**REPUBLIC OF PERU**

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**Initial Version**

**CONCESSION CONTRACT**

**CREATION OF THE SPECIALIZED HEALTH CARE SERVICES AT THE SPECIALIZED HOSPITAL FOR THE ESSALUD PIURA HEALTH CARE NETWORK, DISTRICT OF VEINTISÉIS DE OCTUBRE, PROVINCE OF PIURA, DEPARTMENT OF PIURA**

**2021**

**Important: This is an unofficial translation. In the case of divergence between the English and Spanish text, the version in Spanish shall prevail.**

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**CREATION OF THE SPECIALIZED HEALTH CARE SERVICES AT THE SPECIALIZED HOSPITAL FOR THE ESSALUD PIURA HEALTH CARE NETWORK, DISTRICT OF VEINTISÉIS DE OCTUBRE, PROVINCE OF PIURA, DEPARTMENT OF PIURA**

Mr. Notary:

May you please enter in your Registry of Public Deeds one recording the Concession Contract for the Project “CREATION OF THE SPECIALIZED HEALTH CARE SERVICES AT THE SPECIALIZED HOSPITAL FOR THE ESSALUD PIURA HEALTH CARE NETWORK, DISTRICT OF VEINTISÉIS DE OCTUBRE, PROVINCE OF PIURA, DEPARTMENT OF PIURA” (hereinafter, the Contract), entered into by, on the one hand, the State of the Republic of Peru, duly represented by the Seguro Social de Salud ("Social Health Insurance") (“ESSALUD”), empowered by [\*], domiciled at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, represented by Mr. \_\_\_\_\_\_\_\_\_\_\_\_, identified with National Identity Card No. \_\_\_\_\_\_\_\_\_, duly empowered by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, dated \_\_\_\_\_\_\_, (hereinafter, the GRANTOR), and on the other hand, \_\_\_\_\_\_\_\_\_ (hereinafter, the CONCESSIONAIRE), domiciled at \_\_\_\_\_\_\_\_\_\_\_, province and department of Lima, Peru, duly represented by \_\_\_\_\_\_\_\_\_\_ identified with \_\_\_\_\_\_\_\_\_; domiciled for these purposes at \_\_\_\_\_\_\_\_\_, Lima, province and department of Lima, Peru, duly empowered by power of attorney registered in the Electronic Record No.\_\_\_\_\_\_\_\_ of the Registry of Legal Entities of the Lima Registry Office of the National Superintendency of Public Registries.

# BACKGROUND AND DEFINITIONS

## **Background**

* 1. On January 28, 2014, PROINVERSIÓN and ESSALUD signed the Technical Health Care Agreement under the modality of assignment for the design, conduction and development of the Private Investment Promotion Processes for the projects communicated by the Executive Chairmanship of ESSALUD. In this regard, by Official Notice of the Executive Chairmanship No. 654-PE-ESSALUD-2013 dated December 17, 2013, PROINVERSIÓN was requested to provide technical health care for the project: “Installing the High Complexity Hospital of Essalud in the district of Piura, province of Piura, department of Piura”.
  2. By means of Steering Council Agreement No. 12-10-ESSALUD-2016 adopted at the tenth ordinary session on May 25, 2016, the IMI-APP-2016 was approved, establishing strategies and investment projects within the context of the analysis of its main indicators.
  3. The Pre-Investment Feasibility Study "Installing the High Complexity Hospital of Essalud in the district of Piura, province of Piura, department of Piura", SNIP code 220048, dated May 29, 2017, was declared feasible in attention to Letter No. 305-SGEPI-GEI-GCPI-ESSALUD-2017.

* 1. By means of Agreement No. 4-2-ESSALUD-2018, adopted at the second ordinary session of ESSALUD's Steering Council on January 24, 2018, the IMI-APP-2017 was approved, ratifying the importance of the Project for this entity.
  2. By means of PROINVERSIÓN's Steering Council Agreement dated October 2, 2018, the modification of the names of the Special Investment Committees of PROINVERSIÓN, among others, was approved, entrusting the Project to the Special Committee for Investment in Education, Health, Justice, Tourism, Real Estate and Capital Markets Projects and Other Sectors or Public Companies - PRO SOCIAL + (hereinafter, PRO SOCIAL+ Committee).
  3. On February 7, 2019, the PRO SOCIAL+ Committee approved the Project Evaluation Report, which was approved by ESSALUD and received the favorable opinion of the Ministry of Economy and Finance. Likewise, the PRO SOCIAL+ Committee approved the Promotion Plan for the aforementioned project.
  4. By means of Agreement No. 79-1-2019-CD, in session of February 21, 2019, the PROINVERSIÓN's Steering Council approved the incorporation of the Project to the private investment promotion process, as well as the corresponding promotion modality. Said agreement was published in the official gazette El Peruano on February 28, 2019.
  5. On May 7, 2019, by means of Agreement No. ATC/OC-16389-RG and ATN/ME-16085-RG, PROINVERSIÓN and the Inter-American Development Bank - BID, signed a Contingent Recovery Technical Cooperation Agreement to provide comprehensive advice to PROINVERSIÓN during the private investment promotion process of the Project.
  6. By means of Official Notice No. 746-PE- ESSALUD-2020 dated March 3, 2020, ESSALUD issued a favorable opinion for the incorporation of the green gown services of Hemodialysis, Clinical Pathology, Diagnostic Imaging and Logistics of Strategic Goods, Drugs and Non-Strategic Inputs to the service portfolio of the Project.
  7. By means of Official Notice No. 03-GCPGCI-ESSALUD-2021 dated January 29, 2021, ESSALUD informed PROINVERSIÓN of the rectification in the change of the name of the Project, the same will henceforth be “Creation of the Specialized Health Care Services at the Specialized Hospital for the Essalud Piura Health Care Network, District of Veintiséis de Octubre, Province of Piura, Department of Piura”.
  8. By means of Executive Management Resolution No. [\*] dated [\*], ratified the Agreement No. [\*] adopted by the PRO SOCIAL+ Committee at its session of [\*], whereby the Bidding Terms for the Comprehensive Project Bidding were approved for the concession of the project “Creation of the Specialized Health Care Services at the Specialized Hospital for the Essalud Piura Health Care Network, District of Veintiséis de Octubre, Province of Piura, Department of Piura”.

* 1. On [\*], a call for bids was issued for the Comprehensive Project Bidding for the concession of the project “Creation of the Specialized Health Care Services at the Specialized Hospital for the Essalud Piura Health Care Network, District of Veintiséis de Octubre, Province of Piura, Department of Piura”.

* 1. By means of Agreement No. [\*], dated [\*], the Final Version of the Contract to be signed by the GRANTOR and the CONCESSIONAIRE was approved.
  2. On [\*], the bidder [\*], whose members have formed the CONCESSIONAIRE, was awarded the Successful Bid for the Comprehensive Project Bidding for the concession of the Project "Creation of the Specialized Health Care Services at The Specialized Hospital for the Essalud Piura Health Care Network, District of Veintiséis de Octubre, Province of Piura, Department of Piura".
  3. By means of the Steering Council Agreement of ESSALUD No. [\*] dated [\*], Mr. [\*] was authorized to sign this Contract on behalf of ESSALUD.

## **Definitions**

For the purposes of this Contract, the Parties agree that the terms used herein shall have the following meanings:

* + - 1. ***Permitted Creditor(s)***

The concept of Permitted Creditor(s) is only applicable for the cases of Permitted Secured Indebtedness. The Permitted Creditors must have PROINVERSIÓN's authorization to prove such condition by previously submitting Annex 5 of this Contract. For such purposes, Permitted Creditors may be:

1. In the event that the Permitted Secured Indebtedness is structured through credits, mutual or money loans of any kind, syndicated or not:
2. Any multilateral lending institution of which the State of the Republic of Peru is a member and any fund or asset managed by a multilateral lending agency of which the State of the Republic of Peru is a member;
3. Any Export Credit Agency or any governmental institution or agency of any country to which the State of the Republic of Peru maintains diplomatic relations and any funds or assets managed by an Export Credit Agency or any governmental institution or agency of any country to which the State of the Republic of Peru maintains diplomatic relations;
4. Any international financial entity designated as a first-class international bank in the official letter issued by the Peruvian Central Reserve Bank in force on the date of qualification of the Permitted Creditor. Any change, modification or substitution of such official letter does not affect the rating previously granted;
5. Any other international financial entity with a risk rating no lower than the rating of Peruvian sovereign debt corresponding to foreign currency and long term, assigned by an international credit-rating agency that rates the Republic of Peru;
6. Any national financial entity with a local risk rating of no less than "A", assigned by a national risk rating company, duly authorized by the Superintendency of the Securities Market (SMV);

In these events, the Permitted Creditors may be represented by an administrative agent or security agent, which shall be any of the parties indicated in subsections (i) to (v) of Paragraph a) above. For such purposes, the following shall be considered:

* 1. Administrative Agent, whose function shall be to manage and monitor compliance with the obligations and commitments established in the Contract for Permitted Guaranteed Indebtedness, as well as to represent the Permitted Creditors.
  2. Collateral Agent, in favor of whom the guarantees are granted for the benefit of the Permitted Creditors and whose function shall be to manage the guarantee contracts that the CONCESSIONAIRE has granted in support of the Permitted Secured Indebtedness, to execute the guarantees by order and on behalf of the Permitted Creditors and to recover the amounts of the execution to be distributed among the Permitted Creditors.

It must be specified that the qualification of the Administrative Agent or Collateral Agent is of an administrative nature to exercise the rights on behalf of the Permitted Creditors.

In the event that after the authorization of a Permitted Secured Indebtedness of syndicated or bilateral credits, a Permitted Creditor decides to assign its credit to a third party, either totally or partially in such Permitted Secured Indebtedness, for such third party to be considered a Permitted Creditor, it must first be qualified as a Permitted Creditor by the Grantor, and for such purpose it must submit the declaration contained in Annex 5 of this Contract.

1. In the event that the Permitted Secured Indebtedness is structured through issuances in the stock or capital markets, both domestic and international:
2. All institutional investors so considered by the legal regulations in force (such as Pension Fund Administrators - AFP, insurance companies, national or international), that directly or indirectly acquire any type of securities issued by the Concessionaire, the trustee, securitization company, special purpose company, incorporated in Peru or abroad that acquire rights and/or assets derived from the Contract;
3. Any trust assets, investment funds or securitization company or special purpose company incorporated in Peru or abroad that directly or indirectly represents or acquires rights and/or assets derived from the Contract;
4. Ineligibility regime:

The Permitted Creditor(s) shall in no case be: (i) any entity, fund or, individual, with economic ties to the Concessionaire, in accordance with the provisions of Resolution SMV No. 019-2015-SMV/01, or regulations that replace it; (ii) any entity, fund or, individual, declared ineligible(s) by the Inter-American Development Bank or on the list of parties sanctioned by the World Bank or other multilateral organization that the State has entered into credit agreements with; (iii) any individual convicted by the competent authority by a final and unappealable judgment, or entity that has been sanctioned with criminal or administrative liability, for the commission of corruption offenses (related to biddings, public works, Public Private Partnerships and Projects in Assets), money laundering or terrorism to the detriment of the Peruvian State, committed in Peru or abroad; and, (iv) any entity, or fund through its attorneys-in-fact, legal representatives, directors, officers and/or employees, or individual, that has acknowledged before a competent authority the anti-corruption commission (related to biddings, public works, Public Private Partnerships and Projects in Assets), money laundering or terrorism to the detriment of the Peruvian State, committed in Peru or abroad, provided that such acknowledgement has been officially reported by a competent authority to the State or the Grantor.

In the event of the financing operations indicated in paragraphs a) and b) above, PROINVERSIÓN must verify that the Permitted Creditor is not subject to the first section of paragraph c) when the qualification of Permitted Creditor as part of the Permitted Secured Indebtedness is evaluated.

In the event of the financing operations indicated in paragraph a) above, if one or more Permitted Creditors, due to information that is notorious and/or public knowledge, is included in any of the assumptions of the first section of this paragraph, and this will affect the availability of financial resources associated to such Permitted Creditor so that there is a risk that the CONCESSIONAIRE may not be able to comply with the execution of the project, the CONCESSIONAIRE shall, within one hundred and twenty (120) Days after having been informed by the GRANTOR about such situation: (aa) deliver evidence to the GRANTOR of the substitution of the Permitted Creditor for another that complies with the requirements established in accordance with the provisions of the Contract; (bb) prove to the GRANTOR that it has the necessary resources for the completion of the execution of the project, in which case the CONCESSIONAIRE may submit a resolution of its General Shareholders' Meeting committing to carry out the corresponding capital increases to substitute the current schedule of disbursements of the creditor that has lost the status of Permitted Creditor; (cc) submit to the GRANTOR a new loan agreement entered into with a new Permitted Creditor, a third party or an entity related to the CONCESSIONAIRE; (dd) submit to the GRANTOR documents evidencing the extension of any of the current financing agreements that allow the completion of the execution of the project, if applicable; or in any case, (ee) prove to the GRANTOR that it has the necessary resources through the combination of two (2) or more of the evidences or methods indicated above; otherwise, after the one hundred and twenty (120) days indicated above, a penalty amounting to US$ 5,000. 00 (Five thousand and 00/100 United States Dollars) will be applied for each day of delay.

* + - 1. ***Certificate of Delivery of Assets***

It is the document signed on the Closing Date by the Parties, whereby it is stated that the CONCESSIONAIRE has received the land with Legal Physical Sanitation for the Hospital, which will be delivered to the CONCESSIONAIRE according to the procedure established in clause 6.13.

* + - 1. ***Certificate of Commencement of Construction of the Works and Equipment.***

It is the document signed by the Parties and the Supervisor of Design, Construction and Equipment, whereby it is stated the commencement of execution of Works and Equipment of the Hospital.

* + - 1. ***Certificate of Reversion***

It is the document signed by the Parties and by the Supervisor of Contract and Operations or the Supervisor of Design, Construction and Equipment, if applicable, whereby it is stated that the CONCESSIONAIRE delivers to the GRANTOR the Concession Assets, in accordance with the provisions of the Contract.

* + - 1. ***Certificate of Verification and Acceptance of Works and Equipment***

It is the document signed by the Parties and the Supervisor of Design, Construction and Equipment, whereby the Works and Equipment are received and verified as a whole, being in full compliance with the requirements contained in the Technical File, without any objection from the Hospital. Once the document is signed, the Operational Stage begins.

* + - 1. ***Certificate of Verification and Acceptance of the Equipment***

It is the document signed by the Parties and the Supervisor of Contract and Operations, whereby the Equipment acquired for replacement in the Operational Stage is received and verified, being in full compliance with the requirements established or updated by the GRANTOR in accordance with the Technical File, without any objection from the Hospital.

* + - 1. ***Activity of Preparation of the Technical File***

It is one of the activities that correspond to the Pre-Operational Stage in which the Design is developed until the Technical File is not objected.

* + - 1. ***Activity of Infrastructure Construction***

It is one of the activities that correspond to the Pre-Operational Stage in which the Construction of the Works is developed.

* + - 1. ***Activity of Equipment***

It is one of the activities that correspond to the Pre-Operational Stage in which the Equipment endowment is carried out.

* + - 1. ***Successful Bidder***

It is the Qualified Bidder, who has been awarded the Successful Bid of the Bidding.

* + - 1. ***Draft project***

Set of works and scopes that, in terms of the Design process, are previous to the final project. It allows to make an architectural and engineering proposal in functional, formal, constructive or economic terms, which provide an acceptable approach to the initial version of the project developed from a program. It is the first deliverable in the development of the Technical File.

* + - 1. ***Calendar Year***

It is the twelve (12) month period from January 1 to December 31 of each year, both dates inclusive.

* + - 1. ***Year of Concession***

It is each period of twelve (12) months computed from the Closing Date, inclusive, until the end of the term of the Concession.

* + - 1. ***Concession Area***

These are the areas that will be delivered to the CONCESSIONAIRE for the purposes of the Concession.

* + - 1. ***Area of Influence of the Concession***

These are the areas where the direct and indirect social and environmental impacts resulting from the activities developed within the framework of the Project will have an impact. Their limits will be defined in the environmental management instruments.

* + - 1. ***Competent Governmental Authority***

It is the national, regional, departmental, provincial or district body or institution, or any of its regulatory or administrative units or agencies, or any entity or body of the State of the Republic of Peru that, in accordance with the Applicable Laws and Provisions, has executive, legislative or judicial powers, or is a member of any of the aforementioned governments, authorities or institutions, having jurisdiction over the persons or matters in question.

* + - 1. ***Bidding Terms***

It is the document, including its forms, annexes, appendices and official letters issued by PROINVERSIÓN, establishing the terms under which the Bidding was carried out.

* + - 1. ***Concession Assets***

These are the movable or immovable assets, tangible or intangible, that are incorporated in one way or another in the Contract, are affected to it or constitute inseparable assets of the object of the same.

They are:

1. The land listed in Annex 14,
2. The infrastructure including any assets that have been included in the construction and cannot be separated without affecting the proper functioning of the same, and
3. Equipment, acquired by the CONCESSIONAIRE during the term of the Concession to be used for the it. Said assets are essential for the provision of the Services and shall be delivered to the GRANTOR at the end of the Contract.

The Concession Assets shall include those rights that under any title empower or authorize the use or exploitation of other assets or technologies. All rights over the operating systems, software, know-how, as well as the respective licenses and permits used by the CONCESSIONAIRE in the exploitation of the Concession Assets are considered to be included within the Concession Assets.

* + - 1. ***CONCESSIONAIRE Assets***

These are all the CONCESSIONAIRE Assets that are not included in the Concession Assets, which shall not be returned to the GRANTOR.

* + - 1. ***BIM***

It is the Building Information Modeling or BIM for its acronym in English. It is a work method that involves the processes of design, construction, Equipment Endowment, post construction, management up to its operation and maintenance, integrated, through a virtual model using specialized software, the life cycle of a property, its facilities, equipment and components that comprise it.

* + - 1. ***Occupied Beds***

It is the length of time a hospitalized patient occupies a hospital bed during the period between 0 hours and 24 hours of the same day.

To calculate indicators of hospital activity for a period, the number of occupied beds is multiplied by the number of days in that period to obtain the number of occupied bed-days or patient-days for the period. If on the same day a bed is occupied by two patients at different times, two patient-days should be considered. The admission and discharge of a patient on the same day should be considered as one occupied day or one patient-day.

* + - 1. ***CEASF***

Annual financial compensation for fixed services.

* + - 1. ***CEASV***

Annual financial compensation for variable services.

* + - 1. ***Committee for the Verification and Acceptance of Works and Equipment***

Body appointed or contracted by the GRANTOR to carry out the process of verification and acceptance of the Works and Equipment according to the provisions of the Clause 9.7, 9.8 and Clause 11.24 and following, composed of at least three (3) professionals, one of which will be presiding. Said professionals may be in the fields of architecture, safety, electrical, mechanical, health care, equipment, communications, among others, and said professionals must sign the Certificate of Verification and Acceptance of Works and Equipment, together with the Supervisor of Design, Construction and Equipment in his capacity as technical advisor.

* + - 1. ***Compensation or Financial Compensation***

It is the co-financing to be paid in Soles by the GRANTOR to the CONCESSIONAIRE, including the payment for Equipment Replacement, subject to readjustments and deductions, according to the Contract.

* + - 1. ***GRANTOR***

It is the State of the Republic of Peru represented by the Social Health Insurance - ESSALUD.

* + - 1. ***Concession***

It is the legal relationship under public law established between the GRANTOR and the CONCESSIONAIRE as from the Closing Date, whereby the GRANTOR grants the CONCESSIONAIRE the obligation to design, finance, build, equip, as well as the right to the economic exploitation through the Operation and Maintenance.

* + - 1. ***CONCESSIONAIRE***

It is the special purpose company, incorporated as a legal entity in Peru, who signs this Contract.

* + - 1. ***Bidding***

This is the competitive selection mechanism regulated by the Bidding Terms for the concession of the Project to the private sector, by means of a comprehensive project bidding.

* + - 1. ***Building***

Action that includes new construction, expansion, reconstruction, renovation, remodeling, refurbishment and/or enhancement works, as well as engineering works. These activities include the installation of systems necessary for the operation of the building and/or engineering work. These works are the sole responsibility of the CONCESSIONAIRE.

* + - 1. ***Builder***

It is the CONCESSIONAIRE or the building companies contracted by the CONCESSIONAIRE, at its own expense, cost and risk, that have met the technical requirements in building, in accordance with the provisions of the Bidding Terms, and that will execute the Works that are part of the Concession.

* + - 1. ***Contract***

It is the present document, including its Annexes, executed between the GRANTOR and the CONCESSIONAIRE, which governs the relations between them during the term of its validity.

* + - 1. ***Control***

An individual or legal entity has control of a legal entity or is subject to common control with it, when:

1. It has more than fifty percent (50%) of the voting power in the general shareholders' or partners' meeting, through direct ownership of the securities representing the capital stock or, indirectly, through usufruct, pledge, trust, syndication and similar agreements, or any other legal act; or,
2. Directly or indirectly has the power to appoint or remove the greater part of the members of the board of directors or equivalent body, which allows it to control or exercise the most votes in the sessions of the board of directors or equivalent body, or to govern the operating or financial policies under a regulation or contract, whatever its modality; or,
3. By any other mechanism or circumstance (contractual or otherwise), it effectively controls the decision-making power in the other company.

Additionally, and whenever applicable, the provisions of SMV Resolution No. 019-2015-SMV/01, or any rule that modifies or replaces it, shall be taken into account.

* + - 1. ***Technical Controversy***

It is the controversy regarding a specific fact or act, which resolution depends on the exclusive application of regulations, rules, criteria, concepts or parameters of a strictly technical, environmental or occupational health and safety nature.

* + - 1. ***Non-Technical Controversy***

It is any controversy that is not considered a Technical Controversy.

* + - 1. ***Schedule for Work Execution***

It is the document prepared by the CONCESSIONAIRE containing the schedule for the execution of the Works, in accordance with the deadlines set forth in the Technical Proposal, which shall form an integral part of the Technical File and must be submitted in accordance with the provisions of the Contract. This schedule shall identify the Critical Path.

* + - 1. ***Schedule for Technical File Preparation***

Document prepared by the CONCESSIONAIRE in which the preparation of the Technical File is recorded, in accordance with the deadlines foreseen in the Technical Proposal. It is a tool for the management and control of the project. It may be a printed document or a digital application; in any case, the schedule includes a list of activities or tasks with the foreseen start and end dates, and the Critical Path may be identified.

* + - 1. ***Schedule for Equipment***

It is the document prepared by the CONCESSIONAIRE that includes the times and resources for each activity, to carry out the evaluation, approval, commissioning, installation and testing of all the Equipment.

* + - 1. ***Design and Construction Notebook***

It is the document, physical or virtual, in which the most important facts during the development of the Technical File and during the execution of the Works, Equipment and Commissioning will be recorded.

* + - 1. ***Environmental Impact Statement (DIA, for its acronym in Spanish)***

It is the Environmental Management Instrument applicable to the execution of investment projects that do not cause significant negative socio-environmental impacts.

* + - 1. ***Days***

These are working days, i.e., those days that are not Saturdays, Sundays or non-working holidays in the province of Lima or Piura. Public holidays are also understood to be those days that are not working days for the public sector. The terms established in this Contract shall be counted from the day following receipt of the notification.

* + - 1. ***Calendar Days***

All days of the Calendar Year, which includes Days, non-business days and holidays.

* + - 1. ***Design***

It includes the preparation of the Technical File at the CONCESSIONAIRE's expense, cost and risk, in accordance with Annex 15, with the purpose of harmonizing the human environment, from the design of the objects of use to the architectural and engineering design.

* + - 1. ***Final Provision***

It is the process or operation to treat and dispose of the waste in a place as the last process of its management in a permanent, health care and environmentally safe manner. The CONCESSIONAIRE shall be responsible for the final disposal to be carried out in an environmentally sound manner, and may hire a certified Solid Waste Management Company (EO-RS) for the transportation and final disposal, complying with the Applicable Laws and Provisions.

* + - 1. ***Adhesion Document to the Administration, Payments and Guarantee Parent Trust***

It is the document whereby the CONCESSIONAIRE adheres to the Parent Trust for Administration, Payments and Guarantee as trustee. This document will define the accounts through which the CONCESSIONAIRE will make the payments according to the provisions of this Contract.

The Adhesion Document to the Parent Trust for the Administration, Payments and Guarantee shall be executed between the Parties and the respective trustee, in accordance with the provisions of Annex 12, the Parent Trust Contract for the Administration and Payments and the Applicable Laws and Provisions.

* + - 1. ***Equipment Endowment***

Set of activities for the presentation, review and validation of equipment proposals, as well as the acquisition, provision and installation of the equipment are carried out.

* + - 1. ***Affiliated Company***

A company shall be considered an affiliate of another company when the Control of such companies is held by the same Parent Company.

* + - 1. ***Parent Company***

It is a company that holds the Control of one or several companies. Any company that has Control of a Parent Company, as defined, and so on, is also considered in this definition.

* + - 1. ***Subsidiary Company***

A company whose Control is exercised by another company.

* + - 1. ***Related Companies***

They are the Affiliated Company, Parent Company or Subsidiary Company.

* + - 1. ***Permitted Secured Indebtedness***

It consists of the indebtedness arising from financing or credit operations, issuance of securities and/or money loans, all of them granted by any Permitted Creditor under any modality, the proceeds of which shall be used to comply with the obligations of this agreement, including any renewal, rescheduling or refinancing of such indebtedness granted by a Permitted Creditor(s).

Those operations for financing or credit operations, issuance of marketable securities or debt instruments and/or money lending, of Permitted Creditors, whose proceeds are used for financing CONCESSIONAIRE's Assets, shall not be considered Permitted Secured Indebtedness.

* + - 1. ***Financial Entities***

They are:

a) Banking and insurance companies, as referred to in Annex 3.

b) First class foreign banks, as referred to in Annex 3; and,

c) International financial entities, as referred to in Annex 3.

* + - 1. ***Equipment***

Equipment is the set of devices in the health care center that are part of the physical resource. They will be grouped according to the criteria of the GRANTOR according to the resolution of the Central Office of Planning and Development No. 022 OCPD-EsSalud-2010 "Hospital Equipment Standardization Criteria" as follows:

* Biomedical equipment: All equipment with a specialized design and technological level for a specific clinical application: diagnosis, monitoring, support, treatment, and/or rehabilitation of the intervened patient.
* Complementary equipment: Simple technology devices whose purpose is a specific clinical application.
* Instruments: All parts of specific design for use in specialized health services, usually small in size and almost always for use in surgical environments.
* Electromechanical equipment: Equipment or systems used primarily in services and environments that provide support and health care in the operation, maintenance and development of activities in the hospital environment. It includes ambulances and vehicles used for the aforementioned purposes.
* Computer equipment and communications: Any equipment or system consisting of hardware and software used as a resource or tool in the processing, administration, management, support and/or communication of information.
* Clinical furniture: Furniture of specific design to be used in the direct health care of patients and/or furniture supporting the health care process within the hospital environment.
* Administrative furniture: Furniture whose main purpose is to be used in environments where administrative functions are performed (management, planning, organization, logistics, etc.) and/or to provide comfort and complement management activities within the hospital environment.

* + - 1. ***Equipment Linked to Civil Works***

It is the set of equipment that, due to its volume, weight or installation characteristics, is directly related to the hospital infrastructure, being included during the construction process, giving functionality to the building. For example: elevators, energy systems (generator set, solar panels, UPS, etc.), water systems (hard water, soft water, osmotic water, etc.), wastewater treatment systems, gas systems (oxygen, vacuum, compressed air, gas evacuation, LPG, etc.), air conditioning systems (air conditioning, mechanical ventilation, etc.), cold rooms, among others. Fixed furniture, built-in or associated with the infrastructure (counters, nurses' station furniture, service modules, cupboards, etc.) are also considered.

* + - 1. ***Semi-detailed Environmental Impact Assessment (EIA-sd)***

It is the environmental management instrument applicable to the execution of investment projects that could generate moderate negative environmental impacts, which can be prevented, mitigated or compensated through the corresponding management measures.

* + - 1. ***Preliminary Studies***

These are the ones that allow to recognize the terrain to gather information, data and background necessary for the Technical File, thus obtaining a more complete design, economic scope and execution time.

* + - 1. ***Operational Stage***

It is the period from the date of subscription of the Certificate of Verification and Acceptance of Works and Equipment until the date of Completion. During this period the CONCESSIONAIRE shall carry out the Operation and Maintenance activities and shall provide the Services as established in the Contract.

* + - 1. ***Pre-operational Stage***

It is the period that will begin with the Closing Date and will end with the subscription of the Certificate of Verification and Acceptance of Works and Equipment, unless grounds for Termination occurs.

* + - 1. ***Sentinel Event***

This corresponds to an unexpected situation or event related to the health care received by the patient that has, or may have, negative consequences for the patient and that is not related to the natural course of the disease. This is a sufficiently serious and undesirable outcome of care event to conduct an individual review of each case in which it occurs. It is a serious event whose occurrence should be investigated immediately.

* + - 1. ***Basic File***

Architectural, engineering and installation project that describes the actual conception of the building: form, functions, distribution, construction system. They are represented in plans, computer models or mock-ups, with a descriptive report and a general budget that includes the urban characteristics of the building and are usually used to consult their viability in official bodies and sometimes to request the processing of the building permit, conditioned to the presentation of the corresponding execution project.

* + - 1. ***Technical File***

It is the document that contains the necessary and sufficient information to allow the execution and supervision of the Works and Equipment. It must contain the development of the Project at a definitive level, in accordance with Annex 15, which develops the architecture, equipment, structure and facilities of the future building with the construction details necessary to execute the construction; it consists of: descriptive memory, calculation memories, preliminary studies, plans, construction details, technical specifications, metrics, unit price analysis, work budget, work execution schedule, among others.

* + - 1. ***Closing Date***

It is the day on which the Contract is signed between the GRANTOR and the CONCESSIONAIRE, at the time and place foreseen for that purpose.

* + - 1. ***Parent Trust Administration, Payment and Guarantee***

It is the document signed between ESSALUD and FIDUPERÚ S.A. Sociedad Fiduciaria on March 17, 2010, its addenda or modifications.

* + - 1. ***Performance Bond***

It is the letter of guarantee or stand-by letter of credit issued by a Financial Entity in accordance with Annex 1 and Annex 2, to be submitted by the CONCESSIONAIRE in favor of the GRANTOR, which guarantees the stipulations foreseen in the Clause 16.2 of this Contract. Any document issued by a foreign Financial Entity must be confirmed by a local Financial Entity.

It may be constituted by more than one letter of guarantee or, alternatively, stand-by letter of credit confirmed by a local Financial Entity, as long as they add up to the total amount required for the corresponding guarantee.

Such guarantees must be joint and several, unconditional, irrevocable, with express waiver of the benefit of excussion and division, and of automatic execution.

* Performance Bond for the Pre-Operational Stage: It is the letter of guarantee or stand-by letter of credit issued by a Financial Entity, in accordance with Annex 1, to be submitted by the CONCESSIONAIRE in favor of the GRANTOR, in order to guarantee the correct and timely compliance with each and every one of the obligations of the CONCESSIONAIRE during the Pre-Operational Stage, and until the subscription of the Certificate of Works and Equipment Verification and Acceptance.
* Operational Stage Performance Bond: It is the letter of guarantee or stand-by letter of credit issued by a Financial Entity, in accordance with Annex 2, to be submitted by the CONCESSIONAIRE in favor of the GRANTOR, in order to guarantee the correct and timely compliance with each and every one of the obligations to be borne by the CONCESSIONAIRE during the Operational Stage, and up to one (1) year after the Termination of the Concession. Likewise, it shall guarantee the correct and timely compliance with each and every one of the obligations of the CONCESSIONAIRE during the Pre-Operational Stage, identified as of the first year of the Operational Stage.
  + - 1. ***Stakeholders***

Policyholders, persons or organizations involved in the different stages of the Project, directly or indirectly, who may eventually be affected or who perceive that they are affected by the development and implementation of the Project.

* + - 1. ***Economic Group***

It is the group of legal entities, regardless of their activity or business purpose, that are subject to the control of the same individual or a group of individuals, according to the definitions contained in Resolution SMV No. 00019-2015-SMV/01, or regulation that modifies or replaces it.

* + - 1. ***Hospital***

It is the new Specialized Hospital of the Piura Healthcare Network of ESSALUD in the district of Veintiséis de Octubre, province of Piura, department of Piura, which will be executed as a result of the Contract.

* + - 1. ***Sentinel Indicators***

It refers to the indicator that measures a Sentinel Event. Sentinel indicators identify the occurrence of a Sentinel Event whose occurrence must be investigated immediately. The occurrence of a Sentinel Event results in a penalty established in the Contract.

* + - 1. ***General Indicators***

They correspond to the establishment of the conditions to be complied with by the CONCESSIONAIRE in a general manner for all the Services during the entire term of the Contract. Failure to comply with them may give rise to a penalty as defined in the Contract.

* + - 1. ***Service Indicators***

They are those indicators that allow monitoring compliance with the levels of quality and availability required from the CONCESSIONAIRE, in accordance with the provisions of the Contract.

* + - 1. ***Infrastructure***

Physical assembly resulting from civil construction, consisting of structures, Equipment linked to Civil Works, facilities, supplies and other assets that make up the building as a whole.

* + - 1. ***Environmental Management Instrument (IGA, for its acronym in Spanish)***

These are the mechanisms that make it possible to enforce compliance with the National Environmental Policy and the Applicable Laws and Provisions on social and environmental matters. According to their application they can be, among others, prevention, control and correction. These are environmental management systems, which include studies to evaluate the environmental impact of projects, contingency plans, remediation plans, mechanisms for citizen participation, integrated waste management plans, etc.

* + - 1. ***Temporary Controller***

It is the legal person of private or public law, contracted by the Permitted Creditors at their own expense, cost and risk, prior approval of the GRANTOR, which temporarily and extraordinarily will be in charge of the activities inherent to the construction of the Works or Operation and Maintenance that serves as physical support to the provision of the Service, in accordance with the provisions of clause 14.23.

* + - 1. ***Inventories***

The following inventories have been prepared and submitted in accordance with the Contract:

* + - * ***Annual Inventory***

It is the procedure executed by the CONCESSIONAIRE that consists of physically verifying, coding and registering the movable properties of the Concession Assets, in order to verify the existence of the assets, compare its result with the accounting record, investigate the differences that may exist and proceed to the corresponding regularizations. The Annual Inventory shall be submitted to the GRANTOR, with a copy to the Supervisor of Contract and Operations or to the Supervisor of Design, Construction and Equipment, if applicable, within the first fifteen (15) Calendar Days of April of each Calendar Year until the Termination. This Inventory shall include the Concession Assets belonging thereto as of the date on which said inventory is subscribed in accordance with the provisions set forth in Annex 19.

* + - * ***Inventory of Works***

It is the list of the assets corresponding to the Works to be executed during the Concession, to be submitted by the CONCESSIONAIRE to the GRANTOR, at the time of its completion, with the request for the beginning of the verification and acceptance of the Works and Equipment referred to in the Clause 12.11.24 and following.

* + - * ***Final Inventory***

It is the list of the Concession Assets that shall be submitted by the CONCESSIONAIRE to the GRANTOR, with a copy to the Supervisor of Contract and Operations, when for any reason the Reversion of the Concession Assets occurs.

* + - 1. ***Investment***

Includes the resources necessary for the design, financing and construction of the Project, which includes the Hospital, including but not limited to:

1. Preparation of the Technical File;
2. Preparation, approval and implementation of the Environmental Management Instrument(s), the obtaining of the CIRA and other authorizations, certifications, permits, urban authorizations and licenses that may be necessary according to Applicable Laws and Provisions for the execution of the Project;
3. Execution of the Works;
4. Equipment Endowment;
5. Commissioning;
6. General expenses and profit;
7. Supervision of the design and work;
8. Financing;
9. Reimbursement of process expenses.
   * + 1. ***Applicable Laws and Provisions***

It is the set of normative provisions in force, such as the Political Constitution of Peru, rules with the rank of law, supreme decrees, regulations, regulatory rules, directives, resolutions, as well as any other that, according to the legal system of the State of the Republic of Peru, is applicable, which shall be mandatory for the Parties or those that are issued during the course of the Concession by any Competent Governmental Authority.

* + - 1. ***LIBOR***

Corresponds to the six (6) month London Interbank Offered Rate, in Dollars, as reported by Reuters at the London closing time or the effective annual rate in Dollars that replaces it.

* + - 1. ***Maintenance***

The set of activities carried out by the CONCESSIONAIRE with the purpose of preserving or recovering the structural and operational conditions for which the Works were designed or built and the provision of the Equipment.

It includes the activities that the CONCESSIONAIRE may carry out with the purpose of improving the Works and the Equipment, in order to comply with the obligations of the Contract. It may be corrective, comprehensive, predictive and preventive maintenance.

* + - 1. ***Corrective Maintenance***

The process of restoring the integrity, safety or operation of the Equipment, elements or facilities of the infrastructure after a breakdown with respect to the Concession Assets. Corrective maintenance and unscheduled maintenance are considered synonymous with repair.

* + - 1. ***Comprehensive Maintenance***

Set of activities necessary to maintain over time the operation and functioning within the parameters guaranteed by the manufacturer of the Equipment or the builder of the Work when applicable.

* + - 1. ***Predictive Maintenance***

It consists of daily inspections, prioritizing operating rooms and intensive care and/or critical treatment units, and others, both at the beginning and at the end of the day, recording incidents on a daily record, at which time a corrective report is made to correct them, which must be recorded.

* + - 1. ***Preventive Maintenance***

Maintenance that is performed to prolong the service life of the device, Equipment, infrastructure elements or facilities and to prevent damage. Preventive Maintenance is usually scheduled at defined intervals and includes specific maintenance tasks such as lubrication, cleaning (e.g. of filters) or replacement of parts that commonly wear out (e.g. bearings) or have a limited service life (e.g. pipes). Procedures and intervals are usually established by the manufacturer. In special cases, the user can modify the frequency according to local environmental conditions. Also referred to as planned maintenance or scheduled maintenance.

* + - 1. ***Operation and Maintenance Manual***

It is the document prepared by the CONCESSIONAIRE or the manufacturer, which contains the instructions to operate and maintain the Equipment and Infrastructure, according to the conditions established in Annex 21.

* + - 1. ***Procedure Manuals***

It is a management document that describes in detail and sequentially the operations identified in the execution of the procedures of each functional body of an entity. It is a tool for information and guidance to the personnel directly or indirectly involved in the execution of the procedures when required. It shall be prepared by the CONCESSIONAIRE for each of the Services.

* + - 1. ***White March***

A process whereby a set of activities organized and planned by the GRANTOR at the beginning of the Operational Stage are gradually implemented. It considers the opening of the care of patients and public in general by the GRANTOR'S personnel for a period of time during which the efficiency of the integral functioning and operation of the health care center is checked according to the corresponding health care authorizations. Previously, the CONCESSIONAIRE has carried out and completed, as part of the activities of the Pre-Operational Stage, the Commissioning in its entirety, guaranteeing the implementation and operation of the Services.

* + - 1. ***Technological Enhancement***

Incorporation and adaptation of emerging technologies in the health care processes to improve or optimize them, achieving greater coverage, effectiveness and efficiency in the production of the health care establishment.

* + - 1. ***NSG Global Service Level***

This corresponds to the total performance of the CONCESSIONAIRE in a given period of time, and is composed of the weighted sum of each of the NSP Partial Service Levels, i.e. the partial service level multiplied by the weighting or importance it has within the NSG.

* + - 1. ***Service Levels***

It is the figure, either expressed as a percentage or score, resulting from the application of a set of indicators. The service level represents the degree of compliance with a set of qualities, conditions, features or standards achieved in the provision of a given Service. The level of each of the services or NSP partial service level, corresponds to the weighted sum of each indicator multiplied by its importance in the Service. The service level is associated with the payment for the provision of the Service received by the CONCESSIONAIRE.

* + - 1. ***Works***

Construction of structures, Equipment related to Civil Works, installations, Pre-Installation Works, Supplies and other assets related to the Project, which will be executed by the CONCESSIONAIRE in accordance with the provisions of the Contract.

* + - 1. ***Financial Offer***

It is the one contained in Annex 27 of this Contract.

* + - 1. ***Operation***

It includes the administration and management of the Services on an exclusive basis in accordance with the provisions of this Contract.

* + - 1. ***OTM***

Maintenance work order, it can be a scheduled maintenance activity of Equipment, Infrastructure or Equipment Linked to Civil Works; or a maintenance request from an authorized SIGI-NS user for the maintenance or repair of Equipment, Infrastructure or Equipment Linked to Civil Works.

* + - 1. ***Party***

If applicable, the GRANTOR or the CONCESSIONAIRE.

* + - 1. ***Parties***

They are jointly the GRANTOR and the CONCESSIONAIRE.

* + - 1. ***Minimum Participation***

It is the minimum shareholding, that in no case may be less than thirty-five percent (35%) of the subscribed and paid in cash capital stock of the CONCESSIONAIRE, corresponding to shares with political and economic rights that the Strategic Partner must own and maintain during the entire term of the Concession.

* + - 1. ***Environmental Liabilities***

They are those facilities, effluents, emissions, contaminated sites and remains or waste deposits located in the Area of Influence of the Concession, produced by the development of productive, extractive or service activities not related to the Project, which, having been abandoned or having been closed down in accordance with the Applicable Laws and Provisions, actually, potentially or permanently have an impact on human health, environmental quality and/or the functionality of the ecosystem.

* + - 1. ***Cultural Heritage of the Nation***

Set of assets that represent any manifestation of human activity -material or immaterial- that, due to its importance, value and paleontological, archeological, architectural, historical, artistic, military, social, anthropological, traditional, religious, ethnological, scientific, technological or intellectual significance, is expressly declared as Cultural Heritage of the Nation or that is legally presumed to be so. Said assets have the condition of public or private property with the limitations established by the Applicable Laws and Provisions.

* + - 1. ***Plan for Equipment Implementation***

It is the document prepared by the CONCESSIONAIRE containing the planning, strategy, risks and contingencies to carry out the implementation and endowment activities of the Equipment Project.

* + - 1. ***General Plan***

Document describing a set of activities and processes with which the CONCESSIONAIRE intends to achieve its objectives considering the monthly progress percentages indicated in the Works Execution Schedule. It should mainly consider the timely supply of materials and equipment for the execution of the Works, as well as the supply of equipment and systems related to the civil works, Equipment.

* + - 1. ***Annual Operational Plan (POA, for its acronym in Spanish)***

It is the annual document that will determine the activities, execution, specifications and procedures corresponding to the Operation within the framework of the Contract and the Applicable Laws and Provisions.

* + - 1. ***Equipment Replacement and Upgrade Plan (PRAE, for its acronym in Spanish)***

It is the document that contains the proposal, planning, procedure and schedule necessary to replace, update or incorporate Equipment acquired by replacement, according to obsolescence criteria, in case of expiration of its useful life or due to the need to maintain the technological validity of the operations.

* + - 1. ***Remediation Plan***

It is the Environmental Management Instrument that defines the measures to be applied for the remediation of environmental liabilities or Contaminated Sites, in order to correct the disturbances of the affected areas, so as to ensure, as far as possible, the environmental quality and functionality of the ecosystem to preserve the health of people and the environment, and seek to minimize the impact on the Project. It also includes actions to achieve the subsequent use of the site or its restoration to a state similar to that which existed before the intervention occurred.

* + - 1. ***Occupational Health and Safety Plan***

These are Management Instruments in which the CONCESSIONAIRE establishes the actions to be followed to implement an Occupational Health and Safety Management System that identifies hazards, prevents risks and establishes control measures to avoid incidents and accidents. Its minimum content is regulated by the Applicable Laws and Regulations.

* + - 1. ***Work Plan***

It is the document that contains and develops a systematic set of tasks and actions designed to achieve a particular objective related to the Project in its various stages. Among other aspects, it points out responsibilities, management, guidelines, resources, important milestones, planning, schedule, among others.

* + - 1. ***Medical Architectural Program***

It is the list dimensioned in square meters (m²) of the environments of a health facility that defines its spatial and functional organization within the framework of the Applicable Laws and provisions. This program is included as Annex 6 of this Contract.

* + - 1. ***Medical Functional Program***

It is the technical instrument included as Annex 6 of this Contract.

* + - 1. ***Technical Proposal***

It is the one contained in Annex 26 of this Contract.

* + - 1. ***Project***

It is the project "Creation of the Specialized Health Services of the Specialized Hospital in the Piura Health Care Network of ESSALUD, in the district of Veintiséis de Octubre, province of Piura, department of Piura", executed under the Public-Private Partnership modality, in accordance with the provisions of the Contract.

* + - 1. ***Equipment Project***

Development and design of the Equipment component in the non-objected Technical File that contains and defines the requirements of the Equipment to be implemented in the Pre-Operational Stage and Operational Stage. It contains, among others, the list of Equipment.

* + - 1. ***Commissioning***

In this process, a set of activities is carried out in which the correct individual and joint operation of the civil works, health care, electrical, electromechanical, control and automation systems, equipment linked to civil works and equipment is verified in order to enable the proper Operation of the Hospital, culminating with its acceptance. Likewise, during this period, the process of training in the use and maintenance of Equipment and Infrastructure and the training of SIGI-NS is carried out.

* + - 1. ***Operational Commissioning***

Final phase of the Commissioning process corresponds to the functional and documentary verification of the Equipment as indicated in the non-objected Technical File.

* + - 1. ***Health Care Network***

Includes the Piura Health Care Network of ESSALUD.

* + - 1. ***Replenishment***

This corresponds to the replacement of the Equipment to be carried out by the CONCESSIONAIRE in accordance with the conditions established in the Contract and in the Technical File.

* + - 1. ***Unscheduled Replenishment***

This corresponds to the replacement of the Equipment indicated in Clause 6.41 that is not foreseen in the CONCESSIONAIRE's Equipment Replenishment and Refurbishment Plan.

* + - 1. ***Scheduled Replenishment***

This corresponds to the replacement of the Equipment indicated in Clause 6.40, which is foreseen in the CONCESSIONAIRE's Equipment Replenishment and Refurbishment Plan presented in its Technical Proposal, for which the provisions of Annex 17 have been taken as reference, and which will be acquired by the CONCESSIONAIRE, for which it will receive payment for Equipment Replenishment.

* + - 1. ***Monthly Management Report***

Monthly document generated by the CONCESSIONAIRE during the Operational Stage in which the status of the service provided is reported to the GRANTOR, according to the corresponding management indicators. The goals achieved, the status of the Services, the projections and actions to be implemented in the short, medium and long term, in order to guarantee the provision of the Services with the required quality, timeliness, availability and efficiency, are indicated.

* + - 1. ***Reversion***

It corresponds to the procedure indicated in Chapter VI, whereby the CONCESSIONAIRE transfers the possession of the Concession Assets to the GRANTOR, for which purpose they sign the Certificate of Reversion.

* + - 1. ***Critical Path***

It is the planned sequence of activities that determine the maximum execution term of the Project's components, whose activities must be carried out sequentially since they are indispensable for their execution within the time established in the Contract.

* + - 1. ***Legal Physical Sanitation***

Includes all those actions that are carried out on a certain land, property or real estate of the Concession, in order to regularize and formalize the property right and the real rights related to such property, resulting in the registration of the land, property or real estate of the Concession in the National Superintendency of Public Registries, which are free of charges or encumbrances that may prevent the execution of the Project.

* + - 1. ***Services***

Each of the services that the CONCESSIONAIRE is obliged to provide are the following, the scopes of which are described in Annex 8:

1. **Food Service**: includes the integrated food service management, i.e. the preparation and distribution of food rations to patients and on-call personnel of the Hospital in accordance with the clinical prescription and the organic nutrition unit of the Hospital, respecting the technical and health care standards of the Applicable Laws and Provisions.
2. **Clothes and Laundry Management Service**: includes the endowment, development and management of all those processes and activities necessary to supply each of the units of the Hospital that require it, on a scheduled or unscheduled basis, with all types of care clothing in optimal conditions of cleanliness, ironing, conservation and protection, as well as its custody. Its objective is to endow and supply, on a continuous basis, the clean linen necessary for the healthcare activities of the Hospital.
3. **Housekeeping, Cleaning and Vector Management Services**: includes the housekeeping and cleaning service to provide a level of cleanliness and disinfection of the Hospital that complies with the Applicable Laws and Provisions, respecting the guidelines of the Hospital, with a standard of service that provides guarantees of safety to clinical processes, by preventing and controlling the transmission of microorganisms, through the hospital environment and thus provide patients, Hospital staff and the general public, a stay in a comfortable, clean place, with asepsis in the areas required, helping to preserve the health of the environment and projecting a positive image of the Hospital.
4. **Integrated Management and Solid Waste Management Service**: includes the integrated management and handling, conditioning, segregation, collection, storage, removal, transportation and final disposal of solid waste generated in the Hospital and treatment if applicable, in an effective, efficient and safe manner, in order to contribute to provide safety for patients, staff and visitors, to control and minimize health, occupational and environmental risks due to inadequate management of solid waste generated. All in accordance with Applicable Laws and Provisions.

1. **Sterilization Service**: includes the reception, cleaning (lubrication-descaling), decontamination, disinfection, preparation, packaging, sterilization, storage and distribution of medical devices (ventilator accessories, manual resuscitators, etc.), instruments and surgical clothing coming from the different services of the Hospital, in order to provide a sterile and safe product to be used with the patient.

1. **Safety and Surveillance Service**: includes the protection of patients, staff, visitors and the public in general, as well as the safeguarding of the Hospital's infrastructure and assets, through the physical presence of specialized personnel and with the support of the technologies incorporated in the Project and others proposed by the CONCESSIONAIRE.
2. **Information and Communications Technology and Technology Infrastructure Provisioning and Availability Service**: comprises the integrated management of strong IT services, which operate based on a technology infrastructure with high levels of security, availability and productivity, in such a way that they contribute directly to the efficiency expected by the Hospital.

1. **Maintenance and Operation Service of the Building, Installations, Electromechanical Equipment and *furniture associated with the Infrastructure* (MOE):** comprise the integrated management of maintenance and operation services of all the components of the Hospital's physical infrastructure, including the buildings and their exterior areas, their installations, systems and associated electromechanical equipment and the furniture associated with the Hospital's Infrastructure, with the most modern standards of automation and control of the conditions of safety, functionality, habitability, suitability to the environment, environmental protection and universal accessibility, and especially with the standards of the National Building Regulations and the Applicable Laws and Provisions.

1. **Service of Administration, Acquisition, Maintenance and Availability of Equipment**: comprises the integrated management of services of the highest standard for the technical, legal and administrative management of the acquisition processes. Maintenance and availability of equipment, in order to ensure that these assets comply with the management procedures for state-owned movable property.

1. **Hemodialysis Service**: includes the integrated hemodialysis service to all patients with acute or chronic renal insufficiency. This service shall be granted to all patients referred by the GRANTOR through authorized users by means of the procedure defined by the Parties, including seronegative and seropositive patients with hepatitis B, C and HIV, or any other type of infectious diseases.

1. **Clinical Pathology Service, Laboratory**: comprises the taking and analysis of human biological samples by a multidisciplinary team, which will provide information for the prevention, diagnosis, control or evaluation of health problems of people. This service will be granted to all patients referred by the GRANTOR through authorized users through the procedure defined by the Parties. The objective is to provide microbiological, immunological, hematological, biochemical or other analyses in order to provide information for the prevention, diagnosis, control or evaluation of health problems of the people.

1. **Imaging Service**: includes the delivery of the diagnostic support service through the generation, obtaining and processing of high resolution and precision images by means of ionizing and non-ionizing radiations and other energy sources, which will allow the timely detection of diseases, their study and treatment. This service will be granted to all the patients of the Hospital referred by the GRANTOR through authorized users through the procedure defined by the Parties.

1. **Service of logistics of inputs, strategic assets, pharmaceuticals and non-strategic inputs***:* includes the integrated management of the logistic and physical processes of reception, storage, custody and distribution of strategic materials, non-strategic materials and medicines acquired by the GRANTOR. This service will be provided considering the requirements of the GRANTOR, necessary to provide a timely and quality service to the patients.

The Services shall be provided in accordance with the provisions of the Contract, in compliance with the Service Levels, as well as with the Applicable Laws and Provisions.

The normal provision of the Services entails compliance with the Service Levels and the minimum requirements of the Project contemplated in Annex 8.

* + - 1. ***Health Care Service***

The set of care and medical attention provided to users (patients) for the different medical specialties within the framework of prevention, promotion, recovery and rehabilitation of health.

* + - 1. ***Easements***

These are the rights over portions of land owned by third parties that acquire the status of servient estates, which are required for the implementation of the Project. The easements will be established according to the provisions of Chapter VI of the Contract, its costs and risks shall be assumed by the CONCESSIONAIRE.

* + - 1. ***Computerized Maintenance Management System***

A system to be implemented by the CONCESSIONAIRE that allows storing, managing and processing information corresponding to the control, follow-up and reporting of the Hospital's operation and maintenance status, which shall be integrated with the GRANTOR's maintenance management software.

* + - 1. ***Health Management Systems (SGS)***

Integrated computer management system of all the factors that have an impact on the GRANTOR's healthcare system, where the center of the information system will be the Electronic Medical Record, which will be fed by the different authorized users and will be integrated with the rest of the solutions and/or systems implemented in the hospital, maintaining bidirectional data flows.

* + - 1. ***Information System for the Integrated Management of Service Levels (SIGI-NS)***

It is the computer system to be implemented by the CONCESSIONAIRE for the management and monitoring of the services, registration, verification and measurement of the Service Levels.

* + - 1. ***Contaminated Sites***

These are areas where the soil contains contaminants from anthropogenic activities, in concentrations that may represent risks to health or the environment, because they exceed the Environmental Quality Standards (EQS) for soil or international standards ratified by the State of the Republic of Peru. The area may include underlying groundwater, sediments or other environmental components affected by soil contamination.

* + - 1. ***Strategic Partner***

The shareholder or stockholder of the CONCESSIONAIRE that demonstrated, directly or through its Related Companies, as applicable, compliance with the experience requirements set forth in the Bidding Terms, and that holds the ownership of the Minimum Participation in the CONCESSIONAIRE.

* + - 1. ***Supervisor***

It is the company or companies hired by the GRANTOR, whose cost is assumed by the CONCESSIONAIRE, which will carry out the supervision tasks. There is a Supervisor of Contract and Operations and a Supervisor of Design, Building and Equipment, whose scope and functions are developed in Chapter XIII.

* + - 1. ***Supply***

These are the physical elements required for the proper functioning of the Infrastructure and its Equipment. Supplies are considered to be the provision of electricity, medical gases, drinking water, industrial gases, among others, that comply with the purity and presentation characteristics indicated by the current healthcare regulations.

* + - 1. ***Exchange Rate***

This is the average of the weighted average purchase exchange rate and the weighted average sale exchange rate of Dollars of the financial system published periodically by the Superintendency of Banking, Insurance and Pension Fund Administrators (SBS) and published in the official gazette "El Peruano" for the conversion of Soles to Dollars and vice versa.

* + - 1. ***Termination***

It consists of the termination of the Concession for the reasons set forth in the Contract.

* + - 1. ***Pre-installation Works***

Minimum infrastructure and supply requirements that the building must have to enable the installation of Equipment that requires specific conditions for its operation and functioning, considering situations such as: carrying load or weight of the equipment, minimum normative area for positioning, circulation flows, medical gases, installations, air conditioning conditions, radiological safety, ergometry, health care systems, electrical systems, mechanical systems, among others, as indicated by the manufacturer and/or supplier.

* + - 1. ***Tax Unit or UIT***

It is the Tax Unit in accordance with Rule XV of the Preliminary Title of the Single Ordered Text of the Tax Code, approved by Supreme Decree No. 133-2013-EF or the rule that modifies or replaces it. This value is published every Calendar Year in the official gazette "El Peruano". For the purposes of this Contract, the value in force at the time of payment of the corresponding penalty or deduction, if applicable, shall be considered.

* + - 1. ***Book Value of Assets***

Regardless of the value established for tax purposes or for any other purpose, for the Contract "book value" is the net book value of the Concession Assets or of the financial asset reflecting the Concession Assets, expressed in Soles (according to audited Financial Statements prepared in accordance with the rules and principles generally accepted in Peru, including IFRS standards) discounting amortization and depreciation, as applicable, not taking into account an update of these values from the time the investment was made to the date of the calculation, and without double counting of the concepts.

## **Interpretation: applicable laws, contract documents and order of priority**

* 1. The Contract shall be interpreted, according to the Applicable Laws and Provisions, as a unit and in no case each one of its Clauses independently.
  2. In case of discrepancy or ambiguity in the interpretation of this Contract, the following order of priority shall be followed to resolve such situation:

1. The Contract and its amendments.
2. The Official Letters referred to in the Bidding Terms.
3. The Bidding Terms.
4. The Applicable Laws and Provisions.

* 1. Any reference made in this Contract to "Annexes," "Appendices," "Chapters," "Clauses," "Subparagraphs" or "Paragraphs" shall be deemed to refer to the "Annexes," "Chapters," "Clauses," "Subsections" or "Paragraphs" of this Contract, respectively, unless expressly stated to the contrary.
  2. Any reference to a law, decree or regulation shall be construed as a reference to such law, decree or regulation in force as of the Closing Date or any amendment or any new law, decree or regulation replacing the same, as applicable.
  3. All Annexes to the Contract form an integral part thereof.
  4. The headings contained in this Contract are for identification purposes only and shall not be deemed to be a part hereof limiting or amplifying its contents, or for determining the rights and obligations of the Parties.
  5. The use of the disjunction "or" in an enumeration shall be understood as comprising one or more of the elements of such enumeration.
  6. The use of the conjunction "and" in an enumeration shall be understood to cover all the elements of such enumeration or list.
  7. Capitalized terms, whether used in the singular or plural, which are not defined in this section or other sections of the Contract, shall have the meanings ascribed to them in the Bidding Terms or the Applicable Laws and Provisions, or the meaning given to the same, having regard to their function and use, in the normal course of business in Peru.
  8. Terms in the singular shall include the same terms in the plural and vice versa. Terms in the masculine include the feminine and vice versa.
  9. The Contract is entered into only in the Spanish language. Should there be any difference between any translation of the Contract and this one, the Spanish text shall prevail. Translations of this Contract shall not be considered for purposes of interpretation.
  10. The time periods established shall be computed in Days, Calendar Days, months or years, as applicable.
  11. In all cases where the Contract establishes obligations to be borne by the CONCESSIONAIRE or to be performed by the latter, they shall be understood to be for its own expense, cost and risk, except those expressly foreseen to be borne by or on behalf of the GRANTOR.

# PURPOSE, MODALITY AND CHARACTERISTICS OF THE CONTRACT

## **Purpose**

* 1. By this Contract, the GRANTOR grants the Project in Concession to the CONCESSIONAIRE for the exclusive purpose that the latter carries out the Design, financing, Construction, Equipment Endowment, Operation and Maintenance of the Hospital.

The CONCESSIONAIRE shall be responsible for carrying out the Construction and other activities that may be necessary in order to comply with the provisions foreseen in the Contract, pursuant to the stipulations set forth in the Technical File, with no other limitations than those set forth in this Contract and in the Applicable Laws and Provisions.

Likewise, the CONCESSIONAIRE undertakes to use the land delivered as Concession Assets for the exclusive purpose of the Construction, Equipment Endowment, Operation and Maintenance of the Hospital, obtaining for such purpose all the necessary authorizations for the development of its activities.

* 1. Enunciatively, but not limited to, this Contract authorizes the CONCESSIONAIRE to carry out:

1. The Design, financing, Construction of the Works and Commissioning of the Project.
2. The acquisition, endowment, installation, training and operational commissioning of the Equipment.
3. The execution of the Operation and Maintenance activities of the Works and Equipment and the Replacement of the Equipment and the provision of the Services.
4. In general, to carry out all the steps, procedures and contracts necessary for the implementation and financing of the Hospital.
5. The Reversion of the Infrastructure and Equipment.

* 1. The Concession does not imply the transfer of ownership of the Concession Assets. The CONCESSIONAIRE acquires the Concession right as from the Closing Date and keeps it during the term of the Concession.

* 1. Considering that the purpose of the Concession is to contribute with the social welfare of the population, guaranteeing an adequate rendering of the Services, complying with the Service Levels established in the Contract, during all its validity, the acts of disposition on the Concession must be compatible with this nature and be approved by the GRANTOR, according to the provisions of this Contract.

* 1. This Contract has been entered into in accordance with the Applicable Laws and Provisions. Consequently, the Parties agree that the content, execution, conflicts and other consequences arising from it shall be governed by Peruvian law, which the CONCESSIONAIRE declares to be familiar with.

## **Modality**

* 1. This Contract is a Public-Private Partnership under the co-financed Concession modality, in accordance with the provisions of Legislative Decree No. 1362, and its Regulations approved by Supreme Decree No. 240-2018-EF.

## **Characteristics**

* 1. The Contract is unitary in nature and fulfils a single cause, without prejudice to the multiplicity of activities and services described in Clause 2.2 above.

* 1. The Contract is principal, of reciprocal benefits, progressive and of continuous execution.
  2. All tacit or express approvals, conformities, opinions or similar, issued by the GRANTOR do not imply the release of the obligations and responsibilities of the CONCESSIONAIRE, in accordance with the provisions of this Contract.
  3. Annex 8 of this Contract establishes the Service Levels that the CONCESSIONAIRE shall be obliged to comply with during the term of this Contract.

# EVENTS AT THE CLOSING DATE

## **Statements by the Parties**

* 1. The CONCESSIONAIRE hereby guarantees that, as of the Closing Date and during the term of the Concession, as applicable, the following statements are true, correct and complete:

1. That the Minimum Participation of the Strategic Partner, the bylaws and the CONCESSIONAIRE's organizational documents comply with the requirements of the Bidding Terms.
2. That the CONCESSIONAIRE is duly authorized and has the capacity to assume the obligations corresponding to it as a consequence of the execution of the Contract, having complied with all the necessary requirements to formalize the same and to comply with the obligations contemplated therein.
3. That it is not necessary for the CONCESSIONAIRE to carry out any other acts or procedures, or to obtain any consent from other individuals or legal entities, in order to authorize the execution and performance of the obligations corresponding to it under the Contract.
4. That the CONCESSIONAIRE and its shareholders or stockholders have no impediment to enter into contracts pursuant to Article 29 of Legislative Decree No. 1362 or regulations that modify or replace it, or any other impediment contained in rules with the legal rank, and are not administratively sanctioned with temporary or permanent disqualification in the exercise of their rights to enter into contracts with the State of the Republic of Peru.

1. That the CONCESSIONAIRE and its shareholders or stockholders expressly, unconditionally and irrevocably waive any diplomatic claim for controversies or conflicts that may arise from the Contract.
2. That all the information, statements, certifications and, in general, all the documents submitted in Envelopes No. 1, 2 and 3, during the Bidding stage, remain in force.
3. That the CONCESSIONAIRE declares that the Contract is in a situation of economic financial balance.
4. That there are no actions, lawsuits, arbitration or other legal proceedings in progress, nor judgments, awards or decisions of any kind not executed, against the CONCESSIONAIRE, its shareholders or stockholders, which are intended to prohibit or otherwise prevent or limit compliance with the commitments or obligations contemplated in this Contract.
5. That the CONCESSIONAIRE declares that neither it, nor its shareholders, stockholders, partners or Related Companies, nor any of their respective directors, officers, employees, nor any of their advisors, representatives or agents, have paid, offered, or attempted to pay or offer, or will attempt to pay or offer in the future any illegal payment or commission to any authority related to the awarding of the Successful Bid, the Concession or the execution of this Contract.
6. That the CONCESSIONAIRE receives on the Closing Date for the execution of the Contract and in accordance with the List of Lands, the real estate where the Project will be developed, in accordance with the provisions of Chapter VI, the same that have Legal Physical Sanitation.

1. That the CONCESSIONAIRE hereby states that the contracts it enters into with third parties shall not be enforceable against the GRANTOR.
2. That the CONCESSIONAIRE acknowledges and accepts that its decision to enter into this Contract has been based on its own investigations, examinations, inspections, analyses, studies and risk assessments, upon which the economic-financial model has been prepared, as referred to in Paragraph k) of Clause 3.3. For this reason, the CONCESSIONAIRE declares, acknowledges and accepts that, under no circumstances, it may transfer the risk of the execution of this Contract to the GRANTOR.
3. That the CONCESSIONAIRE acknowledges and accepts that (i) the GRANTOR makes no warranty, express or implied, as to the completeness, reliability, accuracy or truthfulness of any information, oral or written, supplied during the Bidding, or otherwise; and, (ii) the GRANTOR and its representatives, agents, advisors or servants shall have no liability whatsoever for the completeness, reliability, accuracy or truthfulness of such information or for the use to which the CONCESSIONAIRE may have put such information.
4. That the CONCESSIONAIRE acknowledges and accepts that (i) the GRANTOR is not obliged to update the information, verbal or written, provided during the Bidding, or in any other way; and, (ii) the GRANTOR, its representatives, agents, advisors or employees shall have no liability whatsoever for the lack of updating or scope of such information.

1. That, if after the execution of the Contract the falsity of any of the aforementioned declarations is demonstrated, this Contract shall terminate for causes attributable to the CONCESSIONAIRE, having to proceed in accordance with the provisions of Chapter XXIV and to execute the Performance Bond in force at that time.
2. In addition, in the particular case of Paragraph i) of this Clause, if it is verified that any of the aforementioned individuals or legal entities have been or are convicted by means of a final or enforceable judgment or have admitted or acknowledge the commission of any of the crimes related to corruption of public officials typified in Section IV of Chapter II of Title XVIII of the Peruvian Criminal Code, or equivalent crimes in case these have been or are committed in other countries, before any national or foreign competent authority, in relation to the execution of this Contract, the Concession or the awarding of the Successful Bid of the Bidding, the CONCESSIONAIRE shall pay to the GRANTOR a penalty equivalent to ten percent (10%) of the amount resulting from the application of the mechanism or procedure for the liquidation of the Contract established in Chapter XXIV, without prejudice to the execution of the Performance Bond in force at that time.

* 1. The GRANTOR guarantees to the CONCESSIONAIRE, as of the Closing Date and throughout the term of the Concession, as applicable, the truthfulness of the following statements:

1. That it is duly authorized, in accordance with the Applicable Laws and Provisions, to act as such in the Contract. The signature, delivery and performance by the GRANTOR of the obligations and commitments contemplated in the Contract are within its powers, pursuant to the Applicable Laws and Provisions.

No other action or procedure, on the side of the GRANTOR or any other Competent Governmental Authority, is necessary to authorize the execution of the Contract or for the performance of the obligations of the GRANTOR contemplated therein.

1. That the Certificate of Delivery of Assets has been subscribed.
2. That it has complied with all the administrative acts, requirements, demands and obligations at its charge, to execute this Contract and to give due compliance to its stipulations.
3. That there are no Applicable Laws or Provisions in force that prevent the GRANTOR to comply with its obligations under this Contract.
4. That there are no actions, lawsuits, investigations, litigations or proceedings in progress before a jurisdictional body, arbitration court or Competent Governmental Authority, sentences, awards or decisions of any kind not executed, which prohibit, oppose or, in any way, prevent the execution or compliance of the terms of the Contract by the GRANTOR, according to what is stated in the Contract.

1. That the stipulations in the Contract have been formulated on the basis of the Applicable Laws and Provisions.
2. That there are no liabilities, obligations or administrative, labor, tax, judicial or legal contingencies that may in any way affect the use of the Concession Assets, the right to perform the Works or the right to provide the Services.
3. That it will not perform acts that prevent or hinder the execution of the performance by the CONCESSIONAIRE of the services contained in this Contract.
4. That the Contract is in an economically and financially balanced situation.
5. That it has hired the Supervisor of Contract and Operations and the Supervisor of Design, Construction and Equipment.
6. That the Adhesion Document to the Administration, Payment and Guarantee Parent Trust will be subscribed within the term established in subsection 9.3 of the Parent Trust.
7. That the land on which the Hospital will be built, recorded in the registration entry No. 110939328 of the Real Estate Registry of Registration Zone No. I - Piura Headquarters, has been transferred in favor of the GRANTOR by means of a donation, since it has a burden that must be met.
8. That, by means of this Contract, the GRANTOR authorizes the CONCESSIONAIRE to constitute a mortgage on the Concession, in accordance with the provisions of Article 26 of Legislative Decree No. 1362 and Chapter XIV.

## **Findings at Closing Date**

* 1. The CONCESSIONAIRE, as of the Closing Date, has complied with the following:

1. Deliver to PROINVERSIÓN the certified copy of the public deed of incorporation and bylaws of the CONCESSIONAIRE, with record of registration, in order to prove: (i) that it is a new legal entity, validly incorporated in accordance with the Applicable Laws and Provisions; and, (ii) that it has the same partners, shareholders, stockholders or members, and in the same percentages that they maintained as members of the Successful Bidder. The requirement referred to in the section (ii) above shall not apply in the event that the Successful Bidder is a single legal entity, in which case, it shall only have to assign a maximum of one share or participation to a third party in order to comply with the Applicable Laws and Provisions.
2. Prove a minimum capital stock of S/ 143'000,000.00 (One hundred and forty-three million and 00/100 Soles) fully subscribed and to be paid in cash, according to the following detail:

* As of the Closing Date, the paid-in capital shall amount to at least twenty-five percent (25%) of the minimum capital indicated;
* Fifty percent (50%) at the latest within twelve (12) months following the Closing Date; and,
* The entire minimum capital stock, as aforesaid no later than within twenty-five (25) months following the Closing Date.

The referred minimum capital stock shall be maintained until twelve (12) months after the subscription of the Certificate of Works and Equipment Verification and Acceptance, after which the CONCESSIONAIRE shall maintain at least a capital stock equivalent to fifty percent (50%) of the subscribed capital stock, which shall be informed to the GRANTOR within fifteen (15) days after the change is made.

In order to prove the required capital stock, the CONCESSIONAIRE shall submit to the GRANTOR: (i) the public deed of incorporation of the CONCESSIONAIRE and, if applicable, the public deed of increase or reduction of the capital stock and partial amendment of the bylaws, with record of registration; (ii) the accounting entries showing the registration of the funds deposited by the partners, shareholders or stockholders of the CONCESSIONAIRE; and, (iii) the certificate of deposit from the institution of the national financial system where the corresponding deposit was made.

1. Prove the registration, in the corresponding registry office, of the powers of attorney of the legal representative of the CONCESSIONAIRE who will sign the Contract in its name and on its behalf.
2. Submit a notarized copy of the documents evidencing that its competent internal bodies have approved the Contract.
3. Submit a notarized copy of the entries in the share registration book, or equivalent document, showing the composition of the CONCESSIONAIRE's shareholding or participations.
4. Submit the updated affidavit, according to the form in Appendix [\*] of Annex [\*] of the Bidding Terms "Statement of not being disqualified to be a bidder and therefore to contract with the Peruvian State", signed by the members of the CONCESSIONAIRE.
5. Submit the insurance policy contracting schedule and the list of companies that could potentially be contracted. Likewise, it shall submit the list of specialized companies for the preparation of the risk study, in accordance with the provisions of the Contract.
6. Prove that the CONCESSIONAIRE'S bylaws referred to in the Paragraph a) of this Clause must contain at least the following provisions:

* A restriction on the free transfer, disposition or encumbrance of the shares or participations of the Strategic Partner in favor of third parties, with respect to the Minimum Participation.

The Strategic Partner may transfer, dispose or encumber such shares or participations corresponding to the Minimum Participation, after at least five (5) years from the subscription of the Certificate of Verification and Acceptance of Works and Equipment, with the prior non-binding opinion of the Supervisor of Contract and Operations, which shall be issued within a term no longer than fifteen (15) Calendar Days from the receipt of the CONCESSIONAIRE's request and the written authorization of the GRANTOR, which shall be issued within a term no longer than fifteen (15) Calendar Days from the receipt of the opinion of the Supervisor of Contract and Operations. The new strategic partner holder of the Minimum Participation shall comply with the same requirements established for the Strategic Partner in the Bidding Terms and in the Contract.

The GRANTOR's approval is subject to the CONCESSIONAIRE's compliance with the conditions and restrictions of the Bidding Terms.

The referred restriction does not include the transfer of the Minimum Participation of the Strategic Partner to a company of the same Economic Group, as long as the Control of both is exercised by the same Parent Company, with the prior non-binding opinion of the Supervisor of Contract and Operations, which shall be issued within a term no longer than fifteen (15) Calendar Days and with the written authorization of the GRANTOR, which shall be issued in a term no longer than fifteen (15) Calendar Days after receiving the opinion of the Supervisor of Contract and Operations or after the term for the issuance of such opinion has elapsed without having issued it, and provided that the new Strategic Partner complies with the same requirements established for the Strategic Partner in the Bidding Terms.

In the case of an encumbrance on the shares or participations of the Strategic Partner referred to the Minimum Participation, in case of execution, the new Strategic Partner must comply with the requirements and terms established in the preceding paragraph.

The restriction of this section does not include the transfer, disposition or encumbrance of the shares or participations of the Strategic Partner other than the Minimum Participation; nor those of the shares or participations other than that of the Strategic Partner.

* + A restriction on the free transfer, disposition or encumbrance of the shares or participations in favor of other Bidders, or members of other Bidders, who submitted Financial Offers during the Bidding stage, a restriction that is maintained until five (5) years from the subscription of the Certificate of Verification and Acceptance of Works and Equipment.

The aforementioned limitation also includes the transfer, disposition or encumbrance of shares or participations in favor of companies that may be directly or indirectly related or that are part of an Economic Group, according to the definitions contained in SMV Resolution No. 019-2015-SMV/01, or rule that modifies or replaces it, as applicable, related to the legal entities that were Bidders during the Bidding stage, or to the members of the consortiums that submitted Financial Offers during the Bidding stage, other than the Successful bidder.

* + Any amendment to the bylaws that implies a change in the regime of majorities, the classes of shares and the percentages that the shareholders or stockholders must maintain among themselves, its administrative bodies, as well as any process of capital increase, capital reduction, merger, spin-off, transformation or liquidation of the CONCESSIONAIRE, from the Closing Date and during the entire term of the Concession, shall:

1. Maintain the Minimum Percentage Participation of the capital stock for the Strategic Partner, as established in the Bidding Terms and the Contract; and,
2. Necessarily have the favorable vote of the Strategic Partner, and be approved by the shareholders, partners or stockholders of the CONCESSIONAIRE that together represent at least two thirds (2/3) of its capital stock, both in first and second call.

In case the CONCESSIONAIRE decides to carry out any of the aforementioned processes, it shall follow the following rules:

1. Submit to the GRANTOR, with copy to the Supervisor of Contract and Operations, the draft resolution of the general shareholders' meeting. This shall be evaluated and, if applicable, authorized by the GRANTOR within a maximum term of forty-five (45) days after receiving the non-binding opinion of the Supervisor of Contract and Operations, or after the term has elapsed without the issuance of such opinion, which shall be issued within a term no longer than thirty (30) days after receiving the request.
2. The bylaws must expressly contemplate that, for the adoption of any agreement, which directly or indirectly entails or may result in the capital increase, merger, spin-off, transformation or liquidation of the CONCESSIONAIRE, the favorable vote of the Strategic Partner shall necessarily be required. This provision must be maintained throughout the term of the Concession, always respecting the Minimum Participation.

* + The CONCESSIONAIRE is a company whose corporate purpose is limited exclusively to the execution of the activities set forth in the Contract.
  + For purposes of the CONCESSIONAIRE's incorporation, operations and performance, the CONCESSIONAIRE must comply with the Applicable Laws and Provisions.
  + The term of the CONCESSIONAIRE's incorporation must be at least two (2) years after the effective date of the Contract. If the term of the Concession contemplated in Chapter IV is extended or prolonged, the term of the CONCESSIONAIRE's incorporation will be continued for the term of the extension or prolongation, in accordance with the provisions set forth above.

1. Deliver the Performance Bond for the Pre-operational Stage, according to the provisions of Chapter XVI.

1. Make the deposit in the account indicated by PROINVERSIÓN, corresponding to the reimbursement of expenses of the process and the reimbursement in favor of the Inter-American Development Bank - IDB, as established in the Bidding Terms.
2. Deliver the economic-financial model formulated by the Successful Bidder. Said model shall comply with the provisions of the Bidding Terms and the Applicable Laws and Provisions.

* 1. The GRANTOR, as of the Closing Date, has complied with:

1. The return to the CONCESSIONAIRE the Guarantee of Validity, Effectiveness and Seriousness of the Offer submitted by the Successful Bidder, which PROINVERSIÓN has in its custody.
2. Having the confirmation of the trustee of the Administration, Payment and Guarantee Parent Trust indicating that all the conditions have been complied with, including those set forth in subsections 9.1, 9.2 and 9.3 of the Administration, Payment and Guarantee Parent Trust for the adhesion of the CONCESSIONAIRE as new trustee to the Administration, Payment and Guarantee Parent Trust, being pending only the subscription of the Adhesion Document to the Administration, Payment and Guarantee Parent Trust.

# TERM OF THE CONCESSION

## **Term of the Concession**

* 1. The term of the Concession is twenty (20) years from the Closing Date.
  2. In no event shall the term of the Concession, added to the term of any extension, exceed the maximum term established in the Applicable Laws and Provisions, which shall be counted as from the Closing Date.

## **Stages of contract execution**

* 1. The execution of the Contract will be carried out in accordance with the following stages:

1. Pre-Operational Stage

The Pre-Operational Stage has a maximum duration of three (3) years, in which the CONCESSIONAIRE will carry out the Technical File Preparation Activities, Infrastructure Construction Activities, Equipment and Commissioning Activities.

1. Operational Stage

The Operational Stage lasts from the culmination of the Pre-Operational Stage until the end of year twenty (20) of the Concession, period in which the CONCESSIONAIRE will carry out the Operation and Maintenance activities, as well as the Replacement of Equipment subject to replacement and the rendering of the Services as established in the Contract.

## **Extensions due to expiration of the Concession**

* 1. The term of the Concession may be extended at its expiration by requirement of the GRANTOR or request of the CONCESSIONAIRE, by means of a duly grounded written communication, not less than two (2) years prior to the expiration of the term of the Concession.

The GRANTOR reserves the right to review the conditions under which it will evaluate the extension of the Concession. The GRANTOR's decision shall not be subject to challenge or susceptible to be questioned by the CONCESSIONAIRE through the dispute resolution mechanism.

* 1. Before extending the term of the Concession due to expiration, the GRANTOR must evaluate whether during the elapsed time of the Concession, there have been changes in the material, technological and economic conditions, under which the Services are rendered, prior non-binding opinion of the Supervisor of Contract and Operations that must be issued within a maximum term of fifteen (15) Calendar Days of receiving the CONCESSIONAIRE's request, in order to determine whether it is pertinent to grant the extension of the Contract, or if applicable, the call for a new selection process, considering the principles of value for money and competition, as well as other conditions or sectorial rules that may be applicable. The extension of the term must be processed in accordance with the procedure established in Chapter XXII and in the Applicable Laws and Provisions.

## **Suspension of the concession term**

* 1. The CONCESSIONAIRE or the GRANTOR may request the suspension of the term of the Concession when the Critical Path or the normal provision of the Services is affected. No type of economic or financial damage shall be recognized, linked to an impact of income or costs incurred by any of the Parties, whenever any of the following events occur:

1. Force majeure or unforeseeable circumstance, in accordance with the provisions of Chapter XXI.
2. Written agreement between the Parties, derived from circumstances other than those referred to in the preceding Paragraph, and provided that they are not attributable to the CONCESSIONAIRE, prior binding opinion of the Supervisor of Contract and Operations or the Supervisor of Design, Construction and Equipment, as applicable, issued within a maximum term of seven (7) days. Said agreement shall be recorded in minutes.
3. Other cases expressly provided for in this Contract.

The request for suspension of the Concession term is processed in accordance with the procedure foreseen in Clauses 4.11 to 4.15, the Contract may be submitted by any of the Parties. During the period of suspension of the Contract, the calculation of the term of the Contract shall be interrupted.

* 1. In case the suspension of the term of the Concession is generated by the event foreseen in paragraph a) of Clause 4.6 and extends for more than one hundred eighty (180) continuous Calendar Days, counted from the respective declaration, and this suspension affects the Critical Path or the normal rendering of the Services, any of the Parties may invoke the Termination, under the assumption regulated in Clause 24.2.5.
  2. The breach of obligations resulting from the events indicated in Clause 4.6 shall not be sanctioned with the penalties or deductions provided for in the Contract.
  3. In the event that the GRANTOR declares the request for the suspension of the Concession term inadmissible, the penalties or deductions corresponding to the CONCESSIONAIRE shall be applied retroactively.

## **Suspension of obligations**

* 1. The breach of the obligations contemplated in the Contract by the CONCESSIONAIRE or the GRANTOR, shall not be considered as a cause attributable to them, and may be suspended during the time and to the extent that such breach prevents the execution of any of the obligations contemplated therein, and is originated by any of the following causes:

1. Force majeure or unforeseeable circumstance, which affects the performance of an obligation, in accordance with the provisions of Chapter XXI.
2. Agreement between the Parties, derived from circumstances other than those referred to in the preceding Paragraph, and provided they are not attributable to the CONCESSIONAIRE, in which case it shall be necessary to have the prior binding opinion of the Supervisor of Contract and Operations or the Supervisor of Design, Construction and Equipment, which must be issued within a maximum term of ten (10) days. Said agreement shall be recorded in the minutes.
3. Other cases expressly provided for in the Contract.

## **Procedure for declaring the suspension of obligations**

* 1. With the exception of the grounds referred to in Paragraph b) of the preceding Clause, if the CONCESSIONAIRE or the GRANTOR is unable to comply with the obligations established in the Contract due to any of the events set forth in said Clause, the party affected by the event shall inform, if applicable, to the CONCESSIONAIRE or the GRANTOR about the facts that constitute said event, within the following seventy-two (72) hours of having occurred or having become aware of it, if applicable.

Additionally, the affected party shall submit to the GRANTOR or CONCESSIONAIRE and to the Supervisor of Contract and Operations or to the Supervisor of Design, Construction and Equipment, if applicable, within seven (7) days of the event, a technical, legal and financial report, supporting the reasons for the non-compliance, details of such event, the affected obligation or condition, the estimated period of total or partial restriction of its activities and the degree of expected impact, the mitigation measures adopted or that should be adopted as long as the estimated period of restriction is exceeded, proposal of insurance regime (which shall include measures such as the endorsement or transfer in favor of the GRANTOR of the insurance policies that have been contracted by the CONCESSIONAIRE), of contractual guarantees and of other obligations whose compliance is not directly affected by the event.

Likewise, the Party affected by the event shall keep the other Party informed of the development of the event.

* 1. Within ten (10) days after the notification of the circumstance for which the suspension was invoked, the Supervisor of Contract and Operations or the Supervisor of Design, Construction and Equipment, if applicable, shall send its technical opinion to the Parties. This technical opinion shall include the objections that the corresponding supervisor finds to the request; being that the corresponding party shall submit the correction to the Supervisor of Contract and Operations or the Supervisor of Design, Construction and Equipment within a maximum term of ten (10) Calendar Days. The supervisor shall issue an opinion within five (5) days of receipt of the corrective action; if the supervisor does not issue an opinion within the established term, it shall be understood as an unfavorable opinion.

* 1. In the event that the CONCESSIONAIRE has requested the suspension, the GRANTOR shall issue its opinion within a maximum term of ten (10) days after receiving the technical opinion of the Supervisor of Contract and Operations or the Supervisor of Design, Construction and Equipment; in case the GRANTOR does not issue its opinion within the established term, it shall be understood that the request has been rejected.

In the event that the GRANTOR has requested the suspension, the CONCESSIONAIRE shall have a term of ten (10) days from receipt of the request to submit its opinion to the GRANTOR. The GRANTOR shall have a term of fifteen (15) days from receipt of the technical opinion of the Supervisor of Contract and Operations or the Supervisor of Design, Construction and Equipment and the opinion of the CONCESSIONAIRE to declare the suspension.

In all events, the GRANTOR shall be responsible for declaring the suspension in accordance with the Applicable Laws and Provisions; where the suspension shall be effective as of the Calendar Day following the written submission of the request for suspension referred to in Clause 4.13.

* 1. Provided that the suspension has been declared, if the obligations are affected by an event of force majeure or unforeseeable circumstance, they shall be suspended from the occurrence of the event of force majeure or unforeseeable circumstance and for the duration of such event, as regulated in Chapter XXI.
  2. In the event of disputes regarding the opinion issued, the GRANTOR or the CONCESSIONAIRE who is affected shall be entitled to resort to the dispute resolution procedure provided for in the Chapter XXIII.

## **Effects of the declaration of suspension of the Concession term and obligations**

* 1. The duty of the affected party to comply with the obligations under the Contract shall be temporarily suspended during the period approved, due to the impossibility produced by any of the aforementioned causes.

This shall be without prejudice to the obligation of the CONCESSIONAIRE to reestablish the provision of the suspended Services, as soon as possible, once the grounds that gave rise to the suspension has ceased.

* 1. The party affected by an event of force majeure or unforeseeable circumstance shall immediately notify the other parties involved and the Supervisor of Contract and Operations or the Supervisor of Design, Construction and Equipment, when the impediment has ceased and it may continue to comply with its obligations, and shall thereafter resume compliance with the suspended obligations.

Force majeure or unforeseeable circumstance shall not release the affected party from compliance with the obligations that are not suspended due to such events, nor shall it release the CONCESSIONAIRE from the application of penalties or deductions, as applicable, for non-compliance that occurred prior to the declaration of suspension, and which have been duly notified by the Supervisor of Contract and Operations or the Supervisor of Design, Construction and Equipment.

* 1. If during the term of the Concession some obligations are suspended, those that have not been affected by the suspension shall be maintained.
  2. In the event of the rendering of the Services and compliance with the guarantee of continuity thereof, the regulatory provisions in force regarding the coverage of the Services shall be complied with.
  3. In the event that the GRANTOR declares the request for suspension of the term for the fulfillment of the obligations unjustified, the penalties or deductions corresponding to the CONCESSIONAIRE shall be applied retroactively.

# ABOUT SERVICES, SERVICE LEVELS AND SERVICE INDICATORS

## **About Services**

* 1. The characteristics and conditions of the Services, Service Levels and Service Indicators are regulated in Annex 8.
  2. The CONCESSIONAIRE undertakes to keep all the Services available during the entire term of the Contract. The CONCESSIONAIRE at its own expense, cost and risk shall maintain available the Equipment described in the Certificate of Verification and Acceptance of Works and Equipment; therefore, in the event of any failure therein, it shall propose and execute the measures it deems necessary until the detected failure is overcome.

## **About the modification and inclusion of Services**

* 1. The GRANTOR or the CONCESSIONAIRE may request the other Party to add a new service or modify the scope of any of the Services being provided by the CONCESSIONAIRE, being applicable the provisions set forth in Chapter XXII.

In no event shall such requests imply the elimination of any of the Services to be provided by the CONCESSIONAIRE under the Contract.

* 1. Any work or activity that is not expressly mentioned in the Contract or in the Annexes but that, by virtue of the provisions regarding the scope and nature of the Services, as well as based on the best practices and international standards, are necessary for the provision of the Services, shall be implemented in the respective POA, and under no circumstances shall be understood as a modification of the Contract and shall not generate higher costs to the GRANTOR.

## **About the modification of Service Levels and Service Indicators**

* 1. The CONCESSIONAIRE or the GRANTOR may propose the modification or total or partial adjustment of the Service Levels and Service Indicators established in Annex 8 of the Contract, being applicable the provisions set forth in Chapter XXII.

## **Annual Operational Plan**

* 1. For each of the Services, the CONCESSIONAIRE shall prepare an Annual Operational Plan. These plans shall be valid for one (1) Calendar Year, and their approval shall not imply modifications to the Contract or revision of prices or Compensation.

For each Calendar Year, the CONCESSIONAIRE shall submit, at the latest on the last day of September, an Annual Operational Plan, which shall have the favorable opinion of the Supervisor of Contract and Operations and the approval by the GRANTOR at the latest on December 1st of the current Calendar Year, so that it may enter into force on January 1st of the following Calendar Year; otherwise, the penalties set forth in Annex 11 shall be applicable.

During the review period, the GRANTOR and the Supervisor of Contract and Operations may observe and issue comments, which shall be corrected and resolved by the CONCESSIONAIRE within the term established by the GRANTOR, in order to achieve its approval.

As part of the Annual Operational Plan, the Parties shall establish the shifts, protocols, delivery minutes, if applicable, and emergency situations for the use of the laboratory and diagnostic imaging Equipment to be shared with the GRANTOR, in order not to affect the fulfillment of the Service Levels.

In case of failure of any Laboratory and Diagnostic Imaging Equipment, the provisions of Clause 17.1 of the Contract shall apply. Notwithstanding the foregoing, the Supervisor of Contract and Operations shall conduct an investigation within a maximum period of fifteen (15) days from the date the failure is reported in the SIGI-NS. If it is determined that the responsibility lies with the CONCESSIONAIRE, the corresponding deductions for non-compliance with the Service Levels shall be applied retroactively in the next settlement, applying the rules established in Chapter XV, The same shall be computed from the moment the Equipment failure is reported in the SIGI-NS and exceeding the term foreseen in the POA until the Supervisor of Contract and Operations validates the total availability, opinion that shall be issued within five (5) Days after the CONCESSIONAIRE notifies the GRANTOR and the Supervisor of Contract and Operations of the availability of the equipment.

The minimum conditions of the Annual Operational Plan and submission deadlines are described in Annex 20.

## **About the Information System for the Integrated Service Level Management**

* 1. The CONCESSIONAIRE, in order to carry out the monitoring and control of the Service Levels, shall implement the SIGI-NS, described in Annex 8.

This information system allows auditing, monitoring, recording, controlling and obtaining information in real time, of all the systems and processes associated to the operational functioning of each one of the Services. Its objective is to provide all the functionalities to the operation of the Project that affect the accounting of the Service Levels, so that the information registered and processed by this system allows the Parties to acquire certainty regarding the events that determine the calculation of the Service Indicators, their Compensations, penalties and deductions; as well as the Sentinel Indicators and General Indicators. The CONCESSIONAIRE has the obligation to install the updates that may be necessary for the best operation of the system.

The SIGI-NS shall be submitted by the CONCESSIONAIRE to the GRANTOR with a copy to the Supervisor of Contract and Operations for the approval of the CONCESSIONAIRE, prior opinion of the Supervisor of Contract and Operations at least two (2) months prior to the beginning of the Operational Stage, for which the CONCESSIONAIRE shall follow the following approval procedure.

Once the SIGI-NS proposal is received by the CONCESSIONAIRE, the GRANTOR shall issue its approval, prior opinion of the Supervisor of Contract and Operations. The Supervisor of Contract and Operations shall verify the total operability of the system, as well as the training of the user personnel, within a maximum term of fifteen (15) days after receiving the CONCESSIONAIRE'S proposal. With the favorable opinion of the Supervisor of Contract and Operations, the GRANTOR shall communicate its decision within a maximum term of fifteen (15) days from the notification of the opinion of the Supervisor of Contract and Operations, and shall notify its decision simultaneously to the CONCESSIONAIRE and to the Supervisor of Contract and Operations.

In the event of any objections, the GRANTOR shall communicate them to the CONCESSIONAIRE with a copy to the Supervisor of Contract and Operations within a maximum term of fifteen (15) days from the day following the submission of the SIGI-NS by the CONCESSIONAIRE. The CONCESSIONAIRE shall have a term of five (5) days to correct the objections and shall send them to the GRANTOR with a copy to the Supervisor of Contract and Operations. The Supervisor of Contract and Operations shall have a maximum term of three (3) days from the day after receiving the correction of the objections, to issue its favorable opinion. In a maximum term of five (5) days after receiving the above-mentioned favorable opinion or after the term has elapsed without any opinion from the Supervisor of Contract and Operations, the GRANTOR shall issue its opinion.

In the event that the GRANTOR does not issue its opinion within the aforementioned term, the CONCESSIONAIRE shall reiterate its request, granting an additional term of two (2) days for the GRANTOR to issue its opinion; in the event that the latter request is not answered, it shall be understood that the SIGI-NS has been approved.

On the other hand, the CONCESSIONAIRE, since the system is operational, shall start a training process addressed to all the members of the Hospital. This training, which includes the delivery of user manuals, must be continuous for all Hospital personnel as well as for new personnel who join the Hospital and need to use SIGI-NS. This training should be carried out at least every six (6) months or at the request of the Hospital's user area.

* 1. Under no circumstances may the Operational Stage begin if the SIGI-NS is not fully approved and operational.

The CONCESSIONAIRE, through its employees or companies in charge, shall not encourage users who have access to SIGI-NS to communicate through any other means other than SIGI-NS.

## **Service Level Audit**

* 1. The audit of the Service Indicators that measure the Service Levels defined in Annex 8 shall be performed by an external auditing entity, the cost of which shall be assumed by the CONCESSIONAIRE.

The auditor must be a legal entity specialized in auditing services and operation of IT platforms for management and control of services and/or that has professionals with experience in this area.

* 1. Contracting the audit

Within the maximum term of forty-five (45) days from the beginning of the Operational Stage, the CONCESSIONAIRE shall submit to the Supervisor of Contract and Operations and to the GRANTOR, at least three (3) technical proposals from three (3) different companies or entities, for the performance of the audit.

The proposed auditing entities may be auditing companies or institutions of higher education directly or through their technical organizations. Said companies and institutions, as well as the main professionals that integrate the audit, must accredit experience in the development of similar consultancies, executed during the last three (3) years.

In the short list, the CONCESSIONAIRE shall indicate to the Supervisor of Contract and Operations the methodological proposal of each one of the three companies, the evaluation method of each one of them, as well as the selected company.

With this information, the Supervisor of Contract and Operations shall issue its opinion on the company to be hired within a maximum term of seven (7) days, after which, the GRANTOR shall issue its opinion within a maximum term of eight (8) days. Once this term has expired, it shall be understood that the request has been disapproved.

Once the audit entity has been appointed by the GRANTOR, this decision shall be communicated to the CONCESSIONAIRE so that it may proceed with its hiring, whereas the aforementioned contracting shall be carried out within a maximum term of thirty (30) days from the date of notification of the auditor's appointment. The auditing entity shall carry out its audits in strict accordance with the methodology submitted in its Technical Proposal.

The auditing entity and the professionals that comprise it may not have any direct or indirect relationship with the CONCESSIONAIRE or its Related Companies in the last thirty-six (36) months prior to the date of its contracting.

The Supervisor of Contract and Operations shall be the counterpart of the auditing entity, in coordination with the Hospital's management, and shall provide access to the records and documents required by them. In addition, it will coordinate the activities to be carried out with the Hospital's officers.

* 1. Obligations of the auditing entity

The obligations of this entity are to audit the compliance with the Indicators of the Services rendered by the CONCESSIONAIRE throughout the Operational Stage and the functioning of the SIGI-NS, its computerized registry and any logbook contemplated for its registration, as well as the reports or deliverables that the CONCESSIONAIRE delivers to the Supervisor of Contract and Operations and to the GRANTOR, foreseen in this Contract.

The audit must allow to identify failures or inconsistencies in the operation of the SIGI-NS and in the reports and control tasks. Likewise, the audit must include proposal(s) of improvement(s) for an optimal management and provision of the Services, as well as regarding the supervision and operation of the SIGI-NS.

* 1. Specific objectives

The auditing entity shall have the following specific objectives:

1. Audit the information and registry system in charge of the CONCESSIONAIRE, in terms of functionality for end users, accessibility, continuity of access to information, quality and integrity of records, response times, reports and general results of the system, as well as all those areas that the independent auditing entity deems pertinent.
2. Audit the management of the Service Levels in the Contract, in order to achieve the objectives of each one in relation to the provision of the Services and their supervision.

Audit the measurement method, response times, among others, of the Service Indicators approved by the GRANTOR for the corresponding year.

1. Audit the results of the Service Levels provided by the CONCESSIONAIRE, carrying out samplings, census or others, as appropriate.
2. Audit the non-compliance with the Service Indicators, detailing at least the Service, responsible party, date, time and possible cause.
3. Express opinions, certify and quantify the impact of the findings.

Based on the recommendations of the audit, the CONCESSIONAIRE shall deliver an annual proposal for the improvement of the Service Indicators, monitoring systems, registration and communication systems and, in general, of all the conditions that allow determining the Service Levels. To this end, it shall include a proposal for improvements to the regulations, plans and programs considered in the Contract and that define the Service Level, improvements to the supervision procedure of each Service and improvements to the system and applications, both in procedural aspects and in ease of use.

Notwithstanding the foregoing, the auditor's opinion is not binding on the Contract or retroactive for any requirement on the part of the CONCESSIONAIRE.

For the performance of the audit, the information obtained from the SIGI-NS established in the Contract and the background information of the CONCESSIONAIRE and/or GRANTOR and the Supervisor of Contract and Operations and that which shall be made available to the auditing entity to perform the work entrusted shall be taken as a basis.

* 1. Scope of the audit

The auditing entity shall prepare scheduled audits of the information and records corresponding to the evaluation of the Service Levels once (1) a year.

For continuity and comparison of results over time, the auditing entity shall be contracted for a minimum period of two (2) consecutive years.

The auditing entity shall propose the methodology to be applied, which shall specify at least the following:

* 1. Tasks to be performed by the professionals that make up the audit.
  2. Frequency of visits to the areas.
  3. Number of reports to be prepared, which will validate the information and records of the Service Levels, records and procedures of the system.
  4. Schedule of the work to be performed.

The auditing entity shall carry out the audits of the records and procedures. The dates of the scheduled audits will be proposed by the auditing entity, except for the first audit that will be carried out at the request of the Supervisor of Contract and Operations and/or the GRANTOR, by means of a document addressed to the professional in charge of the audit. Likewise, it shall consider that, in the monitoring of the Service Levels, the personnel of the Supervisor of Contract and Operations shall intervene.

* 1. Audit reports

The results of the audits shall be reported to the GRANTOR with a copy to the Supervisor of Contract and Operations. Such audit reports shall indicate each of the results.

In the audit reports, the auditing entity shall state if any of the previously established conditions were not complied with when performing the audit exercise, and shall also state which alternative standards or procedures were applied.

# PROPERTY REGIME

## **About Concession Assets**

* 1. The Concession Assets shall only be destined to the execution of the Contract and shall maintain such condition until the execution of the Certificate of Reversion.
  2. The Concession Assets that the GRANTOR shall deliver to the CONCESSIONAIRE at the Closing Date, intended for the Hospital, are listed in Annex 14.
  3. The land listed in Annex 14 has Legal Physical Sanitation; being that at the Closing Date the referred land that has been donated in favor of the GRANTOR, has a registered charge that establishes a series of conditions, which the CONCESSIONAIRE acknowledges and undertakes to comply with.

* 1. In the event that, due to any action or omission by the CONCESSIONAIRE, the registered donation on the land where the Hospital will be built, the CONCESSIONAIRE shall be responsible for obtaining ownership of the land in favor of the GRANTOR at its own expense, cost and risk .
  2. The GRANTOR undertakes to keep in force the title that entitles it to be the holder of the Concession Assets, having to carry out all the public and/or private acts that may be necessary to maintain the same throughout the term of the Concession.
  3. During the term of the Concession, the CONCESSIONAIRE is obliged to carry out activities aimed at preserving the Concession Assets in a good state of conservation, taking into consideration their ordinary use and nature.

* 1. The CONCESSIONAIRE is also obliged to carry out Preventive and Corrective Maintenance activities without generating a negative impact on the environment, as indicated in the technical-functional specifications of the Service and, in general, all those works necessary to maintain the operability of the Concession Assets.
  2. The CONCESSIONAIRE is obliged to carry out the improvements required by the referred Concession Assets for the adequate rendering of the Services, at its own expense, cost and risk.
  3. The Concession Assets destined to the execution of the Contract, may not be moved out of the Concession Area, unless prior authorization, in writing from the GRANTOR and for among others the following assumptions: (i) corrective maintenance, (ii) upgrade works, (iii) adaptation to new regulations, (iv) factory call due to health care and/or functional alerts. For such purposes, the GRANTOR shall respond to the written request made by the CONCESSIONAIRE, within a term no longer than five (5) days from the receipt of such request. In the event that the GRANTOR does not respond within said term, the CONCESSIONAIRE shall reiterate its request granting an additional term of two (2) Days for the CONCESSIONAIRE to make a decision; in the event of not responding to this last request, the request shall be deemed approved.
  4. The Concession Assets destined to the execution of the Contract, may not be transferred separately from the Concession, or mortgaged, and no Secured Transactions may be constituted on them, or subject them to charges and/or encumbrances of any kind, except previous authorization and in writing, from the GRANTOR.
  5. Each of the Concession Assets subject to registration in Public Registries, must be registered by the CONCESSIONAIRE, at its own expense, cost and risk, in the name of the GRANTOR, within a maximum term of six (6) months after signing the Certificate of Verification and Acceptance of the Works and Equipment acquisition, execution or implementation, with the GRANTOR's conformity, unless a delay or lateness on the part of the Competent Governmental Authority, duly accredited. For such purposes, the GRANTOR expressly authorizes the CONCESSIONAIRE to carry out all the administrative steps required.
  6. For its part, the CONCESSIONAIRE, within a term not to exceed six (6) months from the Closing Date, shall register the Concession in the Registry of Concessions of the National Superintendency of Public Registries (SUNARP, for its acronym in Spanish), at its own expense, cost and risk.

## **About the delivery of the Concession Assets**

* 1. From the subscription of the Certificate of Delivery of Assets, the CONCESSIONAIRE acquires possession of the land destined for the Hospital.
  2. For the purposes of the Contract, the assets that are replaced, repaired and those that are acquired shall be catalogued under the regime of the Concession Assets.

The CONCESSIONAIRE is responsible for the damages, injuries or losses caused to the Concession Assets from the subscription of the Certificate of Delivery of Assets until its delivery to the GRANTOR through the Certificate of Reversion of the Concession Assets.

The CONCESSIONAIRE must have the security measures that guarantee the integrity and proper functioning of the Concession Assets in case of damages that may be caused by third parties.

* 1. The CONCESSIONAIRE shall hold harmless the GRANTOR with respect to and against any action or exception of a legal, administrative, arbitration or contractual nature, or claim of any nature with respect to the Concession Assets, provided that this situation has been originated by acts or omissions occurred from the date of subscription of the respective Certificate of Delivery of Assets and until the date of subscription of the respective Certificate of Reversion of the Concession Assets, unless there is a cause of fraud or gross negligence attributable to the CONCESSIONAIRE.

The CONCESSIONAIRE is liable before the GRANTOR and third parties, if applicable, for the proper administration and use of the Concession Assets, as well as for the risk inherent thereto, and the civil liability arising therefrom.

Any claim, action or act initiated by third parties in relation to the Concession Assets, due to facts or situations not attributable to the CONCESSIONAIRE and which are originated before the date of the subscription of the Certificate of Delivery of Assets, shall be the responsibility of the GRANTOR in the case of the Concession Assets identified in Annex 16 and of the CONCESSIONAIRE in respect of those Concession Assets incorporated by the latter, in accordance with the Applicable Laws and Provisions.

* 1. The CONCESSIONAIRE is obliged to contract and make use of the insurance policies on the Concession Assets, under the terms stipulated in Chapter XVII.
  2. As from the subscription of the respective Certificate of Delivery of Assets, the CONCESSIONAIRE is liable and obliged to pay the taxes, fees and contributions that correspond to it in relation to the Concession Assets, in accordance with the Applicable Laws and Provisions.
  3. All the Concession Assets that the GRANTOR is obliged to deliver to the CONCESSIONAIRE, by means of the respective Certificate of Delivery of Assets, shall comply with the following terms:

1. They are not subject to third party occupation, charges or encumbrances, which affect or prevent the delivery to the CONCESSIONAIRE or the use in possession by the latter, except for the provisions of Clause 6.3.
2. There are no liabilities, obligations, or administrative, labor, tax, judicial or legal contingencies, among others, that in any way affect or may affect the use of these by the CONCESSIONAIRE.

* 1. During the term of the Concession, the GRANTOR shall maintain the property right or the rights of use it holds over the Concession Assets. Notwithstanding the foregoing, this Concession is sufficient title so that, during its term, the CONCESSIONAIRE may exercise exclusive rights for the exploitation of the Concession Assets and enforce its rights against third parties.

Likewise, the Concession is also sufficient title for the CONCESSIONAIRE to enforce its rights, directly linked to the Concession, in the banking and financial system.

* 1. After the subscription of the respective Certificate of Delivery of Assets, the CONCESSIONAIRE shall be responsible, during the term of the Concession, for keeping the Concession Assets free of legal and factual limitations that affect the purposes of the Concession.
  2. The Certificate of Delivery of Assets shall necessarily include the List of Lands, as well as any other element that helps to individualize and identify the asset delivered, its condition and state.

## **Formalities for the subscription of the Certificate of Delivery of Assets**

* 1. The subscription of the Certificate of Delivery of Assets shall be in the presence of a Notary Public, hired and paid by the GRANTOR, in order to certify the delivery to the CONCESSIONAIRE of the land listed in Annex 14, specifying its characteristics, area, location, whether it is in uncultivated or rustic land, its coordinates in the WGS 84 system, state of conservation and maintenance, operation and performance, and the specific allocation to the fulfillment of the object of the Concession, as well as other aspects of interest for the Parties in relation to the land indicated in the Certificate of Delivery of Assets.

The Certificate of Delivery of Assets shall be subscribed in two (2) original copies, one for the GRANTOR and the other for the CONCESSIONAIRE. The GRANTOR shall be responsible for sending a simple copy of these minutes to the Supervisor of Contract and Operations.

* 1. The land listed in Annex 14 shall be received by the CONCESSIONAIRE in the place and state of conservation where it is located. Therefore, the CONCESSIONAIRE may not argue the existence of any fault or hidden defect, which shall be its sole responsibility.

## **Inventories**

* 1. The Certificate of Delivery of Assets shall detail the land to be delivered on the Closing Date.
  2. Subsequent to the execution of the Certificate of Delivery of Assets, the CONCESSIONAIRE is obliged to carry out and submit to the GRANTOR, with a copy to the Supervisor of Design, Construction and Equipment or the Supervisor of Contract and Operations, as applicable, the following Inventories of the Concession Assets:

1. Inventory of Works
2. Annual Inventory
3. Final Inventory

These Inventories are elaborated having as reference the List of Lands and shall have the characteristics expressly provided in the definition of Inventories and other provisions of the Contract, and shall be submitted to the GRANTOR in the opportunities established therein. Once submitted, the GRANTOR, after the opinion of the Supervisor of Contract and Operations or the Supervisor of Design, Construction and Equipment issued within a maximum term of ten (10) Days from the date the Inventories were submitted, may make objections within a maximum term of ten (10) Days, in writing and with the respective explanation, granting the CONCESSIONAIRE, only once, a maximum term of ten (10) Calendar Days for their correction; otherwise, the corresponding penalties shall be applied.

* 1. The Inventories shall contain, at least, a brief description of the goods, their characteristics, location, state of conservation, annotations about their operation or performance, as it corresponds; and, if applicable, series, brand, model and year of manufacture, as well as the data of their registration if they were registered in Public Registries. Interpretative elements such as photographs, drawings, diagrams and third party reports may be included, according to the formats to be provided by the GRANTOR.

## **Easements**

* 1. The CONCESSIONAIRE shall take the necessary steps before the competent institutions for the establishment of all the conventional Easements that may be necessary for the performance of its obligations under the Contract, at its own expense, cost and risk.
  2. The GRANTOR shall grant free of charge the Easements with respect to public property, for which the provisions of Law No. 30327 or rule that modifies or substitutes it shall be applicable.
  3. The CONCESSIONAIRE shall register in the corresponding Public Registries, in the name of the GRANTOR, if applicable, the Easements that have been constituted for the execution of the Contract and that have been imposed on property owned by third parties, within a term of no more than one hundred and fifty (150) Calendar Days calculated as of the date of constitution of the Easement.
  4. The easements required by the CONCESSIONAIRE shall be those identified in the Technical File.
  5. The Easements, once imposed, shall be considered as rights of the Concession.
  6. The Easements entitle the owner of the servient estate to receive the payment of indemnities and compensations established in the Applicable Laws and Provisions, unless such Easements are free of charge.

The payment of any indemnities or compensation that may arise as a result of the agreement or imposition of such Easements shall correspond to the CONCESSIONAIRE, at its own expense, cost and risk.

* 1. The GRANTOR acknowledges the right of the CONCESSIONAIRE to prevent or oppose any repair or modification attempted by any public or private entity, whether or not favored with an Easement, and whose exercise is incompatible with the object of the Concession, as established in the Contract. The CONCESSIONAIRE may request the GRANTOR to intervene for the adequate defense of its right.
  2. In the event an Easement is extinguished due to the CONCESSIONAIRE's fault, and for this reason there is a need for a new Easement, the CONCESSIONAIRE shall be responsible for obtaining it at its own expense, cost and risk.

## **Possessory defenses**

* 1. After signing the Certificate of Delivery of Assets, the CONCESSIONAIRE has the obligation to exercise any of the following modalities of possessory defenses over the land destined for the Hospital:

1. Extrajudicial possessory defense: used to repel the force used against it and to be able to recover the property, if dispossessed, but always refraining from the use of de facto means not permitted by the Applicable Laws and Provisions.
2. Judicial possessory defense: such as injunctions, acts of forced execution and other judicial actions that the CONCESSIONAIRE, in case the Concession is affected, dispossessed, occupied, usurped, among others, shall notify the GRANTOR of such facts and make use of the judicial mechanisms and remedies in force under the Applicable Laws and Provisions that allow it to maintain the rights of the GRANTOR and the CONCESSIONAIRE over the aforementioned land unharmed. In this regard, the law of coercive execution procedure, or regulations that modify or substitute it, shall be applicable.

Without prejudice to the exercise of the aforementioned defenses, the CONCESSIONAIRE, in the event of such as those described in the preceding paragraph, shall communicate the fact to the GRANTOR no later than the Day after its occurrence, by any written means or e-mail, and immediately coordinate with the GRANTOR the legal actions to be filed, in which case, the GRANTOR shall be free to file the legal actions it deems appropriate in order to maintain its right over the Concession Assets unharmed. The GRANTOR shall make its best efforts, in accordance with its powers provided for in the Applicable Laws and Provisions, to assist the CONCESSIONAIRE in such purposes.

## **Reversion of Concession Assets due to Termination**

* 1. Upon Termination for any of the causes described in Chapter XXIV, the CONCESSIONAIRE is obliged to deliver to the GRANTOR, within the following thirty (30) days, in a single act with the participation of the Supervisor of Contract and Operations, all the Concession Assets under the responsibility of the CONCESSIONAIRE. The return of the Concession Assets, by the CONCESSIONAIRE to the GRANTOR, shall be made without this act of return giving rise or entitlement to any indemnity or compensation payable to the CONCESSIONAIRE, except for the acknowledgement of the corresponding payments regulated in Chapter XXIV.

In case the Termination operates during the Pre-Operational Stage, the Concession Assets must be in a good state of conservation, taking into consideration the ordinary use and nature of the assets.

In case the Termination occurs during the Operational Stage, the Concession Assets shall be in good state of conservation, in conditions of use and operation, except for the cause provided for in Clause 24.2.5, and provided that it affects the Concession Assets.

If for reasons not attributable to the CONCESSIONAIRE, it is not possible to deliver all the Concession Assets in a single act, the CONCESSIONAIRE shall deliver the missing assets in a following act, thirty (30) Days after the first act, under the same conditions described. In the latter case, the delay in the delivery of the Concession Assets shall not be penalized.

* 1. Prior to the act of return, the CONCESSIONAIRE shall prepare the Certificate of Reversion and shall send it to the GRANTOR with a copy to the Supervisor of Contract and Operations. The Supervisor of Contract and Operations shall issue to the CONCESSIONAIRE its opinion on the referred minutes within a maximum term of ten (10) Calendar Days. Once the favorable opinion of the Supervisor of Contract and Operations has been received or the term has expired without it being issued, the GRANTOR shall have ten (10) Calendar Days to issue its conformity or its objections to the Certificate of Reversion submitted by the CONCESSIONAIRE, granting it a maximum term of fifteen (15) Days to correct them.

Once the CONCESSIONAIRE has submitted the corrections, the GRANTOR shall have seven (7) Calendar Days to issue its conformity to the Certificate of Reversion.

During the act of return, the CONCESSIONAIRE, the GRANTOR and the Supervisor of Contract and Operations shall sign the respective Certificate of Reversion of the Concession Assets, as established in this Chapter.

Said minutes shall establish the data of the representatives of the Parties and the description of the assets to be returned, specifying: characteristics, location, state of conservation, annotations on operation or performance, and other elements of interest, as applicable.

* 1. The Final Inventory, as well as any other document that helps to identify the object delivered and its state of conservation, including plans, photographs or diagrams, shall be part of the Certificate of Reversion of the Concession Assets. The Final Inventory shall include a detailed list of the spare parts that ensure the continuity of the Concession's operations for a period of [\*] months from the end of the Concession, attaching a duly supported report.

The Certificate of Reversion of the Concession Assets shall be subscribed in three (3) originals, one (1) for the Supervisor of Contract and Operations, one (1) for the CONCESSIONAIRE and one (1) for the GRANTOR.

Likewise, it shall correspond to the GRANTOR to expressly determine and identify in the Certificate of Reversion the respective Concession Assets.

## **Equipment subject to Replacement**

* 1. General Rules

The CONCESSIONAIRE shall be obliged to prepare and apply the Preventive, Integrated, Corrective and Predictive Maintenance of the Equipment Plans for the Equipment subject to Replacement and to develop, prepare and enforce at all times the protocols for the use, conservation and use of such Equipment.

Likewise, it shall be the obligation of the Parties to ensure a high level of qualification and experience of the personnel in charge of the use and handling of the different Equipment subject to Replacement in each of the Hospital's services, taking into account that the complexity and required capacities are different for each Service.

The CONCESSIONAIRE shall also be obliged to elaborate and apply specific continuous training plans for an adequate use of the Equipment subject to Replacement by the personnel authorized for such purpose, in the cases required and, in those cases, where the GRANTOR requests such trainings. These trainings shall not generate the right to an additional payment in favor of the CONCESSIONAIRE.

* 1. Obligations of the CONCESSIONAIRE in connection with Scheduled Replacements

The CONCESSIONAIRE shall be responsible for covering at its sole cost and risk the Scheduled Replacements of the following Equipment:

* + 1. Biomedical equipment.
    2. Complementary equipment.
    3. Electromechanical equipment.
    4. Computer and communications equipment.
    5. Clinical furniture.
    6. Administrative furniture.

Scheduled Replacements shall be understood as those defined by the CONCESSIONAIRE itself in accordance with the Equipment Replacement and Refurbishment Plan, and which in general obey the criteria of the useful life of the Equipment listed in Annex 17.

In the Scheduled Replacements, the CONCESSIONAIRE assumes the responsibility for the opportunity and cost of these replacements. In such sense and as the only payment linked to the CONCESSIONAIRE, the CONCESSIONAIRE shall be entitled to the payment for Equipment Replacement, pursuant to the provisions of Clause 15.15 of this Contract.

If any, or all, of the replacements of the listed Equipment must be brought forward with respect to the replacement program presented in the Financial Offer, it shall be the CONCESSIONAIRE who assumes this risk.

The GRANTOR shall approve the technical specifications of the listed Equipment to be subject of Replacement.

In case of controversy between the Parties regarding the technical specifications of the equipment subject to Replacement, any of the Parties may submit this situation to a specialized Expert in accordance with the provisions of Clauses 23.10 and 23.11.

* 1. Obligations of the Parties in connection with the Unscheduled Replacement

1. Unscheduled Equipment Replacements, during the term of the Contract, at the GRANTOR's responsibility, cost and risk, may be carried out in the following case:

* If the equipment subject to Unscheduled Replacement due to technological obsolescence should be replaced by other updated equipment of similar clinical application, provided that the improvement in the rendering of the Service is evidenced, the GRANTOR shall determine the technical specifications of the equipment to be replaced by the CONCESSIONAIRE.

In this case, the GRANTOR shall be obliged to compensate the CONCESSIONAIRE, with the prior opinion of the Supervisor of Contract and Operations, the net amount of the increased costs assumed by the CONCESSIONAIRE, with the exception of those that are operated by the CONCESSIONAIRE.

The net amount is understood to be the difference between the additional cost of the Replacement and the cost savings benefits for the CONCESSIONAIRE, if applicable, or the potential savings for the CONCESSIONAIRE due to the modification of its Equipment Replacement and Refurbishment Plan. For the purposes set forth in this paragraph, it shall be considered as an additional investment and therefore the provisions set forth in Chapter XXII.

It shall be the CONCESSIONAIRE's obligation to prove reliably and beyond any doubt the nature of the Unscheduled Replacement, as well as to deliver all reliable and authentic information in a timely manner for the purpose of determining the net amount mentioned in the preceding paragraph. Without the delivery of such information by the CONCESSIONAIRE, the CONCESSIONAIRE shall not be entitled to any additional compensation in relation to the Unscheduled Replacements.

1. Unscheduled Equipment Replacements during the term of the Contract shall be the responsibility, cost and risk of the CONCESSIONAIRE, except in the event of technological obsolescence as set forth in paragraph a) above.

## **Obligation to replace damaged Equipment**

* 1. The CONCESSIONAIRE is obliged to replace, at its own cost, the Equipment that may be damaged or lost within a maximum term of fifteen (15) Calendar Days, as from the identification of such event, and the GRANTOR may apply the corresponding penalties in case of non-compliance, according to the provisions of the Annex 11.
  2. The CONCESSIONAIRE, within a maximum term of five (5) days from the occurrence of the event, may submit a duly supported request for extension of the term sent to the GRANTOR with a copy to the Supervisor of Contract and Operations, regarding which the GRANTOR shall issue a decision within a term no longer than five (5) days, prior opinion of the Supervisor of Contract and Operations, who shall send the same to the GRANTOR within a maximum term of two (2) days. In case the GRANTOR does not issue its opinion within the aforementioned term, the CONCESSIONAIRE shall reiterate its request granting an additional term of two (2) Days for the CONCESSIONAIRE's opinion, in case of not responding to this last request, the term requested by the CONCESSIONAIRE shall be deemed to be accepted.

In case the GRANTOR grants the requested term, it shall communicate the new term for the replacement to the CONCESSIONAIRE with a copy to the Supervisor of Contract and Operations. In the event that the GRANTOR rejects the request for extension of the term, the CONCESSIONAIRE shall be required to comply with the replacement obligation within the initially established term of fifteen (15) Calendar Days, and the applicable penalties shall apply in the event of non-compliance.

* 1. The replacement conditions considering the Equipment must be new, unused, of recent manufacture and of equal or superior characteristics. Notwithstanding the foregoing, the CONCESSIONAIRE shall keep available the totality of the Services.

# PERMITS, LICENSES AND AUTHORIZATIONS

## **About the obligations of the CONCESSIONAIRE with respect to permits, licenses and authorizations**

1. 1. The CONCESSIONAIRE, at its own expense, cost and risk, shall be responsible for managing, obtaining and maintaining in force all the permits, licenses and authorizations required for the performance of the Services established in this Contract.
   2. In the event that the nature of the permit, license or authorization requires that the same be requested by the GRANTOR, the CONCESSIONAIRE shall expressly request it in writing. To such effect, the CONCESSIONAIRE shall provide the corresponding logistic support, as well as the technical and legal documentation established in the Applicable Laws and Provisions until obtaining the required license, permit or authorization, as well as assuming the required costs; being that the intervention of the GRANTOR is of means and under no circumstances of results.

## **About the obligations of the GRANTOR with respect to permits, licenses and authorizations**

* 1. The CONCESSIONAIRE at its own expense and cost shall be responsible for managing and obtaining all permits, licenses and authorizations required for the execution of the obligations of the GRANTOR established in the present Contract, unless it is not possible to obtain them due to causes attributable to the GRANTOR.

In case the nature of the permit, license or authorization requires the GRANTOR to submit one or more requirements in order to obtain the same, the GRANTOR shall be obliged to submit the required information to the CONCESSIONAIRE within a maximum term of seven (7) days from the date of the request. Otherwise, the corresponding penalties set forth in Annex 11 shall not be applicable.

# ABOUT THE PRELIMINARY STUDIES AND THE TECHNICAL FILE

* 1. The CONCESSIONAIRE shall prepare a Technical File and submit it to the GRANTOR, with a copy to the Supervisor of Design, Construction and Equipment, considering what is detailed in the Clause 8.7 and following.

## **Obligations of the CONCESSIONAIRE**

* 1. Notwithstanding the other obligations set forth in the Contract, the CONCESSIONAIRE shall have the following obligations during the Technical File Preparation Activities.
  2. The CONCESSIONAIRE undertakes, at its own expense, cost and risk, to prepare the Preliminary Studies and Technical File in accordance with the definitions and specifications of the Services subject to the Contract, the Annexes, the technical and regulatory standards in force and the Applicable Laws and Provisions. The CONCESSIONAIRE assumes full and exclusive responsibility for the preparation of the Preliminary Studies and the development of the Technical File. The CONCESSIONAIRE shall communicate to the GRANTOR, in writing and in advance, the beginning of the preparation of the Technical File within a maximum term of fifteen (15) Calendar Days from the Closing Date.
  3. The design and financing risks of the Technical File shall be entirely assumed by the CONCESSIONAIRE. All the obligations of the CONCESSIONAIRE set forth in this Chapter shall be assumed by the CONCESSIONAIRE at its own expense, cost and risk. Design errors shall not release the CONCESSIONAIRE from complying with the Service Levels.

* 1. The CONCESSIONAIRE for the development of the Technical File shall comply with the technical specifications of the Service Levels , set forth in Annex 8, portfolio of Services, established in Annex 6, and its Technical Proposal, which must have considered at least the scopes of Annex 14, such as the feasibility study, improvements, readjustments, proposals and/or approaches that provide reasonable added value in terms of hospital design, architectural innovation, eco-efficiency, functionality, safety, technology, equipment, among others.
  2. The CONCESSIONAIRE shall be legally liable, in the administrative, civil and criminal fields, for the results obtained and generated as a product of the studies carried out and for the construction project it prepares, as a product of the Technical File developed.

## **Deadlines and delivery of the Technical File**

* 1. Fifteen (15) Calendar Days after the Closing Date, the CONCESSIONAIRE shall deliver the Technical File Work Plan, which shall include the Technical File Preparation Schedule and its contents for the knowledge of the GRANTOR and the Supervisor of Design, Construction and Equipment.

When the CONCESSIONAIRE deems necessary to make a modification to the Technical File Preparation Schedule, it shall consider that this does not imply, under any circumstances, the suspension or extension of the term established for the submission of the respective Technical File. To such effect, the CONCESSIONAIRE shall communicate to the GRANTOR and to the Supervisor of Design, Construction and Equipment the modifications to the Technical File Preparation Schedule, within a maximum term of three (3) Calendar Days after the referred modification is made.

* 1. The CONCESSIONAIRE shall obtain the non-objection of the Technical File within a term that may not exceed twelve (12) months as from the Closing Date, as established in this Chapter, and may propose the improvements or adjustments it deems pertinent at its expense, cost and risk, provided that it complies with the provisions of Annex 15.
  2. The CONCESSIONAIRE shall consider for the development of the Technical File, the technical scopes set forth in Annex 15, and the terms set forth in this Contract, as well as what is required in each of the following documents:

1. Draft project:

The CONCESSIONAIRE shall have sixty (60) Calendar Days from the Closing Date to submit the Draft Project to the GRANTOR with copy to the Supervisor of Design, Construction and Equipment , for the execution of the Preliminary Studies, the formulation and definition of the Draft Project, as well as the preparation, management and approval by the concessionaires of the public utilities of the complementary technical files for the supply of drinking water, sewerage, electric power, telecommunications and other services.

The GRANTOR and the Supervisor of Design, Construction and Equipment shall communicate to the CONCESSIONAIRE its comments, recommendations and technical scopes within a maximum term of fifteen (15) Calendar Days after receiving the Draft Project.

1. Basic File

The CONCESSIONAIRE shall have sixty (60) Calendar Days as from the Day after the submission of the Draft Project, to submit to the GRANTOR, with copy to the Supervisor of Design, Construction and Equipment, the Basic File. This deliverable includes the elaboration of the Technical File, with all the corresponding basic components.

The GRANTOR and the Supervisor of Design, Construction and Equipment shall communicate to the CONCESSIONAIRE its comments, recommendations and technical scopes within a maximum term of fifteen (15) Calendar Days after receiving the Basic File.

1. Final file

The CONCESSIONAIRE shall have one hundred and twenty (120) Calendar Days from the Day after the submission of the Basic File to submit the final file. This deliverable includes the preparation of the Technical File at the final study level; including the development of complete plans, details, technical specifications, descriptive memories, calculation memories, budget, among others, with all the corresponding components.

The CONCESSIONAIRE shall submit the final file in physical and digital format.

The final file shall be delivered to the Supervisor of Design, Construction and Equipment, with a copy to the GRANTOR to be reviewed, evaluated and verified by the latter, and the Supervisor of Design, Construction and Equipment shall submit its opinion to the GRANTOR within a maximum term of twenty (20) Calendar Days, so that it may proceed with its non-objection.

If there are objections to the final file, by the GRANTOR, these shall be sent to the Supervisor of Design, Construction and Equipment in a maximum term of ten (10) Calendar Days to be incorporated to the objections of the referred supervisor, if applicable. The Supervisor of Design, Construction and Equipment shall send the total of the objections to the CONCESSIONAIRE with a copy to the GRANTOR within a maximum term of twenty (20) Calendar Days after receiving the final file. The CONCESSIONAIRE shall have a maximum term of twenty (20) Calendar Days to raise such objections and shall send them to the Supervisor of Design, Construction and Equipment with a copy to the GRANTOR.

Once the corrections have been submitted by the CONCESSIONAIRE, the Supervisor of Design, Construction and Equipment shall have fifteen (15) Calendar Days to communicate whether or not the objections to the final file persist, and penalties, if applicable, shall be applicable.

Once the Supervisor of Design, Construction and Equipment grants the respective technical conformity, it shall send the final file together with his report to the CONCESSIONAIRE so that the latter, within a term no longer than five (5) Calendar Days, communicates to the CONCESSIONAIRE its opinion regarding the non-objection to the Technical File after verifying the withdrawal of objections, and proceed with the following activities.

If as a result of the evaluation carried out by the Grantor in the previous paragraph, objections persist, the Parties shall submit the situation to a specialized Expert within a maximum term of five (05) Days in accordance with the provisions of Clauses 23.10 and 23. 11, in order to verify the lifting of the objections. In the event that the Expert confirms that the Concessionaire has corrected the objections, the Grantor shall communicate to the Concessionaire its decision of non-objection to the Technical File within a maximum term of five (05) days of receiving the communication from the Expert. On the contrary, in the event that the Expert confirms the persistence of objections, the Grantor may apply the cause r) of Clause 24.2.2.

* 1. Any agreement or non-objection of the GRANTOR or opinion of the Supervisor of Design, Construction and Equipment with respect to the Technical File shall not imply or be construed in any way that the GRANTOR transfers to the GRANTOR, in whole or in part, the design, financing or construction risks, which are the sole and exclusive responsibility and liability of the GRANTOR.
  2. The CONCESSIONAIRE shall consider that the non-objected Technical File may be modified by virtue of any change requested by the Competent Governmental Authority for the granting of the licenses and authorizations required under the Contract. Likewise, the CONCESSIONAIRE may request modifications to the non-objected Technical File, provided that the provisions set forth in Annex 15 are complied with.

In both cases, together with the request of non-objection to the modifications to the Technical File, the CONCESSIONAIRE shall submit a legal and technical report supporting the requested modifications, whereas the procedure to obtain the non-objection to these changes will be the same as that established for the non-objection of the Technical File; and, it must be recorded in the corresponding Design and Construction Notebook.

The modifications regulated in this Clause are responsibility of the CONCESSIONAIRE who shall assume them under its own cost, expense and risk considering that they shall not generate higher costs to the GRANTOR, nor may they reduce the Service Levels or modify the execution terms of the Works of the Technical File.

* 1. The CONCESSIONAIRE shall provide the GRANTOR with all the physical and electronic files related to the preparation of the Technical File in accordance with the scopes contained in Annex 15, not limited to the electronic files and the BIM modeling.

## **Intellectual and industrial property rights**

* 1. The parties acknowledge and agree that the intellectual property rights that the CONCESSIONAIRE makes available for the provision of the Services as a consequence of the execution of this Contract, are not owned by the CONCESSIONAIRE and shall not be assigned to the GRANTOR, since their ownership shall be vested in the rightful owner thereof and/or its acquirer.

Notwithstanding the foregoing, as part of the Reversion process, the CONCESSIONAIRE undertakes to deliver to the GRANTOR all Project information and all intellectual property. In the case of intellectual property, the CONCESSIONAIRE shall perform, at its own expense, cost and risk, any act that may be necessary in order for the GRANTOR to be the owner, CONCESSIONAIRE or assignee of any intellectual property right, including any act of registration before the Competent Governmental Authority.

* 1. In terms of intellectual and industrial property, the following provisions shall be applicable to the execution and performance of the CONCESSIONAIRE's obligations under this Contract:

1. The CONCESSIONAIRE assumes the obligation to obtain for itself or in favor of the GRANTOR, during the term of the Contract, any intellectual property rights such as, among others, copyrights, patents, licenses, trademarks or any other industrial or intellectual property rights related to the assets or procedures necessary for the execution of the Contract, for the maximum terms provided for in the Applicable Laws and Provisions. The CONCESSIONAIRE shall have a license to use the aforementioned rights, which shall be granted under the terms established by the Applicable Laws and Provisions.
2. The CONCESSIONAIRE shall allow access to the GRANTOR or its designee, free of charge, to the information of the Concession and the Intellectual Property.
3. The CONCESSIONAIRE shall not acquire any right or license to use any confidential information, data or any other type of intangible assets and intellectual property owned by the GRANTOR in relation to the Concession, or any document over which the CONCESSIONAIRE has the right to use, even if its use is necessary to comply with the object of the Contract, which shall remain the exclusive property, use or exploitation of the GRANTOR.
4. Likewise, the CONCESSIONAIRE acknowledges that the GRANTOR shall be the sole owner of the intellectual property rights over the developments written or created by or for the CONCESSIONAIRE in compliance with the obligations arising from this Contract.
5. The CONCESSIONAIRE shall make backup copies and keep in its safe custody all the information, material and documents of the Concession, being under its responsibility and cost the replacement of the information that has not been properly guarded.

# CONSTRUCTION OF THE WORKS

## **Obligations of the CONCESSIONAIRE**

1. 1. The CONCESSIONAIRE shall be fully and entirely responsible for the correct, full and complete execution of the Works within the term set forth in Clause 9.2 y 9.7 in strict accordance with the Contract and the other documents forming part thereof.

## **Commencement of Infrastructure Construction Activity**

* 1. In order to start the construction of the Works and sign the respective minutes, the Parties shall have a maximum term of twelve (12) months as from the Closing Date.
  2. In order to sign the Certificate of Commencement of Construction of the Works and Equipment and thus initiate the Construction Infrastructure Activity, the Parties shall comply with the following conditions:
     1. That the Parties have executed the Certificate of Delivery of Assets referred to in Clause 6.13 and following.
     2. That the CONCESSIONAIRE has obtained the Easements, according to the conditions set forth in the Clauses 6.27 to 6.34 of Chapter VI.
     3. That the CONCESSIONAIRE has obtained the non-objection to the Technical File.
     4. That the CONCESSIONAIRE has opened the Design and Works Notebook.
     5. That the CONCESSIONAIRE has obtained the approval of the Environmental Management Instrument(s) and other authorizations, permits and licenses required for the commencement of the Works included in the Technical File, by the Competent Governmental Authorities.
     6. In case the Builder is hired by the CONCESSIONAIRE, that the CONCESSIONAIRE has delivered to the GRANTOR a legalized copy of the corresponding construction contract.
     7. That the CONCESSIONAIRE has obtained the Certificate of Non-Existence of Archaeological Remains (CIRA, for its acronym in Spanish) or other instrument required by the Competent Governmental Authority, at its own cost, expense and risk, for the execution of the corresponding Works, without prejudice to the provisions set forth in Chapter XVIII of the Contract.

* + 1. That the CONCESSIONAIRE has accredited the payment in cash of the capital stock, in accordance with Paragraph b) of Clause 3.3.

* + 1. That the CONCESSIONAIRE has obtained PROINVERSIÓN's approval of the Financial Closure.
    2. That the CONCESSIONAIRE has contracted the corresponding insurance, according to the provisions of Chapter XVII.

* 1. The Certificate of Commencement of Construction of the Works and Equipment shall be signed no later than seven (7) Calendar Days after the conditions of the preceding Clause have been verified as a whole.
  2. The construction contracts shall conform to the terms and conditions set forth in the Bidding Terms and in the Contract. Modifications to the construction contracts shall also be submitted to the GRANTOR's knowledge.
  3. In case of modification of the construction contract that implies changing the Builder that accredited compliance with the requirements set forth in the Bidding Terms, the new builder shall be required to comply with at least the same requirements set forth in the Bidding Terms, so that during the execution of the Works the same shall be complied with at all times. If the CONCESSIONAIRE fails to comply with this obligation, it shall be considered a serious breach.
  4. The CONCESSIONAIRE must carry out the Infrastructure Construction Activity within a maximum period of eighteen (18) months from the execution of the Certificate of Commencement of Construction of the Works and Equipment for each Technical File, and the end of these activities must be recorded in the Design and Works Notebook. The procedure of Non-objection is established in Clause 11.18 and the communication to the GRANTOR regarding the constitution of the Committee for the Verification and Acceptance of Works and Equipment as indicated in Clause 9.8 must be foreseen.
  5. The GRANTOR shall constitute and appoint, by means of a resolution, a Committee for the Verification and Acceptance of Works and Equipment once it has received the communication from the Supervisor of Design, Construction and Equipment regarding the completion of the pre-installation works related to the Infrastructure Construction Activity and the Equipment Activity according to the term indicated in Clause 11.6. The GRANTOR may hire the services of the specialist professionals considered necessary for the verification of the Works and the Equipment, assuming the costs of the corresponding hiring.
  6. If the CONCESSIONAIRE, for reasons attributable to it, fails to comply with the deadlines referred to in Clause 9.7, the penalties accrued from the date on which the non-compliance occurred until the date on which the Certificate of Verification and Acceptance of Works and Equipment referred to in Clause 11.27 is subscribed shall be applicable.
  7. The CONCESSIONAIRE assumes the risk of the release of all the interferences of the Project, at its own cost, expense and risk, including all the taxes that may arise therefrom.

## **Works Execution Schedule**

* 1. Once the Infrastructure Construction Activity has started, the CONCESSIONAIRE shall submit to the Supervisor of Design, Construction and Equipment , with copy to the GRANTOR, the Works Execution Schedule updated to such start date, specifying the date of each one of the milestones and the progress of Works and Equipment foreseen, in accordance with a PERT or CPM diagram and a General Plan of the works to be executed, containing at least the provisions of Annex 16, which the CONCESSIONAIRE undertakes to comply with.
  2. The Works Execution Schedule and the General Plan shall show the monthly progress or the percentage of progress of the work scheduled within the maximum term established in the Contract. They must also be submitted in digital and physical media.
  3. The Critical Path must be fully identified in the scheduling network of the Works Execution Schedule, which must indicate for each activity, the preceding and subsequent activities, the activity code, duration, earliest and latest start and end dates, slack, among others.
  4. Together with the Works Execution Schedule, the CONCESSIONAIRE shall submit the following:

GANTT Works Execution Schedule appropriate to the date of commencement of work.

Adequate schedule at the start date of the work valued, indicating the monthly progress percentages estimated in the Technical File that obtained the non-objection.

List of all activities arranged by earliest start date.

Listing of all activities arranged for slack.

List of all activities grouped by responsible parties (CONCESSIONAIRE, Supervisor of Design, Construction and Equipment and GRANTOR).

List of all activities grouped by sector of Work and earliest start.

* 1. The Works Execution Schedule and the General Plan of the works detailing such schedule shall be considered as contractual documents and immersed within the documents of the Technical File. The submission of the aforementioned documents and its non-objection by the GRANTOR shall not exonerate the CONCESSIONAIRE from any of its obligations or responsibilities arising from the Contract regarding the updates or modifications of the schedule in the process of the execution of the Works.

## **Modification of the Works Execution Schedule**

* 1. The CONCESSIONAIRE may request the modification of the Works Execution Schedule, provided that the reasons for the extension are not attributable to the CONCESSIONAIRE, and they affect the Critical Path of the Works Execution Schedule in force at the time of the request. The modification of the Works Execution Schedule shall not imply an extension of the term for the Infrastructure Construction Activity indicated in Clause 9.7 nor an extension of the term of the Concession nor shall it entitle to any compensation other than those contemplated in this Contract.

When the CONCESSIONAIRE, for reasons strictly attributable to it, fails to comply with the terms initially established in the Works Execution Schedule or fails to comply with the new terms, including the modifications referred to in this Clause, the penalties set forth in Annex 11 shall be applicable.

In the event of the occurrence of the provisions set forth in Paragraph u) of Clause 24.2.2, in addition to the application of the corresponding penalties, the GRANTOR shall proceed in accordance with the provisions set forth in Chapter XXIV.

* 1. The requests for modification of the Works Execution Schedule referred to in the preceding Clause shall be subject to the following procedure:

1. The CONCESSIONAIRE shall note in the respective Design and Works Notebook, the circumstances that, in its opinion, deserve the modification of the Works Execution Schedule. Simultaneously to the annotation in the Design and Works Notebook, the Concessionaire shall submit in writing to the Supervisor of Design, Construction and Equipment, with copy to the GRANTOR, the support for the modification and the proposal of the new Works Execution Schedule.
2. The Supervisor of Design, Construction and Equipment will decide whether or not such modification proceeds or not in a maximum term of thirty (30) Calendar Days counted from the annotation in the Design and Works Notebook.
3. In the event the Supervisor of Design, Construction and Equipment rejects the request for modification of the Works Execution Schedule, it shall send the CONCESSIONAIRE a report with the respective explanation or justification.

## **Operation and Maintenance Manuals**

* 1. The CONCESSIONAIRE is obliged to deliver to the GRANTOR, as part of the Commissioning, a copy of the Operation and Maintenance Manuals.

The obligation assumed by the CONCESSIONAIRE implies the responsibility of defining the methodologies, procedures and timeliness of the Operation and Maintenance tasks that will be expressed in the Operation and Maintenance Manual.

* 1. For such purpose, the CONCESSIONAIRE shall submit to the GRANTOR, with a copy to the Supervisor of Design, Construction and Equipment, the Operation and Maintenance Manual together with the Technical File, within the terms established in Chapter VIII, which will be evaluated as part of its documentation, obtaining its non-objection together with the Technical File.

* 1. At the time of signing the Certificate of Works and Equipment Verification and Acceptance, the CONCESSIONAIRE must submit an updated version of the Operation and Maintenance Manual, considering the scopes set forth in Annex 19 and which must have the non-objection of the Supervisor of Design, Construction and Equipment, which must be issued within a term not exceeding ten (10) Calendar Days from its submission. From the issuance of the favorable opinion of the Supervisor of Design, Construction and Equipment, the CONCESSIONAIRE shall submit a new version of the referred manual once every two (2) years, including the approved modifications made since the last version submitted.

The modifications made to the Operation and Maintenance Manual must have the non-objection of the Supervisor of Design, Construction and Equipment or the Supervisor of Contract and Operations , as applicable, for which the CONCESSIONAIRE shall submit only the sections or parts that are being modified and the Supervisor of Design, Construction and Equipment or the Supervisor of Contract and Operations , as applicable, shall issue its non-objection or rejection within a maximum term of ten (10) Calendar Days.

The CONCESSIONAIRE undertakes to generate and maintain a virtual room where the Operation and Maintenance Manuals are stored, which shall be enabled at the latest on the date of subscription of the Certificate of Verification and Acceptance of Works and Equipment.

## **About the registration of works**

* 1. The GRANTOR is responsible for registering and keeping updated the information of all the progress of the Works in the INFOBRAS website of the Office of the Comptroller General of the Republic, or system that modifies or substitutes it; for such purpose, the CONCESSIONAIRE shall submit the information under the conditions indicated by the GRANTOR.

## **Design and Construction Notebook**

* 1. The Design and Works Notebook, from the beginning of the Technical File Preparation Activity, must mention at least the technical agreements, unattended consultations, relevant proposals, useful information of the design process, work milestones, objections or claims between the CONCESSIONAIRE and the GRANTOR, compliance with the Technical File Elaboration Schedule, sources of materials used, suppliers and subcontractors, summary of test results or Commissioning tests, Work correspondence, objections or claims between the CONCESSIONAIRE and the Supervisor of Design, Construction and Equipment.

The development of the Works Execution Schedule must be indicated, indicating the degree of progress in relation to the foreseen; and if there is a delay, indicate the reasons for it, and any other useful information to document the execution process of the Works. At the end of the Works, the operational conditions of the same shall be indicated.

* 1. Copies of the aforementioned documentation (or originals, if applicable) must be included in the corresponding Works files.
  2. The CONCESSIONAIRE undertakes to open, keep the Design and Works Notebook up to date on a daily basis and keep it in custody, which shall be kept in the original.
  3. Additionally, up to two (2) sets of copies must be kept, to be distributed to the GRANTOR and to the Supervisor of Design, Construction and Equipment on a weekly basis with the record and annotations of the corresponding period. The pages shall be notarized, numbered correlatively, and the mechanized loose-leaf system may be adopted.
  4. The GRANTOR shall have free access to the Design and Works Notebook during the execution of the Works and Commissioning. The CONCESSIONAIRE shall deliver the original to the GRANTOR, within ten (10) Calendar Days counted as from the subscription of the Certificate of Works and Equipment Verification and Acceptance, and one set of copies shall remain in possession of the CONCESSIONAIRE and another in possession of the Supervisor of Design, Construction and Equipment.
  5. The CONCESSIONAIRE may request the GRANTOR that the Design and Works Notebook be kept in digital format, which shall be evaluated by the latter within a maximum term of five (5) Days, within which it shall communicate its decision to the CONCESSIONAIRE. In the event of approving such request, the Parties shall establish the applicable regulations for such implementation.

# EQUIPMENT ENDOWMENT

## **Obligations of the CONCESSIONAIRE:**

1. 1. The CONCESSIONAIRE must carry out the Equipment Activity within a maximum term of eighteen (18) months from the subscription of the Certificate of Commencement of Construction of the Works and Equipment. The CONCESSIONAIRE shall provide the Hospital with the Equipment contemplated in the Equipment Implementation Plan developed during the Technical File Preparation Activity or as modified during the Equipment Endowment, being that this modification may not alter the minimum requirements set forth in Annex 14 and the provisions of Clauses 10.15 and 10.16. Likewise, the Pre-installation works shall commence with the execution of the Certificate of Commencement of Construction of the Works and Equipment and shall be completed no later than one (1) month prior to the completion of the Equipment Activity that allows the installation.
   2. It is expressly established that any type of delay or deficiency in the acquisition thereof attributable to the CONCESSIONAIRE shall not be considered grounds for extending the term for the delivery and/or implementation of the Equipment, for which reason it shall provide for the acquisition of the required assets and ensure their provision and installation in accordance with the Equipment Schedule.
   3. The Equipment used in the Hospital must correspond to the Services provided. They must be kept operational, technologically up to date and in a good state of repair, and the CONCESSIONAIRE must fully comply with the provisions of Annex 17.
   4. The Equipment included in the Maintenance Plan must display at all times in a visible place a label or adhesive label, resistant to abrasion and chemical products, stating the date of the last and next preventive maintenance. In addition, another label or sticker detailing the physical or virtual location of the handling instructions issued by the manufacturer.
   5. The CONCESSIONAIRE shall not alienate or encumber the assets destined to the Services object of the CONTRACT or destine them to other purposes, unless expressly authorized by the GRANTOR.
   6. The CONCESSIONAIRE shall submit to the Supervisor of Design, Construction and Equipment for review and validation the Equipment proposals duly supported by means of catalogs, manuals or other technical documents for each of the items contained in the Technical File and shall issue its opinion within a maximum term of seven (7) days. In the event that the Supervisor of Design, Construction and Equipment issues objections, the CONCESSIONAIRE shall, within the term determined by the supervisor, submit the corresponding corrections or propose new equipment, as appropriate, in order to comply with the provisions of the Technical File, respecting the Service Levels. Equipment may only be acquired if it has been previously validated by the Supervisor of Design, Construction and Equipment in accordance with the non-objected Technical File; in case the Supervisor of Design, Construction and Equipment does not expressly pronounce within the established term, it will imply the issuance of a non-favorable opinion.

* 1. The CONCESSIONAIRE shall acquire, install, update and maintain the Equipment necessary for the provision of the Services in accordance with the provisions of this Contract.
  2. The CONCESSIONAIRE shall contract all the insurance necessary to safeguard the integrity of the Hospital Equipment, as well as all the elements that in general may be used for the operation thereof, in accordance with the provisions of Chapter XVII.
  3. The CONCESSIONAIRE shall deliver the Equipment Guarantee certificates and verify that they are in force, and the CONCESSIONAIRE shall be fully responsible for the proper operation of the Equipment.
  4. The CONCESSIONAIRE shall be liable for all damages caused to third parties or property owned by them as a consequence of the use of the Equipment or the breach of the obligations related thereto.
  5. The aforementioned obligations are by way of example but not limited to.

## **Equipment Implementation Plan**

* 1. The CONCESSIONAIRE shall develop the Equipment Implementation Plan during the Equipment Activity, which shall be verified by the Supervisor of Design, Construction and Equipment, according to the following procedure.

The CONCESSIONAIRE in a maximum term of thirty (30) Calendar Days counted from the subscription of the Certificate of Commencement of Construction of the Works and Equipment shall submit to the GRANTOR with copy to the Supervisor of Design, Construction and Equipment, the Equipment Implementation Plan.

Once the Equipment Implementation Plan is received, the Supervisor of Design, Construction and Equipment shall have a maximum term of ten (10) days after receiving the complete documentation from the CONCESSIONAIRE to validate it or, if applicable, to issue the corresponding objections.

In the event the Supervisor of Design, Construction and Equipment issues objections, it must do so only once, attaching the report with the respective explanation or technical justification, in such a way as to allow the CONCESSIONAIRE to absolve or remedy the objections made.

If objections are made by the Supervisor of Design, Construction and Equipment, the CONCESSIONAIRE shall have a maximum period of five (5) days to remedy the same, counted from the day following the date of receipt of said objections.

The Supervisor of Design, Construction and Equipment shall have a maximum term of ten (10) days to evaluate the corrections submitted by the CONCESSIONAIRE, counted from the day following the date of receipt thereof; and, if applicable, proceed to issue the validation of the Equipment Implementation Plan.

In the event that objections persist, the CONCESSIONAIRE shall submit this situation to a specialized Expert in accordance with the provisions of Clauses 23.10 and 23.11.

* 1. The CONCESSIONAIRE shall submit to the Supervisor of Design, Construction and Equipment, as part of the Equipment Implementation Plan, the Equipment Schedule for its validation.
  2. The CONCESSIONAIRE shall develop the Equipment Schedule according to the GANTT diagram for the following items: (i) Biomedical, (ii) Electromechanical, (iii) Complementary, (iv) Electromechanical not associated with civil works, (v) IT, (vi) Clinical Furniture, (vii) Instruments, Administrative Furniture and others considered, taking into account the milestones and stages of development of the Works, guaranteeing the completion of the operational tests and Commissioning in accordance with the Works Execution Schedule. The activities set forth in the Equipment Schedule shall be at the CONCESSIONAIRE's expense, cost and risk.
  3. The CONCESSIONAIRE, for the supply of Equipment, shall meet or exceed the characteristics required in the technical specifications of the Equipment, contained in the Technical File. In the event that the CONCESSIONAIRE is required to change or update them due to Technological Enhancement, such changes or updates shall be verified by the Supervisor of Design, Construction and Equipment; in no event shall change to the technical specifications of the Equipment be accepted if they constitute a disadvantage in characteristics, quality, technology or economic value. In no event it will constitute a greater expense for the GRANTOR.
  4. The CONCESSIONAIRE may implement a greater amount of Equipment than the one indicated in the Technical File in order to achieve, maintain or improve the rendering of the Services, such addition shall not constitute the recognition of a greater compensation in favor of the CONCESSIONAIRE.

## **Receipt of Equipment**

* 1. For the reception of each item of Equipment and once the CONCESSIONAIRE has completed its acquisition and transfer to the installation site, it shall request the Supervisor of Design, Construction and Equipment, within a term of five (5) Calendar Days, to verify compliance with the conditions set forth in Annex 17, Non-objected Technical File and the Applicable Laws and Provisions. The Supervisor of Design, Construction and Equipment shall issue a decision within thirty (30) days of the verification request. If there is any objection on the Equipment provided, its change or technical adaptation, if applicable, shall be indicated in the Design and Construction Notebook.
  2. The reception of the Equipment shall be carried out before the start of the Commissioning, so that the latter cannot be started without the non-objected Equipment.
  3. For the acceptance of the Equipment, the Supervisor of Design, Construction and Equipment shall issue an Equipment acceptance report listing the Equipment received, as well as compliance with the conditions indicated in Annex 17.

# COMMISSIONING

* 1. During this activity, the necessary procedures shall be carried out to verify the correct operation, individually and as a whole, of the civil works, piping, machinery, equipment, electrical and electromechanical installations, control and automation systems, Equipment, among others, in accordance with the File. Likewise, the SIGI -NS training, training on the proper use of the Equipment, and the completion of the POA must be carried out.
  2. The CONCESSIONAIRE is also obliged to have all the administrative and technical permits and authorizations to be issued by the health authority and any others that may apply in relation to the use of the infrastructure, facilities and network services.
  3. The CONCESSIONAIRE must fully comply with the provisions of Annex 18.

## **Conditions precedents to the start of Commissioning**

* 1. The CONCESSIONAIRE shall be responsible for executing and guaranteeing the conditions required for the installation and operational tests of the Equipment, including the Equipment idling, the verification of the works, installations and equipment related to the work, in accordance with the provisions of the non-objected Technical File and the complementary conditions set forth in Annex 18.

The CONCESSIONAIRE is responsible for the completion of all the Pre-installation Works and provision of Supplies.

## **Obligations of the CONCESSIONAIRE**

* 1. The CONCESSIONAIRE's obligations during the Commissioning are as follows:

* + 1. Execute the technical facilities and provide the necessary Supplies for the operation of the Equipment, the verification of the works, installations and equipment related to the work, through certified lines (medical gases, industrial gases, air conditioning, among others), as well as certifying and guaranteeing these Supplies.
    2. Offer and provide all the facilities to the technical officials appointed by the GRANTOR, for the fulfillment of its verification and inspection function of the Commissioning.
    3. The CONCESSIONAIRE is responsible for the execution of the installation, preliminary tests, operational tests and Equipment idling and network of Supplies, following the protocols established in the Technical File and in the Equipment Implementation Plan; complying with the requirements provided by the manufacturers and/or suppliers in order to avoid affecting the good future operation of the Equipment, facilities and Infrastructure of the Hospital.
    4. The aforementioned obligations are not limitative but not limited to.

## **Commissioning Deadline**

* 1. The term for the execution of the Commissioning is seven (7) months, starting with the verification of the completion of the pre-installation works related to the infrastructure and Equipment construction activities, i.e. seventeen (17) months after signing the Certificate of Commencement of Work and Equipment, and will end with the signing of the Certificate of Verification and Acceptance of the Work and Equipment.
  2. Failure to comply with the established deadlines is subject to the application of penalties, according to Annex 11.

## **Commissioning Schedule**

* 1. The CONCESSIONAIRE shall submit to the Supervisor of Design, Construction and Equipment for validation, as part of the Equipment Implementation Plan, the Commissioning Work Plan and the detailed Commissioning Schedule, including times and resources for each activity, to carry out the Commissioning work for the entire Equipment.

The Commissioning schedule shall consider the procedures and actions as well as the time frame indicated for the Infrastructure Construction Activity set forth in Clause 9.4.

* 1. The commissioning schedule shall have three stages: (i) verification of the adequate implementation of Pre-installation Works and Supplies; (ii) the Commissioning; and, (iii) verification and acceptance procedure of the Work and Equipment.
  2. The CONCESSIONAIRE shall develop the Commissioning schedule according to the GANTT diagram, clearly specifying the development of the activities for the verification of the Pre-installation Works and Equipment Supply by category, according to whether they are Biomedical, Electromechanical, Complementary, Electromechanical not associated with civil works, IT, Clinical Furniture and others requiring Pre-installation Works or Supplies.

* 1. The CONCESSIONAIRE, once the Pre-installation Works verification activities have been completed, shall carry out the Commissioning, with the participation of the Supervisor of Design, Construction and Equipment for such activities, and shall remedy any objections that the latter may indicate.
  2. The CONCESSIONAIRE shall be responsible for complying with the Commissioning schedule, and the corresponding penalties shall be applicable, according to Annex 11.

## **Modification of the Commissioning Schedule**

* 1. The Commissioning Schedule may only be modified upon a duly substantiated request from the CONCESSIONAIRE after verification by the Supervisor of Design, Construction and Equipment.
  2. Any request for extension of the deadline of the Commissioning Schedule must be submitted before the expiration of the deadline of the task for which the extension is requested; if the extension is not made within the indicated deadline, it shall be considered an unjustified delay and penalties shall be applied, in accordance with Annex 11.
  3. The modification of the Commissioning schedule shall not generate, under any circumstances, extensions of the Pre-Operational Stage or the Operational Stage deadlines, nor shall it entitle to Financial Compensation of any kind.

## **Review of progress status of the Commissioning schedule**

* 1. The progress of the Commissioning Schedule shall be constantly reported by the CONCESSIONAIRE to the Supervisor of Design, Construction and Equipment on a weekly basis or less frequently as required by the GRANTOR in writing. Failure to comply with such communication within two (2) Days after its occurrence shall be subject to the application of the corresponding penalties.

## **Duty to notify**

* 1. The CONCESSIONAIRE has the obligation to notify the Supervisor of Design, Construction and Equipment of the following:
  2. All situations that alter or hinder the Commissioning, indicating the actions or contingencies to be taken in this respect.
  3. Any change or modification required in the Non-Objected Technical File, due to a technical-health care need that directly involves the need of new Equipment, Supplies or Pre-installation Works, in order to be considered, which in no case will imply a higher cost for the GRANTOR or an extension of the term for the Infrastructure Construction Activity or for the Equipment Activity.

## **Verification of Works, installations and Equipment Linked to the Civil Works**

* 1. Once the annotation of the end of the Infrastructure Construction Activity referred to in Clause 9.7, the Supervisor of Design, Construction and Equipment, within a maximum term of seven (7) Calendar Days, shall verify what has been indicated by the CONCESSIONAIRE and request the GRANTOR, through a supporting report, that the Committee for the Verification and Acceptance of Works and Equipment starts the verification of the Works, installations and Equipment Linked to Civil Works in a maximum term of seven (7) Calendar Days, which shall be carried out in a maximum term of four (4) months since the annotation in the above mentioned Design and Works Notebook was made.

In the event the Committee for the Verification and Acceptance of Works and Equipment makes objections on the Works, the CONCESSIONAIRE shall comply with remedying them within the term established for such purpose by the Committee for the Verification and Acceptance of Works and Equipment, counted as of the receipt of the referred objections.

Upon expiration of said term, the Committee for the Verification and Acceptance of Works and Equipment, within a maximum term of seven (7) days of reception of the corrective action, shall verify the withdrawal of objections and, if they still persist, without prejudice to the application of penalties, the Committee for the Verification and Acceptance of Works and Equipment may approve the Infrastructure Construction Activity, provided that the CONCESSIONAIRE demonstrates that there is no substantial objection, understood as one that does not allow the CONCESSIONAIRE to comply with its contractual obligations in accordance with the Service Levels.

A non-substantial objection shall be understood as that which is not substantial, among which we have:

1. Regarding the Works, it refers to the repair of blows, scratches, paint flaws, alignment of spills of openings with their respective frames, flaws in the sealing of joints, cleaning, green area repairs or similar, of finishing elements that do not pose a safety and evacuation risk; and,
2. Regarding Equipment, it refers to the repair of blows, scratches or similar.

The objections that are not substantial must be lifted, at the latest, within the period of the Commissioning. In case of non-compliance with this term, the GRANTOR shall apply the penalties established in the Contract. The lifting of these objections must be done prior to the issuance of the corresponding Certificate of Verification and Acceptance of Works and Equipment.

In case substantial objections persist, without prejudice of the application of penalties, the Committee for the Verification and Acceptance of Works and Equipment shall set a new term for the correction of such objections, which shall not exceed seven (7) Calendar Days.

If the new deadline expires, the Committee for the Verification and Acceptance of Works and Equipment shall verify the withdrawal of objections within a maximum deadline of seven (7) days and, if it is in agreement, it may approve the corresponding Infrastructure Construction Activity.

Otherwise, if any substantial objection persists, the Committee for the Verification and Acceptance of Works and Equipment shall reject the Works. Consequently, the GRANTOR shall demand compensation for the direct damages generated as a consequence of the non-compliance with the obligations and duties of the CONCESSIONAIRE, without prejudice to the penalties that the GRANTOR may have collected or have accrued previously, at the same time that may be configured as a cause for Termination and, if applicable, the execution of the corresponding Performance Bond.

If the CONCESSIONAIRE does not agree with the GRANTOR'S opinion, regarding the objections made that led to the rejection of the Works according to the provisions of Clause 11.31, may request that the dispute be resolved in accordance with the procedure set forth in Clause 23.10.

If there are no objections, the Committee for the Verification and Acceptance of Works and Equipment shall be responsible for approving the Infrastructure Construction Activity, issuing the corresponding report stating that the execution of the works is in accordance with the Technical File, and the CONCESSIONAIRE shall submit the Works Inventory.

## **Operational testing, registration and validation by Equipment Item**

* 1. The CONCESSIONAIRE shall request the Supervisor of Design, Construction and Equipment to start the operational tests of the Equipment once the technical conformity referred to in Clause 10.17, on the positioning, installation, vacuum tests and preliminary operational tests of the Equipment, as established in the Technical File.

* 1. Within seven (7) days of reception of the request, the Supervisor of Design, Construction and Equipment shall execute and verify the start of the operational tests in accordance with the provisions of the Technical File, including training and provision of technical information (manuals).

If it is found to be in conformity, the CONCESSIONAIRE and the Supervisor of Design, Construction and Equipment shall sign a registration and validation form for each item. The registration and validation process per item shall be carried out within a maximum deadline of five (5) months from the beginning of the Commissioning.

* 1. In the event of non-conformity, the objections, if any, shall be pointed out in order to make the corresponding corrections, the term to correct them shall not exceed seven (7) Calendar Days, after which the tests shall be performed again on the item punctually objected and, if applicable, the respective registration and validation form shall be signed.
  2. If the objections raised in the previous Clause have not been corrected within the time allowed, the corresponding penalties shall be applicable.

It is the CONCESSIONAIRE'S obligation to correct all the objections within a maximum term of five (5) months from the beginning of the Commissioning.

* 1. The subscription of the registration and validation form per item shall not exempt the CONCESSIONAIRE from future claims for the existence of hidden defects. It is the CONCESSIONAIRE'S obligation to remedy any objection not evidenced during the Commissioning.

## **Verification and Acceptance Procedure for the Work and Equipment**

* 1. Once the Infrastructure Construction Activity referred to in Clause 11.18 has been approved and all the registration and validation forms per item referred to in Clause 11.20 have been completed, the CONCESSIONAIRE shall request the GRANTOR to initiate the procedure for verification and acceptance of the Works and Equipment, attaching a report verifying their completion, in accordance with the respective Technical File and including the Works Inventory.

* 1. Within seven (7) Calendar Days from the date of requesting the initiation of the procedure indicated in Clause 11.24, the Committee for the Verification and Acceptance of Works and Equipment appointed by the GRANTOR, together with the technical team of the CONCESSIONAIRE and the Supervisor of Design, Construction and Equipment, start the joint work of verifying the functioning or operability of the completed Works, its installations and the Equipment, arranging the corresponding tests, formulating the objections, with the respective technical justification. The process of verification and acceptance of the Works and Equipment shall be carried out within a maximum deadline of sixty (60) Calendar Days as from the conformity to the Infrastructure Construction Activity and when all the registration and validation cards per item mentioned above are available.

In the event of no objections, the Committee for the Verification and Acceptance of Works and Equipment will issue the Certificate of Works and Equipment Verification and Acceptance.

* 1. In the event that the Committee for the Verification and Acceptance of Works and Equipment makes objections on the Works and Equipment, the CONCESSIONAIRE shall comply with remedying them within the term established for such purpose by the Committee for the Verification and Acceptance of Works and Equipment, counted as from the receipt of such objections.
  2. Upon expiration of said term, the Committee for the Verification and Acceptance of Works and Equipment, within a maximum deadline of seven (7) days of receipt of the corrective action, shall verify the withdrawal of objections and, if they still persist, without prejudice to the application of penalties, the Committee for the Verification and Acceptance of Works and Equipment shall set a new deadline for the correction of said objections.
  3. Upon expiration of said deadline, the Committee for the Verification and Acceptance of Works and Equipment shall verify the withdrawal of objections within a maximum of seven (7) days of receipt of the corrective measures and, if it is in agreement, shall issue the Certificate of Verification and Acceptance of Works and Equipment. On the other hand, in the event that objections persist, without prejudice to the application of penalties, the Committee for the Verification and Acceptance of Works and Equipment may choose to set a new deadline for the correction of said objections, which shall not exceed seven (7) Calendar Days. It is hereby established that the Certificate of Verification and Acceptance of Works and Equipment may not be issued until the functionality of the Infrastructure and Equipment has been verified.
  4. In the event that the new deadline expires and objections persist, the Committee for the Verification and Acceptance of Works and Equipment shall reject the Works and Equipment. Consequently, the GRANTOR shall demand compensation for the direct damages generated as a consequence of the non-compliance with the obligations and duties of the CONCESSIONAIRE, without prejudice of the penalties that the GRANTOR may have collected or previously accrued at the same time that would be configured as a ground for Termination and the execution of the current Performance Bond shall be applicable.
  5. If the CONCESSIONAIRE does not agree with the GRANTOR's opinion regarding the objections made that led to the rejection of the Works in accordance with the provisions of Clause 11.29, it may request that the dispute be resolved in accordance with the procedure set forth in Clause 23.10.
  6. In addition, for the execution of the Certificate of Verification and Acceptance of Work and Equipment that initiates the Operational Stage, the Committee for the Verification and Acceptance of Works and Equipment shall verify compliance with the following conditions:

1. To have all the Supplies necessary for the Operation of the Infrastructure and Equipment, duly validated and certified.
2. To have complied with the delivery of all the documents requested in the Technical File, such as guarantees, manuals, guides, forms and others, both related to the Works and the Equipment.
3. To have the respective Annual Operational Plans of all the Services and Continuous Training Plans duly approved by the GRANTOR.
4. To have the necessary human resources for the beginning of the Operational Stage of each one of the Services, according to Annexes 7 and 8.
5. To have a report of acceptance of the SIGI-NS by the Supervisor of Contract and Operations.
6. To have executed, to the GRANTOR's satisfaction, the training programs in the use and service of the Equipment, SIGI-NS and other computer systems, supported by the attendance forms, training certificates and report of the Supervisor of Contract and Operations indicating the compliance, as required in the Non-Objected Technical File.

1. The delivery to the GRANTOR of the Operational Stage Performance Bond, according to the provisions of Chapter XVI.

1. The accreditation of the contracting of the insurance policies required by the Contract for the Operational Stage.
2. The CONCESSIONAIRE must process and obtain the licenses, permits and authorizations required as indicated in Appendix 1 of Annex 18, for which it must follow the provisions of Chapter VII of this Contract for the Commissioning and sustainability of operations, both administrative and health care, which correspond to it under the Contract.

* 1. If the CONCESSIONAIRE does not agree with the opinion of the Committee for the Verification and Acceptance of Works and Equipment, with respect to the objections made that lead to the rejection of the Works in accordance with the provisions of the preceding paragraphs, it may request that the dispute be resolved in accordance with the Chapter XXIII.

# OPERATION AND MAINTENANCE

1. 1. During the Operational Stage, the CONCESSIONAIRE shall mainly carry out the Operation, Maintenance and Replacement activities at the Hospital, under the terms set forth in Annex 19, without prejudice to the other obligations that, in accordance with the Contract and its Annexes, must be performed during this stage.
   2. During the Operational Stage, the CONCESSIONAIRE shall be entitled to the Compensation under the conditions set forth in Chapter XV.

## **Obligations of the CONCESSIONAIRE**

* 1. It is the CONCESSIONAIRE'S obligation to:

1. Comply with the provision of the Services as set forth in Annex 8.
2. Develop and apply the Internal Regulations, Organization and Function Regulations, Operating Procedures and others in order to guarantee the quality and timeliness of the provision of the Services; as well as to organize and manage the Services, in accordance with the organizational structure of the Hospital, and the CONCESSIONAIRE shall also make the Monthly Management Reports in accordance with the provisions of Annex 19.
3. Have duly qualified human resources in the appropriate number for the provision of the Services in accordance with the scopes of Annex 8 and the provisions of the POA.
4. Maintain the Equipment, Infrastructure and facilities and carry out the Integrated, Preventive, Corrective, Predictive or other necessary Maintenance, as required in Annex 19 and Annex 8.
5. Ensure the prevention of occupational risks by implementing appropriate occupational health and safety policies in accordance with current labor legislation, being responsible for any event that occurs in the Hospital's facilities, in accordance with the provisions of the Chapter XIX.
6. Have adequate resources for the Operation and Maintenance of the Services, in accordance with the scopes of this Contract. Likewise, it shall have reserve material resources in order to attend contingency or force majeure situations, such as natural disasters, losses, shortage situations, among others, with the purpose of maintaining the continuity and availability of the Services.
7. Demonstrate the quality of the Services and comply with the requirements and standards established in Annex 8 during the entire term of execution of the Contract.
8. Implement social, environmental and governance management by implementing policies, procedures and practices aligned with Applicable Laws and Provisions.
9. Keep in operation a Computerized Maintenance Management System, which must be integrated with the SGS and the SIGI-NS, as established in the non-objected Technical File.
10. Implement channels for patient feedback or communication through electronic and physical means to receive suggestions, complaints, among others. This will be done in coordination with the Hospital administration, and the attention of the communications received will be systematized and informed to the GRANTOR, also indicating the implemented corrective actions, if applicable.
11. Keep the SIGI-NS updated and in operation in order to facilitate the control, verification, checking and supervision of the Service Levels, during the term of the Contract.
12. Submit all the documentation in general that is required by the GRANTOR or the Supervisor of Contract and Operations related to the fulfillment of the obligations of this Contract, without prejudice of what is indicated in Annex 8 and Annex 19.
13. Submit, within the first five (5) Calendar Days of each month, the Monthly Management Report including the status of compliance with the obligations listed above and an action plan with preventive actions and contingency measures to mitigate any risk to the provision and continuity of the Services, and guarantee the provision of the same during the entire term of the Concession.
14. The CONCESSIONAIRE must fully comply with the provisions of Annex 19.
15. It is the CONCESSIONAIRE'S obligation to provide the Supervisor of Contract and Operations, with a copy to the GRANTOR, within a term no longer than fifteen (15) Calendar Days after the end of the monthly or annual period, as applicable, monthly and annual reports related to the Operation of the Services, according to the requirements approved by the GRANTOR. The costs of the preparation of the reports shall be borne by the CONCESSIONAIRE.
16. The CONCESSIONAIRE is obliged to provide the necessary cooperation for the GRANTOR to carry out the verification and evaluation of the provision of the Services. The CONCESSIONAIRE shall provide full and truthful information on the risks detected in the performance of the purpose of the Contract, facilitating the supervision tasks, as regards its access to the facilities.
17. Comply with all the obligations set forth in this Contract, especially those set forth in Annex 19 and the Applicable Laws and Provisions for the Operation of the Services.

## **Start date of the Operational Stage**

* 1. The Operational Stage shall commence with the execution of the Certificate of Verification and Acceptance of Work and Equipment, which shall be no later than thirty-six (36) months from the Closing Date.

## **Start of Operations – beta phase**

* 1. With the subscription of the Certificate of Verification and Acceptance of Works and Equipment that starts the Operational Stage, the Beta phase activities begin.
  2. During this period, the GRANTOR shall implement the Beta phase under the formulation of a series of protocols that allow it to implement the Health Care Services within the foreseen term; such protocols shall be communicated to the CONCESSIONAIRE within a term of two (2) months before the beginning of the Operational Stage. Likewise, the CONCESSIONAIRE shall be in charge of operating the Services, the systems and Equipment as a whole, as an autonomous service provider unit, as established in the Contract.
  3. The duration of the Beta phase shall have a maximum term of three (3) months computed from the beginning of the Operational Stage. As it is a gradual process, the Health Care Services can be made available at different moments and as the GRANTOR considers, once the indicated term has elapsed, they must be fully available, except for causes attributable to the GRANTOR.
  4. If any interference or operational problem is detected by the Supervisor of Contract and Operations during the White March, the CONCESSIONAIRE shall carry out all the corresponding actions for the correct operation of the Hospital, within the framework of the present Contract at its own expense, cost and risk.

* 1. The Beta phase shall generate the right of the CONCESSIONAIRE to receive the Financial Compensation for the Services effectively rendered, which shall not be subject to deductions, without prejudice to the Service Level measurements, as regulated in Chapter XV.
  2. Once the Beta phase term has commenced, the CONCESSIONAIRE must be in a position to provide the Services, otherwise, after the opinion of the Supervisor of Contract and Operations, it shall be treated as a serious breach, according to the provisions of the Clause 24.2.2 of this Contract.

## **Rights and complaints - Complaints Book**

* 1. The CONCESSIONAIRE shall provide the Services to all patients of the Hospital, in accordance with the provisions of the Contract and the Applicable Laws and Provisions.
  2. The CONCESSIONAIRE shall implement a claims and complaints book submitted in person, by telephone or online in compliance with the Applicable Laws and Provisions.

## **Organization of Services**

* 1. The CONCESSIONAIRE shall design and manage the Services, in accordance with the parameters established for such purpose in this Contract, in the Annual Operational Plan, in the terms presented in its Technical Proposal and the Applicable Laws and Provisions.
  2. The CONCESSIONAIRE shall provide the Services, which are defined in Annex 8.

The CONCESSIONAIRE may subcontract to third parties to provide one or more of the Services for which it is responsible. In such case, one calendar month before the beginning of the Operational Stage and each time there are changes during the entire term of the Concession, the CONCESSIONAIRE shall prove to the GRANTOR that the subcontractor or subcontractors comply with the requirements set forth in the Bidding Terms, which shall be qualified by the GRANTOR within a term no longer than fifteen (15) Calendar Days. In case the GRANTOR considers that the subcontractor does not have the qualification required in the Bidding Terms, the CONCESSIONAIRE shall submit a new alternative until obtaining the conformity of the GRANTOR. Notwithstanding the fact that the service has been subcontracted, in the event of termination, the CONCESSIONAIRE shall return to the GRANTOR the necessary Equipment so that the subcontracted Service(s) may be provided directly.

* 1. The CONCESSIONAIRE shall obtain the corresponding permits and licenses for the rendering of the Services, in accordance with the provisions set forth in Chapter VII. Failure to comply with this obligation shall entail the application of the corresponding penalties, as set forth in Annex 11.

* 1. During the Operational Stage, the CONCESSIONAIRE undertakes to obtain and keep the quality certifications in force and updated as set forth in Annex 22, subject to the application of the corresponding penalties.
  2. The Compliance Report of the Management and Quality Plans of each Service, regulated in the POA, shall be submitted by the CONCESSIONAIRE on an annual basis to be evaluated by the Supervisor of Contract and Operations and the GRANTOR.

* 1. The CONCESSIONAIRE shall maintain and guarantee the operating conditions of the Hospital and manage the Services according to the provisions of the Applicable Laws and Provisions, without prejudice to complying with the provisions set forth in Paragraph h) of Clause 12.3 of this Contract.

For the execution of the Services, the CONCESSIONAIRE shall incorporate personnel with the appropriate qualifications and ratings for the job performed, in accordance with the parameters set forth in Annex 8, and shall comply with all Applicable Laws and Provisions, and the GRANTOR may at any time request the accreditation of compliance with these obligations.

* 1. The CONCESSIONAIRE shall submit to the GRANTOR, thirty (30) days before the beginning of the Operational Stage and every time there are changes, the information related to the personnel appointed to occupy the administrative executive positions of the Hospital. The CONCESSIONAIRE'S executives who will provide the Services in the Hospital shall be obliged to assume the health care guidelines of the GRANTOR.
  2. The CONCESSIONAIRE shall develop the appropriate measures regarding environmental, social, safety and occupational health quality, as indicated in the POA, as well as the actions to be developed each year to achieve the objectives of the management system and ensure its continuous improvement.

## **Information management**

* 1. The information management in charge of the CONCESSIONAIRE shall be interrelated with the SGS in such a way that they share the GRANTOR's database for decision making.

Additionally, the CONCESSIONAIRE shall implement the interfaces, creating an adequate interrelation between the CONCESSIONAIRE's pre-existing systems and the new systems to be incorporated by the CONCESSIONAIRE, exporting the information between them in order to optimize the rendering of the Services.

* 1. The CONCESSIONAIRE has the obligation to:

1. Provide and install the necessary Equipment for the operation of the SGS and SIGI-NS, as detailed in the Technical File and Annex 8.
2. Provide the required software, which shall be called SGS and SIGI-NS, on which the GRANTOR shall enjoy a free use license, shall deliver the licenses of the software developed in perpetuity for all the equipment, systems and any technological solution at no cost for the GRANTOR, as well as the source programs, duly documented, in a digital repository of software version control, together with an automated procedure for their compilation. In case of Termination, the CONCESSIONAIRE shall transfer in favor of the GRANTOR the license agreements in force for the software used.
3. Provide the preventive maintenance and restoration service of the SGS and SIGI-NS during the term of the Contract. Likewise, to provide such services at the end of the Contract, previous agreement with the GRANTOR.
4. Install the necessary updates for the best operation of the SGS and SIGI-NS.
5. Elaborate manuals of use of the SGS and SIGI-NS and to update them when required. These manuals shall have the prior favorable opinion of the Supervisor of Contract and Operations.
6. Provide training and updating to personnel who will perform functions related to the SMS and SIGI-NS.
7. Ensure and provide with the required promptness, the spare parts, equipment, devices, components and/or parts necessary to guarantee a maximum level of maintenance and operability of the data processing equipment, and restore its optimal operation when a failure or irregularity occurs. The spare parts, equipment, devices, components and/or parts shall be incorporated into the equipment covered by the Contract until the end of its useful life or for any other cause that leads to its replacement.
8. Respect the intellectual property rights of third parties with respect to SGS and SIGI-NS. The CONCESSIONAIRE guarantees that the works and services rendered to the GRANTOR by this Contract do not infringe or violate the intellectual or industrial property rights or any other legal or contractual rights of third parties, in the absence of which the CONCESSIONAIRE shall be liable without involving the GRANTOR.
9. Keep the most absolute reserve on the data and information belonging to the GRANTOR, not being able to provide to third parties under any concept, any information; in compliance with the Applicable Laws and Provisions.
10. Maintain the operation and provision of the SGS and SIGI-NS, established in the present Contract, its Annexes and in the Technical File with the quality and in the foreseen opportunity.
11. Not to manipulate, edit or deliver false information, in a malicious manner, with respect to the declarations, requests and authorizations made during the Operational Stage. In this case, the CONCESSIONAIRE shall be deemed to have incurred in a serious breach and therefore the provisions of Chapter XXIV.

The interface will be provided by the CONCESSIONAIRE in order to achieve an adequate interrelation with the pre-existing systems of the GRANTOR, exporting the indicators and the information detailed in the Contract, its Annexes, Technical File and in the Technical Proposal, so as to optimize the effectiveness of the Services provided at the Hospital.

* 1. The GRANTOR undertakes to:

1. Provide the CONCESSIONAIRE with access to the information in its database that is necessary to comply with its obligations, as set forth in this Chapter, including, if applicable, information that guarantees patient identification, such as fingerprints, photographs or any other means of biometric identification.
2. Provide timely information on the systems it uses, so that the CONCESSIONAIRE may develop the interfaces between them and the systems to be implemented as set forth in this Contract.

## **Replacement and Refurbishment of Equipment**

* 1. The CONCESSIONAIRE must submit to the GRANTOR, with a copy to the Supervisor of Contract and Operations, the Equipment Replacement and Update Plan (PRAE, for its acronym in Spanish) together with the POA, so that the Investment for Replacement is approved by the GRANTOR.
  2. Notwithstanding the terms stipulated above, the CONCESSIONAIRE or the GRANTOR may request the partial or integral modification of the PRAE at any time, in accordance with the PRAE established in the preceding Clause.
  3. The CONCESSIONAIRE shall submit the respective PRAE proposal, which shall contain as a minimum:
  4. Acquisition and installation schedule that establishes a maximum term of one (1) year for the implementation of the equipment, counted as of ESSALUD's approval.
  5. Type of assets, code according to the Equipment Catalog, characteristics of the Concession Assets that individualizes them.
  6. Projected location within the Hospital.
  7. Proposal valued at a lump sum, as a reference, based on the financial structure of the Equipment in the Investment Period. The lump sum includes the total acquisition cost including the cost of financing, its modality and term. Additionally, the CONCESSIONAIRE shall detail the unit prices of the items included, attaching three (3) quotations, except in the case of a sole supplier.
  8. Technical specifications of the new equipment to be delivered or installed, if applicable.
  9. The technical documentation, in accordance with the equipment catalog as indicated in the Contract.
  10. The procedure to be followed for: i) removal and disposal of the Equipment to be replaced, and, ii) Maintenance Plan Update.

* 1. The GRANTOR shall have a term of thirty (30) days to issue its non-objection or communicate its objections, prior opinion of the Supervisor of Contract and Operations, who shall issue its opinion within a maximum of ten (10) days of receiving the request. In case there are any objections, the CONCESSIONAIRE shall remedy them within the maximum term granted by the CONCESSIONAIRE and send them with a copy to the Supervisor of Contract and Operations.

The GRANTOR shall issue its non-objection or rejects the PRAE within a maximum term of twenty (20) days after the objections have been corrected by the CONCESSIONAIRE, subject to the opinion of the Supervisor of Contract and Operations, who shall issue its opinion within a maximum term of ten (10) days after receiving the correction.

If there is no opinion from the CONCESSIONAIRE, it shall be understood that the PRAE does not have conformity.

* 1. During the Operational Stage, once the PRAE is approved, the CONCESSIONAIRE shall have a maximum term of five (5) Days to submit to the GRANTOR, with a copy to the Supervisor of Contract and Operations, the planning of the implementation of the replacement of the Equipment, which shall include the Equipment acquired for replacement approved by the GRANTOR, which shall be unused and with the technology in force, as well as the respective annotation of cancellation of the replacement Equipment.
  2. When it is necessary to replace or update the Equipment during the term of the Contract, the GRANTOR shall issue a Certificate of Verification and Acceptance of the Equipment received, which shall have the previous opinion of the Supervisor of Contract and Operations, who shall issue it within a maximum term of seven (7) Calendar Days, in order to comply with the characteristics established in the PRAE.
  3. The old Equipment, object of replacement, shall be removed keeping its operability and shall be duly stored at the GRANTOR's disposal at no cost, for its removal within one hundred and eighty (180) days from the subscription of the Certificate of Verification and Acceptance of the Equipment.

# ABOUT THE SUPERVISION

## **Common provisions**

1. 1. The exercise of the functions to be performed by the GRANTOR under this Contract and the Applicable Laws and Provisions shall in no case be subject to authorizations, permits or any other manifestation of the CONCESSIONAIRE's will. The Concessionaire shall provide all its cooperation to facilitate the performance of such functions, and any failure to do so shall be construed as an infringement subject to penalty, in accordance with the Applicable Laws and Provisions.
   2. The GRANTOR shall exercise its supervision rights and obligations by itself or through a third party, for which it shall hire one or more specialized companies to act as: (i) Supervisor of Design, Construction and Equipment and (ii) Supervisor of Contract and Operations.

Both the Supervisor of Design, Construction and Equipment and the Supervisor of Contract and Operations must not have directly rendered any type of service in favor of the CONCESSIONAIRE, its shareholders, stockholders or related companies in the last two (2) years prior to their contracting, in Peru or abroad.

The contract with each of the supervisors must include confidentiality clauses regarding the information provided by the CONCESSIONAIRE, and they must establish that they are solely responsible for any damage or harm that their personnel may cause to the Works and the Equipment during the supervision work.

* 1. The CONCESSIONAIRE shall bear the costs of both supervisors, including IGV (General Sales Tax), with each supervisor issuing the respective payment vouchers to the GRANTOR. The total monthly amount that the CONCESSIONAIRE shall allocate for the work of the Supervisor of Design, Construction and Equipment is S/ 434,172.00 (Four hundred and thirty-four thousand one hundred and seventy-two and 00/100 Soles) plus IGV (General Sales Tax), and for the work of the Supervisor of Contract and Operations during the Pre-Operational Stage is S/ 86,834. 00 (Eighty-six thousand eight hundred and thirty-four thousand thirty-four and 00/100 Soles) plus IGV (General Sales Tax) and for the Operational Stage it is S/ 434,172.00 (Four hundred and thirty-four thousand one hundred and seventy-two and 00/100 Soles) plus IGV (General Sales Tax).
  2. Within five (5) days after signing the contract with each of the supervisors, the GRANTOR shall inform the CONCESSIONAIRE of the appointment of the supervisor.

If as a result of the selection process of the respective supervisor, the amount awarded by the GRANTOR is lower than the amounts foreseen in the previous clause, the non-awarded balance may be used for possible extensions to the corresponding supervision contract.

If after the completion of each supervisor's functions, there is still a balance, it shall be freely available to the GRANTOR.

Exceptionally, in case the Adhesion Document to the Administration, Payment and Guarantee Parent Trust has not been subscribed yet, at the GRANTOR's request, the CONCESSIONAIRE shall make the payment in the account indicated by the GRANTOR. In case there is a delay in the payment of the CONCESSIONAIRE, default interest shall be applied with an effective annual interest rate in soles, equivalent to the nominal value of LIBOR, plus two percent (2%), for each Calendar Day of delay and for the amounts owed.

In the event that the delay exceeds thirty (30) Calendar Days, the GRANTOR shall be entitled to deduct such amounts owed and the interests from the compensation for the Services to which the CONCESSIONAIRE is entitled in accordance with the provisions set forth in Chapter XV.

In the event that for causes attributable to the CONCESSIONAIRE additional resources are required for the supervision, the difference shall be assumed by the CONCESSIONAIRE.

If for causes attributable to the GRANTOR, additional resources are required for the supervision, the difference shall be assumed by the GRANTOR.

If for causes of force majeure or unforeseeable circumstances, additional resources are required for the supervision, the amount shall be assumed by the GRANTOR and the CONCESSIONAIRE in equal parts.

* 1. Exceptionally, the GRANTOR may temporarily assume the supervision functions, only in the event that the contract with the Supervisor of Design, Construction and Equipment or with the Supervisor of Contract and Operations is terminated or has expired. In this case, the GRANTOR shall communicate to the CONCESSIONAIRE the name of the Directorate or unit that will assume the role of supervisor.
  2. In this event, the GRANTOR shall hire the services of a new supervisor within a maximum term of thirty (30) days, so that the non-objection of the Technical File, the completion of the Works, the Equipment endowment and the Commissioning, always have the technical opinion of the Supervisor of Design, Construction and Equipment or of the Supervisor of Contract and Operations, if applicable.
  3. In case of the suspension of the Concession term or the suspension of the term for the fulfillment of obligations, the GRANTOR may suspend totally or partially the corresponding supervision works, while the suspension lasts.
  4. From the beginning of the Concession, the CONCESSIONAIRE shall provide the Supervisor of Design, Construction and Equipment and the Supervisor of Contract and Operations, at its own cost, with an independent office with an area of no less than [\*], including furniture, toilets, telephone, internet and electricity supply. The office must be located in the Concession Area. The CONCESSIONAIRE must assume the basic service expenses incurred by the Supervisor of Contract and Operations and the Supervisor of Design, Construction and Equipment, in the assigned rooms.

## **Supervisor of Design, Construction and Equipment**

* 1. The Supervisor of Design, Construction and Equipment is responsible for carrying out the technical supervision actions during the development of the Pre-Operational Stage.
  2. The CONCESSIONAIRE must provide the Supervisor of Design, Construction and Equipment, with a copy to the GRANTOR, the monthly progress reports on the preparation of the Technical File and the Environmental Management Instrument, including all the supplementary information requested by the latter, as well as access to the activities and studies that the CONCESSIONAIRE is going to carry out or will carry out for this purpose. These progress reports must be sent within five (5) days after the last day of the previous month due.
  3. The CONCESSIONAIRE shall provide all the necessary facilities for the fulfillment of the purposes of the Supervisor of Design, Construction and Equipment, including, but not limited to, the following:

1. Provide the information requested by the Supervisor of Design, Construction and Equipment for the fulfillment of its purposes, within the term established.
2. Access to all site facilities.
3. Allow the Supervisor of Design, Construction and Equipment to take the necessary samples to verify the quality of the work.
4. In general, all those necessary for a correct supervision of the elaboration of the Technical File, Construction of the Works, Equipment Endowment and testing of the installations and systems, for the due qualification and Commissioning of the Hospital.

Notwithstanding the aforementioned, the GRANTOR, through the corresponding internal body, may carry out control tasks within the framework of the Applicable Laws and Provisions, and shall receive the same facilities from the CONCESSIONAIRE.

## **Supervision of Contract and Operations**

* 1. It is the responsibility of the Supervisor of Contract and Operations to carry out the legal, environmental, financial and economic control of the Contract from the Closing Date; as well as the technical control, monitoring and control of compliance with the Service Levels during the Operational Stage.

Given the specificity of each of the Services detailed in Annex 8, it is essential for the Supervisor of Contract and Operations to have professionals with certified experience in their control and/or management.

* 1. The Supervisor of Contract and Operations, with its subsequent control activities, shall also provide the necessary information and support that generates certainty in the GRANTOR that the activities and Services provided by the CONCESSIONAIRE are in accordance with what is specified in this Contract and that the results of the supervision are properly reflected in the payments for the Compensations to be made and/or the corresponding penalties or deductions are applied, either for lack of Service availability or for deficiencies in the Service Levels of the same.

Among the functions of the Supervisor of Contract and Operations is to review and investigate Sentinel Events, given their relevance to the health care work, as described in this Contract.

* 1. Without prejudice to the work of the Supervisor of Contract and Operations, Hospital personnel, as direct users of the Services, may also register through SIGI-NS, their requests or non-conformities with the Services.

In addition to monitoring compliance with the Service Levels through the Supervisor of Contract and Operations and Hospital staff, the CONCESSIONAIRE must implement its own quality controls.

* 1. SIGI-NS will be a monitoring tool available to the Supervisor of Contract and Operations.

* 1. The CONCESSIONAIRE shall provide all the necessary facilities for the fulfillment of the purposes of the Supervisor of Contract and Operations, including, but not limited to, the following:

1. Access to all the facilities of the work.
2. Provide the information that the Supervisor of Contract and Operations may request, for the fulfillment of its purposes, within the term it has foreseen.
3. Allow the Supervisor of Contract and Operations to take the necessary samples to verify the quality of the Services.
4. In general, all those necessary for the proper supervision of the Contract and the provision of the Services.

* 1. The Supervisor of Contract and Operations, in the exercise of its duties, shall have the right of permanent access to all documentation and files relating to any activity related to the Services performed by the CONCESSIONAIRE.

# PERMITTED SECURED INDEBTEDNESS AND FINANCIAL CLOSURE

## **Permitted Secured Indebtedness**

* 1. The CONCESSIONAIRE shall submit in writing to PROINVERSIÓN, for purposes of the Permitted Secured Indebtedness, the request of conformity thereto, accompanied by the following:

1. Executive summary outlining the amount of the amounts committed in each of the credit agreements and/or bond issuance agreements.
2. Copy of the draft credit agreements and guarantees.
3. The CONCESSIONAIRE's affidavit containing the information detailed in Annex 4.
4. The declaration of the Permitted Creditor, containing the requirements contained in Annex 5.

With respect to the above-mentioned documents, it shall be understood that they comply with the minimum requirements if in the draft contracts specified in paragraph b) above it is established that the rights provided in favor of the Permitted Creditors do not exceed those granted by the Contract and that any agreement to the contrary shall not be enforceable against the GRANTOR.

Since the risk of managing and obtaining the financing is under the responsibility of the CONCESSIONAIRE, the minimum requirements shall be deemed fulfilled if the documents listed above are submitted under the terms and conditions set forth in the Contract.

* 1. PROINVERSIÓN will have a term of fifteen (15) days to answer, with copy to the GRANTOR, if the documentation, specified in the Clause 14.1 is complete, counted as of the day following receipt thereof. In such case, the CONCESSIONAIRE may submit its request again. If in the latter case there is no opinion within a period of five (5) days, such request shall be deemed accepted.

PROINVERSIÓN's evaluation will consist of reviewing that the documents of the Permitted Secured Indebtedness have been issued in accordance with the conditions of the table in Annex 5, with the provisions set forth in Clauses 14.17 to 14.32, as applicable, that the Affidavit submitted by the Permitted Creditor complies with the wording and terms contained in Annex 5 and that the guarantee contracts granted by the CONCESSIONAIRE do not alter this Contract or generate risks or any additional liability to the GRANTOR not regulated in this Contract. PROINVERSIÓN shall have a term of thirty (30) days, counted from the day after the complete receipt of the request of conformity to the Permitted Secured Indebtedness, to issue its opinion.

* 1. For the purposes of the review of the documents, PROINVERSIÓN may request additional information within ten (10) days of receipt of the request submitted by the CONCESSIONAIRE. The CONCESSIONAIRE shall submit the requested information, completely and without deficiencies, within fifteen (15) Days, after which the calculation of the term for the issuance of PROINVERSIÓN's opinion shall be restarted, counted as of the day following the day of receipt of the information.

In the event that the term mentioned in the preceding paragraphs expires without PROINVERSIÓN making an opinion, the CONCESSIONAIRE shall reiterate its request granting an additional term of two (2) Days for PROINVERSIÓN to make an opinion, in the event that the latter request is not answered, it shall be understood that the Permitted Secured Indebtedness is in conformity.

* 1. PROINVERSIÓN's obligation in this Chapter in relation to the Permitted Secured Indebtedness shall remain in force until the beginning of the Operational Stage. Once the Operational Stage has started, it shall be up to the GRANTOR to carry out the process in accordance with the terms set forth in Clauses 14.1 and 14.3.

## **Financial Closure**

* 1. The obligation of the CONCESSIONAIRE to reach the Financial Closure shall be deemed fulfilled when the CONCESSIONAIRE proves that it has sufficient financing commitments for the Investment. Notwithstanding the accreditation of the Financial Closure, the CONCESSIONAIRE has the obligation to obtain the full amount of the funds necessary to finance the obligations for which it is responsible under the Contract. In the event that all or part of the aforementioned commitments are credited in Dollars, the Exchange Rate in force on the Closing Date shall be applied to verify compliance with this condition.

At the sole discretion of the CONCESSIONAIRE, it may or may not use Permitted Secured Indebtedness for the accreditation of the Financial Closure.

* 1. Within a maximum term of twelve (12) months as from the Closing Date, the CONCESSIONAIRE shall obtain the conformity to the Financial Closure under the terms and conditions set forth in this Chapter. Additionally, when the Financial Closure is accredited through Permitted Secured Indebtedness, the CONCESSIONAIRE shall previously obtain the conformity to the Permitted Secured Indebtedness under the terms and conditions set forth in this Chapter.
  2. In the event that the CONCESSIONAIRE determines that it will not be able to comply with the Financial Closure within the term established for its accreditation, the CONCESSIONAIRE may exceptionally request, on a single occasion, by means of a written communication to the GRANTOR, with a copy to PROINVERSIÓN, an extension of thirty (30) Calendar Days to the term indicated in the previous clause, accompanying the corresponding economic or technical support.

Such request shall be made no later than ten (10) days prior to the expiration of the time limit set forth in Clause 14.6 and the GRANTOR shall have a maximum term of eight (8) days to issue its opinion.

* 1. Any indebtedness operation of the CONCESSIONAIRE may not have the effect, directly or indirectly, of exempting it from its obligation to comply with each and every one of the provisions of the Contract and the Applicable Laws and Provisions.
  2. PROINVERSIÓN is the entity in charge of verifying compliance with the obligation set forth in the preceding Clause.

## **Procedure for the accreditation of the Financial Closure**

* 1. In order to accredit the Financial Closure, the CONCESSIONAIRE shall request PROINVERSIÓN's conformity to the Financial Closure, submitting the following documents, as applicable:

1. Executive summary outlining the amount of the sums committed in each of the credit agreements, financing agreements and/or indenture agreements.
2. Legalized copy of the credit agreement and/or indenture agreement, as applicable, and guarantee agreements (mortgage on the Concession right, on the CONCESSIONAIRE's shares, among others), duly signed by the CONCESSIONAIRE and the respective Permitted Creditors (or any other entity acting on behalf of the aforementioned creditors as agent). In the event such contracts are drafted in a foreign language, they must be accompanied by an official translation into Spanish.
3. CONCESSIONAIRE's Affidavit, the minimum content of which is attached as Annex 4.
4. Document evidencing the payment in cash of one hundred percent (100%) of the subscribed capital stock.
5. Notarized copy of the financing agreements, guarantees, trusts and in general any relevant contractual text, which the CONCESSIONAIRE has agreed with Related Companies to the CONCESSIONAIRE.
6. Documents evidencing the subscription and full payment in cash of any increase of the capital stock for an amount greater than the minimum amount indicated in Clause 3.3.

* 1. Upon receipt of the CONCESSIONAIRE's request, PROINVERSIÓN, within a maximum term of five (5) days, shall review that the entirety of the documents mentioned in Clause 14.9 have been submitted. In the event that PROINVERSIÓN considers that the documentation submitted by the CONCESSIONAIRE is not complete, it may observe the request, giving the CONCESSIONAIRE a maximum period of at least five (5) days to complete the requested documentation.

Once the application has been completed with the full documentation required in Clause 14.10, PROINVERSIÓN will proceed to review the content of the documentation submitted.

* 1. PROINVERSIÓN shall issue its conformity or issue objections to the content of the information within a maximum term of fifteen (15) days as from the day following the day the complete application is submitted by the CONCESSIONAIRE, and shall notify its decision simultaneously to the GRANTOR and to the CONCESSIONAIRE.
  2. In the event of any objections, the CONCESSIONAIRE shall have five (5) days to correct them and submit the corresponding documentation to PROINVERSIÓN. After said term has elapsed or the documentation has been received, PROINVERSIÓN shall have five (5) days to evaluate the CONCESSIONAIRE's accreditation of the Financial Closure of the CONCESSIONAIRE.

* 1. Failure to remedy objections communicated to the CONCESSIONAIRE within the deadlines set forth in the Clauses 14.11 and 14.13 of this Chapter, shall be considered as a failure to credit the Financial Closure.

* 1. PROINVERSIÓN will review: (i) that the documents submitted in accordance with the Clause 14.10. In the case of crediting through a Permitted Secured Indebtedness, it will be reviewed that the documents have been issued in accordance with the conformity granted, for which purpose the conditions of the table in Annex 5 will be taken into account, (ii) that the amount of the financing contract is equal to or greater than the amount required to credit Financial Closure in accordance with Clause (i) that the amount of the financing contract is equal to or greater than the amount required to credit Financial Closure in accordance with Clause (ii) that the amount of the financing contract is equal to or greater than the amount required to credit Financial Closure in accordance with Clause 14.5; and, (iii) the financing agreement is firm, meaning that all the conditions for signing the agreement have been met and that it is signed by persons with sufficient authority to do so.
  2. Concluded with the evaluation process referred to in Clause 14.13, PROINVERSIÓN , within a maximum term of two (2) days, shall communicate such opinion to the GRANTOR and the CONCESSIONAIRE, being understood at that moment that the Financial Closure has been accredited or not.

## **Guarantees in favor of Permitted Creditors**

* 1. For the purpose of obtaining financing to comply with the execution of the Investment in the terms required under the Contract, the CONCESSIONAIRE may, provided that the Applicable Laws and Provisions allow it and following the procedure established therein, grant guarantees in favor of the Permitted Creditors to secure the Permitted Secured Indebtedness, on the following:
     1. Mortgage on the right of the Concession.
     2. Trust or assignment of the income, collection rights and cash flows derived from this Contract.
     3. Secured Transactions over the shares or participations representing one hundred percent (100%) of the capital stock of the CONCESSIONAIRE.
  2. The CONCESSIONAIRE accepts and acknowledges that the granting and execution of any of such guarantees mentioned in the preceding clause shall not relieve it of its obligations in compliance with the provisions of this Contract.

## **Mortgage of the Concession right**

* 1. The CONCESSIONAIRE is entitled to mortgage its Concession right in favor of Permitted Creditors in accordance with the provisions of Legislative Decree No. 1362 and Applicable Laws and Provisions, as guarantee for the Permitted Secured Indebtedness.
  2. The constitution of the mortgage on the Concession right and the text of the respective contract may only be requested by the Permitted Creditors, being that the GRANTOR by means of this contract, grants its approval to the constitution of the same, not being required that the GRANTOR issues and/or subscribes any additional document to this Contract. PROINVERSIÓN shall be the entity in charge of reviewing the mortgage constitution contract and giving its conformity according to the provisions of Clause 14.1 and following.
  3. The execution of the mortgage shall be carried out according to the extrajudicial execution modality, in accordance with the procedure regulated in the mortgage contract with the previous opinion of the GRANTOR. In case of discrepancy between the provisions of this Contract and the text of the respective contract, the provisions of this Contract shall prevail.
  4. The decision of the Permitted Creditors to exercise their right to foreclose the mortgage constituted in their favor shall be notified in writing to the GRANTOR and the CONCESSIONAIRE at least five (5) Days in advance. For a period of six (6) months, counted from such notice, the GRANTOR shall be prevented from declaring the Termination in advance.
  5. Within a maximum period of ten (10) Days counted from the day after receiving the communication mentioned in the previous clause, the Permitted Creditors may propose to the GRANTOR a list of legal entities candidates to be constituted as Temporary Controller, taking into account the requirements established in the Bidding Terms.

The GRANTOR, in a maximum term of ten (10) days after receiving the list of possible Temporary Controllers, shall communicate to the Permitted Creditors the legal entity that has been selected to assume the role of Temporary Controller, so that in a maximum term of three (3) days the Permitted Creditors formalize their contracting and communicate it to the GRANTOR. In case the GRANTOR does not issue its decision in the established terms, the Permitted Creditors will be able to choose the Temporary Controller, and will communicate this fact to the GRANTOR. The payment of the Temporary Controller's fees will not be assumed by the GRANTOR, being this in charge of the Permitted Creditors.

The GRANTOR shall communicate the hiring of the Temporary Controller to the CONCESSIONAIRE, within a term of two (2) days as from the day following the day of its hiring. Upon receipt of such communication, the CONCESSIONAIRE shall coordinate with the Temporary Controller all the actions to be taken so that the transfer of the Project is carried out in the most efficient manner possible, and such transfer shall be completed within a maximum term of forty (40) days as from the day following receipt of the aforementioned communication.

The CONCESSIONAIRE shall be liable for any action or omission that prevents, delays or hinders the transfer of the Project to the Temporary Controller, as well as for the damages that this may cause to the GRANTOR, the Permitted Creditors, the users and/or third parties.

* 1. The Permitted Creditors that communicate their decision to foreclose the Concession shall propose, within a maximum term of one hundred and twenty (120) Calendar Days after the notification to the GRANTOR provided in Clause 14.22, to a new concessionaire for approval by the GRANTOR. Such term may be extended by the GRANTOR's decision. The GRANTOR shall have fifteen (15) days to issue its approval or rejection to the proposed new concessionaire.
  2. The GRANTOR may only reject the approval of the new concessionaire presented if any of the following circumstances are verified with respect to such new concessionaire, its shareholders, partners or stockholders or its respective Related Companies:

1. The new concessionaire presented does not comply with the qualification requirements established in the Bidding Terms, unless the decision to foreclose has been made during the Operation Period, in which case the qualification requirements to prove construction experience shall not be required, or
2. They have composed the Successful Bidder or belong to the same economic group of the Successful Bidder; or
3. It is an entity or individual that has been convicted by means of a final or enforceable judgment, or has admitted or recognized the commission of any of the crimes defined in Section IV of Chapter II of Title XVIII of the Peruvian Criminal Code, or equivalent crimes in case these have been committed in other countries, before any competent national or foreign authority, in relation to the execution of this Contract, the Concession or the awarding of the Successful Bid, or
4. It is an entity or individual included, as of the date of the request for transfer referred to in Clause 14.24, on the lists of sanctioned entities published by World Bank Group (World Bank Listing of Ineligible Firms & Individuals) or by the Inter-American Development Bank (IDB List of Sanctioned Firms and Individuals).

Once the new concessionaire has been chosen, said act shall be communicated in writing to the Temporary Controller, who shall be obliged to initiate the necessary coordination with the new CONCESSIONAIRE, so that the transition of the operation of the Project is carried out in the most efficient manner possible. The definitive substitution of the new CONCESSIONAIRE must be completed within a term no longer than forty (40) Calendar Days counted from the Day after the new CONCESSIONAIRE is hired. Said definitive substitution must be evidenced by means of the respective certificates or deeds of transfer of the shares and/or rights in question. A copy of said documents must be delivered to the Permitted Creditors and to the Entity, and the corresponding entries must also be made in the corresponding Public Registries.

## **Secured Transactions in the Minimum Participation**

* 1. The decision of the Permitted Creditors to exercise their right to enforce the Secured Transactions over the Minimum Participation constituted in their favor shall be communicated in writing to the GRANTOR and the CONCESSIONAIRE at least five (5) Days in advance. This notification requirement is only applicable to the execution of the Secured Transactions over the Minimum Participation, since there is free availability over the other shares of the CONCESSIONAIRE. As from such notification, the GRANTOR shall be prevented from declaring the Early Termination of this Contract for a period of six (6) months.
  2. Within a maximum term of ten (10) days as from the sending of the communication indicated in the previous clause, the Permitted Creditors shall propose to the GRANTOR a list of legal entities to act as Temporary Controller, taking into account the requirements established in the Bidding Terms.

The GRANTOR in a maximum term of ten (10) days after receiving the list of possible Temporary Controllers, shall communicate to the Permitted Creditors the legal entity that will assume the role of Temporary Controller, so that in a maximum term of three (3) days the Permitted Creditors can formalize its hiring. In the event that the GRANTOR does not issue its decision in the established terms, the Permitted Creditors will be able to choose the Temporary Controller, assuming the costs of its hiring, and will communicate this fact to the GRANTOR.

The GRANTOR shall communicate the hiring of the Temporary Controller to the CONCESSIONAIRE, within a term of two (2) days from its hiring. Upon receipt of such communication, the CONCESSIONAIRE shall coordinate with the Temporary Controller all the actions to be taken so that the transfer of the Project is carried out in the most efficient manner possible, and such transfer shall be completed within a maximum term of forty (40) days as from the day following receipt of the aforementioned communication.

The CONCESSIONAIRE shall be liable for any action or omission that prevents, delays or hinders the transfer of the Project to the Temporary Controller, as well as for the damages that this may cause to the GRANTOR, the Permitted Creditors, the Users and/or third parties.

* 1. The Permitted Creditors that communicate their decision to enforce the Secured Transactions over the Minimum Participation shall propose, within a maximum term of one hundred and twenty (120) Calendar Days after the notification to the GRANTOR provided for in the Clause 14.26, to a new strategic partner for the GRANTOR's approval. Such term may be extended by decision of the GRANTOR at the request of the Permitted Creditors. The GRANTOR shall have Ten (10) Days to issue its conformity or rejection to the proposed new Strategic Partner.
  2. The GRANTOR may only deny the approval of the new Strategic Partner submitted if any of the following circumstances were verified with respect to such new Strategic Partner, its shareholders (direct or indirect) or its respective Related Companies:

1. The new Strategic Partner presented does not comply with the qualification requirements established in the Bidding Terms, or
2. They have been members of a Bidder in the Bidding, or belong to the same economic group of a Bidder in the Bidding, or
3. They are an entity or individual that has been convicted by means of a final or enforceable judgment, or has admitted or recognized the commission of any of the crimes typified in Section IV of Chapter II of Title XVIII of the Peruvian Criminal Code, or equivalent crimes in case these have been committed in other countries, before any competent national or foreign authority, in relation to the execution of this Contract, the Concession or the awarding of the Successful Bid in the Bidding; or
4. It is an entity or individual included, as of the date of the request for transfer referred to in Clause 14.28, the lists of sanctioned entities published by the World Bank Group (World Bank Listing of Ineligible Firms & Individuals) or by the Inter-American Development Bank (IDB List of Sanctioned Firms and Individuals).

Once the new Strategic Partner is approved, such act shall be communicated in writing by the GRANTOR to the Temporary Controller, who shall be obliged to start the coordination of the case with the new Strategic Partner, so that the transition of the operation of the Project is carried out in the most efficient way possible. The definitive substitution of the new Strategic Partner must be completed within a term no longer than forty (40) days from the day after receiving the communication of approval of the new Strategic Partner by the Temporary Controller. Said definitive substitution shall be evidenced by means of the respective certificates or deeds of transfer of the shares and/or rights in question. A copy of such documents shall be delivered to the Permitted Creditors and to the GRANTOR; and also, the registrations shall be made in the corresponding Public Registries, according to the Applicable Laws and Provisions.

## 

## **Permitted Creditors' Rights**

* 1. The Parties agree that the GRANTOR shall only be entitled to terminate the Contract or declare the Termination, provided that the formalities have been previously verified and the terms of the cure procedure by the Permitted Creditors foreseen in the following clause have elapsed, except for the case foreseen in Clause 24.2.6.
  2. The Permitted Creditors that have granted Permitted Secured Indebtedness shall be entitled to cure any default of the CONCESSIONAIRE under this Agreement in the manner set forth below.

1. The GRANTOR shall notify the Permitted Creditors of the occurrence of any cause that entitles the GRANTOR to request the Early Termination of this Contract, in accordance with Chapter XXIV, simultaneously with the notification sent to the CONCESSIONAIRE. In such notification, the GRANTOR shall expressly state the ground or grounds of Early Termination produced.
2. The Permitted Creditors shall have a period of ninety (90) Calendar Days as from the notice referred to in Paragraph a) above to cure any cause for early termination related to an obligation whose breach was subject to cure pursuant to the Chapter XXIV. If the Permitted Creditors fail to remedy the ground for Early Termination, or if the Permitted Creditors have informed the GRANTOR of their intention not to exercise their right to remedy, the GRANTOR may exercise its right to terminate the Contract in accordance with the provisions of the Chapter XXIV.
3. The failure of the Permitted Creditors to exercise their right to cure shall in no way affect or affect the benefits and/or rights established in favor of the Permitted Creditors in this Agreement.

During such period of ninety (90) Calendar Days, the Permitted Creditors shall be entitled to exercise any other rights in their favor granted under this Contract, including the enforcement of any of the guarantees described in Clause 14.17.

1. The intention to cure or the curing of the ground of early Termination produced by the Permitted Creditors shall not be understood in any case as the assumption by the Permitted Creditors of any of the covenants, agreements or obligations of the CONCESSIONAIRE in this Contract.
2. The Permitted Creditors shall have the right to cure defaults in relation to the renewal of the Performance Bond indicated in Clause 16.4, provided that the same is in force with a term of at least thirty (30) Calendar Days before its expiration. Otherwise, the GRANTOR shall proceed to execute the same prior to its expiration, even though there is still a term of correction by the Permitted Creditors.
   1. The Parties guarantee that the rights stipulated in favor of the Permitted Creditors in the Contract are unswayable and irrevocable, except with the prior and express consent of the Permitted Creditors. For these purposes, with the sole communication of the Permitted Creditors (directly or through any other entity acting on behalf of the aforementioned Permitted Creditors as agent) addressed to the GRANTOR and the CONCESSIONAIRE, letting them know that they accept the stipulation in their favor, the acceptance of the respective Permitted Creditors referred to in article 1458 of the Peruvian Civil Code shall be deemed to have been fulfilled.

# ECONOMIC AND FINANCIAL REGIME

## **Origin of the funds for the payment of the Compensations**

* 1. The Compensation referred to in this Chapter shall come from the GRANTOR'S resources, which shall be channeled through the Parent Trust under the terms and conditions set forth in said document and in the Adhesion Document to the Administration, Payment and Guarantee Parent Trust.

The Parent Trust shall be renewed by the GRANTOR so that it is always in force. The CONCESSIONAIRE by means of the Adhesion Document to the Administration, Payments and Guarantee Parent Trust will be incorporated to the Parent Trust as trustee.

## **Financial Compensation**

* 1. All Financial Compensation payments to be made by the GRANTOR to the CONCESSIONAIRE shall be made in Soles plus the IGV (General Sales Tax), as applicable.

The GRANTOR shall make the monthly payments of the Financial Compensation for the Service rendered to the CONCESSIONAIRE and payment for Equipment Replacement to the corresponding account, being that the first payment shall be made at the end of the first month counted from the subscription of the Certificate of Verification and Acceptance of Works and Equipment and the last payment shall be made at the month of the expiration of the term of the Concession.

The GRANTOR undertakes to make the payments of the amounts indicated by the CONCESSIONAIRE including all the readjustments and deductions established in the present Contract, according to the following expression:

CEMm,t = CEMSm,t + CREm,t

Wherein:

CEMm,t : Financial Compensation for month m of the Calendar Year t

CREm,t: Compensation for Equipment Replacement for month m of the Calendar Year t

Also,

Wherein:

CEMSm,t: Financial Compensation for Service rendered in month m of Calendar Year t.

CEMIm,t: Financial Compensation associated with the investments corresponding to the availability of the Hospital, in month m of calendar year t.

CEMSFm,t: Fixed Financial Compensation for Services rendered, in month m of Calendar Year t.

CEMSVm,t: Variable Financial Compensation for Services rendered, in month m of Calendar Year t.

DMCESm,t: Deduction based on the Service Level achieved in the Service month m of Calendar Year t.

The GRANTOR and the CONCESSIONAIRE agree that in the event that the GRANTOR is in default of its obligation to make the CEM payments pursuant to this Chapter, the GRANTOR shall, in addition to making the corresponding payment, pay the CONCESSIONAIRE interest at an effective annual interest rate in soles, equivalent to the nominal value of LIBOR, plus two percent (2%), for each Calendar Day of delay after the expiration of the term and for the balances owed.

The delay in the payment of any of the preceding CEM payments does not alter the date of subsequent payments, and the dates established in this Contract must be respected.

The following Clauses describe each of the elements of this expression.

## **Financial Compensation for Investment**

* 1. The Financial Compensation for Investment in month m of Calendar Year t, will be determined according to the following expression:

Wherein:

CEMIm,t: Financial Compensation to be received by the CONCESSIONAIRE for the investments made for the availability of the Hospital, in the month of service provision m of Calendar Year t.

CEAIt: Annual Financial Compensation for investment in Calendar Year t, which amounts to the sum of [\*] Soles and which was included in the successful bidder's Financial Offer.

Once the Certificate of Verification and Acceptance of Works and Equipment is subscribed, the payments resulting from the application of the formula established in the previous paragraph will be made, being a fundamental obligation of the GRANTOR to make such payments.

In the event that, the suspension of the rendering of the Service is declared due to force majeure or unforeseeable circumstance, only the compensation associated to the CEAI will be kept in force.

In the particular case of the suspension of a Service due to force majeure or unforeseeable circumstance, such Service shall be considered as not rendered, and there shall be no Financial Compensation from the GRANTOR during the period of the suspension, nor any obligation of the CONCESSIONAIRE to render the suspended Service. The remaining Services shall be provided by the CONCESSIONAIRE and paid for by the GRANTOR in accordance with the provisions of this Contract, as well as the proportion of the suspended Service that has been provided prior to the suspension.

## **Financial Compensation for Services rendered**

* 1. The Financial Compensation for the Services rendered considers the monthly payment, during the entire period of rendering of the Services under the terms included in this Contract and the Financial Offer.

In accordance with the provisions of Chapter V the Services to be rendered by the CONCESSIONAIRE are the following:

1. Food Service.
2. Clothes and Laundry Management Service.
3. Housekeeping, Cleaning and Vector Management Service.
4. Safety and Surveillance Service.
5. Integrated Solid Waste Management Service.
6. Sterilization Service.
7. Information Technology and Communications Service and Technological Infrastructure Provision and Availability Service.
8. Maintenance and Operation Service of the Building, Facilities, Electromechanical Equipment and Furniture associated with the infrastructure.
9. Service of Administration, Acquisition, Maintenance and Availability of the Equipment.
10. Hemodialysis Service.
11. Clinical Pathology Service, Laboratory.
12. Imaging Service.
13. Service of Logistics of supplies, strategic goods, drugs and non-strategic supplies.

## **Fixed Monthly Financial Compensation for Services rendered (CEMSF)**

* 1. The GRANTOR shall pay the CONCESSIONAIRE a Fixed Monthly Financial Compensation for the following Services, regardless of their use:

* 1. Housekeeping, Cleaning and Vector Control Services.
  2. Safety and Surveillance Service.
  3. Information Technology and Communications and Technological Infrastructure Provision and Availability Service.
  4. Maintenance and Operation Service of the Building, Facilities, Electromechanical Equipment and Furniture associated with the infrastructure.
  5. Service of Administration, Acquisition, Maintenance and Availability of Equipment.
  6. Logistics Service of inputs, strategic goods, drugs and non-strategic inputs.

In addition to the payment of the services indicated in the previous paragraph CEMSF also considers the payment of a factor **α** % of the total estimated production indicated in Appendix 8 of Annex 8 for the following services:

* 1. Food Service
  2. Clothes and Laundry Management Service.
  3. Integrated Solid Waste Management Service
  4. Sterilization Service
  5. Hemodialysis Service
  6. Clinical Pathology Service, Laboratory.
  7. Imaging Service.

The following table shows the factors for each of the Services that have a variable payment.

| **Service** | **α HACC** |
| --- | --- |
| Clothes and Laundry Management | 36% |
| Food | 36% |
| Solid Waste Management | 59% |
| Sterilization | 53% |
| Hemodialysis | 32% |
| Clinical Pathology | 26% |
| Imaging | 13% |
| **Average** | **36%** |

From the foregoing, the Fixed Monthly Financial Compensation for Services rendered in Calendar Year t shall be determined in accordance with the following expression:

Wherein:

CEMSFm,t: Fixed Monthly Financial Compensation to be received by the CONCESSIONAIRE for the Services in the service rendering month m of Calendar Year t.

CEASFt: Fixed Annual Financial Compensation to be received by the CONCESSIONAIRE for the Services in calendar year t, which amounts to the sum of [\*] Soles and which was included in the Financial Offer duly updated in accordance with the readjustment mechanism indicated in Clause 15.11 and following.

## **Variable Monthly Financial Compensation for Services Rendered**

* 1. The GRANTOR shall pay a Monthly Financial Compensation, above the value α indicated in the table of the previous Clause, of the total estimated production for each of the following Services:
  + Food Service
  + Clothes and Laundry Management Service.
  + Integrated Solid Waste Management Service
  + Sterilization Service
  + Hemodialysis Service
  + Clinical Pathology Service, Laboratory
  + Imaging Service

The amount of the Variable Monthly Financial Compensation to be paid by the GRANTOR for the Services rendered shall be determined according to the following expression:

Wherein:

|  |  |
| --- | --- |
|  | : It is the Reference Unit Price paid for the equivalent quantity for service j provided in the month of service provision m Calendar Year t, over α% of the maximum equivalent production for service *j*. |
|  | : This is the equivalent amount of service j actually performed in service delivery month m of Calendar Year t. |
|  | : This is the percentage of the maximum production of service j that would be paid as Fixed Monthly Financial Compensation for Services rendered. |
|  | The total annual quantity of equivalent services or products, at maximum design capacity (100% usage), expected from service j divided by twelve. |
|  | : Number of services with variable Financial Compensation. |

The expression corresponds to a minimum Q which is a number established in the Bidding Terms. The reference unit price (PUR, for its acronym in Spanish) for each variable service considered will be those of the Financial Offer. corresponds to the equivalent amount to be measured based on the information registered in the SIGI and which shall be validated by the Supervisor as part of its opinion in the liquidation process regulated in Clause 15.17.

For its part, the calculation of the equivalent quantities shall take into account the provisions of Appendix 8 of Annex 8.

**Financial Compensation during the Beta Phase**

* 1. During the White March, the GRANTOR shall make the payment in favor of the CONCESSIONAIRE for the Financial Compensation for the Services effectively rendered.

## **Deductions from financial compensation**

* 1. General aspects for the calculation of deductions

The deductions to the Financial Compensation for the Service are subject to the level of compliance of the CONCESSIONAIRE with the standards required in the Contract for the availability of the Hospital Infrastructure, its facilities and for the provision of the Services.

In this regard, the deductions shall be applied in accordance with the following criteria:

1. Deductions apply only to the Financial Compensation for Services, both Fixed Financial Compensation and Variable Financial Compensation. Under no circumstances shall any deduction be applied to the Financial Compensation for Investment.
2. The deductions to the Financial Compensation for Services (CES, for its acronym in Spanish) both in its fixed and variable component will be directly related to the fulfillment of the required standards for the Hospital's operating services, which will result in the Global Service Level (GSL) that will be applied to the Financial Compensation.
3. The total monthly deduction shall not exceed twenty percent (20%) of the total value of the monthly CES (CEMSF+CEMSV).
4. In the event that in a particular calendar month the deduction to be applied exceeds the monthly limit indicated above, the outstanding balance of deduction will remain as a pending right to be collected which will be effective in the following payment.

1. The accumulated amount of deductions pending collection will be discounted from the following immediate payments in which the deduction is less than twenty percent (20%) of the total value of the monthly CES, so that the collection of the outstanding balance plus the deduction of the current payment month does not exceed twenty percent (20%). This procedure shall be carried out until the outstanding balance of deductions is covered.

## **Deduction of Financial Compensation for Services (CES)**

* 1. The Deduction to the Financial Compensation for Services shall be subject to compliance with the standards of the Services to be provided by the CONCESSIONAIRE associated with the management of the Hospital and which are as follows:

1. Food Service.
2. Clothes and Laundry Management Service.
3. Housekeeping, Cleaning and Vector Management Service.
4. Safety and Surveillance Service.
5. Integrated Solid Waste Management Service.
6. Sterilization Service.
7. Information and Communications Technology and Technological Infrastructure Provision and Availability Service.
8. Hemodialysis Service.
9. Clinical Pathology, Laboratory Service.
10. Imaging Service.
11. Supply Logistics Service, strategic goods, drugs and non-strategic supplies.
12. Maintenance and Operation Service of the Building, Installations, Electromechanical Equipment and Furniture associated to the infrastructure.
13. Service of Administration, Acquisition, Maintenance and Availability of Equipment.

The monthly deduction for the service to which this Financial Compensation shall be subject shall be determined in accordance with the following expression:

The Global Service Level (GSL) corresponds to the total performance of the CONCESSIONAIRE during a calendar month, and is composed of the weighted sum of each one of the Partial Service Levels NSP, i.e. the sum of the partial service level multiplied by the weighting or importance it has within the GSL.

Wherein:

|  |  |
| --- | --- |
|  | : Monthly Partial Service Level for the service i |
|  | : Weighting factor of the service i |

Details of the weighting factors and the GSL calculation procedure are set out in Annex 8.

* 1. In those cases where the Supervisor of Contract and Operations identifies that the CONCESSIONAIRE does not comply with the Scope of a Service provided in Annex 8, which undoubtedly and directly affects or puts at risk the health of patients or Hospital staff, the latter shall notify the CONCESSIONAIRE with a copy to the GRANTOR, otherwise the CONCESSIONAIRE may carry out actions against the CONCESSIONAIRE within a maximum term defined by the Supervisor of Contract and Operations to accredit the provision of such service, the CONCESSIONAIRE shall be granted a maximum term defined by the Supervisor of Contract and Operations to accredit the provision of the referred service, otherwise the GRANTOR may take the corresponding actions so that the service is not interrupted. This cost shall be reimbursed by the CONCESSIONAIRE, notwithstanding the responsibilities, risk and cost overruns to be assumed by the CONCESSIONAIRE for such non-compliance, without implying greater costs or expenses to the GRANTOR.

For such purpose, the GRANTOR shall submit the payment voucher for the expenses incurred to the Supervisor of Contract and Operations, who shall issue a supported opinion within a maximum term of seven (7) days, and with the opinion of the Supervisor of Contract and Operations, the latter shall require the GRANTOR to reimburse the GRANTOR within a maximum term of thirty (30) Calendar Days. In case the CONCESSIONAIRE does not comply with the payment within the indicated term, the GRANTOR may execute the Operational Stage Performance Bond for the amount corresponding to the established reimbursement and the corresponding interests, without prejudice to the penalties established in this Contract.

If the GRANTOR within one (1) month intervenes in more than four (4) opportunities within the framework of the provisions of this clause, it shall be considered that the CONCESSIONAIRE has incurred in a serious non-compliance and therefore the provisions of this Chapter XXIV shall be applicable.

## **Readjustment of financial compensation**

* 1. The following is the update considered for each component of the Financial Compensation to be paid by the GRANTOR to the CONCESSIONAIRE.

* 1. Readjustment of the Annual Financial Compensation for Investment

The CEAI is not subject to any type of readjustment.

* 1. Readjustment of the fixed Annual Financial Compensation for services rendered

The fixed Annual Financial Compensation for Services rendered at the Hospital shall be updated in accordance with the following expression:

Wherein:

CEASFt: Fixed Annual Financial Compensation for services rendered, updated to Calendar Year t of the contract.

CEASF0: Value of the fixed annual Financial Compensation for services rendered, requested in the Financial Offer.

: National Consumer Price Index published by the National Institute of Statistics and Informatics (INEI), or the indicator that replaces it. The latest monthly IPC available as of the adjustment date indicated will be taken into account.

: National Consumer Price Index published by the National Institute of Statistics and Informatics (INEI), or the indicator that replaces it, corresponding to the month of award.

t: Calendar year for which the adjustment is made.

0: Year of the month corresponding to the award of the successful bid.

No later than ten (10) Days of January of each Calendar Year, the Supervisor of Contract and Operations shall determine the value of the that will be in force during the Calendar Year and shall inform the GRANTOR, by means of a written communication, no later than two (02) Days after the calculation has been made.

Exceptionally, for the Calendar Year in which Operation begins, the Supervisor of Contract and Operations shall determine and inform the GRANTOR the value of the in force during that Calendar Year, at the latest during the first five (5) Days of the month following the date of subscription of the Certificate of Verification and Acceptance of Works and Equipment.

* 1. Readjustment of the variable Annual Financial Compensation for services rendered at the Hospital

The variable Annual Financial Compensation for services rendered at the Hospital will be updated according to the consumer price index, in accordance with the following expression:

Wherein:

PURjt: Unit Reference Price of the Service j remunerated on a variable basis, updated to Calendar Year t of the Contract.

PUR0j: Unit Reference Price of the Service j remunerated on a variable basis, of the Financial Offer.

National Consumer Price Index published by the National Institute of Statistics and Informatics (INEI), or the indicator that replaces it, the latest monthly IPC available at the indicated adjustment date will be taken into account.

: National Consumer Price Index published by the National Institute of Statistics and Informatics (INEI), or the indicator that replaces it, corresponding to the month of award.

t: Calendar year for which the adjustment is made.

0: Year of the month corresponding to the award of the successful bid.

Not later than ten (10) days of January of each Calendar Year, the Supervisor of Contract and Operations shall determine the value of the that will be in force during the Calendar Year and shall inform to the GRANTOR, by means of a written communication, at the latest two (02) Days after the calculation has been made.

Exceptionally, for the Calendar Year in which the Operation starts, the Supervisor of Contract and Operations shall determine and inform the GRANTOR about the value of in force during that Calendar Year, no later than during the first five (5) days of the month following the date of execution of the Certificate of Verification and Acceptance of Works and Equipment.

## **Provision of resources for the payment for replacement of equipment**

* 1. The GRANTOR shall transfer to the Equipment Replacement Account of the Administration, Payments and Guarantee Parent Trust the allocation of resources for the payment for the Equipment Replacement (CRE) under the terms of this Contract and in accordance with the provisions of the Adhesion Document to the Administration, Payments and Guarantee Parent Trust, so that there are resources committed by the GRANTOR for the reimbursement to the CONCESSIONAIRE when the latter makes the purchase of equipment within the framework of the Scheduled Replacement on behalf of the CONCESSIONAIRE, under the conditions and obligations indicated in the rules described in Annex 12.

For the purposes of the CRE payment, the PREM amounts shall be fully allocated to an account for Equipment Replacement that may only be used to make payments, at the corresponding time in accordance with the Equipment Replacement and Refurbishment Plan.

For such purpose, the GRANTOR shall instruct the Trustee of the Administration, Payment and Guarantee Parent Trust to make the provision of resources. The nominal amount that would have corresponded to the PREM for IGV (Sales Tax) shall be added.

The PREM in month m of Calendar Year t shall be determined in accordance with the following expression:

Wherein:

PREMm,t: Provision of resources for the payment of Equipment Replacement during the term of the Contract, in the month of service delivery m of Calendar Year t.

PREAt: It corresponds to the updated amount of the amount offered by the Successful bidder in its Financial Offer. As indicated in Clause 15.16.

In the event that there are balances in the account for Equipment Replacement at the expiration of the Concession Term, such remainders shall constitute the CONCESSIONAIRE's income for the Equipment Replacement service.

If any, or all, of the equipment replacement needs to be brought forward or modified, except in the case provided for in clause 6.41 a) regarding the replacement program presented in the Technical Proposal, it shall be the CONCESSIONAIRE who assumes this risk.

* 1. For the provision for the equipment replacement, an updating or indexation mechanism is considered, taking into account the variation of the exchange rate and the consumer price index, according to the following expression:

Wherein:

: Annual Equipment Replacement Provision for Calendar Year t.

: Annual Equipment Replacement Provision requested in the Concessionaire's Financial Offer.

: National Consumer Price Index published by the National Institute of Statistics and Informatics (INEI), or the indicator that replaces it. The latest monthly IPC available as of the adjustment date indicated will be taken into account.

: National Consumer Price Index published by the National Institute of Statistics and Informatics (INEI), or the indicator that replaces it, corresponding to the month of award.

: Exchange rate published by the Superintendency of Banking and Insurance (SBS). The latest daily exchange rate available on the adjustment date indicated will be taken into account.

: Exchange rate at the date of award. Value published by the Superintendency of Banking and Insurance (SBS).

t: Calendar year for which the adjustment is made.

0: Year of the month corresponding to the award of the successful bid.

Not later than ten (10) days of January of each Calendar Year, the Supervisor of Contract and Operations shall determine the value of the that will be in force during the Calendar Year and shall inform the GRANTOR, by means of a written communication, no later than two (02) days after the calculation has been made.

Exceptionally, for the Calendar Year in which Operation begins, the Supervisor of Contract and Operations shall determine and communicate to the GRANTOR the value of in force during that Calendar Year, no later than during the first five (5) days of the month following the date of execution of the Certificate of Verification and Acceptance of Works and Equipment.

## **Procedure for Compensation Payment**

* 1. Once the Certificate of Verification and Acceptance of Works and Equipment has been subscribed, the CONCESSIONAIRE, within fifteen (15) Days after the expiration of each month, shall submit to the Supervisor of Contract and Operations, with a copy to the GRANTOR, a report containing the monthly payment including all the Financial Compensations, including the respective readjustments, to which it is entitled to receive in such period in accordance with the provisions of this Chapter.

The Supervisor of Contract and Operations shall have a term of up to five (5) days, counted from the day following the day in which the payment of the Financial Compensations of the respective month is delivered by the CONCESSIONAIRE, to communicate in writing to the GRANTOR its conformity or objection to the same, either total or partial, attaching the corresponding support. Unless there is an error in the amount to be paid, neither the Supervisor of Contract and Operations nor the GRANTOR may make other objections to the payment of the Monthly Compensation for Investment.

The GRANTOR shall have a term of ten (10) Days, counted from the Day after receiving the opinion of the Supervisor of Contract and Operations on the payment, to communicate in writing to the CONCESSIONAIRE its partial or total approval or objection.

The objection to any payment shall be communicated in writing (letter, fax or e-mail) by the GRANTOR to the CONCESSIONAIRE within the term set forth in the preceding paragraph, explaining the causes of the objection and accompanying the corresponding support.

The CONCESSIONAIRE may accept the objection or ratify its payment, and shall communicate its decision in writing to the GRANTOR within five (5) days of receipt of the objection, reserving the right to activate the corresponding dispute resolution mechanisms, at such time as it deems appropriate.

The GRANTOR shall have a term of up to five (5) days from the notification, to communicate to the Administration, Payment and Guarantee Parent Trust the total or partial approval of the monthly payment, for the party not objected by the Parties.

* 1. If there are differences between the Parties, regarding the payment of the Compensations, the following shall apply Chapter XXIII, with respect to those concepts and amounts that are under discussion.

## **Procedure for Compensation Payments**

* 1. From this communication, the CONCESSIONAIRE shall submit to the GRANTOR the payment vouchers for the approved partial or total payment, if applicable. Once it has these vouchers, the GRANTOR shall have a term of five (5) Days to deposit the total amount of the payment communicated by the CONCESSIONAIRE, differentiating the objected part and the approved part. The trust shall transfer to the free availability account only the approved part and the difference shall be retained in the Deductions and Penalties Account as established in subparagraph 3.3 of Annex 12.

## **Complementary procedure and documentation for the replacement of equipment.**

* 1. For the Replacement of Equipment, the CONCESSIONAIRE shall send a request for disbursement of the CRE to the GRANTOR containing the technical specifications, model, brand and origin of the equipment to be acquired. The GRANTOR shall have seven (7) days to give conformity to the technical specifications or request additional information about the equipment. After receiving the request for additional information, the CONCESSIONAIRE shall have five (5) days to complete the additional information requested. Once said information is delivered, the GRANTOR shall have five (5) Days to give conformity to the technical specifications. The Parties agree that in case the request is objected, an expert opinion shall be carried out directly according to the provisions of clauses 23.10 and 23.11, in order to give opinion on the GRANTOR'S objections to the Technical Specifications in order to proceed with the purchase of the equipment to be replaced. By means of the conformity to the technical specifications, the GRANTOR finishes with the technical evaluations of the equipment and the disbursement of the SRA is subject only to the confirmation of the Supervisor of Contract and Operations to the GRANTOR that the equipment subject of the authorization procedure has been properly installed in the Hospital's facilities. Said opinion must be issued within five (5) days of notification of the installation by the CONCESSIONAIRE.

Upon compliance with the procedure described above, the GRANTOR undertakes to notify the Trustee of the authorization to deliver funds to the CONCESSIONAIRE no later than the day following receipt of the confirmation from the Supervisor of Contract and Operations.

The invoicing referred to in the preceding paragraph shall be made in accordance with the percentages in dollars and soles established in the Administration, Payment and Guarantee Parent Trust, and the GRANTOR shall not be obliged to approve payments for Equipment Replacement to the CONCESSIONAIRE that do not comply with this requirement.

Together with the verification of the installation of the equipment to be requested by the CONCESSIONAIRE to the Supervisor of Contract and Operations, the CONCESSIONAIRE shall deliver to the GRANTOR the invoice for the purchase and installation of the equipment.

## **Economic and Financial Balance**

* 1. The Parties acknowledge that as of the Closing Date the Contract is in a situation of economic and financial balance in terms of rights, liabilities and risks assigned to the Parties. The Parties shall be entitled exclusively to the compensation regulated in this section.
  2. The Contract stipulates a mechanism for the reestablishment of the economic financial balance to which the CONCESSIONAIRE and the GRANTOR shall be entitled in the event that, exclusively and explicitly due to changes in the Applicable Laws and Provisions, after the execution of this Contract and which have a direct impact with economic or financial aspects linked to the variation of revenues or costs assumed by the CONCESSIONAIRE, pursuant to the Applicable Laws and Provisions.
  3. Any Party that considers that the economic financial balance of the Contract has been affected, may request, in writing, its reestablishment to the other Party, attaching a report supporting, as required, the technical, economic, financial and legal aspects of such impact, as well as the proposal to achieve the reestablishment. The existence of an imbalance does not give rise to the suspension of the term or the Termination of the Concession Contract.
  4. It shall be the responsibility of the Supervisor of Contract and Operations to evaluate and determine the breach of the economic financial balance, as well as to determine the amount of compensation that will allow the reestablishment of such balance.

The decisions of the Supervisor of Contract and Operations are binding and final and, therefore, may not be submitted to the dispute resolution mechanisms set forth in Chapter XXIII.

* 1. The effect on the economic financial balance shall be determined based on the last annual audited profit and loss statement of the CONCESSIONAIRE, according to the information provided by the Parties to the Contract, where the variations in income or costs referred to are supported. Notwithstanding the foregoing, the GRANTOR or the CONCESSIONAIRE may request the information supporting the aforementioned variations.
  2. The Supervisor of Contract and Operations shall establish the magnitude of the imbalance based on the difference between:

1. The income before taxes for the year, specifically related to the rendering of the Service; and,
2. The recalculation of the income before taxes for the same period, related to the rendering of the Service, applying the values of income or costs that correspond to the time prior to the modification that occurs as a consequence of the changes referred to in Clause 15.22.

For such purpose, the Supervisor of Contract and Operations may request from the CONCESSIONAIRE or the GRANTOR the information it deems necessary regarding the revenues and costs that have been affected by the changes in the Applicable Laws and Provisions.

If it is proven that the imbalance occurs in several periods, without having restored the economic financial balance, the accumulated difference in profits shall be calculated following the same procedure.

* 1. The unbalance factor is determined by the following expression:

If the percentage of the imbalance, in absolute value, exceeds [ten percent (10%)], it shall be reestablished.

If the imbalance affects the CONCESSIONAIRE (b>a), the GRANTOR shall grant it a compensation equivalent to the difference of the amount obtained in Paragraph b) of Clause 15.26 minus the amount obtained in Paragraph a) of said Clause.

If the imbalance affects the GRANTOR (b<a), the CONCESSIONAIRE shall grant a compensation to the GRANTOR equivalent to the difference of the amount obtained in paragraph (a) of Clause 15.26 minus the amount obtained in Paragraph b) of said Clause.

In both cases, such compensation may be added to or discounted, respectively, from the remuneration payable by the CONCESSIONAIRE for the resulting amount, without including interest.

* 1. In the event that any of the Parties invokes the reestablishment of the economic financial balance, the Supervisor of Contract and Operations shall be responsible for determining whether it is appropriate, within thirty (30) days following the day after the notification of any of the Parties that invokes the economic and financial imbalance, in application of the provisions of the preceding paragraphs.

If it is the case, the Supervisor of Contract and Operations shall establish, within a term not exceeding thirty (30) Days, after determining the origin, the amount to be paid in favor of the Party that invoked the reinstatement. The Parties shall be informed of the result so that they may implement what corresponds to each one.

* 1. For any delay an equivalent payment shall be recognized using an effective annual interest rate in soles equivalent to the nominal value of LIBOR, plus two percent (2%) calculated on the unpaid balance for each Calendar Day of delay, after the maximum crediting period agreed for each Calendar Day of delay.
  2. The reestablishment of the economic financial balance shall not be applicable for those changes produced as a consequence of the provisions issued by the Competent Governmental Authority that establish infringements or sanctions, or the application of penalties that were contemplated in the Contract, or that were as a consequence of acts, facts attributable to or resulting from the performance of the CONCESSIONAIRE.
  3. In the event of the reestablishment of the economic and financial balance, said compensation, the GRANTOR or CONCESSIONAIRE, if applicable, shall directly manage the payment of the amount of the compensation determined by the Supervisor of Contract and Operations, within a period not exceeding one (1) year from the date of communication of its opinion. In case it is not possible to pay such amount within such period, the Parties may agree on a payment schedule for the remaining amount at the expiration of the previous term.

## **Tax regime of the Concession**

* 1. The CONCESSIONAIRE shall be subject to the national, regional and municipal tax legislation applicable to it, and shall comply with all tax obligations corresponding to the exercise of its activity. The consequences of non-compliance with tax obligations shall be fully assumed by the CONCESSIONAIRE and shall not be enforceable against the GRANTOR.
  2. The CONCESSIONAIRE shall be obliged, under the terms set forth in the Applicable Laws and Provisions, to pay all taxes, contributions and fees applicable, among others, to the Concession Assets or those to be constructed or incorporated to the Concession, whether such taxes are administered by the National, Regional or Municipal Government, from the moment of taking possession, provided that such taxes, contributions and fees are directly related to the Contract.
  3. The CONCESSIONAIRE may request the execution of a legal stability agreement, which, in accordance with the Applicable Laws and Provisions, has the quality of a legally binding contract, pursuant to the provisions of Legislative Decree No. 662, Legislative Decree No. 757; and, the first and second paragraph of Article 19 of the Sole Ordered Text of the rules with legal rank that regulates the concession of public works of infrastructure and public services to the private sector, approved by Supreme Decree No. 059-96-PCM, upon compliance with the conditions and requirements established in said norms, or those that modify or replace them.
  4. Likewise, the CONCESSIONAIRE may access the corresponding tax benefits, provided it complies with the procedures, requirements and substantial and formal conditions set forth in the Applicable Laws and Provisions.

# GUARANTEES

## **GRANTOR'S guarantee in favor of the CONCESSIONAIRE**

1. 1. As long as the requirements set forth in the Applicable Laws and Provisions are complied with, the CONCESSIONAIRE may request the issuance of the securities and guarantees of the Republic of Peru in support of the obligations, representations and warranties payable by the GRANTOR set forth in the Contract. The Parties acknowledge that, in no case, the referred guarantee shall constitute a financial guarantee.

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## **CONCESSIONAIRE’s Guarantees in favor of the GRANTOR**

* 1. The Performance Bond guarantees, during its term, the correct and timely performance of each and every one of the CONCESSIONAIRE's obligations under this Contract; including, (i) the payment of any penalties; (ii) the amounts ordered to be paid in favor of the GRANTOR, by means of a final judgment or enforceable arbitration award; and, (iii) other statements and stipulations set forth in the Contract.
  2. The Performance Bond shall be issued as follows:

1. Pre-operational Stage Performance Bond: it shall be issued by the CONCESSIONAIRE and shall amount to [S/. 52'000,000.00 (Fifty-two million and 00/100 Soles)] and shall remain in force from the Closing Date until the date of execution of the Certificate of Verification and Acceptance of Works and Equipment.

In the event that the resolution of disputes related to the Pre-operational Stage, subject to the dispute resolution mechanisms established in Chapter XXIII, is extended for a period of time subsequent to the execution of the Certificate of Verification and Acceptance of Works and Equipment, the Performance Bond for the Pre-operational Stage shall remain in force until the resolution of such disputes and for the amount corresponding to such disputes, not to exceed the amount indicated in this Paragraph in force at such time.

1. Operational Stage Performance Bond: it shall be issued by the CONCESSIONAIRE and shall amount to [S/. 31'000,000.00 (Thirty-one million and 00/100 Soles)] and shall remain in force from the date of execution of the Certificate of Verification and Acceptance of Works and Equipment until one (1) year after the Termination of the Concession.

The Operational Stage Performance Bond guarantees the obligations of the CONCESSIONAIRE associated to both the Pre-Operational Stage and the Operational Stage.

In the event that the resolution of the disputes related to the Operational Stage, subject to the dispute resolution mechanisms established in Chapter XXIII, is prolonged for a term longer than one (1) year after the Termination of the Concession, the Operational Stage Performance Bond shall remain in force until the resolution of such disputes and for the amount corresponding to such disputes, not exceeding the amount indicated in this Paragraph.

## **Renewal**

* 1. The Performance Bond shall remain in effect at all times for the amounts and terms set forth in the preceding Clause. If the term of the Concession is extended, the Operational Stage Performance Bond shall remain in force for up to one (1) year after the extension period.
  2. If the corresponding Performance Bond is not renewed by the CONCESSIONAIRE no later than thirty (30) Calendar Days prior to its expiration, the GRANTOR shall proceed to its total execution, which constitutes the notice referred to in Clause 24.2.2.

In the event of failure to renew the Performance Bond and its subsequent execution, the amount of the bond shall be retained in the account of the Administration, Payment and Guarantee Parent Trust as a guarantee until the CONCESSIONAIRE complies with the renewal of the Performance Bond. Additionally, the penalties set forth in Annex 11 shall be applicable.

Upon compliance with the renewal, the GRANTOR shall return to the CONCESSIONAIRE the amount of the guarantee, without interest, and after deducting the expenses incurred, if any.

* 1. The renewed Performance Bond shall be issued under the terms contained in the preceding clauses, in accordance with the model set forth in Annex 1 and Annex 2, if applicable.

## **Enforcement of the Performance Bond**

* 1. In the event of enforcement of the corresponding Performance Bond, the CONCESSIONAIRE shall return it to the original amount established within a term no longer than ten (10) days from the date of its enforcement. In the event of non-compliance with the deadline by the CONCESSIONAIRE, the provisions set forth in paragraph g) of Clause 24.2.2.

Once the execution of the Performance Bond has been executed, the GRANTOR shall dispose in its favor of the amount corresponding to it as a result of the CONCESSIONAIRE's default, being that the remaining balance shall be deposited by the GRANTOR in the account of the Administration, Payments and Guarantee Parent Trust as a guarantee until the CONCESSIONAIRE complies with the restitution of the full amount corresponding to the respective Performance Bond within a maximum term of five (5) days from the day following the day in which the Performance Bond is executed, otherwise the Chapter XXIV shall be applicable.

Upon compliance with the restitution, the GRANTOR undertakes to notify the Trustee of its conformity with the new Performance Bond for the return to the CONCESSIONAIRE of the balance of the amount of the guarantee, without interest, and after deducting the expenses incurred, if any. In case the guarantee is not returned, the GRANTOR may invoke the Termination of the Contract and shall dispose of the retained resources. Additionally, the penalties foreseen in Annex 11 shall be applicable.

# INSURANCE SYSTEM

## **Types of insurance policies**

* 1. During the term of the Contract, the CONCESSIONAIRE shall take out and maintain in force the insurance policies detailed in this Chapter, to cover the Works and Equipment, its workers, contractors and subcontractors, as well as third parties, among others, establishing the GRANTOR, or whoever it may designate, as additional insured in the respective contracted policies, in order to allocate, if applicable, the proceeds of the insurance indemnity to the restitution, replacement or repair of the damaged assets.

The policies shall have as insured the CONCESSIONAIRE, who undertakes to allocate one hundred percent (100%) of the amounts resulting from the indemnity for any loss, to the repair of the damages caused by such loss, replacement of the damaged property and reconstruction of the Works, if applicable. These amounts shall be deposited in the Insurance Indemnity accounts of the Administration, Payment and Guarantee Parent Trust.

The CONCESSIONAIRE shall contract, at its own cost, risk and expense, all insurance policies required under the Contract with insurance and reinsurance companies that are rated A or higher at the time of contracting or renewing the insurance policy, according to information from the Superintendency of Banking, Insurance and AFP, or risk rating agencies operating in Peru or abroad. Likewise, it will assume the costs of any and all deductibles or coinsurance contracted in the required insurance policies.

The international reinsurers covering the risks of the insurer contracted by the CONCESSIONAIRE must have a minimum rating of A-, granted by an international credit-rating agency, at the time of contracting and subsequent renewals. Failure to comply with this obligation shall constitute a serious breach, in accordance with the provisions set forth in Chapter XXIV.

The CONCESSIONAIRE shall send to the GRANTOR a copy of the insurance policies contracted.

The GRANTOR shall not assume any kind of obligation or liability for payment before any insurance or reinsurance company related to the insurance policies required under the Contract.

* 1. The list of coverages set forth in this Chapter is for illustrative purposes only, being understood only as minimum requirements, and the CONCESSIONAIRE may expand or improve its coverage.
  2. Personal Insurance for Workers

The CONCESSIONAIRE shall comply with contracting and presenting all insurance policies required by the Applicable Laws and Provisions for workers in Peru, covering and protecting the life and health of all workers under its charge directly or indirectly related to the Concession, such as Life Insurance Law (Legislative Decree No. 688) and Complementary Risk Work Insurance (Health and Pensions), among others. These insurances must be contracted considering at least the coverage and requirements demanded by the Applicable Laws and Provisions.

* 1. Likewise, the CONCESSIONAIRE shall verify that the special services companies, agents, contractors or subcontractors that hire workers assigned for the execution of the object of this Contract comply with the regulations indicated in the preceding paragraph, and shall be jointly and severally liable for the obligations arising from the Applicable Laws and Provisions with respect to the damage or harm caused.

* 1. Construction and Erection All Risks Insurance

The CONCESSIONAIRE shall comply with contracting the aforementioned policy, covering the risk of construction and assembly of the civil and electromechanical works and all the assets that may suffer material damage of any kind and description, as well as the construction equipment and machinery, in any place and condition in which they are located, including its own- or third-party premises, permanent or temporary camps, outdoors or underground.

The risks covered by this policy shall include, as a minimum, the following: Basic Coverage (A); Coverage (B), which covers damages due to earthquake, tremor, tidal waves; Coverage (C), which covers rain, flood and landslides; Coverage (D), which covers material damages until the end of the Commissioning; and, Coverage (G), debris removal.

Likewise, political risks such as strikes, civil commotions, malicious damage, vandalism and terrorism should be included. Also covered should be: extensive maintenance, other adjacent properties, weakening of bases, masses and subsoils, and Technical File design errors and associated hidden defects.

These coverages must be in force during the entire Infrastructure Construction Activity until the execution of the Certificate of Verification and Acceptance of Works and Equipment, except for coverage (D), which begins at Commissioning and remains in force until the execution of the Certificate of Verification and Acceptance of Works and Equipment.

Additionally, "Civil Liability E and F" coverage must be included, which must cover direct, indirect and consequential damages, from the beginning of the Infrastructure Construction Activity until the beginning of the Operational Stage.

Said sum insured must be at least equivalent to the value of the maximum probable loss resulting from the risk study carried out at the CONCESSIONAIRE's cost, risk and expense, corresponding to the most probable risks. In the event that any loss exceeds the sum insured, the CONCESSIONAIRE shall be liable for the balance not covered by the insurance contracted, holding CONCESSIONAIRE harmless from liability, except for the provisions of the Clause 17.18.

* 1. Completed Civil Works All Risks Insurance or All Risks Property Insurance

The policy shall cover all civil works, Equipment, including all its installations, equipment and stock of any kind and description, whether terrestrial or subway, for all material damages that any property of any kind and description may suffer, which shall be consistent with the actual budget executed, with the exception of preliminary or preparatory works for the construction of the Hospital which shall not be part of the insured value, such as expenses for demolition of buildings, removal of pavement, cleaning and disposal of debris, among others.

Risks associated with the physical or structural integrity of the Infrastructure, political risks such as strikes, civil commotions, malicious damage, vandalism and terrorism; and natural risks such as earthquakes, tidal waves, floods, landslides, rains and risks due to environmental damage shall be included among the risks covered by this policy. As well as risks of machinery breakage, electronic equipment, all contractor's risks, misfortune, mobile or portable equipment, automatic coverage for new acquisitions, own or third party vehicles within the insured premises, land subsidence, landslides and earth movements. Design errors and hidden defects that may appear in the infrastructure should also be covered.

This coverage must also include the risks of direct losses due to any type of loss, including demolition, cleaning, debris removal, extra expenses and extraordinary expenses.

The CONCESSIONAIRE must comply with contracting the aforementioned policy, covering the damages that may be suffered by the equipment and all the land and subway installations; as well as covering the property risk of the finished Works and in Operation of all risks. This policy shall be effective as from the subscription of the Certificate of Works and Equipment Verification and Acceptance and shall remain in force until the subscription of the Certificate of Reversion of the Concession Assets.

The CONCESSIONAIRE must declare to the insurance company the total replacement value of the CONCESSIONAIRE's Works and Equipment referred to in this Clause, including all its installations, equipment and stock, as the total value of the risk exposure. The CONCESSIONAIRE shall be liable for the balance not covered by the insurance contracted, holding the CONCESSIONAIRE harmless from liability, except for the provisions of the Clause 17.18.

The insured value must at all times include the replacement value clause at current value on the date of loss. Said insured sum must be at least equivalent to the value of the maximum probable loss, resulting from the risk study carried out at the CONCESSIONAIRE's cost, risk and expense, corresponding to the most significant risks.

The GRANTOR, subject to the non-binding opinion of the Supervisor of Contract and Operations, shall suspend the obligation of the CONCESSIONAIRE to contract and maintain in force this policy only with respect to acts of terrorism, if this type of insurance ceases to be offered in the national and international market. To prove this, the CONCESSIONAIRE shall submit a report prepared by a specialized international company, other than the insurance broker, agent or consultant of the CONCESSIONAIRE.

The suspension of this obligation shall operate from the moment in which the alternative treatment to be agreed in writing by the Parties, with the prior opinion of the Supervisor of Contract and Operations, to regulate the case in which the Works and Equipment suffer damage due to acts of terrorism, comes into force.

If during the suspension referred to in the previous paragraph, the national or international market offers again policies to cover damages caused by acts of terrorism, the CONCESSIONAIRE shall comply with informing about such situation, (within a term not less than ten (10) Days of having received the relevant information), to the GRANTOR and the Supervisor of Contract and Operations, reactivating the obligation of the CONCESSIONAIRE to contract and maintain in force the policy that covers this type of damages.

The CONCESSIONAIRE shall contract such policy within twenty (20) days of being requested in writing by the GRANTOR. This obligation shall become effective again at the time the CONCESSIONAIRE contracts the policy to cover damages to the Works and Equipment due to acts of terrorism; or, once the term of twenty (20) Days referred to above has elapsed, whichever occurs first.

Simultaneously with the entry into force of this obligation, the alternative treatment agreed upon by the Parties shall be without effect, and there shall again be the possibility of suspending it under the same terms referred to in this Clause, should the aforementioned event occur again.

In the event of a loss related to acts of terrorism, when the CONCESSIONAIRE has not contracted the policy and it is verified that such policy does exist in the national or international market, the CONCESSIONAIRE shall assume the costs, expenses and taxes derived from the loss.

* 1. General Liability, Contractual, Extracontractual and Employer's Liability Insurance

The CONCESSIONAIRE shall comply with contracting the civil liability coverage that shall cover any damage, loss or injury that may occur to third party property or to third parties due to any action of the CONCESSIONAIRE, its contractors, subcontractors, its officers or employees, in connection with the Concession. This insurance shall include, at least, the following clauses, for the entire term of the Concession:

1. General Tort Liability.
2. Employer's Liability.
3. Contractual Civil Liability.
4. Cross Liability between the CONCESSIONAIRE, contractors and subcontractors.
5. Civil Liability for sudden, unforeseen and accidental filtration, pollution or contamination.

Although the risk of the liability coverage is different during the stages of the Concession, the characteristics of such coverage are similar and must respond to the following particularities:

* For all purposes, the State entities, with the exception of the GRANTOR or whoever it may designate, shall be considered third parties for any claim they may make for direct damages and other economic losses they may suffer as a consequence of the construction of the Works and subsequent Operation of the Services, therefore, any State body shall have its right to make its legal claim, as third parties, for any direct damages from the Works or Operation subject matter of the Concession and which are legally attributable to the CONCESSIONAIRE, its contractors, subcontractors or any other company, linked, related or designated by the CONCESSIONAIRE.
* The sum insured for the civil liability coverage for personal, material and environmental damages, both during the Pre-Operational Stage and the Operational Stage, shall be determined by the CONCESSIONAIRE at a level sufficient to cover such damages. Said insured sum shall be at least US$ 15'000,000.00 (Fifteen million and 00/100 United States Dollars).

In the event that any loss exceeds the sum insured, the CONCESSIONAIRE shall be liable for the balance not covered by the insurance contracted, holding the GRANTOR harmless of liability, with the exception of the provisions of Clause 17.18.

* 1. Other policies

Without prejudice to the mandatory policies indicated in Clauses 17.3 to 17.7**,** the CONCESSIONAIRE may, in accordance with its own strategic vision of management and distribution of the risks of the Project, in order to comply with the provisions of the Applicable Laws and Provisions, or for any other duly justified cause, take any other insurance policy in addition to those previously established, and shall notify the GRANTOR, once the same have been contracted.

## **Insurance approval**

* 1. For the purposes of the Concession, the CONCESSIONAIRE shall have the insurance policies required by this Chapter, by way of example and not limitation, being considered, in any case, as minimum requirements that may be expanded and improved by the CONCESSIONAIRE, and whose final proposal has been duly approved by the GRANTOR.
  2. The CONCESSIONAIRE shall submit to the GRANTOR, with copy to the Supervisor of Contract and Operations, the policy proposals, together with the proforma policies and the list of specialized companies for the elaboration of the risk study, as referred to in paragraph g) of Clause 3.3 in the following terms:

1. For the Pre-Operational Stage:

* On the Closing Date: Personal Insurance for Employees.
* At the latest ten (10) months from the Closing Date for the Hospital: (i) Construction and Erection All Risks Insurance; and, (ii) General, Contractual, Extracontractual and Employer's Liability Insurance and Other Policies.

1. For the Operational Stage:

* Personal Insurance for Workers
* Completed Civil Works All Risks Insurance or All Risks Property Insurance
* General, Contractual, Extracontractual and Employer's Liability Insurance
* Other policies

The same shall be submitted no later than sixty (60) days prior to the execution of the Certificate.

The GRANTOR shall have a term of thirty (30) days from receipt of the request for its opinion or approval, and for this purpose it must have the prior binding opinion of the Supervisor of Contract and Operations, which must be issued within a term no longer than ten (10) days, both for the policy proposal and in the cases in which the CONCESSIONAIRE must submit the renewals according to the provisions of Clause 17.20. After the term indicated in this paragraph, if there is no opinion from the GRANTOR, the policies shall be deemed to be approved.

In case the GRANTOR makes objections to the policy proposals submitted, the CONCESSIONAIRE shall have a term of fifteen (15) days to correct them. The CONCESSIONAIRE shall submit the corrections to the GRANTOR with a copy to the Supervisor of Contract and Operations, the GRANTOR shall have a term of ten (10) days for its opinion, and for this purpose it must have the prior binding opinion of the Supervisor of Contract and Operations, which shall be issued within a term no longer than five (5) days from the receipt of the corrections by the CONCESSIONAIRE. Once this term has elapsed and if there is no opinion from the CONCESSIONAIRE, the policies shall be deemed approved.

In case of automatic approval, if during the validity of the policy it is verified that any of the conditions required for the same are not complied with, the CONCESSIONAIRE shall adapt it to what is indicated by the GRANTOR within a maximum term of twenty (20) days after the adaptation request is communicated, without prejudice to the application of the penalties that may be pertinent.

The personal insurance policy for workers shall be submitted in the mentioned request; however, the same shall only be for communication purposes but not for approval.

* 1. Copies of the contracted policies shall be drafted in Spanish language, and shall be delivered to the GRANTOR, with a copy to the Supervisor of Contract and Operations, as appropriate, in accordance with the following terms and conditions:

1. The policies of Clause 17.3: within a term that shall not exceed fifteen (15) Days after the policy proposals have been submitted.
2. The policies under Clauses 17.5 and 17.7: within a term that shall not exceed fifteen (15) Days prior to the execution of the Certificate of Commencement of Construction of the Works and Equipment; in the case of the Hospital's policies.
3. The policy of the Clause 17.6: within a period not to exceed fifteen (15) days prior to the execution of the Certificate of Verification and Acceptance of Works and Equipment.

In any case, neither the works nor the Pre-Operational Stage may commence without the corresponding policies being contracted and delivered to the GRANTOR, with a copy to the Supervisor of Contract and Operations.

## **Insurance system**

* 1. Communications

The policies contracted in accordance with the provisions of the Contract shall contain a stipulation that obliges the respective insurance company to notify the GRANTOR in writing, with a copy to the Supervisor of Contract and Operations , of any breach by the CONCESSIONAIRE in the payment of premiums or any circumstance that affects the validity of the policies or in case of cancellation or non-renewal of any insurance, at least thirty (30) Calendar Days prior to the date on which such breach may result in the suspension of coverage or partial or total cancellation of the policy. The insurance company shall notify to the GRANTOR at least sixty (60) Calendar Days in advance the policies that are about to expire in such term.

The respective policy shall at the same time establish that its expiration shall only occur if the insurance company has complied with the obligation referred to in the first part of this Clause.

The CONCESSIONAIRE shall notify the GRANTOR, with a copy to the Supervisor of Contract and Operations, at least sixty (60) Calendar Days prior to the expiration of the corresponding policies, the dates and conditions under which the renewals of such policies shall be carried out.

In the event that the renewal of the policy does not involve a change in the coverages or exclusions, the approval of the renewal of the policy shall be automatic, once said notification has been made.

In the event that the renewal of the policy includes changes in the coverages, deductibles or exclusions, the CONCESSIONAIRE together with the aforementioned notification shall submit a report prepared by a specialized international company, different from the insurance broker, agent or consultant of the CONCESSIONAIRE. The GRANTOR, with the prior binding opinion of the Supervisor of Contract and Operations, shall issue its opinion within a maximum term of forty (40) Calendar Days. For this purpose, the Supervisor of Contract and Operations shall have a term of twenty (20) Calendar Days.

If after this term the GRANTOR does not issue an opinion, it shall be understood that it agrees with the terms of the renewal of the policies; unless the CONCESSIONAIRE has not complied with notifying the GRANTOR, with a copy to the Supervisor of Contract and Operations, within the established term, in which case the latter shall have the balance of the term foreseen to issue an opinion. Such conformity does not mean relief of the responsibility of keeping covered all the insurable concepts.

When the renewals of the insurance policies do not imply a modification of its terms and conditions, it shall only be necessary to inform such fact to the GRANTOR and to the Supervisor of Contract and Operations, without requiring its opinion.

* 1. CONCESSIONAIRE's Obligations and Responsibilities

The contracting of insurance policies does not reduce, limit or alter in any way the obligations and liabilities assumed by the CONCESSIONAIRE within the framework of the Contract.

* 1. Policy compliance and enforcement

The CONCESSIONAIRE is obliged before the GRANTOR to comply with the terms and conditions of all the insurance policies contracted in accordance with the provisions of the Contract.

One hundred percent (100%) of the amount resulting from the execution of the insurance shall be destined to the purpose for which it was contracted.

If as a result of the execution of the policies contracted in favor of the GRANTOR there is a balance that could result from the execution of these, such balance shall be deposited in the Insurance Compensation Account.

In the event of a claim, the CONCESSIONAIRE shall report it to the insurance company no later than the next day after it begins and, at the same time, shall notify the GRANTOR. The CONCESSIONAIRE shall initiate, pursue and complete such claims enforcement process as may be necessary or required under the terms of the insurance policy relevant to such loss and shall incur all expenses related to such claims process at its own cost, risk and expense. If the insurance coverage is paid due to lack of timely notification of a loss, the CONCESSIONAIRE shall be responsible, at its own cost, risk and expense, for restoring the conditions prior to the loss and for making the corresponding indemnities, releasing the GRANTOR from all liability.

The CONCESSIONAIRE shall assume the costs of each and every one of the deductibles or coinsurances contracted in the required insurance policies.

* 1. Coverage report

Within the first sixty (60) Calendar Days of each Concession Year, including the first year in which the Closing Date occurs, and during the term thereof, the CONCESSIONAIRE shall submit to the GRANTOR, with a copy to the Supervisor of Contract and Operations, the following:

1. The list of the insurance policies that were in force during the previous Calendar Year, specifying for each of these policies the claims made by the CONCESSIONAIRE.
2. The detail of the current status of such claims, specifying the indemnities made by the Insurance Company.
3. A list of the insurance policies to be taken out and/or maintained by the CONCESSIONAIRE during the year in question, indicating at least the following:
4. Insurance policy coverages,
5. Insurance companies.
6. As of the second Concession Year, a certificate issued by the authorized representative of the insurance company indicating the policies and coverages that the CONCESSIONAIRE has contracted during the previous year, in order to demonstrate compliance with the terms of this Chapter.

* 1. Notwithstanding the foregoing, during the term of the Concession, and whenever the GRANTOR so requires, the CONCESSIONAIRE shall submit reliable proof that all insurance policies are still in force and up to date in their payments.

The GRANTOR, at any time, may request from the CONCESSIONAIRE the delivery of the original of the insurance policies it has contracted, or legalized copies thereof, as well as receipts or documents proving that it is up to date in the payment of the corresponding premiums.

* 1. In the event of non-compliance with the obligation to keep the policies in force, the GRANTOR may execute the corresponding Performance Bond, prior notice to the CONCESSIONAIRE, without prejudice to the penalties to which said non-compliance may give rise or to the Termination, in accordance with the provisions of Chapter XXIV.

In case the GRANTOR executes the corresponding Performance Bond, the CONCESSIONAIRE is obliged to reimburse it, in accordance with the provisions of Chapter XVI.

* 1. Non-Covered Events

The CONCESSIONAIRE shall be liable to the GRANTOR or third parties for the losses, damages and liabilities not covered by the insurance policies described in this Chapter, or due to lack of coverage, as well as the balance not covered by the contracted insurance, in case the loss exceeds the insured amount, shall be borne by the CONCESSIONAIRE, who shall be the only responsible before the GRANTOR for any loss or damage caused, with the exception of the uninsurable cases of force majeure or unforeseeable circumstance, among other events not insurable in the national or international market, according to verification made through a specialized insurance expert selected by mutual agreement of the Parties, this decision is unchallengeable.

To this end, the expert shall be hired at the CONCESSIONAIRE's cost, risk and expense and shall follow the procedure set forth in Clauses 23.10 and 23.11.

* 1. GRANTOR's policy contracting

If the CONCESSIONAIRE fails to maintain the policies in force, as required in accordance with this Chapter, the GRANTOR shall renew or contract the policies that the CONCESSIONAIRE has failed to maintain in force, in which case it shall notify the CONCESSIONAIRE of the contracting and payment of the premiums at the cost, risk and expense of the CONCESSIONAIRE. The amount of such premiums plus interest shall be calculated at an effective annual interest rate in soles equivalent to the nominal value of LIBOR plus two percent (2%), for each Calendar Day of delay and for the amounts owed, which shall be paid by the CONCESSIONAIRE to the GRANTOR within a maximum term of five (5) Days counted as of its notification by the GRANTOR.

The provisions of the preceding paragraph are applicable without prejudice to the execution of the corresponding Performance Bond and the application of the corresponding penalties, as established in the Contract. The resources resulting from the execution of the Performance Bond shall be used to contract the insurance policies referred to in this Clause.

## **CONCESSIONAIRE'S Responsibility**

* 1. The contracting of insurance policies by the CONCESSIONAIRE does not diminish its liability, and therefore the CONCESSIONAIRE shall be directly liable for all its obligations, over and above any insured liability, except for causes not attributable to it. In these terms, the CONCESSIONAIRE undertakes to hold the GRANTOR harmless against any lawsuit, delay or claim related to the Operation, subrogating itself, likewise, in place of the GRANTOR, if there is a claim from third parties for this cause, in any way whatsoever.
  2. Regardless of the provisions of this Chapter and the obligations set forth herein, the CONCESSIONAIRE shall pay the totality of the sums due to any person, in accordance with the Applicable Laws and Provisions. This implies that, in the event of a loss caused by fraud or fault on its part, and which is not covered by the aforementioned insurance policies, the CONCESSIONAIRE shall be solely liable for any possible damage that may be caused.

The CONCESSIONAIRE shall not be liable for the acts or facts committed by the GRANTOR or third parties, who shall be liable for the damages and losses attributable to them, unless the third parties were directly or indirectly related to the CONCESSIONAIRE. This exemption from liability covers the provisions related to Environmental Liabilities referred to in Chapter XIX. The foregoing is without prejudice to the CONCESSIONAIRE's obligation to take custody of the Concession's property and assets.

# SOCIO-ENVIRONMENTAL CONSIDERATIONS

## **Responsibilities**

1. 1. The CONCESSIONAIRE undertakes to comply with the Applicable Laws and Provisions, as well as with those that modify or replace them, including the international regulations referred to in the Second Transitory, Complementary and Final Provision of the General Environmental Law, and the environmental, social, safety and health obligations established in this Contract.
   2. During the term of the Contract, the CONCESSIONAIRE shall be responsible for compliance with all the socio-environmental obligations established in this Contract, in the Applicable Laws and Provisions, in the Environmental Management Instruments of the Project approved by the Competent Governmental Authority and in the agreements signed with Stakeholders, if any, at its cost, risk and expense; including the obligation to assume any consented and firm economic sanction imposed by the Competent Governmental Authority.
   3. The CONCESSIONAIRE shall be responsible for the management of all socio-environmental impacts generated in the Concession Area as from the execution of the Certificate of Delivery of Assets to the extent that the cause of the impact has originated as a consequence of the activities carried out by the Project. In case of controversy, such liability shall be determined by the Competent Governmental Authority, within the framework of the environmental regulations in force.

Notwithstanding the foregoing, the CONCESSIONAIRE shall assume exclusive liability to third parties and shall be responsible for the management of any type of negative environmental impact attributable to it, even if it is not identified in the approved Environmental Management Instrument or its controls are not regulated in the regulations in force. This responsibility includes risks and impacts generated by action or omission.

* 1. The CONCESSIONAIRE shall be jointly and severally liable for any environmental damage or social impact or impact to health and safety, which is directly attributable to its contractors or subcontractors and which is caused by the effect of the activities of the Concession. The contracting of insurance policies does not hold the CONCESSIONAIRE harmless of liability.

The CONCESSIONAIRE shall establish mechanisms and standards to align and monitor the social, environmental, safety and health management of its contractors and subcontractors; shall apply the life cycle analysis approach in order to minimize its ecological footprint; and shall homologate its suppliers based on efficiency, quality, social, environmental, safety and health management criteria.

* 1. As of the Closing Date, the CONCESSIONAIRE shall have social and communication management plan and qualified personnel to timely inform the progress of the Project and to communicate to the public opinion the investment mechanism and the best practices to be implemented, as well as to execute social and institutional relationship actions in order to promote conditions of understanding with all the Project's Stakeholders.

The CONCESSIONAIRE shall submit to the GRANTOR within the first fifteen (15) Calendar Days of the Closing Date a social and communication management plan, which shall be updated (i) upon request of the GRANTOR, (ii) when the Citizen Participation Plan is approved, (iii) when it obtains the environmental certification and, (iv) where applicable, when it submits the socio-environmental reports.

Throughout the term of the Concession, the CONCESSIONAIRE shall maintain a fluid and constructive communication with the Stakeholders, map and monitor the social and political risks, know the evolution of the expectations and perceptions about the Concession, coordinate with the CONCESSIONAIRE the social management actions and the communication campaigns to be carried out, and promote the prevention and resolution of conflicts.

The CONCESSIONAIRE will be responsible for acting with respect towards the population, institutions, authorities and the different Stakeholders, applying an intercultural approach and recognition of human rights and local customs, so as to maintain constructive long-term relationships.

## **Environmental Certification**

* 1. The Hospital has been classified by the General Directorate of Environmental Health of the Ministry of Health in Category II of the Environmental Impact Assessment System, and has Terms of Reference approved by Directorial Resolution No. 1292-2016/DSA/DIGESA/SA, which is attached in Annex 23. To prepare the Semi-Detailed Environmental Impact Study, the CONCESSIONAIRE shall consider in addition to the content established in Annex III of the Regulations of the Environmental Management System Law or regulations that modify or replace it, the minimum contents considered in Annex 27 and those requested by the Competent Governmental Authority, considering the characteristics of the final design.
  2. The CONCESSIONAIRE shall process the licenses, permits or technical opinions of the Competent Governmental Authorities that are necessary for the preparation, presentation or approval of the Environmental Management Instrument, in accordance with the Applicable Laws and Provisions.
  3. The CONCESSIONAIRE shall provide for the synergy and complementarity of the Technical File and the Environmental Management Instrument.

For the submission of the Technical File to the GRANTOR, it shall not be necessary to have the Environmental Management Instrument approved. However, the CONCESSIONAIRE shall ensure that such instrument is prepared considering all the scopes and components included in the Technical File. Likewise, the environmental certification shall be submitted to the GRANTOR before obtaining the non-objection of the Technical File.

In accordance with the foregoing, the CONCESSIONAIRE is responsible for carrying out the necessary procedures in order to obtain the approval of the Environmental Management Instrument, as part of the requirements for the non-objection of the Technical File.

* 1. The CONCESSIONAIRE shall consider that the consulting companies it enters into service rendering contracts for the preparation, modification or update of the Environmental Management Instruments shall comply with the requirements set forth in the Applicable Laws and Provisions.
  2. Prior to the commencement of the execution of the Works, the CONCESSIONAIRE shall communicate the commencement date to the GRANTOR and to the Competent Governmental Authority in matters of environmental control, certifying that it has the environmental certification, as well as the authorizations, licenses or permits required by the Competent Governmental Authorities or private parties.
  3. Any Environmental Management Instrument of the Project, its amendments, updates or associated supporting technical reports shall form part of this Contract, and shall be considered as an Annex to the same, automatically, after its approval by the Competent Governmental Authority. Compliance with the commitments established in said instruments will be verified by the Supervisor of Contract and Operations and must be reported in the Monthly Management Reports and in the socio-environmental reports.

## **Socio-Environmental Management**

* 1. The CONCESSIONAIRE shall implement socio-environmental management measures taking into account the following mitigation hierarchy: (i) prevent; (ii) mitigate or correct; (iii) monitor; (iv) remediate or restore; and (v) compensate.
  2. Prior to the commencement of the Hospital Infrastructure Construction Activity and throughout the term of the Contract, the CONCESSIONAIRE shall provide training to its workers on issues related to the type of activities to be performed and the environmental, social or occupational health and safety measures to be implemented within the framework of the corresponding Environmental Management Instrument approved by the Competent Governmental Authority for the Project, the environmental regulations in force, and the Applicable Laws and Provisions.
  3. The CONCESSIONAIRE shall comply, during the term of the Concession, as part of its socio-environmental management, with the provisions of the Environmental Management Instrument(s), the Contract, and the Applicable Laws and Provisions, with special emphasis on the management of social and environmental impacts referred to:

1. The effects on the population in the Concession Area of Influence.
2. Integral management and handling of solid waste.
3. Wastewater treatment.
4. Handling of hazardous materials.
5. The management of the clearing, vibrations and noise caused by excavation activities, earth movement, demolition and dismantling of existing infrastructure.
6. Safety and health of workers, users and the community.

* 1. The CONCESSIONAIRE shall implement the necessary measures to make the Service and the infrastructure associated with it sustainable, resilient and low carbon. Therefore, it shall:
  2. Implement the Action Plan attached in Annex 24, in coordination with the GRANTOR.
  3. Implement a certifiable management system of quality, environmental management, occupational health, safety, governance and social responsibility. Such system shall be fully planned and documented before the beginning of the Works, shall be executed during the whole Infrastructure Construction Activity and shall be updated before the completion of the same in order to consider the particularities of the Commissioning and the Operational Stage and shall be kept in force during the whole term of the Concession.
  4. Verify that the main construction contractor (EPC) has ISO 9001, ISO 14001 and ISO 45001 certification prior to contracting for the Project.
  5. Optimize the Project's eco-efficiency measures and select clean technologies that allow obtaining the "Leadership in Energy and Environmental Design" (LEED) sustainable construction certification and ISO 5001 Certification. The CONCESSIONAIRE shall obtain these certifications within the first six (6) months of the beginning of the Operational Stage at the latest.
  6. Quantify the Project's greenhouse gas emissions, implement a minimization strategy and annually register its progress and achievements in the "*Carbon Footprint*" platform of the Peruvian State, or the one that replaces it.
  7. Implement a risk management system for the Project that considers risks associated with climate change and variability.
  8. The CONCESSIONAIRE shall comply with the requirements and management measures demanded by the Competent Governmental Authorities that carry out supervision and oversight actions, whether or not they are established in the approved Environmental Management Instruments.

## **Environmental Liabilities**

* 1. The CONCESSIONAIRE shall not be responsible for the remediation of the Environmental Liabilities that may have been generated prior to the date of signature of the Certificate of Delivery of Assets, even if the effects occur after such date.

As part of the preparation of the baseline of the Environmental Management Instrument, the CONCESSIONAIRE shall prepare a study for the identification and evaluation of the Environmental Liabilities and Contaminated Sites, according to the Applicable Laws and Provisions, located in the Concession Area and shall submit it to the GRANTOR.

In case the CONCESSIONAIRE identifies Environmental Liabilities or Contaminated Sites that due to their nature could not have been detected during the elaboration of the environmental baseline, the CONCESSIONAIRE shall communicate to the GRANTOR the finding no later than ten (10) Calendar Days after its discovery, informing the implications that this would represent for the Project. Such communication shall detail characteristics of the finding such as: (i) its location; (ii) possible extension; (iii) potential damages; (iv) referential costs of its remediation, among others. The communication must include a justification supporting the reasons why it could not be detected previously.

Depending on the risk that the Environmental Liabilities or Contaminated Sites identified represent for the development of the Project, the Parties shall proceed as described in Clauses 18.18 and 18.19.

* 1. In case the Environmental Liability or Contaminated Site does not generate a significant risk for the development of the Project, the CONCESSIONAIRE shall communicate its existence to the GRANTOR, who shall urge the Competent Governmental Authorities to require the responsible parties to carry out the remediation in accordance with the Applicable Laws and Provisions.
  2. In case the Environmental Liability or Contaminated Site generates a significant risk for the development of the Project, the CONCESSIONAIRE shall prepare a draft Remediation Plan in accordance with the Applicable Laws and Provisions within a term no longer than ninety (90) Days since the identification of the finding was communicated to the GRANTOR.

As from the delivery of the Remediation Plan by the CONCESSIONAIRE, the GRANTOR shall have a term of twenty (20) days to evaluate it and submit objections, if any. If after the aforementioned term, the GRANTOR does not submit objections to the CONCESSIONAIRE, it shall be understood that the Remediation Plan is accepted.

In case there are any objections, the CONCESSIONAIRE shall clear them within a term no longer than twenty (20) days. The GRANTOR shall have a term of ten (10) days to evaluate the objections and issue its conformity. If no more objections are sent, it shall be understood that the conformity has been granted. In the event that the GRANTOR's objections persist, the CONCESSIONAIRE shall resolve them within the term agreed upon by the Parties.

The costs that the CONCESSIONAIRE has to assume in relation to the elaboration and approval of the Remediation Plan shall be assumed directly by the CONCESSIONAIRE, without any acknowledgement by the GRANTOR. However, the Parties may agree on the mechanism under which the CONCESSIONAIRE shall be compensated for the costs incurred in the event the CONCESSIONAIRE executes the Remediation Plan, in accordance with the provisions established in Chapter XXII, promoting the speed of the process in order to minimize the impact on the Project's deadlines.

## **Cultural heritage**

* 1. The CONCESSIONAIRE declares to be aware of the Applicable Laws and Provisions related to the protection of the Cultural Heritage of the Nation, and undertakes to strictly comply with them, notwithstanding which, it shall comply with the following provisions:

1. Obtain the Certificate of Non-Existence of Archaeological Remains and/or the Authorization to Execute the Archaeological Monitoring Program, as applicable.
2. If during the execution of the Project any archaeological or historical remains not previously identified are found, the CONCESSIONAIRE shall be responsible for suspending all activities in the area of the finding and immediately notifying the Ministry of Culture and the GRANTOR. In these cases, the CONCESSIONAIRE at its own cost, risk and expense, must establish protective barriers around the archaeological remains found in the Concession Area and proceed in accordance with the provisions of the Regulations on Archaeological Interventions, or any rule that modifies or replaces it.
3. If the archaeological or historical remains were a non-isolated element, the GRANTOR shall be responsible for the corresponding arrangements with the Ministry of Culture for its subsequent archaeological rescue, and the CONCESSIONAIRE shall relocate or reconstruct the Works that may be affected by the finding. In the event that the relocation or re-staging of the Works should require the acquisition of additional land, this shall be assumed by the GRANTOR, subject to prior agreement of the Parties, in accordance with the provisions set forth in Chapter XXII.
4. In no case may the CONCESSIONAIRE acquire any title or right whatsoever over the archaeological or historical material or remains found.

Compliance with the obligations described in this clause may be invoked by the CONCESSIONAIRE as a ground for suspension or extension of the Works execution term, in accordance with Chapter IV and Chapter IX, to conclude the execution of the Works, provided that the circumstances described above are duly accredited by the CONCESSIONAIRE.

## **Socio-Environmental Reports**

* 1. During the Infrastructure Construction Activity, within the first fifteen (15) Calendar Days following the end of each month, the CONCESSIONAIRE shall deliver to the GRANTOR, with a copy to the Supervisor of Contract and Operations and to the Competent Governmental Authority for environmental control, a Socio-Environmental Report that includes at least the provisions set forth in Clause 18.23.

* 1. During the Operational Stage, within the first fifteen (15) Calendar Days following the end of each quarter, the CONCESSIONAIRE shall deliver to the GRANTOR, with a copy to the Supervisor of Contract and Operations and to the Competent Governmental Authority for environmental control, a Socio-Environmental report that includes at least the provisions set forth in Clause 18.23.

As from the third year of the Operational Stage, within the first fifteen (15) Calendar Days following the end of each semester, the CONCESSIONAIRE shall deliver to the GRANTOR, with a copy to the Supervisor of Contract and Operations and to the Competent Governmental Authority for environmental control, a Socio-Environmental report that includes at least the provisions of Clause 18.23.

* 1. The reports described in Clauses 18.21 and 18.22 shall report on the status of compliance with the commitments derived from: (i) the approved Environmental Management Instruments, their amendments and/or updates; (ii) the socio-environmental obligations set forth in this Contract and its Annexes; (iii) the implementation of sustainability safeguards required by the creditors, if applicable; (iv) the agreements signed with Stakeholders; (v) the additional management measures proposed in previously submitted socio-environmental reports; and, (vi) the licenses, permits or favorable opinions issued by the Competent Governmental Authorities.

In these reports the CONCESSIONAIRE shall: (i) indicate the status of the Project; (ii) provide information on the activities carried out to comply with each commitment or obligation in the reporting period; (iii) indicate the environmental problems encountered; (iv) propose the additional measures necessary to solve and correct them; (v) specify the budget spent per activity; (vi) indicate the effectiveness of the implementation of each of the measures adopted; (vii) present performance indicators; and, (viii) detail the environmental and social management activities planned for the following period. The evidence must be supported by attached documents, dated photographs and audiovisual material.

* 1. The preparation of the socio-environmental reports and the submission thereof, in accordance with the provisions of this Chapter, shall be carried out by the CONCESSIONAIRE at its own cost, risk and expense.
  2. The CONCESSIONAIRE shall deliver a copy to the GRANTOR and to the Supervisor of Contract and Operations of:
* Each one of the offices, reports, environmental reports required by the Competent Governmental Authorities in environmental matters, within the term and conditions established by them; and
* Any communication, notification, resolution, information, or similar that the CONCESSIONAIRE receives from the Competent Governmental Authorities, within a maximum term of five (5) Days counted from the Day following its receipt.

* 1. Notwithstanding the obligation to submit socio-environmental reports, the GRANTOR or the Supervisor of Contract and Operations may at any time request follow-up meetings with the GRANTOR, summoning the Competent Governmental Authorities in environmental and social matters, as well as request additional information to the CONCESSIONAIRE regarding socio-environmental issues.

# RELATIONS WITH STRATEGIC PARTNERS, THIRD PARTIES AND PERSONNEL

## **Relations with Strategic Partners**

1. 1. The Strategic Partner must hold and maintain a Minimum Participation of not less than thirty-five percent (35%) of the capital stock.

The Strategic Partner may be replaced by another Strategic Partner, in accordance with the provisions set forth in Paragraph h) of Clause 3.3 of the Contract. After the five (5) year term set forth in Paragraph h) of Clause 3.3, the CONCESSIONAIRE may request the replacement of the Strategic Partner, if there is no response from the GRANTOR, the request shall be deemed denied; notwithstanding that, in the latter case, the CONCESSIONAIRE may request again the approval of the replacement of the Strategic Partner, complying with the procedure set forth in this Clause.

The new Strategic Partner shall comply with the same requirements established in the Bidding Terms and in this Contract.

The conformity of the substitution of the Strategic Partner by the GRANTOR does not affect or limit the exclusive responsibility of the CONCESSIONAIRE to associate itself adequately to comply with the purposes of this Contract.

* 1. All acts, businesses, contracts and agreements that may affect the percentage of the Minimum Participation, without prejudice to the restrictions set forth in Clause 3.3, such as the restriction to the free transfer of the Minimum Participation, issuance of shares, mergers, capital increases and others in the CONCESSIONAIRE, shall be informed to the GRANTOR, within ten (10) Days of the occurrence of any of the mentioned acts, in order to verify that the percentage indicated in the preceding Clause is always maintained.

## **Assignment of contractual position**

* 1. Except as provided in Chapter XIV, the CONCESSIONAIRE may not transfer its right to the Concession nor assign its contractual position until at least five (5) years have elapsed since the subscription of the Certificate of Verification and Acceptance of Works and Equipment and provided that it has the express authorization of the GRANTOR.

For purposes of the authorization, the CONCESSIONAIRE shall communicate to the GRANTOR its intention to transfer its rights derived from the Contract or assign its contractual position, accompanying the following:

* 1. Preparatory contract or letter of intent to transfer or assign, duly signed by the CONCESSIONAIRE and the acquirer or assignee.
  2. Documentation evidencing the conformity of the assignees regarding the assignment of the contractual position in the contracts that the assignors have entered into in compliance with the Bidding Terms.
  3. Documentation evidencing that the assignee has the capital stock required in this Contract.
  4. Documentation evidencing that the assignee has a Strategic Partner, according to the requirements of the Bidding Terms and of this Contract.
  5. Documentation that accredits the necessary legal capacity of the acquirer or assignee.
  6. Documentation evidencing that the acquirer or assignee complies with the pre-qualification requirements that at the time were demanded in the Bidding Terms, for the qualification of the Bidders.
  7. Agreement whereby the purchaser or assignee agrees to assume any damages and pay any other sum due and payable by the CONCESSIONAIRE.

The CONCESSIONAIRE shall send its complete request to the GRANTOR with a copy to the Supervisor of Contract and Operations. The Supervisor of Contract and Operations shall issue its prior opinion within a maximum term of five (5) days after receiving the request; the GRANTOR shall issue its opinion on such request within a maximum term of fifteen (15) days after receiving the opinion of the Supervisor of Contract and Operations. Once this term has elapsed without any answer from the GRANTOR, the request shall be considered as denied.

The GRANTOR's conformity does not release the assignor, who transfers its right to the Concession or assigns its contractual position for a maximum term of one (1) year from the date of approval of the assignment, against non-compliance by the CONCESSIONAIRE.

The assignee shall deliver to the GRANTOR the corresponding Performance Bond within a maximum term of five (5) days after the acceptance of the request is communicated. After the expiration of the term of one year from the date of approval of the assignment, the GRANTOR shall proceed to return the Performance Bond to the CONCESSIONAIRE.

This implies that, during this period, the assignor shall be jointly and severally liable with the assignee for the acts carried out before the transfer or assignment.

The GRANTOR shall not deny the request for transfer or assignment of contractual position, to the extent that the CONCESSIONAIRE proves compliance with the minimum requirements set forth in this Clause and in the Bidding Terms, if applicable.

## **Relations with third parties**

* 1. All contracts or agreements that the CONCESSIONAIRE enters into with its partners, the Builder, third parties and personnel, and also in those that by their nature affect the object of the Concession, the GRANTOR or the Concession Assets, it shall include clauses that contemplate the following:
  2. Include a section specifying that the Termination shall consider the termination of the respective contracts or agreements, as these are accessory to the first one; unless the GRANTOR decides to continue them by assuming the contractual position of the CONCESSIONAIRE, without prejudice to the capacity of the GRANTOR to renegotiate the terms of the referred contracts, including the power to terminate them.
  3. Limit its term, so that in no case it exceeds the term of the Concession. The minimum term of the construction contract, counted from the beginning of the Infrastructure Construction Activity, shall include the term for the construction of the corresponding Works, plus two (2) additional years.

1. The waiver to file, directly or through its shareholders, criminal complaints or civil liability actions against the GRANTOR or its officers; or, against the Supervisor of Contract and Operations or its personnel.
2. Include a clause that allows the GRANTOR, at its sole option, to assume the contractual position of the CONCESSIONAIRE in such contract, through an irrevocably authorized assignment of contractual position in advance, in case of Termination, enabling the continuation of such contracts.
3. Include a clause that guarantees the obligation to comply with: (i) the contractual obligations in social, environmental, safety and occupational health matters of this Contract; (ii) the Applicable Laws and Provisions; and (iii) the commitments of the Environmental Management Instruments of the Project.
4. Include a clause expressly guaranteeing that the obligations of the CONCESSIONAIRE derived from the contracts or agreements it enters into with third parties shall not be enforceable against the GRANTOR.

The inclusion of the provisions contained in the preceding paragraphs a), b) and d) shall not be applicable to financing contracts, insurance policy contracts or contracts for the provision of public services in favor of the CONCESSIONAIRE, without prejudice to the ability of the GRANTOR to renegotiate the terms of such contracts, including the power to terminate them.

* 1. The CONCESSIONAIRE shall deliver to the GRANTOR a copy of the contracts referred to in the preceding Clause within fifteen (15) days of their execution.
  2. Under no circumstances shall the CONCESSIONAIRE be exempt from its liability to the GRANTOR for acts derived from the execution of the contracts entered into with third parties, which may have an impact on the Concession.
  3. The Parties acknowledge that each of them is obliged to assume the costs generated as a consequence of the consumption of public services (such as electricity, water, gas, internet, telecommunications, among others); being that each of them shall comply with the corresponding payments in accordance with the provisions of Annex 14 of the Contract.

## **Relations with personnel**

* 1. The CONCESSIONAIRE and any of its subcontractors shall provide and hire in connection with the performance of the Services the personnel that complies with the provisions of the Contract, including but not limited to Annex 8 and the Technical Proposal.

The CONCESSIONAIRE shall have a team of personnel that, in the event of any emergency situation, shall guarantee the adequate provision of the Services.

* 1. With respect to its relations with its personnel, whether national or foreign, the CONCESSIONAIRE shall comply with the Applicable Laws and Provisions.
  2. In no event shall the CONCESSIONAIRE be liable for the payment of labor claims in favor of any of the CONCESSIONAIRE's employees. In the event that the GRANTOR is judicially ordered to pay any labor claim in favor of one or more of the CONCESSIONAIRE's employees, which may have arisen during the term of the Concession, the CONCESSIONAIRE shall be obliged to reimburse the amount that the GRANTOR has had to pay, as well as the costs, fees and expenses incurred by the GRANTOR, within a maximum period of thirty (30) Calendar Days from the date the GRANTOR made the required payment.
  3. In the event of Termination, the CONCESSIONAIRE is exclusively responsible for the payment of all labor benefits, such as remunerations, working conditions and other benefits, conventional or unilateral, owed to its workers up to the date on which the Termination occurred. Pursuant to the provisions of Chapter XXIV, the GRANTOR shall not be liable, in any case, for such debts.
  4. The CONCESSIONAIRE shall at all times maintain strict discipline and good order among the workers of the CONCESSIONAIRE and its subcontractors. Such personnel shall abide by and comply with all rules and regulations governing the Services as set forth in Annex 8 and any other documents established by the CONCESSIONAIRE and provided to the CONCESSIONAIRE prior to the provision of the Services and during the performance of the Services.

The CONCESSIONAIRE, as the sole responsible for the personnel it assigns for the execution of the Works and Services subject matter of this Contract, undertakes to prove in accordance with the legal requirements in force the compliance of its labor and social security obligations with respect to the personnel in charge of the Works and Services.

Likewise, the GRANTOR may request documentation evidencing the CONCESSIONAIRE's compliance with the labor and social security obligations with respect to the personnel that may be assigned for the execution of the works contemplated in the Contract. For such purpose, THE CONCESSIONAIRE shall have a term of fifteen (15) days to make such information available.

* 1. The CONCESSIONAIRE shall strictly comply with the policies of the GRANTOR, its own policies and the policies issued by the Competent Governmental Authorities related, among others, to the prohibition and consumption of alcoholic beverages and any drug with no medical properties in the Hospital's facilities. Without prejudice to any penalty or sanction applicable to workers in breach, the CONCESSIONAIRE shall be liable for damages of any nature or personal losses related to third parties, their property and all consequences arising from such misconduct, releasing the GRANTOR from any liability for such damages and/or personal losses.
  2. Without prejudice to the CONCESSIONAIRE's technical and organizational autonomy in the performance of the Contract, the Supervisor of Contract and Operations shall be entitled to object and request the CONCESSIONAIRE, for duly accredited causes, to remove any person hired by the CONCESSIONAIRE or by a subcontractor who behaves inappropriately or is incompetent or negligent in the performance of its duties or whose employment is considered detrimental to the performance of the Contract, in particular with the provision of Services. The CONCESSIONAIRE shall not refuse such request without reasonable justification.
  3. In the event of a strike affecting the performance of the Contract, the CONCESSIONAIRE shall take the necessary actions to perform its obligations.

The CONCESSIONAIRE shall bear the cost for any damages that may be caused either by strike or other reasons arising from the breach of obligations by the personnel of the CONCESSIONAIRE or its subcontractors.

# ADMINISTRATIVE COMPETENCIES

## 

## **Common provisions**

* 1. The GRANTOR shall perform its functions related to the execution of the Contract, in strict compliance with the Applicable Laws and Provisions, and within its respective scope of competence.
  2. The exercise of such functions shall in no case be subject to authorizations, permits or any other manifestation of the CONCESSIONAIRE's will. The CONCESSIONAIRE shall always provide all its cooperation to facilitate the performance of the functions of the GRANTOR.
  3. The GRANTOR reserves the right to inspect and verify compliance with the CONCESSIONAIRE's obligations, and may take any necessary action.

## **Previous opinions**

* 1. When deadlines have not been expressly established, the following rules shall be objected:

1. The maximum term for the GRANTOR to issue an opinion is thirty (30) Days.
2. The terms will be counted from the next day of the date of submission of the request, with the complete information to the GRANTOR.
3. Once the term of the GRANTOR has expired, the lack of express opinion will imply the issuance of a non-favorable opinion.
4. In case more information is required to issue an opinion, the GRANTOR may suspend the term, if applicable, while the CONCESSIONAIRE sends the requested information. The request for additional information shall be formulated, only once, within the first ten (10) days of receipt of the request to issue an opinion, and the request may be reiterated in the event that the complete delivery of the requested information to the CONCESSIONAIRE has not been complied with. This provision shall apply without prejudice to the corresponding penalties.

* 1. The CONCESSIONAIRE shall comply with all the information requirements and procedures established in the Contract or those that may be established by the GRANTOR, in the matters within its competence, in accordance with the provisions of the Applicable Laws and Provisions.

The CONCESSIONAIRE shall submit the periodic reports, statistics and any other data in relation to its activities and operations, in the forms and terms established in the Contract and in the Applicable Laws and Provisions. In cases where no deadlines have been established, the GRANTOR shall request the reports based on a reasonableness criterion.

The CONCESSIONAIRE shall facilitate the review of its documentation, files and other data required by the GRANTOR or the Supervisor of Contract and Operations, in a timely manner, in order to monitor and enforce the terms of the Contract, in accordance with the Contract and the Applicable Laws and Provisions.

## **Other provisions**

* 1. The failure of the CONCESSIONAIRE to deliver the information to the Competent Governmental Authorities is subject to the administrative sanctioning provisions of the Applicable Laws and Provisions.

# FORCE MAJEURE OR UNFORSEEABLE CIRCUMSTANCE

1. 1. Neither the GRANTOR nor the CONCESSIONAIRE shall be liable for the non-performance of an obligation or for its partial, late or defective performance, if caused by force majeure or unforeseeable circumstance, as provided in this Chapter.
   2. For the purposes of the Contract, a situation of unforeseeable circumstance or Force Majeure shall exist whenever:
2. An event, condition or circumstance not attributable to the GRANTOR, or to the CONCESSIONAIRE, of an extraordinary, unforeseeable and irresistible nature occurs, which prevents them from complying with the obligations under their charge or causes their partial, late or defective compliance;
3. The respective event, condition or circumstance must be beyond the reasonable control of whoever invokes the ground, which, despite the exercise of due diligence and despite all reasonable efforts and measures to prevent the event, condition or circumstance, avoid or mitigate its effects, cannot prevent the non-compliance situation from occurring;
4. Such event, condition or circumstance is not the direct or indirect result of a failure of the Party claiming to be affected to perform any of its obligations under this Contract; and,
5. Such circumstance, event or condition is notified to the other Party in accordance with the time limit and terms provided in Clause 21.7.

Force majeure or unforeseeable circumstance, according to their respective nature and scope, in accordance with Applicable Laws and Provisions, include, but are not limited to the following:

* 1. Any act of external, internal or civil war (declared or undeclared), invasion, armed conflict, blockade, revolution, riot, insurrection, civil commotion or acts of terrorism and any approval, occupation or siege of any substantial part of the Concession Area, which prevents the CONCESSIONAIRE from completing within the contractual term the execution of the Works or normally providing the Services, or which prevents the GRANTOR from complying with the obligations for which it is responsible.
  2. Any stoppage, strike, claim or protest by workers or third parties who do not have an employment or commercial relationship with the CONCESSIONAIRE or with the natural persons or legal entities contracted by it, which goes beyond its reasonable control or which are unforeseeable and which prevents it from completing the execution of the Works within the contractual term or normally providing the Services, or which prevents the CONCESSIONAIRE from fulfilling the obligations for which it is responsible.
  3. Any discovery of archaeological remains that is of such a magnitude as to prevent the CONCESSIONAIRE from completing the execution of the Works within the contractual term or from providing the Services normally, or that prevents the GRANTOR from complying with its obligations.
  4. Any event or natural disaster, earthquake, flood, fire, explosion, or any meteorological phenomenon, provided that it directly affects in whole or in part the Concession Assets or the Works or their elements and which, in turn, prevents the CONCESSIONAIRE from completing the execution of the Works within the contractual term or normally providing the Services and under the quality standards established in the Contract, or which prevents the GRANTOR from complying with the obligations under its responsibility.
  5. Any epidemic, pandemic, contamination, plague or any similar event, to the extent that such event prevents or limits the CONCESSIONAIRE from providing the Services normally, or prevents the GRANTOR from complying with the obligations it is responsible for.
  6. The eventual destruction of the Works or their elements, totally or partially, preventing it from completing the execution of the Works within the contractual term, damages to the Concession Assets that produce their total destruction or their impossibility of recovery, and that prevent the normal rendering of the Services.

* 1. The CONCESSIONAIRE may not invoke the following assumptions as an event of force majeure or unforeseeable circumstance in relation to the performance of its obligations under the Contract:
  2. The approval, application or effects of Applicable Laws and Provisions unless this prevents them from carrying out their activities;
  3. Any failure attributable to the CONCESSIONAIRE or the natural persons or legal entities hired by the CONCESSIONAIRE to obtain or maintain any approval or permit required under the Contract;
  4. Any failure attributable to the CONCESSIONAIRE or the natural persons or juridical persons hired by it during the term of the Concession, with respect to the Concession Assets and Services;
  5. Mechanical breakdowns or failure of the Equipment, machinery or technology implemented or used by the CONCESSIONAIRE or by the natural persons or legal entities hired by the CONCESSIONAIRE;

* 1. In case the GRANTOR invokes force majeure or unforeseeable circumstance, it shall make the best efforts of a diligent concessionaire to ensure the resumption of the corresponding activity or provision in the shortest possible time after the occurrence of such events. Likewise, if the GRANTOR invokes force majeure or unforeseeable circumstance, it shall make its best efforts to overcome such situation in the shortest possible time.
  2. Force majeure or unforeseeable circumstance shall not release the party affected with such event from the fulfillment of obligations that are not suspended by such event.
  3. In the event that the affected party, or the other parties involved, does not agree with the classification of the event as force majeure or unforeseeable circumstance or its consequences, it may resort to the dispute resolution procedure of Chapter XXIII.

* 1. The Party affected by an event of force majeure or unforeseeable circumstance shall inform the other Party as soon as reasonably possible, and, in any event, at the latest within seventy-two (72) hours of the occurrence or knowledge, if applicable, of the facts constituting such event of force majeure or unforeseeable circumstance. Additionally, it shall keep the other Party informed of the development of such events. This communication is given without prejudice to the compliance with the Applicable Laws and Provisions regarding the immediate communication in case of unforeseen interruption of the Services.

After sending the communication, the affected Party shall have a maximum period of seven (7) additional days to submit its request for suspension to the other Party and to the Supervisor of Contract and Operations, attaching a technical, legal and financial report, as appropriate, which must be substantiated as a minimum:

1. Description of the occurrence of the event.
2. Date of occurrence of the event or date on which it became aware of the event.
3. The date on which the stoppage of activities or obligations occurs.
4. The time of the stoppage produced or the estimated time of the total or partial stoppage of the activities or obligations.
5. The degree of expected impact, details of such event, the obligation or condition affected.
6. The mitigation measures adopted.
7. Other actions derived from these events.
8. Proposed insurance regime, contractual guarantees and other obligations whose fulfillment is not directly affected by the event.

Within a term not to exceed ten (10) days from the date of receipt of the request for suspension, the Supervisor of Contract and Operations shall submit its technical opinion to the affected party, in accordance with the procedure set forth in Clauses 4.12 and 4.13 of the Contract.

If the affected party does not submit the request for suspension within eight (8) days of the event, it shall be understood that such event does not constitute an impediment for the fulfillment of the obligations to which it is liable.

* 1. The affected party shall make its best efforts to ensure the resumption of the performance of its obligations in the shortest possible time after the occurrence of such events.

The declaration of suspension due to force majeure or unforeseeable circumstance shall not give rise to any right of indemnity, on the part of the GRANTOR, in favor of the CONCESSIONAIRE.

* 1. In the event of termination of the Contract due to an event of force majeure or unforeseeable circumstance, the liquidation of the Contract shall be governed by the rules established in Chapter XXIV.

# AMENDMENTS TO THE CONTRACT

1. 1. Amendments to the Contract shall be valid only when agreed in writing, by means of an addendum, for duly founded cause, maintaining the competitive conditions of the promotion process and the economic and financial balance of the services to be provided by the GRANTOR or the CONCESSIONAIRE, taking care not to alter the allocation of risks and the nature of the Project, and signed by the representatives of the Parties, with sufficient power and complying with the pertinent requirements of the Applicable Laws and Provisions.

In no event shall the Parties understand that any minutes, agreement or other document, other than an addendum, has modified or may modify the Contract.

* 1. If any stipulation or provision of the Contract is considered null and void, invalid or unenforceable by arbitration award, the decision shall be strictly construed for such stipulation or provision, and shall not affect the validity of the other stipulations of the Contract.
  2. Any request for amendment, addition or modification of the Contract by either Party shall be submitted to the other Party with due technical, legal, economic and financial support.
  3. The modification of any of the terms established in the Contract must have the prior opinion of the Supervisor of Contract and Operations and the Competent Governmental Authorities, in accordance with the Applicable Laws and Provisions. Likewise, the CONCESSIONAIRE must have the prior favorable opinion of the Permitted Creditors.

# DISPUTE SETTLEMENT

## **Applicable Laws and Provisions**

* 1. The Contract shall be governed and interpreted in accordance with the Applicable Laws and Provisions. Therefore, the Parties express that the content, execution, conflicts and other consequences arising therefrom shall be governed by the legislation in force at the time, which the CONCESSIONAIRE declares to be aware of.

## **Scope of application**

* 1. This chapter regulates the resolution of all disputes arising between the Parties during the Concession and those related to the termination of the Contract.
  2. The decisions of the Competent Governmental Authorities that are issued in execution of their administrative powers attributed by express rules, whose means of claim is the administrative channel, shall not be subject to direct interaction or arbitration.

## **Waiver of diplomatic claims**

* 1. The CONCESSIONAIRE and its partners, shareholders or stockholders expressly, unconditionally and irrevocably waive any diplomatic claim for controversies or conflicts that may arise from the Contract.

## **Direct interaction**

* 1. The Parties declare that it is their will that all conflicts or uncertainties of an arbitrable nature, with legal relevance, that may arise with respect to the interpretation, execution, performance, and any aspect related to the existence, validity or effectiveness of the Contract or Termination, shall be resolved by direct dealing between the Parties, within a period of ninety (90) Calendar Days counted from the date on which one Party communicates to the other, in writing, the existence of the conflict or uncertainty with legal relevance. The agreements adopted by the Parties during the direct interaction procedure shall be recorded in the respective record(s).
  2. The period of direct interaction for the case of national arbitration shall be no less than three (3) months from the date on which one Party communicates to the other, in writing, the existence of a conflict or uncertainty with legal relevance, unless the Parties have submitted the dispute to the procedure and other provisions applicable in case of amiable compositor, provided for in Supreme Decree No. 240-2018-EF, Regulation of Legislative Decree No. 1362, or rule that amends or replaces it. Such minimum term of three months (3) months may be modified by agreement of the Parties, in view of the circumstances of each dispute.

The request for initiation of direct dealing must include a comprehensive description of the dispute and its due technical, legal, contractual, financial or other grounds, as well as be accompanied by all the corresponding means of evidence.

On the other hand, in the case of international arbitration, the negotiation or direct dealing period shall not be less than six (6) months. Said term shall be computed as from the date on which the party invoking the clause notifies its request to initiate the direct interaction in writing, including detailed information (background, facts, points of dispute, claims and proposals for dispute resolution alternatives) to the Ministry of Economy and Finance, in its capacity as Coordinator of the Coordination and Response System of the State regarding International Investment Disputes, pursuant to the provisions of Law No. 28933 and its regulations, approved by Supreme Decree No. 125-2008-EF, or rules that modify or replace them.

The terms referred to in the preceding paragraphs may be extended by joint decision of the Parties, an agreement to be recorded in writing, provided that there is a real possibility that, if this additional period is available, the dispute will be resolved by means of direct interaction.

In the event that the Parties, within the direct interaction period, do not resolve the conflict or uncertainty raised, they shall define it as a conflict or uncertainty of a technical or non-technical nature, if applicable. When the Parties do not agree on the nature of the dispute, both Parties shall support their position in a written communication to be sent to their counterpart. In it, they will explain the reasons why they consider the dispute to be of a technical or non-technical nature.

Conflicts or technical uncertainties will be resolved in accordance with the procedure stipulated in Paragraph a) of Clause 23.8. Conflicts or uncertainties that are not of a technical nature shall be resolved in accordance with the procedure set forth in Paragraph b) of Clause 23.8. Should the Parties fail to agree within the direct dealing period as to whether the dispute or controversy raised is a Technical Dispute or a Non-Technical Dispute, or should the dispute have both Technical Dispute and Non-Technical Dispute components, then such dispute or uncertainty shall be considered a Non-Technical Dispute and shall be resolved in accordance with the respective procedure provided for in Paragraph b) of Clause 23.8.

* 1. The outcome of any direct dealing procedure shall be recorded in minutes.

## **Arbitration**

* 1. Types of arbitration proceedings:
  2. Conscientious Arbitration - Each and every Technical Dispute that cannot be resolved directly by the Parties within the direct dealing period shall be submitted to conscientious arbitration, in accordance with subparagraph 3 of Article 57 of Legislative Decree No. 1071, or rule that modifies or substitutes it, in which the arbitrators shall resolve according to their knowledge and best knowledge and understanding. The arbitrators may be national or foreign experts, but in all cases they must have ample experience in the subject matter of the respective Technical Dispute, and must not have any conflict of interest with any of the Parties at the time and after their appointment as such.

The Arbitral Tribunal may request from the Parties the information it deems necessary to resolve the Technical Dispute under consideration and, as a consequence, may submit to the Parties a proposal for conciliation, which may or may not be accepted by the Parties.

The Arbitral Tribunal may assess all evidence and request from the Parties or third parties such evidence as it deems necessary to resolve the claims raised.

The Arbitral Tribunal shall prepare a preliminary decision, which shall notify to the Parties within thirty (30) Days after its installation, and the Parties shall have five (5) Days to prepare and deliver to the Tribunal their comments on such preliminary decision. The Arbitral Tribunal shall issue its final decision on the Technical Dispute raised within ten (10) Days after receipt of the Parties' comments, its preliminary decision or the expiration of the time limit for submitting such comments, whichever occurs first.

The proceedings for the resolution of a Technical Dispute shall be held in the city of Lima, Peru. Exceptionally, and due to the nature of the specific case, the Arbitral Tribunal shall move to another location only for the purpose of acting evidentiary means such as an expert opinion, an ocular inspection or any other evidentiary means that is necessary to act in another location, for a term not exceeding ten (10) days.

The members of the Tribunal shall keep absolute reserve and maintain confidentiality on all information that they learn from their participation in the resolution of a Technical Dispute.

The dispute shall be resolved through national arbitration, and shall be administered by the Center for Conflict Analysis and Resolution - PUCP, in all matters not provided for in the Contract.

1. Arbitration at Law - Non-Technical Disputes shall be resolved by arbitration at law, in accordance with Article 57, paragraphs 1 and 2 of Legislative Decree No. 1071, or any regulation that modifies or substitutes it, a procedure in which the arbitrators shall rule in accordance with the applicable Peruvian legislation.

Arbitration at law may be local or international, in accordance with the following:

* 1. When the Non-Technical Disputes involve an amount greater than US$ 30'000,000.00 or its equivalent in local currency, at the official exchange rate published by SUNAT, in effect at the beginning of the direct interaction, the Parties shall attempt to resolve the disputes via direct interaction within the term set forth in Clause 23.6 in the case of international arbitration, which may be extended by joint decision of the Parties under the terms established.

In the event that the Parties do not reach an agreement within the period of direct interaction referred to in the preceding paragraph, the disputes arising shall be settled by international arbitration at law, through a procedure administered by the International Centre for Settlement of Investment Disputes (CIADI) in accordance with the provisions on arbitration, established in the Convention on the Settlement of Investment Disputes between States and Nationals of other States, approved by Peru through Legislative Resolution No. 26210, to whose rules the Parties unconditionally submit, as well as the Procedural Rules applicable to CIADI Arbitration Proceedings (Arbitration Rules).

For the purposes of processing the international arbitration proceedings at law, in accordance with the CIADI Arbitration Rules, the GRANTOR, on behalf of the Republic of Peru, declares that the CONCESSIONAIRE shall be considered a "National of Another Contracting State" if it is subject to foreign control as established in Article 25(2)(b) of the Convention on the Settlement of Investment Disputes between States and Nationals of Other States, and the CONCESSIONAIRE accepts to be considered as such.

The arbitration shall take place in the city of Washington D.C., United States of America.

If for any reason it is determined that CIADI does not have jurisdiction or declines to undertake the arbitration under this Clause, the Parties agree in advance to submit the dispute, on the same terms, to the Arbitration Rules of the Arbitration Center of the International Chamber of Commerce - CCI.

Alternatively, the Parties may agree to submit the controversy to a different jurisdiction if they deem it convenient.

* 1. Non-Technical Disputes where the amount involved is equal to or less than US$ 30'000,000.00 or its equivalent in local currency, at the official exchange rate published by SUNAT, in force at the beginning of the direct interaction, and those disputes of pure law that are not quantifiable in money, shall be resolved by arbitration at law, and shall be administered by the Center for Conflict Analysis and Resolution - PUCP.

The arbitration shall take place in the city of Lima, Peru; and shall be conducted in the Spanish language, and the corresponding arbitration award shall be issued within one hundred and twenty (120) Calendar Days after the date of installation of the Arbitral Tribunal. Exceptionally, the award may be issued outside this term, when the Arbitral Tribunal considers it indispensable to act evidentiary means such as expert opinions or ocular inspections outside the city where the arbitration proceeding takes place, within a term previously agreed upon by the Parties.

## **Common procedural rules**

* 1. Both for Conscientious Arbitration referred to in Clause 24.8 (a) and for Arbitration at Law referred to in Clause 24.8 (b), whether international or domestic, the following general provisions shall apply:

1. The Arbitral Tribunal shall be composed of three (3) members. They shall preferably choose one (1) professional with a minimum experience of five (5) years in the disputed matter or a lawyer with experience in regulatory or concessions matters, depending on the nature of the dispute. Each Party shall appoint one arbitrator within sixty (60) days of the request and the third shall be appointed by agreement of the Parties, within thirty (30) days, who in turn shall serve as chairman of the Arbitral Tribunal.

If one of the Parties fails to appoint its Arbitrator or if the Parties do not reach an agreement on the appointment of the third arbitrator within the established term, the arbitrators not appointed by such date shall be appointed, at the request of any of the Parties, by the Center for Conflict Analysis and Resolution - PUCP, in domestic law arbitration or by the International Centre for Settlement of Investment Disputes (CIADI) in international law arbitration.

1. Without prejudice to the administrative acts referred to in Clause 23.3, c which are exempted from this Chapter, the arbitrators may, at their discretion, make up any difference or gap in the legislation or in the Contract, by applying the general principles of law and the agreements, conventions or treaties to which the Republic of Peru is a signatory.
2. The award issued shall be integrated to the contractual rules established in the Contract.
3. The Parties agree that the award issued by the Arbitral Tribunal shall be final and unappealable and of immediate execution. In this sense, the Parties must consider it as a last instance sentence, with the authority of res judicata. Consequently, the Parties waive the remedies of reconsideration, appeal, annulment, cassation or any other means of appeal against the arbitration award, declaring that it shall be binding, final and immediately enforceable, except for the grounds set forth in Articles 62 and 63 of Legislative Decree No. 1071.
4. During the arbitration, the Parties shall continue with the performance of their contractual obligations, to the extent possible, including those that are the subject matter of the arbitration. If the subject matter of the arbitration is the performance of the obligations guaranteed by the Performance Bond, if applicable, the term of the bond shall be suspended and such bond may not be executed for the reason that gave rise to the arbitration, and must be kept in force during the arbitration proceedings.
5. All expenses incurred in the resolution of a Technical Dispute, or Non-Technical Dispute, including the fees of the arbitrators involved in the resolution of a dispute, shall be borne by both Parties in equal percentage, unless otherwise determined by the Arbitral Tribunal. The same rule shall apply in the event that the respondent or counterclaimant accepts or recognizes the claim of the plaintiff or counterclaimant. Likewise, should the award be partially in favor of the Parties, the Arbitral Tribunal shall decide on the distribution of such costs, taking into account the circumstances of the case.

In the event that the proceeding is terminated without a decision on the merits of the claims due to settlement or conciliation, such agreement shall establish the responsibility to assume the referred expenses. If the settlement or conciliation does not so provide, each party shall cover its own expenses.

## **Expert opinion**

* 1. All disputes that may arise with respect to compliance with the provisions of the preceding Clause shall be resolved in a single act by an independent expert (hereinafter, Expert) appointed by mutual agreement of the Parties, pursuant to the following clauses, who shall be hired by the CONCESSIONAIRE, who assumes all the costs, risks and expenses required by such hiring, as well as any taxes that may affect the same. The implementation of the expert opinion is mandatory, as well as the decisions of the Expert are binding and final and, therefore, may not be submitted to the dispute resolution mechanisms established in this Chapter. The Expert shall establish in its decision the term that the Party or Parties have to execute or implement its or their decisions, except as regulated in Clauses 24.10.1 and 24.10.2.
  2. For the hiring of the Expert, the CONCESSIONAIRE shall send to the GRANTOR, within a maximum term of fifteen (15) Days after the dispute arises, the terms of reference, terms and procedure of the expert opinion, as well as a list of at least three (3) recognized experts in the disputed matter. None of the proposed experts shall be related to or directly or indirectly rendering any type of services in favor of the Parties, their partners, shareholders, board members, officers, stockholders or Related Companies, in Peru or abroad. This limitation shall cover from the year prior to the one in which the Expert is selected, up to one (1) year after the completion of the expertise.

Once the documentation for the expert opinion is received, the GRANTOR, within a term no longer than ten (10) days, may make objections including its veto right to the list of experts, terms of reference, terms and procedure of the expert opinion. In case there are objections, the CONCESSIONAIRE, within a term no longer than five (5) days after receiving the objections, shall correct them to the satisfaction of the GRANTOR. If there are no objections or if the CONCESSIONAIRE corrects them, the GRANTOR shall approve the contracting conditions and shall select one of the experts within a term no longer than ten (10) days. The GRANTOR may exercise its veto right regarding the proposed list of experts.

Once the Expert has been selected, the CONCESSIONAIRE, within a maximum term of ten (10) Days, shall hire him/her under the terms set forth in the preceding Clause, and shall inform the GRANTOR the scope and cost of the services of expert opinion.

# TERMINATION OF THE CONTRACT

## **Termination of the contract due to expiration of the term of the agreement**

1. 1. The Concession shall terminate at the expiration of the term set forth in Chapter IV or any extension granted pursuant to such Chapter.

In such case, the Termination shall not consider any retribution to the CONCESSIONAIRE, nor any indemnity amount for eventual damages that the Termination may generate for any of the Parties.

Once the term of the Concession has expired, the possession of the Concession Assets shall revert in favor of the GRANTOR, or whoever it may designate, in accordance with the procedure established in the Chapter VI.

## **Grounds for Early Termination**

* 1. The Contract shall only be declared terminated early upon the occurrence of one or more of the following causes:

* + 1. By mutual agreement

The Contract shall terminate and, therefore, the Concession, at any time, by written agreement between the CONCESSIONAIRE and the GRANTOR, prior favorable opinion of the Supervisor of Contract and Operations, in accordance with the Applicable Laws and Provisions, for which the procedure regulated in this chapter shall apply, which contains the rules and mechanism for the settlement of the Concession, as well as the Reversion of the Concession Assets, ensuring the continuity of the Services.

In addition, the provisions of Clauses 24.10 and following.

* + 1. For non-compliance by the CONCESSIONAIRE

The Contract terminates prematurely in case the CONCESSIONAIRE incurs in a serious breach of its contractual obligations that affects or makes impossible the normal development or continuity of the Concession, if after a written request, the CONCESSIONAIRE does not rectify, to the satisfaction of the GRANTOR, in accordance with the provisions of the Clause 24.3.

Upon expiration of the term set forth in Clause 24.3 without the breach having been rectified, the GRANTOR may invoke the Termination by means of a communication sent to the CONCESSIONAIRE, proceeding to execute the corresponding Performance Bond, without prejudice to the application of the penalties or deductions that may be applicable as a cause of the serious breach of the obligations of the CONCESSIONAIRE.

Such causes of serious non-compliance with the CONCESSIONAIRE'S obligations shall be considered as those expressly indicated in the Contract as such, among which are the following:

1. Failure of the CONCESSIONAIRE to comply with the obligation to subscribe or pay up its share capital or to maintain a minimum share capital throughout the term of this Contract, within the term and as expressly provided for in the Contract.
2. The judicial declaration of bankruptcy, in accordance with the provisions of the Applicable Laws and Provisions.
3. The initiation, at the request of the CONCESSIONAIRE or any of its shareholders or related persons, of a corporate, administrative or judicial process for its dissolution or liquidation.
4. The initiation, at the request of the CONCESSIONAIRE or any of its shareholders or related persons, of a merger, spin-off or transformation of companies or any other corporate reorganization, without the corresponding authorization of the GRANTOR.
5. The declaration made by the Competent Governmental Authority by means of a final resolution (consented or executed), in judicial or administrative proceedings, which determines the serious alteration of the environment, of the historical or cultural heritage of the Nation, or of the natural resources, by the CONCESSIONAIRE.
6. The transfer of the CONCESSIONAIRE's rights derived from the Contract or the assignment of its contractual position, without prior written authorization from the GRANTOR or without observing the Applicable Laws and Provisions.
7. The failure of the CONCESSIONAIRE to grant, reinstate or renew the Contract Performance Bonds in favor of the GRANTOR or the insurance policies required under the terms established in the Contract; or, if any of them were issued under terms and conditions different from those agreed in the Contract, despite the prior request for correction.
8. The use of the Concession Assets in a manner different from that foreseen in the Contract, by the CONCESSIONAIRE, without prior written authorization from the GRANTOR.
9. The commission of any act or omission that constitutes a fraudulent breach by the CONCESSIONAIRE that results in the commission of a public action crime to the detriment of the CONCESSIONAIRE, when so ordered by a consented judicial sentence.
10. The issuance of a consented or executed court order or a final administrative decision that prevents the CONCESSIONAIRE from providing the Services under the Contract or that imposes an embargo, lien or seizure that affects, in whole or in part, the Concession Assets, provided that any of these measures remains in force for more than sixty (60) Calendar Days or within the longer term set in writing by the GRANTOR, which shall be granted when reasonable grounds exist.
11. Non-compliance with the conditions for the Strategic Partner's participation established in the Contract.
12. Non-compliance that cumulatively generates the payment of consented and enforceable penalties in excess of [5000] UIT, which may be applied by virtue of the execution of the Contract.
13. If within one (1) Calendar Year the Global Service Level is less than fifty percent (50%) in six (6) consecutive months or in nine (9) non-consecutive months, a period that includes the White March.
14. If within one (1) Calendar Year the Service Level of one of the Services is less than fifty percent (50%) in six (6) consecutive months or in nine (9) non-consecutive months, which period includes the White March.
15. Failure to comply with the Financial Closure, in accordance with the provisions of Clause 14.14.
16. Falseness in the declarations made in Clauses 3.1 or 3.3.
17. Failure to comply with the provisions of Article 33.1 of the Regulations of Legislative Decree No. 1362, or any rule that may amend or replace it.
18. Failure to remedy objections to a Technical File, related to non-compliance with Annex 15, within the established term, unless the objection is subject to an expert opinion or the result thereof is in favor of the CONCESSIONAIRE.
19. Failure to sign the Certificate of Commencement of Construction of the Works and Equipment, for grounds attributable to the CONCESSIONAIRE, within the terms established in the Contract.
20. Failure to operate one or more of the Services, for grounds attributable to the CONCESSIONAIRE.
21. Failure to comply with the deadline of the Infrastructure Construction Activity for grounds attributable to the CONCESSIONAIRE that generates, cumulatively, a delay of more than two (2) months, counted as from the date of expiration of the deadline established in the Clause 9.4.

1. The repeated breach of the obligations subject to penalties or sanctions. For these purposes, it is understood as repeated non-compliance: the imposition by the GRANTOR or the Competent Governmental Authority of penalties or sanctions for an accumulated amount higher than thirty percent (30%) per Calendar Year of the total amount of the corresponding Performance Bond, during the whole term of the Concession.
2. Failure to comply with the orders of the consented arbitration awards or decisions of the experts provided for in this Contract within the terms established, issued against it, related to the Concession.
3. Granting a mortgage on the Concession in favor of third parties other than the Permitted Creditors.
4. Failure to comply with the obligations expressly regulated as serious and grounds for Termination in the Contract, other than those detailed in the preceding paragraphs.
5. The initiation, at the request of the Executive Branch, of a dissolution process, in accordance with the provisions of Article 410 of Law No. 26887, General Corporations Law, or rule that modifies or substitutes it.

For the purposes of the provisions of this Clause, the CONCESSIONAIRE's failure to comply with its obligations must be due to causes that are not included within the cases of force majeure or unforeseeable circumstance.

Termination for breach by the CONCESSIONAIRE shall not give rise to any right of indemnity in favor of the CONCESSIONAIRE for damages.

Without prejudice to the execution of the Contract Performance Bond and the application of the corresponding penalties, sanctions or deductions, the CONCESSIONAIRE may demand the compensation for damages that may be due.

* + 1. For non-compliance by the GRANTOR

The CONCESSIONAIRE may terminate the Contract in advance in case the GRANTOR incurs in any of the following causes:

1. Default in the payment of the Financial Compensation. The CONCESSIONAIRE may terminate the Contract if the GRANTOR is in arrears in the payment of the Compensation, for more than ninety (90) consecutive Calendar Days, as from the date such obligation becomes due, in accordance with the procedure set forth in Clause 15.19.
2. Unjustified default in the payment of the compensation in favor of the CONCESSIONAIRE, for the reestablishment of the economic financial balance, in accordance with the procedure set forth in Clause Chapter XV.

In the aforementioned cases, the CONCESSIONAIRE shall previously require the GRANTOR, through a notary public, to remedy the non-compliance in accordance with the provisions of Clause 24.3, without prejudice to the possibility for the Parties to have recourse to the dispute settlement mechanism provided for in Chapter XXIII.

Upon expiration of the term without the breach having been remedied, the CONCESSIONAIRE may invoke the Termination by means of a written communication sent to the GRANTOR and to the Supervisor of Contract and Operations.

For the purposes of the provisions of this Clause, the non-fulfillment of the obligations of the GRANTOR, indicated in the preceding paragraphs, must be due to causes directly attributable to the GRANTOR and which are not included within the assumptions of force majeure or unforeseeable circumstance.

The Termination due to non-fulfillment of the GRANTOR shall be effective regardless of the fact that such Termination has been submitted to arbitration proceedings.

* + 1. By unilateral decision of the GRANTOR

For reasons of public interest, duly motivated, the GRANTOR has the power to terminate the Contract, having to give prior written notice to the CONCESSIONAIRE and the Permitted Creditors, no less than six (6) months prior to the term foreseen for the Termination.

During these six (6) months, the CONCESSIONAIRE shall be obliged to comply with those obligations set forth in the Contract.

The exercise of this power by the CONCESSIONAIRE shall be without prejudice of the provisions of Clause 24.14.

* + 1. Force majeure or unforeseeable circumstance

The GRANTOR or the CONCESSIONAIRE shall have the option to terminate the Contract due to events of force majeure or Act of unforeseeable circumstance God, provided that it is verified that it involves one or more of the events mentioned in the Chapter XXI and that the maximum term of one hundred and eighty (180) Calendar Days has expired.

In addition, for the event of force majeure or unforeseeable circumstance to be a cause for Termination, it must prevent any of the Parties from complying with its obligations or cause its partial, late or defective compliance for a period exceeding [six (6) months] continuous or accumulated in the term of one Concession Year.

In the event of a discrepancy as to whether the Contract should be terminated by either of the Parties, such discrepancy shall be subject to the procedure established by Chapter XXIII.

* + 1. For application of the anti-corruption clause

The CONCESSIONAIRE declares that neither it, nor its shareholders, partners or Related Companies, nor any of their respective directors, officers, employees, nor any of their advisors, representatives or agents, have paid, offered, or attempted to pay or offer, nor will attempt to pay or offer in the future any illegal payment or commission to any authority related to the awarding of the Successful bid of the Bidding, the Concession or the execution of this Contract.

It is expressly established that in the event that it is verified that any of the natural or legal persons mentioned in the preceding paragraph have been convicted by means of a final or enforceable judgment, or have admitted or recognized the commission of any of the crimes defined in Section IV of Chapter II of Title XVIII of the Peruvian Criminal Code, or equivalent crimes if they have been committed in other countries, before any national or foreign competent authority, in relation to the execution of this Contract, the Concession or the awarding of the Successful Bid of the Bidding, the Contract shall be terminated as a matter of law and the CONCESSIONAIRE shall pay the GRANTOR a penalty equivalent to ten percent (10%) of the amount resulting from the application of the mechanism or procedure for the liquidation of the Contract established in this Chapter, without prejudice to the execution of the Performance Bond.

For the determination of the economic link referred to in the first paragraph, the provisions of SMV Resolution No. 019-2015-SMV/01 or rule that modifies or replaces it shall apply.

Termination due to the application of this ground does not generate any right to compensation in favor of the CONCESSIONAIRE for damages.

To terminate the Contract in this case, the following procedure shall be followed:

* + 1. The GRANTOR shall communicate in writing to the CONCESSIONAIRE, through a notary public, its intention to use the Anti-Corruption Clause to terminate the Contract. When this communication becomes effective, the Termination shall take place as a matter of law.
    2. Once the Termination is declared as a matter of law in accordance with the preceding paragraph, it shall proceed in accordance with the Anti-Corruption Clause 24.14 and following.

## **Procedure for corrective actions**

* 1. Serious non-compliance for cause attributable to one of the Parties, as regulated in clause 24.2.2 and 24.2.3 shall entitle the affected Party to terminate the Contract and to claim compensation in accordance with the liquidation procedure described in this Chapter.

The Party that failed to comply with its obligations shall have a term of thirty (30) Calendar Days, extendable for an additional thirty (30) Calendar Days, counted from the date of receipt of the notarized notice to remedy such breach, unless a different term is established in the Contract, or a longer term is granted expressly and in writing by the Party asserting its right of termination.

In the event that the CONCESSIONAIRE is the defaulting Party and does not remedy the breach within the term provided, with the agreement of the GRANTOR, as the injured Party, and in accordance with the provisions of the Contract, the latter may invoke the Termination and execute the Performance Bond.

The correction procedure established in the present clause will not be applicable for the cases foreseen in the paragraphs b), e), i), j), l), m), n) and v) of the Clause 24.2.2, and Clauses 12.22 paragraph k, 15.10 and 24.2.6.

## **Procedures for Termination of the Contract**

* 1. The procedure for Termination shall be as indicated below, except for the cases of Termination for application of the anti-corruption clause.
  2. The Parties, as appropriate in each case, shall immediately comply with all the obligations and procedures set forth in the Contract for the purposes of the Termination thereof, whereupon the Contract shall be terminated and the Concession shall terminate by operation of law.
  3. Any Termination decision made by the Parties shall be notified simultaneously to the Supervisor of Contract and Operations. This notification shall be given prior to the Termination, and the early Termination may be effective as from sixty (60) Calendar Days after said notification, except in the case of the provisions of Clause 24.2.4.

* 1. Sixty (60) Calendar Days before the expiration of the Concession term, the preparation of the Final Inventory shall begin, with the intervention of the Supervisor of Contract and Operations, and shall be completed ten (10) Calendar Days before the expiration date of the Concession term.

In the event of Termination by mutual agreement, the Final Inventory shall be part of this agreement as an annex to the agreement signed for such purpose, which shall have the opinion of the Supervisor of Contract and Operations.

In the event of Termination for breach by the CONCESSIONAIRE or the GRANTOR and the application of the anti-corruption clause, the Final Inventory to be carried out with the intervention of the Supervisor of Contract and Operations, shall be concluded ten (10) Calendar Days after having communicated the decision by the CONCESSIONAIRE or the GRANTOR, if applicable, to terminate the Contract after the expiration of the term for the correction, if applicable.

In the event of Termination by unilateral decision of the GRANTOR, the Final Inventory to be carried out with the intervention of the Supervisor of Contract and Operations, shall be concluded within twenty (20) Calendar Days of notification of the GRANTOR's decision.

In the cases of Termination due to force majeure or unforeseeable circumstance, the Final Inventory to be carried out with the intervention of the Supervisor of Contract and Operations, shall be concluded within twenty (20) Calendar Days since the invocation of the Termination cause is notified to the other Party.

## **Effects of Termination of the Contract**

* 1. The Termination produces the obligation of the CONCESSIONAIRE to return to the GRANTOR all the areas included in the Concession Area, as well as to deliver the Concession Assets to the CONCESSIONAIRE, pursuant to the terms established in the Clauses 6.36 to 6.38, unless otherwise provided by the GRANTOR for cases of force majeure or unforeseeable circumstance, or other causes not attributable to the Parties, in accordance with the provisions of the Chapter XXI.
  2. Upon Termination:

1. The activity of the CONCESSIONAIRE ceases and its right to exploit the Concession is extinguished, a right that is reassumed by the GRANTOR, a right that is reassumed by the CONCESSIONAIRE through whoever it designates.
2. As a matter of pure law, all contracts are automatically terminated, referred to in Chapter XIX, except for those that the GRANTOR has expressly decided to keep in force and in respect of which it has assumed the contractual position of the CONCESSIONAIRE, whereas the list of such contracts has been previously communicated by the GRANTOR to the CONCESSIONAIRE in the notice of Termination referred to in Clause 24.6. This assumption does not apply to the contracts referred to in the paragraph a) of Clause 19.3.
3. Settlement shall follow the rules set forth in Clause 24.10 and following.

## **Settlement of the Contract**

* 1. General rules

The General Rules shall apply in any of the termination scenarios set forth in the following clauses.

* + 1. If the Termination occurs during the Pre-operational Stage, i.e., during the period between the Closing Date and the date of the execution of the Certificate of Verification and Acceptance of Works and Equipment, a settlement amount shall be calculated which shall be equivalent to the Book Value of the Assets effectively executed during such period by the CONCESSIONAIRE, without applying any type of update of such values from the time the Contract was signed until the time of making the settlement effective.

In this regard, the following should be taken into account:

* + 1. The CONCESSIONAIRE shall be acknowledged the costs incurred in the non-objected Technical File.
    2. The payments made to the Trust for the costs of the Supervisor of Contract and Operations and the Supervisor of Design, Construction and Equipment are recognized to the CONCESSIONAIRE.
    3. Other investments resulting from compliance with the obligations of the Concession Contract, duly credited in accordance with international financial reporting standards (NIIF), are recognized to the CONCESSIONAIRE.
    4. Expenses paid in advance for insurance that have not yet been amortized in the current fiscal year are recognized.
    5. Financial expenses (interest and commissions) incurred by the CONCESSIONAIRE as part of the financing of the Works during the Pre-operational Stage are recognized.
    6. The balance existing in the Supervision Account of the Administration, Payment and Guarantee Parent Trust shall be reverted in favor of the GRANTOR.

The referred settlement shall be carried out by a specialized expert selected by the GRANTOR from a list of three persons proposed by the CONCESSIONAIRE within a maximum term of fifteen (15) days from the notification of the Termination request, following the procedure established in Clause 23.11 and which shall be contracted by the CONCESSIONAIRE, who shall assume all the costs, expenses and risks required by such contracting, as well as any taxes affecting the same. The implementation of the expertise opinion is mandatory, as well as the decisions of the Expert are binding and definitive and, therefore, may not be submitted to the dispute resolution mechanisms set forth in Chapter XXIII.

The Expert must meet the following minimum requirements:

* 1. Ten (10) or more years of representation and/or affiliation with an international auditing firm;
  2. At least five (5) years of experience in economic and financial audits related to legal, tax and/or contractual matters.
  3. Not having any relationship with any of the Parties that may generate a conflict of interest. This limitation shall cover from the year prior to the one in which the Expert is selected, up to one year after the completion of the expertise.

For these purposes, the opinion of the Supervisor of Contract and Operations shall be required, who shall inform its opinion to the expert within a term no longer than thirty (30) Days from the appointment of the expert.

The liquidation and the exercise of the installment payments shall be notified by the expert to the Parties within thirty (30) Days after the Supervisor of Contract and Operations has issued its opinion. The Party disagreeing with such settlement may have recourse to the dispute settlement mechanism provided for in Chapter XXIII.

In the event that the GRANTOR decides to accept the payment of the settlement in installments according to the provisions of Clause 24.10.3, shall notify the CONCESSIONAIRE within three (3) days following the notification by the Expert.

* + 1. If the Termination occurs during the Operational Stage, that is, in the period between the date of subscription of the Certificate of Verification and Acceptance of Works and Equipment and the date of Termination of the Concession Contract, a settlement amount not greater than the Book Value of the Assets will be calculated.

The referred liquidation shall be carried out by a specialized expert selected by the GRANTOR from a list of three persons proposed by the CONCESSIONAIRE within a maximum term of fifteen (15) days from the notification of the Termination request, following the procedure established in Clause 23.11 and which shall be contracted by the CONCESSIONAIRE, who shall assume all the costs, expenses and risks required by such contracting, as well as any taxes affecting the same. The implementation of the expertise is mandatory, as well as the decisions of the Expert are binding and definitive and, therefore, may not be submitted to the dispute resolution mechanisms set forth in Chapter XXIII.

The Expert must meet the following minimum requirements:

1. Ten (10) or more years of representation and/or affiliation with an international auditing firm;
2. At least five (5) years of experience in economic and financial audits related to legal, tax and/or contractual matters.
3. Not having any relationship with any of the Parties that may generate a conflict of interest. This limitation shall cover from the year prior to the one in which the Expert is selected, up to one year after the completion of the expertise.

This settlement shall include the amount corresponding to those settlements pending payment in accordance with the provisions of Clause 15.17. For these purposes, the opinion of the Supervisor of Contract and Operations shall be required, who shall inform its opinion to the expert within a term no longer than thirty (30) Days from the appointment of the expert.

The settlement and the exercise of the installment payment scenario shall be notified by the expert to the Parties within thirty (30) Days after the Supervisor of Contract and Operations has issued its opinion. The party disagreeing with the referred settlement, may resort to the dispute resolution mechanism provided for in Chapter XXIII.

In the event that the GRANTOR decides to use the provisions of Clause 24.10.3, payment in installments, it shall notify the CONCESSIONAIRE within three (3) days following the notification by the expert.

In the event referred to in the preceding paragraph, both the Administration, Payment and Guarantee Parent Trust and the provisions of the Concession Contract and its Annexes that are applicable for the purpose of ensuring payment shall remain in force.

In addition, for the determination of the settlement amount in any of the grounds described in Clause 24.2 should be subtracted, if applicable, the expenses incurred by the CONCESSIONAIRE for the replacement of the Equipment and which have already been reimbursed as of the date of Completion, in accordance with the provisions of Chapter XV.

* + 1. The Grantor, for all the causes for termination established in the Contract, and in accordance with its budgetary availability, may choose to make the payment of the settlement in installments in accordance with the following considerations:
  1. The Grantor shall recognize the amount of the settlement determined according to the cause of termination in equal monthly installments, in accordance with the following expression, except as provided for in paragraph b.

Wherein:

IL Settlement amount

n

Number of months in which the payment of the installments will be made, being the number of months from the date on which the amount of the settlement has been determined as a consequence of the Expiration until the end of the remaining term of the Concession.

ri Estimated monthly rate as follows:

Wherein:

TA: will correspond to the lower rate between:

1. = Effective annual debt rate acquired by the CONCESSIONAIRE through financing with third parties or Permitted Creditors.

In case the concessionaire has credited more than one financing, a weighted average of the annual effective rate (TA1) will be made, according to the amounts of each financing credited by the concessionaire in the Financial Closure or as permitted secured indebtedness, in effect at the expiration date.

*ii)*

Wherein: is the sovereign benchmark rate at the Financial Closure date and for the duration corresponding to the repayment term of the debt determined as of the Financial Closure date.

Only in those cases in which the Concessionaire refinances the financing credited at the Financial Closure date, will correspond to the sovereign benchmark rate at the date of such refinancing of indebtedness and for the duration corresponding to the repayment term of the debt determined at the date of refinancing.

The value of corresponds to the rate published by the Superintendency of Banking, Insurance and AFP for the "Curva Cupón Cero Perú Soles Soberana" (Zero Coupon Peru Sovereign Soles Curve) on its web page called “Una curva en una fecha” (A curve on a date) (“*www.sbs.gob.pe/app/pu/CCID/Paginas/cc\_unacurva.aspx*”) or the one that replaces it. In the event the repayment term of the debt does not coincide with the terms published by the SBS, the corresponding interpolation process will be applied between the closest shorter and longer terms.

* 1. If:

The value of the monthly fee shall be recognized as the value of

* 1. The beginning of the payment of installments shall be made within the first ten (10) days of the month following the settlement amount. The monthly payments shall be made within the first ten (10) days of each month.
  2. In case the GRANTOR deems it necessary, both the Administration, Payment and Guarantee Parent Trust and the provisions of the Concession Contract and its Annexes applicable for the purpose of ensuring the payment shall remain in force.
  3. If after fifteen (15) Days from the scheduled payment date, the GRANTOR does not make the corresponding disbursement, interest shall be generated, which shall be calculated taking into account an effective annual interest rate in soles equivalent to the nominal value of LIBOR plus two percent (2%), for each Calendar Day of delay after the due date for payment until the GRANTOR pays the CONCESSIONAIRE the full amount owed.
     1. It is expressly established that the CONCESSIONAIRE shall not have the right to demand Financial Compensation, indemnity amounts or any other concept that implies a greater recognition than that obtained after applying the settlement mechanisms referred to in this Clause.
  4. Settlement due to expiration of the concession term
     1. When the Termination occurs due to the expiration of the agreed term, the settlement shall not contemplate any payment for the investments, Works or facilities in the land areas included in the Concession Area, as well as for the Concession Assets, nor any compensatory or indemnifying amount for possible damages that the Termination may generate for any of the Parties.
     2. In this case, the GRANTOR shall return to the CONCESSIONAIRE the corresponding Performance Bond.
  5. Settlement by mutual agreement
     1. If the termination of the Contract is by mutual agreement between the Parties, this agreement shall contain the mechanism for the settlement of the Concession. For this purpose, it shall take into account the provisions of Clause 24.12 which will result in the only amount to be offset.

No compensatory amount shall be considered to the Parties for the damages caused by the Termination.

* + 1. The opinion of the Supervisor of Contract and Operations must be obtained for this procedure.
  1. Settlement for non-compliance by the CONCESSIONAIRE
     1. If the Termination is caused by the CONCESSIONAIRE's default, the procedure for the calculation of the settlement shall be carried out considering the provisions of Clause 24.12, as appropriate.
     2. The expenses detailed in Clause 24.12 must be duly supported by the CONCESSIONAIRE. The concepts to be recognized and the resulting amount must have the favorable opinion of the Supervisor of Contract and Operations.
     3. Under this cause of Termination, the GRANTOR shall execute the corresponding Performance Bond in force at the date of occurrence of the Termination, it being understood that the GRANTOR is expressly authorized to execute and dispose of the amount of the bond, without any right of reimbursement for the CONCESSIONAIRE, and without prejudice to the penalties, sanctions or deductions that may be applicable at the date due to the breach of the obligations of the CONCESSIONAIRE, in accordance with the provisions of the Chapter XV and Chapter XXV.
     4. The final amount payable to the CONCESSIONAIRE shall be calculated as a result of the subtraction of the settlement amount and the amounts identified as a consequence of the application of the preceding Clause. The GRANTOR shall only pay ninety percent (90%) of the value obtained from this procedure.
     5. The amounts referred to in this Clause shall be duly scheduled by the GRANTOR in the annual budget of the following budget year, as it corresponds to the date of the Termination, without generating the obligation of payment of interests by the GRANTOR, without any other cost or expense, and shall be paid at the latest at the end of the first semester of such budget year or paid in installments according to the provisions of Clause 24.10.3, if applicable.
     6. Alternatively, the GRANTOR may call for a public bidding of the Concession to select a new Concessionaire, according to the procedures determined by the GRANTOR and the Applicable Laws and Provisions, which shall be subject to the following rules:

1. The GRANTOR may organize, call and execute a public bidding for the transfer of the Concession and delivery of the Concession Assets to the new Concessionaire, within a term no longer than twelve (12) months, from the date on which the termination of the Contract is declared.
2. In the event of termination of the Contract due to serious breach by the CONCESSIONAIRE or application of the anti-corruption clause; the CONCESSIONAIRE, its principal partners and the Related Companies of both will not be eligible to bid.
3. The successful bidder of the public bidding shall be the one that submits the best Financial Offer for the Concession, under the terms of the respective bidding terms.
4. The payment made by said successful bidder shall be in cash, in Soles and within the term established in the bidding terms of said Bidding and shall be deposited in favor of the CONCESSIONAIRE within a maximum term of five (5) days. Upon expiration of said term, interest shall accrue for each Calendar Day elapsed. Said interest shall be calculated at an effective annual interest rate in soles equivalent to the nominal value of LIBOR plus two percent (2%) for each Calendar Day of delay after the expiration of the term and for the amounts actually owed.
5. The new Concessionaire shall subscribe with the GRANTOR the respective Contract, according to the Applicable Laws and Provisions in force at that time.
6. The GRANTOR shall pay the amount set forth in Clause 24.15.4, even if the call for bids is declared void or the corresponding contract is not signed.
   1. Settlement in the event of Termination due to application of the Anti-Corruption Clause
      1. Under these grounds for Termination, the GRANTOR shall execute the corresponding Performance Bond in force on the date of occurrence of the Termination, it being understood that the GRANTOR is expressly authorized to execute and dispose of the amount of the bond, without any right to reimbursement for the CONCESSIONAIRE, and without prejudice to any penalties, sanctions or deductions that may be applicable to the date, due to the breach of the obligations of the CONCESSIONAIRE.
      2. The final amount to be paid to the CONCESSIONAIRE shall be calculated as a result of the subtraction of the settlement amount and the amounts identified as a consequence of the application of the preceding Clause, in this way the GRANTOR shall pay as the only compensation what results from applying the Compensation formula in the event of serious breach by the CONCESSIONAIRE, deducting additionally from this amount a penalty equivalent to ten percent (10%) of the resulting amount, without prejudice to the execution of the Performance Bond in force at that time.
      3. The provisions of subparagraphs 24.13.5 and 24.13.6 shall also apply to the settlement due to the application of the Anticorruption Clause.
   2. Liquidation due to default or unilateral decision of the GRANTOR
      1. If the Termination is caused by liability or by unilateral decision of the GRANTOR, the settlement procedure shall be carried out considering the provisions of Clause 24.10, as appropriate.
      2. Additionally, for this ground for settlement, an amount to be paid to the CONCESSIONAIRE shall be calculated, which shall be the result of the addition of the liquidation amount calculated according to Clause 24.10, plus a compensation as a measure of indemnification for the damages that the Termination may cause to the CONCESSIONAIRE, which shall be equal to the amount of the Performance Bond in force at that date.
      3. The expenses detailed in Clause 24.10 must be duly supported by the CONCESSIONAIRE. The concepts to be recognized and the resulting amount must have the favorable opinion of the Supervisor of Contract and Operations.
      4. The amounts referred to in this Clause shall be duly scheduled by the GRANTOR in the annual budget of the following budget year, as it corresponds to the date of the Termination, without generating the obligation of payment of interests by the GRANTOR, without any other cost or expense.

The resulting amount shall be paid at the latest at the end of the first semester of the following budgetary year of the GRANTOR, once said amount has been approved and the corresponding deductions or penalties have been applied.

If after fifteen (15) Days from the scheduled payment date, the GRANTOR does not make the corresponding disbursement, interest shall be generated, which shall be calculated taking into account an effective annual interest rate in soles equivalent to the nominal value of LIBOR plus two percent (2%), for each Calendar Day of delay after the due date for payment until the GRANTOR pays to the CONCESSIONAIRE the full amount owed.

It is expressly established that the CONCESSIONAIRE shall not be entitled to demand Financial Compensations, indemnity amounts or any other concept that implies a greater recognition than the one obtained after applying the settlement mechanisms referred to in Clause 24.15.

* 1. Settlement due to force majeure or unforeseeable circumstance
     1. If the Termination is caused by force majeure or unforeseeable circumstance, the settlement procedure shall be carried out considering the provisions of Clause 24.10, as appropriate.
     2. The expenses detailed in Clause 24.10 must be duly supported by the CONCESSIONAIRE. The concepts to be recognized and the resulting amount must have the favorable opinion of the Supervisor of Contract and Operations.
     3. The amounts referred to in this Clause shall be duly scheduled by the GRANTOR in the annual budget of the following budget year, as it corresponds to the date of the Termination, without generating the obligation of payment of interests by the GRANTOR, without any other cost or expense.

The resulting amount shall be paid no later than during the first quarter of the following fiscal year of the GRANTOR, once said value has been approved and the corresponding deductions or penalties have been applied, or paid in installments according to the provisions of Clause 24.10.3, as applicable.

If after fifteen (15) Days from the scheduled payment date, the GRANTOR does not make the corresponding disbursement, interest shall be generated, which shall be calculated taking into account an effective annual interest rate in soles equivalent to the nominal value of LIBOR plus two percent (2%), for each Calendar Day of delay after the due date for payment until the GRANTOR pays the CONCESSIONAIRE the full amount owed.

It is expressly established that the CONCESSIONAIRE shall not be entitled to demand Financial Compensations, indemnity amounts or any other concept that implies a higher recognition than the one obtained after applying the settlement mechanisms referred to in Clause 24.16.

## **Return of Performance Bond**

* 1. If the Termination is caused by the GRANTOR's default, by unilateral decision of the GRANTOR, by mutual agreement or by force majeure or unforeseeable circumstance, the GRANTOR shall return to the CONCESSIONAIRE the corresponding Performance Bond, within twelve (12) months after the Termination, provided that the corresponding deductions or penalties have been applied.

# PENALTIES AND SANCTIONS

* 1. The GRANTOR shall be entitled to apply the penalties set forth in the Contract. The CONCESSIONAIRE shall not be exempt from liability, even in cases where the breaches are a consequence of contracts it enters into with the Builder, suppliers or other contractors or subcontractors.
  2. The events of default shall generate the obligation to pay the respective penalty, without prior notice of default being required, and its payment shall not imply the release of the CONCESSIONAIRE from complying with the respective obligation.
  3. In the event of non-compliance by the CONCESSIONAIRE with any of the obligations set forth in the Contract, the GRANTOR, with the prior non-binding report of the Supervisor of Contract and Operations, shall notify the CONCESSIONAIRE of the detected non-compliance, stating:

1. The reasons that motivate the imposition of the penalty;
2. The mechanism and term for the correction of the noncompliance;
3. The determination of the corresponding penalty, in accordance with the table of penalties in Annex 11; and,
4. The payment requirement, indicating that the payment must be deposited in the Deductions and Penalties account as established in Annex 12, which must occur within ten (10) days following receipt of the requirement.

* 1. Within the referred period of ten (10) Days, the CONCESSIONAIRE may express in writing its disagreement to the GRANTOR, with copy to the Supervisor of Contract and Operations, regarding the penalty applied, for which it shall attach a legal, technical and financial report supporting its position.

To this end, the Supervisor of Contract and Operations shall have a maximum term of ten (10) days, counted from the receipt of the CONCESSIONAIRE's report, to send its non-binding opinion to the GRANTOR, which shall have a maximum term of ten (10) days, counted from the receipt of the non-binding opinion of the Supervisor of Contract and Operations or, if the term has elapsed without having issued an opinion, to send its decision, being able to ratify the penalty or leave it without effect.

In the event that the CONCESSIONAIRE does not express its disagreement with the penalty or the GRANTOR ratifies the same, the CONCESSIONAIRE must pay the amount of the penalty, which must occur within ten (10) days following receipt of the request or ratification by the GRANTOR.

* 1. The CONCESSIONAIRE may contradict the imposition of the penalty, in which case a controversy shall have arisen, which shall be resolved in accordance with the provisions of Chapter XXIII. Within a maximum term of ninety (90) Calendar Days counted from the communication of the imposition of the penalty, the CONCESSIONAIRE shall resort to the dispute resolution mechanisms established in the Contract. In the event that it does not resort to the dispute resolution mechanism, it shall be understood that it has accepted the penalty.

In this case, prior to the presentation of the CONCESSIONAIRE's contradiction of the applicability of the penalty, the CONCESSIONAIRE must have paid the penalty, as a requirement for the submission of the request for dispute resolution.

In case the CONCESSIONAIRE is not satisfied with the result of the direct agreement, it has a maximum term of thirty (30) days from the conclusion of the direct agreement to initiate the arbitration procedure. Once said term has elapsed without having initiated the arbitration procedure referred to in Chapter XXIII, the penalty is hereby waived.

* 1. In case of direct interaction, the GRANTOR shall have a maximum term of fifteen (15) days to issue its duly grounded opinion. If upon expiration of such term the GRANTOR does not issue any opinion, it shall be understood as rejected the submitted questioning.
  2. If the dispute is resolved favorably to the GRANTOR by arbitration award, the CONCESSIONAIRE shall additionally pay ten percent (10%) of the amount of the confirmed penalty, three (3) days after the arbitration award has been notified to the CONCESSIONAIRE.

If the dispute is resolved favorably to the CONCESSIONAIRE, the GRANTOR shall proceed to refund the amount received as a result of the penalty imposed, as determined in the direct agreement or in the arbitration award.

* 1. In the event that the CONCESSIONAIRE fails to pay the penalties within the term established in Clauses 25.3, 25.4 or 25.5, or fails to pay the ten percent (10%) referred to in the preceding Clause, the GRANTOR shall execute the corresponding Performance Bond, for an amount equivalent to the penalty imposed, plus the interest generated from the notification until the effective date of payment, and the CONCESSIONAIRE shall return such bond, according to the provisions of Chapter XVI. For any delay, an effective annual interest rate in soles, equivalent to the nominal value of LIBOR plus two percent (2%), will be recognized for each day of delay on the unpaid balance, after the maximum payment period agreed upon.

* 1. The payment of the applicable penalties may not be considered as grounds for invoking the breach of the economic financial balance.
  2. The remedy of the breach notified does not annul the application of the corresponding penalties derived from the breach, unless otherwise expressly provided for in the Contract.

* 1. The GRANTOR has the obligation to keep the accounting and penalties record imposed and their equivalence in UIT established in the Contract, in order to determine the application of the provisions of Chapter XXIV and the other events provided for in this Contract. Notwithstanding the fact that the Supervisor of Contract and Operations shall carry out the same control of the accounts.

* 1. Additionally, non-compliances associated with Sentinel Indicators and General Indicators will be penalized as established in Annex 9, Annex 10 and Annex 11.

## **Sanctions**

* 1. The administrative penalties imposed by the Competent Governmental Authorities arising from conduct that constitutes a breach of the Contract, but at the same time qualifies as a breach of the Applicable Laws and Provisions, shall be applied to the CONCESSIONAIRE in excess of the contractual penalties established for the same event. The CONCESSIONAIRE shall be liable for the damages resulting from the breach of contract, even if it is not penalized for the breach itself.
  2. In the event that it is verified that the CONCESSIONAIRE's conduct constitutes both a breach of contract and a punishable administrative infringement, only the corresponding administrative sanction shall be applied, and the CONCESSIONAIRE shall not be subject to a penalty for the same concept. The penalty procedure shall be regulated by the Applicable Laws and Provisions. This condition is not applicable to deductions for non-compliance with the Service Levels.
  3. In order to comply with the provisions of this Chapter, the CONCESSIONAIRE is obliged to send to the GRANTOR and the Supervisor of Contract and Operations, within a term no longer than fifteen (15) Calendar Days from the imposition thereof, a copy of the administrative sanctions that may have been imposed as a consequence of the execution of the obligations under its responsibility related to the Contract.
  4. The GRANTOR has the obligation to keep the record of the UIT (Tax Units) imposed as a result of the sanctions applied by the Competent Governmental Authorities, in order to determine the application of Chapter XXIV.

# LIABILITIES AND INDEMNITIES

## **General Description**

1. 1. The CONCESSIONAIRE is solely liable to the GRANTOR for any loss or damage it has caused or to which it has contributed directly or indirectly to the detriment of the GRANTOR.

## **Indemnities**

* 1. For those cases other than those set forth in Chapter VI, which are regulated according to the provisions of said Chapter, the CONCESSIONAIRE shall defend and hold the GRANTOR harmless of all claims, lawsuits, actions, damages, losses, interests, expenses, costs (including attorneys' fees and expenses) that may be directed:

1. By a third party (including, but not limited to claims brought by other contractors of the CONCESSIONAIRE) related to or caused by the action or omission of the CONCESSIONAIRE (its shareholders, officers, employees, representatives, agents or subcontractors).
2. By or on behalf of any person employed or engaged by the CONCESSIONAIRE or one of its subcontractors, including but not limited to claims for employment, injury, illness, death, administrative liability, professional liability, medical liability, indemnity or compensation of any kind, loss of or damage to such person's property, arising from any cause whatsoever, including but not limited to the fault of the CONCESSIONAIRE.

The Parties declare and accept that, if any third party initiates an action, administrative proceeding or lawsuit of any nature against the GRANTOR, related to the subject matter of the Contract, the fact that the GRANTOR assumes the defense of the action, administrative proceeding or lawsuit shall not limit in any way the CONCESSIONAIRE's obligation to indemnify the GRANTOR as indicated in this Clause. The CONCESSIONAIRE may, at its own expense and without any limitation to its obligation to indemnify the GRANTOR, participate in the defense of such action, administrative proceeding or claim, with an attorney who must be previously approved by the GRANTOR.

Notwithstanding the foregoing paragraph, the GRANTOR may request the CONCESSIONAIRE to conduct at its own expense, cost and risk the defense of any claim filed against the GRANTOR, which is related to any of the indemnities set forth in this Clause.

# CONFIDENTIALITY

## **Confidentiality**

* 1. The CONCESSIONAIRE may not, without the prior written consent of the GRANTOR, publish on its own account or through another person, any article, essay or any other material referring to a dispute related to this Contract, except to inform its professional consultants, or the Permitted Creditors in accordance with the financing agreements, through a strict commitment to maintain confidentiality on the information transmitted to them, or to the extent that the obligation to make public certain information is made in compliance with the Applicable Laws and Provisions.

The CONCESSIONAIRE acknowledges that for purposes of this Contract, it shall have access to confidential information, which includes, without limitation, work and operations plans, technical and operational information, schemes, data, industrial secrets, processes, ideas, inventions, whether patentable or not, cost information, prices, operation and management strategies, all information relating to the Works, the Equipment, personnel, users and the operations carried out with them, information relating to products and technology of the party disclosing confidential information or the properties, composition, structure, use or processing thereof; names and experience of the party's employees and consultants disclosing confidential information; other technical business, financial, development plans, products, studies, strategies and similar information.

The CONCESSIONAIRE declares that it shall not use in any way, for its own account or for the account of another person, or disclose to a third person, except as expressly permitted in terms of this Contract, the confidential information of the other Party and shall exercise a degree of care for confidential information similar to that which it would use for its own confidential information.

The CONCESSIONAIRE, its shareholders and subcontractors, as a result of the same, shall know, observe, have access to confidential information of the GRANTOR or develop new information based on the same. Furthermore, the CONCESSIONAIRE acknowledges that such confidential information of the GRANTOR is the property of the GRANTOR and is secret, sensitive and reserved and undertakes not to disclose, use, exploit, copy, modify or destroy, directly or through third parties, such confidential information for any purpose other than the performance of its obligations under this Contract, even if such confidential information was generated after the Termination of the Contract.

The CONCESSIONAIRE acknowledges that the breach by any of the obligations under this Chapter shall entitle the GRANTOR to exercise any action or right it may be entitled to under the Applicable Laws and Provisions against such Party.

In the event of confidential information, the CONCESSIONAIRE's obligations contained in this Chapter shall survive the termination of the term of the Contract; and in the case of intellectual property rights, as long as the corresponding authorization is in force.

## **Procedure for the delivery and dissemination of confidential information**

* 1. If the CONCESSIONAIRE requires the sharing of confidential information, within the framework of the provisions of the preceding Clause, it shall communicate such request to the CONCESSIONAIRE, which shall be duly supported and shall expressly specify the information required to be disclosed.

The GRANTOR receives the request and will have a term of up to ten (10) Business Days to issue or not its conformity to the dissemination of the confidentiality of the information. If no decision is made, it will be understood that the request has been rejected.

# DOMICILES AND REPRESENTATION

## **Fixing**

1. 1. Unless otherwise expressly agreed in the Contract, all notices, summons, petitions, demands and other communications related to the Concession shall be in writing and shall be considered validly notified when they have the respective receipt of the addressee, to the following addresses in the city of Lima:

If addressed to the GRANTOR:

Name:

Address:

Attention:

If addressed to the CONCESSIONAIRE:

Name:

Address:

Attention:

## **Change of domicile**

* 1. Any change of domicile must be communicated in writing to the other Party with a period of fifteen (15) Calendar Days in advance. As long as the change of domicile is not communicated, the previous domicile shall remain in force for all purposes of this Contract.

Any new domicile shall be fixed in compliance with the requirements of the preceding Clause.

**Representation of the GRANTOR**

* 1. The GRANTOR shall communicate to the CONCESSIONAIRE in the Pre-operational Stage during the first twenty (20) Calendar Days of each Calendar Year; and, in the Operational Stage through the POA, the respective person or area that shall be responsible for carrying out the obligations set forth in the Contract and its Annexes, especially in relation to the rendering of the Services.

In witness whereof, this Contract is duly executed in two (2) copies of identical tenor, in the city of Lima on the \_\_\_\_\_\_\_\_\_\_\_\_\_days of the month of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of 20\_\_.

**Annex No. 1 PERFORMANCE BOND MODEL**

Lima, ………………………., 20....

Sirs,

Social Health Insurance- ESSALUD

Jirón Domingo Cueto No. 120 - Jesús Maria

By hand.-

Ref.: Bank Guarantee Letter No...…………..

Expiration Date:......................

Integral Project Tender for the Concession of the Project: Creation of the Specialized Health Services of Piura Specialized Hospital of Assistance Network - ESSALUD, district 26 de Octubre, province of Piura, department of Piura.

Dear Sirs,

We hereby create and upon request of our clients, . ......................... (name of the legal entity) (hereinafter “the CONCESSIONAIRE”) this joint and several, irrevocable, unconditional and automatic performance bond, without benefit of excussion or division, up to the sum of [\*] on behalf of the Social Health Insurance (hereinafter “ESSALUD”) to guarantee the correct and timely compliance with any and all of the CONCESSIONAIRE’s obligations arising from the Contract for the Project “Creation of the Specialized Health Services of Piura Specialized Hospital of Assistance Network - ESSALUD, 26 de Octubre district, province of Piura, department of Piura” (hereinafter, the Contract), as established in numeral i) of Clause 16.3; including but not limited to:

* The payment of any penalties that may apply;
* Obligations arising from the Pre-operational Stage.
* The sums ordered to be paid on behalf of the GRANTOR, by means of a final decision or enforceable arbitration award.
* Other representations and provisions set forth in the Contract.

In order to honor this bond on its behalf, it shall be sufficient a requirement made through a notary document from ESSALUD, which must be signed by the person duly authorized by this institution, indicating that our clients ………….…. (name of the CONCESSIONAIRE) have not complied with the obligations that are guaranteed by this document.

Any delay on our part in honoring the aforementioned bond shall accrue interests equal to the maximum LIBOR rate, plus a spread of 3% per annum. The LIBOR rate shall be the rate established by the daily Cable Reuter received in Lima at 05:00 p.m. London time on the date on which the requirement for payment was received by notary document. Interest shall accrue from the date on which compliance has been requested until the effective date of payment.

This bond shall also guarantee the correct and timely compliance with the obligations of the CONCESSIONAIRE established by virtue of the provisions contained in Legislative Decree No. 1362, its Regulations approved by Supreme Decree No. 240-2018-EF and the Applicable Laws and Provisions amending or substituting them.

Our obligations under this bond shall not be affected by any dispute between ESSALUD or any entity of the Republic of Peru and our clients.

This bond shall be in effect from ………………………………, 20...., to ………………………………, 20....., inclusive.

Sincerely,

Signature ………………………..

Name ……………………….

Bank ……………………….

**Annex No. 2 PERFORMANCE BOND MODEL**

Lima, ………………………., 20....

Sirs,

Social Health Insurance- ESSALUD

Jirón Domingo Cueto No. 120 - Jesús Maria

By hand.-

Ref.: Bank Guarantee Letter No..…………..

Expiration Date:......................

Integral Project Tender for the Concession of the Project: Creation of the Specialized Health Services of Piura Specialized Hospital of Assistance Network - ESSALUD, district 26 de Octubre, province of Piura, department of Piura.

Dear Sirs,

We hereby create and upon request of our clients, ......................... (name of the legal entity) (hereinafter “the CONCESSIONAIRE”) this joint and several, irrevocable, unconditional and automatic performance bond, without benefit of excussion or division, up to the sum of [\*] on behalf of the Social Health Insurance (hereinafter “ESSALUD”) to guarantee the correct and timely compliance with any and all of the CONCESSIONAIRE’s obligations arising from the Contract for the Project “Creation of the Specialized Health Services of Piura Specialized Hospital of Assistance Network - ESSALUD, 26 de Octubre district, province of Piura, department of Piura” (hereinafter, the Contract), as established in numeral ii) of Clause 16.3; including but not limited to:

* The payment of any penalties that may apply;
* Obligations arising from the Operational Stage.
* Obligations arising from the Pre-operational Stage, identified from the first year of the Operational Stage.
* The sums ordered to be paid on behalf of the GRANTOR, by means of a final decision or enforceable arbitration award.
* Other representations and provisions set forth in the Contract.

In order to honor this bond on its behalf, it shall be sufficient a requirement made through a notary document from ESSALUD, which must be signed by the person duly authorized by this institution, indicating that our clients ………….…. (name of the CONCESSIONAIRE) have not complied with the obligations that are guaranteed by this document.

Any delay on our part in honoring the aforementioned bond shall accrue interests equal to the maximum LIBOR rate, plus a spread of 3% per annum. The LIBOR rate shall be the rate established by the daily Cable Reuter received in Lima at 05:00 p.m. London time on the date on which the requirement for payment was received by notary document. Interest shall accrue from the date on which compliance has been requested until the effective date of payment.

This bond shall also guarantee the correct and timely compliance with the obligations of the GRANTEE established by virtue of the provisions contained in Legislative Decree No. 1362, its Regulations approved by Supreme Decree No. 240-2018-EF and the Applicable Laws and Provisions amending or substituting them.

Our obligations under this bond shall not be affected by any dispute between ESSALUD or any entity of the Republic of Peru and our clients.

This bond shall be in effect from ………………………………, 20...., to ………………………………, 20....., inclusive.

Sincerely,

Signature ……………………….

Name ……………………….

Bank ……………………….

**Annex No. 3 LIST OF FINANCIAL INSTITUTIONS**

**Banks**

They are those companies defined in accordance with Law No. 26702, General Law of the Financial System and the Insurance System and Organic Law of the Superintendency of Banking, Insurance and AFP (SBS) or any regulation amending or substituting it, and that have a minimum local rating of CP-1, category 1, CLA-1 or EQL-1 for short-term obligations; A for financial strength; and AA for long-term obligations pursuant to Applicable Laws and Provisions. These ratings must be in force at the time of submitting the Performance Bonds of the Contract and be granted by at least two (2) risk rating agencies recognized and accredited in Peru.

**Insurance Companies**

They are those companies defined in accordance with Law No. 26702, General Law of the Financial System and the Insurance System and Organic Law of the Superintendency of Banking, Insurance and AFP (SBS) and that at the date of issuance of the Performance Bonds of the Contract have a minimum rating of AA, in terms of their financial strength issued by at least two (2) risk rating agencies authorized by the Superintendency of the Securities Market.

**First Category Foreign Banks**

First category foreign banks included in the list approved by the Central Reserve Bank of Peru through Notice No. 028-2020-BCRP published by the Central Reserve Bank of Peru on October 13, 2020 or the rule amending or substituting it shall be taken into account.

**International Financial Institutions**

• Any international financial entity having a risk rating no lower than the rating of the Peruvian sovereign debt corresponding to foreign currency and long term, assigned by one of the international risk rating agencies that rank the State of the Republic of Peru.

• Any multilateral loan institution of which the State of the Republic of Peru is a member.

It should be noted that guarantees from First Category Foreign Banks and International Financial Institutions must be confirmed by one of the Banks indicated in this Exhibit.

**Annex No. 4 MINIMUM CONTENT OF THE CONCESSIONAIRE AFFIDAVIT**

1. The CONCESSIONAIRE shall submit an affidavit stating the following in connection with credit agreements:

a) parts to credit agreements;

b) the value of the credit;

c) the interest rate applicable to the credit;

d) list of the guarantees to be granted by the CONCESSIONAIRE within the framework of the credit agreements;

e) the repayment schedule of the loan;

f) precedent conditions for the first disbursement;

g) an express statement to the effect that the Indenture Agreement (i) does not contravene the Contract and provides that, in the event of any inconsistency between the Debenture Agreement and the Contract, the provisions of the Contract shall prevail, (ii) does not modify the risk matrix of the Contract, and (iii) provides that the rights granted to the CONCESSIONAIRE in the indenture and the guarantees do not exceed those granted by the Contract and that any agreement to the contrary shall not be enforceable against the GRANTOR; and

h) Since the risk of managing and obtaining the financing is borne by the CONCESSIONAIRE, it shall be understood that the minimum requirement has been met if the affidavit of the CONCESSIONAIRE contains all the information listed herein.

2. In the case of issuances in the capital market, the CONCESSIONAIRE shall only have to provide an affidavit indicating:

a) the value of the issuance;

b) the applicable interest rate;

c) list of the guarantees to be granted by the CONCESSIONAIRE;

d) the term for payment;

e) an express statement to the effect that the Indenture Agreement (i) does not contravene the Contract and provides that, in the event of any inconsistency between the Indenture Agreement and the Contract, the provisions of the Contract shall prevail, (ii) does not modify the risk matrix of the Contract, and (iii) provides that the rights granted to the CONCESSIONAIRE in the indenture and the guarantees do not exceed those granted by the Contract and that any agreement to the contrary shall not be enforceable against the GRANTOR.

Since the risk of managing and obtaining the financing is borne by the CONCESSIONAIRE, it shall be understood that the minimum requirement has been met if the affidavit of the CONCESSIONAIRE contains all the information listed herein.

**Annex No. 5 PERMITTED CREDITOR STATEMENT MODEL**

Lima, ………………………., 20....

Sirs

Private Investment Promotion Agency - PROINVERSIÓN

Enrique Canaval y Moreyra No. 150 - Floor 9,

San Isidro.-

Permitted Creditor: ..............................................

Reference: Project Contract “……….”

In accordance with the provisions of Clause 14.1 of the Project Contract “\*”, we state the following:

* + 1. That we are not subject to any impediments or restrictions (by contractual, judicial, arbitration, administrative, legislative or other means) to assume and comply with the commitment to finance ………………… (CONCESSIONAIRE) (acting/participating in its capacity as bondholders’ representative in the issuance of securities/debt instruments) and therefore our relevant internal bodies have approved [a line of credit/our participation in our capacity as Bondholders’ Representatives in the issuance of securities/debt instruments] up to the amount of \_\_\_\_\_\_\_\_\_\_\_\_, on behalf of .................... (CONCESSIONAIRE) [shall receive / issue], which is destined to comply with the obligations derived from the Contract.
    2. That, [acting on behalf of the purchasers of the securities/debt instruments issued by it as Issuer ...... (CONCESSIONAIRE)] we comply with the requirements established to qualify as Permitted Creditor, in accordance with the terms assigned to this definition in the Contract.
    3. We state that the financing indicated in the previous Paragraph shall be performed, among others, in accordance with the provisions of the contract called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to be undersigned between \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (CONCESSIONAIRE) and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Financial Entity/Bondholders’ Representative).
    4. *[In the case of credit agreements]* Finally, we state that the credit agreements (i) do not contravene the Contract and provide that, in the event of any inconsistency between the credit agreements, or any other agreement ancillary thereto, and the Contract, the provisions of the Contract shall prevail, (ii) do not modify the risk matrix of the Contract (iii) establish that the obligations of *[CONCESSIONAIRE]* in the financing agreements and the guarantees granted by *[Concessionaire]* do not exceed the possible guarantees to be granted according to the Contract and the current legislation, and that any agreement to the contrary shall not be enforceable against the Grantor, and (iv) do not generate risks or any additional liability to the GRANTOR not considered in the Contract.
    5. *[In case of capital market issuances]* Finally, we state that the indenture agreement (i) does not contravene the Contract and establishes that, in case of inconsistency between the indenture and the Contract, the provisions of the Contract, or any other agreement ancillary thereto, shall prevail, (ii) does not modify the risk matrix of the Contract, and (iii) the obligations of *[Name of the Concessionaire]* in the indenture and the guarantees granted by *[Concessionaire]* do not exceed the possible guarantees to be granted according to the Contract and the current legislation, and that any agreement to the contrary shall not be enforceable against the Grantor, and (iv) do not generate risks or any additional liability to the GRANTOR not considered in the Contract.

Sincerely,

**Signature**: .....................................

Name: ..................................

Representative of the Permitted Creditor

Entity: ...................................

Permitted Creditor

\*Copied to the GRANTOR

**Table: Financing Conditions of the Permitted Creditor**

|  |  |  |
| --- | --- | --- |
| 1 | Amount of the credit / of the issuance: | USD or Soles |
| 2 | Applicable interest rate: | \_\_\_\_% |
| 3 | List of guarantees to be granted by *[Concessionaire)*: | * \_\_\_\_ * \_\_\_\_ * \_\_\_\_ |
| 4 | Grace period and credit repayment term / term for payment: | \_\_\_\_\_\_\_ (\_\_) years/months |
| 6 | Credit repayment schedule *[In case of credit agreements]*. | Attached to this statement |
| 7 | Precedent conditions for first disbursement *[In case of credit agreements]* and drawdown period |  |
| 8 | Covenants |  |
| 9 | Applicable law |  |

**Annex No. 6: FUNCTIONAL MEDICAL PROGRAM AND ARCHITECTURAL MEDICAL PROGRAM**

| **FUNCTIONAL MEDICAL PROGRAM - HOSPITAL** | | |
| --- | --- | --- |
| **SERVICES** | **DIMENSIONING** | **COMMENTS** |
| **UPSS OUTPATIENT CARE** |  |  |
| **1. Physicians’ Offices** | **41** |  |
| **a) Medical Offices** | **22** |  |
| Cardiology | 2 |  |
| Dermatology | 2 | 1 Shared Physician’s Office (Plastic Surgery and Burns) |
| Endocrinology | 2 |  |
| Gastroenterology | 2 |  |
| Geriatrics | 1 |  |
| Clinical Hematology | 0 | Shared Physician’s Office (Internal Medicine) |
| Infectious Diseases and Tropical Medicine | 1 |  |
| General Medicine | 0 |  |
| Internal Medicine | 3 |  |
| Nephrology | 1 |  |
| Pneumology | 1 |  |
| Neurology | 2 |  |
| Clinical Oncology | 0 | Included in the UPSS Oncological\* |
| Radiation Oncology | 0 | Included in the UPSS Oncological\* |
| Psychiatry | 1 |  |
| Rheumatology | 2 |  |
| **Consider:** |  |  |
| TB Office | 1 |  |
| HIV Office | 1 |  |
| **b) Surgery Offices** | **12** |  |
| Anesthesiology | 1 |  |
| Head and Neck Surgery | 1 |  |
| General Surgery | 1 |  |
| Oncological Surgery | 1 |  |
| Pediatric Surgery | 1 |  |
| Plastic Surgery and Burns | 0 | Shared Physician’s Office (Dermatology) |
| Thoracic and Cardiovascular Surgery | 1 |  |
| Neurosurgery | 1 |  |
| Otorhinolaryngology | 1 |  |
| Traumatology | 2 |  |
| Urology | 2 |  |
| **c) Obstetrics Gynecology** | **4** |  |
| Gynecology | 2 |  |
| Obstetrics | 2 | Including High Risk |
| **d) Pediatrics** | **3** |  |
| Pediatrics | 1 |  |
| Teenagers Pediatrics | 1 |  |
| Neonatal | 1 |  |
| **e) Other Physicians’ Offices in their Specific UPSS** | **5** |  |
| **e.1 Peruvian Institute of Ophthalmology (IPO)** | **5** |  |
| Peruvian Institute of Ophthalmology (IPO) | 5 |  |
| **e.2 Physical Medicine and Rehabilitation** | **0** |  |
| Physical Med. and Rehab. Office: Adults | 0 | Included in the UPSS Physical Medicine and Rehabilitation |
| Physical Med. and Rehab. Office: Pediatrics | 0 | Included in the UPSS Physical Medicine and Rehabilitation |

|  |  |  |
| --- | --- | --- |
| Physical Med. and Rehab. Office: Pediatrics | 0 | Included in the UPSS Physical Medicine and Rehabilitation |
| **e.3 Hemodialysis** | **0** |  |
| Hemodialysis Office | 0 | Included in the UPSS Hemodialysis |
| **e.4 Peritoneal Dialysis** | **0** |  |
| Peritoneal Dialysis Office | 0 | Included in the UPSS Hemodialysis |
| **e.5 Radiation Therapy** | **0** |  |
| External Radiation Therapy Office (Linear  Accelerator) | 0 | Included in the UPSS Radiotherapy |
| Internal Radiotherapy Office (Brachytherapy) | 0 | Included in the UPSS Radiotherapy |
| **2) Non-Physician’s Offices** | **19** |  |
| **a) Dentistry** | **5** |  |
| Dental Chairs | 3 |  |
| Dental Chairs (Pediatrics) | 2 |  |
| **b) Nursing** | **7** |  |
| Nursing Areas: Adults | 3 | Physician’ Office + Immunization Room + Treatment Room |
| Nursing Areas: Pediatrics | 4 | Physician’ Office + Dispensary include the CREED areas + Immunization Room  + Early Stimulation Room. / 3rd Level Regulations |
| **c) Obstetrics** | **1** |  |
| Obstetric Area | 1 | Set for 1 room for Family Planning and Psycoprophylaxis according to institutional policy parameters. |
| **d) Nutrition** | **2** |  |
| Nutrition Office: Adults | 1 |  |
| Nutrition Office: Pediatrics | 1 |  |
| **e) Social Assistance** | **1** |  |
| Social Work Office | 1 |  |
| **f) Psychology** | **3** |  |
| Psychology Office | 2 |  |
| Psychology Office (Pediatrics) | 1 |  |
| **g) Other Non-Physician’s Offices in their Specific**  **UPSS** | **0** | **Included in other UPSS** |
| **g.1) Physical Medicine and Rehabilitation** | **0** |  |
| Physical Medicine and Rehabilitation Offices | 0 | Included in the UPSS Physical Medicine and Rehabilitation |
| Physical Medicine and Rehabilitation Offices (Pediatrics) | 0 | Included in the UPSS Physical Medicine and Rehabilitation |
| **g.2) Hemodialysis** | **0** |  |
| Cons. Multidisciplinary (Psyc.+ Nutrition + Social  Worker) | 0 | Included in the UPSS Hemodialysis |
| **g.3) Peritoneal Dialysis** | **0** |  |
| Nursing Office | 0 | Included in the UPSS Hemodialysis |
| Multidisciplinary Office (Psyc.+ Nutrition + Social  Worker) | 0 | Included in the UPSS Hemodialysis |
| **3) Medical procedure offices** | **78** |  |
| **a) Cardiology** |  |  |
| Eco-Doppler | 1 | Benchmark 10 Hospitals (min. range 1 and max. range 1) |
| EKG Holter + Blood Pressure Holter | 1 | Benchmark 10 Hospitals (min. range 1 and max. range 1) / 3rd Level Regulation |
| Cardiac Stress Test | 1 | Benchmark 10 Hospitals (min. range 1 and max. range 1) / 3rd Level Regulation |
| Electrocardiogram | 4 | Benchmark 10 Hospitals (min. range 4 and max. range 6) / 3rd Level Regulation |
| Echocardiogram | 2 | Benchmark 10 Hospitals (min. range 2 and max. range 3) / 3rd Level Regulation |
| **b) Dermatology** |  |  |

|  |  |  |
| --- | --- | --- |
| Dermoscopy + Biopsies + Phototherapy, Photopheresis and Photodynamics + Electrotherapy | 1 | Benchmark 10 Hospitals (min. range 0 and max. range 1) / 3rd Level Regulation |
| Cryotherapy + Cauterizations | 1 | Benchmark 10 Hospitals (min. range 2 and max. range 5) |
| Skin Test | 1 | 3rd Level Regulation |
| **c) Endocrinology** |  |  |
| Glucose Tolerance | 1 | Benchmark 10 Hospitals (min. range 1 and max. range 2) |
| Diabetic Foot Evaluation + Treatment Room | 1 | Benchmark 10 Hospitals (min. range 1 and max. range 2) |
| **d) Gastroenterology** |  |  |
| Upper Endoscopy + Lower Endoscopy + Capsule Endoscopy | 3 | 1 Upper Endos. ; 1 Lower Endos.; 1 Capsule Endoscopy / Benchmark 10 Hospitals (min. range 2 and max. range 3) / 3rd Level Regulation |
| Ultrasounds | 1 | Benchmark 10 Hospitals (min. range 1 and max. range 2) / 3rd Level Regulation |
| Post Sedation Recovery Room | 1 | 3rd Level Regulation |
| **e) Geriatrics** |  |  |
| Dispensary and Triage of the Geriatric Patient  (Control of FV: Weight, Height) | 1 |  |
| **f) Hematology** |  |  |
| Procedures Room for Specialty (MO Biopsy) | 1 |  |
| **g) Internal Medicine** |  |  |
| Room for Immunotherapy and Allergy Test | 1 | Benchmark 10 Hospitals (min. range 1 and max. range 2) |
| **h) Nephrology** |  |  |
| Procedures Room for Specialty (Kidney Biopsy) | 0 | Integrated in the UPSS Hemodialysis |
| **i) Pneumology** |  |  |
| Spirometry and Effort Test | 2 | Benchmark 10 Hospitals (min. range 2 and max. range 3) / 3rd Level Regulation |
| Bronchoscopy and Pleural Biopsy | 1 | Benchmark 10 Hospitals (min. range 1 and max. range 2) / 3rd Level Regulation |
| Thoracentesis | 1 |  |
| **j) Neurology** |  |  |
| Electroencephalography | 2 | Benchmark 10 Hospitals (min. range 2 and max. range 3) / 3rd Level Regulation |
| Electromyography | 1 | Benchmark 10 Hospitals (min. range 1 and max. range 1) / 3rd Level Regulation |
| Evoked Potentials | 1 | 3rd Level Regulation |
| Polysomnography | 1 |  |
| **k) Psychiatry** |  |  |
| Group Psychotherapy Room - Gym - Ludotherapy | 1 | Benchmark 10 Hospitals (min. range 2 and max. range 3) |
| Psychoeducation Room + Family Psychotherapy | 1 |
| **l) Rheumatology** |  |  |
| Infiltration Room + Arthrocentesis | 1 |  |
| **m) TBC** |  |  |
| TB Counseling and Prevention | 1 | 3rd Level Regulation |
| Medication Consumption | 1 | 3rd Level Regulation |
| Dispensation and Follow-up Pharmacotherapy | 1 | 3rd Level Regulation |
| Procedure Room 30 | 1 | 3rd Level Regulation |
| Sampling (Sputum) | 1 | 3rd Level Regulation |
| **n) HIV** |  |  |
| Dispensation and Follow-up Pharmacotherapy | 1 | 3rd Level Regulation |
| TARGA | 1 | 3rd Level Regulation |
| Counseling and prevention of STIs, HIV and AIDS | 1 | 3rd Level Regulation |
| **o) Anesthesiology** |  |  |
| Procedure Room / Room for pain treatments | 1 | 10 Armchairs / 3rd Level Regulation |
| Recovery Room | 1 | 3rd Level Regulation |
| **p) Head and Neck Surgery** |  |  |

|  |  |  |
| --- | --- | --- |
| Procedure Room / Dispensary | 1 |  |
| **q) General Surgery** |  |  |
| Procedure Room / Dispensary | 1 | 3rd Level Regulation |
| **r) Oncological Surgery** |  |  |
| Procedure Room / Dispensary | 1 |  |
| **s) Pediatric Surgery** |  |  |
| Procedure Room / Dispensary | 1 |  |
| **t) Plastic Surgery and Burns** |  |  |
| Procedure Room / Dispensary | 2 | 1 Plastic Surgery Office and 1 Burns Office |
| **u) Thoracic and Cardiovascular Surgery** |  |  |
| Procedure Room / Dispensary | 1 |  |
| **v) Neurosurgery** |  |  |
| Procedure Room / Dispensary | 1 |  |
| **w) Ophthalmology** |  |  |
| Campimetry | 2 | Benchmark 10 Hospitals (min. range 2 and max. range 4) / 3rd Level Regulation |
| Refractometry | 2 | Benchmark 10 Hospitals (min. range 1 and max. range 2) / 3rd Level Regulation |
| Specular Microscopy, Computerized Corneal Topography | 2 | Benchmark 10 Hospitals (min. range 2 and max. range 4) |
| Ocular Ultrasound | 1 | Benchmark 10 Hospitals (min. range 1 and max. range 2) |
| Visual Evoked Potentials | 1 | Benchmark 10 Hospitals (min. range 1 and max. range 1) |
| YAG Laser | 1 | Benchmark 10 Hospitals (min. range 2 and max. range 2) |
| Argon Laser | 1 | Benchmark 10 Hospitals (min. range 1 and max. range 1) |
| Ocular Tomography | 1 | Benchmark 10 Hospitals (min. range 1 and max. range 1) |
| Angiography | 1 | Benchmark 10 Hospitals (min. range 1 and max. range 2) |
| Experimental Ophthalmic Surgery | 1 |  |
| **x) Otolaryngology** |  |  |
| Audiometry | 1 | Benchmark 10 Hospitals (min. range 2 and max. range 4) / 3rd Level Regulation |
| Vestibular Tests | 1 | Benchmark 10 Hospitals (min. range 1 and max. range 2) |
| Endoscopy | 1 | Benchmark 10 Hospitals (min. range 2 and max. range 3) |
| Otomicroscopy | 1 | Benchmark 10 Hospitals (min. range 1 and max. range 2) / 3rd Level Regulation |
| **y) Traumatology** |  |  |
| Plaster Room / Dispensary | 1 | 3rd Level Regulation |
| **z) Urology** |  |  |
| Cystoscopies | 1 | Benchmark 10 Hospitals (min. range 1 and max. range 2) / 3rd Level Regulation |
| Urodynamics | 1 | Benchmark 10 Hospitals (min. range 1 and max. range 2) |
| **aa) Gynecology-Obstetrics** |  |  |
| Colpscopy | 1 | Benchmark 10 Hospitals (min. range 1 and max. range 1) / 3rd Level Regulation |
| Multipurpose Procedure Room (Gynecology) | 1 | Benchmark 10 Hospitals (min. range 1 and max. range 2) / 3rd Level Regulation |
| Obstetrical Ultrasound | 2 | Benchmark 10 Hospitals (min. range 2 and max. range 3) / 3rd Level Regulation |
| Fetal Monitoring | 1 | Benchmark 10 Hospitals (min. range 1 and max. range 1) / 3rd Level Regulation |

|  |  |  |
| --- | --- | --- |
| Multipurpose Procedure Room | 1 | Benchmark 10 Hospitals (min. range 1 and max. range 2) / 3rd Level Regulation |
| **bb) Telemedicine** |  |  |
| Teleconsultation by a Specialist Doctor | 1 | 3rd Level Regulation |
| **4) Non-medical Procedures Offices** | **5** |  |
| **a) Dentistry** |  |  |
| X-ray Room (Dental) | 1 | 3rd Level Regulation |
| Somatic and Maxillofacial Prosthesis Laboratory  Room | 1 |  |
| **c) Obstetrics** |  |  |
| Talks Room and Obstetric Psychoprophylaxis | 1 |  |
| **f) Psychology** |  |  |
| GESSEL Chamber | 1 | Included in the Pediatric Area |
| Family Psychotherapy Room (Capacity 10 People) | 1 |  |
| **UPSS HOSPITALIZATION** |  |  |
| **1. Hospitalization Rooms: Hospital Beds** | **324** |  |
| **a. Medical Service** | **121** |  |
| Cardiology |  |  |
| Dermatology |  |  |
| Endocrinology |  |  |
| Gastroenterology |  |  |
| Geriatrics |  |  |
| Clinical Hematology |  |  |
| Infectious Diseases and Tropical Medicine |  |  |
| General Medicine |  |  |
| Physical Medicine and Rehabilitation |  |  |
| Internal Medicine |  |  |
| Nephrology |  |  |
| Pneumology |  |  |
| Neurology |  |  |
| Clinical Oncology |  |  |
| Radiation Oncology |  |  |
| Psychiatry |  |  |
| Rheumatology |  |  |
| **Consider:** |  |  |
| Isolation Room | 6 | One isolation bed for every 20 hospital beds according to the 3rd level care regulation. Not considered in the total count of hospital beds. |
| **b. Surgery Service** | **104** |  |
| Anesthesiology |  |  |
| Head and Neck Surgery |  |  |
| General Surgery |  |  |
| Oncological Surgery |  |  |
| Plastic Surgery and Burns |  |  |
| Thoracic and Cardiovascular Surgery |  |  |
| Neurosurgery |  |  |
| Dentistry |  |  |
| Ophthalmology |  |  |
| Otorhinolaryngology |  |  |
| Traumatology |  |  |
| Urology |  |  |
| **Consider:** |  |  |
| Isolation Room | 6 | One isolation bed for every 20 hospital beds according to the 3rd level care regulation. Not considered in the total count of hospital beds. |

|  |  |  |
| --- | --- | --- |
| **c. Gynecology - Obstetrics Service** | **47** | **Functional beds model managed as a joint block for gynecology and obstetrics** |
| Gynecology | 11 |  |
| Adult Obstetrics | 30 |  |
| Adolescent Obstetrics | 6 | In 2014, the percentage of teenagers between 15-19 years who were pregnant  at least 1 time was 16.7% in the Piura region. INEI |
| **Consider:** |  |  |
| Isolation Room | 3 | One isolation bed for every 20 hospital beds according to the 3rd level of care regulation. Not considered in the total count of hospital beds. |
| **d. Pediatric Service** | **52** |  |
| Pediatrics | 41 | 16 Infants; 16 Preschoolers; 10 Schoolchildren and 10 Teenagers |
| Pediatric Surgery | 11 |
| **Consider:** |  |  |
| Isolation Room | 3 | One isolation bed for every 20 hospital beds according to the 3rd level of care regulation. Not considered in the total count of hospital beds. |
| **e) Peruvian Institute of Ophthalmology (IPO)** | **0** |  |
| Ophthalmology | 0 |  |
| **UPSS EMERGENCY** |  |  |
| **Emergency Rooms** | **19** |  |
| Minimal Resuscitation Unit - Shock Trauma | 2 |  |
| Quick Attention Room | 1 |  |
| Internal Medicine Room | 4 |  |
| General Surgery Room | 3 |  |
| Surgery Procedure Room | 2 |  |
| Gynecology + S.H. Room | 1 |  |
| Obstetrics + S.H. Room | 2 | Located within the UPSS Obstetrics |
| Pediatrics and Neonatology Room | 3 | 2 Pediatric Rooms and 1 Neonatology Room (3rd Level Regulation) |
| Traumatology Room - Plaster | 1 |  |
| **Consider:** |  |  |
| Injection Room | 1 |  |
| **Emergency Observation Beds** | **49** |  |
| Adult Observation Beds - Men | 17 |  |
| Adult Observation Beds - Women | 17 |  |
| Pediatric Observation Beds | 15 |  |
| **Isolation Emergency Rooms** | **4** |  |
| Adult Isolation Room | 2 |  |
| Pediatric Isolation Room | 2 |  |
| **UPSS SURGICAL CENTER** |  |  |
| **3. Operating Rooms (OR) - Surgeries by Specialty** | **11** | **This is another breakdown of the Surgical Block (do not add to points 1. and 2. of the UPSS Surgical Center)**  **. From 11 operating rooms, 1 Neurosurgery and Thoracic and Cardiovascular Surgery OR. From 11 operating rooms, 1 emergency OR (do not select Neurosurgery and Thoracic and Cardiovascular Surgery). From 11 operating rooms, 1 Cesarean OR. From 11 operating rooms, 5 multipurpose ORs.**  **From 11 operating rooms, 3 day-time**  **surgery OR (2 Ophthalmology + 1 Minor high requirement surgeries)** |

|  |  |  |
| --- | --- | --- |
| Head and Neck Surgery |  |  |
| General Surgery |  |  |
| Oncological Surgery |  |  |
| Pediatric Surgery |  |  |
| Plastic Surgery and Burns |  |  |
| Thoracic and Cardiovascular Surgery |  |  |
| Neurosurgery |  |  |
| Ophthalmology2 |  |  |
| Otorhinolaryngology |  |  |
| Traumatology |  |  |
| Urology |  |  |
| Genealogy |  |  |
| Obstetrics |  |  |
| Nephrology |  |  |
| **2. Recovery Beds (RB)** | **22** |  |
| Recovery Bed - Surgeries with Hospitalization | 16.0 | 2 per Operating Room |
| Recovery Bed - Day-time Surgeries | 6.0 | 2 per Operating Room |
| **3. Preparation Beds and Adaptation to Medium** | **12** |  |
| Preparation Beds and Adaptation to Medium | 12.0 | 4 for each Day-time Surgery Operating  Room |
| **UPSS OBSTETRIC CENTER** |  |  |
| **1. Delivery Rooms** |  |  |
| Delivery Rooms | 9 UTPR | UTPR are multifunctional rooms integrating the delivery, dilation, and recovery room. For the dimensioning of these areas, it has been considered the estimated need of recovery beds / immediate puerperium 9. Therefore, the provision of 9 UTPR rooms are necessary. |
| **2. Other Rooms** |  |  |
| Dilation Beds | 9 UTPR + 5 Dilatation Beds | 9 Multifunctional Rooms with Family Accompaniment + 5 Beds in the Dilation Room |
| Rec beds. / Immediate Puerperium | 9 UTPR | Included in the 9 Multifunctional Rooms with Family Accompaniment |
| Fetal Monitoring Room | 1 |  |
| Monitoring Beds | 3 |  |
| **UPSS - ICU** |  |  |
| **a) ICU** |  |  |
| **ICU Beds** | **14** |  |
| ICU - Adult Beds | 10 |  |
| ICU - Pediatric Beds | 4 |  |
| **Consider:** |  |  |
| ICU Room Isolated Adults | 2 | According to the technical standard, one isolation bed for each ICU service module (5 beds per module). Included in the ICU bed count |
| ICU Room Isolated Pediatrics | 1 | According to the technical standard, one isolation bed for each ICU service module (6 beds per module). Included in the ICU bed count |
| **b) NICU** |  |  |
| **NICU Beds** | **28** |  |
| NICU - Adult Beds | 20 |  |
| NICU - Pediatric Beds | 8 |  |
| **Consider:** |  |  |

|  |  |  |
| --- | --- | --- |
| NICU Room Isolated Adults | 4 | According to the technical standard, one isolation bed for each ICU service module (5 beds per module). Included in the NICU bed count |
| NICU Room Isolates Pediatrics | 1 | According to the technical standard, one isolation bed for each ICU service module (6 beds per module). Included in the NICU bed count |
| **c) ICU-NICU Neonatology (Cribs):** |  |  |
| **ICU: Incubators** | **9** |  |
| **NICU: Cribs** | **33** |  |
| **Cribs for Adaptation Unit** | **6** |  |
| **UPSS DIAGNOSIS AIDS & TREATMENT** |  |  |
| **Rooms** | **18** |  |
| Angiography Room | 1 |  |
| Bone Densitometry Room | 2 |  |
| Ultrasound Room | 4 |  |
| Extracorporeal Shockwave Lithotripsy Unit | 1 |  |
| Mammography Room (treatment) | 2 |  |
| X-ray Room | 1 |  |
| Tomography Room | 2 |  |
| X-ray Room (Digital) | 4 | Fits the removal by estimation of technological changes (includes 1 in emergencies) |
| X-ray Room (Contrast) | 1 | Remains 1 because the request for removal and the trend is to replace these studies with CT |
| **UPSS NUCLEAR MEDICINE** |  |  |
| Physician’ Office | 1 |  |
| **Rooms** |  |  |
| Gamma Chamber | 1 |  |
| **UPSS CLINICAL PATHOLOGY (CLINICAL LABORATORY)** |  |  |
| **Sampling** |  |  |
| **Lab Cubicles - Sampling** | **16** |  |
| 1. Hematological | 3 |  |
| 2. Biochemical | 8 |  |
| 3. Microbiological | 2 |  |
| 4. Immunological | 2 |  |
| 5. Cytology | 1 |  |
| **Sample Processing** | **7** |  |
| Core Lab | 1 | Total volume of Hematological and Biochemical tests 673,205 per year in  2036 |
| Laboratory of Immunology | 1 | Total volume of immunological tests 102,259 per year in 2036 |
| **Microbiology / Parasitology Laboratory** |  | Total volume of microbiological tests 76,694 per year in 2036 |
| Separate area for Microbiology | 1 |  |
| Separate area for Urinalysis | 1 |  |
| Separate area for Parasitology | 1 |  |
| Separate area for TB | 1 |  |
| Emergency Laboratory | 1 |  |
| **UPSS PHARMACY** | **6** |  |
| Counters for Prescription Distribution1 / | 5 |  |
| Counters for External Consultation: IPO | 1 |  |
| **UPSS PATHOLOGICAL ANATOMY** |  |  |
| **Rooms** | **9** |  |
| Surgical Pathology Laboratory | 1 |  |
| Cytology Laboratory | 1 |  |

|  |  |  |
| --- | --- | --- |
| Immunohistochemistry and Immunofluorescence  Laboratory | 1 |  |
| Histochemical Techniques Laboratory | 1 |  |
| Genetics Laboratory | 1 |  |
| Macroscopy Room and Sample File | 1 |  |
| Intraoperative Examinations Laboratory (Refer Centro  Qx) | 1 |  |
| Corpse Conservation Chamber | 1 | 8 corpses |
| Necropsy Room | 1 |  |
| **UPSS PHYSICAL MEDICINE & REHABILITATION** |  |  |
| **1) Physicians’ Offices** | **10** |  |
| Physical Med. and Rehab. Office: Adults | 8 |  |
| Physical Med. and Rehab. Office: Pediatrics | 1 | Developmental Pathology |
| Physical Med. and Rehab. Office: Pediatrics | 1 | Locomotor System |
| **2) Non-Physician’s Offices** | **2** |  |
| Psychological Offices: Adults | 1 |  |
| Psychological Offices: Children | 1 |  |
| **3) Environments** |  |  |
| **Medical Procedures Room:** | **2** |  |
| Procedure Room: Adults | 1 |  |
| Procedure Room: Children | 1 |  |
| **Cubicles:** | **37** |  |
| Physical Agents - Adults | 13 | 60% |
| Thermotherapy - Adults | 3 | 60% |
| Hydrotherapy - Adults | 5 | 60% |
| Mechanotherapy - Adults | 1 |  |
| Physical Agents - Pediatrics | 9 | 40% |
| Thermotherapy - Pediatrics | 2 | 40% |
| Hydrotherapy - Pediatrics | 3 | 40% |
| Mechanotherapy - Pediatrics | 1 |  |
| **Special Procedure Room:** | **2** |  |
| Laser Ray Room (Infrared) | 1 |  |
| Magnetotherapy Room | 1 |  |
| **Group Room:** | **2** |  |
| Group Room for Adults: Gym | 1 |  |
| Group Room for Children: Gym | 1 |  |
| **Multipurpose Room** | **1** |  |
| Multipurpose Room for Workshops | 1 |  |
| **Therapy Area:** | **5** |  |
| Speech Therapy Room: Children | 1 |  |
| Speech Therapy Room: Adults | 1 |  |
| Occupational Therapy: Children | 1 |  |
| Occupational Therapy: Adults | 1 |  |
| Cardiac Rehabilitation | 1 |  |
| **UPSS CENTER OF HEMOTHERAPY AND BLOOD**  **BANK** | **1** |  |
| **Rooms** |  |  |
| Hemotherapy Center and Type II Blood Bank  (PRONAHEBAS) | 1 |  |
| **UPSS STERILIZATION CENTER** |  |  |
| **Specific Areas** | **5** |  |
| a) Red or Contaminated Area | 1 |  |
| b) Blue Area or Preparation Area | 1 |  |
| c) Green Area or Restricted Area | 1 |  |
| d) Staff Changing Room & Bathroom | 1 |  |
| e) Management Area | 1 |  |
| **UPSS HEMODIALYSIS** |  |  |
| **HEMODIALYSIS:** |  |  |
| **Physicians’ Offices:** | **4** |  |
| Physician’s Office | 1 |  |

|  |  |  |
| --- | --- | --- |
| All-Purpose Office (Psychology + Nutrition + Social Worker) | 3 |  |
| **UPSS Areas** |  |  |
| **UPSS Hemodialysis** |  |  |
| Hemodialysis Modules | 3 |  |
| Normal Hemodialysis Chairs | 45 |  |
| Emergency Hemodialysis Chairs | 6 |  |
| Support Hemodialysis Chairs | 6 |  |
| **Include area of:** |  |  |
| Exams and Procedures Room | 2 |  |
| Post Hemodialysis Rest Room | 1 |  |
| **UPSS PERITONEAL DIALYSIS** |  |  |
| **PERITONEAL DIALYSIS** |  |  |
| **Offices** |  |  |
| Physician’s Office | 1 |  |
| Nursing Office | 1 |  |
| Multidisciplinary Office (Psyc.+ Nutrition + Social  Assistance) | 1 |  |
| **Rooms** |  |  |
| Teaching and Training Room | 1 |  |
| Invasive Procedure Room | 1 |  |
| Dispensary | 1 |  |
| Automated PD Room | 1 |  |
| **UPSS RADIOTHERAPY** |  |  |
| **1. RADIOTHERAPY** |  |  |
| **1.1. EXTERNAL RADIOTHERAPY** |  |  |
| Physician’s Office | 2 |  |
| Linear Accelerator | 2 | The High Complexity Hospital will have 1 linear accelerator up to 2027. From 2027, a second equipment will be add. In terms of infrastructure, reserve space is  incorporated for the second linear accelerator. |
| **1.1. INTERNAL RADIATION THERAPY (BRACHITHERAPY)** |  |  |
| Physician’s Office | 1 |  |
| **UPSS CHEMOTHERAPY** |  |  |
| **1. CHEMOTHERAPY** | **20** |  |
| Adult Armchairs | 14 |  |
| Children Armchairs | 6 |  |

**ARCHITECTURAL MEDICAL PROGRAM - HOSPITAL**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Functional Unit** | **No. Room** | **Area** | **Functional** |  | **m2 built** |
|  | | | | | |
| **ASSISTANCE AREAS** |  |  | 23.050,60 | 33,529.78 | |
|  | | | | | |
| **UPSS HOSPITALIZATION** | 324 | Beds | 7.234,40 | 1,45 | **10.489,88** |
|  | | | | | |
| **UPSS CRITICAL CARE** | 90 |  | 2.513,00 | 1,50 | **3.769,50** |
|  | | | | | |
| **UPSS OUTPATIENT CARE:** | 61 |  | 3.925,50 | 1,40 | **5.495,70** |
|  | | | | | |
| **UPSS OPHTHALMOLOGY (INSTITUTE OF OPHTHALMOLOGY)** |  |  | 670,00 | 1,40 | **938,00** |
|  | | | | | |
| **UPSS HEMODIALYSIS** |  |  | 1.087,50 | 1,40 | **1.522,50** |
|  | | | | | |
| **UPSS PERITONEAL DIALYSIS** |  |  | 215,00 | 1,40 | **301,00** |
|  | | | | | |
| **UPSS PHYSICAL MEDICINE & REHABILITATION** |  |  | 1.224,00 | 1,40 | **1.713,60** |
|  | | | | | |
| **UPSS CHEMOTHERAPY** |  |  | 464,00 | 1,40 | **649,60** |
|  | | | | | |
| **UPSS RADIOTHERAPY** |  |  | 1.207,50 | 1,40 | **1.690,50** |
|  | | | | | |
| **UPSS EMERGENCY** |  |  | 1.579,20 | 1,50 | **2.368,80** |
|  | | | | | |
| **UPSS SURGICAL CENTER:** |  |  | 1.175,00 | 1,60 | **1.880,00** |
|  | | | | | |
| **UPSS DAY-TIME SURGERY** |  |  | 523,50 | 1,60 | **837,60** |
|  | | | | | |
| **UPSS OBSTETRIC CENTER:** |  |  | 741,50 | 1,60 | **1.186,40** |
|  | | | | | |
| **UPSS STERILIZATION:** |  |  | 490,50 | 1,40 | **686,70** |
|  | | | | | |
| **CLINICAL SUPPORT AREAS** |  |  | 4.275,20 | 6.026,07 | |
|  | | | | | |
| **UPSS DIAGNOSTIC IMAGING:** |  |  | 1.508,00 | 1,50 | **2.262,00** |
|  | | | | | |
| **UPSS NUCLEAR MEDICINE** |  |  | 189,00 | 1,50 | **283,50** |
|  | | | | | |
| **UPSS PHARMACY:** |  |  | 629,80 | 1,35 | **850,23** |
|  | | | | | |
| **UPSS CLINICAL PATHOLOGY:** |  |  | 709,20 | 1,35 | **957,42** |
|  | | | | | |
| **UPSS BLOOD BANK - HEMOTHERAPY** |  |  | 836,20 | 1,35 | **1.128,87** |
|  | | | | | |
| **UPSS PATHOLOGICAL ANATOMY:** |  |  | 403,00 | 1,35 | **544,05** |
|  | | | | | |
| **PATIENT MANAGEMENT AREAS** |  |  | 2.660,00 | 3.591,00 | |
|  | | | | | |
| **UPSS ADMINISTRATION** |  |  | 2.033,00 | 1,35 | **2.744,55** |
|  | | | | | |
| **UPS INFORMATION MANAGEMENT** |  |  | 507,00 | 1,35 | **684,45** |
|  | | | | | |
| **UPSS - CHAPEL** |  |  | 120,00 | 1,35 | **162,00** |
|  | | | | | |
| **GENERAL SERVICES AREA** |  |  | 4.731,40 | 6.150,82 | |
|  | | | | | |
| **UPS TRANSPORTATION** |  |  | 91,00 | 1,30 | **118,30** |
|  | | | | | |
| **UPS LAUNDRY & CLOAKROOM** |  |  | 302,00 | 1,30 | **392,60** |

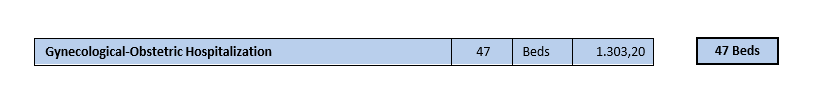
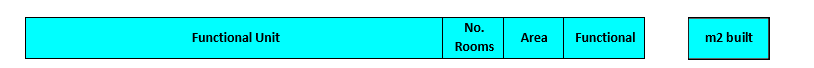
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Functional Unit** | **No.**  **Rooms** | **Area** | **Functional** |  | **m2 built** |
|  |  |  |  |  |  |
| **UPS STAFF CHANGING ROOM & BATHROOM** |  |  | 328,00 | 1,30 | **426,40** |
|  |  |  |  |  |  |
| **UPS MAINTENANCE WORKSHOPS** |  |  | 461,00 | 1,30 | **599,30** |
|  |  |  |  |  |  |
| **UPS GENERAL WAREHOUSE** |  |  | 760,00 | 1,30 | **988,00** |
|  |  |  |  |  |  |
| **UPS COLD CHAIN (Specialized Warehouse)** |  |  | 152,00 | 1,30 | **197,60** |
|  |  |  |  |  |  |
| **UPS CLEANING/HOUSEKEEPING** |  |  | 68,00 | 1,30 | **88,40** |
|  |  |  |  |  |  |
| **UPS SURVEILLANCE** |  |  | 80,00 | 1,30 | **104,00** |
|  |  |  |  |  |  |
| **UPSS NUTRITION & DIET SERVICES** |  |  | 1.362,20 | 1,30 | **1.770,86** |
|  |  |  |  |  |  |
| **UPS ENVIRONMENTAL HEALTH** |  |  | 266,00 | 1,30 | **345,80** |
|  |  |  |  |  |  |
| **UPS POWER HOUSE** |  |  | 776,20 | 1,30 | **1.009,06** |
|  |  |  |  |  |  |
| **UPS GAS SUPPLY CENTER** |  |  | 85,00 | 1,30 | **110,50** |
|  |  |  |  |  |  |
| **SUPPLEMENTARY SERVICE AREAS** |  |  | 757,80 |  | 985,14 |
|  |  |  |  |  |  |
| **UPS ALL-PURPOSE ROOM** |  |  | 162,00 | 1,30 | **210,60** |
|  |  |  |  |  |  |
| **UPS STAFF RESIDENCE** |  |  | 216,00 | 1,30 | **280,80** |
|  |  |  |  |  |  |
| **UPS STAFF COMFORT** |  |  | 379,80 | 1,30 | **493,74** |
|  |  |  |  |  |  |
| **NET AND TOTAL BUILT AREA in FUNCTIONAL UNITS (I to XXIV)** | |  | **35.475,00** |  | **50.282,81** |
|  | |  |  |  |  |
| **SUPPLEMENTARY AREAS: 15% of the total functional Unit areas (vertical & horizontal interconnection)** | |  |  | 1,15 | **7.542,42** |
| NOTE: THE SURFACES OF THE FUNCTIONAL AREAS IN THIS TABLE HAVE BEEN OBTAINED FROM THE PROJECT METERS. GENERAL CIRCULATIONS: UP TO 15% OF THE TOTAL SUM OF THESE AREAS HAS  BEEN CONSIDERED. | | | | | |
| **5% of the total functional area (Technical Floor / Electromechanical Installations: INCLUDING TECHNICAL ROOMS, ELECTRIC PANELS, ELECTRIC FRAMES, SANITARY INSTALLATIONS FRAMES, ETC)** | | | | 1,05 | **2.514,14** |
| NOTE: All sanitary, electrical, mechanical and telecommunications technical areas, including ducts and rooms, will be defined in the Technical File with the detailed engineering design and whose location will be distributed in the building. They are included in this estimated 5% and will comply with the corresponding technical specifications according to Current Regulations, adjusting to sufficient  dimensions for proper operation. | | | |  |  |
| \* These areas will be defined in the Technical File with the detailed engineering design and will be located throughout the building | | | |  |  |
| **NET AND TOTAL BUILT AREA OF THE PROJECT** |  |  | 35.475,00 |  | **60.339,37** |
| **OPEN AREAS (Parking and Others)** |  |  | 8.700,00 |  | **69.039,37** |
| Source: Update with RM862-2015-MINSA |  |  |  |  |  |

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| **Functional Unit** | **No.**  **Rooms** | **Area** | **Functional** |

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| **ASSISTANCE AREAS** | | | 23.050,60 |
| **UPSS HOSPITALIZATION** | 324 | Beds | 7.234,40 |
| **Conventional Medical and Surgical Hospitalization** | 225 | Beds | 4.034,00 |
| **CLINICAL AREA** |  |  |  |
| Room 02 beds with Bathroom - Medicine / Surgery | 112 | 28,00 | 3.136,00 |
| Room 01 bed with Bathroom - Medicine / Surgery | 1 | 20,00 | 20,00 |
| Isolation Room | 12 | 23,00 | 276,00 |
| **CLINICAL SUPPORT AREA** |  |  |  |
| Nurses Station (\*\*) | 7 | 12,00 | 84,00 |
| Clean Utility Room (\*\*) | 7 | 6,00 | 42,00 |
| Dirty Utility Room (\*\*) | 7 | 4,00 | 28,00 |
| Equipment and Instrumental Warehouse (\*\*) | 7 | 6,00 | 42,00 |
| Procedure Room (\*\*) | 7 | 16,00 | 112,00 |
| Cabinet (\*\*) | 7 | 12,00 | 84,00 |
| Clean Clothes (\*\*) | 7 | 4,00 | 28,00 |
| Dirty Clothes Deposit (\*\*) | 7 | 6,00 | 42,00 |
| Cleaning Room (\*\*) | 7 | 4,00 | 28,00 |
| Septic Room (\*\*) | 7 | 6,00 | 42,00 |
| Solid waste intermediate Warehouse (\*\*) | 7 | 4,00 | 28,00 |
| Stretcher and Wheelchair Station (\*\*) | 7 | 6,00 | 42,00 |

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| **COMMON AREAS** |  |  | 681,00 |
| **PUBLIC AREA** |  |  |  |
| Family Waiting Room (\*) | 1 | 135,00 | 135,00 |
| Public Bathroom-Men (\*) (\*\*) | 4 | 9,00 | 36,00 |
| Public Bathroom-Women (\*) (\*\*) | 4 | 8,00 | 32,00 |
| Handicap Bathroom (\*) (\*\*) | 4 | 5,00 | 20,00 |
| **ADMINISTRATIVE AREA** |  |  |  |
| Meeting Room (Medical Boards and Training) (\*) (\*\*) | 4 | 20,00 | 80,00 |
| Medical Staff Work Room (\*) (\*\*) | 4 | 12,00 | 48,00 |
| Nursing Coordination (\*) (\*\*) | 4 | 12,00 | 48,00 |
| Head Office (\*) (\*\*) | 2 | 15,00 | 30,00 |
| Secretariat (\*) (\*\*) | 2 | 10,00 | 20,00 |
| **STAFF COMFORT AREA** |  |  |  |
| Nurses Lounge (\*) (\*\*) | 7 | 12,00 | 84,00 |
| Doctors Lounge (\*) (\*\*) | 4 | 8,00 | 32,00 |
| Bathrooms & Changing Rooms-Men (Doctors) (\*) (\*\*) | 4 | 14,00 | 56,00 |
| Bathrooms & Changing Rooms-Women (Doctors) (\*) (\*\*) | 4 | 15,00 | 60,00 |

(\*) Rooms that can be grouped every two units

(\*\*) The number of units is not binding for the design; it is an estimate for the calculation of surfaces

|  |  |  |  |
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| **CLINICAL AREA** |  |  |  |
| Room 02 beds with Bathroom - Gynecology | 5 | 28,00 | 140,00 |
| Room 01 beds with Bathroom - Gynecology | 1 | 20,00 | 20,00 |
| Room 02 beds with Bathroom - Obstetrics (joint accommodation) | 12 | 30,00 | 360,00 |
| Room 01 beds with Bathroom - Obstetrics (joint accommodation) | 6 | 20,00 | 120,00 |
| Room 01 beds with Bathroom - Adolescent Obstetrics (joint  accommodation) | 6 | 20,00 | 120,00 |
| Isolation Room | 3 | 23,00 | 69,00 |
| Healthy newborn care room (4 cribs) – To be located next to  Obstetrics | 1 | 16,00 | 16,00 |
| **CLINICAL SUPPORT AREA** |  |  |  |
| Nurses Station (\*\*) | 2 | 15,00 | 30,00 |
| Obstetrician Station (\*\*) | 2 | 15,00 | 30,00 |
| Clean Utility Room (\*\*) | 2 | 12,00 | 24,00 |
| Dirty Utility Room (\*\*) | 2 | 4,00 | 8,00 |
| Equipment and Instrumental Warehouse (\*\*) | 2 | 6,00 | 12,00 |
| Procedure Room (\*\*) | 2 | 16,00 | 32,00 |
| Cabinet (\*\*) | 2 | 12,00 | 24,00 |
| Artesa Bathroom (\*\*) | 2 | 5,00 | 10,00 |
| Preparation of dairy products and formulas (\*\*) | 2 | 15,00 | 30,00 |
| Clean Clothes (\*\*) | 2 | 4,00 | 8,00 |
| Dirty Clothes Deposit (\*\*) | 2 | 6,00 | 12,00 |
| Cleaning Room (\*\*) | 2 | 4,00 | 8,00 |
| Septic Room (\*\*) | 2 | 6,00 | 12,00 |
| Solid waste intermediate warehouse (\*\*) | 2 | 4,00 | 8,00 |
| Stretcher and Wheelchair Station (\*\*) | 2 | 6,00 | 12,00 |
| Visitors Lounge (\*\*) | 2 | 15,00 | 30,00 |
| **PUBLIC AREA** |  |  |  |
| Family Waiting Room (\*) | 1 | 28 (20) | 28 (20) |
| Public Bathroom-Men (\*) (\*\*) | 1 | 9,00 | 9,00 |
| Public Bathroom-Women (\*) (\*\*) | 1 | 8,00 | 8,00 |
| Handicapped Bathroom (\*) (\*\*) | 1 | 5,00 | 5,00 |
| **ADMINISTRATIVE AREA** |  |  |  |
| Head Office (\*) (\*\*) | 1 | 15,00 | 15,00 |
| Secretariat (\*) (\*\*) | 1 | 10,00 | 10,00 |
| Meeting Room (Medical Boards and Training) (\*) (\*\*) | 1 | 20,00 | 20,00 |
| Medical Staff Work Room (\*) (\*\*) | 1 | 12,00 | 12,00 |
| Nursing Coordination (\*) (\*\*) | 1 | 12,00 | 12,00 |
| **STAFF COMFORT AREA** |  |  |  |
| Nurses Lounge(\*) (\*\*) | 1 | 12,00 | 12,00 |
| Doctors Lounge (\*) (\*\*) | 1 | 8,00 | 8,00 |
| Bathrooms & Changing Rooms-Men (Doctors) (\*) (\*\*) | 1 | 14,00 | 14,00 |
| Bathrooms & Changing Rooms-Women (Doctors) (\*) (\*\*) | 1 | 15,00 | 15,00 |

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| **Functional Unit** | **No.**  **Rooms** | **Area** | **Functional** |  | **m2 built** |
|  | | | | | |
| **Pediatric Hospitalization:** | 52 | Beds | 1.142,20 |  | **52 Beds** |
| **CLINICAL AREA** |  |  |  |  |  |
| Room 02 cribs (Infants) (2 bed-crib x room) | 8 | 30,00 | 240,00 |  | 16 |
| Room 02 beds (Pre - school) (including Bathroom) | 8 | 28,00 | 224,00 |  | 16 |
| Room 02 school beds with Bathroom | 5 | 28,00 | 140,00 |  | 10 |
| Room 02 teenagers beds with Bathroom | 5 | 28,00 | 140,00 |  | 10 |
| Isolation room with Bathroom + work area (Pediatrics) | 3 | 23,00 | 69,00 |  |  |
| Lactation Room | 1 | 7,00 | 7,00 |  |  |
| Playroom for kids | 1 | 10,00 | 10,00 |  |  |
| **CLINICAL SUPPORT AREA** |  |  |  |  |  |
| Nurses Station | 1 | 15,00 | 15,00 |  |  |
| Clean Utility Room | 1 | 12,00 | 12,00 |  |  |
| Dirty Utility Room | 1 | 5,00 | 5,00 |  |  |
| Equipment and instrumental warehouse | 1 | 7,00 | 7,00 |  |  |
| Procedures Room (including tub) | 1 | 18,00 | 18,00 |  |  |
| Cabinet | 1 | 12,00 | 12,00 |  |  |
| Preparation of dairy products and formulas | 1 | 15,00 | 15,00 |  |  |
| Clean Clothes | 1 | 4,00 | 4,00 |  |  |
| Dirty Clothes Deposit | 1 | 4,00 | 4,00 |  |  |
| Cleaning Room | 1 | 6,00 | 6,00 |  |  |
| Septic Room | 1 | 6,00 | 6,00 |  |  |
| Solid waste intermediate Warehouse | 1 | 4,00 | 4,00 |  |  |
| Stretcher and Wheelchair Station | 1 | 6,00 | 6,00 |  |  |
| Visitors Lounge | 1 | 15,00 | 15,00 |  |  |
| **PUBLIC AREA** |  |  |  |  |  |
| Family Waiting Room (\*) | 1 | 31,20 | 31,20 |  |  |
| Public Bathroom-Men (\*) | 1 | 9,00 | 9,00 |  |  |
| Public Bathroom-Women (\*) | 1 | 8,00 | 8,00 |  |  |
| Handicapped Bathroom (\*) | 1 | 5,00 | 5,00 |  |  |
| Family Report Room | 1 | 12,00 | 12,00 |  |  |
| **ADMINISTRATIVE AREA** |  |  |  |  |  |
| Head Office + Bathroom (\*) | 1 | 15,00 | 15,00 |  |  |
| Secretariat (\*) | 1 | 10,00 | 10,00 |  |  |
| Meeting Room (Medical Boards and Training) (\*) | 1 | 20,00 | 20,00 |  |  |
| Medical Staff Work Room (\*) | 1 | 12,00 | 12,00 |  |  |
| Nursing Coordination (\*) | 1 | 12,00 | 12,00 |  |  |
| **STAFF COMFORT AREA** |  |  |  |  |  |
| Nurses Lounge (\*) | 1 | 12,00 | 12,00 |  |  |
| Doctors Lounge (\*) | 1 | 8,00 | 8,00 |  |  |
| Bathrooms and Changing Rooms-Men (doctors) (\*) | 1 | 14,00 | 14,00 |  |  |
| Bathrooms and Rhanging Rooms-Women (doctors) (\*) | 1 | 15,00 | 15,00 |  |  |
| (\*) Rooms that can be grouped every two units | | | | | |
| **Hospital Admission** |  |  | 74,00 |  | |

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| **Functional Unit** | **No.**  **Rooms** | **Area** | **Functional** |  | **m2 built** |
|  | | | | | |
| Public Bathroom-Men | 1 | 6,00 | 6,00 |  | |
| Public Bathroom-Women | 1 | 5,00 | 5,00 |
| Handicapped Bathroom | 1 | 5,00 | 5,00 |
| Interview cubicle (6m2 x cubicle) | 5 | 6,00 | 30,00 |
| Internal waiting for admission and discharges | 1 | 28,00 | 28,00 |
|  | | | | | |
| **UPSS CRITICAL CARE** | 90 |  | 2.513,00 | 1,50 | **3.769,50** |
| **BLACK ZONE: ADMINISTRATIVE AREA** |  |  |  | 5 | |
| Reception, Reports and Entry Control | 1 | 12,00 | 12,00 |
| Family Waiting Room (2 rel. x bed x 1.5 m2 x pers.) | 1 | 135,00 | 135,00 |
| Public Bathroom-Men | 1 | 11,00 | 11,00 |
| Public Bathroom-Women | 1 | 13,00 | 13,00 |
| Handicapped Bathroom | 1 | 5,00 | 5,00 |
| Medical report to relatives | 1 | 15,00 | 15,00 |
| Head Office + Bathroom | 1 | 15,00 | 15,00 |
| Secretariat | 1 | 10,00 | 10,00 |
| Nursing Coordination | 1 | 12,00 | 12,00 |
| Meeting Room (Boards) | 1 | 20,00 | 20,00 |
| Technical Room - UPS | 4 | 12,00 | 48,00 |
| Staff Rest Room + Bathroom | 2 | 18,00 | 36,00 |
| **GRAY ZONE: SUPPORT TO ASSISTANCE STAFF** |  |  |  |
| Staff Bathrooms & Changing Rooms - Men | 1 | 19,00 | 19,00 |
| Staff Bathrooms & Changing Rooms - Women | 1 | 19,00 | 19,00 |
| Healings Room | 1 | 16,00 | 16,00 |
| Sterile Clothing Warehouse (0.50 m2 x bed) | 3 | 15,00 | 45,00 |
| Changing Room - Visitors | 2 | 4,00 | 8,00 |
| Cabinet | 2 | 12,00 | 24,00 |
| Septic Room | 2 | 6,00 | 12,00 |
| Cleaning Room | 2 | 4,00 | 8,00 |
| Solid waste intermediate storage | 2 | 4,00 | 8,00 |
| Clean Clothes | 2 | 6,00 | 12,00 |
| Dirty Clothes | 2 | 4,00 | 8,00 |
| Dirty Jobs | 2 | 4,00 | 8,00 |
| Rolling X-ray Equipment Warehouse | 2 | 4,00 | 8,00 |
| Lactation Room + Bathroom | 1 | 10,00 | 10,00 |
| Breast milk conservation area | 1 | 4,00 | 4,00 |
| Incubator disinfection and filter changes | 1 | 15,00 | 15,00 |
| Incubator maintenance | 1 | 15,00 | 15,00 |
| Respirator and biomedical equipment maintenance area | 2 | 12,00 | 24,00 |
| **WHITE AREA: CLINICAL AREA ICU-NICU (Adults)** | 30 |  |  |
| Patient reception and stretcher station | 6 | 10,00 | 60,00 |
| Nurses Station | 6 | 15,00 | 90,00 |
| Clean Work Area | 6 | 4,00 | 24,00 |
| Equipment and Instrumental Warehouse | 6 | 8,00 | 48,00 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Functional Unit** | **No.**  **Rooms** | **Area** | **Functional** |  | **m2 built** |
|  | | | | | |
| Warehouse of medicines, supplies and material | 6 | 8,00 | 48,00 |  |  |
| Sinks | 6 | 3,00 | 18,00 |  |  |
| ICU treatment room (5 beds) each 20 m2 - cubicles  (including 1 isolated 20m2) | 2 | 100,00 | 200,00 |  | 10 |
| NICU treatment room (5 beds) each 12 m2 - cubicles  (including 1 isolated 20m2) | 4 | 68,00 | 272,00 |  | 20 |
| Bathroom for Patients in ICU-NICU | 2 | 3,00 | 6,00 |  |  |
| **WHITE AREA: CLINICAL AREA ICU-NICU (Pediatrics)** | 18 |  |  |  |  |
| Patient reception and stretcher station | 3 | 10,00 | 30,00 |  |  |
| Nurses Station | 3 | 15,00 | 45,00 |  |  |
| Clean Work Area | 3 | 4,00 | 12,00 |  |  |
| Equipment and Instrumental Warehouse | 3 | 8,00 | 24,00 |  |  |
| Medicines, Supplies and Material Warehouse | 3 | 8,00 | 24,00 |  |  |
| Sinks | 3 | 3,00 | 9,00 |  |  |
| ICU PEDIATRICS Treatment Room (4 beds) each 20 m2 - cubicles  (including 1 isolated 20m2) | 1 | 80,00 | 80,00 |  | 4 |
| NICU PEDIATRICS Treatment Room (4 beds) each 12 m2 - cubicles  (including 1 isolated 20m2) | 2 | 56,00 | 112,00 |  | 8 |
| Bathroom for Patients in ICU-NICU | 2 | 3,00 | 6,00 |  |  |
| **WHITE ZONE: CLINICAL AREA ICU-NICU (Neonates)** | 42 |  |  |  |  |
| Patients Reception and Stretcher Station | 8 | 10,00 | 80,00 |  |  |
| Nurses Station | 8 | 15,00 | 120,00 |  |  |
| Clean Work Area | 8 | 4,00 | 32,00 |  |  |
| Equipment and Instrumental Warehouse | 8 | 8,00 | 64,00 |  |  |
| Medicines, Supplies and Material Warehouse | 8 | 8,00 | 64,00 |  |  |
| Sinks | 8 | 3,00 | 24,00 |  |  |
| Artesa Bathroom | 2 | 5,00 | 10,00 |  |  |
| ICU Neonates Treatment Room (5 cribs / incubators) each 8 m2 -  cubicles (including 1 isolated 12m2) | 1 | 44,00 | 44,00 |  | 5 |
| ICU Neonates Treatment Room (4 cribs / incubators) each 8 m2 -  cubicles (including 1 isolated 12m2) | 1 | 36,00 | 36,00 |  | 4 |
| Parenteral Nutritional Support | 2 | 6,00 | 12,00 |  |  |
| NICU Neonates Treatment Room (6 cribs / incubators) each 8 m2 -  cubicles (including 1 isolated 12m2) | 5 | 52,00 | 260,00 |  | 30 |
| NICU Neonates Treatment Room (3 cribs / incubators) each 8 m2 -  cubicles (including 1 isolated 12m2) | 1 | 28,00 | 28,00 |  | 3 |
| Newborn Care Room with Pathology (6 cribs) - Adaptation Room | 1 | 36,00 | 36,00 |  |  |
|  | | | | | |
| **UPSS OUTPATIENT CARE:** | 61 |  | 3.925,50 | 1,40 | **5.495,70** |
| **RECEPTION AREA** |  |  |  |  | |
| General Lobby Entrance | 1 | 234,00 | 234,00 |
| Admission (08 Modules of 3.75 m2) | 1 | 30,00 | 30,00 |
| References and Counter references | 1 | 11,00 | 11,00 |
| Checkout | 1 | 4,00 | 4,00 |
| Admission Waiting (7.20 m2 per module) | 1 | 60,00 | 60,00 |
| Stores | 4 | 10,00 | 40,00 |
| Bedridden Waiting Room (1 per floor) | 1 | 11,00 | 11,00 |
| Wheelchair Warehouse (1 per floor) | 1 | 7,50 | 7,50 |

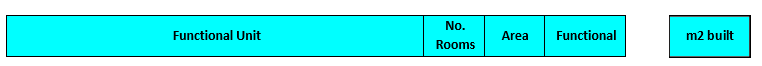
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Functional Unit** | **No.**  **Rooms** | **Area** | **Functional** |  | **m2 built** |
|  | | | | | |
| Medical Records Files Area | 1 | 30,00 | 30,00 |  | |
| Reports (Including Waiting Area, 03 modules of 3.60 m2) | 1 | 20,00 | 20,00 |
| Head Office of Outpatient Care | 1 | 15,00 | 15,00 |
| Public Bathroom-Men | 1 | 31,00 | 31,00 |
| Public Bathroom-Women | 1 | 27,00 | 27,00 |
| Handicapped Bathroom-Men | 2 | 5,00 | 10,00 |
| Handicapped Bathroom-Women | 2 | 5,00 | 10,00 |
| Pre-school Bathroom | 1 | 8,00 | 8,00 |
| Lactation Room | 2 | 18,00 | 36,00 |
| Consultation Waiting Room | 1 | 585,00 | 585,00 |
| Pediatrics / Medicine / Surgery / Gynecology Triage | 4 | 11,00 | 44,00 |
| Appointments Module (1 module with 10 offices, 3.00 m2 x module) | 7 | 3,00 | 21,00 |
| Epidemiology | 1 | 25,00 | 25,00 |
| Medical Control and Approval | 1 | 15,00 | 15,00 |
| **PHYSICIANS’ OFFICES** |  |  |  |
| **Medical Office (considered as multipurpose offices)** | 22 |  |  |
| Cardiology Office | 2 | 16,00 | 32,00 |
| Echo Doppler Room | 1 | 16,00 | 16,00 |
| EKG Holter Room+ Blood Pressure Holter (ABPM) | 1 | 16,00 | 16,00 |
| Ergometry Room | 1 | 25,00 | 25,00 |
| Electrocardiogram Room | 4 | 12,00 | 48,00 |
| Echocardiogram Room | 2 | 16,00 | 32,00 |
| Dermatology Room | 2 | 16,00 | 32,00 |
| Dermoscopy Room + Biopsies + Phototherapy + Electrotherapy | 1 | 16,00 | 16,00 |
| Cryotherapy Room, Cauterizations | 1 | 16,00 | 16,00 |
| Skin Test | 1 | 16,00 | 16,00 |
| Endocrinology Office | 2 | 16,00 | 32,00 |
| Glucose Tolerance / Glycaemia Testing Room (02 armchairs) | 1 | 16,00 | 16,00 |
| Diabetic Foot Evaluation Room + Treatment Room | 1 | 16,00 | 16,00 |
| Gastroenterology Office | 2 | 18,00 | 36,00 |
| Upper Endoscopy Room | 1 | 24,00 | 24,00 |
| Lower Endoscopy Room (Proctoscopy + Colonoscopy) + Patient  Changing Room + Bathroom | 1 | 24,00 | 24,00 |
| Capsule Endoscopy Room / Other Procedures | 1 | 18,00 | 18,00 |
| Patient Recovery Room + Patient Changing Room + Bathroom | 1 | 12,00 | 12,00 |
| Ultrasound Room | 1 | 16,00 | 16,00 |
| Instrumental Cleaning of Gastroenterology | 1 | 6,00 | 6,00 |
| Instrumental and Material Deposit | 1 | 6,00 | 6,00 |
| Geriatrics Office | 1 | 18,00 | 18,00 |
| Geriatric Patient Triage Room (VF Control: Weight, Height) | 1 | 16,00 | 16,00 |
| Procedures Room for the Specialty (Bone Marrow Biopsy) | 1 | 16,00 | 16,00 |
| Internal Medicine Office | 3 | 16,00 | 48,00 |
| Room for Immunotherapy and Allergy Test | 1 | 16,00 | 16,00 |
| Medicine Office of Enf.Infectious and Tropical | 1 | 18,00 | 18,00 |
| Nephrology Office | 1 | 16,00 | 16,00 |

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| **Functional Unit** | **No.**  **Rooms** | **Area** | **Functional** |  | **m2 built** |
|  | | | | | |
| Procedures Room for the Specialty (Kidney Biopsy) | 1 | 16,00 | 16,00 |  | |
| Pulmonology Office | 1 | 16,00 | 16,00 |
| Spirometry Room + Stress Tests | 2 | 20,00 | 40,00 |
| Bronchofibroscopy Room | 1 | 20,00 | 20,00 |
| Thoracentesis Room | 1 | 16,00 | 16,00 |
| Neurology Office | 2 | 16,00 | 32,00 |
| Electroencephalography (EEG) Room | 2 | 16,00 | 32,00 |
| Electromyography Room (EMG) | 1 | 16,00 | 16,00 |
| Neurological Evoked Potentials Room | 1 | 16,00 | 16,00 |
| Polysomnography Room + Bathroom | 1 | 18,00 | 18,00 |
| Psychiatry Office | 1 | 16,00 | 16,00 |
| Group Psychotherapy Room - Gym - Ludotherapy | 1 | 40,00 | 40,00 |
| Psychoeducation Room + Family Psychotherapy | 1 | 16,00 | 16,00 |
| Rheumatology Office | 2 | 16,00 | 32,00 |
| Infiltration Room + Arthrocentesis | 1 | 16,00 | 16,00 |
| TB Clinic (Isolated Distant HIV Environment) | 1 | 18,00 | 18,00 |
| Tuberculosis Counseling and Prevention | 1 | 16,00 | 16,00 |
| Medication Consumption | 1 | 8,00 | 8,00 |
| Pharmacotherapeutic Dispensing and Monitoring | 1 | 7,00 | 7,00 |
| Procedures Room | 1 | 7,00 | 7,00 |
| Sputum Sampling Environment (Roofed Exterior) | 1 | 3,00 | 3,00 |
| Waiting Room + Reports | 1 | 14,00 | 14,00 |
| Nursing Room / Medication Administration | 1 | 16,00 | 16,00 |
| Patients Bathroom (men - women) | 2 | 3,00 | 6,00 |
| Staff Bathroom | 1 | 3,00 | 3,00 |
| Cleaning Room | 1 | 4,00 | 4,00 |
| Waste Deposit | 1 | 4,00 | 4,00 |
| HIV Office + Bathroom (Isolated environment distant from TB) | 1 | 18,00 | 18,00 |
| Counseling and Prevention of STIs, HIV and AIDS | 1 | 16,00 | 16,00 |
| TARGA Room | 1 | 8,00 | 8,00 |
| Waiting Room + Reports | 1 | 14,00 | 14,00 |
| Patients Bathroom (men - women) | 2 | 3,00 | 6,00 |
| Pharmacotherapeutic Dispensing and Monitoring | 1 | 7,00 | 7,00 |
| Medicine Warehouse | 1 | 6,00 | 6,00 |
| Staff Bathroom | 1 | 3,00 | 3,00 |
| Cleaning Room | 1 | 4,00 | 4,00 |
| Waste Deposit | 1 | 4,00 | 4,00 |
| Mental Health Office | 1 | 16,00 | 16,00 |
| **Surgery Office (considered multipurpose offices)** | 12 |  |  |
| Anesthesiology Office | 1 | 16,00 | 16,00 |
| Pain Therapy Room (10 seats - armchairs) (with monitoring station) (8  m2 x armchair) | 1 | 92,00 | 92,00 |
| Recovery Room (recliners) | 1 | 24,00 | 24,00 |
| Head and Neck Surgery Office | 1 | 16,00 | 16,00 |
| Procedure Room | 1 | 16,00 | 16,00 |

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| **Functional Unit** | **No.**  **Rooms** | **Area** | **Functional** |  | **m2 built** |
|  | | | | | |
| Cardiovascular Surgery Office | 1 | 16,00 | 16,00 |  | |
| Procedure Room | 1 | 16,00 | 16,00 |
| General Surgery Office | 1 | 16,00 | 16,00 |
| Procedure Room | 1 | 16,00 | 16,00 |
| Oncology Surgery Office | 1 | 16,00 | 16,00 |
| Procedure Room | 1 | 16,00 | 16,00 |
| Pediatric Surgery Office | 1 | 16,00 | 16,00 |
| Procedure Room | 1 | 16,00 | 16,00 |
| Topic of Plastic Surgery Procedures | 1 | 16,00 | 16,00 |
| Burn Procedures Room | 1 | 16,00 | 16,00 |
| Neurosurgery Office | 1 | 16,00 | 16,00 |
| Procedure Room | 1 | 16,00 | 16,00 |
| Otolaryngology Office | 1 | 16,00 | 16,00 |
| Audiometry Room (Silent Chamber) | 1 | 16,00 | 16,00 |
| Vestibular Testing Room + Otomicroscopy | 1 | 16,00 | 16,00 |
| Endoscopy Room | 1 | 16,00 | 16,00 |
| Traumatology Office | 2 | 16,00 | 32,00 |
| Plaster Room / Dispensary | 1 | 18,00 | 18,00 |
| Pain Treatment Office | 1 | 16,00 | 16,00 |
| Urology Office + Bathroom | 2 | 18,00 | 36,00 |
| Cystoscopy Room / Dispensary | 1 | 16,00 | 16,00 |
| Urodynamic Room | 1 | 16,00 | 16,00 |
| **Gynecological Obstetrics Specialty** | 4 |  |  |
| Gynecology Office + Bathroom | 2 | 18,00 | 36,00 |
| Colposcopy Room | 1 | 20,00 | 20,00 |
| Multipurpose Procedure Room | 1 | 20,00 | 20,00 |
| Obstetrics Office + Bathroom | 2 | 18,00 | 36,00 |
| Ultrasound Room | 2 | 20,00 | 40,00 |
| Fetal Monitoring Room (2 stretchers) | 1 | 20,00 | 20,00 |
| Cervical-Uterine Pathology Procedures Room | 1 | 20,00 | 20,00 |
| **Pediatrics Specialty** | 3 |  |  |
| Pediatric Office | 1 | 16,00 | 16,00 |
| Teenagers Office | 1 | 16,00 | 16,00 |
| Neonatology Office | 1 | 16,00 | 16,00 |
| **NON-PHYSICIAN’S OFFICES** | 19 |  |  |
| **Dentistry** | 5 |  |  |
| Dental Office: Pediatrics | 2 | 18,00 | 36,00 |
| Dental Office: Adults | 3 | 18,00 | 54,00 |
| X-ray Room (Dental) | 1 | 6,00 | 6,00 |
| Somatic and Maxillofacial Prosthesis Laboratory Room | 1 | 16,00 | 16,00 |
| **Nursing** | 7 |  |  |
| Nursing Office: Elderly | 1 | 16,00 | 16,00 |
| Injection Room | 1 | 18,00 | 18,00 |
| Treatment Room | 1 | 18,00 | 18,00 |
| Nursing Office: Pediatrics | 1 | 16,00 | 16,00 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Functional Unit** | **No.**  **Rooms** | **Area** | **Functional** |  | **m2 built** |
|  | | | | | |
| CRED room | 1 | 18,00 | 18,00 |  | |
| Room for Immunizations RN and Children | 1 | 16,00 | 16,00 |
| Early stimulation room | 1 | 24,00 | 24,00 |
| **Obstetrics** | 1 |  |  |
| Obstetric Room + Bathroom | 1 | 18,00 | 18,00 |
| Family Planning Room | 1 | 16,00 | 16,00 |
| Talk Room and Psychoprophylaxis Therapy (including Bathroom) | 1 | 36,00 | 36,00 |
| **Nutrition** | 2 |  |  |
| Nutrition Office: Adults | 1 | 16,00 | 16,00 |
| Nutrition Office: Pediatrics | 1 | 16,00 | 16,00 |
| **Social Assistance** | 1 |  |  |
| Social Work | 1 | 16,00 | 16,00 |
| **Psychology** | 3 |  |  |
| Psychology Office: Adults | 2 | 16,00 | 32,00 |
| Family Psychotherapy Room (Capacity 10 People) | 1 | 18,00 | 18,00 |
| Psychology Office: Pediatrics | 1 | 16,00 | 16,00 |
| GESSEL Chamber | 1 | 16,00 | 16,00 |
| **TELEMEDICINE** | 1 |  |  |
| Teleconsultation by a Specialist Doctor | 1 | 25,00 | 25,00 |
| Videoconference Room | 1 | 50,00 | 50,00 |
| **SUPPORT AREA Outpatient Care** |  |  |  |
| Staff Bathroom - Men | 1 | 13,00 | 13,00 |
| Staff Bathroom - Women | 1 | 11,00 | 11,00 |
| Supervision Office | 1 | 15,00 | 15,00 |
| Meeting Room | 2 | 18,00 | 36,00 |
| Cloakroom | 2 | 8,00 | 16,00 |
| Fungible Warehouse | 2 | 5,00 | 10,00 |
| Medical Equipment Warehouse | 4 | 10,00 | 40,00 |
| Instrumental Prewash Room | 2 | 9,00 | 18,00 |
| Waste Deposit | 4 | 4,00 | 16,00 |
| Housekeeping / Cleaning Room | 4 | 4,00 | 16,00 |
|  | | | | | |
| **UPSS OPHTHALMOLOGY (INSTITUTE OF OPHTHALMOLOGY)** |  |  | 670,00 | 1,40 | **938,00** |
| **PUBLIC AREA** |  |  |  |  | |
| Entrance Hall | 1 | 24,00 | 24,00 |
| Public Waiting Room | 1 | 60,00 | 60,00 |
| Specialized Pharmacy (including service and daily stock) | 1 | 30,00 | 30,00 |
| Public Bathroom-Men | 1 | 6,00 | 6,00 |
| Public Bathroom-Women | 1 | 5,00 | 5,00 |
| Handicapped Bathroom | 1 | 5,00 | 5,00 |
| **ADMINISTRATIVE AREA** |  |  |  |
| Admission - Reports | 1 | 15,00 | 15,00 |
| Medical Head Office with Bathroom | 1 | 18,00 | 18,00 |
| Nursing Head Office | 1 | 15,00 | 15,00 |
| Medical Head Secretariat Office | 1 | 15,00 | 15,00 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Functional Unit** | **No.**  **Rooms** | **Area** | **Functional** |  | **m2 built** |
|  | | | | | |
| Technical Room - UPS | 1 | 12,00 | 12,00 |  | |
| **CLINICAL AREA** |  |  |  |
| Ophthalmology Office | 5 | 18,00 | 90,00 |
| **Ophthalmology Procedures Offices** | 15 |  |  |
| Recovery Room (5 armchairs) | 5 | 8,00 | 40,00 |
| Campimetry Room 1 and 2 | 2 | 18,00 | 36,00 |
| Refractometry + Keratorefractometry + Pachymetry | 3 | 18,00 | 54,00 |
| Specular Microscopy + Computerized Corneal Topography | 2 | 18,00 | 36,00 |
| Ocular Ultrasound | 1 | 18,00 | 18,00 |
| VISUAL Evoked Potentials | 1 | 18,00 | 18,00 |
| YAG Laser Room | 1 | 15,00 | 15,00 |
| Argon Laser Room | 1 | 15,00 | 15,00 |
| Ocular Tomography Room | 1 | 15,00 | 15,00 |
| Angiography | 1 | 15,00 | 15,00 |
| Ophthalmological Experimental Surgery Laboratory Room (Qx  Practices) | 1 | 15,00 | 15,00 |
| Training Room / Closed Circuit Video Room (30 people) | 1 | 50,00 | 50,00 |
| **CLINICAL SUPPORT AREA** |  |  |  |
| Housekeeping / Cleaning Room | 1 | 4,00 | 4,00 |
| Medical Equipment Warehouse | 1 | 20,00 | 20,00 |
| Warehouse for Stock Medicines | 1 | 20,00 | 20,00 |
| Solid Waste Deposit | 1 | 4,00 | 4,00 |
|  | | | | | |
| **UPSS HEMODIALYSIS** |  |  | 1.087,50 | 1,40 | **1.522,50** |
| **ADMINISTRATIVE AREA** |  |  |  |  | |
| Reception / Admission / Files | 1 | 9,00 | 9,00 |
| Head Office + Bathroom | 1 | 15,00 | 15,00 |
| Secretariat | 1 | 7,00 | 7,00 |
| Staff Bathroom (Men) | 1 | 8,00 | 8,00 |
| Staff Bathroom (Women) | 1 | 8,00 | 8,00 |
| **Outpatient Care Area** |  |  |  |
| Physician’ Office | 1 | 15,00 | 15,00 |
| Multidisciplinary Office (Nutritionist, Social Worker, Psychologist) | 3 | 16,00 | 48,00 |
| Exams and Procedures Room | 2 | 20,00 | 40,00 |
| **HEMODIALYSIS AREA** |  |  |  |
| **Treatment Area** |  |  |  |
| Patient Waiting Room | 1 | 67,50 | 67,50 |
| Patient Weighing Scale | 1 | 4,00 | 4,00 |
| Hemodialysis Room (45 armchairs - 8m2 / armchair) | 1 | 360,00 | 360,00 |
| Hemodialysis Area - Emergency (2 mod. of 3 positions - 6 armchairs) | 1 | 48,00 | 48,00 |
| Support Area (6 equipment) | 1 | 24,00 | 24,00 |
| Post Hemodialysis Rest Room (2 armchairs) (\*\*) | 3 | 10,00 | 30,00 |
| Nurses Station (Including dirty U. and clean U.) (\*\*) | 3 | 14,00 | 42,00 |
| Exam Room and Procedures | 2 | 18,00 | 36,00 |
| **Supplementary Area** |  |  |  |



|  |  |  |  |
| --- | --- | --- | --- |
| Daily Solutions Deposit or Materials Warehouse | 1 | 14,00 | 14,00 |
| Clean Area | 3 | 4,00 | 12,00 |
| Clean Room | 3 | 4,00 | 12,00 |
| Housekeeping / Cleaning Room | 3 | 4,00 | 12,00 |
| Bathroom + Changing Room (Staff-Men) | 1 | 14,00 | 14,00 |
| Bathroom + Changing Room (Staff - Women) | 1 | 15,00 | 15,00 |
| Patient Bathroom - Men | 1 | 6,00 | 6,00 |
| Patient Bathroom - Women | 1 | 6,00 | 6,00 |
| Handicapped Bathroom | 2 | 5,00 | 10,00 |
| **SUPPLEMENTARY SERVICES AREA** |  |  |  |
| Wheelchair Area | 1 | 20,00 | 20,00 |
| Relative's Bathroom - Men | 1 | 3,00 | 3,00 |
| Relative's Bathroom - Women | 1 | 3,00 | 3,00 |
| **GENERAL SERVICE AREA** |  |  |  |
| Water Treatment Plant | 1 | 37,00 | 37,00 |
| Water Storage Room | 1 | 60,00 | 60,00 |
| Solution Warehouse | 1 | 5,00 | 5,00 |
| Dialyzer Filter Warehouse and Lines | 1 | 6,00 | 6,00 |
| Gallons Warehouse | 1 | 40,00 | 40,00 |
| Biocontaminated Room | 1 | 36,00 | 36,00 |
| Machine Maintenance Room | 1 | 15,00 | 15,00 |

(\*\*) The number of units is not binding for the design, it is an estimate for the calculation of surfaces.

301,00

1,40

|  |  |  |  |
| --- | --- | --- | --- |
| **UPSS PERITONEAL DIALYSIS** |  |  | 215,00 |
| **PERITONEAL DIALYSIS AREA** |  |  |  |
| **ADMINISTRATIVE AREA** |  |  |  |
| Head Office + Bathroom | 1 | 15,00 | 15,00 |
| Secretariat | 1 | 7,00 | 7,00 |
| **Outpatient Care Area** |  |  |  |
| Waiting Room | 1 | 12,00 | 12,00 |
| Medical Office | 1 | 15,00 | 15,00 |
| Nursing Office | 1 | 15,00 | 15,00 |
| Multidisciplinary Office (Nutritionist, Social Worker, Psychologist) | 1 | 16,00 | 16,00 |
| **Treatment Area** |  |  |  |
| Education and Training Room | 1 | 20,00 | 20,00 |
| Invasive Procedure Room | 1 | 20,00 | 20,00 |
| Peritoneal Fluid Drainage Room | 1 | 7,00 | 7,00 |
| Dispensary | 1 | 25,00 | 25,00 |
| Automated PD Room | 1 | 15,00 | 15,00 |
| Training Stock Warehouse | 1 | 9,00 | 9,00 |
| **Supplementary Area** |  |  |  |
| Staff Bathroom (Men) | 1 | 7,00 | 7,00 |
| Staff Bathroom (Women) | 1 | 7,00 | 7,00 |
| Housekeeping / Cleaning Room | 1 | 4,00 | 4,00 |
| Solid Waste Deposit | 1 | 4,00 | 4,00 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Functional Unit** | **No.**  **Rooms** | **Area** | **Functional** |  | **m2 built** |
|  | | | | | |
| Patient Bathroom - Men | 1 | 6,00 | 6,00 |  | |
| Patient Bathroom - Women | 1 | 6,00 | 6,00 |
| Handicapped Bathroom | 1 | 5,00 | 5,00 |
|  | | | | | |
| **UPSS PHYSICAL MEDICINE & REHABILITATION** |  |  | 1.224,00 | 1,40 | **1.713,60** |
| **PUBLIC AND ADMINISTRATIVE AREA** |  |  |  |  | |
| Reception - Control | 1 | 9,00 | 9,00 |
| Waiting Room | 1 | 50,00 | 50,00 |
| Bathroom Public - Men | 1 | 6,00 | 6,00 |
| Bathroom Public - Women | 1 | 6,00 | 6,00 |
| Admission | 1 | 11,00 | 11,00 |
| Head Office + Bathroom | 1 | 15,00 | 15,00 |
| Secretariat | 1 | 11,00 | 11,00 |
| **ASSISTANCE AREA** |  |  |  |
| **Physicians’ Offices** |  |  |  |
| Physical Medicine and Rehabilitation Office (Adults) | 2 | 16,00 | 32,00 |
| Office of Physical Medicine and Rehabilitation (Pediatrics) -  Developmental Pathology | 1 | 16,00 | 16,00 |
| Office of Physical Medicine and Rehabilitation (Pediatrics) - Locomotor  Apparatus | 1 | 16,00 | 16,00 |
| **Non-Physician’s Offices** |  |  |  |
| Psychology Office (Adults) | 1 | 14,00 | 14,00 |
| Psychology Office (Pediatrics) | 1 | 14,00 | 14,00 |
| **Procedures Rooms** |  |  |  |
| Medical Procedures Room (Adults) | 1 | 14,00 | 14,00 |
| Medical Procedures Room (Pediatrics) | 1 | 14,00 | 14,00 |
| **Cubicles** |  |  |  |
| Electrotherapy (TENS, Trabert Current, Bernard´s Current,  Interferential Currents, Russian Currents, Multiple Current Electrotherapy, Combination Therapy) (13 cubicles of 6m2) | 1 | 78,00 | 78,00 |
| Thermotherapy (Paraffin Tank, Hot Compress Tank, Infrared Light Lamp, Ultraviolet Light Lamp, Diathermy, Microwave, Ultrasound) (3  cubicles 6m2) + Work Area | 1 | 22,00 | 22,00 |
| Hydrotherapy - (Upper and Lower Limb Tanks) (12m2 cubicles) | 3 | 12,00 | 36,00 |
| Hydrotherapy (Hubbard Therapeutic Tank) | 1 | 45,00 | 45,00 |
| Mechanotherapy (Adult Gym) | 1 | 100,00 | 100,00 |
| Electrotherapy - Pediatrics (TENS, Trabert Current, Bernard´s Current, Interferential Currents, Russian Currents, Multiple Current  Electrotherapy, Combination Therapy) (9 cubicles of 6m2) | 1 | 54,00 | 54,00 |
| Thermotherapy - Pediatrics (Paraffin Tank, Hot Compress Tank, Infrared Light Lamp, Ultraviolet Light Lamp, Diathermy, Microwave,  Ultrasound) (2 cubicles 6m2) + Work Area | 1 | 16,00 | 16,00 |
| Hydrotherapy - Pediatrics (Upper and Lower Limb Tanks) (12m2  cubicles) | 1 | 12,00 | 12,00 |
| Hydrotherapy - Pediatrics (Hubbard Therapeutic Tank) | 1 | 45,00 | 45,00 |
| Hydrotherapy - Pediatrics (Therapeutic Pool) (4 to 6 people) (4 x 2.5),  (0.9 cm to 1.50 m deep) | 1 | 60,00 | 60,00 |
| Mechanotherapy (Kids Gym) | 1 | 100,00 | 100,00 |
| **Special Procedures Rooms** |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Functional Unit** | **No.**  **Rooms** | **Area** | **Functional** |  | **m2 built** |
|  | | | | | |
| Laser Therapy | 1 | 16,00 | 16,00 |  | |
| Magnet Therapy | 1 | 16,00 | 16,00 |
| **Group Room** |  |  |  |
| Group Room for Adults | 1 | 25,00 | 25,00 |
| Group Room for Children | 1 | 25,00 | 25,00 |
| **Therapy Rooms** |  |  |  |
| Speech Therapy (Adults) | 1 | 12,00 | 12,00 |
| Speech Therapy (Pediatrics) | 1 | 12,00 | 12,00 |
| Occupational Therapy (Adults) | 1 | 45,00 | 45,00 |
| Occupational Therapy (Pediatrics) | 1 | 45,00 | 45,00 |
| Cardiac Rehabilitation | 1 | 12,00 | 12,00 |
| ADL - Activities of Daily Living | 1 | 50,00 | 50,00 |
| Multipurpose Room for Workshops | 1 | 25,00 | 25,00 |
| **SUPPORT AREA** |  |  |  |
| Therapist Work and Reports | 1 | 18,00 | 18,00 |
| Stretcher and Wheelchair Area | 2 | 6,00 | 12,00 |
| Patient Bathroom - Men (including handicapped) + Changing Room | 1 | 16,00 | 16,00 |
| Patient Bathroom - Women (including handicapped) + Changing Room | 1 | 16,00 | 16,00 |
| Pediatric Patient Bathroom (including handicapped) + Changing Room | 2 | 12,00 | 24,00 |
| Equipment and Materials Warehouse | 1 | 15,00 | 15,00 |
| Dirty Clothes | 1 | 3,00 | 3,00 |
| Clean Clothes | 1 | 3,00 | 3,00 |
| Housekeeping / Cleaning Room | 1 | 4,00 | 4,00 |
| Solid Waste Deposit | 1 | 4,00 | 4,00 |
| Personal Dressing Room + Bathroom | 2 | 15,00 | 30,00 |
|  | | | | | |
| **UPSS CHEMOTHERAPY** |  |  | 464,00 | 1,40 | **649,60** |
| **CONSULTATION AREA - PHYSICIANS’ OFFICES** |  |  |  |  | |
| Control and Reception | 1 | 10,00 | 10,00 |
| Records Office | 1 | 12,00 | 12,00 |
| Waiting Room | 1 | 72,00 | 72,00 |
| Stretcher and Wheelchair Area | 1 | 5,00 | 5,00 |
| Patient Bathroom - Men | 1 | 8,00 | 8,00 |
| Patient Bathroom - Women | 1 | 8,00 | 8,00 |
| Handicapped Bathroom (men and women) | 2 | 5,00 | 10,00 |
| Multifunctional Office + Bathroom | 1 | 16,00 | 16,00 |
| Clinic Oncology Office + Bathroom | 1 | 16,00 | 16,00 |
| **CHEMOTHERAPY AREA** |  |  |  |
| **Consultation Area** |  |  |  |
| Procedures Room | 1 | 18,00 | 18,00 |
| Special Procedures Room | 1 | 18,00 | 18,00 |
| Adult Chemotherapy Room (5 m2 per position) (14 positions) | 1 | 70,00 | 70,00 |
| Children Chemotherapy Room (5 m2 per position) (6 positions) | 1 | 30,00 | 30,00 |
| **Technical Area** |  |  |  |
| Preparation of Cytostatic Medicines + Lock (6 m2) | 1 | 20,00 | 20,00 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Functional Unit** | **No.**  **Rooms** | **Area** | **Functional** |  | **m2 built** |
|  | | | | | |
| Pre-washing | 1 | 7,00 | 7,00 |  | |
| Sterilization Area | 1 | 12,00 | 12,00 |
| Staff Lounge | 1 | 20,00 | 20,00 |
| Changing Rooms + Staff Bathroom-Men | 1 | 14,00 | 14,00 |
| Changing rooms + Staff Bathroom-Women | 1 | 15,00 | 15,00 |
| **TECHNICAL SUPPORT AREA (for offices and chemotherapy)** |  |  |  |
| General Warehouse | 1 | 12,00 | 12,00 |
| Waste Deposits | 2 | 4,00 | 8,00 |
| Housekeeping / Cleaning Room | 2 | 4,00 | 8,00 |
| Technical Room - UPS | 1 | 4,00 | 4,00 |
| **ADMINISTRATIVE AREA** |  |  |  |
| Service Head Office + Bathroom | 1 | 15,00 | 15,00 |
| Secretariat | 1 | 15,00 | 15,00 |
| Files Area | 1 | 15,00 | 15,00 |
| **STAFF AREA (For UPSS Oncology)** |  |  |  |
| Staff Bathroom | 2 | 3,00 | 6,00 |
|  | | | | | |
| **UPSS RADIOTHERAPY** |  |  | 1.207,50 | 1,40 | **1.690,50** |
| **LINEAR ACCELERATOR ZONE** |  |  |  |  | |
| **Public Area** |  |  |  |
| Stretcher and Wheelchair Area | 1 | 6,00 | 6,00 |
| Waiting Room for Hospitalized Patients | 1 | 6,00 | 6,00 |
| Entrance Hall | 1 | 40,00 | 40,00 |
| Reception and Control | 1 | 6,00 | 6,00 |
| Treatment File / Files Area | 1 | 12,00 | 12,00 |
| Outpatient Waiting Room | 1 | 30,00 | 30,00 |
| Public Bathroom - Men | 1 | 3,00 | 3,00 |
| Public Bathroom - Women | 1 | 3,00 | 3,00 |
| Handicapped Bathroom | 1 | 5,00 | 5,00 |
| Physician’s Office (Radiation Oncology) + Bathroom + Changing Room  (radiotherapist) | 2 | 18,00 | 36,00 |
| Non-Functional Physician’s Office + Bathroom (psychologist,  nutritionist, social worker) | 1 | 15,00 | 15,00 |
| **Administrative Area** |  |  |  |
| Entrance Hall - Administration | 1 | 15,00 | 15,00 |
| Secretariat | 1 | 10,00 | 10,00 |
| Waiting Room + Bathroom | 1 | 30,00 | 30,00 |
| Office of the Head of Service + Bathroom | 1 | 14,00 | 14,00 |
| All-Purpose Room | 1 | 25,00 | 25,00 |
| Staff Office | 1 | 20,00 | 20,00 |
| Bathroom Staff - Women | 1 | 3,00 | 3,00 |
| Bathroom Staff - Men | 1 | 3,00 | 3,00 |
| Cleaning Room | 1 | 4,00 | 4,00 |
| **Simulation Zone** |  |  |  |
| Patient Waiting Room for Treatment | 1 | 20,00 | 20,00 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Functional Unit** | **No.**  **Rooms** | **Area** | **Functional** |  | **m2 built** |
|  | | | | | |
| Bathroom Patients | 2 | 7,00 | 14,00 |  | |
| Nursing Station Inc. Clean and Dirty Utility Area | 1 | 12,00 | 12,00 |
| Pre and Post Preparation and Observation Room Therapy | 1 | 23,00 | 23,00 |
| Recovery | 1 | 8,00 | 8,00 |
| Waiting Room for Hospitalized Patient | 1 | 6,00 | 6,00 |
| Simulation Room (Tomograph) | 1 | 36,00 | 36,00 |
| Mask Making Area | 1 | 8,00 | 8,00 |
| Clean Clothes | 1 | 4,00 | 4,00 |
| Control Panel Area | 1 | 12,00 | 12,00 |
| Contour Room | 1 | 12,00 | 12,00 |
| Planning and Clinical Dosimetry Room | 1 | 14,00 | 14,00 |
| Physical Dosimetry Room | 1 | 14,00 | 14,00 |
| Lounge | 1 | 16,00 | 16,00 |
| Changing Room + Bathroom - Medical Staff | 1 | 12,00 | 12,00 |
| Changing Room + Bathroom - Medical Staff | 1 | 12,00 | 12,00 |
| **Treatment Zone** |  |  |  |
| Linear Accelerator Entrance Hall | 1 | 12,00 | 12,00 |
| Waiting Room | 1 | 25,00 | 25,00 |
| Treatment Room (Linear Accelerator) including Bunker | 1 | 90,00 | 90,00 |
| Treatment Room (Linear Accelerator) including Bunker - Reserve Area | 1 | 90,00 | 90,00 |
| Linear Accelerator Control | 2 | 12,00 | 24,00 |
| Handicapped Bathroom | 1 | 5,00 | 5,00 |
| Changing Room | 4 | 3,00 | 12,00 |
| Cleaning Room | 1 | 4,00 | 4,00 |
| **Service Area (Accelerator Area)** |  |  |  |
| Masks or Other Immobilizers Warehouse | 1 | 7,00 | 7,00 |
| Materials and Medicines Warehouse | 1 | 16,00 | 16,00 |
| Equipment Warehouse | 1 | 18,00 | 18,00 |
| Septic Room | 1 | 6,00 | 6,00 |
| Dirty Clothing Room | 1 | 6,00 | 6,00 |
| Waste Deposit | 1 | 4,00 | 4,00 |
| Cleaning Room | 1 | 4,00 | 4,00 |
| Changing Room – Women + Bathroom | 1 | 14,00 | 14,00 |
| Changing Room - Men + Bathroom | 1 | 15,00 | 15,00 |
| **BRACHYTHERAPY AREA** |  |  |  |
| **Public Area** |  |  |  |
| Wheelchair Area | 1 | 6,00 | 6,00 |
| Entrance Hall | 1 | 20,00 | 20,00 |
| Patients Waiting Room | 1 | 21,00 | 21,00 |
| Brachytherapy Office + Bathroom | 1 | 20,00 | 20,00 |
| **Administrative Area** |  |  |  |
| Entrance Hall - Administration | 1 | 12,00 | 12,00 |
| Waiting Room | 1 | 15,00 | 15,00 |
| Office of the Head of the Brachytherapy Service | 1 | 15,00 | 15,00 |
| Staff Office - Brachytherapy | 1 | 25,00 | 25,00 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Functional Unit** | **No.**  **Rooms** | **Area** | **Functional** |  | **m2 built** |
|  | | | | | |
| Bathroom - Men | 1 | 3,00 | 3,00 |  | |
| Bathroom - Women | 1 | 3,00 | 3,00 |
| **Treatment Zone** |  |  |  |
| Preparation Room | 1 | 18,00 | 18,00 |
| Radiosurgery Room (surgical intervention room) | 1 | 38,00 | 38,00 |
| Radiotherapy Room (radiation room) (including 5m2 control) | 1 | 36,00 | 36,00 |
| Rest Room + Bathroom | 2 | 10,00 | 20,00 |
| Nurses Station | 1 | 15,00 | 15,00 |
| Sterilization Room | 1 | 12,00 | 12,00 |
| Sink Area | 1 | 8,00 | 8,00 |
| **Clinical Support Area** |  |  |  |
| Patient Changing Room - Men | 1 | 7,00 | 7,00 |
| Patient Changing Room - Women | 1 | 7,00 | 7,00 |
| Medical Staff Changing Room - Women + Bathroom | 1 | 14,00 | 14,00 |
| Medical Staff Changing Room - Men + Bathroom | 1 | 15,00 | 15,00 |
| Solid Waste Deposit | 1 | 4,00 | 4,00 |
| Dirty Clothing Room | 1 | 4,00 | 4,00 |
| Septic Room | 1 | 6,00 | 6,00 |
| Clean Clouthing Room | 1 | 2,50 | 2,50 |
|  | | | | | |
| **UPSS EMERGENCY** |  |  | 1.579,20 | 1,50 | **2.368,80** |
| **EXTERNAL AREA** |  |  |  |  | |
| Reserve Area Field Hospital | 1 | --- | --- |
| Arrival Ambulances (width 2 ambulances) | 1 | 36,00 | --- |
| Ambulance Parking (4 ambulances) | 1 | 62,00 | --- |
| Drivers Lounge + Bathroom | 1 | 12,00 | 12,00 |
| **PUBLIC AREA** |  |  |  |
| Entrance Hall | 1 | 18,00 | 18,00 |
| Reception / Admission / Registration | 1 | 18,00 | 18,00 |
| Disaster Information | 1 | 62,00 | --- |
| Disaster Area (possibility of expansion abroad) | 1 | 62,00 | --- |
| Public Waiting Room | 1 | 115,20 | 115,20 |
| Public Bathroom-Men | 1 | 14,00 | 14,00 |
| Public Bathroom-Women | 1 | 12,00 | 12,00 |
| Handicapped Bathroom | 2 | 5,00 | 10,00 |
| Stretcher and Wheelchair Area | 1 | 12,00 | 12,00 |
| Family Interview Room | 2 | 11,00 | 22,00 |
| Area for the National Police (PNP) | 1 | 9,00 | 9,00 |
| Social Work (Administrative Technician, Patient and Family Support) | 1 | 15,00 | 15,00 |
| **CLINICAL AREA** | 19 |  |  |
| Triage | 3 | 11,00 | 33,00 |
| Shock Trauma and Resuscitation Unit | 2 | 25,00 | 50,00 |
| Quick Attention Room | 1 | 18,00 | 18,00 |
| Internal Medicine Room | 4 | 16,00 | 64,00 |
| General Surgery Room | 3 | 16,00 | 48,00 |

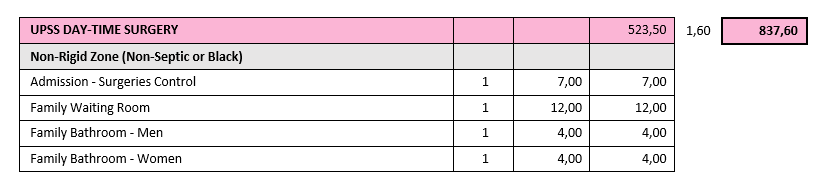
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| **Functional Unit** | **No.**  **Rooms** | **Area** | **Functional** |  | **m2 built** |
|  | | | | | |
| Surgery Procedure Room | 2 | 18,00 | 36,00 |  | |
| Gynecology Room + Bathroom | 1 | 20,00 | 20,00 |
| Pediatrics Room | 2 | 16,00 | 32,00 |
| Neonatology Room | 1 | 12,00 | 12,00 |
| Traumatology Room - Plaster | 1 | 24,00 | 24,00 |
| Waiting Room for Admitted Patients | 1 | 12,00 | 12,00 |
| Injection Room - Adults (including armchair rest area) | 1 | 18,00 | 18,00 |
| Nebulization Room - 6 Adults | 1 | 12,00 | 12,00 |
| Injection Room - Pediatric (including armchair rest area) | 1 | 16,00 | 16,00 |
| Nebulization Room - 4 Pediatric | 1 | 12,00 | 12,00 |
| Rehydration Room - Adults | 1 | 16,00 | 16,00 |
| Rehydration Room - Pediatric | 1 | 12,00 | 12,00 |
| **CLINICAL SUPPORT AREA - AMBULATORY AREA** |  |  |  |
| Nurses station with Bathroom | 1 | 16,00 | 16,00 |
| Dirty Utility Room | 1 | 4,00 | 4,00 |
| Clean Work - Quick Sterilization | 1 | 8,00 | 8,00 |
| Housekeeping / Cleaning Room | 1 | 4,00 | 4,00 |
| Septic Room + Bedpan Washer | 1 | 6,00 | 6,00 |
| Clean Clothing Deposit | 1 | 4,00 | 4,00 |
| Dirty Clothing Deposit | 1 | 4,00 | 4,00 |
| Technical Room | 1 | 10,00 | 10,00 |
| **OBSERVATION AREA** | 49 |  |  |
| Observation Room - Adults Men + Bathroom (6 beds x 9 m2) | 3 | 54,00 | 162,00 |
| Observation Room - Adults Women + Bathroom (6 beds x 9 m2) | 3 | 54,00 | 162,00 |
| Pediatric Observation Room + Bathroom (5 beds x 9 m2) | 3 | 45,00 | 135,00 |
| Isolated Adult (1 bed) with Bathroom + Lock | 1 | 23,00 | 23,00 |
| Isolated Adult Negative Pressure (1 bed) with Bathroom + Lock | 1 | 23,00 | 23,00 |
| Isolated Pediatrics (1 bed) with Bathroom + Lock | 1 | 23,00 | 23,00 |
| Isolated Adult with Negative Pressure (1 bed) with Bathroom + Lock | 1 | 23,00 | 23,00 |
| Shower Hose (Bath) for Patients | 1 | 12,00 | 12,00 |
| Staff Bathroom Rooms | 2 | 3,00 | 6,00 |
| Staff Bathroom - Observation Zone | 2 | 3,00 | 6,00 |
| Handicapped Bathroom | 1 | 5,00 | 5,00 |
| **DIAGNOSIS AIDS & TREATMENT AREA** |  |  |  |

m2 built

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| **Functional Unit** | **N°**  **Rooms** | **N°**  **Rooms** | **Functional** |
| Pharmacy (deposit and dispatch) | 1 | 30,00 | 30,00 |
| Portable X-Ray Equipment Area | 1 | 6,00 | 6,00 |
| **CLINICAL SUPPORT AREA OBSERVATION** |  |  |  |
| Nurses Station with Bathroom | 1 | 13,00 | 13,00 |
| Dirty Job | 1 | 4,00 | 4,00 |
| Clean Job – Quick Sterilization | 1 | 8,00 | 8,00 |
| Cleaning – Housekeeping Room | 1 | 4,00 | 4,00 |
| Septic Room – Bedpan Washer | 1 | 6,00 | 6,00 |
| Clean Clothes Deposit | 1 | 4,00 | 4,00 |
| Dirty Clothes Deposit | 1 | 4,00 | 4,00 |
| Patients Cloakroom | 1 | 4,00 | 4,00 |
| Medical and Instrumental Equipment Deposit | 1 | 12,00 | 12,00 |
| Equipment and Materials Warehouse for Disasters | 1 | 25,00 | 25,00 |
| Medicines Stock Warehouse | 1 | 12,00 | 12,00 |
| Solid Waste Deposit | 1 | 4,00 | 4,00 |
| Technical Room | 1 | 10,00 | 10,00 |
| **STAFF COMFORT AREA** |  |  |  |
| Bathroom + Medical Staff Changing Room | 2 | 16,00 | 32,00 |
| Staff Lounge | 2 | 11,00 | 22,00 |
| **ADMINISTRATIVE AREA** |  |  |  |
| Admission – Information Area | 1 | 15,00 | 15,00 |
| Medical Head Office with Bathroom | 1 | 13,00 | 13,00 |
| Secretariat of the Medical Head Office | 1 | 11,00 | 11,00 |
| Office of the Unit Head (Nurses) | 1 | 12,00 | 12,00 |

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| **UPSS SURGICAL CENTER:** |  |  | 1.175,00 |
| **Non-Rigid Zone (Non-Septic or Black)** |  |  | 79,00 |
| Admission – Operations Control | 1 | 7,00 | 7,00 |
| Family Waiting Room | 2 | 32,00 | 64,00 |
| Family Bathroom - Men | 1 | 4,00 | 4,00 |
| Family Bathroom - Women | 1 | 4,00 | 4,00 |
| Head Physician’s Office | 1 | 15,00 | 15,00 |
| Secretariat | 1 | 12,00 | 12,00 |
| Medical Board Room (1.50 m2 per person) | 1 | 24,00 | 24,00 |
| Nursing Coordination Office | 1 | 12,00 | 12,00 |
| Staff Bathroom - Men | 1 | 4,00 | 4,00 |
| Staff Bathroom - Women | 1 | 4,00 | 4,00 |

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| **Functional Unit** | **N°**  **Rooms** | **Area** | **Functional** |
| Technical Room | 1 | 10,00 | 10,00 |
| Cleaning Room | 1 | 4,00 | 4,00 |
| Solid Waste Deposit | 1 | 4,00 | 4,00 |
| Technical Room - UPS | 1 | 12,00 | 12,00 |
| **Semi-Rigid Zone (Semi Septic Or Gray)** |  |  |  |
| Assistance Staff Lounge | 1 | 40,00 | 40,00 |
| Nurses Station | 1 | 15,00 | 15,00 |
| Recovery Room (6 beds each x 9m2) + (nur + clean + anest) | 1 | 74,00 | 74,00 |
| Recovery Room (6 beds each x 9m2) + (nur + clean + anest) | 2 | 65,00 | 130,00 |
| Anesthesiologist Office | 1 | 10,00 | 10,00 |
| Clean Utility Room | 2 | 6,00 | 12,00 |
| Dirty Utility Room | 2 | 5,00 | 10,00 |
| Clean Clothes (1.5m2 x room) | 1 | 4,00 | 4,00 |
| Dirty Clothes | 1 | 3,00 | 3,00 |
| Instrumental Pre-wash | 1 | 8,00 | 8,00 |
| Septic Room + Bedpan Washer | 1 | 6,00 | 6,00 |
| Medical Equipment Warehouse | 1 | 5,00 | 5,00 |
| Medical Staff Changing Room & Bathroom - Men | 1 | 12,50 | 12,50 |
| Non-Medical Staff Changing Room & Bathroom - Men | 1 | 12,50 | 12,50 |
| Medical Staff Changing Room & Bathroom - Women | 1 | 12,50 | 12,50 |
| Non-Medical Staff Changing Room & Bathroom - Women | 1 | 12,50 | 12,50 |
| Surgical Clothes Storage | 1 | 4,00 | 4,00 |
| Stretcher Transfer | 1 | 9,00 | 9,00 |
| Stretcher and Wheelchair Area | 1 | 5,00 | 5,00 |
| Doctor’s Lounge and Operational Reports | 1 | 12,00 | 12,00 |
| Housekeeping Area of Operating Rooms | 1 | 6,00 | 6,00 |
| Change of Surgical Boots | 1 | 5,00 | 5,00 |
| **Rigid Zone (Aseptic or White)** |  |  |  |
| Patient’s Reception (Rigid Area) | 1 | 20,00 | 20,00 |
| Medical Sink Area | 8 | 3,00 | 24,00 |
| Anaesthetic Induction | 1 | 72,00 | 72,00 |
| Medicines and Supplies Warehouse | 1 | 7,50 | 7,50 |
| Equipment Warehouse for Operating Rooms | 1 | 10,00 | 10,00 |
| Rapid Sterilization and Cleaning of Instruments | 1 | 15,00 | 15,00 |
| Portable X-Ray | 1 | 3,50 | 3,50 |
| Supplies and Sterile Material Warehouse | 1 | 5,00 | 5,00 |
| Polyvalent Operating Room | 5 | 50,00 | 250,00 |
| Cesarean Room | 1 | 50,00 | 50,00 |
| Emergency Operating Room | 1 | 50,00 | 50,00 |
| Neurosurgery and Cardiovascular Operating Room | 1 | 80,00 | 80,00 |



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| **Functional Unit** | **N°**  **Rooms** | **Area** | **Functional** | **m2 built** |
| Solid Waste Deposit | 1 | 4,00 | 4,00 |  |
| Patient Changing Room | 3 | 12,00 | 36,00 |
| **Semi-Rigid Zone (Semi Septic or Gray) \*** |  |  |  |
| Assistance Staff Lounge | 1 | 15,00 | 15,00 |
| Nurses Station | 1 | 15,00 | 15,00 |
| Recovery Room (beds) (2 beds x OR) (6 beds) | 1 | 38,00 | 38,00 |
| Room Preparation and Adaptation to Environment (4 armchairs x OR)  (armchairs-8m2 / armchair) | 1 | 64,00 | 64,00 |
| Anesthesiologist Office | 1 | 10,00 | 10,00 |
| Clean Utility Room | 2 | 6,00 | 12,00 |
| Dirty Utility Room | 2 | 5,00 | 10,00 |
| Clean Clothes (1.5m2 x room) | 1 | 12,00 | 12,00 |
| Dirty Clothes | 1 | 3,50 | 3,50 |
| Surgical Instruments Pre-Wash | 1 | 8,00 | 8,00 |
| Septic Room + Bedpan Washer | 1 | 6,00 | 6,00 |
| Technical Room - UPS | 1 | 4,00 | 4,00 |
| Medical Equipment Warehouse | 1 | 5,00 | 5,00 |
| Medical Staff Changing Room & Bathroom - Men | 1 | 12,00 | 12,00 |
| Non-Medical Staff Changing Room & Bathroom - Men | 1 | 12,00 | 12,00 |
| Medical Staff Changing Room & Bathroom - Women | 1 | 12,00 | 12,00 |
| Non-Medical Staff Changing Room & Bathroom - Women | 1 | 12,00 | 12,00 |
| Surgical Clothes Storage | 1 | 4,00 | 4,00 |
| Patient Transfer | 1 | 12,00 | 12,00 |
| **Rigid Zone (Aseptic or White)** |  |  |  |
| Patient Reception (Rigid Area) | 1 | 10,00 | 10,00 |
| Medical Sink Area | 3 | 3,00 | 9,00 |
| Anaesthetic Induction | 1 | 9,00 | 9,00 |
| Medicines and Supplies Warehouse | 1 | 7,00 | 7,00 |
| Equipment Warehouse for Operating Rooms | 1 | 10,00 | 10,00 |
| Rapid Sterilization and Cleaning of Surgical Instruments | 1 | 15,00 | 15,00 |
| Ophthalmology Operating Room (IPO) | 2 | 40,00 | 80,00 |
| General Surgery Operating Room | 1 | 50,00 | 50,00 |

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| **UPSS OBSTETRIC CENTER** |  |  | 741,50 | 1,60 | 1.186,40 |
| **Unrestricted Area** |  |  |  |  |  |
| Reception - Control | 1 | 5,00 | 5,00 |
| Family Waiting Room + Bathroom | 1 | 54,00 | 54,00 |
| Stretcher and Wheelchair Area | 1 | 6,00 | 6,00 |
| **Semi Restricted Area** |  |  |  |
| Head Office | 1 | 15,00 | 15,00 |
| Secretariat | 1 | 11,00 | 11,00 |
| Obstetric Coordination | 1 | 14,00 | 14,00 |
| Obstetric Workstation | 1 | 15,00 | 15,00 |
| Obstetric Room + Bathroom | 2 | 20,00 | 40,00 |
| Clean Utility Room | 1 | 6,00 | 6,00 |
| Dirty Utility Room | 1 | 6,00 | 6,00 |
| Obstetrics Lounge + Bathrooms | 1 | 15,00 | 15,00 |
| Clean Clothes | 1 | 4,00 | 4,00 |

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| **Functional Unit** | **N°**  **Rooms** | **Area** | **Functional** | **m2 built** |
| Dirty Clothes | 1 | 4,00 | 4,00 |  |
| Patients Waiting Room | 1 | 10,00 | 10,00 |
| Pregnants Changing Room | 2 | 3,00 | 6,00 |
| Curettage Room | 1 | 25,00 | 25,00 |
| Multifunctional Room with Family Assistance | 9 | 36,00 | 324,00 |
| Fetal Monitoring Room (3 beds) | 1 | 30,00 | 30,00 |
| Examination and Preparation Room + Bathrooms (Includes shower) (2  beds + 3 m2 Bathroom) | 1 | 21,00 | 21,00 |
| Dilatation Room with Bathroom (5 beds \* 9 m2 + 3 m2 Per Bathroom) | 1 | 50,00 | 50,00 |
| Newborn Observation | 1 | 9,00 | 9,00 |
| Medical Sink Area | 3 | 3,00 | 9,00 |
| Rapid Sterilization and Surgical Instrument Cleaning | 1 | 5,00 | 5,00 |
| Medical Staff Changing Room with Bathroom - Men | 1 | 9,00 | 9,00 |
| Non-Medical Staff Changing Room with Bathroom - Men | 1 | 9,00 | 9,00 |
| Medical Staff Changing Room with Bathroom - Women | 1 | 9,00 | 9,00 |
| Non-Medical Staff Changing Room with Bathroom - Women | 1 | 9,00 | 9,00 |
| **Support Area** |  |  |  |
| Equipment and Materials Deposit | 1 | 6,00 | 6,00 |
| Placenta Deposit | 1 | 2,00 | 2,00 |
| Septic Room + Bedpan Washer | 1 | 5,00 | 5,00 |
| Solid Waste Deposit | 1 | 3,50 | 3,50 |
| Cleaning - Housekeeping Room | 1 | 5,00 | 5,00 |

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| **UPSS STERILIZATION** |  |  | 490,50 | 1,40 | 686,70 |
| **Contaminated Zone (Red)** |  |  |  |  |  |
| Carts Washing | 1 | 10,00 | 10,00 |
| Clean Carts Warehouse | 1 | 12,00 | 12,00 |
| Staff Changing Room - Men with Bathroom (Dirty Area) | 1 | 14,00 | 14,00 |
| Staff Changing Room - Women with Bathroom (Dirty Area) | 1 | 15,00 | 15,00 |
| Reception and Control of Dirty Material | 1 | 24,00 | 24,00 |
| Washing and Decontamination | 1 | 35,00 | 35,00 |
| Classification | 1 | 12,00 | 12,00 |
| Cleaning -Housekeeping Room | 1 | 5,00 | 5,00 |
| Solid Waste Deposit | 1 | 6,00 | 6,00 |
| **Clean Zone (Blue)** |  |  |  |
| Staff Changing Room - Men with Bathroom (Clean Area) | 1 | 16,00 | 16,00 |
| Staff Changing Room - Women with Bathroom (Clean Area) | 1 | 16,00 | 16,00 |
| Lock | 1 | 4,00 | 4,00 |
| Reception and Control of Clean Material | 1 | 10,00 | 10,00 |
| Head Office with Bathroom | 1 | 15,00 | 15,00 |
| Non-Sterile Material and Equipment Deposit | 1 | 60,00 | 60,00 |
| Textile Material Area | 1 | 6,00 | 6,00 |
| Cutting Area | 1 | 6,00 | 6,00 |
| Heat Sensitive Material Preparation Area | 1 | 30,00 | 30,00 |
| Specialties Material Preparation Area | 1 | 30,00 | 30,00 |
| Prepared Material Storage Area | 1 | 3,50 | 3,50 |

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| **Functional Unit** | **N°**  **Rooms** | **Area** | **Functional** | **M2 built** |
| Lubrication and Instruments Preparation Area | 1 | 6,00 | 6,00 |  |
| Technical Room | 1 | 8,00 | 8,00 |
| **Autoclave Zone (Process Area)** |  |  |  |
| High Temperature Sterilization Zone (Autoclaves) | 2 | 12,00 | 24,00 |
| Low Temperature Sterilization Zone | 1 | 15,00 | 15,00 |
| **Sterile Zone (Green)** |  |  |  |
| Material Reception and Classification | 1 | 36,00 | 36,00 |
| Sterilized Material Warehouse | 1 | 60,00 | 60,00 |
| Sterile Material Dispatch | 1 | 12,00 | 12,00 |

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| **CLINICAL SUPPORT AREAS** |  |  | 4.275,20 | 6.026,07 |
| **UPSS DIAGNOSTIC IMAGING** |  |  | 1.508,00 | 2.262,00 |
| **Customer Service Zone** |  |  |  |  |
| Reception - Delivery of Results | 1 | 12,00 | 12,00 |  |
| Stretcher and Wheelchair Station | 1 | 6,00 | 6,00 |  |
| Hospitalized Patients Waiting Room (Minimum 3 stretchers) | 1 | 20,00 | 20,00 |  |
| Public Bathroom | 2 | 5,00 | 10,00 |  |
| **Administrative Zone** |  |  |  |  |
| Head Office + Bathroom | 1 | 15,00 | 15,00 |  |
| Secretariat | 1 | 10,00 | 10,00 |  |
| Staff Bathroom | 2 | 4,00 | 8,00 |  |
| **Diagnostic Zone** |  |  |  |  |
| **RADIOLOGY SERVICE** |  |  |  |  |
| Waiting Room | 1 | 91,00 | 91,00 |  |
| Digital Radiology Room | 4 | 32,00 | 128,00 |  |
| Additional Patient Changing Room | 4 | 3,00 | 12,00 |  |
| Digital Specialized Radiology Room (with contrast) | 1 | 32,00 | 32,00 |  |
| Additional Patient Changing Room | 1 | 3,00 | 3,00 |  |
| Patient Bathroom | 1 | 4,00 | 4,00 |  |
| Patient Preparation Room | 2 | 6,00 | 12,00 |  |
| General Deposit | 1 | 9,00 | 9,00 |  |
| Data Storage File | 1 | 12,00 | 12,00 |  |
| Reading Room + Image Reading | 1 | 15,00 | 15,00 |  |
| Bathroom + Staff Changing Room | 2 | 12,00 | 24,00 |  |
| Ultrasound Room + Bathroom + Changing Room | 5 | 20,00 | 100,00 |  |
| Mammography Room with Changing Room | 2 | 18,00 | 36,00 |  |
| Densitometry Room with Changing Room | 2 | 18,00 | 36,00 |  |
| Contrast Preparation Room | 1 | 16.00 | 16,00 |  |
| Cleaning – Housekepping Room | 1 | 4,00 | 4,00 |  |
| Solid Waste Deposit | 1 | 4,00 | 4,00 |  |
| **TOMOGRAPHY** |  |  |  |  |
| Waiting Room | 1 | 15,00 | 15,00 |  |
| Supplies Warehouse | 1 | 12,00 | 12,00 |  |
| Equipment Cabinet | 1 | 4,00 | 4,00 |  |
| Staff Bathroom + Changing Rooms | 2 | 8,00 | 16,00 |  |
| Patient Bathroom & Changing Room | 2 | 4,00 | 8,00 |  |

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| **Functional Unit** | **N°**  **Rooms** | **Area** | **Functional** | **M2 built** |
| Tomography Room | 2 | 36,00 | 72,00 |  |
| Patient Preparation and Rest Room | 1 | 15,00 | 15,00 |
| Command | 2 | 7,00 | 14,00 |
| Technical Room | 1 | 11,00 | 11,00 |
| Reading and Printing Room | 1 | 15,00 | 15,00 |
| **MAGNETIC RESONANCE** |  |  |  |
| Reception and Admission | 1 | 6,00 | 6,00 |
| Waiting Room | 1 | 9,00 | 9,00 |
| Patient Bathroom + Changing Rooms | 2 | 6,00 | 12,00 |
| Magnetic Resonance Room | 1 | 40,00 | 40,00 |
| Patient Preparation and Rest Room | 1 | 15,00 | 15,00 |
| Command | 1 | 7,00 | 7,00 |
| Technical Room | 1 | 11,00 | 11,00 |
| Equipment Cabinet | 1 | 12,00 | 12,00 |
| Reading and Printing Room | 1 | 20,00 | 20,00 |
| Supplies Deposit | 1 | 12,00 | 12,00 |
| Staff Bathroom + Changing Rooms | 2 | 8,00 | 16,00 |
| Reserved Area | 1 | 100,00 | 100,00 |
| **LITHOTRIPSY** |  |  |  |
| Waiting Room | 1 | 9,00 | 9,00 |
| Preparation Room | 1 | 16,00 | 16,00 |
| Nurse Care + Supplies Dep. | 1 | 12,00 | 12,00 |
| Supplies Deposit | 1 | 12,00 | 12,00 |
| Staff Changing Room & Bathroom | 2 | 6,00 | 12,00 |
| Patient Bathroom & Changing Room | 2 | 8,00 | 16.00 |
| Extracorporeal Lithotripsy Room | 1 | 40,00 | 40,00 |
| Command Room | 1 | 3,00 | 3,00 |
| Reading and Printing Room | 1 | 9,00 | 9,00 |
| Rest Room | 1 | 24,00 | 24,00 |
| **INTERVENTIONAL RADIOLOGY** |  |  |  |
| **Public Area** |  |  |  |
| Waiting Room | 1 | 24,00 | 24,00 |
| Patient Bathroom | 2 | 3,00 | 6,00 |
| Handicapped Bathroom | 1 | 5,00 | 5,00 |
| Stretcher and Wheelchairs Station | 1 | 6,00 | 6,00 |
| **Administrative Area and Clinical Support** |  |  |  |
| Reception - Control | 1 | 10,00 | 10,00 |
| Inactive File | 1 | 18,00 | 18,00 |
| Passive File | 1 | 9,00 | 9,00 |
| Secretariat | 1 | 10,00 | 10,00 |
| Head Office + Bathroom | 1 | 15,00 | 15,00 |
| Dispensary (Patient Preparation) + Nurse Station | 1 | 20,00 | 20,00 |
| Sterile Material | 1 | 9,00 | 9,00 |
| Hemodynamic Material | 1 | 18,00 | 18,00 |
| Staff Bathroom + Changing Room | 2 | 12,00 | 24,00 |
| Clean Clothes | 1 | 6,00 | 6,00 |
| **Clinical Area (Rigid Zone)** |  |  |  |

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| **Functional Unit** | **N°**  **Rooms** | **Area** | **Functional** | **M2 built** |
| Medical Sink Area | 2 | 3,00 | 6,00 |  |
| Angiography Room | 1 | 60,00 | 60,00 |  |
| Rest Room (2 patients x Rooms) (10m2) | 1 | 20,00 | 20,00 |  |
| Bathroom Rest Room | 1 | 4,00 | 4,00 |  |
| Dirty Room | 1 | 4,00 | 4,00 |  |
| Clean Room | 1 | 6,00 | 6,00 |  |
| **Service Area** |  |  |  |  |
| Dirty Clothes | 1 | 6,00 | 6,00 |  |
| Cleaning – Housekeeping Room | 1 | 4,00 | 4,00 |  |
| Solid Waste Deposit | 1 | 4,00 | 4,00 |  |
| Technical Room - UPS | 1 | 4,00 | 4,00 |  |

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| **UPSS NUCLEAR MEDICINE** |  |  | 189,00 | 1,50 | 283,50 |
| **Customer Service Zone** |  |  |  |  | |
| Waiting Room | 1 | 15,00 | 15,00 |
| Reception, Reports and Entry Control | 1 | 6,00 | 6,00 |
| **Diagnostic Zone** |  |  |  |
| Secretariat | 1 | 10,00 | 10,00 |
| Home Office + Bathroom | 1 | 15,00 | 15,00 |
| Managed Patient Waiting Room | 1 | 10,00 | 10,00 |
| Medicine Offices | 1 | 15,00 | 15,00 |
| Control Room and Report Processing | 2 | 12,00 | 24,00 |
| Radioactive Substances Storage and Preparation Room | 1 | 7,00 | 7,00 |
| Measurement Room: Rotating Gamma Camera, includes command room  (5m²) and Machine Room (5m²) | 1 | 40,00 | 40,00 |
| Radioactive Substances Administration Room | 1 | 16,00 | 16,00 |
| Radioactive Waste Room | 1 | 4,00 | 4,00 |
| File Room | 1 | 11,00 | 11,00 |
| Managed Patients Bathrooms | 1 | 6,00 | 6,00 |
| Staff Bathrooms | 2 | 3,00 | 6,00 |
| Cleaning Room | 1 | 4,00 | 4,00 |

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| **UPSS PHARMACY** |  |  | 629,80 | 1,35 | 850,23 |
| **DISPENSING AREA** |  |  |  |  | |
| Waiting (8 patients per window, 1.2 m2 per person) | 1 | 76,80 | 76,80 |
| Outpatient Medicines Dispensing (5 windows) | 1 | 20,00 | 20,00 |
| Hospital Medicines Dispensing | 1 | 10,00 | 10,00 |
| Specialized Medicines Dispensing: ER, OR, ICUs and Others | 1 | 10,00 | 10,00 |
| Unit Dose Preparation | 1 | 20,00 | 20,00 |
| **MANAGEMENT, PROGRAMMING AND STORAGE AREA** |  |  |  |
| Head Office + Bathroom | 1 | 15,00 | 15,00 |
| Secretariat | 1 | 15,00 | 15,00 |
| Meeting Room | 1 | 17,00 | 17,00 |
| Peripheral Pharmacy Warehouse | 1 | 60.00 | 60.00 |
| Unit Dose Medicine Storage | 1 | 36,00 | 36,00 |
| Quarantine Area | 1 | 12,00 | 12,00 |
| Cold Rooms | 1 | 12,00 | 12,00 |
| Special Control Medicines | 1 | 15,00 | 15,00 |

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| **Functional Unit** | **N°**  **Rooms** | **Area** | **Functional** | **M2 built** |
| Returned Products Area | 1 | 12,00 | 12,00 |  |
| Inventory and Control System | 1 | 10,00 | 10,00 |
| **CLINICAL PHARMACY AREA** |  |  |  |
| Clinical Pharmacokinetics | 1 | 12,00 | 12,00 |
| Medicines and Toxic Information | 1 | 15,00 | 15,00 |
| Outpatient Pharmacotherapeutic Follow-Up | 1 | 15,00 | 15,00 |
| Pharmacotherapeutic Follow-Up in Hospitalization | 1 | 15,00 | 15,00 |
| Pharmacovigilance and Technovigilance | 1 | 15,00 | 15,00 |
| **PHARMACOTECNIA ZONE** |  |  |  |
| Support Area | 1 | 12,00 | 12,00 |
| Conditioning and Relaunch | 1 | 12,00 | 12,00 |
| Preparation of Non-Sterile Master Formulas | 1 | 24,00 | 24,00 |
| Staff Bathroom | 2 | 3,00 | 6,00 |
| Lock | 1 | 6,00 | 6,00 |
| **White Zone** |  |  |  |
| Intravenous Mixtures Preparation | 1 | 16,00 | 16,00 |
| Lock + Sink | 1 | 4,00 | 4,00 |
| Cytotoxic Preparation | 1 | 12,00 | 12,00 |
| Nutrition Parenteral | 1 | 50,00 | 50,00 |
| Sterile Master Formulas Preparation | 1 | 30,00 | 30,00 |
| Finish Products Disposal | 1 | 6,00 | 6,00 |
| **CLEANING – HOUSEKEEPING AREA** |  |  |  |
| Waste Deposits | 1 | 6,00 | 6,00 |
| Cleaning – Housekeeping Room | 1 | 4,00 | 4,00 |
| **COMFORT ZONE** |  |  |  |
| Bathroom + Staff Changing Room - Men | 1 | 14.00 | 14,00 |
| Bathroom + Staff Changing Room - Women | 1 | 15,00 | 15,00 |

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| **UPSS CLINICAL PATHOLOGY** |  |  | 709,20 | 1,35 | **957,42** |
| **PUBLIC ZONE** |  |  |  |  |  |
| Waiting Room (join with general lobby) | 1 | 115,20 | 115,20 |  |  |
| Public Bathroom - Men | 2 | 3,00 | 6,00 |  |  |
| Public Bathroom - Women | 2 | 3,00 | 6,00 |  |  |
| Handicapped Bathroom | 1 | 5,00 | 5,00 |  |  |
| Sampling (Cubicles) | 16 | 5,00 | 80,00 |  |  |
| Special Sampling | 1 | 9,00 | 9,00 |  |  |
| Reception of Samples - Control - Delivery of Results | 1 | 20,00 | 20,00 |  |  |
| **ADMINISTRATIVE AREA** |  |  |  |  |  |
| Head Office with Bathroom | 1 | 15,00 | 15,00 |  |  |
| Secretariat | 1 | 9,00 | 9,00 |  |  |
| Laboratory Coordinator | 1 | 12,00 | 12,00 |  |  |
| Clinical Laboratory Records | 1 | 12,00 | 12,00 |  |  |
| Work Dispatches | 1 | 18,00 | 18,00 |  |  |
| Multipurpose Meeting Room | 1 | 20,00 | 20,00 |  |  |
| **PROCEDURES AREA** |  |  |  |  |  |
| Sample Preparation and Labeling | 1 | 15,00 | 15,00 |  |  |
| Central Automated Laboratory (Core) (Includes Hematology and  Biochemistry) | 1 | 100,00 | 100,00 |  |  |

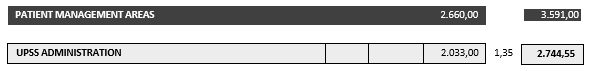
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| --- | --- | --- | --- | --- |
| **Functional Unit** | **N°**  **Rooms** | **Area** | **Functional** | **M2 built** |
| Immunology Laboratories | 1 | 15,00 | 15,00 |  |
| Laminar Flow Cabinet Area | 1 | 12,00 | 12,00 |
| Microbiology / Parasitology Laboratory |  |  |  |
| Separate Room for Microbiology | 1 | 15,00 | 15,00 |
| Separate Room for Urinalysis | 1 | 15,00 | 15,00 |
| Separate Room for Parasitology | 1 | 15,00 | 15,00 |
| Separate Room for TB | 1 | 18,00 | 18,00 |
| Lock | 1 | 9,00 | 9,00 |
| Laminar Flow Cabinet Area | 1 | 12,00 | 12,00 |
| Microbiology Samples Receipt | 1 | 6,00 | 6,00 |
| Emergency Laboratory | 1 | 18,00 | 18,00 |
| **COMMON AREAS** |  |  |  |
| Technical Room | 1 | 24,00 | 24,00 |
| Materials and Supplies Deposit | 1 | 3,50 | 3,50 |
| Materials and Reagents Warehouse | 1 | 40,00 | 40,00 |
| Materials Washing and Sterilization (3 m2 per Lab) | 1 | 18,00 | 18,00 |
| Emergency Shower | 1 | 1,50 | 1,50 |
| **CLINICAL SUPPORT ZONE** |  |  |  |
| Staff Bathroom - Men + Changing Rooms | 1 | 14.00 | 14,00 |
| Staff Bathroom - Women + Changing Rooms | 1 | 15,00 | 15,00 |
| Clean Clothes | 1 | 4,00 | 4,00 |
| Dirty Clothes | 1 | 4,00 | 4,00 |
| Solid Waste Deposit | 1 | 4,00 | 4,00 |
| Cleaning - Housekeeping Room | 1 | 4,00 | 4,00 |

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| **UPSS BLOOD BANK – HEMOTHERAPY** |  |  | 836,20 | 1,35 | **1.128,87** |
| **SEMI-DIRECTED ZONE** |  |  |  |  | |
| Home Office with Bathroom | 1 | 15,00 | 15,00 |
| Meeting Room | 1 | 15,00 | 15,00 |
| Waiting Room | 1 | 12,00 | 12,00 |
| Donor Reception | 1 | 8,00 | 8,00 |
| Office - Medical Exam | 1 | 15,00 | 15,00 |
| Blood Draw | 1 | 40,00 | 40,00 |
| Rest Room | 1 | 15,00 | 15,00 |
| Plasmapheresis | 1 | 20,00 | 20,00 |
| Aseptic Room | 1 | 12,00 | 12,00 |
| Staff Changing Rooms | 1 | 12,00 | 12,00 |
| Mobile Equipment Store | 1 | 20,00 | 20,00 |
| Bathroom | 2 | 9,00 | 18.00 |
| **Blood Test** |  |  |  |
| Donor Sample Analysis | 1 | 40,00 | 40,00 |
| Reception, Classification and Typification | 1 | 20,00 | 20,00 |
| Detection of Communicable Diseases | 1 | 20,00 | 20,00 |
| Reagents Preparation | 1 | 15,00 | 15,00 |
| Compatibility Testing | 1 | 15,00 | 15,00 |
| **Blood Components Production** |  |  |  |
| Materials Reception | 1 | 15,00 | 15,00 |

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| **Functional Unit** | **N°**  **Rooms** | **Area** | **Functional** | **M2 built** |
| Isolation Techniques | 1 | 10,00 | 10,00 |  |
| Aseptic Rooms | 1 | 15,00 | 15,00 |
| Centrifuges | 1 | 30,00 | 30,00 |
| Cold Room + 4 ° C | 1 | 20,00 | 20,00 |
| Sterile Instrumental Warehouse | 1 | 20,00 | 20,00 |
| Control Laboratory | 1 | 20,00 | 20,00 |
| Cryobiology Refrigeration | 1 | 20,00 | 20,00 |
| Cryobiology Warehouse | 1 | 30,00 | 30,00 |
| **Quality Control** |  |  |  |
| Reception of Materials | 1 | 12,00 | 12,00 |
| Lock | 1 | 4,20 | 4,20 |
| Microbiology | 1 | 18,00 | 18,00 |
| Sterile Chamber | 1 | 6,00 | 6,00 |
| Mediums Preparation | 1 | 20,00 | 20,00 |
| Laboratory | 1 | 30,00 | 30,00 |
| Material Deposit | 1 | 15,00 | 15,00 |
| **Components Storage and Distribution** |  |  |  |
| Storage - 30 ° C | 1 | 20,00 | 20,00 |
| Storage + 4 ° C | 1 | 40,00 | 40,00 |
| Antechamber | 1 | 10,00 | 10,00 |
| Distribution | 1 | 24,00 | 24,00 |
| **CLINICAL SUPPORT** |  |  |  |
| Sterilization | 1 | 40,00 | 40,00 |
| Sterile Warehouse | 1 | 10,00 | 10,00 |
| Distillation | 1 | 20,00 | 20,00 |
| Washing | 1 | 40,00 | 40,00 |
| Material Warehouse | 1 | 12,00 | 12,00 |
| Reagent Warehouse | 1 | 12,00 | 12,00 |
| Cleaning - Housekeeping Room | 1 | 5,00 | 5,00 |
| Solid Waste Deposit | 1 | 6,00 | 6,00 |

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| **UPSS PATHOLOGICAL ANATOMY:** |  |  | 403,00 | 1,35 | 544,05 |
| **Laboratories’ Zone** |  |  |  |  | |
| Sampling | 1 | 11,00 | 11,00 |
| Sample Reception | 1 | 12,00 | 12,00 |
| Sample Storage | 1 | 20,00 | 20,00 |
| Surgical Pathology Laboratory | 1 | 15,00 | 15,00 |
| Cytology Laboratory | 1 | 15,00 | 15,00 |
| Histochemical Techniques Laboratory | 1 | 15,00 | 15,00 |
| Immunohistochemistry and Immunofluorescence Laboratory | 1 | 15,00 | 15,00 |
| Genetics Laboratory | 1 | 15,00 | 15,00 |
| Macroscopy Room and Sample File | 1 | 15,00 | 15,00 |
| Intraoperative Examination Laboratory | 1 | 15,00 | 15,00 |
| Reading Room | 1 | 15,00 | 15,00 |
| Waxed Block and Sheet File | 1 | 18,00 | 18,00 |

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| **Functional Unit** | **N° Rooms** | **Area** | **Functional** | **M2 built** |
| Microscopy | 1 | 15,00 | 15,00 |  |
| Necropsy Room | 1 | 24,00 | 24,00 |
| Corpse Delivery Room | 1 | 20,00 | 20,00 |
| **Public Zone** |  |  |  |
| Mourners Waiting Room | 1 | 15,00 | 15,00 |
| Public Bathroom | 2 | 3,00 | 6,00 |
| Corpses Preparation | 1 | 7,00 | 7,00 |
| Head Office with Bathroom | 1 | 15,00 | 15,00 |
| Secretariat and Delivery of Results | 1 | 11,00 | 11,00 |
| Teaching Room and Cases Review | 1 | 24,00 | 24,00 |
| **Procedures Zone** |  |  |  |
| Corpse Preservation Chamber (8 corpses) | 1 | 20,00 | 20,00 |
| Washing and Sterilization (Pre-Washing of instruments) | 1 | 7,00 | 7,00 |
| Material Storage | 1 | 6,00 | 6,00 |
| Bathroom + Changing Room Necropsy Room | 1 | 6,00 | 6,00 |
| **Support Zone** |  |  |  |
| Clinic Dump Waste | 1 | 6,00 | 6,00 |
| Solid Waste Deposit | 1 | 4,00 | 4,00 |
| Cleaning - Housekeeping Room | 1 | 4,00 | 4,00 |
| **Staff Comfort Zone** |  |  |  |
| Medical Staff Bathroom + Changing Room | 2 | 8,00 | 16,00 |
| Non-Medical Staff Bathroom + Changing Room | 2 | 8,00 | 16,00 |

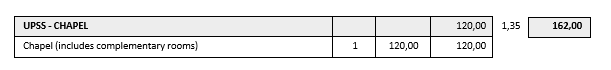


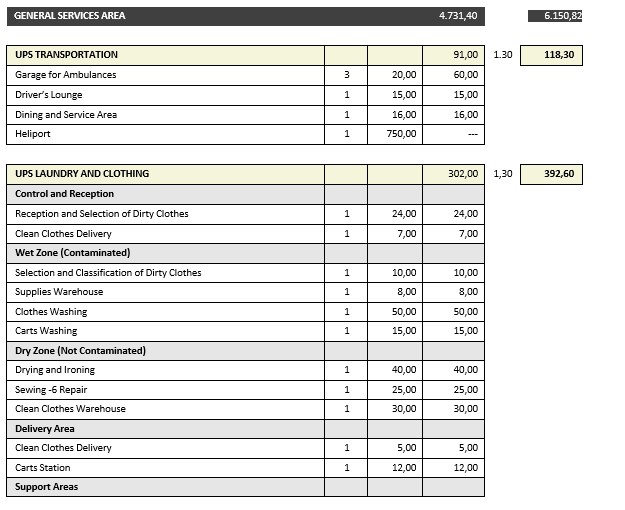
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| **CARE NETWORK MANAGEMENT** |  |  |  |  |
| Entrance Hall | 1 | 24,00 | 24,00 |
| Secretariat + Waiting Room | 1 | 30,00 | 30,00 |
| Manager Office + Bathroom | 1 | 24,00 | 24,00 |
| Meeting Room | 1 | 15,00 | 15,00 |
| Staff Bathroom - Men | 1 | 33,00 | 33,00 |
| Staff Bathroom - Women | 1 | 39,00 | 39,00 |
| Kitchenette | 1 | 3,00 | 3,00 |
| Handicapped Bathroom - Women | 1 | 5,00 | 5,00 |
| Handicapped Bathroom - Men | 1 | 5,00 | 5,00 |
| Cleaning - Housekepping Room | 1 | 4,00 | 4,00 |
| Waste Deposit | 1 | 4,00 | 4,00 |
| Seismograph | 1 | 8,00 | 8,00 |
| **SUPPORT UNITS** |  |  |  | Natural |
| **Management Office** |  |  |  | 172 |
| Head Office + Bathroom + Meeting Room | 1 | 30,00 | 30,00 |  |
| Secretariat + Waiting Room | 1 | 30,00 | 30,00 |  |
| **Pool of Professionals** |  |  |  |  |
| Staff Administration Unit (5m2 per desk) | 1 | 15,00 | 15,00 | 3 |
| File Unit and Staff Well-Being (5m2 per desk) | 1 | 15,00 | 15,00 | 3 |

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| **Functional Unit** | **N°**  **Rooms** | **Area** | **Functional** | **m2 built** |
| Accounting and Costs Unit (5m2 per desk) | 1 | 40,00 | 40,00 | 8 |
| Treasury and Costs Unit (5m2 per desk) | 1 | 35,00 | 35,00 | 7 |
| Programming and Acquisitions Unit (5m2 per desk) | 1 | 50,00 | 50,00 | 10 |
| Warehouse Unit (5m2 per desk) | 1 | 25,00 | 25,00 | 5 |
| Maintenance, Infrastructure, Equipment & General Services Unit.  (5m2 per desk) | 1 | 20,00 | 20,00 | 4 |
| Wealth Control Unit (5m2 per Desk) | 1 | 20,00 | 20,00 | 4 |
| **Divisions** |  |  |  |  |
| IT Support Division (5m2 per desk) | 1 | 35,00 | 35,00 | 7 |
| Finance Division (includes safe 5m2 + windows (3 \* 3m2)) (5m2 per  desk) | 1 | 10,00 | 10,00 | 2 |
| Acquisitions Division (5m2 per desk) | 1 | 40,00 | 40,00 | 8 |
| Hospital Engineering and Services Division (5m2 per desk) | 1 | 15,00 | 15,00 | 3 |
| Human Resources Division (5m2 per desk) | 1 | 60,00 | 60,00 | 12 |
| **Training, Research and Teaching Unit** |  |  |  |  |
| Training, Research and Teaching Unit (5m2 per desk) | 1 | 15,00 | 15,00 | 3 |
| **ADVISORY UNITS** |  |  |  |  |
| Legal Advisory Unit | 1 | 25,00 | 25,00 | 5 |
| **Planning and Quality Office** |  |  |  |  |
| Head Office + Bathroom + Meeting Room | 1 | 30,00 | 30,00 |  |
| Secretariat | 1 | 12,00 | 12,00 |  |
| Planning and Quality Division (5m2 per desk) | 1 | 15,00 | 15,00 | 3 |
| Health Intelligence Division (5m2 per desk) | 1 | 25,00 | 25,00 | 5 |
| Medical Resources Division (5m2 per desk) | 1 | 15,00 | 15,00 | 3 |
| **Institutional Relations Office** |  |  |  |  |
| Office | 1 | 10,00 | 10,00 | 2 |
| Waiting Room | 1 | 18,00 | 18,00 |  |
| **LINE UNITS** |  |  |  |  |
| **Benefits Coordination and Primary Care Office** |  |  |  |  |
| Head Office + Bathroom + Meeting Room | 1 | 30,00 | 30,00 |  |
| Secretariat | 1 | 15,00 | 15,00 | 3 |
| Coordination Office Pool of Professionals (5m2 per desk) | 1 | 40,00 | 40,00 | 8 |
| Economic Benefits Unit (5m2 per desk) | 1 | 40,00 | 40,00 | 8 |
| Social Benefits Unit (5m2 per desk) | 1 | 20,00 | 20,00 | 4 |
| **Hospital Base Management** |  |  |  |  |
| Waiting Room | 1 | 18,00 | 18,00 |  |
| Management Office with Bathroom | 1 | 15,00 | 15,00 |  |
| Reports - Reception | 1 | 12,00 | 12,00 |  |
| Secretariat with Kitchenette | 1 | 10,00 | 10,00 | 2 |
| Meeting Room - Library | 1 | 60,00 | 60,00 | 12 |
| Insured Service Office | 1 | 10,00 | 10,00 | 2 |
| Admission, Medical Records, Referrals and Counter-referrals Division | 1 | 60,00 | 60,00 | 12 |
| Medical Staff Office | 1 | 12,00 | 12,00 |  |
| Volunteering with Meeting Room | 1 | 120,00 | 120,00 | 24 |
| Multipurpose Room | 1 | 60,00 | 60,00 |  |
| Handicapped Bathroom - Men | 1 | 4,00 | 4,00 |  |
| Handicapped Bathroom - Women | 1 | 4,00 | 4,00 |  |
| Cleaning – Housekeeping Room | 1 | 4,00 | 4,00 |  |

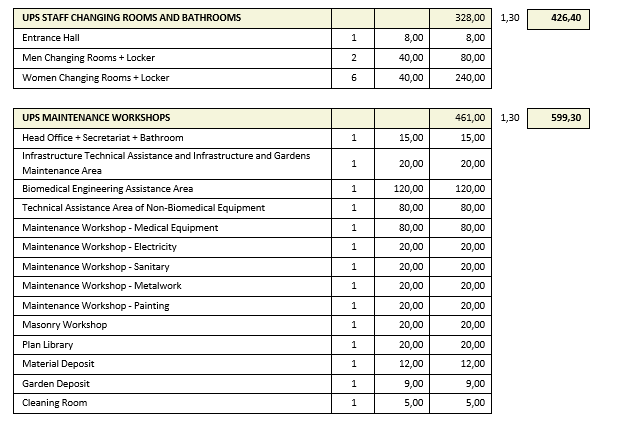
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| **Functional Unit** | **N°**  **Rooms** | **Area** | | **Functional** | **m2 built** |
| Waste Deposit | 1 | | 4,00 | 4,00 |  |
| Social Worker Office | 1 | | 15,00 | 15,00 |  |
| **HOSPITAL ADMINISTRATION** |  | |  |  |  |
| Staff Entry Control + Card holder | 1 | | 2,00 | 2,00 |  |
| Documentary Procedure | 1 | | 9,00 | 9,00 |  |
| General Directorate / Executive Directorate | 1 | | 24,00 | 24,00 | 1 |
| Sub Directorate | 1 | | 15,00 | 15,00 | 1 |
| Secretariat | 1 | | 15,00 | 15,00 | 1 |
| Institutional Control Office | 1 | | 12,00 | 12,00 | 1 |
| Strategic Planning Office | 1 | | 30,00 | 30,00 | 5 |
| Legal Advisory Unit | 1 | | 9,00 | 9,00 | 1 |
| Quality Management Unit | 1 | | 24,00 | 24,00 | 4 |
| Epidemiology Unit | 1 | | 18.00 | 18.00 | 3 |
| Administration Office (Head) | 1 | | 12,00 | 12,00 | 1 |
| Secretariat | 1 | | 9,00 | 9,00 | 1 |
| Economy and Finance Unit | 1 | | 30,00 | 30,00 | 5 |
| Pool Off. Accounting, Economy, Treasury and Cash | 1 | | 24,00 | 24,00 | 4 |
| Informatics and Statistics Unit | 1 | | 24,00 | 24,00 | 4 |
| Staff Unit | 1 | | 30,00 | 30,00 | 5 |
| Logistics and Assets Unit | 1 | | 24,00 | 24,00 | 4 |
| Insurance Unit | 1 | | 24,00 | 24,00 | 4 |
| Waiting Room | 1 | | 18,00 | 18,00 |  |
| Documentary File | 1 | | 20,00 | 20,00 |  |
| Training Office | 1 | | 24,00 | 24,00 | 4 |
| Staff Bathroom – Men | 1 | | 12,00 | 12,00 |  |
| Staff Bathroom – Women | 1 | | 13,00 | 13,00 |  |
| **PROVIDER UNITS** |  | |  |  |  |
| **CEPRIT** |  | |  |  |  |
| CEPRIT Office (5m2 per desk) | 1 | | 40,00 | 40,00 | 8 |
| **PPP MANAGEMENT UNIT** |  | |  |  |  |
| Waiting Room | 1 | | 18,00 | 18,00 |  |
| Concessionaire Manager Office | 1 | | 24,00 | 24,00 | 1 |
| Head of Legal Department | 1 | | 15,00 | 15,00 | 1 |
| Head of Operations Department | 1 | | 15,00 | 15,00 | 1 |
| Head of Finance Department | 1 | | 15,00 | 15,00 | 1 |
| Head of General Services Department | 1 | | 15,00 | 15,00 | 1 |
| Head of Maintenance Department | 1 | | 15,00 | 15,00 | 1 |
| Secretariat | 1 | | 12,00 | 12,00 | 1 |
| Staff Bathroom - Men | 1 | | 7,00 | 7,00 |  |
| Staff Bathroom - Women | 1 | | 6,00 | 6,00 |  |
| Kitchenette | 1 | | 3,00 | 3,00 |  |
| Warehouse | 1 | | 6,00 | 6,00 |  |
| Supervisor Office | 3 | | 12,00 | 36,00 | 3 |
| Secretariat | 1 | | 12,00 | 12,00 | 1 |
| Boardroom | 1 | | 20,00 | 20,00 |  |

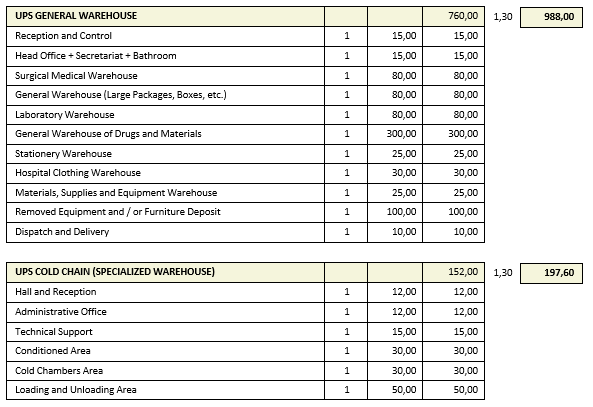
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| **Functional Unit** | **N°**  **Rooms** | **Area** | **Functional** | **m2 built** |
| Entrance Hall | 1 | 6,00 | 6,00 |  |
| Head Office + Bathroom | 1 | 15,00 | 15,00 |
| Informatics Office (Administrative) | 1 | 9,00 | 9,00 |
| Technical Support | 1 | 20,00 | 20,00 |
| Central Surveillance and Security | 1 | 9,00 | 9,00 |
| Communications Center | 1 | 9,00 | 9,00 |
| Data Centre |  |  |  |
| Electrical Control Room | 1 | 12,00 | 12,00 |
| Equipment Rooms | 1 | 36,00 | 36,00 |
| Service Provider Room | 1 | 3,00 | 3,00 |
| Data Center Administration Room | 1 | 9,00 | 9,00 |
| Data Center Storage | 1 | 6,00 | 6,00 |
| Communications Room (located in the different UPSS) | 30 | 12,00 | 360,00 |
| Staff Bathroom - Men | 1 | 3,00 | 3,00 |
| Staff Bathroom - Women | 1 | 3,00 | 3,00 |
| Handicapped Bathroom | 1 | 5,00 | 5,00 |
| Cleaning – Housekeeping Room | 1 | 4,00 | 4,00 |
| Waste Deposit | 1 | 4,00 | 4,00 |





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| **Functional Unit** | **N°**  **Rooms** | **Area** | **Functional** | **m2 built** |
| Head Office + Secretariat + Bathroom | 1 | 30,00 | 30,00 |  |
| New Clothes, Cloth Bales and Others Warehouse | 1 | 30,00 | 30,00 |
| Waste Deposit | 1 | 8,00 | 8,00 |
| Cleaning Room | 1 | 8,00 | 8,00 |





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| **Functional Unit** | **N°**  **Rooms** | **Area** | **Functional** | **m2 built** |
| Staff Bathroom | 1 | 3,00 | 3,00 |  |

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| **UPS CLEANING** |  |  | 68,00 | 1,30 | 88,40 |
| Cleaning Supplies Warehouse | 1 | 12,00 | 12,00 |  | |
| Cleaning Materials Deposit | 1 | 10,00 | 10,00 |
| Cleaning and Gardens Coordinator | 1 | 30,00 | 30,00 |
| Changing Room - Men | 1 | 8,00 | 8,00 |
| Changing Room - Women | 1 | 8,00 | 8,00 |

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| **UPS SURVEILLANCE** |  |  | 80,00 | 1,30 | **104,00** |
| Changing Room - Men | 4 | 6,00 | 24,00 |  | |
| Changing Room - Women | 4 | 6,00 | 24,00 |
| Weapons Warehouse | 1 | 8,00 | 8,00 |
| Checkpoint Control + Bathroom | 4 | 6,00 | 24,00 |

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| **UPSS NUTRITION AND DIETETICS** |  |  | 1.362,20 | 1,30 | **1.770,86** |
| **Control and Reception Area** |  |  |  |  | |
| Nutritionist Office | 1 | 12,00 | 12,00 |
| Supply Loading and Unloading. | 1 | 16,00 | 16,00 |
| Supply Control | 1 | 10,00 | 10,00 |
| **Warehouse Area** |  |  |  |
| Hall | 1 | 15,00 | 15,00 |
| Perishable Goods Warehouse | 1 | 5,00 | 5,00 |
| Non-Perishable Goods Warehouse | 1 | 15,00 | 15,00 |
| Tubers Warehouse | 1 | 15,00 | 15,00 |
| **Preservation Area** |  |  |  |
| Antechamber | 1 | 12,00 | 12,00 |
| Dairy Products | 1 | 7,00 | 7,00 |
| Meat Products | 1 | 7,00 | 7,00 |
| Fish | 1 | 7,00 | 7,00 |
| Fruits, Green and Leafy Vegetables | 1 | 7,00 | 7,00 |
| Frozen Products | 1 | 7,00 | 7,00 |
| **Preparation Area** |  |  |  |
| Nutrition Coordination Office | 1 | 12,00 | 12,00 |
| Food Preparation and Cooking (1.05 m2 x bed) | 1 | 340,20 | 340,20 |
| Distribution Center of Prepared Food | 1 | 30,00 | 30,00 |
| Formulas Preparation | 1 | 24,00 | 24,00 |
| Packaging and Refrigeration | 1 | 10,00 | 10,00 |
| Sterilization and Distribution | 1 | 15,00 | 15,00 |
| Trash Classification | 1 | 18,00 | 18,00 |
| Dishwashing and Dishes and Utensils Storage | 1 | 12,00 | 12,00 |
| Thermal Carts Washing and Station | 1 | 10,00 | 10,00 |
| **Technical Support** |  |  |  |
| Head Office + Bathroom | 1 | 15,00 | 15,00 |
| Secretariat | 1 | 11,00 | 11,00 |
| Staff Changing Room – Women + Bathroom | 1 | 14,00 | 14,00 |
| Staff Changing Room – Men + Bathroom | 1 | 15,00 | 15,00 |

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| **Functional Unit** | **N°**  **Rooms** | **Area** | **Functional** | **m2 built** |
| Solid Waste Deposit | 1 | 10,00 | 10,00 |  |
| Detergent Supplies | 1 | 4,00 | 4,00 |
| Cleaning Room | 1 | 5,00 | 5,00 |
| Unit Staff Dining Room | 1 | 12,00 | 12,00 |
| Staff Dining Room | 1 | 270,00 | 270,00 |
| Public Cafeteria | 1 | 400,00 | 400,00 |

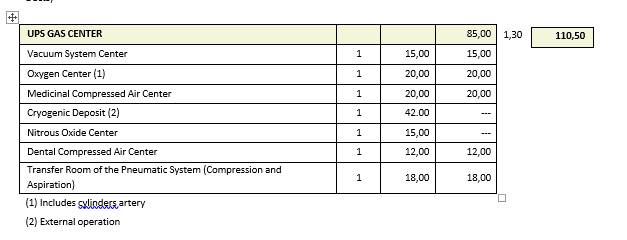
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| --- | --- | --- | --- | --- | --- |
| **UPS ENVIRONMENTAL HEALTH** |  |  | 266,00 | 1,30 | **345,80** |
| Environmental Health Unit | 1 | 20,00 | 20,00 |  | |
| Occupational Health Unit | 1 | 20,00 | 20,00 |
| Staff Bathroom & Changing Room | 2 | 8,00 | 16,00 |
| **Load** |  |  |  |
| Switchyard | 1 | 35,00 | --- |
| **Solid Waste Management (outsourced service)** |  |  |  |
| Cleaning room | 1 | 4,00 | 4,00 |
| Waste Area IV | 1 | 20,00 | 20,00 |
| Waste Area III | 1 | 20,00 | 20,00 |
| Waste Area II | 1 | 20,00 | 20,00 |
| Waste Area I | 1 | 20,00 | 20,00 |
| Reception and Classification | 1 | 24,00 | 24,00 |
| Control Area | 1 | 12,00 | 12,00 |
| Carts Wash | 1 | 10,00 | 10,00 |
| Carts Area | 1 | 15,00 | 15,00 |
| Hazardous Waste Deposit | 1 | 15,00 | 15,00 |
| **Waste Treatment Area** |  |  |  |
| Waste Sterilizer Equipment Area (autoclave) | 1 | 50,00 | 50,00 |

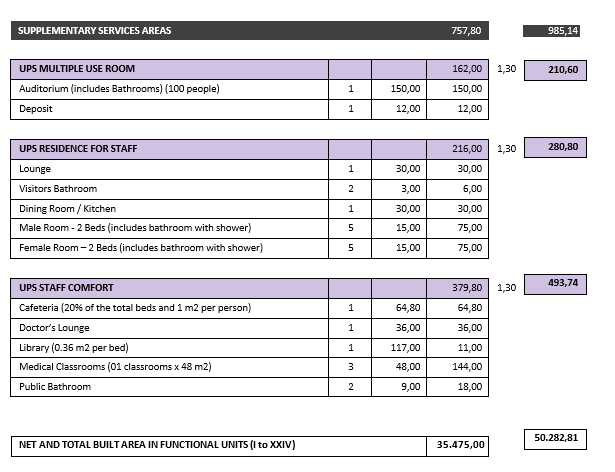
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| --- | --- | --- | --- | --- | --- |
| **UPS POWER HOUSE** |  |  | 776,20 | 1,30 | **1.009,06** |
| Low Voltage General Board | 1 | 35,00 | 35,00 |  | |
| Technical Room | 1 | 30,00 | 30,00 |
| Delivery Company | 1 | 24,00 | --- |
| Electric Sub-Station | 1 | 40,00 | 40,00 |
| Generator for Electric Sub-Station | 1 | 80,00 | 80,00 |
| Oil Tank | 1 | 40,00 | --- |
| Accumulation Room - DHW Pumping | 1 | 50,00 | 50,00 |
| Heaters Room | 1 | 24,00 | 24,00 |
| Gray Water Tank | 1 | 16,00 | 16.00 |
| Water Treatment System - Soft water Tank | 1 | 60,00 | 60.00 |
| Water Supply System - Drinking Water Tank | 2 | 155,00 | 310.00 |
| Water Supply System - Drinking Water Pumping Room | 1 | 48,00 | 48.00 |
| Firefighting System - Firefighting Tank | 2 | 21,60 | 43.20 |
| Firefighting system - Firefighting Pumping Room | 1 | 20,00 | 20,00 |
| LPG Tank (1) | 1 | 24,00 | --- |
| Secondary Transformation Centers \* | 1 | 36,00 | --- |
| Secondary General Boards \* | 1 | 150,00 | --- |
| Technical Rooms for Secondary Boards \* | 1 | 610,00 | --- |
| UPS | 1 | 20,00 | 20,00 |

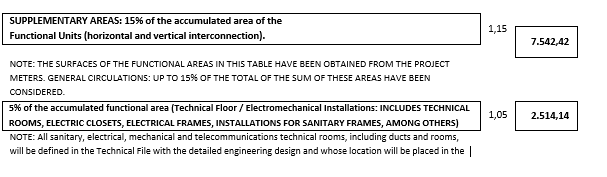
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| --- | --- | --- | --- | --- |
| **Functional Unit** | **N°**  **Rooms** | **Area** | **Functional** | **M2 built** |

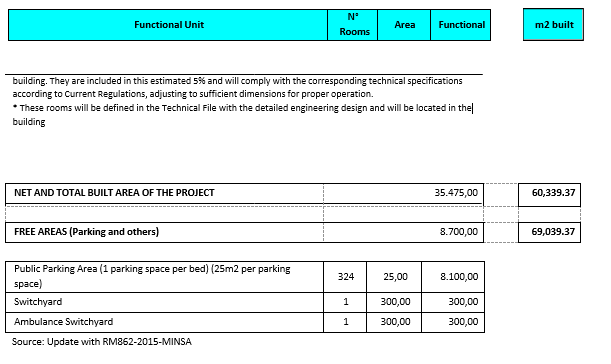
(1) Outside

\* Rooms included in the 5% of the accumulated functional area (Technical Floor / Electromechanical Installations / Installations Ducts)









**Annex No. 7 MINIMUM PERSONNEL OF THE CONCESSIONAIRE**

The minimum Personnel of the CONCESSIONAIRE, in addition to that established in Exhibit No.8 for the provision of the Services, for each stage of the Project is as listed in this Exhibit.

1. Minimum Personnel required to the CONCESSIONAIRE during the Pre-Operational Stage:

* General Manager: shall act as the Concessionaire’s representative.
* Finance Manager
* Technical Manager
* Construction Supervisory Team
* Medical Equipment Supervisory Team
* Quality and Environmental Manager
* Change and Training Management
* General Services Supervisor/Head of Services
* Risk Preventionist
* Administration

1. Minimum Personnel required to the CONCESSIONAIRE during the Operational Stage:

* General Manager
* Finance Manager
* Operation Manager
* General Services Supervisor/Head of Services
* Quality and Environmental Manager
* Technical Office Manager
* Service Supervisors/Service Specialists
* Administrative Personnel/Technical Office
* Change and Training Management
* Head of IT (Deputy Manager)
* Public Relationships and Territorial Development
* IT Personnel (Network Administrator and Help Desk)
* Administration (including management and personnel)

**Annex No. 8: SERVICE LEVELS**

1. **INTRODUCTION**

This Annex provides details of all the Services regulated by Service Levels.

In order to determine the value of each Service Indicator, the equations defined are used, and their calculation considers the decimal rounding of the value obtained to the nearest number according to the number of decimal places in which each indicator must be expressed.

1. **DESCRIPTION OF SERVICES AND SERVICE LEVELS**

Each of the Services to be provided by the CONCESSIONAIRE is described below, and the associated Service Indicators are shown.

* + 1. Food Service
    2. Clothes and Laundry Management Service
    3. Cleaning, Sanitation and Vector Management Service
    4. Security and Surveillance Service
    5. Integral and Solid Waste Management Service
    6. Sterilization Service
    7. Service of Information and Communications Technology and Provision and Availability of Technological Infrastructure.
    8. Service of Maintenance and Operation for the Building, Facilities, Electromechanical Equipment and Furniture associated to the Infrastructure.
    9. Service of Administration, Acquisition, Maintenance and Availability of the Equipment
    10. Hemodialysis Service
    11. Clinical Pathology, Laboratory Service
    12. Imaging Service
    13. Supply Logistics, strategic goods, drugs and non-strategic supplies Service

**Specific definitions**

* Perceived service quality: It is the degree of user satisfaction regarding the service received. When the Service quality is specified, the combined effect of characteristics such as availability, reliability, integrity, friendliness, comfort, and other factors specific to each Service should be considered.
* Technical Service quality: It is defined as the compliance with established standards, current rules and compliance with the protocols defined for the Service.
* Health Facility: These are facilities where health care is provided, on an outpatient or inpatient basis, aimed at prevention, promotion, diagnosis, treatment and rehabilitation, enabling people to maintain or restore their state of health (Supreme Decree No. 013-2006-SA, which approves the Regulations on Health Facilities and Medical Support Services).
* Data source: This is the source of information used to measure a specific Service Indicator.
* Healthcare-Associated Infection (HAI): It is any systemic or localized condition resulting from the adverse reaction to the presence of microorganisms or their toxins in a hospitalized patient or in outpatient care. A HAI is determined if there is evidence that this condition was not present or being incubated at the time of admission, unless the infection is related to a previous admission.
* Calculation periodicity or calculation frequency: This corresponds to the frequency required to calculate a given Service Level.
* Measurement periodicity: This corresponds to the frequency required to measure a specific Service Indicator. There is a total of 7 indicators under this concept, since their measurement is required on a daily basis, but the calculation frequency of the indicator as a whole is monthly.
* Maximum response time: Time elapsed between the communication of an occurrence by the SIGI-NS user and the start of activities for its resolution by the CONCESSIONAIRE. The response time is recorded in the work order created in SIGI-NS.
* Maximum time for the provision of the Service: Time elapsed between the start of the actions and activities leading to the provision of the Service, according to the rules and procedures in force, until its completion. The time of provision of the Service is recorded in SIGI-NS at the end of the intervention of the personnel, thus closing the service order.
* Maximum solution time: time elapsed between the start of the actions and activities of the service, according to current rules and procedures, until its completion. The time of provision of the Service is recorded in the SIGI-NS at the end of the intervention; the record of completion will be made by the accredited personnel of the user area giving their compliance and closing the service order.
* SIRI: Request for Information on Inventory Register.

1. **DESCRIPTION OF SERVICES TO BE PROVIDED BY THE CONCESSIONAIRE**
   1. **FOOD SERVICE**

It corresponds to a main food service or alternatively called nutrition service, for patients and personnel on duty (in charge) defined by the GRANTOR.

The food and nutritional preparations and servings, provided by the CONCESSIONAIRE, shall be of optimum sanitary, nutritional, organoleptic quality, presentation, volume and temperature, in accordance with the requirements established by the nutritional area of the Hospital and Applicable Laws and Provisions.

The Service quality is related to (but not limited to):

* Timely attention to the food requirements of the user areas.
* Safety in patient care, avoiding infections and intoxications caused by inadequate storage or handling conditions of the food provided by the Service.
* Unrestricted compliance with all Applicable Laws and Provisions.

**Purpose**

The purpose is to perform the integrated management of the Food Service, that is, to prepare and distribute food servings to patients and personnel on duty of the Hospital, in accordance with the clinical prescription and the organic nutrition unit of the Hospital, respecting the technical and sanitary standards of the Applicable Laws and Provisions.

**Scope**

It includes the planning, requisition of consumables, reception, storage and conservation, preparation, quality control and distribution of food and preparations of the normal and dietary regimens for hospitalized patients and under emergency observation, and personnel on duty.

The CONCESSIONAIRE shall maintain the trays, crockery, cutlery, utensils, transport carts, tray carts and other elements of the Service in optimum operating and presentation conditions and in sufficient number to provide adequate and timely attention to all patients and Hospital personnel.

The Hospital shall be responsible for the nutritional care of pediatric patients under six (6) months of age.

The management (preparation) of enteral, parenteral and milk formulas, since this is a prescription-only product, its preparation will be the responsibility of the personnel of the Hospital and not of the CONCESSIONAIRE.

**Time Availability**

The Service shall be provided continuously every Calendar Day of the year. The Kitchen opening hours will be the time required for the correct provision of the Service, from the reception of fresh products from the suppliers until the closing of the facilities with all the material in perfect conditions of cleanliness and sanitation.

The CONCESSIONAIRE shall agree with the GRANTOR the schedule for delivery and collection of the menus to the patients and the personnel included in the scope of the Service, under regulatory criteria. Likewise, the CONCESSIONAIRE shall agree with the GRANTOR the working shifts that guarantee the correct provision of the Service.

**Regulations**

For the provision of the Service, the CONCESSIONAIRE, taking into account the best practices and international standards, shall comply at least with the Applicable Laws and Provisions and the procedures established in this regard by the GRANTOR through the Supervisor of Contract and Operations, in order to guarantee at all times, the safety in terms of prevention of HAI, transmission of infectious and contagious diseases and occupational accidents.

In any case, the CONCESSIONAIRE shall comply with the technical standards set forth by the Ministry of Health, THE GRANTOR or any other Competent Governmental Authority. As well as the provisions of the municipal and sanitary permits, as applicable.

In particular, the CONCESSIONAIRE shall comply, as a minimum, with the following Applicable Laws and Provisions:

* Resolution No. 34-GCPS-ESSALUD-2016 which approves Directive No. 002. GCPS-ESSALUD-2016 Guide for Safe Food Handling Practices in Organic and Functional Nutrition Units of the Social Health Insurance System - ESSALUD and Procedures Manual for Organic and Functional Nutrition Units of the Social Health Insurance System.
* Directive No. 002. GCPS-ESSALUD-2013, Procedures Manual for ESSALUD Nutrition and Services.
* Guide for Nutritional Intervention in Patients with Cancer - ESSALUD.
* Guide for Nutritional Intervention in Patients with HIV-AIDS - ESSALUD.
* Guide for Nutritional Intervention in Patients with Tuberculosis - ESSALUD.
* Indicators of the Organic and Functional Nutrition Units in ESSALUD.
* Directive No. 005. GCPS-ESSALUD-2013 Guide of Good Practices and Food Handling in the Nutrition Services of ESSALUD. Technical Health Standard No. 103 -MINSA/DGSP-V.01 "Technical Health Standard of the Production Unit of Nutrition and Dietetics Health Services", approved by Ministerial Resolution No. 665-2013/MINSA.
* Sanitary Standard for Food Services in Health Facilities, NTS N 098-MINSA/DIGESA-V.01, approved by Ministerial Resolution No. 749-2012/MINSA.
* Sanitary Regulations for the Operation of Food and Beverage Self-Services - Ministerial Resolution No. 1653-2002-SA-DM.
* Sanitary Standard for Restaurants and Related Services - Ministerial Resolution No. 822-2018-MINSA.
* Standards for the establishment and operation of Collective Food Services. Supreme Resolution No. 0019-81-SA/DVM.
* Sanitary standard for the application of the HACCP system in the manufacture of food and beverages. Approved by Ministerial Resolution No. 449-2006/MINSA on May 17, 2006.
* Sanitary standard that establishes the microbiological criteria for sanitary quality and safety for food and beverages for human consumption, approved by Ministerial Resolution No. 591-2008/MINSA.
* Technical Guide for the microbiological analysis of surfaces in contact with food and beverages, according to Ministerial Resolution No. 461-2007/MINSA.
* Directive No. 06-GCPS-ESSALUD-2016: Guidelines for the operation of Organic and Functional Nutrition Units in the Social Health Insurance System.
* Resolution No. 34-GCPS-ESSALUD-2016: Procedure Manual of the Organic and Functional Nutrition Units in the Social Health Insurance System- ESSALUD.
* General Management Resolution No. 653-GG-ESSALUD-2004, which modifies Directive No. 004-DE-IPSS-92, "Standards for the provision of food to the personnel of Social Security hospitals" (in force).
* Resolution No. 18-GCPS-ESSALUD-2019, which approves the technical document "Guide for nutritional care in children under 5 years of age with anemia - ESSALUD".
* General Management Resolution No. 503-GG-ESSALUD-2019, which approves Directive No. 09-GCPS-ESSALUD-2019, "Directive for the Promotion and Encouragement of Healthy Care in all Social Health Insurance Facilities".
* Law No. 30021, Law on the Promotion of Healthy Eating in Children and Adolescents", and its regulation Supreme Decree No. 017-2017-SA.

**Equipment and Supplies**

The CONCESSIONAIRE shall be responsible for providing the necessary material for the proper provision of the Service, such as: kitchen equipment, transport carts, crockery, houseware, cutlery, glassware, garbage and waste bins, etc., with the GRANTOR'S non-objection prior favorable opinion of the Supervisor of Contract and Operations in accordance with Applicable Laws and Provisions. Therefore, the maintenance and replacement of the equipment or any other element used by the CONCESSIONAIRE for the provision of the Service shall be the exclusive responsibility of the CONCESSIONAIRE.

The CONCESSIONAIRE shall have a feeding station that must be installed at the Hospital. The feeding station may not be located outside the Hospital's facilities, and therefore it shall operate in the area of the Hospital intended for such purpose.

The CONCESSIONAIRE shall be responsible for managing and operating the feeding station, the lunch room where it provides the food service for the Hospital's personnel on duty.

For both the Infrastructure and the Equipment, the CONCESSIONAIRE shall submit and carry out a Preventive and Corrective Maintenance program, in accordance with the manufacturer's instructions, in order to provide a continuous and quality Service.

**Personnel**

The CONCESSIONAIRE shall provide and maintain the number of personnel necessary in accordance with the requirements of the Service, as well as to cover breaks, vacations, medical breaks and unforeseen absences, in compliance with the Applicable Laws and Provisions. All personnel must have as a requirement a health certificate suitable for the position.

The personnel provided by the CONCESSIONAIRE shall include a minimum number of nutritionists for the preparation and elaboration area, with experience of at least five (5) years working in Health Facilities, specifically in the unit in charge of scheduling and elaborating the planned culinary preparations; or in the unit in charge of planning, supervising and evaluating the dietary treatment of the hospitalized patient.

The personnel in charge of food preparation must have at least three (3) years of technical education in food handling and at least five (5) years of experience working in Health Facilities in food preparation and related procedures.

All the personnel of the Service shall be free of infectious diseases during the performance of their food handling tasks, having at their disposal as many personal protective equipment (PPE) as they may need to guarantee the safety of the activity, both for the workers and the patients, according to Applicable Laws and Provisions.

The CONCESSIONAIRE must develop a health program for personnel, which shall include health examinations upon entry and subsequently undergo, once a year, a complete health examination. The health examination must also certify that the person is not a carrier of foodborne diseases such as typhoid fever, hepatitis, *sthaphylococcus aureus*, or active skin diseases. At least the following tests shall be considered: VDRL, thorax X-ray, serial stool culture and parasitology, nail bed culture and nasopharyngeal culture, and others that may be necessary during the term of the Contract.

The CONCESSIONAIRE shall be responsible for ensuring that the personnel handling food complies with the specific hygienic working conditions. Likewise, it shall comply with the regulations regarding the prevention and control of HAI.

The personnel participating in the provision and supervision of this Service must have personal protection elements in accordance with the risk associated with the same and with Applicable Laws and Provisions, verifying that they are in an operating status at all times.

In addition, they must have health and vaccination cards. Said cards must be in force and must be shown at the request of the Supervisor of Contract and Operations. In the case of the vaccination card, it must bear the signatures of the personnel responsible for administering each dose, as well as the identification of the vaccine batches.

The personnel profiles shall be submitted to the Supervisor of Contract and Operations, for compliance with the corresponding technical standard, ten (10) days prior to the commencement of the Service. Any subsequent change shall be communicated and the corresponding profile shall be submitted to the Supervisor of Contract and Operations for a favorable opinion, at the latest one (1) day after the change occurs.

**Technical - Functional Specifications of the Service**

The Food Service delivered by the CONCESSIONAIRE shall comply with the general principles of hygiene included in the Good Handling Practices (GHP) in Food Safety applied throughout the food chain or production process up to distribution, which include the sanitary requirements for food handlers; and the hygiene and sanitation programs (PHS, for its acronym in Spanish) applied to the services in general, equipment, utensils and surfaces.

The CONCESSIONAIRE must incorporate on-site or remote temperature change alarm systems, in accordance with the technology used, to enable it to act and correct any alterations detected immediately.

In the food manufacturing process, the following operations are distinguished as a minimum:

* Provision and reception of raw materials and supplies in general,
* Storage of raw materials,
* Production,
* Packaging for distribution,
* Dirt collection and washing,
* Storage of equipment and utensils.

The CONCESSIONAIRE shall be responsible for acquiring the necessary cleaning products and for maintaining the equipment and materials in optimal conditions.

* **Process**
  + **Reception**:
* The CONCESSIONAIRE shall contract the different suppliers, being responsible for their compliance with the food and hygiene regulations established from time to time regarding food preservation and handling. The certification mechanism of the suppliers, and food, shall be proposed by the CONCESSIONAIRE, and non-objection must be obtained from the GRANTOR with the favorable opinion of the Supervisor of Contract and Operations and be established in the AOP.
* The CONCESSIONAIRE shall have a reserve of non-perishable food for fifteen (15) Calendar Days in order to be able to provide the Service in case of possible failures in the supply or other occurrences.

Non-perishable products are understood as foodstuffs such as: rice, sugar, corn flour, salt, powdered milk, tomato sauce, etc.

* + **Storage**:
    - All products, both perishable and non-perishable, shall be stored in compliance with Applicable Laws and Provisions and shelf life control shall be carried out to ensure their optimum condition.
  + **Production**. The production process includes the following stages:
    - Receipt of diet prescription by clinical nutritionists of the Hospital.
    - Pre-processing or processing of raw food.
      * Preliminary operations, such as weighing of ingredients, mixing and other operations of the preparation process, shall be carried out on smooth surfaces, with clean utensils, exclusively used for each activity, reducing the risk of cross contamination.
      * Raw food processing should be carried out in the previous preparation area, and includes: trimming, washing of meat and offal, washing and peeling of vegetables, defrosting, among others.
      * The processing of vegetables (that do not require cooking), such as washing, trimming, leaf removal, among others, should be carried out separately from the processing of meat and fish, with exclusive utensils, and then transferred to the intermediate preparation area. Fruits are transferred only when they are washed.
      * In the area that generates a large amount of solid organic waste, it should be deposited in appropriate containers and removed properly covered, without passing through the intermediate and final area when food is being processed.
    - Intermediate preparation or processing of cooked foods.
      * The processing of cooked foods should be carried out in the intermediate preparation or cooking area. Cooking is a stage that decreases the sanitary risk, due to the destruction of microbiological hazards, thus avoiding cross-contamination.
      * Cooking time and temperature are sufficient for the destruction of non-spore-producing pathogenic microorganisms. Meats should be well cooked in the center of the piece.
      * In large pieces of bone-in poultry, ensure a minimum temperature of 74°C in the deep muscle, in contact with the bone (breast, thigh) to ensure the elimination of Salmonella.
      * Ensure that the stuffing of preparations reaches this safety temperature and be served or refrigerated immediately.
      * Fuel used for cooking should be kept out of the cooking area for safety and to avoid cross contamination of food.
    - Final preparation
      * The operating area should not be adjacent to the raw food processing area or any other area that favors cross-contamination. Keep clean and in a good state of preservation, as well as materials, equipment and utensils.
      * Portioning, cooling and serving of food, are processes that require handling under rigorous hygiene that prevents cross-contamination of freshly cooked food.
      * The handlers that work in this area as well as the utensils used are exclusive to the final processing area, while the final processing process is being carried out.
      * Food is distributed to the patients, immediately after being elaborated and for no reason, retained food will be distributed.
      * Retained food is refrigerated, properly covered or protected and perfectly identified with the day and time of entry into the chamber, and must be consumed within 24 hours.

In the appendix: Cold Chain Process, corresponding to this Service, establishes the general considerations regarding the different stages of the cold chain process. The CONCESSIONAIRE shall comply with the Applicable Laws and Provisions at all times, and shall be solely responsible for the correctness of each and every stage of the process, as well as for ensuring that all food served to patients is in perfect condition and complies with the requirements of the Applicable Laws and Provisions. The application of the cold chain process will be subject not only to the availability of sufficient space in the kitchen area, but also to the presentation of alternatives in the respective AOP that cover this need.

* + **Distribution**:
    - The CONCESSIONAIRE will be responsible for distributing the trays from the kitchen to the patient's room, the nursery, if applicable, and the Hospital's personnel lunch room.
  + **Dirt removal and washing:**
    - The CONCESSIONAIRE shall be responsible for the recovery of all materials (carts, crockery, houseware and trays) that should arrive at the washing area after each shift from the patients' rooms. The procedures for automatic washing and cleaning of all materials, including pick-up schedules, shall be established in writing. These shall be included in the AOP.
    - Diets and menus.
      * The diets supplied shall meet the needs and caloric - protein and RDA (Recommended Dietary Allowance) requirements established for an adult or in the different diversification phases of pediatric diets, as appropriate, in addition to complying with the general recommendations for the healthy and sick population in terms of frequency, nature and quality of consumption for each of the food groups. If weighing of waste left by the patient is necessary, this will be a responsibility of the GRANTOR.
      * The food shall preserve the organoleptic conditions or optimum temperature at the time it is served for consumption in order to achieve patient satisfaction and provide an objectively pleasant meal and in accordance with the Applicable Laws and Provisions. Both the organoleptic and optimum temperature conditions shall be proposed by the CONCESSIONAIRE and shall be included in the AOP.
      * The duly dosed menus will have a minimum turnover of thirty (30) Calendar Days, i.e., every thirty (30) Calendar Days the menus will be changed. Likewise, there will be rounds of menus for each of the seasons of the year, i.e., menus will be adapted to the different seasons of the year.
      * The meals will consist of breakfast, lunch, snack and dinner. In addition, the CONCESSIONAIRE shall consider an offer of extras available to be provided to special groups upon specific request (diabetics and others who, due to their health conditions, so require). The quantity of extras shall be in accordance with the preparation of special menus. Water will be provided, daily, bottled, at least one liter per patient, depending on the indicated consumption.
      * The types of regimes to be delivered by the CONCESSIONAIRE must be established in the corresponding AOP; without prejudice to this, the following are mentioned for reference:
  + Basic regimes
    - Complete or usual
    - Light
    - Soft without residues
    - Liquid
    - Liquid-Cold
    - Water
  + Special regimes
    - Hypo- or Hyperglycemic
    - Hypo- or Hypercaloric
    - Hypo- or Hyperproteic
    - Hyposodium
    - Diabetic

**Table 1: Examples of a Complete or Regular Feeding Regime**

|  |  |  |  |
| --- | --- | --- | --- |
| **Regular regime breakfast** | **Regular regime lunch and dinner** | **Regular regime snacks** | **Snacks or refreshments as an alternative to lunch or dinner** **(\*)** |
| Milk, coffee with milk, tea, infusions, coffee. Juice, cereal with fruit, Bread (2) or 6 water or soda crackers.  Appetizers: jam, butter, blancmange, olives, avocado, egg.  Sugar Sachet or sweetener. | Starter or salad or soup  Main dish with poultry, fish, meats and a side dish. Low calorie alternative  Beverage: Juice, soft drink or water.  Dessert: Fruits, jelly, yogurt, ice cream, milk desserts, such as puddings, flan, among others (excluding mazamorra - Corn Pudding).  Bread or package of water or soda crackers. | Any alternative of tea, coffee with or without milk, infusions, juice, yogurt, fruit, milk dessert. | Beef or poultry sandwich with tomato or other vegetable added, on regular 100-gram bread.  The sandwich must be prepared at the Feeding station.  1 fruit or whole yogurt  1 individual 200 cc. bottled juice.  Double napkin. |

(\*) Snacks or refreshments should be available as an alternative to lunch or dinner only for healthcare personnel in exceptional cases.

* + - * The CONCESSIONAIRE shall prepare special menus according to tradition (complying with the restrictions of each diet) for the following dates: Christmas Eve (dinner), Christmas Day (lunch), New Year's Eve (dinner), New Year (lunch), Children's Day (breakfast, lunch and dinner), Patient's Week (breakfast, lunch and dinner every day of the week) and Hospital anniversary (dinner only for Hospital personnel), which shall be agreed with the GRANTOR and the Supervisor of Contract and Operations in the respective AOP.
      * The CONCESSIONAIRE shall take into account specific food guidelines for people that the supply of traditional menus, suppose health problems, due to intolerance or allergies either of patients or Hospital personnel. These food guidelines shall be set by the GRANTOR.
      * The CONCESSIONAIRE shall take into account and offer food alternatives to minority groups by reason of religion or eating habits, as in the case of vegetarians, being subject in any case to the medical indications of the doctor for each patient or by own conditions of the Hospital personnel.
      * The menus for personnel included within the scope of the Service will be the same as those established for patients without dietary restrictions.
      * Personnel on duty (in charge) must be those on the "scheduled duty list" previously submitted to the CONCESSIONAIRE, through SIGI-NS.
      * The CONCESSIONAIRE must have available a manual for the preparation of basal and therapeutic diets used, containing:
  + Description of culinary techniques.
  + Standardization of culinary technical terms.
  + Variations in organoleptic quality and its critical points, related to culinary techniques and temperature.
  + Control and definition of cooking temperatures for each recipe.
  + Technical creativity and special presentation in foods used as garnishes.
  + Special presentation for specific groups (pediatric and adult, easy to swallow, etc.).
  + Note for patient information about their hospital diet.
    - * In those aspects not regulated in this section, the CONCESSIONAIRE shall at all times comply with the indications and guidelines of the GRANTOR and the Supervisor of Contract and Operations.
* Catalog of products to be used. The catalog of products/food used by the CONCESSIONAIRE must be included in the AOP of the Service and must meet the quality needs and objectives of the Hospital.

The coding and description of each of the parts of the raw materials to be used, applied to each recipe and menu, shall be adjusted to the description of quality and commercial presentation for each raw material to be used following the Peruvian technical standards or food codex (if applicable).

The catalog shall consist of the following sections (following the classification of the food sanitary registry):

* + Meat and meat derivatives, poultry and hunting.
  + Fish, crustaceans, mollusks and derivatives.
  + Eggs and derivatives.
  + Milk and derivatives.
  + Edible fats.
  + Cereals.
  + Leguminous plants.
  + Tubers.
  + Flours and derivatives.
  + Plants, vegetables, mushrooms, fruits and direvatives.
  + Natural sweeteners and derivatives.
  + Condiments and spices.
  + Stimulant foods and derivatives.
  + Prepared or precooked dishes, food preparations under specific formula and for special diets and food allergies.
  + Drinking waters and ice.
  + Ice cream.
  + Non-alcoholic beverages.
  + Additives, flavorings and technological adjuvants.

Under no circumstances may the CONCESSIONAIRE reuse raw materials, such as oils or leftovers from preparations, and the Supervisor of Contract and Operations or the Hospital's nutrition area shall carry out random inspections to ensure compliance.

The use of additives in the preparation of food must be in accordance with the Applicable Laws and Provisions, including the food sanitary regulations in force.

Frozen inputs shall not show signs of thawing prior to use.

Products and supplies must be properly stored, according to the provisions of the sanitary regulation for food services in Health Establishments Ministerial Resolution 748-2012 MINSA and the Guide for Good Handling Practices in Food Safety in ESSALUD nutrition services approved by Management Resolution 034-GCPS-ESSALUD-2016, or standards that modify or replace them, and must not have contact with walls, ceilings or floors of the respective storage areas. Likewise, the traffic corridors in the storage area shall be free of obstructions.

The CONCESSIONAIRE shall promote healthy eating, defined as: *“It is a varied diet, preferably in a natural state or with minimal processing, which provides energy and all the essential nutrients that every person needs to stay healthy, allowing them to have a better quality of life at all ages”*, and apply Law No. 30021, Law on the Promotion of Healthy Eating for Children and Adolescents", and its regulation Supreme Decree No. 017-2017-SA, or standards that modify or replace them.

* Back-up system. The CONCESSIONAIRE shall design and permanently maintain an alternative emergency mechanism to the one used to provide the Hospital's Food Service for patients and personnel. This mechanism must be capable of providing the same amount of daily servings for the duration of the cause that originated its activation, at least for a period of ten (10) Calendar Days.

The CONCESSIONAIRE shall permanently have the raw materials available at the Hospital, necessary to execute the contingency plan established in the AOP. Likewise, it may consider, at its own expense and cost, the availability of refrigerated food in a nearby center and arrange the transfer procedures, verifiably preserving the cold chain for the maintenance of the food.

**Service Organization**

For this Service, the CONCESSIONAIRE shall satisfy its own requirements, as well as those of the corresponding user area, through the SIGI-NS.

The CONCESSIONAIRE shall propose the functional Service organization, in order to provide the same to all the user areas, considering that, during the Operational Stage, there shall be the pertinent coordination with the Maintenance, Cleaning and Sanitation, Security and Surveillance, and Solid Waste Management Services.

**Documentation**

In addition to the specific information that the CONCESSIONAIRE must submit as established in the previous sections regarding this Service, the following information must be submitted by the CONCESSIONAIRE:

* Initial information to be submitted by the CONCESSIONAIRE prior to the commissioning.

The CONCESSIONAIRE shall prepare the Service’s AOP that includes its direct application with the Service. The Service’s AOP shall determine the corresponding specifications and procedures within the framework of the Applicable Laws and Provisions and their updates or modifications during the execution of the Contract. The minimum referential content of the AOP is indicated in Annex 21.

* Periodic information to be submitted during the Operational Stage
  + The CONCESSIONAIRE shall provide the sanitary operating authorizations of all the companies it works with and its homologation.
  + On a bimonthly basis, the CONCESSIONAIRE shall submit the records established in the manual of procedures based on the principles of hazard analysis and critical control points to the GRANTOR and to the Supervisor of Contract and Operations for their evaluation.
  + The CONCESSIONAIRE shall deliver to the Supervisor of Contract and Operations a monthly report containing the statistical information of the operation of the Service. This report shall contain, at least, the following information:
    - Number of menus served daily and the monthly total, validated by the nutrition unit. This information shall be detailed at least by type of beneficiary (patients, personnel, daycare children if applicable, others), according to Directive 06-GCPS-ESSALUD-2016 or standard that modifies or replaces it.
    - Number of beneficiaries in community feeding programs, if any.
    - Percentage of complaints and claims from users.
    - Percentage of rejected diets.
    - Percentage of compounding inputs.
    - Percentage of users satisfied with care.
    - Other information considered relevant for monitoring the Service quality and whose inclusion in the monthly report shall be agreed between the GRANTOR and the CONCESSIONAIRE.
    - Information required by the GRANTOR, to prepare the monthly report submitted to its immediate superior (NETWORK, ESSALUD Headquarters, MINSA, others).
    - AOP.

**Definition of Terms**

* Downsizing: This process consists of lowering the internal temperature of the food between -2 and 5°C for 90 minutes.
* Healthy diet: It is a varied diet, preferably in its natural state or with minimal processing, which provides energy and all the essential nutrients that every person needs to stay healthy, allowing them to have a better quality of life at all ages.
* Microbiological analysis: inspection to assess the microbial load of a food, which, depending on its specificity, can detect specific pathogens associated with ETAs.
* Sensory analysis: Process that consists of evaluating the organoleptic properties of food or preparations to determine if the flavor, texture and gastronomic characteristics are in accordance with the criteria established in the culinary recipes or menu. The sensory analysis procedure should be established in the AOP, such as: attributes to be evaluated (aroma, color, flavor, presentation), evaluation methodology and results.
* Frozen food: They are those, natural or processed, that have been subjected, by means of appropriate equipment, to a low temperature process until the product reaches a temperature of -18ºC in the thermal center.
* Modified atmosphere: Modified atmosphere packaging (MAP) involves the elimination of air from inside the package and its replacement by a gas or gas mixture, generally CO2, O2 and N2, in materials with a barrier to gas diffusion. This modification in the gaseous environment decreases the degree of respiration, reduces microbial growth and delays enzymatic spoilage with the purpose of extending the shelf life of the product (food).
* Storehouse: Place of storage of raw materials and supplies that complies with the appropriate conditions for their storage in accordance with the Applicable Laws and Provisions.
* Calculation of ingredients: a spreadsheet executed by the production manager or chef indicating the quantity of ingredients (in grams or kilograms) in relation to the total number of servings to be produced.
* Cooking: Definitive thermal process, in which food is subjected to T° above 100°C in order to eliminate its pathogenic load of origin and gastronomically modify its presentation.
* Diet: It is the set of substances that are regularly ingested as food.
* Defrost: physical action of returning the raw material that is frozen to its organoleptic characteristics of natural temperature.
* Vacuum packaging: Vacuum packaging is a packaging method that consists of removing air from the inside of a package in order to extend the shelf life of a food product.
* Sausages and processed meat derivatives: food derived from beef, chicken, turkey, fish or any other edible animal, which has undergone an elaboration process that includes cutting, change of texture, smoking, dehydration, pre-cooking, or other, and that elements have been incorporated in it to enhance its organoleptic and preservation characteristics. E.g.: sausages, ham, pate, Nuggets, escalopes, hamburgers, meatballs.
* ETAS: Foodborne diseases. Infections resulting from the ingestion of food containing live pathogenic microorganisms.
* Natural fruits and vegetables: This means the same elements in their natural state with their shells (not frozen, not processed, not packaged).
* Pre-processed Fruits and Vegetables: Raw material of vegetable origin that has undergone reprocessing processes (cutting, washing, disinfection, including bleaching, chemical preservation, cooking or other) and can be preserved by refrigeration, freezing, vacuum or modified atmosphere.
* Cleaning Operations: Removal of all visible soil from food by physical means.
* Inputs: Products, different from raw materials, but necessary for various stages of the production process and service. Included in this group are disposable items and products for the cleanliness of the Service.
* Hand washing: This is the most important basic measure, and at the same time the simplest, to prevent contact infections and HAI, and should be carried out effectively by all personnel in a Health Facility. Having said the above, it is essential that those who handle food in the Health Facility are the ones who must permanently incorporate this procedure into their work routine.
* Hot holding: Maintenance of food at T° above 65° C, normally applicable to preparations that must be kept for some time after preparation and during service.
* Cold holding: Maintenance of food at T° below 5°C, normally applicable to preparations that have undergone cooking, then rapid cooling and are stored, until use.
* Raw Materials: Any substance that, in order to be used as food, can be perishable raw material and non-perishable raw material.
* Materials: any element necessary for food processing or associated with food processes directly or indirectly.
* Reference sample: representative sample of each of the food preparations that have been elaborated during the production process, in order to be available in case there is a need for microbiological analysis.
* Menu: detail list of preparations that have been scheduled to be delivered at meal times (breakfast, lunch, mid-day snack, dinner, snack) for patients, and Hospital personnel and children in day care if applicable.
* Sanitization Operations: decrease or elimination of the bacterial load present in food by chemical means.
* Purchase Order (PO): Format in which the raw materials needed to manufacture the products and that are requested from suppliers are recorded.
* Rinsing Operations: elimination of detergents or sanitizers from food by using abundant and running water.
* Drying Operations: removal of visible water on food by physical means.
* Peeling operations: removal of the peel from a natural (unprocessed) food for preparation of gastronomic preparations.
* Cutting operations: incision of a food for gastronomic purposes.
* Fundamental operations: The fundamental operations are "combinations". This means putting different ingredients together in reasonable proportions in a logical order to achieve specific substances or preparations. Fundamental operations are divided into: Bulk processing, change of consistency and auxiliary operations.
* Definitive Operations: these are changes produced in foods (preparations) with different operations achieving their definitive cooking and flavor: moist or expansion cooking, concentration or dry cooking, combined cooking and auxiliary operations.
* Auxiliary operations: all types of actions such as salting - Desalting - Smoking - Soaking - Marinating - Curing - Seasoning - Decorating - Docking - Wrapping - Stuffing - Tying - Cooking - Skewering - Pounding.
* Pathogen: causing harm or disease.
* Weighing: corroboration of the net weight of the preparations to the dish, required in the Contract.
* Gross weight: net weight + tare weight.
* Net weight: weight of the food or preparation only.
* Tare weight: weight of the container, dish, bowl or packaging (tare).
* Finished Product: food or preparation that, through the development of the production process of the Food Service, is ready for consumption by consumers (patients, students and employees).
* Scheduling: Specific and necessary information for the preparation of the daily production in the lunch room. It contains information regarding ingredients or raw material needed for each preparation, quantity required and associated cost.
* Rethermalization: Subjection of food preparations (finished product) to Temperatures above 65° C and that allow distributing the preparations with the initial organoleptic and gastronomic characteristics according to the recipe.
* Culinary recipe: detail of the elaboration of a specific preparation of the minutes scheduled for the Hospital.
* Reprocessing: action to which a raw material is subjected prior to its transformation into a finished product.
* Labeling: Set of inscriptions, legends or illustrations contained on the label that inform about the characteristics of a food product.
* Label: label implemented by the Hospital's central food production unit and applied on a raw material, food, preparation or finished product that requires storage, the purpose of which is to allow identification on the product with at least the following information: Name of the product, date of preparation, time of preparation, expiration or disposal date, time of disposal.
* Sanitize: reduce the number of microorganisms to a safe level. Sanitizer should have germicidal or antimicrobial properties and are applied to non-living objects to destroy microorganisms.
* FIFO system: raw material organization where it is established that the raw material that first enters the warehouse is the first to be used.
* Meal time: It is referred to breakfast or lunch, dinner, snack, or similar.
* Thermalization: Thermalization is referred to as the physical process by which particles in a system reach thermal equilibrium through the interaction between them heat or cold.
  1. **CLOTHES AND LAUNDRY MANAGEMENT SERVICE**

The Service consists of the provision, development and management of all those processes and activities necessary to supply each of the Hospital's UPSS and UPS, which is required on a scheduled or unscheduled basis, with all types of healthcare clothing in optimal conditions of cleanliness, ironing and conservation, as well as protection.

The protection will guarantee the subsequent maintenance of the ideal conditions of cleaning, ironing and conservation of the clothing, in order to avoid their microbiological contamination and the risk of contamination of the patients, and to be used by the personnel of each UPSS or UPS of the Hospital for the safe care of the patients of the Hospital. This Service does not include the provision of clothing for the Hospital's administrative personnel.

The Service quality is related to (but not limited to):

* Timely attention to the requirements of the Hospital's user areas for clothing in optimal conditions of cleanliness, ironing and conservation, as well as protection, avoiding affecting (by suspension or postponement) patient care.
* Safety in patient care, avoiding the risk of contamination attributable to inadequate cleaning, ironing and conservation conditions, as well as protection of the clothing provided by the Service.
* Compliance with the Applicable Laws and Provisions.

**Purpose**

The purpose of the Clothes and Laundry Management Service is to provide the provision and supply, on a continuous basis, of clean linen necessary for the Hospital's healthcare activities (hospitalization, surgical and outpatient activities, among others) with safety standards compatible with the Applicable Laws and Provisions.

**Scope**

In general, the scope and responsibility of the Service includes all the necessary activities from the provision of clothing, the collection of dirty clothing in the user areas to the delivery of the clothing in optimal conditions of cleanliness, ironing and conservation, as well as protection, to the user areas for their subsequent use.

These activities, in general and not limited to, are described below:

* Clothes management including:
  + The provision, repair and replacement of care garments (care clothing, bed linen, patient clothing, among other clothing).
  + The provision and replacement of clothing for the care work defined in the "Clothing Manual for ESSALUD's Social Security Care Centers", which is currently in force.
  + Having a stock of clothing that allows for the continuous satisfaction of the care needs.
  + The custody of the Hospital personnel's clothing, allowing them to have a system for safeguarding their belongings in the different user areas that correspond according to the Hospital's own annual medical program.
* Laundry service includes:
  + The collection of dirty clothing (Care garments: Care clothing, bed linen, patient clothing, among other clothing), in the environments of the user areas.
  + Laundering of clothing,
  + Drying of washed clothing.
  + The ironing of clean and well-preserved clothing.
  + Preparation and packaging (protection) of clean, ironed and well-preserved clothing.
  + Storage of the clean, ironed and well-preserved clothing in the UPS-LAV.
  + Distribution of clean, ironed and well-preserved clothing to the user areas. For those user areas that require clothing in sterile conditions, the Clothes and Laundry Service (after coordination with the UPS-CE sterilization plant) will deliver the clothing in optimal conditions of cleanliness, ironing, conservation and protection and in the quantity required by the UPS-CE in a timely manner.

These activities are the sole responsibility of the CONCESSIONAIRE, and therefore no other UPS or unit or office of the Hospital shall be responsible for any deficiencies in their performance, nor shall it be required to perform them.

The CONCESSIONAIRE shall be solely responsible for the provision of all types of clothing (in optimal conditions of cleanliness, ironing and conservation) for the Hospital's user areas, not including the Hemodialysis, Laboratory and Service of Imaging.

* To be supplied:
  + Care clothing on demand, that is, those clothing necessary to face demand variations over the usual supply according to the seasonality of the Care activity and according to the quality defined by the GRANTOR.
  + Care clothing available in case of unforeseen events, that is, those clothing not considered within the corresponding safety stock, thus allowing to respond to unforeseen events.
  + Care clothing and annual replacement.

Regarding the disposable or sterile disposable clothing to be supplied by the CONCESSIONAIRE, to be used in diagnostic and therapeutic procedures, the scope is for use in biohazard areas such as emergency units, surgical center, isolation and neonatology. It must also have an emergency stock to face contingencies.

**Time Availability**

This service must be provided continuously every day of the year during the Operational Stage, and there shall be no excuse whatsoever for its stoppage or for non-compliance or delay, guaranteeing that the user areas have clothing in optimal conditions of cleanliness, ironing and conservation.

Likewise, the schedules for distribution and delivery to the Hospital's user areas of clothing in optimal conditions of cleanliness, ironing, conservation and protection and in the required quantity, as well as the collection of dirty clothing in the Hospital's user areas, will be determined in the AOP. This schedule should be flexible enough to adapt to the specific needs of the user areas.

**Regulations**

For the provision of the Service, the CONCESSIONAIRE, considering the best practices and international standards, shall comply at least with the Applicable Laws and Provisions and the procedures established in the AOP approved by the GRANTOR, with the favorable opinion of the Supervisor of Contract and Operations, in order to guarantee at all times, the safety in terms of prevention of HAI, transmission of infectious and contagious diseases and occupational accidents.

In any case, the CONCESSIONAIRE shall comply with the technical standards set forth by the Ministry of Health or any other Competent Governmental Authority.

In particular, the CONCESSIONAIRE shall comply, as a minimum, with the following Applicable Laws and Provisions:

* HOSPITAL CLOTHES MANUAL FOR CARE CENTERS OF THE SOCIAL HEALTH INSURANCE SYSTEM- ESSALUD, GCPS-ESSALUD, June 2014, which was based on the existing Hospital Clothing Manual of the Units of Social Health Insurance System Service - ESSALUD, approved by Resolution of the Executive Chairmanship No. 599-PE-ESSALUD-2010 for the Healthcare Centers of ESSALUD at the Nationwide.
* Directive No. 8-GCPS-ESSALUD-2016 "Rules and Procedures of the Main Office and Sterilization Unit of the Social Health Insurance System" approved by Resolution of Central Management of Health Benefits No. 57-GCPS-ESSALUD-2016 of June 7, 2016.
* Technical Standard No. 015-MINSA/DGSP-V.01 "Biosafety Manual" approved by Ministerial Resolution No. 614 - 2004 / MINSA, dated June 15, 2004.
* Regulation of Law No. 29783, Law on Occupational Safety and Health, approved by Supreme Decree No. 005-2012-TR.
* Technical Guide on Cleaning and Disinfection Procedures for Environments in Health Establishments and Medical Support Services, approved by Ministerial Resolution No. 372-2011/MINSA.

Likewise, the CONCESSIONAIRE shall comply with the procedures and specifications established in the OP.

The CONCESSIONAIRE may incorporate, prior non-objection from the GRANTOR with the favorable opinion of the Supervisor of Contract and Operations, regulatory aspects or standards from other experiences of public-private partnerships in the health sector outside the country, as long as the corresponding technical-economic sustainability is presented, showing the maintenance or improvement of the Service quality offered.

**Equipment and Supplies**

The CONCESSIONAIRE may provide this service using the available infrastructure of the Hospital's UPS-LAV or another outside the Concession Area, always implementing the state-of-the-art equipment and technology required and guaranteeing its optimal maintenance, in order to perform the tasks of its competence with quality, according to the conditions established in this document. In case of use of the UPS-LAV, all costs associated with energy and water shall be assumed by the CONCESSIONAIRE.

The CONCESSIONAIRE shall be responsible for any loss or breakage or any damage or deficiency that may occur in the clothing as a consequence of the performance of the Service.

The CONCESSIONAIRE shall keep an automated record in the SIGI-NS of the provision of clothes, their removal, laundering and delivery.

Consequently, the CONCESSIONAIRE shall assume the cost and manage its replacement with completely new clothing. The cost of replacement shall be borne entirely by the CONCESSIONAIRE. Likewise, when some clothing is taken to be sterilized, the UPS-CE indicates that the damage was originated during the Clothes and Laundry Service, this clothing shall be replaced by the CONCESSIONAIRE with a new one at no charge to the Hospital, nor to the GRANTOR, as the case may be.

The cleaning and maintenance of the UPS-LAV infrastructure shall be assumed by the CONCESSIONAIRE as part of the service, whether it is used or not. The supplies to be used in each of the procedures carried out for such purpose shall be previously established in the AOP in coordination with those responsible for the Cleaning and Maintenance Services.

Without intending to be an exhaustive list of the material resources that the CONCESSIONAIRE shall provide for the correct rendering of the Service, the following is a list of the Equipment and materials that the CONCESSIONAIRE shall provide:

* Clothing transport trolleys should be made of materials that can be cleaned and disinfected, as well as corrosion resistant. Their structure shall be adequate to the needs of transportation within the facilities, with the wheels being made of a sound-dampening material to avoid excessive noise in the Hospital (in accordance with the specifications required by the Applicable Laws and Provisions). For its measurement, the CONCESSIONAIRE shall establish the tools or equipment to be used and shall obtain the prior favorable opinion of the Supervisor of Contract and Operations. Considering the permissible noise limits according to the National Environmental Noise Standards Regulations approved by Supreme Decree No. 085-2003-PCM or regulations that modify or replace it. The above implies noise detection, measurement and control systems in the Hospital.
* In addition, the trolleys must have established characteristics of size, capacity and resistance that, while guaranteeing their durability and practicality, do not endanger the occupational health of the personnel who handle them due to their excessive weight or difficult handling.
* Dirty cloth bags may be made of waterproof and drip-proof fabric or plastic or water-soluble, free of holes or other defect that does not comply with the given characteristics; they must also have an adequate closing system.
* Sufficient containers to prevent bags from being stored on the floor at each dirty cloth collection point.
* Provision of clean linen in stock in order to guarantee the Service even in emergency situations. The CONCESSIONAIRE shall meet requests of an urgent and emergency nature at any time.
* They shall have a scale to weigh the clean linen. The weighing shall be carried out jointly by the personnel of the CONCESSIONAIRE and the personnel designated by the Hospital for such purpose. The CONCESSIONAIRE shall be responsible for the weekly calibration and verification of said scales, as well as of any scales acquired for the provision of the Service.
* The chemical supplies, disinfectants, detergents and others, to be used in the performance of the Services, shall be detailed in the respective AOP, which shall have, as appropriate, the legal authorizations in force and the respective registrations. Likewise, the CONCESSIONAIRE shall keep a register of suppliers for all the supplies. The CONCESSIONAIRE shall inform the Supervisor of Contract and Operations through the SIGI-NS, regarding all the inputs used in the provision of the Service, by means of a technical data sheet containing at least the following: quantities, dilutions, safety measures and storage, as well as the flammable and toxic condition.

**Personnel**

The CONCESSIONAIRE shall have sufficient personnel for the performance of the functions within the scope of the Service, so that the activity is not interfered by issues related to lack of human resources (sick leave, training, absences, etc.). One (1) head of service should be designated.

The personnel must be duly trained and qualified by competent entities in laundry processes. Therefore, all personnel involved in the provision of the Service must be accredited:

* Experience of having worked in the laundry area in Health Facilities or in commercial laundry, at least six (6) months.
* Specific initial training of at least forty-five (45) hours on topics related to: handling of hospital linen (tightness of linen, hospital process of dirty cloth and clean linen, others), use of chemicals (dilutions, storage, replacement, disposal, others), prevention of transmission of Infections associated with health care, standard precautions, prevention of accidents with body fluids at risk, use of protective barriers, risk prevention, customer service, among others.

The minimum profile required for the Head of Service will be:

* Professional textile, industrial or related engineer.
* Specialized in hospital laundry.
* Five (5) years of professional experience.
* Two (2) years of work in hospital laundry management or coordination.

In shifts when the head of service is not available, management will be entrusted to the shift manager (if necessary).

The personnel profiles shall be submitted to the Supervisor of Contract and Operations, for compliance with the corresponding technical standard, ten (10) days prior to the execution of the Certificate of Works and Equipment Verification and Acceptance. Any subsequent change shall be communicated and the corresponding profile shall be submitted to the Supervisor of Contract and Operations for its favorable opinion, at the latest one (1) day after the change has occurred.

The CONCESSIONAIRE shall annually carry out, in the corresponding topics, the training to all the personnel that may require it, which shall be verified by the Supervisor of Contract and Operations. The training must have been given by health-related professionals or technicians with knowledge of health care-associated infections and by technicians with knowledge in the handling of chemicals and detergents.

Personnel in charge of folding and assembling surgical clothing should receive formal training in these procedures, in order to coordinate these actions with those required by the Hospital in the Sterilization Service provided by the Hospital for these purposes.

The personnel involved in the provision and supervision of this service must be adequately uniformed and have personal protective equipment according to the risk associated with it, ensuring that they are operational at all times. These must be provided by the CONCESSIONAIRE, with their respective training and supervision in their use.

In addition, they must have health and hepatitis B and tetanus vaccination cards. Said cards must be in force and must be shown at the request of the Supervisor of Contract and Operations. In the case of the vaccination card, it must bear the signatures of the personnel responsible for administering each dose, as well as the identification of the vaccine batches.

**Technical - Functional Specifications of the Service**

The CONCESSIONAIRE shall implement the facilities and Equipment necessary to provide the Service in accordance with the Applicable Laws and Provisions and the requirements set forth in this section.

The CONCESSIONAIRE shall guarantee at all times the normal development of the required Services, providing at its full cost, charge and responsibility the facilities, Equipment and additional spaces that may be necessary to comply with the specifications, requirements and demands established.

All logos shall be applied in accordance with the Applicable Laws and Provisions and shall obtain the GRANTOR's non-objection, prior favorable opinion of the Supervisor of Contract and Operations.

Regarding the provision, collection, distribution and replacement of clothing, the CONCESSIONAIRE shall comply with the following minimum requirements:

* Clothing provision. Each year the Supervisor of Contract and Operations shall inform the CONCESSIONAIRE within sixty (60) Calendar Days of the beginning of the second half of the year, as a reference, of the estimated amount of Care clothing for the following Calendar Year.

The CONCESSIONAIRE shall be responsible for providing the necessary linen in accordance with the levels of effective daily Care activity registered by the Hospital, with each of its Services and the number and distribution of personnel in Care functions.

* + **Bed linens.** The CONCESSIONAIRE shall always deliver sufficient clean linen to cover the Hospital's demand. The CONCESSIONAIRE shall be responsible for determining the procedure for estimating the required clean linen in order to avoid a shortage situation, considering the following table as a reference, without being exhaustive:

**Table 2: Guidelines for Number of Changes Bed Linens**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Place** | **Room** | **Storehouse** | **Emergency stock in the clothing store** | **Change in wash** |
| Description | Clothes placed on each bed provided | Unit's clinical linen storage | Stock required in case of contingency | Process clothing |
| Number of changes | 1 | 1 | 1\* | 1 |

\* This minimum shall be defined by the CONCESSIONAIRE with the favorable opinion of the Supervisor of Contract and Operations.

The bed linen required as a minimum (referential) is detailed in the following table.

**Table 3: Required Bed Linen Guidelines**

| **Hospitalization bed** | **Pediatric hospital cot** | **Newborn baby Cots, Procedure Cots and Incubators** |
| --- | --- | --- |
| 1 white, elasticized bottom sheet with printed logo of the Hospital.  1 white top sheet with printed Hospital logo.  1 blanket, bordered on its 4 edges.  1 bed cover, with printed or embroidered logo of the Hospital.  1 high absorption white bath towel of at least 400 grams per square meter (GSM) (approximately 110 cm x 70 cm), with the Hospital's logo printed on it.  1 waterproof mattress cover (mattress liner)  1 bed protection pad | 1 top sheet with children's design with printed logo of the Hospital.  1 bottom sheet without design in a color matching the top sheet,  with Hospital logo print  1 bottom sheet without design in a color matching the top sheet (50 cm x 110 cm approximately) with Hospital's printed logo.  1 pastel-colored blanket, trimmed on 4 edges.  1 bedspread with children's design with printed or embroidered logo of the Hospital.  1 high absorption white bath towel of at least 400 grams per square meter (GSM) (approximately 110 cm x 70 cm), with the Hospital logo printed on it.  1 waterproof mattress cover, adjustable on 4 edges, elasticized, for cribs.  1 waterproof mattress cover (mattress liner).  1 sill | 4 cotton or similar blankets of 100 cm x 100 cm approximately, in replacement of pillow.  1 one-piece size 00-0-1-2, in replacement of patient's gown.  1 breastfeeding apron sizes M, L, XL, with a piece that allows the thorax area to be uncovered and open at the back.  1 thermoregulation cap, sizes 00-0-1-2.  1 pair of socks sizes 00-0-1-2  1 crib skirt, to maintain thermoregulation of the newborn, measures according to cot dimensions.  1 incubator protector of 110 cm x 110 cm, to protect the newborn from light, made of a material that blocks the passage of light and is not damaged by the heat.  3 side protectors for phototherapy cot (Universal measures and density).  1 100 cm. x 100 cm. approx. towel with hood of high absorption of at least 400 grams per square meter (GSM) and white in color.  1 waterproof mattress cover adjustable on its 4 edges, elasticized for cots. |

This includes clothing such as waterproof mattress cover.

All bed linen and cots for hospitalization corresponding to sheets, covers and bedspreads must have a composition of at least 80% cotton and 144 threads.

* + **Frequency of change**. Hospital linen, such as sheets, covers, towels and undershirts, patient gowns, shall be changed for laundering and ironing, according to the following frequency:
    - On a daily basis for each bed and cot in use.
    - Each inpatient discharge.
    - By requirements of the user area through SIGI-NS.

The CONCESSIONAIRE shall change blankets and bedspreads at the time of discharge of each patient or when the user requests it through the SIGI-NS.

* + **Clothing for patients.** For each inpatient, shirt and gown shall be required according to the stipulated in the manual, depending on the type of patient, according to the GRANTOR's requirements. Notwithstanding the above, the following table shall be considered as a reference:

**Table 4: Guidelines for number of changes of clothing for patients**

| **Place** | **Room** | **Storehouse** | **Emergency stock in the clothing store** | **Change in wash** |
| --- | --- | --- | --- | --- |
| Description | Patient's clothing | Unit's clinical linen storage | Stock required in case of contingency | Process clothing |
| Number of changes | 1 | 1 | 1 | 1 |

The CONCESSIONAIRE must have shirts in small (XS) and (S), medium (M), large (L) and extra-large (XL) and (XXL) sizes, as well as special and pediatric sizes with children's design.

* + **Frequency of change.** Patient linen should be changed for laundering and ironing according to the following frequency:
    - On a daily basis for each bed and cot in use.
    - Each inpatient discharge.
    - By requirements of the user area through SIGI-NS.
  + **Clothing subject to sterilization processes.** The CONCESSIONAIRE shall provide and prepare the surgical packages of clothes subject to sterilization, according to the Hospital's requirements. For such purpose, the linen shall be delivered in the corresponding packages to the Hospital's sterilization plant or to whoever the GRANTOR determines. After the process carried out by the Sterilization Service, this linen shall be distributed from said sterilization plant to the units that require it.
  + **Hospital clothing.** Corresponds to reusable clothing to be worn by Hospital personnel, as well as visitors for the development of care activities, wards, emergency wards, major outpatient surgery wards, labor rooms and delivery wards and others in units that require protection to patients or personnel established in accordance with the requirements of the GRANTOR.

Hospital clothing consists of a kimono-type shirt and pants. Aprons are also required for hospital personnel and visitors who interact with patients in isolation or other similar areas. The size distribution and materiality shall obtain prior favorable opinion of the Supervisor of Contract and Operations, according to the information provided by the GRANTOR.

The frequency of change of clothes for washing and ironing is daily for each personnel member, and the CONCESSIONAIRE must have a safety or emergency stock at the health care facility.

* + **Clothing for Patient transfer stretchers.** The clothing to be provided per patient for this care activity comprise as a minimum:
    - 1 white elasticized bottom sheet with printed logo.
    - 1 white top sheet with logo printed.
    - 1 white pillowcase with logo printed.
    - 1 blanket, piped on all 4 edges.
    - 1 patient gown, logo printed.
    - 1 stretcher cover sheet, logo printed.
    - Among others.

The measurements of the above required clothing shall be adjusted to the corresponding units that the CONCESSIONAIRE acquires and replenishes.

The distribution of sizes and materiality shall be made according to the requirements made by the GRANTOR.

The frequency of change is per transfer, except for the blankets, which shall be changed for washing and ironing on a weekly basis, or upon request. Likewise, the authorized users may request additional clothing for these patients through SIGI-NS, and the CONCESSIONAIRE shall have a security or emergency stock at the health care facility.

* + **Other clothing**. This corresponds to clothing such as wipes, cotton towels, fitted or flat sheets, physical restraints (thoracic-abdominal harness, restraint shirt, limb restraints), disposable sheets and cloth sheets for kinesiology mats, clothing for medical residences, among others.
* Laundry pick-up. The Hospital personnel shall deposit the dirty clothes daily at the points provided for such purpose in the bags to be supplied by the CONCESSIONAIRE. The CONCESSIONAIRE shall be in charge of collecting the dirty clothes at the points provided for such purpose at the Hospital and transferring it to the laundry.

The collection of dirty clothes from the different Care and non-Care environments shall be carried out by the CONCESSIONAIRE according to the defined POA, at least two (2) times a day. Under no circumstances shall accumulation of dirty clothes be allowed in said areas.

The dirty clothes collection schedules shall be established in the POA according to the GRANTOR's requirements. Likewise, at the request of the Supervisor of Contract and Operations, the CONCESSIONAIRE shall change the schedules established in said program in order to improve the processes involved, provided herein, without any modification of the conditions established in this Annex for the rendering of the Service.

The dirty clothes shall be collected and transported in waterproof, weight-resistant containers (bags), duly sealed in closed carts, different from the clean linen carts, specially conditioned for this activity.

The collection of dirty clothes in each health-care and non-health-care environment will be approved by the respective SIGI-NS user or defined for this purpose.

The bags for dirty and contaminated linen will be colored according to Applicable Laws and Provisions.

**Cleaning and hygiene.** The CONCESSIONAIRE shall be responsible for ensuring that the entire Service process (reception, storage, handling, processing, distribution and collection) complies with the hygiene standards established by the General Directorate of Environmental Management (DIGESA) of the Ministry of Health of Peru (MINSA), including the Technical Guide on Procedures for Cleaning and Disinfection of Environments in Health Establishments and Medical Support Services, approved by Ministerial Resolution No. 372-2011/MINSA, or the rule that modifies or replaces it.

The CONCESSIONAIRE shall be responsible for acquiring the necessary cleaning products and for maintaining the equipment and materials in optimal conditions.

* Transportation. The transport of linen shall be carried out by the CONCESSIONAIRE, using trolleys for clean and dirty cloth, so that they are never in the same compartment simultaneously, and clean linen shall never be transported in a trolley that has contained dirty cloth without proper disinfection of the same, and there shall be a clearly differentiated flow of circulation between clean and dirty clothes.

All trolleys and bags containing clothes for their transportation shall be cleaned daily, in case the latter are not disposable, whether or not they are used by the CONCESSIONAIRE's workers. The cleaning process shall be proposed by the CONCESSIONAIRE and shall have the prior favorable opinion of the Supervisor of Contract and Operations.

* Washing and ironing.
  + The CONCESSIONAIRE shall classify the clothing in the laundry according to the specific washing processes to be followed in its treatment depending on the type of fabric in question and the type of stains it has, using the appropriate products, times and temperatures in each phase. These processes shall be proposed by the CONCESSIONAIRE and must have the previous favorable opinion of the Supervisor of Contract and Operations.
  + Clothing processing should be carried out in two routes, to avoid crossing destinations and processes, ensuring the separation at all times of clean and dirty cloth by the establishment of a "sanitary barrier". The same measures of separation of both types of linen shall be taken in transport vehicles and with respect to workers or equipment, ensuring that they do not pass directly from the dirty area to the clean area.
  + Clothing considered contaminated (infectious) shall be treated separately.
  + The CONCESSIONAIRE shall employ a pre-washing system that guarantees the removal of all organic matter on the linen.
  + The CONCESSIONAIRE shall, at all times, comply with the technical requirements of asepsis (sanitary barrier), percentage of oxidizing agent (bleach or hydrogen peroxide) to be used in the washing, rinsing guarantee (elimination of oxidizing residues), ironing and folding methods and hygiene in transport.
  + The CONCESSIONAIRE shall use high-temperature thermal disinfection for 100% cotton clothing, and for other clothing, such as polyester, by means of other oxidizing agents.
  + Chlorine shall not be used on delicate clothing (newborns - infants and similar), which shall be subjected to a special washing and disinfection process, appropriate for this type of clothing, in accordance with the Applicable Laws and Provisions.
* Delivery of clean clothes.
  + Pack the clean linen in order to avoid contamination during handling and post-wash storage, from CONCESSIONAIRE's facilities to the time of its use in the Services. The Clothes and Laundry Management Service shall be responsible for ensuring that the linen arrives in optimal conditions to all the Care areas.
  + Clean clothing must be transported aseptically to the storage areas located in the services and must be handed over to the person in charge of reception. The user shall verify the visual and physical condition of the linen, and may reject it due to poor washing, ironing, folding, persistent stains, tears, fraying, condition of elastics, presence of foreign elements that are not part of the clothing, among others. In these cases, the CONCESSIONAIRE shall replace them within the time referred to in this section.
  + The delivery of clean clothing shall be carried out in closed transport carts with wheels. The personnel of Clothes and Laundry Management Service shall be in charge of depositing the clean linen at the points set up for this purpose.
  + Reusable surgical linen shall be delivered to the sterilization unit for processing and subsequent delivery to the unit of use. The CONCESSIONAIRE shall ensure the availability of surgical linen at all times. The linen shall be delivered in a timely manner to the sterilization plant service for processing, with the Clothes and Laundry Management Service being solely responsible for the delivery of the units.
  + Clean clothing must be delivered properly sorted, ironed and folded. These criteria shall be proposed by the CONCESSIONAIRE and shall have the previous favorable opinion of the Supervisor of Contract and Operations.
  + The operating room linen shall be folded as requested by the sterilization unit.
  + Delivered linen shall be considered clean when it is free of stains.
  + The number of clothing in each package shall be proposed by the CONCESSIONAIRE and shall have the prior favorable opinion of the Supervisor of Contract and Operations, and a maximum weight of 5 kg shall be established for the packages, depending on the type of clothing in question. The same shall apply to the identification criteria of the packages.
  + Clean clothing must be weighed upon delivery by the laundry to the Hospital, specifying the type of clothing, their weight in kg or units, date of delivery, as well as any other data considered necessary for internal control.
  + The laundry will keep track of delicate linen and special clothing. The latter shall be delivered to the CONCESSIONAIRE separately from the rest of clothing, and the laundry shall do the same when making deliveries. Special clothing includes, among other things: curtains, flags, fabric screens, others.
  + The percentage of rejects of clothing supplied by the CONCESSIONAIRE shall never be above three percent (3%) in the case of the Care areas under its responsibility.
  + The percentage of humidity of the clothing shall not exceed two percent (2%). To ensure this measure, the CONCESSIONAIRE shall propose the measurement methodology, including the daily sample size, all of which shall have the prior favorable opinion of the Supervisor of Contract and Operations. Notwithstanding the foregoing, the Supervisor of Contract and Operations may carry out random measurements.
* Replacement of clothing.
  + The CONCESSIONAIRE shall replenish the patient's bed linen, and hospitalization clothes, as well as other types of clothes, in order to maintain the original quality of the clothing, ensuring that it maintains the quality according to the GRANTOR's needs.
* Response times.
  + **Replacement.** The replacement of clothing should be based on the results of monthly inventories, which should specify the reasons for the disposal of clothing, such as deterioration, wear and tear, and losses, among others. The criteria for the disposal of clothing must be previously defined and specified in the Service's POA.

Once the need for replacement has been established, the CONCESSIONAIRE, at its own expense, cost and responsibility, shall have a maximum of five (5) days to replace the damaged clothing. The replacement shall be considered valid when the Supervisor of Contract and Operations issues the compliance within 48 hours of its replacement, also with the compliance of the affected user area. If the damaged clothing, due to its characteristics and relevance for the user area, requires to be replaced in less time, the CONCESSIONAIRE shall replace it in the shortest time determined by the user area in conjunction with the Supervisor of Contract and Operations.

* + **For unscheduled requests and unforeseen events.** The CONCESSIONAIRE shall have the maximum times established in the following table to provide the service in relation to unscheduled and unforeseen requests made by an authorized user through the SIGI-NS.

The maximum times shall be counted from the request made in the information system by the corresponding user.

* + **Faced with the requirements to be made of the clothes that are damaged.** For these cases, response times will be as follows:

**Table 5: Maximum Solution Time**

|  |  |  |
| --- | --- | --- |
| **Zone** | **Maximum solution time (minutes)** | |
| **Contingencies (emergency)** | **Due to variations in demand**  **(unscheduled)** |
| Critical | 30 | 90 |
| Semi critical | 60 | 150 |
| Non-critical | 90 | 210 |

**Service Organization**

For this service, the CONCESSIONAIRE shall meet the Service's own requirements, as well as those of the user area through the SIGI-NS.

The CONCESSIONAIRE shall propose the functional Service organization, in order to provide the Service to all the user areas, considering that, during the Operational Stage, there shall be the pertinent coordination with the Sterilization, Security and Surveillance, Maintenance, Cleaning and Vector Management Services.

**Documentation**

In addition to the specific information that the CONCESSIONAIRE must submit as established in the previous sections regarding this Service, the following information must be submitted by the CONCESSIONAIRE:

* Initial information to be submitted by the CONCESSIONAIRE prior to the Commissioning. The CONCESSIONAIRE shall prepare the Service’s POA that includes its direct application with the Service. The Service’s POA shall determine the corresponding specifications and procedures within the framework of the Applicable Laws and Provisions and their updates or modifications during the execution of the Contract. The minimum referential content of the POA is indicated in Annex 21.
* Periodic reports to be submitted during the Operational Phase.
  + On a quarterly basis, the CONCESSIONAIRE shall submit microbiological reports of samples taken at the different points of the laundry process.
  + The CONCESSIONAIRE shall report, at the Hospital's request, on the physical and chemical processes used both for the linen and for the carts and transport elements.
  + The CONCESSIONAIRE shall deliver to the Supervisor of Contract and Operations a monthly report containing statistical information on the operation of the Service. This report shall contain, at least, the following information:
    - Kilograms of clothing collected and delivered,
    - Kilograms and percentage of lost clothing, torn clothing, removal due to wear and tear, etc.
    - Percentage of clothing replacement.
    - Percentage of late delivery.
    - Other information considered relevant for monitoring the Service quality and whose inclusion in the monthly report shall be agreed between the GRANTOR and the CONCESSIONAIRE.
    - Measurement of the Service Indicators, according to the Contract.
    - Percentage of activities suspended due to lack of clothes.
  + The POA shall include the technical data sheets on the materials and supplies to be used during the respective Calendar Year and shall specify the supplies to be used in the replenishment, washing, drying, ironing and mending procedures.

**Definition of Terms**

* Disinfection: The process by which most pathogenic microorganisms, except bacterial spores, are destroyed. Disinfectants are used on inanimate objects.
* Washing: Phases in which dirt and detergent residues are removed by flowing large quantities of clean water.
* Pre-washing: Phase prior to washing, since it is required that when the laundry is started it is free of dirt. Therefore, it is necessary to carry out previous procedures (in cold or warm water) to correctly remove protein stains and avoid their fixation.
* Rejected clothing: It is the clothing that presents residues of dirt, i.e. poorly washed, poorly ironed or poorly packaged or bagged, because it is not suitable for the use of patients of the Hospital.
* Patient clothing: It is that clothing used by the patient such as pajamas, towels, diapers, jackets and gowns.
* Deteriorated clothing: They are those that after having finished the washing and ironing process show noticeable wear, excessive stains, tears, torn edges.
* Flat linen: These are clothing such as sheets, bed protection pads, bedspreads, blankets, pillowcases, towels, etc.
* Sterile clothing: They are those clean clothing that have undergone a sterilization procedure for their respective use according to each area used.
* Disposable clothing: These are those clean sterile and non-sterile clothing made of disposable or reusable material for their respective use according to each area that requests them.
* Clean clothing: Those hospital, flat, surgical and delicate clothing, washed and ironed, which will be sent to their respective services.
* Dirty clothing: Those hospital, flat, surgical and delicate clothing that have been used in the different services by patients or Hospital personnel.
* Contaminated clothing: Those hospital, flat, surgical and delicate clothing that have been used in the different services by patients or Hospital personnel and have body substances or from patients with infectious diseases (includes linen coming from the emergency area, even without visible body fluids).
* Operating room clothing: These are those clothing necessary for the surgical intervention of patients and clothing of physicians, nurses and assistants.
* Linens: Those white hospital clothing that are used in the different areas of the Hospital (sheets, pillowcases, towels, etc.).
* Bed clothing: These are those hospital clothing, waterproof mattress cover, bottom sheet, top sheet, pillowcase and blankets, which are used in the different beds, patient stretchers.
* Colored linen: green, yellow, light blue and pink colored clothing used in the different areas of the Hospital (sheets, surgical linen, pillowcases, pajamas, gowns, etc.).
* Bleaching clothes: In this phase, the elimination of the chemical products used in the previous phases and a good finish of the clothing must be guaranteed.
* Dirt: Undesirable foreign bodies that are deposited or adhere to textiles.
* Hospital clothing: All hospital clothing of different colors and models necessary for the good service of the hospitalized patient (sheets, gowns, bedspreads, pajamas, surgical clothing, diapers, pillowcases, incubator covers, etc.), as well as the clothing of the clinical and support team for the care work.
  1. **CLEANING, SANITATION AND VECTOR MANAGEMENT SERVICE**

This service contemplates the cleaning, sanitation service of interior spaces, as well as the vector control and management of the hospital facilities and immediate accesses.

The quality of the Cleaning, Sanitation and Vector Management Service is related to (but not limited to) the following:

* Timely attention to the requirements of the Hospital's user areas for spaces in optimal conditions of cleanliness, hygiene and disinfection, avoiding affecting (by suspension or postponement) patient care.
* Safety in patient care, avoiding the risk of contamination attributable to inadequate conditions of cleaning, housekeeping and vector management, as well as the minimization of risks for this concept.
* Decontamination, as well as biosafety in all facilities, spaces, equipment and furniture.
* Compliance with the Applicable Laws and Provisions.
  + 1. **CLEANING AND SANITATION**

It consists of carrying out all environmental cleaning and disinfection activities in all the Hospital's [[1]](#footnote-1) facilities and spaces, providing a standard of service that guarantees environmental safety and reduces the risk of disease and infection transmission.

**Purpose**

The purpose of the cleaning and sanitation service is to provide a level of cleanliness and disinfection of the Hospital that complies with the Applicable Laws and Provisions, respecting its guidelines and the requirements indicated in this section, with a standard of service that provides guarantees of innocuousness to the clinical processes, by preventing and controlling the transmission of microorganisms through the hospital environment and thus providing patients, Hospital personnel and the general public with a comfortable, clean and aseptic environment in the required areas, helping to preserve the health of the environment and projecting a positive image of the Hospital.

**Scope**

It includes the cleaning and housekeeping of all the Hospital's healthcare and non-healthcare environments, its Clinical and Non-Clinical Furniture, and non-medical equipment, as well as the necessary supplies for the cleaning of such equipment, excluding the exterior cleaning of walls, exterior windows, gardens, among others, which shall be the responsibility of the infrastructure maintenance service.

The CONCESSIONAIRE must ensure that the Service is provided in such conditions that it does not conflict with the provision of care to patients, or the safety of Hospital personnel and the general public of the Hospital.

Likewise, the service must consider the supply, storage and handling of the supplies, their replacement in case of obsolescence, as well as the disposal of used or unused supplies, in accordance with the Applicable Laws and Provisions and the scope of these matters indicated in this section.

Excluded from this service are the functions associated with patient comfort, such as: personal hygiene, bedpans (chatas) removal or change of bed linen of inpatients, which shall be in charge of the GRANTOR. Notwithstanding the foregoing, the CONCESSIONAIRE has the obligation to provide the bed linen change service for the medical residences.

Notwithstanding the foregoing, the CONCESSIONAIRE shall provide all the necessary supplies and products for the Hospital's technical nursing personnel to carry out the proper cleaning of the patient's unit.

It is specified that the liquid soap is not only included in the hygienic services but also the liquid soap in the form of foam required by the Operating Room and other areas of the Hospital, according to the standards and requirements of the type of soap established by the GRANTOR.

The Service also includes the collection from the common solid waste containers (comparable to households), having to proceed to the sanitization, disinfection and disinsectization of these, once the bag has been removed and prior to its replacement.

The CONCESSIONAIRE shall guarantee the disinfection of the air in the environments considered clean as determined by the GRANTOR, changing and providing HEPA filters, where appropriate, in coordination with those responsible for the Maintenance Service. The CONCESSIONAIRE shall guarantee the absence of unpleasant odors in all the areas of the Hospital.

**Time Availability**

The CONCESSIONAIRE shall provide a service that allows the maintenance of all the Hospital premises properly cleaned during all the Calendar Days of the year and in a continuous manner.

The service shall be performed preferably at times when there is less traffic of patients, the general public, Hospital personnel or at the end of administrative work.

Scheduled times and frequencies should be detailed in the POA in accordance with the minimum standards stipulated in this section and linked to the Institutional Strategic Plan (PEI).

**Regulations**

For the provision of the Service, the CONCESSIONAIRE, considering the best practices and international standards, shall comply at least with the Applicable Laws and Provisions and the procedures established by the GRANTOR through the Supervisor of Contract and Operations in order to guarantee at all times the safety in terms of prevention of HAI, transmission of infectious diseases and occupational accidents.

In any case, the CONCESSIONAIRE shall comply with the technical standards set forth by the Ministry of Health or any other Competent Governmental Authority.

In particular, the CONCESSIONAIRE shall comply, as a minimum, with the following Applicable Laws and Provisions:

* Technical Guide on Procedures for Cleaning and Disinfection of Environments in Health Establishments and Medical Support Services, approved by Ministerial Resolution No. 372-2011/MINSA.
* Technical standard for cleaning and disinfection in the IPRESS of the Social Health Insurance System - ESSALUD (Resolution of Central Management of Health Services No. 10-GG-ESSALUD-2015).
* General Management Directive No. 19-GCPS-ESSALUD-2019 V.01 (Biosafety Standards of the Social Security Health Insurance - ESSALUD.
* Health directive to promote social handwashing as a healthy practice in Peru: Sanitary Directive", approved according to Ministerial Resolution No. 773-2012/MINSA.
* Technical Guide for Hand Hygiene in the IPRESS of the Social Health Insurance System - ESSALUD 2017 (Resolution of Central Management of Health Services N° 74-GCPS-ESSALUD-2017).
* Technical Guide for the Implementation of the Hand Hygiene Process in Health Establishments, approved according to Ministerial Resolution N° 255-2016/MINSA.
* Ministerial Resolution N° 599-2019-MINSA.
* General Management Directive No. 004-GCPS-ESSALUD-2018, V.01 (Cleaning and disinfection).
* Directive No. 19-GG-ESSALUD-2019, "Biosafety Standards of the Social Health Insurance System - ESSALUD.

**Equipment and Supplies**

The service includes the supply of dispensers and supplies such as: toilet soap and soap with antiseptic properties, alcohol gel, toilet paper, paper towels and stretcher paper. The CONCESSIONAIRE shall periodically self-inspect the Hospital to ensure its good condition, cleanliness and replenishment.

The CONCESSIONAIRE shall be responsible for the procurement, safe storage and use of the products required for the performance of the cleaning service, as well as for all the costs incurred for their procurement and conservation, guaranteeing compliance with the following premises:

* The CONCESSIONAIRE shall have a detailed list of the products to be used in each of the areas, indicating their composition, compatibility and adaptation to the use and environment in question.
* The products to be used, as well as their degree of dilution according to the criticality of the application areas, shall have the prior favorable opinion of the Supervisor of Contract and Operations.
* For the use of cleaning and disinfection products, the CONCESSIONAIRE shall always be governed under the principle of environmental protection.
* With respect to disinfectants, the CONCESSIONAIRE shall be governed by the indications determined by the legal, regulatory and technical standards in force at local, regional and national level during the term of the Contract.
* The CONCESSIONAIRE shall guarantee the disinfection of the air in the environments considered clean as determined by the GRANTOR, changing and providing HEPA filters, where appropriate, in coordination with those responsible for the maintenance service.

The CONCESSIONAIRE shall provide all the Equipment, devices, material and supplies necessary for the provision of the Service. The equipment used by the CONCESSIONAIRE shall incorporate state-of-the-art technology, guaranteeing its operation in optimum conditions, in accordance with the requirements of this section.

Likewise, the CONCESSIONAIRE shall have washable trolleys with casters, preferably plastic, with a key or lock, with separate compartments for garbage, detergents and cleaning implements. In the areas belonging to the established critical zoning, equipment with water filters must be considered. In addition, the equipment used for vacuuming and electric polishing must be silent.

The maintenance, acquisition and replacement of the equipment or any other element used by the CONCESSIONAIRE to provide this Service shall be the exclusive responsibility of the CONCESSIONAIRE.

Among others, the CONCESSIONAIRE shall provide:

* Cleaning products necessary to maintain the Hospital premises in perfect hygienic conditions.
* Supplies and products necessary for the nursing technical personnel to perform the proper cleaning of the patient's unit.
* Toiletries: paper towels, toilet paper, liquid soap, alcohol gel and its corresponding dispensers, garbage bags for all Hospital units. In addition, the CONCESSIONAIRE shall provide and install a deodorizing system in the public toilets and hygienic containers. It is specified that liquid soap is not only included in the hygienic restrooms but also liquid soap in the form of foam required by the Operating Room, according to the standards and requirement of soap type established by the GRANTOR.
* And any necessary equipment to carry out the cleaning process.
* All cleaning products shall be coded and labeled, which shall be expressed in the POA.

**Personnel**

The CONCESSIONAIRE shall provide and maintain the necessary and sufficient staffing in accordance with the requirements of the Contract, as well as to cover breaks, vacations, medical breaks and unforeseen absences for 24 hours a day, all year round.

The Service must have a permanent supervision program for the contracted personnel, indicating methods to be applied for compliance with the procedures.

The personnel hired by the CONCESSIONAIRE must be certified as having undergone psychological and, if applicable, psychiatric tests at accredited health establishments for such purpose, in order to prevent or avoid acts against the physical and mental integrity of the children, adolescents, visitors and Hospital personnel.

All personnel shall be free of infectious diseases and have up-to-date vaccinations, and the CONCESSIONAIRE shall be responsible for keeping a copy of the documents evidencing compliance with this obligation. The personnel must have a certificate of health apt for the position.

The CONCESSIONAIRE must have a head of the Service whose minimum profile must be:

* With technical studies in administration or similar.
* With professional experience of at least (3) three years.
* With experience in similar positions of hospital experience of at least (3) three years.
* Have skills in coordination, managerial ability.

Minimum profile of cleaning personnel:

* All personnel must have at least six (6) months of experience in industrial cleaning, except those assigned to critical and semi-critical areas, who must have at least twelve (12) months of experience in cleaning Health Establishments.
* All personnel participating in the provision of the service must prove specific initial training of at least forty (40) hours on topics related to: cleaning in healthcare facilities, HAI, vectors (types and management), effective barriers, evaluation and management of supplies and hospital waste, among others, all of which must be developed within the framework of the technical regulations governing the provision of cleaning services.
* Likewise, the CONCESSIONAIRE must annually update, in the corresponding topics, the aforementioned training to all personnel who require it, which will be verified by the Supervisor of Contract and Operations. The training must be provided by health professionals with experience in this service in Health Establishments.
* The CONCESSIONAIRE, in addition to providing the necessary human resources to maintain optimum hygiene and disinfection conditions, shall assign specific cleaning personnel in the Hospital's surgical centers. The CONCESSIONAIRE shall provide the necessary personnel so that during the time that surgical activity takes place in the Hospital, the dressing rooms in the surgical area have the necessary personnel assigned to them so that, in addition to carrying out the cleaning and replenishment of cleaning utensils. The personnel involved in the provision and supervision of this Service must have protective elements in accordance with the risk associated with it.
* The uniform of the surgical block personnel must be of a different color than the one used in the other units of the Hospital, and in no case may they go out with it, outside these areas.
* The POA must indicate the staffing with the estimated productivity levels. It should also specify the detail of uniforms for cleaning supervisor and cleaning operator, the period in which they should be renewed, as well as the detail of them by seasons of the year (summer to winter).
* The personnel profiles shall be submitted to the Supervisor of Contract and Operations, for compliance with the corresponding technical standard, ten (10) Days prior to the commencement of the Service. Any subsequent change shall be communicated and the corresponding profile shall be submitted to the Supervisor of Contract and Operations for a favorable opinion, at the latest one (1) day after the change occurs.

**Technical - Functional Specifications Of The Service**

The CONCESSIONAIRE shall train its personnel in relation to the cleaning techniques to be implemented according to the criticality of the area to which they are assigned, through the permanent implementation of internal control procedures carried out by the professional personnel of the CONCESSIONAIRE’s operating organization.

All cleaning procedures and protocols shall be adapted to the potential pathogenic risk level of the area in which it is carried out. Depending on the type of area, the necessary procedures, materials and techniques shall be implemented for the adequate control of HAI, for which the CONCESSIONAIRE shall structure the cleaning of the Hospital by areas, which shall have the prior favorable opinion of the Supervisor of Contract and Operations and shall be defined in accordance with the level of risk of pathogenic transmission:

* Critical or high-risk zones for patients.
* Semi-critical or medium-risk zones for patients.
* Non-critical or low-risk zones for patients:
  + Indoors
  + Exteriors

For the performance of the cleaning works, the necessary personal protection elements (PPE) shall be available for the workers, proceeding to the signaling of the areas to avoid accidents when necessary.

Any cleaning activity that interferes with the Care works, shall have the GRANTOR's non-objection, previous favorable opinion of the Supervisor of Contract and Operations, adapting its schedule if necessary (including nights and holidays).

During the cleaning works, the personnel of the Service shall replenish the consumables included in its scope, and restore order in the cleaning areas.

**Type of cleaning by scheduling**

* Scheduled: It is the one that is carried out in the different areas of the Hospital, according to a pre-established planning and technique, in accordance with the present section.
* Unscheduled or upon request: It is performed in response to a request, according to a pre-established technique and response times established in this section.

The CONCESSIONAIRE shall follow the indications of the General Directorate of Environmental Management (DIGESA) of the Ministry of Health of Peru (MINSA) or the entity replacing it in terms of operating protocols and specific products to be used, guaranteeing a Service that provides the necessary cleaning and disinfection to all areas of the Hospital (including the spaces occupied by the CONCESSIONAIRE).

The cleaning of the machine rooms, medical gas plant or other areas or spaces intended to accommodate special installations or equipment (electrical, sanitary, computer, air conditioning, security, telecommunications, etc.) shall be carried out by personnel specially trained for such tasks belonging to each of the operating Services involved: telecommunications and computer service and maintenance service, provision of public services and energy efficiency.

The cleaning of the CONCESSIONAIRE's warehouses shall be carried out by each of the Services to which they are assigned: food supply service and security and surveillance service.

The cleaning of the kitchen and spaces assigned to the food supply service shall be carried out by the personnel of said service.

Three (3) types of cleaning are considered, depending on the areas to be cleaned:

* Routine or basic cleaning.
* Semi-thorough cleaning.
* Thorough cleaning.

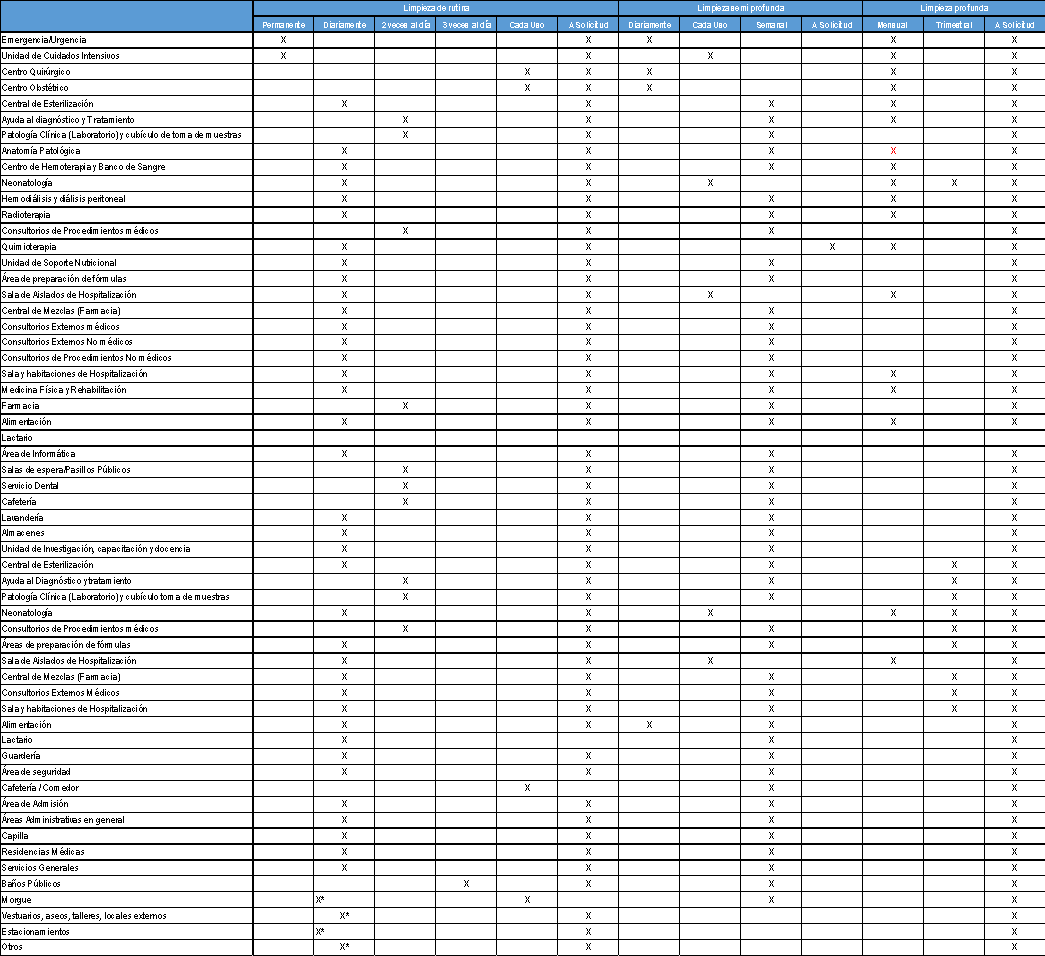
**Frequencies**. The frequency of application of these types of cleaning is shown below:

* Permanent: The service shall be staffed continuously on-site at the required premises.
* Daily: The service is provided once (1) a day in accordance with the schedules and conditions specified in the POA.
* 2 times a day: The service is provided two (2) times a day in accordance with the schedules and conditions specified in the POA.
* 3 times a day: The service is provided three (3) times a day according to the schedules and conditions specified in the POA.
* Each Use: The service is provided on the premises or portion thereof as appropriate, at the conclusion of each patient use.
* On request: Corresponds to the specific request for the provision of the service by a SIGI-NS user, authorized by the GRANTOR.

Likewise, it will be understood that in those cases where periodicities such as weekly, monthly or quarterly are indicated, the service must be provided at the frequency indicated, according to the schedules and conditions specified in the POA.

For reference purposes, the frequency by type of cleaning per Hospital unit is shown below, as appropriate.

**Table 6: Types and Frequency of Cleaning by Units**



For all the Services or care and non-care environments not identified in the table above, the minimum frequency requirements shall be:

* Routine or basic cleaning: daily, after 7:00 pm.
* Semi-thorough cleaning: upon request.
* Thorough cleaning: upon request.

**Response times**. The CONCESSIONAIRE shall have a corrective cleaning service to attend to possible urgencies and emergencies arising from the Hospital's activity. This service shall be performed based on a request from a specific sector channeled through the SIGI-NS or at the request of the cleaning supervisor defined for such purpose by the CONCESSIONAIRE, who shall stipulate the response times according to the priority and seriousness of the situation.

The CONCESSIONAIRE shall respond to such requests as many times as required and within the established response time:

**Table 7: Maximum Response Time**

|  |  |
| --- | --- |
| **Category** | **Maximum response time** |
| Emergency (if it requires the cessation of the Hospital's activity). | 5 minutes |
| Urgency (if it delays times in medical procedures) | 10 minutes |
| Scheduled | 16 minutes after the scheduled time |

**Definition of Terms**

* Antiseptic: Antimicrobial substance applied to the skin to reduce the number of bacterial flora present.
* Contaminated area: These are the places that are a reservoir of certain types of germs, due to the nature of their functions for circumstantial reasons.
* Clean area: These are the places where work is done with clean or sterile elements; such as surgical center, sterilization plant, laboratory, blood bank, intensive care unit, etc.
* Dirty area: These are the places where body fluids are disposed of, or serve as a deposit and place to wash and decontaminate elements used with patients, such as intermediate or final storage areas for contaminated waste and laundry (Dirty Clothes).
* Disinfection: It is the process carried out for the elimination of microorganisms of vegetative forms without ensuring the elimination of bacterial spores on inanimate objects (from surfaces and air), by means of chemical or physical agents called disinfectants.
* Disinfectants: These are chemical solutions that destroy or inactivate microorganisms that can cause disease and are applied on inert material without deteriorating it.
* Alcoholic rub-in hand disinfectant: Alcoholic product (liquid, gel or foam) intended for application to the hands in order to reduce the growth of microorganisms. Such products may contain one or more types of alcohol with excipients, other active ingredients and moisturizers.
* World Health Organization (WHO) Multimodal Hand Hygiene Improvement Strategy: methodology based on WHO guidelines, with the aim of changing hand hygiene behavior, improving safety in patient care.
* Hand hygiene: Hygiene measure conducive to hand antisepsis in order to reduce transient bacterial flora. It usually consists of rubbing the hands with an alcohol-based antiseptic or washing them with plain or antimicrobial soap and water.
* Antimicrobial soap: Soap containing a chemical ingredient with activity against skin surface flora, it can be used in liquid or gel form.
* Hand washing: It consists of the mechanical removal of dirt and elimination of transient microorganisms from the skin. It is the routine hand washing that is performed with water and plain soap and has a duration of no less than twenty (20) seconds removes 80% of the transient microbial flora.
* Cleaning: Removal of dirt deposited on fixed surfaces using mechanical (rubbing, scrubbing, brushing), physical (temperature) or chemical (disinfection) means within a certain period of time. Regardless of the area to be sanitized, it is important to mechanically remove the dirt and not simply wipe with wet clothes that spread the dirt.
* Routine or basic cleaning: It is performed in Services or environments that are in operation. It intends to clean by dragging horizontal surfaces, followed by wet cleaning with chemical cleaning supplies or surface disinfectants, as appropriate. This type of cleaning includes: floors, bathrooms, clinical and non-clinical furniture. It also includes: removing and replacing the bags from the tubs, emptying them, disinfecting, drying and relocating them to their original position; replacing the supplies (liquid soap, toilet paper and hand towel) in rooms where there are dispensers; replacing the supplies in rooms where there is paper towels; positioning the furniture according to the original location; vacuuming carpeted areas.
* Semi-thorough cleaning: It is performed in Services or environments that are totally or partially functioning. It intends to use specialized supplies in order to ensure a semi-thorough cleaning. It considers all the elements of the Service or environment, including those not considered in routine cleaning, such as: vertical surfaces, air ducts, blinds, walls, ceilings, lights, doors, everything attached at height and walls. It includes washing, waxing or polishing of floors as appropriate, except for carpeted floors. It should also consider the thorough washing of floors and pavement indicated in the POA, in order to remove old layers of wax, varnish, etc., leaving it ready for the application of a conservation and maintenance treatment.
* Thorough cleaning: It corresponds to a thorough cleaning, scheduled or upon request, involving both horizontal and vertical surfaces, non-clinical furniture, lighting, ventilation grilles, and any other element not indicated in the semi-thorough cleaning. Considers carpet cleaning on surfaces where applicable.
* Specific or corrective cleaning: This is the corrective cleaning service to meet possible emergencies and emergencies arising from the Hospital's activity.
* Dirt: It is the organic and potentially microorganism-carrying matter that reaches surfaces through direct contamination such as daily use, through indirect contamination by contact with environmental air and dust, and direct contamination of microorganisms from the activity of arthropods (flies, cockroaches), rodents and other vectors.
* Microorganism: Also called microbe or microscopic organism, it is a living being that can only be visualized with the microscope. They are organisms endowed with individuality that present, unlike plants and animals, an elementary biological organization. They are mostly unicellular (bacteria, viruses, fungi).
* Patient unit: A patient unit is considered to be the whole formed by the space of the room, the furniture and the material used by the patient during his stay in a Health Establishment. In a hospitalization unit there shall be as many patient units as the number of beds. The cleaning of the patient unit will be in charge of a nursing technician.
* Critical areas: Critical or medium-high risk areas are identified as those areas that, due to their characteristics and the procedures performed, pose a high risk of threat of patient death and infection.
* Semi-critical or medium critical areas: They are those areas of the Hospital or medium risk, they are those areas where less invasive procedures are performed, which involve a medium risk of threat of patient death and infection.
* Non-critical areas: They are those areas of the Hospital with low risk of infection, which do not imply a risk of infection. It can be: indoor or outdoor.
* Environment cleaning zone: For this guide the environment cleaning zone is composed of floors, walls, baseboards, windows, ceilings, blinds, sinks, doors, toilets. The cleaning of the cleaning unit will be carried out by the cleaning personnel.

* + 1. **VECTOR AND PEST SANITARY CONTROL**

This service consists of keeping all Hospital facilities free of pests or fauna that may have a harmful effect on the health of patients, Hospital personnel and personnel in general. And in case of identification of any vector, take action and control measures to minimize the risk to the health of people without interrupting the operation of the facilities, following the best recommendations of the industry.

**Purpose**

The purpose is to keep the Hospital free of pests or fauna, which can act as mechanical vectors or intermediate hosts capable of transmitting diseases to humans, representing a risk to people or to buildings and facilities, through the implementation of a set of promotion, prevention and surveillance activities. In addition to the known vectors, those specific to the geographical area and pests of seasonal occurrence are considered.

**Scope**

It includes the sanitary control of vectors in all the Hospital's healthcare and non-healthcare facilities, as well as in the rest of the areas that make up the aforementioned Health Establishments.

The service shall be provided on the basis of preventive, scheduled and corrective or shock treatments on an unscheduled or punctual basis at the request of the GRANTOR or the Supervisor of Contract and Operations, when applicable.

For the purposes of this Service, "vector" is understood as the living carrier that, by means of dissemination, inoculation or both, can transmit infectious or harmful agents for human health.

The CONCESSIONAIRE shall be responsible for the efficacy and control of the different treatments, as well as for the follow-up, monitoring, regulation and technical advice required. Likewise, it shall consider the necessary safeguards in the management of vectors included under the concept of protected species according to the Applicable Laws and Provisions.

The CONCESSIONAIRE must ensure that the Service is provided under conditions that are not in conflict with the provision of care to patients, nor the safety of Hospital personnel and the general public of the Hospital.

**Regulations**

For the provision of the Service, the CONCESSIONAIRE, considering the best practices and international standards, shall comply at least with the Applicable Laws and Provisions and the procedures established in this regard by the GRANTOR through the Supervisor of Contract and Operations, in order to guarantee at all times, the safety in terms of prevention of HAI, transmission of infectious and contagious diseases and occupational accidents.

In any case, the CONCESSIONAIRE shall comply with the technical standards set forth by the Ministry of Health or any other Competent Governmental Authority.

In particular, the CONCESSIONAIRE shall comply, as a minimum, with the following Applicable Laws and Provisions:

* Technical Health Standard No. 133-2017/MINSA/DIGESA Technical Health Standard for the Implementation of Integrated Surveillance and Control of Insect Vectors, Nuisance Arthropods and Rodents in Health Establishments and Medical Support Services.
* Health Technical Standard No. 116-2015MINSA/ DIGESA - V.01 "Health Technical Standard for the Implementation of Surveillance and Control of Aedes Aegypti, vector of dengue and chikungunya fever and prevention of the entry of Aedes Albopictus in the national territory".
* Sanitary Directive No. 051- 2012/MINSA/DIGESA-V.01 "Sanitary Directive for the Scheduling of Pesticides Used in Prevention and Control of Insect Vectors of Metaxenic Diseases.
* Technical Health Standard for the Implementation of Surveillance and Control of Aedes Aegypti, Dengue Vector in the National Territory.

Notwithstanding the aforementioned, it is the CONCESSIONAIRE’s responsibility to ensure that the Vector Sanitary Control Service is provided in accordance with Applicable Laws and Provisions.

**Time Availability**

The CONCESSIONAIRE must provide the Service, every day of the year, on a continuous basis, during the entire term of the Contract.

**Equipment and Supplies**

The CONCESSIONAIRE shall prove that all the inputs it uses have the authorizations in accordance with the Applicable Laws and Provisions and the corresponding sanitary registrations.

The CONCESSIONAIRE shall inform the Supervisor of Contract and Operations through the SIGI-NS, regarding all the inputs it uses in the provision of the Service, by means of a technical data sheet containing, at least, the following: quantities, dilutions, safety and storage measures, as well as their flammable and toxic condition. Likewise, the CONCESSIONAIRE shall keep updated in the SIGI-NS and in the accident or contingency control measures plan during the Operational Stage, the information regarding the amount of flammable or toxic inputs together with the respective data sheets and safety and storage measures.

The CONCESSIONAIRE shall ensure the sufficiency of equipment and technologies necessary for the provision of the Service in accordance with the requirements established in the Contract.

Likewise, the maintenance, acquisition and replacement of the Equipment or any other element used by the CONCESSIONAIRE for the provision of this Service shall be the exclusive responsibility of the CONCESSIONAIRE.

**Personnel**

The CONCESSIONAIRE shall guarantee that the Service is provided in accordance with the provisions of the Contract, and shall have an organizational structure and staffing that meets such requirements. For these purposes, it shall comply, as a minimum, with the following:

* A supervisor in charge of the Service.
* All personnel participating in the provision of the Service must undergo a medical evaluation prior to their incorporation and be included in the biological and ergonomic risk prevention programs to be prepared by the CONCESSIONAIRE.
* The personnel must accredit, as a minimum schooling level, a completed high school.
* All personnel must accredit, at least, six (6) months of experience in the vector sanitary control field.
* All personnel participating in the provision of the service must accredit specific initial training of at least forty (40) hours in topics related to: sanitation in Health Establishments, HAI, vectors (types and management), effective barriers, evaluation and management of supplies and hospital waste. Likewise, the CONCESSIONAIRE must annually update the aforementioned training on the corresponding topics for all personnel who require it, which shall be verified by the Supervisor of Contract and Operations. The training must be provided by health professionals with experience in this service in Health Establishments.
* The personnel of the CONCESSIONAIRE involved in the provision and supervision of this Service must be familiar with the local standards and procedures for handling and transferring waste in which vectors may be found.
* The personnel participating in the provision and supervision of this Service must have personal protection elements according to the risk associated to it and to the Applicable Laws and Provisions.

**Technical - Functional Specifications of the Service**

The CONCESSIONAIRE shall implement this Service in accordance with the requirements set forth in this Annex and in the POA, so as to respond in a scheduled or reactive manner, based on their requirements. Likewise, it shall comply with the Service Indicators.

The CONCESSIONAIRE shall include in the POA the scope, technical and operational definitions, service delivery modalities, technical and administrative procedures, process flows, organizational structure and staffing, and control and supervision mechanisms, among other aspects, of the Vector Sanitary Control Service, consistent with the requirements set forth in this Annex.

The CONCESSIONAIRE shall implement the disinsection and rat extermination routines as indicated in the POA of the Service.

The CONCESSIONAIRE must have protective barriers as established in the MINSA's or the GRANTOR's technical standards, and also in those places indicated by practical evidence in this regard, such as, for example, windows of hospital wards or rooms and hospitalization bathrooms. Likewise, the CONCESSIONAIRE must design and establish the procedure for signs, protective barriers, precautions and appropriate warnings regarding the provision of the service that imply any potential or actual risk for patients, visitors, Hospital personnel and the general public.

The CONCESSIONAIRE shall consider as part of this Service, a monthly inspection program. In addition, at least two annual preventive nighttime inspections shall be considered, one in winter and the other in summer. The planned inspections and treatments should be prioritized towards the healthcare facilities and the food preparation and storage and hospital waste storage areas.

The Supervisor of Contract and Operations may evaluate the effectiveness of the treatments carried out for the elimination and control of vectors, requesting the pertinent changes in the event of deficient evaluations or the appearance of new vectors.

The CONCESSIONAIRE shall be responsible for keeping the presence of vectors under control. In the event of unscheduled emergency situations that represent health risks, the Supervisor of Contract and Operations shall qualify such circumstance and determine the term for the respective shock treatment to be provided.

**Service Organization**

For this Service, the CONCESSIONAIRE must meet the requirements of the Service, as well as those of the user area through the SIGI-NS.

The CONCESSIONAIRE shall propose the functional service organization, in terms of cleaning, housekeeping and sanitary vector control, in order to provide the service to the Hospital personnel and the public in general, considering that, during the Operational Stage, there shall be the pertinent coordination with the Infrastructure Maintenance Service, and Integrated Solid Waste Management Service.

**Documentation**

* Initial information to be submitted by the CONCESSIONAIRE prior to the commissioning. The CONCESSIONAIRE shall prepare the POA for the Service, cleaning and sanitation and sanitary vector control, which shall include its direct application. The Service’s POA shall determine the corresponding specifications and procedures within the framework of the Applicable Laws and Provisions and their updates or modifications during the execution of the Contract. The minimum referential content of the POA is indicated in Annex 21.
* Periodic reports to be submitted during the Operational Stage.
  + On a quarterly basis, the CONCESSIONAIRE shall submit to the Supervisor of Contract and Operations reports on the application of cleaning and vector control and management actions with their results.
  + The CONCESSIONAIRE shall report, at the request of the Supervisor of Contract and Operations, on the physical and chemical processes used for cleaning and disinfection as well as vector management.
  + The CONCESSIONAIRE shall deliver to the Supervisor of Contract and Operations a monthly report containing statistical information on the performance of the Service. This report shall contain, as a minimum, the following information:
    - Number of scheduled and unscheduled toilets,
    - Evaluation of the Service.
    - Percentage of compliance with scheduled Service.
    - Percentage of compliance with unscheduled Service.
    - Information on control, vector management and findings.
    - Other information considered relevant for monitoring the Service quality and whose inclusion in the monthly report shall be agreed between the GRANTOR and the CONCESSIONAIRE.
    - Measurement of the Service Indicators, according to Contract.
    - Percentage of activities suspended due to lack of cleanliness or sanitation.
    - Percentage of activities suspended due to the presence of vectors.

**Definition of Terms**

* Vector control: activity by which actions are taken to eliminate a population of insect vectors or control their population to levels that do not constitute a risk for disease transmission, whether chemical, mechanical or biological control.
* Larvicidal control: Control of breeding sites, which consists of the application of a larvicide to eliminate the larvae of the dengue vector that cannot be eliminated in any other way. Also referred to as focal control.
* Insecticides: They are those products used for interventions in the prevention and control of insect vectors transmitting Metaxenic Diseases.
* Insect Vector: insect that has the capacity to acquire a pathogen, allow its propagation in its own organism and transmit it in a viable form to another organism that will develop the disease.
* Larvae: aquatic (immature) stage of mosquito metamorphosis.
* Larvicide: Compound of chemical or biological origin that has the ability to kill mosquito larvae.
* Pest: Sudden and multitudinous infestation of insects, animals or other organisms of the same species that cause various types of damage and that may even harm or constitute a health risk to people.
* Pesticide: Compound that has the capacity to kill an organism.
* Risk: Probability of occurrence of harm.
* Rodent: Murine mammal, considered a pest and that can potentially transmit diseases to people or contaminate some environment.
* Vector: Any agent (person, animal or microorganism) that transports and transmits a pathogen to another living organism.
  1. **INTEGRATED SOLID WASTE MANAGEMENT SERVICE**

The Integrated Solid Waste Management corresponds to all technical and administrative activities of planning, coordination, agreement, design, application, and evaluation of policies, strategies, plans, and action programs for the appropriate management of solid waste.

Solid waste management involves conditioning, segregation, collection, storage, removal, transport, and final disposal or any other technical operational procedure used from the generation to the final disposal of solid waste.

The quality of this Service is related to (but not limited to):

* Adequate compliance with the corresponding activities, avoiding the suspension or postponement of diagnostic or therapeutic procedures, as well as administrative procedures in the different Care and administrative areas of the Health Establishment.
* Safety in patient care (avoiding, for example, intra-hospital infections), the safety of the Hospital's Care and administrative personnel, the safety of the general public that enters the Hospital and the safety of the environment surrounding the hospital, avoiding the minimum exposure to risks to people's health, risks attributable to the inadequate management of solid waste generated in the Hospital.
* Unrestricted compliance with the Applicable Laws and Provisions on the Integrated Solid Waste Management in Health Establishments, Medical Support Services and Research Centers.

**Purpose**

To provide the integrated management and handling, conditioning, segregation, collection, storage, removal, transport and disposal of solid waste generated in the Hospital and treatment if applicable, in an effective, efficient and safe manner, in order to provide safety for patients, personnel and visitors of the same, to control and minimize health, occupational and environmental risks due to inadequate management and handling of solid waste generated. All in accordance with the Applicable Laws and Provisions for these purposes.

**Scope**

The CONCESSIONAIRE shall provide and operate a management and disposal system for the waste generated at the Hospital considering the best practices and international standards shall comply at least with the Health Technical Standard No. 144-MINSA/2018/DIGESA "Integrated Solid Waste Management in Health Establishments, medical support services and research centers", approved by Ministerial Resolution No. 1295-2018/MINSA, and the other Applicable Laws and Provisions.

* Conditioning of all the environments of the Hospital with all the materials and supplies to start the management of hospital waste according to the activity performed, its storage and classification.
* Segregation of hospital waste, including training and awareness-raising of healthcare personnel in the proper segregation of waste generated as a result of the healthcare activity.
* Collection and Internal transportation: These are the activities of transferring hospital waste within the hospital to the corresponding final disposal.
* External collection and final disposal: This is the disposal of hospital waste in the sanitary landfill or places authorized for this purpose.
* Develop protocols for action in cases of accidental spills and containment of environmental or personnel contamination.
* The CONCESSIONAIRE must guarantee the traceability of the vehicle so that the solid waste reaches the treatment plant and subsequent final disposal in the sanitary landfill.

Hospital waste is understood as any material from the Hospital from the moment it is rejected, because its usefulness or clinical management is considered finished and only then can we begin to talk about waste that has an associated risk. According to the Applicable Laws and Provisions, the service must include the three (3) types of waste that may be generated in the Hospital:

* Class A: Biocontaminated wastes. These are those hazardous wastes generated in the process of medical and scientific care and research, which are contaminated with infectious agents, or may contain concentrations of microorganisms that are of potential risk to the person who comes into contact with such wastes.
* Class B: Special waste. These are those hazardous wastes generated in Hospital with physical and chemical characteristics of potential danger due to corrosive, flammable, toxic, explosive, reactive and radioactive for the exposed person.
* Class C: Common waste: These are those wastes that have not been in contact with patients, or with contaminating materials or substances; such as those generated in offices, corridors, common areas, cafeterias, auditoriums and in general in all sites of the generator's establishment, including the remains of food preparation. This category includes, for example, waste generated in administration, waste from the cleaning of gardens, patios, public areas, remains of food preparation in the kitchen and, in general, any material that cannot be classified in categories A and B.

**Regulations**

For the provision of the Service, the CONCESSIONAIRE, considering the best practices and international standards, shall comply at least with the Applicable Laws and Provisions and the procedures established in this regard by the GRANTOR through the Supervisor of Contract and Operations, in order to guarantee at all times, the safety in terms of prevention of HAI, transmission of infectious and contagious diseases and occupational accidents.

In any case, the CONCESSIONAIRE shall comply with the technical standards set forth by the Ministry of Health or any other Competent Governmental Authority.

In particular, the CONCESSIONAIRE shall comply, as a minimum, with the following Applicable Laws and Provisions:

* Ministerial Resolution No. 258-2011/MINSA, which approves the Technical Document "National Environmental Health Policy".
* Ministerial Resolution No. 312-2011/MINSA, which approves the Technical document "Protocol for Occupational Medical Examinations and Diagnostic Guides for Mandatory Medical Examinations by Activity".
* Ministerial Resolution No. 1295-2018/MINSA which approved the Technical Health Standard No. 144-MINSA/2018/DIGESA "Integrated Solid Waste Management in Health Establishments, medical support services and research centers".
* Resolution No. 27-GG-ESSALUD-2020 which approved Directive No. 02-GCPS-ESSALUD-2020 on "Solid Waste Management Standards in ESSALUD".
* MINAM regulation on disposal of electrical and electronic devices.
* Regulation on management of human anatomical-pathological and corporeal waste.
  + Directive No. 19-GG-ESSALUD-2019, "Biosafety Standards of the Social Health Insurance System - ESSALUD".
  + Radiological Protection and Safety Standard of ESSALUD.

**Time Availability**

This Service shall be available 24 hours a day, every day of the year, during the period of contractual execution of the service, and there shall be no excuse for its paralyzation or for non-compliance or delay.

Likewise, the specific schedules for the activities corresponding to the stages indicated in the scope of the Service will be determined in the respective POA. This schedule shall have sufficient flexibility to adapt to the needs of the user areas and to respond to any unscheduled needs or requests that may arise.

**Equipment and Supplies**

The CONCESSIONAIRE shall inform the Supervisor of Contract and Operations through the SIGI-NS, regarding all the inputs used in the provision of the Service, by means of a technical data sheet in accordance with the Applicable Laws and Provisions and containing, at least, the following: quantities, dilutions, safety and storage measures, as well as their flammable and toxic condition, among other data.

As a safety measure, knowledge of the *Material Safety Data Sheet* (MSDS) shall be mandatory.

The CONCESSIONAIRE shall provide and replenish directly at each waste-generating site, at its own cost and risk, the respective bags and containers for categorized waste, and any other element or input, according to the frequency established in the respective POA on quantity and quality.

The CONCESSIONAIRE shall use the infrastructure available or associated to the environmental management unit for the development of the Service, implementing as much Equipment as required and its respective maintenance, to undertake with quality the tasks of its competence, according to the conditions established in this Contract.

Likewise, the maintenance and replacement of the Equipment or any other element used by the CONCESSIONAIRE for the provision of this Service shall be the exclusive responsibility of the CONCESSIONAIRE.

The CONCESSIONAIRE shall be liable for any loss or breakage or inoperability or any damage or deficiency that may occur in the infrastructure and Equipment of the service and of the Hospital as a result of the performance of the Service.

Consequently, the CONCESSIONAIRE shall bear the cost and arrange for the replacement (if applicable) with a completely new product. The cost of replacement shall be borne entirely by the CONCESSIONAIRE.

The cleaning and maintenance of the infrastructure of the Environmental Management Unit shall be assumed by the CONCESSIONAIRE as part of the Service, considering for this purpose the provisions of General Management Directive No. 004-GCPS-ESSALUD-2018 V.01, "Technical Standard for Cleaning and Disinfection in the IPRESS of the Social Health Insurance System - ESSALUD", or rule that modifies or replaces it.

**Personnel**

The CONCESSIONAIRE shall have sufficient personnel for the performance of the functions within the scope of the Service, so that the activity is not interfered by issues related to lack of human resources (sick leave, training, absences, breaks, vacations, unforeseen absences, etc.).

The CONCESSIONAIRE must have a head of the Service whose minimum profile must be:

* Environmental, sanitary or related engineer.
* Specialized in management and handling of hospital waste.
* Trained in biosafety in health establishments.
* With a minimum professional experience of five (5) years.
* With experience as head or responsible for the management and handling of hospital waste of at least two (2) years.

In accordance with the POA, this Head of Service will coordinate its work with the GRANTOR through the Epidemiology Office (Biosafety) and the Hospital's Environmental Health Unit or Sanitary Engineering Division, or the unit that takes their place.

For shifts when the head of service is not available, the shift manager will be in charge of the shift manager (if necessary).

The personnel hired by the CONCESSIONAIRE shall be certified as having undergone psychological and, if applicable, psychiatric tests at accredited health establishments for such purpose, in order to prevent or avoid acts that may threaten the physical and mental integrity of the children, adolescents, visitors and Hospital personnel. Also, comply with the provisions of Ministerial Resolution No. 312-2011/MINSA, which approves the Technical Document "Protocol for Occupational Medical Examinations and Diagnostic Guides for Mandatory Medical Examinations by Activity".

The personnel must be duly trained and qualified in the role they will perform as part of the Service as described in the technical health standard on the subject. They must be trained in biosafety standards and the appropriate measures to be used in the event of an accident.

The personnel profiles shall be submitted to the Supervisor of Contract and Operations, for compliance with the corresponding technical standard, ten (10) days prior to the start of the Service. Any subsequent change shall be communicated and the corresponding profile shall be submitted to the aforementioned Supervisor for a favorable opinion, at the latest one (1) day after the change occurs.

The CONCESSIONAIRE must have the personnel's updated documentation, as well as the police and criminal record certificates, health card and Hepatitis B and tetanus vaccination card.

With respect to the health card and the hepatitis B and tetanus vaccination card, they must be in force and must be shown at the request of the Supervisor of Contract and Operations. In the case of the vaccination card, it must bear the signatures of the personnel responsible for administering each dose, as well as the identification of the vaccine batches. Regarding the police clearance and criminal record certificates, these must certify the lack of such record.

The evaluation of alternatives for the acquisition of personal protective equipment (PPE), for the development of daily work, should be carried out according to the activity that the personnel perform, which should be contemplated in the Hazard Identification, Risk Assessment and Control Measures (IPERC) matrix to be developed for this Service, the information to be considered should be that contained as regulations in Annex 10 of NTS No. 144-MINSA/2018/DIGESA, or rule that modifies or replaces it.

**Technical - Functional Specifications of the Service**

Due to the characteristics of the waste and the potential risk that some of them may present, it is necessary to carry out a correct handling of them, so it is necessary to establish an adequate planning that guarantees safety and asepsis in the collection and transfer to the final storage of the Hospital, as well as in their subsequent transport to the transfer or treatment and disposal plants.

Specifically, the objectives and activities in both the in-hospital and external management are as follows.

**Table 8: Activities in the in-Hospital Area by Waste Type**

| **Objectives** | **Activities** | |
| --- | --- | --- |
| **Class A and B waste** | **Class C waste** |
| Ensure good solid waste segregation practices. | Design and implementation of a training program and awareness plan for the personnel involved (cleaning personnel, care personnel, generators and other hospital personnel and CONCESSIONAIRE’ personnel). | |
| Support process and information support for the elaboration of management documents required according to Applicable Laws and Provisions (baseline diagnostics, Minimization Plans/Programs and Solid Waste Management in the hospital). | |
| Design and implementation of the Occupational Risk Surveillance Plan for the activities under the CONCESSIONAIRE's scope. | |
| Implement adequate methods, materials and equipment for conditioning, primary storage and internal transportation of solid waste. | Determination of standardized methods and procedures for class A and B waste management. | Determination of standardized methods and procedures for the class C waste management |
| Supply of equipment (containers, trolleys for transporting bags, garbage cans) and consumables (bags, sharps containers) for in-hospital management. | |
| Internal transport of waste containers from the intermediate warehouses (or their equivalents) to the hospital's final (or central) warehouse; includes the design and implementation of specific internal collection routes. | |
| Execution of infrastructure maintenance activities (painting of walls, replacement of lighting fixtures, plumbing, etc.) at the Final Warehouse. | |
| Implement adequate infrastructure and equipment for intermediate and final storage. | Class A: For waste containers, the supply, installation and maintenance of canneries shall be at +4ºC. |  |
| Review of design of Intermediate/Final Storage point, improvement design and execution of improvements. | |
| Provision of mobile warehouses for Intermediate Warehouses whenever there are no intermediate storage points and the available space allows it. | |
| Provision of scales, washing equipment. | |
|  | Permanent administration of the final warehouse (waste reception - access control - weighing - labeling - cleaning / disinfection, maintenance). | |

Prepared based on Ministerial Resolution Nº1295-2018/MINSA which approves Health Technical Standard Nº144-MINSA/2018/DIGESA "Integrated Solid Waste Management in Health Establishments, medical support services and research centers".

**Table 9: Activities in the External Management area by type of Waste**

| **Objectives** | **Activities** | |
| --- | --- | --- |
| **Class A and B waste** | **Class C waste** |
| Implement an adequate methodology for external transportation, itinerary compliance and supervision. | External transportation of treated waste to the corresponding final disposal site. | After collection, transport from the hospital directly to the corresponding final disposal site. |
| Design of collection methodology and external transportation, provision of vehicle fleet, execution of the collection service and fleet maintenance. | Design of collection methodology and external transportation, provision of vehicle fleet, execution of collection service and fleet maintenance. |
| Implement an adequate infrastructure for the treatment of hazardous solid waste. | Administrative procedures, design, construction, operation & maintenance of the treatment plant considering Autoclave technology for Class A waste and incineration for Class B waste. | The treatment stage does not apply. |
| Ensure proper disposal of solid waste. | The outsourced service of an authorized final disposal center is considered (The authorized final disposal infrastructure will not be part of the service: it is a service to be contracted that must comply with all the legal requirements demanded by the Competent Governmental Authorities). | The outsourced service of an authorized final disposal center is considered (The authorized final disposal infrastructure will not be part of the service: it is a service to be contracted that must comply with all the legal requirements demanded by the Competent Governmental Authorities). |
|  | Class A: Service for the final disposal of waste treated by autoclave and shredded in a cell for common and assimilated waste.  Class B: Service for the final disposal of non-incinerable Class B waste and ashes from Class B waste incinerated in a safety cell for waste assimilated to hazardous waste. | Service for the final disposal of waste collected in a cell for common and assimilated waste. |

Based on Ministerial Resolution Nº1295-2018/MINSA which approves Health Technical Standard Nº 144-MINSA/2018/DIGESA "Integrated Solid Waste Management in Health Establishments, Medical Support Services and Research Centers".

**Table 10: Other Key Activities in Solid Waste Management, by Class**

| **Objectives** | **Class A and B waste** | **Class C waste** |
| --- | --- | --- |
| To comply with other key activities | Carry out the Integrated Solid Waste Management from the warehouses to the final disposal of the waste (after treatment for Class A and B waste). |  |
| Have an integral supply of equipment (containers and garbage cans) and consumables (bags, sharps containers) for in-hospital management, including transport carts and waste bags. | |
| Carry out total biosafety control activities through the integrated containerization of the service. Thus prohibiting any manipulation and direct contact of the worker with the bags from the intermediate warehouses to the treatment plant. | |
| Traceability of all waste containers (QR codes) from intermediate warehouses to the treatment plant. | |
| Carry out daily automatic washing of all containers (Class A and B waste) at the treatment plant. |  |
| Class A: Perform treatment of bio-contaminated waste by autoclave with post-shredding. |  |
| Class B: Treat special waste by incineration. In this case, it will comply with the European Directive 76l2O00lCE, as well as international. |  |
| Implement a refrigerated warehouse (+4ºC) with a capacity of 3 Calendar Days at the treatment plant to mitigate any eventuality. |  |
| Carry out a collection frequency will be daily. | The CONCESSIONAIRE shall agree with the GRANTOR the frequency of removal of common waste from the Hospital. |
| Implement a software to monitor and optimize the collection route. | |

Based on Ministerial Resolution No. 1295-2018/MINSA, which approves Health Technical Standard No. 144-MINSA/2018/DIGESA "Integrated Solid Waste Management in Health Establishments, medical support services and research centers".

The CONCESSIONAIRE shall contract a company that has the authorization of DIGESA (EPS - RH Company).

For the provision of the Service, the Solid Waste Operating Company (EO-RS) must have the authoritative registry of solid waste operating companies, administered by the Competent Governmental Authority, or maintain the authorization of DIGESA in force, according to the services it will provide: collection, transportation, processing and final disposal.

The EO-RS must also have the authorization for the transportation of hazardous waste, issued by the Competent Governmental Authority.

In order to properly perform collection and transportation operations, the EO-RS must take into account the Applicable Laws and Provisions, including Legislative Decree No. 1278 "Law on the Integrated Solid Waste Management" and its regulations, which state the following:

* Maintain adequate control of sanitary and environmental risks;
* Transport solid waste according to its physical, chemical and biological nature, hazardous characteristics, and incompatibility with other waste;
* Certify the preventive maintenance of the equipment and vehicles used for the transportation of waste; which, in turn, must have visible signage of the type of waste they transport;
* Personnel in charge of collecting and transporting solid waste must have Personal Protective Equipment (PPE) and have received training on the types and risks of the waste they handle, in addition to knowing about the procedures in the event of occurrences (fires, spills, among others);
* Use the transit routes for hazardous solid waste transportation vehicles authorized by the Competent Governmental Authority;
* Employ vehicles for the transportation of hazardous solid waste with the following characteristics: white in color, visible identification in red according to the type of waste being transported on both sides of the cargo compartment of the vehicle, name and telephone number of the EO-RS on both doors of the driver's cab, registration number issued by MINAM on both sides of the cargo part of the vehicle; with a size of 40 cm by 15 cm;
* Vehicles for the transportation of biocontaminated solid waste must be used exclusively for that purpose.

The CONCESSIONAIRE shall carry out the baseline diagnosis prior to the design and implementation of the waste management plan, identifying the generating sources according to type of waste and determining the average amount of each type of waste generated.

Based on the establishment of this baseline, the CONCESSIONAIRE will implement the necessary measures to improve segregation, reduce generation and thereby control the overall impact of waste.

The healthcare personnel, responsible for sorting, will deposit the waste generated in the different containers according to the classification determined by the Applicable Laws and Provisions. At a general level, the waste groups are those defined above and classified as follows:

1. Biocontaminated waste;
2. Special waste; and
3. Common waste.

The management of special wastes that so require (B.3) will be carried out in coordination with the IPEN (Peruvian Institute of Nuclear Energy).

The CONCESSIONAIRE shall install sufficient containers of the following types at the central waste storage collection station:

* Red plastic containers with the biosafety logo for biocontaminated waste.
* Green plastic containers with their respective lids in perfect state of conservation with a minimum capacity of 140 liters and must be labeled indicating the type of waste they contain (biocontaminated and common).
* Red bags with the respective biodegradable biosafety logo and black biodegradable bags. All of them will be delivered on a weekly basis to the environmental sanitation unit for their respective placement by the cleaning company.

The area destined for final storage within the Hospital must be clearly marked and the common waste containers/compactors shall be removed when they are at a maximum of 75% of their capacity.

The CONCESSIONAIRE shall be responsible for the proper condition and cleanliness of the intermediate warehouses and the central or final warehouse, the latter having the required differentiation of spaces depending on the type of the different types of waste, including cold chambers for the waste that so requires.

Class A and B waste will be transported exclusively by personnel from the hospital waste management service.

Internal collection will be carried out during the hours of the day that least affect healthcare activities, using circuits that do not coincide with patients or visitors.

In all cases, the waste bags shall be transported in specially equipped carts, and shall not be dragged along the floor or suspended by hand.

The CONCESSIONAIRE shall present at least two (2) mobile units (vans with internal lining to avoid leachate spills), said vehicles must be for the exclusive use of this Service, each one of them must be duly identified with the name of the company indicating the type of waste they transport using the biosafety sign. The means of transport should be washed and disinfected after each transfer, change of shift in an environment authorized by the Competent Governmental Authority. The external transportation of waste must comply with the Applicable Laws and Provisions.

The CONCESSIONAIRE must have a digital electronic platform scale for weighing hazardous and biocontaminant medical waste. This equipment must have a periodic calibration certificate from INDECOPI or similar entity, as well as the presentation of the respective registration number. Under no circumstances shall the waste not be weighed, this being grounds for non-compliance with the Service.

The CONCESSIONAIRE shall use the manifest sheets provided by the Hospital as generator of hazardous and biocontaminant hospital waste. During the term of the Contract, the CONCESSIONAIRE shall deliver daily (including holidays) the manifest sheets and admission tickets to the sanitary landfill authorized by the Competent Governmental Authority.

The CONCESSIONAIRE shall provide extra polyethylene bags and garbage cans to cover eventualities.

Ordinary waste will be landfilled and treated in appropriate recycling plants authorized by the Competent Governmental Authority.

Special waste shall be disposed of in authorized treatment plants. The CONCESSIONAIRE shall provide as many containers and bags as necessary for the proper collection and transfer of the waste with all the required safety guarantees.

The CONCESSIONAIRE shall include the necessary measures to carry out the appropriate characterization of the waste, thus achieving the objectives of efficient management and reduction of waste generation.

The CONCESSIONAIRE shall guarantee the appropriate disposal and neutralization of the waste generated at the Hospital, incorporating resources that optimize the neutralization of the waste and its reuse if possible.

The CONCESSIONAIRE must have the documentation that attests and corroborates the adequate treatment of the hazardous waste generated at the Hospital, as well as its adequate disposal in the safety landfill.

The maximum response times for unscheduled activities are those indicated in the following table.

**Table 11: Response Times for non-scheduled activities**

|  |  |
| --- | --- |
| **Category** | **Time** |
| Maximum response time | 10 minutes |
| Maximum solution time | 20 minutes |

**Service Organization**

The CONCESSIONAIRE shall meet the Service's own requirements, as well as those of each user area through the SIGI-NS.

The CONCESSIONAIRE shall propose the functional Service organization, in order to provide the Service to all the user areas, considering that, during the Operational Stage, there shall be the pertinent coordination with the technical areas of the Hospital and also with the Food, Maintenance, Cleaning and Vector Management and Security and Surveillance services.

**Documentation**

In addition to the specific information that the CONCESSIONAIRE must submit as established in the previous sections regarding this Service, the CONCESSIONAIRE shall submit the following information:

* Information to be submitted by the CONCESSIONAIRE prior to the commissioning. The CONCESSIONAIRE shall prepare the Service’s POA that includes its direct application with the Service. The Service’s POA shall determine the corresponding specifications and procedures within the framework of the Applicable Laws and Provisions and their updates or modifications during the execution of the Contract. The minimum referential content of the POA is indicated in Annex 21.
* Periodic information to be submitted during the Operational Phase.
  + The CONCESSIONAIRE shall submit the sanitary operating authorizations of its own and of all the companies with which it works and their homologation.

**Definition of terms**

* Conditioning: It consists of preparing the services or areas of the institution with materials: containers (garbage cans, rigid containers, etc.) and supplies (bags) necessary and adequate for the reception or deposit of the different types of waste generated by these services or areas.
* Primary storage: Temporary waste storage depot, after segregation, located within the institution's premises before being transported to intermediate or central storage.
* Intermediate storage. Place or environment where waste generated by the different sources of nearby services is temporarily collected, strategically distributed within the services.
* Central or final storage: This is the environment where waste from intermediate or primary storage is stored. In this environment the waste is temporarily deposited while waiting to be transported to the place of treatment, recycling or final disposal. The final storage time should not exceed 48 hours.
* Characterization: Activity that consists of determining the composition of a solid waste in type and volume. Through this, we can know in detail what type of solid waste and its volume is being generated in the institution and based on this, take corrective measures that may be the most appropriate.
* Safety cell: It corresponds to the infrastructure located in the areas destined for the final disposal of solid waste, where hazardous waste will be confined.
* Container: Fixed or mobile container of variable capacity, in which waste is deposited for storage or transportation.
* Bio-safety containers for sharps: Rigid container that must contain a biosafety symbol in a visible manner, likewise it must have the filling limit marked on 3/4 parts. These containers are disposable.
* Final disposal: Stage in which the previously treated solid waste is taken to a registered and authorized sanitary landfill, which must be properly equipped and operated, so that it allows for the sanitary and environmentally safe disposal of solid waste.
* Solid Waste Services Operating Company (EOS-RS): Legal entity that provides services related to solid waste through one or more activities: cleaning of roads and public spaces, collection and transportation, transfer, treatment and final disposal of solid waste.
* Solid Waste Commercialization Company: Legal entity whose corporate purpose is oriented to the commercialization of solid waste for its reuse and which is registered by the Ministry of Health.
* Waste generator: A natural or legal person that generates solid waste as a result of its activities, whether as a product, importer, distributor, trader or user. In this case, the Health Establishment is the generator.
* Manifest: Technical administrative document that facilitates the tracking of all hazardous solid waste transported from the place of generation to final disposal.
* Internal collection: Activity that involves the collection of solid waste from the source of generation in the various services, units, offices or areas inside the Health Establishment, to intermediate or final or central storage, as appropriate.
* Collection and external transportation: Activity that involves the collection of solid waste by the solid waste service provider EPS-RS, duly registered with the Competent Governmental Authority, whose vehicles must have all authorizations from the corresponding Municipality or the Ministry of Transportation and Communications, from the Health Establishment to its final disposal. Hazardous waste in no case should be transported together with municipal waste, special closed vehicles should be used.
* Safety landfill: Facility intended for the sanitary and environmentally safe disposal of solid waste from the non-municipal management area on the surface or underground, based on the principles and methods of sanitary and environmental engineering. In this type of landfill, only biocontaminated and special waste generated in the Health Establishment will be disposed of.
* Sanitary landfill: Facility intended for the sanitary and environmentally safe disposal of solid waste from the municipal management area on the surface or underground, based on the principles and methods of sanitary and environmental engineering. In this type of landfill will be disposed exclusively common waste generated in the Health Establishment.
* Non-hazardous Waste: Those produced by the generator in any place and in the development of its activity, which does not present a risk to human health or the environment. Any non-hazardous waste from a Health Establishment that is presumed to have been in contact with hazardous waste must be treated as such.
* Hazardous waste: Wastes that, due to their characteristics or the handling to which they are or will be subjected, represent a significant risk to health and the environment. Hazardous wastes are those that present at least one of the following characteristics: self-combustibility, explosiveness, corrosiveness, reactivity, toxicity, radioactivity or pathogenicity. Likewise, containers or packaging and packing, which have been in contact with them or with hazardous substances or products, are considered hazardous.
* Inert wastes: These are wastes that do not decompose, are not transformed into raw material and their natural degradation requires long periods of time. These include: expanded polyethylene, some types of paper (carbon paper) and plastics.
* Common waste: They are those wastes that have not been in contact with patients or with contaminating materials or substances, they are generated in offices, corridors, common areas, cafeterias, waiting rooms, auditoriums. Includes leftovers from food preparation.
* Biocontaminated waste: Waste generated in the process of medical care and research, which is contaminated with infectious agents or may contain high concentrations of microorganisms, which are of potential risk for the person who comes into contact with such waste.
* Special wastes: Those hazardous solid wastes generated in Health Establishments and medical support services, with physical and chemical characteristics of potential danger, due to corrosive, flammable, toxic, explosive and reactive for the exposed person.
* Segregation: It is the action of separation, at the place of generation of solid waste by placing them according to their class in the corresponding container. The waste generator is the one who segregates it.
* Response Times. The service in the event of an unscheduled activity will be performed based on a request from an accredited user, channeled through the SIGI-NS or at the request of the Supervisor of Contract and Operations.

The CONCESSIONAIRE shall attend to these unscheduled requests as many times as required. This procedure also applies to activities not carried out by the CONCESSIONAIRE within the established schedule and which are reported to SIGI-NS by the user personnel for attention and compliance.

* 1. **STERILIZATION SERVICE**

The Service in charge of the reception, cleaning (lubrication-descaling), decontamination, disinfection, preparation, packaging, sterilization, storage and distribution of medical devices (ventilator accessories, manual resuscitators, etc.), instruments and surgical clothing coming from the different services of the Hospital, in order to provide a sterile and safe product to be used with the patient.

Specifically, the Sterilization Service consists of developing and managing all those processes and activities to supply in a timely manner to each of the Hospital's UPSS and UPS, whether on a scheduled or unscheduled basis, all types of products in ideal sterile conditions (material, clothing, supplies, equipment, devices or instruments or other) or disinfected if they do not require sterilization and storage until their distribution or dispensation, duly protected. Sterilization service of medical instruments, as a product of health campaigns.

Storage (according to MINSA regulation "Manual of Hospital Disinfection and Sterilization" or rules that modifies or substitutes it), must guarantee the subsequent maintenance of the ideal sterility conditions in order to be used by the personnel of each UPSS or UPS of the Hospital in the different diagnostic or therapeutic procedures as part of the safe care of the patients of the Hospital; therefore, its dispensation or distribution must be done in closed packages or containers that guarantee its adequate transportation.

The protection must guarantee the subsequent maintenance of ideal sterility conditions in order to be used by the personnel of each UPSS or UPS of the Hospital in the different diagnostic or therapeutic procedures as part of the safe care of the Hospital's patients.

The Service quality is related to, but not limited to:

* Timely attention to product requirements by the user areas, avoiding the suspension or postponement of diagnostic or therapeutic procedures.
* Safety in patient care, avoiding infections attributable to inadequate sterility or disinfection conditions of the product supplied by the Service.
* Unrestricted compliance with all Applicable Laws and Provisions related to sterilization and disinfection.

The Sterilization Service should have a quality control system that includes all the processes (traceability), as well as the monitoring and control of each cleaning and sterilization process through physical, chemical and biological controls.

**Purpose**

The purpose is to provide a sterilized or disinfected service for all medical devices, instruments and surgical clothing required, in safe conditions to be used by the different units of the Hospital.

The above means ensuring the correct process of cleaning, decontamination, disinfection, preparation, packaging, sterilization and storage of the different medical devices, instruments or surgical clothing (as required) until the sterile material is distributed or dispensed to the different hospital services or areas.

**Scope**

In general, the scope and responsibility of the Service includes all the necessary activities from the reception of the pre-washed material by the user areas to the delivery of the products in sterile (or disinfected) conditions, duly protected, to the user areas for their subsequent use.

This service includes high temperature sterilization (moist heat - steam), low temperature sterilization and disinfection according to their compatibility. All sterilization methods should have procedure guides, records and evidence of monitoring of each load.

All heat resistant materials compatible with moisture should be subjected to moist heat (steam) sterilization. Sterilization with gaseous chemical methods should be carried out in automated equipment that provides safety to the personnel that handles it and to the users.

The Service includes, without being restrictive, the effective sterilization process of medical devices, instruments and surgical clothing whose material may be made of steel, PVC, latex, rubber, silicone, polyethylene, polyurethane or other polymers, etc.; therefore, the sterilization process should be through humid heat or low temperature (gas) according to the material and technical data sheet of the product.

Due to the diversity of products that make up the different hospital medical devices and surgical instruments, the following are required:

1. High temperature sterilization by moist heat used: for surgical instruments and medical devices that withstand high temperatures (as stipulated in the POA).
2. Low temperature sterilization by ethylene oxide gas or hydrogen peroxide for surgical instruments and medical devices that are thermolabile or thermosensitive. For this last type of sterilization, the delivery times of the product will be considered according to the needs or requirements of the users, since there are high turnover and low turnover medical devices, i.e., those that are required in less than three (3) hours and others that can wait 18-24 hours for dispensing.

High Level Disinfection (HLD), understood as the process of eliminating all microorganisms (fungi, fungal spores, viruses, vegetative bacteria, others) from equipment, should be included as part of the service.

The Sterilization Service considers all those materials that require the condition of a process to be sterile, either for surgical or clinical use. The Sterilization Service should consider as materials at least the following:

* Sterile textile material for surgical use. Material comprises both sterile material for operating room personnel (e.g. gowns), as well as clothes used to delimit the surgical field and maintain sterility of instruments and equipment (e.g. double, single, slit, eye pads, as well as foot and slit sheets, drapes, etc.).
* Single-use sterile textile material and healing and consumables. The Service includes healing and consumable material (textile, glass and rubber), as well as single-use textile material.
* Instruments and Equipment. The Service includes all instruments and equipment requiring sterilization of the different specialties.

Among the activities of this service, in a general and non-limiting way, the following are considered:

* Reception and classification of medical devices, instruments and surgical clothing delivered by the user areas.
* Manual or mechanical washing, as appropriate, according to the procedure guide in force.
* Instrument maintenance: lubrication or descaling (the latter as required).
* High level or intermediate level disinfection as required and according to current procedure guide.
* Inspection and verification of items (cleanliness, functionability).
* Preparation and packaging of medical devices, instruments and surgical clothing according to current procedure guide.
* Sterilization of medical devices, instruments and surgical clothing according to procedure guide and technical data sheet of the product to be sterilized.
* Storage of sterilized material according to current procedure guide.
* Removal, distribution and dispensing of sterile material to user areas.
* Orientation and education to the user areas regarding the handling of dirty and sterile material, as well as its storage.

These activities are the sole responsibility of the CONCESSIONAIRE, and therefore no other UPS or unit or office of the Hospital shall be responsible for any deficiencies in their performance, nor shall they perform them, with the following exceptions:

Pre-washing in the environments of the user areas (UPSS and UPS of the Hospital other than the UPS-CE).

* All dirty material should be pre-washed immediately after use in the direct care UPSS.
* Storage in the environments of the user areas (UPSS and Hospital UPS other than the UPS-CE).
* In these activities, responsibilities are shared between the CONCESSIONAIRE in charge of the Service and the representatives of the user areas. However, the UPS-CE personnel, in charge of the CONCESSIONAIRE, will be responsible for the adequate training of the personnel of the user areas to carry out such activities. The coordination and operation processes shall be reflected in the respective POA of the Service. This POA shall in turn determine the corresponding specifications and procedures within the framework of the Applicable Laws and Provisions and their updates or modifications during the execution of the Contract.

For the transport of dirty material to the UPS and collection of sterile material from the UPS, the CONCESSIONAIRE shall provide containers or packages with washable lids that guarantee adequate transport according to the size and quantity required for each of the user areas, which shall be used only for this purpose.

The activities of the Service shall respond to the scheduled requirements in a timely manner, of exclusive responsibility of the user areas (UPSS and UPS of the Hospital other than the UPS-CE) as well as to the requirements made by these user areas, on an emergency basis.

**Regulations**

For the provision of the Service, the CONCESSIONAIRE, considering the best practices and international standards, shall comply at least with the Applicable Laws and Provisions and the procedures established in this regard by the GRANTOR through the Supervisor of Contract and Operations, in order to guarantee at all times, the safety in terms of prevention of HAI, transmission of infectious and contagious diseases and occupational accidents.

In any case, the CONCESSIONAIRE shall comply with the technical standards set forth by the Ministry of Health or any other Competent Governmental Authority.

In particular, the CONCESSIONAIRE shall comply, as a minimum, with the following Applicable Laws and Provisions:

* Ministerial Resolution 1472-2002 SA/DM "Hospital Disinfection and Sterilization Manual".
* Directive No. 8-GCPS-ESSALUD-2016 "Standards and Procedures of the Central and Sterilization Unit of the Social Security Health System" approved by Resolution of Central Management of Health Benefits No. 57-GCPS-ESSALUD-2016 of June 7, 2016.
* Directive No. 11-GG. ESSALUD-2013, "Standards for the Organization and Strengthening of the Sterilization plants and Units of the ESSALUD Care Centers".
* Resolution of Central Management of Health Benefits No. 126-GCPS-ESSALUD-2016 "Guidelines for the Selection of Fungible and Non-Fungible Materials and Supplies for the Central and Sterilization Unit of the Social Health Insurance System-ESSALUD".
* General Management Resolution No. 1018-GG-ESSALUD-2013.

Likewise, the CONCESSIONAIRE shall comply with the procedures and specifications established in the POA.

**Time Availability**

This Service shall be performed continuously 24 hours a day, every day of the year, during the period of contractual execution of the service, and there shall be no excuse for its stoppage or for non-compliance or delay.

Likewise, the schedules for delivery of the products and reception of the pre-washed material shall be determined in the POA. This schedule must be flexible enough to adapt to the specific needs of the Hospital's user areas, especially the surgical center.

**Equipment And Supplies**

The CONCESSIONAIRE shall use the available infrastructure of the UPS-CE for the development of the service and its implementation shall be carried out according to its category (Level 3) included in Directive No. 11-GG. ESSALUD-2013, "Standards for the Organization and Strengthening of the Sterilization plants and Units of the ESSALUD Care Centers”, to perform the work of its competence with quality, so it must have at least the following equipment:

* Vacuum Sterilizers
* Ultrasound washer-disinfectors
* Corrugated and instrument dryers
* Low-temperature sterilizers (ethylene oxide, hydrogen peroxide)
* Mixed sleeve cutter sealer.
* Mixed sleeve sealer with built-in printer.

Both sterilizers and washing machines shall have their own reverse osmosis system for water treatment.

All low-temperature sterilization systems shall be automated according to the established conditions and in compliance with Applicable Laws and Provisions.

The washing area must have at least:

* Air injector extractor.
* Stainless steel sinks throughout the structure with deep and wide wells to facilitate immersion and washing of instruments.
* Workbenches for drying medical devices and surgical instruments.
* Water and compressed air guns.
* Anteroom with hand wash basin.
* Soft water facilities for rinsing (flushing) of medical instruments and devices.
* Computerized recording area.
* Transport cars among others.

The preparation and packaging area should have at least:

* Magnified viewing lamps (magnifying glass).
* Workbenches with built-in dispenser for mixed sleeves.
* Ergonomic chairs
* Tissue paper dispensers
* Anteroom with hand wash basin.
* Computerized registration area
* Stainless steel shelving.
* Air conditioning system

The preparation area for surgical linen and textiles should be located separately from the preparation area for medical devices and surgical instruments.

The sterile material storage area should have at least:

* Anteroom with hand wash basin.
* Stainless steel open and closed shelves.
* Stainless steel sterile material transport cars.
* Computerized recording area
* Air conditioning system

The areas for headquarters, refreshments, meeting room, supplies storage and dressing rooms shall be implemented in accordance with the Applicable Laws and Provisions.

Preventive and corrective maintenance of all equipment shall be assumed by the CONCESSIONAIRE and shall be performed according to the schedule established in the POA, and shall be published and available for the respective supervisions.

The CONCESSIONAIRE shall be responsible for any loss or breakage or inoperability or any damage or deficiency that may occur in the products (material, clothing, input, equipment, device or instrumental or other) as a consequence of the performance of the Service. Consequently, the CONCESSIONAIRE shall assume the cost and arrange for its replacement with a completely new product. The cost of the replacement shall be borne entirely by the CONCESSIONAIRE. Likewise, if when an instrument or surgical instrument is repaired, the specialized workshop or the corresponding establishment indicates that the damage was caused during the sterilization process (generation of deposits, deteriorated rubber bands due to inadequate temperature, etc.), this instrument or surgical instrument shall be replaced by the CONCESSIONAIRE free of charge for the GRANTOR, even though the instrument has a warranty in force.

The CONCESSIONAIRE shall have a maximum of 5 (five) days to replace the damaged product(s). Reinstatement shall be considered valid when, after forty-eight (48) hours of its reinstatement, the Supervisor of Contract and Operations, issues its compliance. If the damaged product, due to its characteristics and relevance for the user area, requires to be replaced in less time, the CONCESSIONAIRE shall replace it in the shortest time determined by the user area with the favorable opinion of the Supervisor of Contract and Operations.

The cleaning and maintenance of the UPS-EC infrastructure shall be assumed by the CONCESSIONAIRE as part of the service. The supplies to be used in each of the procedures carried out for this purpose shall be previously established in the POA in coordination with those responsible for the Cleaning, Sanitation and Maintenance Services.

**Personnel**

The CONCESSIONAIRE shall have sufficient personnel, in accordance with the Applicable Laws and Provisions for the performance of the functions within the scope of the Service, so that the activity is not interfered by issues related to lack of human resources (leaves, training, absences, etc.), in the areas of the sterilization plant (UPS-CE).

The CONCESSIONAIRE shall have accredited and trained technical personnel. Said personnel shall have sufficient experience and training to adequately perform their work. To this effect, they must have at least a specialization in the areas of the sterilization plant in the case of professional nursing personnel and experience - training in the case of technical nursing personnel. Likewise, a head of service and other personnel must be available for the proper organization and operation of the service.

On shifts when the head of service is not available, the management will be entrusted to the shift manager (if necessary); the personnel roster will be published on a monthly basis and will be available for viewing.

All Service personnel shall have passed the corresponding medical evaluations and their profiles shall be submitted for prior opinion to the Supervisor of Contract and Operations ten (10) days prior to the start of the Service. Any subsequent change shall be communicated and the corresponding profile shall be submitted to the Supervisor of Contract and Operations no later than one (1) day after the change occurs.

All personnel working in the plant or sterilization unit must be protected against hepatitis B and C and tetanus, as well as receive medical check-ups at the time of entry, periodically and at the end of the work activity, for the prevention and early detection of occupational diseases.

The professional and technical personnel must comply with the profile established for the development of the different activities of the sterilization plant as established in General Management Resolution No. 1018-GG-ESSALUD-2013 or rule that modifies or replaces it.

The minimum profile required for the head of the Sterilization Service shall be:

* Nursing profession
* Specialized in sterilization plant (with specific formal training in sterilization plant management).
* Five (5) years of professional experience.
* Two (2) years working in head or coordination of hospital central sterilization unit.

It will be responsible for the execution of each of the procedures to be developed in the central and sterilization unit.

At the same time, it is required:

* 1 nursing technician
* With specific formal training in sterilization plant management.
* Three (3) years of professional experience.
* Two (2) years of experience in sterilization plants.

The nursing technician is support personnel in the actions established in the procedures of the areas, according to indications and will be supervised by the licensed nurse.

The staffing of human resources should be in accordance with the number of beds - stretchers, number of operating rooms, procedure rooms and the demand originated by the complexity and resolution capacity of the Health Establishment.

The nursing personnel of the central and sterilization unit is responsible for providing safe, competent and continuous services, as established in the evaluation criteria corresponding to Macroprocess 4: Risk Management of Care (MRA) and Macroprocess 18: Decontamination, Cleaning, Disinfection and Sterilization (DLDE) inherent to the Nursing Area of the List of Standards for Accreditation of Health Establishments - MINSA.

Personnel must use personal protective equipment (PPE) according to the risks existing in their work area according to the Applicable Laws and Provisions, for which there should be signs in the different areas of the sterilization plant indicating which PPE should be used.

**Technical - Functional Specifications of the Service**

As part of the CONCESSIONAIRE’s general obligations for the Sterilization Service, they include:

* General obligations.
* **Schedule and delivery method**: The schedule for delivery of dirty material and collection of sterile material shall be carried out as established by the Hospital, through adequate means of distribution and storage provided by the CONCESSIONAIRE, so that all the material is available at the beginning of the surgical day or in case of emergency.

The material shall be placed inside a container or package with a washable plastic lid and shall be transported in open trolleys (cars).

Both the container or package and the car will be provided by the CONCESSIONAIRE, for which the size of the container or package and the cars will be standard; taking into account that two containers will be needed, one for dirty material (red lid) and another for sterile material (green lid).

* **Material delivery and warehouse management**: The Sterilization Service personnel will be responsible for the correct state of the sterile material warehouse, located in the surgical block, other user units and in the Service itself, as well as for managing the expiration dates of the sets contained therein (if necessary).
* **Delivery and collection of material**: The Sterilization Service personnel will deliver the corresponding sterile material to the units of use, requesting the signature of the delivery document. Likewise, they will pick up the used material according to the established schedule, proceeding in the same way. The transport and distribution of the material will be carried out following the dirty and clean circuits established in the Hospital, thus avoiding their intertwining.

The delivery of dirty material will be done in the respective format, giving a copy to the user of what has been received, signing both as compliance.

The collection of sterile material will be done by checking the material according to the list, signing the person who delivers and the person who receives as a symbol of acceptance.

* Validation of the sterilization plant. The authorization procedure shall require the verification and opinion of the Supervisor of Operations and Contract that the requesting CONCESSIONAIRE has the appropriate facilities, knowledge, means and personnel. Said validation must be available prior to the Commissioning of the service.
* Procedures on cleaning, disinfection, preparation - packaging and sterilization. The cleaning, disinfection, preparation - packaging and sterilization tasks shall be carried out in differentiated areas, so that dirty or contaminated materials are not mixed with clean and sterile ones, i.e., a unidirectional flow shall be maintained, separated by sanitary barriers and communicated by passage windows or anterooms.

In the performance of each of the processes, the personnel of the Service must use the personal protection elements established according to the protocols, as well as the operating procedures indicated by the Applicable Laws and Provisions or the device that modifies or replaces it; in addition to those international standards that due to their technological contribution may be applicable.

* Cleaning. The cleaning of the materials includes the processes of: reception, classification, pre-washing or decontamination, washing, drying and lubrication and, if necessary, descaling or maintenance of the surgical instruments.

In the performance of each of the processes the CONCESSIONAIRE shall follow the operating procedures and validation methods indicated in the Directive and its updates that are generated throughout the term of the Contract.

* Disinfection. The CONCESSIONAIRE shall carry out high level and intermediate, medium and low level disinfection processes depending on the requirements, through chemical or thermal decontamination as required, preferably liquid chemical methods approved by the Applicable Laws and Provisions and their subsequent updates and revisions.

In carrying out each of the processes, the CONCESSIONAIRE shall follow the operating procedures and validation methods indicated in Directive No. 11-GG. ESSALUD-2013 and its updates generated throughout the term of the Contract.

* Preparation and packaging. All items to be sterilized, stored and transported must be conditioned in selected packaging in order to guarantee the sterile conditions of the processed material.

The packaging should be selected according to the sterilization method and the item to be prepared and should be labeled according to the Applicable Laws and Provisions, indicating at least the name of the product, area or service to which it corresponds, initials of the person who prepares it, date of preparation and expiration date.

In carrying out each of the processes, the CONCESSIONAIRE shall follow the operating procedures and evaluation methods indicated in Directive No. 11-GG. ESSALUD-2013 and its updates that are generated throughout the term of the Contract.

Packages should be subjected to ongoing evaluation to verify the following:

* The integrity of the outer layer material.
* The integrity of the seals.
* Correct identification.
* Chemical indicator turning.
* Expiration date reading.
* **High temperature sterilization**. The service shall have methods for high temperature sterilization with vacuum system, soft water and osmotic sterilization, the latter two depending on the stage of the process.

In carrying out each of the processes, the CONCESSIONAIRE shall follow the operating procedures and evaluation methods indicated in Directive No. 11-GG. ESSALUD-2013 and its updates generated throughout the term of the Contract.

* **Low temperature sterilization**. The service shall have one or two systems for low-temperature sterilization of thermosensitive material (e.g., ethylene oxide, hydrogen peroxide). The system(s) chosen should be automated and ensure suitability for use and compliance with Applicable Laws and Provisions.
* **Labeling processes**. The labeling of packages or boxes will be done according to the Applicable Laws and Provisions, indicating at least the name of the product, area or service to which it corresponds, initials of the person who prepares it, date of preparation and expiration date; this label must be consigned on the external tapes or through an automatic labeling system.

The labeling and subsequent storage, sterile medical devices must be kept in a place reserved for storage that is accessible, clean, dry and easy to clean, will be carried out on all the material subject to this Service.

* **Storage of sterile material**: sterile packages or boxes, will be stored in open or closed stainless steel shelves according to their turnover, i.e., for low turnover material in closed shelves and for high turnover material in open shelves.
* **Cleaning and sterilization monitoring**: the CONCESSIONAIRE shall implement a monitoring system based on chemical, physical and biological indicators according to the process.

For the cleaning process, it shall place a cleaning indicator (dirt test) for the thermal washer-disinfector for each process, which shall be affixed to the respective format.

For the moist heat and gas sterilization process, a chemical indicator shall be placed for each package, set or box, a Process Control Device (PCD) for each load and a biological indicator according to the Applicable Laws and Provisions.

The CONCESSIONAIRE shall establish time procedures, people (external auditors) to evaluate all the processes of the sterilization plant in the different areas.

* **Sterilization plant records system**. The CONCESSIONAIRE must implement a traceability system for medical instruments and devices, as well as a registration system, both automated, for which each area: washing, preparation, storage and management, will have a computer (all interconnected with each other) to adequately control and monitor the material entering and leaving the sterilization plant, as well as the status of each box of instruments, including the forceps.

The CONCESSIONAIRE must keep a record of all activities, routines and procedures related to the processing of the products.

**Type of records required from the CONCESSIONAIRE:**

* Routine record, the number of cycles, batch number, and the name of the operators responsible for the process, as established on a daily, weekly or monthly basis, shall be recorded.
* Quality control, the results of leakage test, Bowie Dick test per day or week shall be recorded and the printouts shall be pasted in the corresponding register.

The results of the chemical and biological controls shall be kept by the CONCESSIONAIRE for a minimum period of one (1) year from the date of their performance.

* Service guarantee. The Service must guarantee the total absence of physical, chemical or biological risks in the material delivered by the sterilization plant, through strict compliance with the work protocols and the confirmation given by the internal quality controls provided by the same.

All materials defined by the manufacturer as single-use will not be re-sterilized and those that cannot be processed with sufficient guarantees will be returned to the service of origin with the corresponding document specifying the reasons for the return. There shall not be a rejection of more than two percent (2%) of the deliveries made by the CONCESSIONAIRE, for each shift in a day.

* Quality. The CONCESSIONAIRE shall perform, at its expense and risk on a monthly basis, quality controls by authorized external laboratories, and shall communicate the results thereof in writing to the GRANTOR.

The Sterilization Service shall have a quality control system that includes all the processes and processed elements (physical, chemical and biological controls).

The Supervisor of Contract and Operations will establish the inspection and quality control systems considered adequate to check the Service quality (controls with its own specialized personnel or by means of an approved entity), verifying the fulfillment of the sterilization procedures in all its phases, the traceability of the boxes of surgical instruments, textiles and compliance with the Applicable Laws and Provisions of safety and hygiene at work in force at all times. The aforementioned traceability must be automated.

The Service shall carry out the appropriate physical, chemical and biological controls by program and by autoclave, being obliged to keep a record that shall be included in its activity report if there are no occurrences; if, on the contrary, any value out of range is detected, this situation shall be immediately reported to the Hospital, indicating the box and type of supposedly contaminated material for its control.

At all times the CONCESSIONAIRE shall follow the sterilization process monitoring methods indicated in Directive No. 11-GG. ESSALUD-2013 and its updates generated throughout the term of the Contract, which include the measurement of quality indicators of the sterilization plant.

* Response times. The replacement of surgical material that suffered losses or breakages must be done within a maximum term of five (5) Days, at the CONCESSIONAIRE’s full charge, cost and responsibility.

The maximum response times for this Service and its corresponding provision of the Service in events not scheduled by the user areas are detailed below.

**Table 12: Maximum Response Times (Stored Instruments)**

| **Category** | **Maximum response time** | **Maximum solution time** |
| --- | --- | --- |
| Emergency (sudden and high priority demand for sterilization of materials, which will have response times for emergency care in cases of emergency for medical surgical material). | 5 minutes | 10 minutes |
| Emergency (care provided when the user requires surgical material for emergency cases). | 10 minutes | 15 minutes |

For Operating Room, Critical Units and Emergency, an emergency stock should be provided under the responsibility of the hospital personnel.

**Service Organization**

For this service, the CONCESSIONAIRE shall meet the service's own requirements, as well as those of each user area through the SIGI-NS.

The CONCESSIONAIRE shall propose the functional Service organization, in order to provide the Service to all the user areas, considering that, during the Operational Stage, there shall be the pertinent coordination with the Clothes and Laundry Services, as well as with the Maintenance, Cleaning and Sanitation and Security and Surveillance Services.

**Documentation**

In addition to the specific information that the CONCESSIONAIRE must submit as established in the previous sections related to this Service, the CONCESSIONAIRE shall submit the following information:

* Information to be submitted by the CONCESSIONAIRE prior to the Commissioning.
* The CONCESSIONAIRE shall prepare the Service’s POA that includes its direct application. The Service’s POA shall determine the corresponding specifications and procedures within the framework of the Applicable Laws and Provisions and their updates or modifications during the execution of the Contract. The minimum referential content of the POA is indicated in Annex 21.
* Biosafety and occupational health actions, cleaning, inspection, sterile barrier system, sterilization cycle monitoring, storage, distribution and transportation, validation, among others.
* Periodic reports to be submitted during the Operational Stage. The CONCESSIONAIRE shall deliver to the Supervisor of Contract and Operations a monthly report containing statistical information on the operation of the Service. This report shall contain, at least, the information indicated in the Applicable Laws and Provisions, highlighting the following:
  + Volume of sterilized material, differentiating the type of sterilization.
  + Number of reprocesses.
  + Number of surgical procedures suspended or delayed due to lack of sterile material.
  + Number of urgent requests.
  + Other information considered relevant for monitoring the Service quality and whose inclusion in the monthly report shall be agreed between the Hospital and the CONCESSIONAIRE, with the intervention of the Supervisor of Contract and Operations, in the POA.

**Definition of Terms**

* Biological control: Method that determines the viability of spores on objects subjected to a sterilization process.
* Correct biological control: Result (-) after incubation of the biological control that passed a sterilization cycle.
* Incorrect biological control: Result (+) after incubation of the biological control that passed a sterilization cycle.
* Deposits or residues on instruments: Presence of visible organic or inorganic material on the instrument surface.
* Disinfection: Process by which most pathogenic microorganisms, except bacterial spores, are killed or destroyed. Disinfectants are used on inanimate objects.
* Arrangement of instruments: Preparation of surgical instruments in boxes according to classification into cutting, non-cutting and hemostatic, contained in the POA.
* Packaging: Cover that protects and preserves the sterility of the material until the moment of use, in addition to allowing aseptic handling.
* Sterilization: Process by which all types of microorganisms, including spores, are destroyed.
* Surgical instruments: Reusable medical surgical material, compatible with sterilization methods.
* Instruments with signs of corrosion: Presence of pitting or black spots on the instruments due to not having received timely anti-corrosion treatment.
* Clean instruments: Medical surgical instruments that have undergone a washing process according to current standards, resulting in instruments without visible blood or organic remains, ready to be packaged and sterilized.
* Cleaning: Process that removes organic and inorganic dirt or any other foreign material.
* Sterile material: All surgical instruments free of pathogenic microorganisms.
* Organic matter: Blood and body fluids present on surgical instruments.
* Contaminated material: Any sterile material used or with loss of the indemnity of the wrapping.
* Residue: Presence of visible organic material, remains of body fluids or body waste.
* Textile: Clean, intact surgical or clinical clothing that performs barrier function compatible with high temperature sterilization.
* Traceability: Set of measures, actions and procedures that make it possible to record and identify a given surgical material and instruments in its processing from its origin to its final use.
  1. **SECURITY AND SURVEILLANCE SERVICE**

It consists of providing the integral management of the Hospital's security and surveillance, providing adequate control, surveillance and protection for all the people and facilities of the Hospital.

The Service quality is related to (but not limited to):

* Timely attention to the requirements of the user areas, avoiding the suspension or postponement of diagnostic or therapeutic procedures.
* Safety in patient care, avoiding criminal acts attributable to inadequate security and surveillance conditions.
* Unrestricted compliance with all Applicable Laws and Provisions.

**Purpose**

The purpose of the Service is to provide protection and safeguard the Hospital's Infrastructure and assets, as well as patients, personnel, visitors and the general public, by means of the physical presence of specialized personnel and with the support of the technologies incorporated in the Project and others proposed by the CONCESSIONAIRE.

To achieve this objective, the CONCESSIONAIRE shall carry out prevention, dissuasion and Care actions, in order to provide protection for property and persons within the Hospital area.

**Scope**

The Security and Surveillance Service shall ensure a level of coverage such that it generates security throughout the Hospital area. This visible appearance of security must be consistent with the functionality of the Hospital and the policy of the Ministry of Health.

The service must include the protection of the Hospital's infrastructure, facilities and equipment, and must incorporate traceability of each of them within the activities inherent to the service. Likewise, the service includes the control of all the accesses to the Hospital, and the orientation to the users with respect to specific enclosures.

To provide the Security and Surveillance service, the CONCESSIONAIRE, at its own cost, expense and responsibility, shall operate all the technological security and surveillance support defined in the Project. Likewise, the maintenance, acquisition and replacement of the Equipment and furniture, or any other element used by the CONCESSIONAIRE for the provision of this Service, shall be the CONCESSIONAIRE’s sole responsibility.

The CONCESSIONAIRE shall meet extraordinary scheduled security requirements, such as official acts with the presence of the public and authorities, visits by authorities or larger crowds of people due to seasonal variations, without altering the normal operation of the Hospital. Likewise, the CONCESSIONAIRE shall attend to the unscheduled security requirements that may arise due to a fortuitous and unexpected event.

The Service shall include in its activities the management and custody of keys to all the doors of all the Hospital's premises.

The CONCESSIONAIRE must ensure that the service is provided in such conditions that are not in conflict with the provision of care to patients, nor the safety of Hospital personnel and the general public.

The integral security service shall cover the following areas:

* Access control:
  + Ensure that only patients and their families, suppliers, authorized personnel and visitors have access to the Hospital premises, limiting the access of unauthorized persons to restricted areas.
  + Protect restricted areas by limiting access to unauthorized persons.
  + Verify identity documents, credentials and other documents for entry and exit in accordance with Hospital policies.
  + Security personnel are usually the first person, due to their location, to whom Hospital visitors/patients go, so they should treat patients, visitors and Hospital personnel appropriately.
  + Carry out personal control through direct inspection or electromagnetic means, avoiding the entry of unauthorized weapons of any kind, and in case the personnel carry weapons with the proper authorization, they should place them in an individual safety box with a key. Except for duly identified National Police personnel on duty at the Hospital.
  + Verify the contents of vehicles, trunks and rear-view mirrors of cars, briefcases and boxes, etc. For this purpose, electromagnetic elements shall be used.
* Crime prevention:
  + Protect the Hospital premises from theft, vandalism, disorder and criminal damage.
  + Maintain the safety of persons within the Hospital premises, including the protection of patients, employees, service providers and visitors.
* Emergency support and occurrence response:
  + The CONCESSIONAIRE shall also respond to any emergency situation or occurrence that may arise on the Hospital premises.
* Use of the video surveillance system:
  + The CONCESSIONAIRE shall provide the video surveillance system and maintain it in optimal conditions, through a control center to be implemented by the CONCESSIONAIRE.
  + The CONCESSIONAIRE shall place personnel with the appropriate profile for the service 24 hours a day, year-round.
  + The CONCESSIONAIRE shall immediately report any occurrences affecting property or the safety of goods and persons at the Hospital, adopting the corresponding measures with the institutional authority (director or chief on duty) and local authority (National Police, Serenazgo (municipal security service), Fire Department, etc.).
  + The CONCESSIONAIRE shall store the video recordings in accessible electromagnetic systems, in the area provided by the Hospital for review if necessary or requested by the authorities.
* Parking lot security:
  + The CONCESSIONAIRE shall be responsible for the security of the vehicles parked in the Hospital parking lots, except for the parking lots located outside, in compliance with the security protocols established by the Hospital.

**Time Availability**

This service shall be provided 24 hours a day, every day of the year, without exception. It shall cover the entire area of the Hospital. In those areas in which there should be no physical presence of security guards for clinical or administrative reasons, remote surveillance by technological means shall be incorporated, unless expressly indicated by the Supervisor of Contract and Operations.

The guard Posts shall be covered uninterruptedly every day of the week, including non-working days, starting the services in a punctual and disciplined manner, retiring at the established time of their working hours, after being relieved.

The schedules will be those established in the surveillance register, and in all cases will be adjusted to the Hospital's services (emergencies, outpatients, etc.).

**Regulations**

For the provision of the Service, the CONCESSIONAIRE, considering the best practices and international standards, shall comply at least with the Applicable Laws and Provisions and the procedures established in this regard by the GRANTOR through the Supervisor of Contract and Operations, in order to guarantee at all times, the safety in terms of prevention of HAI, transmission of infectious and contagious diseases and occupational accidents.

In any case, the CONCESSIONAIRE shall comply with the technical standards set forth by the Ministry of Health or any other Competent Governmental Authority.

In particular, the CONCESSIONAIRE shall comply, as a minimum, with the following Applicable Laws and Provisions:

* Legislative Decree No. 1213 regulating Private Security Services.
* Legislative Decree No. 1218 regulating the use of video surveillance cameras.
* Law No. 30.120 supporting citizen security with public and private video surveillance cameras.
* Directive No. 10-2017-SUCAMEC, approved by Resolution No. 424-2017-SUCAMEC, which establishes the characteristics, technical specifications and use of uniforms, emblems, badges and implements of private security personnel.
* Others.

**Equipment and Supplies**

For the provision of the Service, the CONCESSIONAIRE shall provide all the equipment and systems defined in the Technical File. By virtue of the foregoing, the CONCESSIONAIRE shall:

* Maintain and update the equipment established in the Technical File necessary to cover the requirements for the provision of the Service set forth in this Annex.
* Maintain the security control room operational as the operations center for the different actions of the Integral Security Service. From it, all surveillance, registration, alarm, access control, object custody, occurrence control and reception systems will be coordinated.
* Have Security and Surveillance technology in all the points and enclosures of the Concession Area, which have been considered vulnerable in the Service's POA.
* Permanently check the state of operation of the technological systems and the Security and Surveillance equipment used in the provision of the service.

Likewise, the maintenance, acquisition and replacement of the equipment and furniture, or any other element, used by the CONCESSIONAIRE for the provision of this Service, shall be the sole responsibility of the CONCESSIONAIRE.

On the other hand, the CONCESSIONAIRE shall provide at least the equipment, in sufficient quantity to ensure the proper provision of the Service and guarantee the safety in the Hospital, in accordance with the Applicable Laws and Provisions.

**Table 13: Equipment and Supplies**

|  |  |
| --- | --- |
| **Nº** | **Item** |
| 1 | Weapon |
| 2 | Level I and Level II Bulletproof Vest |
| 3 | Radio Central Station with Antenna |
| 4 | State of the art portable radio equipment |
| 5 | Metal Detector |

The CONCESSIONAIRE shall also provide the auxiliary equipment and materials described below:

* Signaling material for small works (barriers, tapes, lights, signs, etc.).
* Radio-transmitter communication devices and communication center compatible with the frequencies used in the Hospital.
* Automated round control system.
* Mobile panic buttons.

**Personnel**

The CONCESSIONAIRE shall have an organizational and staffing structure that meets such requirements. For these purposes, it shall comply, at least, with the following:

* Personnel in charge of the Service.
* Personnel in a shift system that covers the minimum requirements defined in this Annex for all the sites according to the zoning established, as appropriate, in accordance with the POA associated with this Service.
* All personnel participating in the execution of the Service shall undergo a medical evaluation prior to their incorporation and be included in the risk prevention programs to be carried out by the CONCESSIONAIRE.
* The personnel must accredit the training and work experience necessary for the provision of the Service, with the corresponding legal certifications.
* They shall prove that they do not have a criminal or police record.
* They must also prove specific knowledge of surveillance, security, alarm systems and fire protection operations, as well as experience in customer service and information to the public.
* All personnel involved in the provision of the Service must accredit specific initial training that refers to:
  + Instruction and training as required by the National Superintendence for the Control of Security Services, Weapons, Ammunition and Explosives for Civilian Use - SUCAMEC;
  + Those related to courtesy, customer service and public relations (minimum of 18 hours); and
  + Those directly performed within the framework of the supervision that is carried out.
* Training must be provided by professionals with accredited experience in this Service and duly authorized by the GRANTOR.

The personnel profiles shall be submitted to the Supervisor of Contract and Operations, for compliance with the corresponding technical standard, ten (10) Days prior to the commencement of the Service. Any subsequent change shall be communicated and the corresponding profile shall be submitted no later than one (1) day after the change to the Supervisor of Contract and Operations for his favorable opinion.

* The personnel participating in the provision and supervision of this Service shall have protective elements according to the risk associated to the same, as well as others that are inherent to the Service provided, verifying that at all times these are in an operating status. For these purposes, the CONCESSIONAIRE shall, at least, provide the personnel with the following elements:
  + Book of reception and delivery of service and news; which must be entered in the SIGI-NS.
  + Flashlight.
  + Communication equipment with authorized and current frequency, which does not interfere with the medical equipment.
  + Communication with the person directly in charge of the service (either mobile phone or radio).
  + Any other element necessary for the proper performance of the Security and Surveillance tasks required in the Hospital.
* The number of personnel required will be that necessary to guarantee the Hospital's security 24 hours a day, every day of the year, both in terms of the number of agents and supervisors. They will have special relevance in the most sensitive areas of the Hospital (entrance, access to floors, access to intensive and intermediate care units, among others).
* The personnel hired by the CONCESSIONAIRE must be certified as having undergone psychological and, if applicable, psychiatric tests in accredited health establishments for such purpose, in order to prevent or avoid acts against the physical and mental integrity of children, adolescents, visitors and Hospital personnel.

The CONCESSIONAIRE must have a head of the Service whose minimum profile shall be:

* Having technical studies in administration or similar.
* Having minimum professional experience of five (5) years.
* Having experience in similar positions of experience in hospitals of at least (3) three years.
* Having skills in coordination, organizational capacity, teamwork capacity and leadership.

Profile of security personnel:

* All personnel must have at least two (2) years of experience in the security and surveillance field.
* Service personnel must have knowledge of security and surveillance, knowledge of public attention and information, use of alarm and fire protection systems, handling emergency situations, use of transmitters, knowledge of cardiopulmonary resuscitation (BLS certification) and first aid.

The agents shall provide the service properly uniformed, identified with the company's photocheck and SUCAMEC ID card governed by the respective Resolution, including the security and personal protection equipment required for the best performance of their duties, in accordance with the rules established by the Ministry of the Interior or in accordance with the provisions of Directorial Resolution No. 02393-2003-IN-1704, or any other rule that may modify or replace it.

The CONCESSIONAIRE shall periodically hold coordination meetings with the competent Hospital officials, in order to carry out a comprehensive evaluation of the surveillance service, in order to reinforce the security measures and optimize the results of the aforementioned service.

The agents may be changed or withdrawn at the GRANTOR's request. The agents withdrawn by deficiency or indiscipline will not be able to return to offer their services to the Hospital.

* Every agent appointed for the provision of the Hospital Service shall be evaluated and verified by means of its firearm license, in the face of criminal acts, in order to protect human lives or institutional property, against armed attacks or other cases, and shall be in strict compliance with the legal and regulatory standards of SUCAMEC (National Superintendence for the Control of Security Services and Control of Weapons, Ammunition and Explosives for Civilian Use); for which purpose the security guard must have a firearm license, be familiar with said regulations and be duly trained in their regulatory use, under the absolute responsibility of the CONCESSIONAIRE.

The personnel rendering services to the Hospital must comply with the following profile, in accordance with the Applicable Laws and Provisions:

* Security service supervisor: They must be trained personnel with experience in this type of work, preferably retired officers of the Armed Forces, Police Forces (Peruvian National Police), or have experience in similar work, which does not restrict the presentation of civilian personnel.
  + Nationality: Peruvian.
  + Age: of legal age.
  + Education: Minimum high school completed.
  + Health: Good.
  + Affidavit of current domicile.
  + Copy of National ID card.
  + Copy of police, criminal, judicial and health records.
  + Minimum experience of two (02) years in supervisory work, attach copies of documents that prove the experience (must be accredited with work certificates issued by the competent authority in the company where he/she worked, indicating the time and place where he/she rendered his/her services).
  + Document that certifies that he/she has not been retired for misconduct (if he/she is a retired officer), issued by the agency where he/she worked before retiring.
  + Current mental health certificate, issued by a public or private Health Establishment authorized by the Ministry of Health.
  + Health Certificate, issued by a public or private Health Establishment authorized by the Ministry of Health.
  + Contingency insurance for risk work, Law No. 26790.
* Watchman Each watchman must comply with the following:
  + Nationality: Peruvian.
  + Age: of legal age.
  + Education: Minimum Secondary level.
  + Health: Good.
  + Copy of National ID card.
  + Copy of valid police, criminal, judicial and health background certificates (submit the original for the signing of the contract).
  + SUCAMEC ID card (for all security guards).
  + Updated license to carry weapons from SUCAMEC.
  + Affidavit of current domicile.
  + Document certifying not to have been retired for misconduct (if retired military), issued by the agency where he/she worked before retiring.
  + Experience: prove a minimum of two (2) years of experience in Integral Security in the area or object of the call of the present process (it must be demonstrated with work certificates issued by the competent authority in the company where he/she worked, indicating the time and place where he/she rendered his/her services).
  + Current mental health certificate, issued by a public or private health establishment authorized by the Ministry of Health (Mandatory for the signing of the contract).
  + Health Certificate, issued by a public or private Health Establishment authorized by the Ministry of Health (Mandatory for signing the contract).
  + Contingency insurance for work at risk Law N° 26790.

The uniform of the security agents shall comply with the Applicable Laws and Provisions.

The CONCESSIONAIRE shall provide all personnel providing the Service with the necessary clothing to enable them to carry out their activities in mandatory, permanent and correctly uniformed.

The summer and winter clothing shall be under the responsibility of the CONCESSIONAIRE, without excluding the obligation of the CONCESSIONAIRE to change or replace any clothing, accessory or badge that may be worn, deteriorated or in bad condition without the right to readjustment or recognition by the GRANTOR. The Supervisor of Contract and Operations shall be responsible for verifying compliance.

The number of clothing and composition of the uniform of the Service supervisor and of the male or female surveillance agent shall be the sole responsibility of the CONCESSIONAIRE and shall guarantee an adequate presentation, which shall be verified by the Supervisor of Contract and Operations.

The entire catalog of all the clothing (uniforms) to be assigned to the security and surveillance personnel, as well as their size, shall be established in the Service’s POA.

The armament to be used shall be distributed according to the description of the Hospital's Guard Post Schedules, and shall be in accordance with SUCAMEC regulations.

Security and personal protection equipment to be described in the proposal.

Minimum weaponry characteristics:

* Gun for the use of watchmen, which must be in optimal conditions and with the corresponding cartridges.
* All armed security guards must have bulletproof vests.
* The SUCAMEC ID card, as well as the License for the use and possession of weapons.
* Likewise, agents must carry the respective licenses for the use and possession of weapons issued by SUCAMEC, as well as the personal identification card in a visible place.

In the event of damage to any weapon, it shall be replaced immediately and in a timely manner within 24 hours, so as not to alter the performance of the service.

Periodically (quarterly), the CONCESSIONAIRE shall have the armament maintained by specialized personnel; to this effect, the weapon shall not be removed from the Hospital, except for repair and by duly identified personnel of the CONCESSIONAIRE.

In all cases, the armament shall be kept in custody in the premises of the service enabled for such purpose, and the service personnel shall not carry the armament outside the Hospital's facilities.

**Technical - Functional Specifications of the Service**

Depending on their characteristics, guard Posts in the Hospital's areas will be categorized into 12 and 24-hour posts. In the case of 24-hour surveillance positions, these will be covered by agents whose shifts may not exceed 12 hours.

In the event that the scheduled replacement does not show up, the company shall be obliged to assign, within a period not to exceed one (1) hour after the change of security guard, another person.

The replacement of the agents at each post shall be 15 minutes in advance and shall be carried out in all cases at the work post.

The CONCESSIONAIRE shall ensure that all security personnel in operation are in communication with each other and with the person directly in charge of the service at all times.

**Control center**

The different events of Integrated Security (surveillance systems, alarm systems, access control, custody of objects, occurrences, reception of requests, etc.) must be coordinated from a control unit that will be operational 24 hours a day throughout the year.

This system must allow remote control of the facilities, paying special attention to those high-risk areas determined by the Hospital, such as accesses, parking, and others to be defined in the POA.

The CONCESSIONAIRE shall guarantee that all security guards can be contacted at any time during their working hours by the Control Center in order to be able to respond to urgent and emergency requests that may arise.

At each guard post, the CONCESSIONAIRE shall provide the existence of the following controls, as the case may be:

* Record and checkroom.
* Record of daily occurrences.
* Record of personnel departures outside of working hours.
* Registration of income.
* Hospital visitor control log.

**Control operations**

The CONCESSIONAIRE shall comply with the operating procedures to carry out the following controls:

* Personnel Entry and Exit of hospital. The control of entry and exit of the Hospital's personnel will be carried out according to the established working hours and within the same, the permissions or commissions of the service through the Exit Slips or other authorized documents. They must be sent attached to the daily report to the Supervisor of Contract and Operations with a copy to the GRANTOR. Monitor the use of *photocheck* by Hospital personnel.
* Entry and exit of public user to the Hospital. To control the entry and exit of the public user to the Hospital premises.

Likewise, to control the use of the visitors' identification card inside the Hospital premises.

The CONCESSIONAIRE shall be responsible for the supervision and control of the personnel dependent on the Hospital and public user, through personnel supervision activities (rounds, daytime, evening and nighttime inspections); and other forms of control that it deems convenient to apply in order to guarantee an efficient, continuous service and in accordance with the schedules established for the service.

* Entry and exit in the parking lot of vehicles. Control the entry and exit of vehicles owned by the Hospital, Hospital personnel or those authorized by the Hospital in the parking area.
* Entry and exit of materials, furniture, equipment or fixtures and supplies in general. The control of entry and exit of materials: furniture, equipment, work documents, equipment and supplies in general, which have the respective order or exit ticket, shall be carried out in compliance with the administrative rules and procedures and in coordination with the Hospital.
* Incoming and outgoing of particular materials. The control of incoming and outgoing materials, such as: packages, briefcases, bundles, documentation, among others, shall be carried out in compliance with the established administrative rules and procedures.
* Admission and departure of patients' relatives. The CONCESSIONAIRE shall control the entry of relatives of delicate patients to the different hospitalization rooms with the respective special passes granted by the physicians responsible for each Department or service outside visiting hours.
* Control of external sectors. The CONCESSIONAIRE shall have permanent control of all the external sectors adjacent to the Hospital, as well as the facilities on the grounds.
* The service supervisor shall inform the competent authority of the Hospital, in order to make the pertinent complaint to the Competent Governmental Authorities.

**Protection operations**

The CONCESSIONAIRE shall immediately make available to the members of the State Security Forces and Corps the alleged perpetrators, in relation to the object of their protection, as well as the instruments and evidence of the crimes, and may not proceed to question them.

The CONCESSIONAIRE shall ensure that all its personnel are aware of and apply the action plans, offering a crime prevention service that guarantees:

* Surveillance patrols. The CONCESSIONAIRE shall carry out inspection and surveillance patrols throughout the Hospital's perimeter. The surveillance patrols shall make rounds on the perimeter of the facilities and other public areas of the same to be determined by the Hospital. Said patrols shall take the necessary actions to guarantee the safety of the users, the facilities and the property, including but not limited to:
  + Immediately report to the Control Center any damage or deterioration detected in the facilities or property: locks, vehicles, protective fences, gas, water, steam, electrical systems, etc.
  + Secure doors and windows that appear open in vacant areas for no apparent reason and that may pose a security risk.
  + Escort out of the premises any person who does not have a justified reason for being in the Hospital.
* Specific security. The CONCESSIONAIRE shall ensure that specific security systems for high-risk departments are sufficient and adequate, including the provision of security personnel with specific expertise in certain departments at the stipulated periods.

At the express request of the Hospital, the CONCESSIONAIRE shall provide security personnel with special knowledge when there is a high risk situation in relation to certain patients, including a secret surveillance service.

The CONCESSIONAIRE shall provide a special escort service in connection with the following activities:

* + Collection and movement of money at the Hospital site.
  + Escort of Hospital employees in remote areas of the Hospital.
  + In all those circumstances that are determined.

**Disaster and emergency operations**

The CONCESSIONAIRE shall respond to situations such as:

* Earthquake alarm.
* Fire alarm.
* Intrusion alarm.
* Security alarms.
* Personal attack alarms.
* Bomb threat.
* External disaster response.
* Coordinate its activities in accordance with the Hospital's own Emergency Plan.

The CONCESSIONAIRE shall carry out periodic drills in coordination with the GRANTOR. In addition, it shall ensure that the necessary Care is attended and provided in the Hospital area, including, but not limited to, the following activities:

* Ensure that all firefighting equipment is located in the designated location, that there are no obstructions to its immediate use if necessary, and that emergency exits are free of obstructions.
* Attend and respond to fire and other disaster alarm notification.
* Communicate to the access blockage control unit for firefighting and other catastrophes.
* Assist in the evacuation of affected areas in the event of fires and other catastrophes, under the direction of designated Hospital personnel.
* Coordinate with outside emergency care agencies/entities as part of their duties to assist in connection with any occurrence.
* Inform the maintenance area and intervene upon shutdown of elevator equipment, air conditioners, emergency lights and smoke detectors.

The CONCESSIONAIRE shall establish systems and procedures to adequately and correctly communicate and record in the SIGI-NS all occurrences that occur.

**Service Organization**

For this service, the CONCESSIONAIRE shall meet the service's own requirements, as well as those of each user area through the SIGI-NS.

The CONCESSIONAIRE shall propose the functional Service organization, in order to provide the service to all the user areas, considering that, during the Operational Stage, there shall be the pertinent coordination with the Maintenance, Cleaning and Vector Management service; the Information and Communications Technology service and the Provision and Availability of Technological Infrastructure.

**Documentation**

In addition to the specific information that the CONCESSIONAIRE must submit as established in the previous sections related to this service, the CONCESSIONAIRE shall submit the following information:

**Initial information to be submitted by the CONCESSIONAIRE**

The CONCESSIONAIRE shall carry out a safety study, which consists of a complete survey and risk or vulnerability assessment of the Hospital's facilities, infrastructure, equipment and environment, all of which shall be materialized in a complete report of the safety conditions and a proposal to implement protocols, systems or devices that make it possible to remedy the potential deficiencies observed both by the CONCESSIONAIRE and by the Supervisor of Contract and Operations in agreement with the GRANTOR. This study shall identify and classify the different areas of the Hospital in all its risk levels, as an example:

* High risk level: corresponds to areas where people, goods and furniture, and monetary values of any kind are highly vulnerable to threats, and therefore highly complex security mechanisms must be implemented.
* Medium risk level: corresponds to areas where people, goods and furniture, and monetary values of any kind are vulnerable to threats at a lower level than the high risk level, so that security mechanisms of medium complexity must be implemented.
* Low risk level: Corresponds to areas where people, goods and furniture, and monetary values of any kind are not very vulnerable to threats, so security mechanisms of low complexity should be implemented.

The study and all the documentation required by the Applicable Laws and Provisions, including the respective technical proposal for the implementation and operation of the surveillance and access control infrastructure, shall be submitted according to the risk levels observed in the security study to be submitted to the previous opinion of the Supervisor of Contract and Operations, agreed with the GRANTOR.

* The CONCESSIONAIRE shall prepare the Service’s POA that includes its direct application. The Service’s POA shall determine the corresponding specifications and procedures within the framework of the Applicable Laws and Provisions and their updates or modifications during the execution of the Contract, as described in Annex 21.

**Periodic reports to be submitted during the Operational Phase**

* The security guards shall formalize a report at the end of their shift detailing the controls carried out and the occurrences detected, which shall be sent directly to the security manager of the Hospital covered by the Contract.
* On a fortnightly basis, a copy of all the aforementioned daily reports and a summary of the occurrences of the same period shall be provided to the Hospital.
* On a monthly basis, a report on the monitoring and execution of the preventive and corrective safety plan and the replacements carried out, as well as the summary of the monthly activity, shall be delivered.
* The CONCESSIONAIRE shall deliver to the Hospital a monthly report containing statistical information on the operation of the service. This report shall contain, at least, the following information:
  + Number of losses and thefts in the Hospital and details of these events (stolen/lost asset, place, time, other relevant information).
  + Number of interventions to persons not authorized to enter the Hospital.
  + Interventions carried out that prevented theft or loss.
  + Number and causes of other occurrences identified.
  + Number of drills carried out.
  + Other information considered relevant for monitoring the Service quality and whose inclusion in the monthly report must be agreed between the Hospital and the CONCESSIONAIRE.

**Definition of Terms**

* CCTV: Closed Circuit Television Surveillance.
* SUCAMEC: National Superintendence for the Control of Security Services and Control of Weapons, Ammunition and Explosives for Civilian Use).
* Security management system: Computer tool for the management of the Security and Surveillance Service, which will allow the updated and classified registration of all security events, their containment measures and others defined in the SIGI-NS.
* High risk level areas: Corresponds to areas where people, goods and furniture, and monetary values of any kind are highly vulnerable to threats, so highly complex security mechanisms must be implemented.
* Medium risk level zones: Corresponds to areas where people, goods and furniture, and monetary values of any kind are vulnerable to threats at a lower level than the high risk level, for which reason medium complexity security mechanisms must be implemented.
* Low risk level zones: Corresponds to areas where people, goods and furniture, and monetary values of any kind are not very vulnerable to threats, so security mechanisms of low complexity must be implemented.
* Restricted areas: Includes areas defined by the Hospital Management as highly vulnerable and vulnerable in terms of security, access control and surveillance, plus those under the management of the CONCESSIONAIRE in the same concept.

* 1. **INFORMATION AND COMMUNICATIONS TECHNOLOGY SERVICES AND PROVISION AND AVAILABILITY OF TECHNOLOGICAL INFRASTRUCTURE**

It consists of providing the integral management of robust IT services, which operate based on a technological infrastructure with high levels of security, availability and productivity, in such a way that they contribute directly to the efficiency expected by the Hospital. The CONCESSIONAIRE shall meet the IT and telecommunications requirements in accordance with the requirements set forth in this section.

It is stated for all purposes that the Hospital is the owner of all the data, and the CONCESSIONAIRE shall guarantee at its full cost, charge and responsibility, the transfer of this data to the new technologies implemented in the Hospital, either directly or with third parties, ensuring 100% operational continuity.

The Service quality is related to (but not limited to):

* Permanent uninterrupted availability of communication services, connectivity, functionality, operability and interoperability between all UPSS and UPS of the Hospital as well as with external entities related to the Hospital, achieving both the satisfaction of users in their daily care in the different environments of the Hospital as well as other related actors (Care and non-Care personnel of the hospital, personnel of other entities different from the Hospital that require connecting and communicating with the Hospital's personnel).
* Ensure at all times, the security, confidentiality, integrity, availability and quality of all information received, processed, stored and generated through the different systems implemented for the Hospital.
* Unrestricted compliance with the Applicable Laws and Provisions.

**Purpose**

The purpose of the service is to provide, develop and manage all those processes and activities necessary for the personnel of each UPSS or UPS of the Hospital to have and use a modern communication system and an integrated information platform, which includes the corresponding clinical and non-clinical information systems, for the adequate development of their daily Care and non-Care activities in the Hospital and also to allow their internal communication among themselves and with the outside world, contributing to the optimal and efficient operation and management of the Hospital as a whole under the concept of "Technological Hospital".

This service shall include, but is not limited to:

* The implementation of structured and specialized cabling system, of the latest category compatible with all communications systems in accordance with the Technical File.
* The provision of the corresponding computer equipment and specialized equipment.
* The implementation of information systems and specialized software.
* The implementation of interfaces with the information and communication systems or platforms of entities external to the Hospital that require it.
* The implementation of measures to ensure the interoperability of the Hospital's systems.

**Scope**

This service will be provided by the CONCESSIONAIRE under the concept of "Technological Hospital", which implies:

* Recognizing and adhering to the infrastructure, state-of-the-art technology in the hospital field and other similar ones in order to optimize functionality and health care.
* Employing systems that integrate voice technologies, images, data, video and telehealth services in their different variants, as well as achieve an "intelligent" building.
* Resorting to solutions that allow for versatility and efficiency in the work of human resources, as well as in the use of physical resources, such as the pneumatic transport of samples, documents and medications and the implementation of the Electronic Medical Record within the framework of an Integrated Information System.

This results in benefits in the following areas: access, effectiveness, efficiency, quality, safety, knowledge generation, impact on the economy and integration, linked to the areas of application of ICTs in healthcare: prevention, diagnosis, treatment, monitoring, health education, service management and e-commerce.

It is important to mention that the infrastructure, equipment and ICT solutions or systems will be implemented, operated, maintained and renewed by the CONCESSIONAIRE, seeking the current and updated technology, in order to always comply with the quality and performance standards established in this Contract. This means that, at the CONCESSIONAIRE’s risk, the infrastructure, each piece of equipment, each device, each ICT solution or system implemented shall be flexible and upgradeable or replaceable or expanded in scope, after its initial commissioning, at no additional cost to the Hospital.

The update of the Technological Infrastructure shall correspond to the most updated technological equivalent available in the market at the time of the update, such as to allow the operational continuity of the service in accordance with the Applicable Laws and Provisions.

The CONCESSIONAIRE shall plan and execute the technological upgrade ensuring the continuity of operation, integration and interoperability of all the hardware and software components installed in the Hospital.

In the event of a technological upgrade involving hardware and software components, the CONCESSIONAIRE shall propose to the Supervisor of Contract and Operations an upgrade plan in order to issue an opinion for the corresponding non-objection of the GRANTOR.

The Services shall implement the best practices and international standards related to the following aspects:

* Provide and maintain the following communication services:
  + Primary telephone lines.
  + Conventional analogical telephone lines (Public Telephony).
  + Phone lines of different telephone operators
  + Symmetrical internet line)
  + Outlets for public telephones
  + Private mobile telephone network
* Implement and maintain the following systems operational in the Hospital:
  + IP Telephony System.
  + Nurse Call System
  + Ambient Sound and Periphonic System.
  + Synchronized Clock System
  + Centralized Wireless Networking System.
  + IP Television System
  + Insured Service Module System
  + IP Video Surveillance System
  + Access Control and Security System.
  + Telepresence System.
  + VHF/HF Radio Communication System.
  + Fire Detection and Alarm System.
  + Centralized Processing System.
  + Centralized Storage System.
  + Life Monitoring System.
  + Local Area Networking System (*Networking*).
  + Connectivity and Information Security System.
  + Maintenance and Energy Saving System.
  + Health Management System.
  + Image Management System.
  + Public Telephony System.
  + Computer and Specialized Equipment
  + Structured Cabling System
  + Server Room System - Data Center.
* The CONCESSIONAIRE, considering the description indicated in the feasibility study declared feasible of the Project, may propose to the GRANTOR the implementation of other similar systems, as long as these allow optimizing or improving the rendering of the Service.
* Any necessary provision for the Hospital to comply with the concept of "Technological Hospital".
* Maintenance System for infrastructure, installations and electromechanical equipment.
* SISMAC System (Asset Management and Maintenance System), may be part of the SIGI-NS and will be communicated, coordinated and interoperable with the SIGI-NS.
* Infrastructure operation management BMS system, may be part of SIGI-NS or be communicated, coordinated and interoperable with SIGI-NS.
* System: "ESSALUD Intelligent Health System - ESSI", the CONCESSIONAIRE shall implement the ESSI, for which it shall develop the necessary modules for compliance with the contractual obligations. On the other hand, the CONCESSIONAIRE shall deliver the licenses of the software developed in perpetuity for all equipment, systems and all technological solutions at no cost in favor of the GRANTOR.

Likewise, the CONCESSIONAIRE shall:

* Manage the corresponding authorizations, permits or agreements necessary to provide the public telephone service, the distribution cabling network, telephone terminals and all the equipment and systems necessary for its proper operation.
* Manage so that public telephones cannot receive incoming calls from outside and must have clear indications of the rates and procedures for their use.
* Provide an IP television system in areas of common use in the Hospital, such as waiting rooms, blood bank, hemodialysis, cafeteria, personnel canteen, as well as Hospital personnel break rooms.
* Provide, install and operate the necessary equipment for the transmission of institutional and social communication scheduling including outreach and information programs defined by the GRANTOR (Content Scheduling).
* Deliver the licenses of the software it develops in perpetuity for all equipment, systems, database, source code and all technological solution at no cost to the GRANTOR.
* Perform replacements and upgrades of the telephony, television and internet systems during the term of the Contract according to the POA and technical advances and user demand, according to the provisions of the GRANTOR.
* Implement systems to keep records of Access Control of users entering the Hospital, including equipment and biometric systems for access to controlled areas.
* Provide the connectivity elements of the Hospital's local network (interfaces, switch configuration, etc.) so that the telephone switch it provides can be integrated to the "Hospital" National Telecommunications Services Network (voice, data and video), as well as be integrated to the Hospital's national dialing plan and the Public Switched Telephone Network.
* Ensure the operation of equipment (networks and IT equipment) in the Hospital.
* Enable the use of telehealth or telemedicine by provisioning the necessary equipment, devices and systems.
* Provide the computer security systems that protect the equipment (firewall, IPS, IDS, etc.).
* Implement a help desk to provide support through a communications system for internal and external users.
* Maintain a high level of care for all users (internal and external) and be able to adapt to varying demands and operations of the Hospital. This includes training, reinforcements and in sum constant technical support to the personnel of all the Hospital's UPSS and UPS in order for them to make proper use of the infrastructure and technological information and communication platforms implemented by the CONCESSIONAIRE.
* Additionally, the CONCESSIONAIRE must provide and install hospital cost management software with calculation and analysis capacity, which allows costing by diagnosis-related group for the Hospital. Within this obligation, it must consider a training plan for the facility's personnel. This system and the corresponding training plan for the Hospital shall be submitted to the Supervisor of Contract and Operations for non-objection as part of this Service.

This Service will cover all the UPSS and UPS of the Hospital, applying what is detailed in the POA of the Service, which will determine the corresponding specifications and procedures within the framework of the Applicable Laws and Provisions and their updates or modifications during the execution of the Contract.

**Time Availability**

The CONCESSIONAIRE shall guarantee the permanent availability of the Service of all the Hospital's information and communication technology infrastructure and platform, 24 hours a day, every day of the year, during the term of the Contract, providing adequate and timely technical support for both scheduled and unscheduled requirements.

The POA will determine the specific scheduling of the Service, which must have sufficient flexibility to adapt to the specific needs of the user areas.

**Regulations**

For the provision of the Service, the CONCESSIONAIRE, considering the best practices and international standards, shall comply at least with the Applicable Laws and Provisions and the procedures established in this regard by the GRANTOR through the Supervisor of Contract and Operations, in order to guarantee at all times, the safety in terms of prevention of HAI, transmission of infectious and contagious diseases and occupational accidents.

In any case, the CONCESSIONAIRE shall comply with the technical standards set forth by the Ministry of Health or any other Competent Governmental Authority.

In particular, the CONCESSIONAIRE shall comply, as a minimum, with the following Applicable Laws and Provisions:

* National Building Regulations, approved by Supreme Decree No. 011-2006-VIVIENDA, on May 08, 2006, published on June 08, 2006 and its amendments. Updated 2019.
* Technical Health Standard "Infrastructure and Equipment of Health Establishments of the Third Level of Care" NTS No. 119 MINSA/DGIEM-V.01.
* Parameters for the Design of Health Establishments Infrastructure - DGIEM/MINSA.
* ANSI/TIA-1179 Standard, on Telecommunications Infrastructure for Health Establishments.
* Peruvian Technical Standard NTP-ISO/IEC 27001:2014, Security Techniques. Information security management systems.
* Technical Health Standard No. 067-MINSA/DGSP, Standard on Telehealth.
* National Electricity Code - Volume Utilization.
* IEC 60364 Standard, on grounding schemes (ECT).
* IEEE Standard STD 142-1991, on Single Ground.
* ANSI/TIA-568-C.3 Standard, on Fiber Optic Cabling Components.
* ISO/IEC 11801 Standard, Addenda 1 and 2, 2nd Edition, on Telecommunications Cabling System.
* ANSI/TIA-568-B-2008 Standard, on telecommunications cabling in buildings.
* ANSI/TIA-568-C.0-2012 Standard, Generic Telecommunications Cabling for Customer Premises.
* ANSI/TIA-568-C.1-2012 Standard: Commercial Building Telecommunications Cabling Standard.
* ANSI/TIA-568-C.2-2014 Standard: Balanced Twisted-Par Telecommunications Cabling and Components Standard.
* IEC61340-4-1 Standard: "Standard Test Methods for Specific Applications - Electrical Resistance of Floor Covering and Installed Floors".
* ANSI/TIA-310-D Standard: "Enclosures for Electrical and Telecommunications Equipment".
* ANSI/TIA-569-C Standard, on Telecommunications Enclosures and Raceways for Commercial Buildings.
* ANS/TIA-607-B-2013 Standard, on Grounding and Grounding for Telecommunications Systems in Commercial Buildings.
* ANSI/TIA-606-B-2015 Standard, on the Management of Commercial Telecommunications Infrastructure.
* ANSI/TIA 942-A-2013 Standard, on Data Center design and infrastructure.
* ANSI/TIA 942-AAAC Standard ANSI/TIA 942-AAAC Optical Attenuation Properties in Optical Fibers.
* ANSI/BICSI-002.2014: Data Center Design Standard and Recommended Practices.
* BICSI-005-2016: System Design and Implementation Best Practices.
* ANSI/TIA-1179-2010, Healthcare Facility Telecommunications Infrastructure Standard.
* National Electricity Code (CNE), includes the amendment according to R.M. No. 175-2008-MEM/DM, dated 11/04/08 Non-flame propagating conductors, free of halogens and corrosive acids.
* IEC 60332-3-2004: Fire resistance, halogen-free and low smoke emission.
* ANSI/TIA/EIA-TSB-67 Standard on Specification for Field Testing of the Transmission Performance of Unshielded Twisted Pair Cabling Systems.
* IEEE 802.3af Standard, on Power over Ethernet (PoE).
* IEEE 802.11n standard, on wireless connectivity.
* IEEE 802.3ae and IEEE 802.3an standards, on 10 Gpbs Ethernet transmissions.
* IEEE 802.3az (Energy Efficient Ethernet) standard.
* NFPA 70 Standard: Electrical Installation Code Article 250.
* NFPA 72 Standard: Fire Alarm Code.
* NFPA 75 Standard: “Standard for the Fire Protection of Information Technology Equipment”.
* NFPA 99 Standard: “Standard for Health Care Facilities”.
* NFPA 101 Standard: Human Safety Code.
* NFPA 2011 Standard: Standard for clean agent fire extinguishing systems.
* ASTM E 814-97 Standard: Fire Stop Through Fire Stops
* ROSH (Restriction of Hazard Substances).
* NTP IEC 60884-1 2007 N.
* ANSI/IEC 60529-2004 IP degree of protection.
* ISO/IEC 11801:2002 Ed. 2.0: Generic Cabling for Customer Premises.
* IEEE 802.3an “Physical Layer and Management Parameters for 10Gbps Operation – Type 10GBASE-T”.
* SEGDI-PCM and MINSA regulations (RENHICE, others).

All the aforementioned standards that undergo changes during the period should be taken into account in their latest version.

**Equipment and Supplies**

The CONCESSIONAIRE shall use the infrastructure available at the Hospital for the development of the service, implementing any equipment required and its respective maintenance, in order to perform the work of its competence with quality, according to the conditions established in this Contract.

It is the direct responsibility of the CONCESSIONAIRE to provide all the information and communication technology infrastructure and platform necessary for the performance of the IT and telecommunications service (ICT Service), according to the conditions set forth in this Contract.

The CONCESSIONAIRE shall consider the provision, installation, configuration, commissioning, availability, maintenance, support and everything necessary to maintain the continuity of the operation and the high performance levels requested in the Telecommunications and IT Service during the term of the Contract.

The CONCESSIONAIRE shall be responsible for any loss or breakage or inoperability or any damage or deficiency that may occur in other areas of the Hospital as a consequence of the development of the service.

The CONCESSIONAIRE shall assume the cost and arrange for the repair or replacement of what is affected. The CONCESSIONAIRE shall have a maximum of 5 days to repair or replace the damaged goods. The repair or replacement shall be considered valid when the Supervisor of Contract and Operations issues the compliance within 48 hours of the repair or replacement, with the agreement of the affected user area. If the affected asset, due to its characteristics and relevance for the user area, requires to be repaired or replaced in less time, the CONCESSIONAIRE shall comply with the term established by the user area and the Supervisor of Contract and Operations.

The CONCESSIONAIRE shall carry out the cleaning and maintenance of the areas used for the provision of this ICT Service in accordance with the obligations assumed in the Contract, whether such areas are used or not. The supplies to be used in each of the cleaning, cleaning and maintenance procedures shall be previously established in the POA in coordination with those responsible for each of the areas involved.

At the end of the contractual execution period of the Service, the CONCESSIONAIRE shall deliver to the GRANTOR the infrastructure and equipment related to this Service in perfect operating conditions.

**Personnel**

The CONCESSIONAIRE shall have the qualified personnel necessary for the performance of the functions within the scope of the Service, so that the activity is not interfered by issues related to lack of human resources (sick leave, training, absences, etc.).

In order to ensure that the service is provided in accordance with the provisions of the Contract, the CONCESSIONAIRE must have an organizational structure and staffing that meets such requirements. Said personnel shall have sufficient experience and training to adequately perform their work. The minimum required profile shall be:

* Professional personnel must have a minimum work experience of (03) three years in functions related to networks, communications and databases.
* Technical personnel must accredit a minimum work experience of one (1) year in functions related to computer equipment support.

Likewise, a head of service and other support personnel will be available for the proper organization and operation of the service. The minimum profile required for the Head of Service will be:

* Professional systems or computer engineer.
* Specialized in networks, telecommunications and database management.
* Five (05) years of professional experience.
* Two (02) years of work in Head or Coordination of ICT Services in hospitals.

In shifts in which the Head of Service is not available, the Headship will be entrusted to the shift manager (if necessary).

All Service personnel must have passed the corresponding medical evaluations and their profiles must be submitted to the Supervisor of Contract and Operations ten (10) days prior to the start of the Service. Any subsequent change shall be communicated and the corresponding profile shall be submitted to the Supervisor of Contract and Operations no later than one (1) day after the change occurs.

**Technical - Functional Specifications of the Service**

**Provision of information and communication infrastructure and equipment associated with the service.**

The CONCESSIONAIRE is responsible for carrying out this activity during the construction stage of the hospital infrastructure, implementing in a timely manner the information infrastructure for the correct Commissioning and Operation of the Hospital.

**Implementation of information and communication systems**

The CONCESSIONAIRE is responsible for carrying out this activity during the construction stage of the hospital infrastructure, implementing the systems indicated in this section in a timely manner. It is the responsibility of the CONCESSIONAIRE to guarantee the uninterrupted and permanent availability of the Health Management System for use by the Hospital's internal and external users.

**Health Management System**

The core of the information system will be the Electronic Medical Record, which will be fed by the different authorized users and will be integrated with the rest of the solutions and systems implemented in the Hospital, maintaining bidirectional data flows.

The electronic medical record should contribute to the academic and scientific function, being a valuable source for the study and research of certain pathologies and the efficacy of certain treatments, with the prior consent of the Ethics Committee or other committee determined by the Hospital Director, in order to protect the security of patient information.

The central element is the existence of the Electronic Medical Record as the backbone of the development of the system. This dynamic and continuous record of the health situation of each patient must be:

* Unique There should be only one clinical history for each patient that gathers all the information and not different scattered records.
* Accessible for all: The patient's clinical history should be available in real time in each service where the patient can have access to medical care that allows effective resolution and follow-up of their health conditions and access to information on "epidemiology and Care" available to health personnel and their respective regulators.
* Articulated and Interoperable; Communication with the information systems determined by the GRANTOR and with the corresponding public applications.
* Adapted to the GRANTOR's regulations and functionality: The system will be based on the GRANTOR's own operating criteria, rules and regulations, adapting as necessary to the Applicable Laws and Provisions and to the future developments of the organization.

The information of the processes in the 5 areas defined above would allow the Hospital to operate in a "paperless" logic, connecting processes, and minimizing errors, and:

* Enable the exchange of patient information at any point in the care network that is connected to the system.
* Offer support tools necessary for better treatment in patient care.

**Interoperability Management**

During the execution of the Contract, the CONCESSIONAIRE shall be responsible for ensuring the interoperability of all the information and communication systems implemented in the Hospital with the information and communication systems of the GRANTOR, as well as of the other entities with which it is appropriate to share data, starting with the Electronic Medical Record implemented in the hospital.

Furthermore, the CONCESSIONAIRE shall ensure the integration with ESSALUD's Intelligent Health Service System - ESSI, used by all the health care centers of the GRANTOR, which, among other things, allows the integration of all the information of the benefits provided to all the insured patients, as well as having a single standardized system whose development is based on the institutional regulations in force.

**Information Security, Confidentiality / Privacy Management**

It considers, within its scope, guaranteeing during the execution of the Contract, the fulfillment of all the requirements, considerations, procedures and protocols of a correct information security management system, following the Peruvian Technical Standard NTP-ISO/IEC 27001, as well as the rules that modify or substitute it issued by the GRANTOR in all its scopes and primarily in correspondence to the objectives and scopes of this Contract.

Likewise, with the contents of Law 29733, Personal Data Protection Law, as well as Law 30096, Computer Crimes Law, and directives and rules of SEGDI-PCM and GRANTOR, in force and as amended.

The CONCESSIONAIRE shall be responsible for providing the Hospital with an integral protection system, which considers all the necessary elements to protect all the computer systems, to which this annex refers, from external or internal attacks, whether these come from viruses, intruders, unauthorized access to the network, or any other element that puts the generated or existing information at risk.

The CONCESSIONAIRE shall keep confidential all information recorded, processed or stored in the computer systems to which it has access, whether confidential or not, and may not use them for purposes not validated by the Supervisor of Contract and Operations, and may not under any circumstances or by any means disclose, disseminate, publish, sell, assign, copy, reproduce, interfere with, intercept, alter, modify, damage, render useless or destroy, in whole or in part, such information. This prohibition affects the CONCESSIONAIRE, its personnel, its consultants, subcontractors and their personnel, or in any other capacity that are linked to the concession, in any of its stages, and its liability shall be joint and several with respect to them.

The CONCESSIONAIRE shall be responsible for preventing third parties, different from the SIGI-NS users defined by the GRANTOR, from entering the SIGI-NS. The CONCESSIONAIRE shall inform the Supervisor of Contract and Operations when it detects Hospital officials or third parties misusing, damaging or extracting information from the systems.

Without being limiting, the CONCESSIONAIRE shall be responsible for providing the following services, whose minimum specifications and coverage are indicated below, which shall be considered for all the equipment supplied:

* Antivirus program.
* Antispam program.
* Intrusion detection program.
* Logs (Database event transactions).
* LDAP (Client-server type protocol for accessing a directory service).
* Others.

**Training**

During the Start-up period, the CONCESSIONAIRE shall carry out the initial training to all the Hospital's personnel, in addition to the officers determined by the GRANTOR and the Supervisor of Contract and Operations.

Likewise, throughout the execution period of the Contract and according to a technological update schedule, the CONCESSIONAIRE shall develop the training of the users (internal and external) corresponding to each update. The number of personnel to be trained shall be defined in each POA, according to the replacement schedule.

**Updating of technological infrastructure**

The CONCESSIONAIRE shall update the Technological and Communication Infrastructure, both prior to the commencement of the service and then periodically according to the technological validity and the corresponding replacement schedule.

The update of the technological and communication infrastructure shall be with the most updated technological equivalent available in the market at the time of the update, such as to allow the operational continuity of such infrastructure, in accordance with the provisions of this section.

**Initial update**

The CONCESSIONAIRE shall deliver an updated list of the Technological and Communication Infrastructure and software to be provided at the beginning of the service, whose referential characteristics are indicated in the descriptive memory of the "facilities for the information technology and Communications solutions", where the basic guidelines and the design criteria of the Telecommunications Facilities are presented, corresponding to the Pre-investment Study at the Project Feasibility level. Said list shall be submitted 180 days before the beginning of the Operational Stage, for which it shall be submitted to the Supervisor of Contract and Operations, for its review and non-objection from the GRANTOR. The Supervisor of Contract and Operations shall have a term of 30 days as from the delivery of the proposal by the CONCESSIONAIRE, to issue its non-objection or make observations. In the latter case, the CONCESSIONAIRE shall have 15 days to submit a new proposal with the requested corrections.

**Software Upgrade**

The CONCESSIONAIRE shall provide the GRANTOR with software *update* and *upgrade* services. For these purposes, the installation of Software *Updates* must be carried out by the CONCESSIONAIRE in full coordination with the Supervisor of Contract and Operations and scheduled at least 30 (thirty) days in advance in order to coordinate and duly communicate to the affected users.

*Upgrades* or new versions of Software must be optional in their application and the Supervisor of the Contract and Operations shall be the one who, based on the background information provided by the CONCESSIONAIRE, shall determine the relevance, convenience and timeliness of their installation. The installation of versions already tested and validated in other health institutions or organizations of similar size is recommended.

If as a result of the application of *Updates* or *Upgrades* it becomes necessary to make changes in the configuration of the applications at user level, these shall be at the CONCESSIONAIRE’s expense, cost and responsibility, and shall be considered as part of the *Update* or *Upgrade* activities.

**Hardware Maintenance**

The CONCESSIONAIRE shall carry out a preventive and corrective maintenance program, which shall be included in the respective POA. Regarding corrective maintenance activities, they must be previously coordinated with the Supervisor of Contract and Operations, as established in the respective POA.

**About Software**

The CONCESSIONAIRE shall provide preventive and corrective maintenance services for all the Hospital's software, in order to ensure adequate system operation and support. The maintenance shall have at least the following characteristics:

* The Preventive Maintenance recommended for each software by the manufacturers must be performed at times that generate the least possible impact on the operation of the Hospital's areas and premises involved.
* This maintenance must consider, at least, 3 preventive activities established in the POA for the system components. Their frequency will be determined by the characteristics of the activity, such as, database, server, application maintenance, etc. The scheduling of these activities should indicate the equipment (servers, diagnostic stations, dictation devices, or other involved). It will be considered part of the preventive maintenance the evaluation of the functionalities of the different applications with the objective of making the necessary corrections.
* Corrective maintenance of the systems must be performed as often as necessary. This maintenance must be performed at times that generate the least impact on the operation of the care services, with prior opinion of the Supervisor of Contract and Operations.
* Once each maintenance process has been carried out, the CONCESSIONAIRE must prepare a report in the SIGI-NS, established in the Contract, with the results of the work performed, mentioning associated pending issues, if any, and those responsible for the process.

**Response and availability times**

The response times to perform corrective maintenance associated with the severity of the occurrence reported in the SIGI-NS will be:

**Table 14: Response Time**

| **Level** | **Occurrence** | **Response time to be attended to the occurrence** |
| --- | --- | --- |
| Level 1 | Involve the entire application or stop the service for the corresponding software (e.g., database crashes, general system crash, substantial loss of data). | Within one hour of its report in SIGI-NS |
| Level 2 | Affect certain areas of the software (e.g.: downtime in any of the zones established in the Bidding Terms, loss of data on entry). | Less than 2 hours from the first report of the occurrence in SIGI-NS |
| Level 3 | Have a minor impact on software performance (e.g. unexpected behavior when entering data). | Less than 5 hours counted from the first report of the occurrence in SIGI-NS |
| Level 4 | Minor impact on software performance (e.g., syntax problems in the user interface). | Always less than 12 hours from the first report of the occurrence in SIGI-NS |

In all cases, the service mode shall be 7x24 (Monday to Sunday, 24 hours a day).

Likewise, the CONCESSIONAIRE shall carry out all pertinent actions in order to guarantee the minimum level of availability of the Technological Infrastructure service.

The following is the six-monthly availability (%) and the maximum continuous downtime of this service, according to the zoning.

**Table 15: Semi-Annual Availability (%)**

|  |  |  |
| --- | --- | --- |
| **Zoning** | **Semi-annual Availability (%)** | **Maximum continuous stop time** |
| Critical zones | 100 % | Less than one minute |
| Semi-critical zones | 99.5 % | 15 minutes |
| Non-critical zones | 99 % | 30 minutes |

**Availability**: Availability or "*uptime*" is defined as the probability that an element of the service is ready to operate when required, representing an objective measure of the continuity of the service provided.

**Service Organization**

For this service, the CONCESSIONAIRE shall meet the requirements of the service itself, as well as for each user area through the SIGI-NS.

The CONCESSIONAIRE shall propose the functional Service organization for the fulfillment of its obligations under the Contract, considering that during the Operational Stage it must be in coordination with the Service of Maintenance and Operation of the infrastructure, facilities, electromechanical equipment and furniture associated to the infrastructure regarding the provision of the network with the SIGI-NS established for the operation and supervision of the Service Levels.

The SIGI-NS system shall have a tool organized as a contingency plan for cases where the system becomes temporarily inoperative, said contingency plan must consider the replacement of the information in the SIGI-NS system in order to guarantee the security of the information, continuity of records, traceability, measurements, operability and other functionalities of the system.

**Documentation**

In addition to the specific information that the CONCESSIONAIRE must submit as established in the previous sections related to this service, the CONCESSIONAIRE shall submit the following information:

* Initial information to be submitted by the CONCESSIONAIRE. The CONCESSIONAIRE shall prepare the Service’s POA that includes its direct application. The Service’s POA shall determine the corresponding specifications and procedures within the framework of the Applicable Laws and Provisions and their updates or modifications during the execution of the Contract, as described in Annex 21.
* Periodic reports to be submitted during the Operational Stage.

The CONCESSIONAIRE shall deliver to the Supervisor of Contract and Operations a monthly report containing statistical information on the operation of the service. This report shall contain, at least, the information indicated in the GRANTOR's directives and the necessary information for the evaluation of the service level indicators:

* Percentage of operability of each system implemented.
* Number of urgent requests attended and solved per period of time.
* Other information considered relevant for the monitoring of the Service quality and whose inclusion in the monthly report shall be agreed between the GRANTOR and the CONCESSIONAIRE.

The CONCESSIONAIRE shall develop a seismic vulnerability study and risk study for this Service, once the Hospital starts operating, in order to determine the mitigation measures to be implemented at its own cost to ensure the continuity of the Service. The terms of reference for the aforementioned studies must be approved by the Supervisor of Contract and Operations prior to the start of operation of the Service. The studies shall be developed and completed in accordance with the provisions of Chapter XVIII of the Contract.

**Definition of Terms**

* ADSL Access: Broadband access technology with download speeds higher than upload speeds, which uses the external copper telephone plant (subscriber loop), but does not use the telephone transport or switching network (National Plan for the Development of Broadband in Peru, 2011).
* Activation: Process by which the operating company effectively enables the contracted service (Glossary of Terms of the Single Ordered Text of the Conditions of Use of Public Telecommunications Services, approved by Resolution No. 138-2012-CD/OSIPTEL).
* Necessary bandwidth: For a given class of emission, width of the frequency band strictly sufficient to ensure the transmission of information at the speed and with the quality required under specified conditions (Article 1°, numeral 6.16, of the National Frequency Allocation Plan, approved by Ministerial Resolution No. 187-2005-MTC-03).
* Antenna: Device that emits or receives radioelectric signals (Article 2°, paragraph h) of the Law for Strengthening the Expansion of Telecommunications Infrastructure, Law No. 29022).
* Broadband: Data transmission connectivity, mainly to the Internet, on a permanent and high-speed basis, which allows the user to be always online, at appropriate speeds for obtaining and interactive broadcasting of multimedia information, and for the access and adequate use of various voice, data and audiovisual content services and applications (Article 4 of the Law for Promotion of Broadband and Construction of the National Fiber Optic Backbone Network, Law No. 29904).
* State Assets: Movable and immovable assets whose ownership, administration and maintenance corresponds to the Entities, regardless of the level of government to which they belong. They may be Public Domain Assets or Private Domain Assets (Article 5° of the Regulations on Law No. 29022, Law for Strengthening the Expansion of Telecommunications Infrastructure, approved by Supreme Decree No. 003-2015-MTC).
* Coaxial cable (\*): Cable formed by two concentric metallic conductors separated by an insulating material. This type of cable is widely used in access networks.
* Cable modem (\*): Wired access technology that allows telecommunications services to be offered using the coaxial cable network. It is also known as DOCSIS Network. This term also applies to the modem located at the subscriber's premises that accesses the Internet through a DOCSIS Network. (\*) Reference definition.
* Terminal Boxes: Final elements of the Telecommunications Network installed on poles, facades or similar; and to which the drop wires are connected. (Article 5° of the Regulation of Law No. 29022, Law for Strengthening the Expansion of Telecommunications Infrastructure, approved by Supreme Decree No. 003-2015-MTC).
* Switchboard: Center for control, management and switching of communications of the Mobile System that has interconnection capacity with other telecommunications networks (Article 1° of the Regulation of Public Mobile Services, approved by Ministerial Resolution No. 418-2002-MTC/15.03).
* Circuit: Means of transmission that allows communication between two points (Definitions of the Contract with Entel Perú S.A., approved by Supreme Decree No. 11-94-TCC).
* Traffic View: It is the document that allows evaluating the operability, continuity and consumption of Broadband in a given time, at its maximum rate, the Internet access speed, or that of a leased circuit. In addition, if the service is within the contracted speed parameters according to the configuration in the main server where the entire network is managed, in accordance with the technology and equipment. (List of evidentiary means approved by the Administrative Tribunal for the Solution of User Complaints, approved by Resolution No. 001-2012- MP/TRASU-ST-OSIPTEL).
* Availability (Uptime): It refers to the time when a system, server, device or hardware works without interruptions, i.e. the percentage of operability.
* DSL (technology): A modem technology that transforms telephone lines into high-speed lines. ADSL is one of the four current DSL technologies (HDSL, SDSL, VDSL), which are modulation techniques for high-speed data transmission over the copper pair. See ADSL Modem (Article 1 of the Maximum rates applicable to data transmission services through virtual ATM circuits with ADSL access, approved by Resolution No. 036-2000-CD/OSIPTEL).
* Network Elements: It refers to the infrastructure supporting telecommunications networks. Said elements shall be defined by OSIPTEL. (Complementary Provisions to the Law on Access to Infrastructure by Major Providers of Public Telecommunications Services approved by Resolution N° 020-2008-CD/OSIPTEL).
* Call Recording Equipment: Equipment that allows detecting:
  + The beginning and end,
  + Measure the duration,
  + Record and generate reports, of the telephone calls made from the subscriber's telephone set, and
  + Record and generate reports on the lack of electric power supply to the ERLL, and its replacement, as well as the absence of voltage in the telephone line (Article 2 of the Technical Standard for Call Recording Equipment (ERLL), approved by Ministerial Resolution No. 204-2005-MTC-03).
* Terminal equipment: Device in which a telecommunications circuit ends and which allows the user to access the network. (Glossary of Terms of the Single Ordered Text of the General Regulations of the Telecommunications Law, approved by Supreme Decree No. 020-2007-MTC) / (Glossary of Terms of the Single Ordered Text of the Conditions of Use of Public Telecommunications Services, approved by Resolution No. 138-2012-CD/OSIPTEL).
* *ETSI European Telecommunications Standards Institute*: It is the European Telecommunications Standards Institute recognized by the European Commission as the responsible for standardization in the field of telecommunications for the countries of the European Community (Glossary of Terms of the Single Ordered Text of the Conditions of Use of Public Telecommunications Services, approved by Resolution No. 138-2012-CD/OSIPTEL).
* Optical Fiber: Very thin thread of transparent material, glass or plastic materials, used as a physical means to transmit large amounts of information over long distances making use of light pulses as an optical carrier (Article 5° of the Regulation of Law No. 29022, Law for Strengthening the Expansion of Telecommunications Infrastructure, approved by Supreme Decree No. 003-2015-MTC).
* HFC (\*) Hybrid Fiber-Coaxial Network: It is a wired network that has a part of Optical Fiber and another part of Coaxial Cable. This network allows the provision of Internet, landline Telephony and Cable TV services. (\*) Reference definition.
* Identification of the connected user (ISDN): Supplementary service that allows providing the number that identifies the connected user (Annex of Definitions of the Rule that approves the Maximum Fixed Tariff Regime to be applied by telecommunications companies for the establishment of ISDN connections and supplementary services, approved by Resolution N° 028-97-CD/OSIPTEL).
* Internet: A worldwide network of computer networks that uses a common communications protocol, TCP/IP (*Transmission Control Protocol/Internet Protocol*). It is a worldwide network of computer networks whose connectivity is provided by the use of a common communications protocol: TCP/IP (*Transmission Control Protocol/Internet Protocol*). This protocol provides a common operating language between networks that themselves use a variety of protocols. Currently the main uses of the Internet are: e-mail, file transfer between computers (*file transfer or ftp*), remote access to computers (*remote login*), and the *World Wide Web*.
* Service interruption: Total or partial incapacity that makes it impossible or difficult to provide the service, characterized by an inadequate operation of one or more network elements (Glossary of Terms of the Single Ordered Text of the Conditions of Use of Public Telecommunications Services, approved by Resolution No. 138-2012-CD/OSIPTEL).
* Inventory: Procedure that consists of physically verifying, coding and recording the assets that the entity has at a certain date. In order to verify the existence of the assets, contrast the results with the accounting record, investigate the differences that may exist and proceed to the corresponding regularization. It must follow what is indicated in Directive No. 001-2015/SBN, called "Procedure for the Management of State Movable Property" approved by Resolution No. 046-2015/SBN. This procedure must be auditable at any time and accessible to its information by the administration.
* Telecommunications Law Sole Ordered Text of the Telecommunications Law, approved by Supreme Decree No. 013-93-TCC.
* **Preventive maintenance (MP)**: Maintenance that is performed to extend the service life of the device and prevent malfunctions. MP is usually scheduled at defined intervals and includes specific maintenance tasks such as lubrication, cleaning (e.g. of filters) or replacement of parts that commonly wear out (e.g. bearings) or have a limited service life (e.g. tubes). Procedures and intervals are usually established by the manufacturer. In special cases, the user can modify the frequency according to local environmental conditions. Sometimes preventive maintenance is called "planned maintenance" or "scheduled maintenance".
* **Corrective maintenance (MC):** Process to restore the integrity, safety, or operation of a device after a failure. Corrective maintenance and unscheduled maintenance are considered synonymous with repair.
* **Legal Technical Maintenance**: The type of maintenance to be performed as mandated by a law, directive or specific standard that requires compliance. If this is the case, equipment subject to such law, directive or standard will additionally have an installation book, where all preventive, corrective and legal interventions will be reflected.
* **USB Modem**: Wireless modem that connects to a USB port of a desktop or laptop computer (laptop, tablet, etc.) to provide a wireless data connection, usually to connect to the Internet. It may receive other names such as Dongle, USB BAM. (Annex 1 of the Regulation on Supervision of Coverage of Public Telecommunication Services for Mobile and Fixed Wireless Access, approved by Resolution No. 135-2013-CD/OSIPTEL).
* **Monitoring**: Those activities to be carried out by OSIPTEL on an optional basis, with the purpose of becoming aware of the performance of the supervised entities in the public telecommunications services market (Article 6° of the General Regulation on Supervision, approved by Resolution No. 090-2015-CD/OSIPTEL).
* **NGN**: A packet-based network that enables the provision of telecommunication services and in which multiple QoS-enabled broadband transport technologies can be used, and in which service-related functions are independent of the underlying transport-related technologies. It allows users the unhindered access to networks and service providers or services of their choice. It supports pervasive mobility that will enable consistent and ubiquitous delivery of services to users (ITU Recommendation Y.2001).
* **PGBME**: Procedure for the Management of State Movable Property.
* **Medical procedure**: Health care provided individually to the user population for preventive, diagnostic or therapeutic purposes, which is carried out by the health care professional of the Health Establishments (Supreme Decree No. 024-2005-SA, which approves the Standard Health Data Identifications).
* **Acceptance Tests:** These are the tests defined by the Hospital and instructed by the Supervisor of Contract and Operations to the CONCESSIONAIRE for the reception, at any stage of the Contract, of the medical equipment prior to its commissioning, use and operation.
* **Remedy**: Rectification of an error (SUNAT-ESSALUD Glossary of Interinstitutional Terms).
* **UNIRED**: It is the access of users and information provider centers to the Internet, using TCP/IP protocol at international level through telecommunication services that support such protocol.
* **USSD**: USSD is a service for sending data through GSM terminals. It does not have network elements for store and forward, so the interactive response times of USSD-based services are generally faster than those based on SMS, in this sense it is usually used for real-time telephony services and instant messaging services.
* **WIMAX Acronym for Worldwide Interoperability for Microwave Access**. It is a broadband wireless access technology based on the IEEE 802.16 family of standards. (IEEE 802.16)
* **Wi-Fi (\*)**: Wireless network technology that allows computers, cell phones and other devices to communicate via a wireless signal. This technology describes network components that are based on the 802.11 standard developed by the IEEE and adopted by the Wi-Fi Alliance.
* **WAP** (\*) Protocol for wireless communications to create advanced telecommunication services and access Internet pages from a cell phone (ITU-D).

(\*) Reference definition.

* 1. **SERVICE OF MAINTENANCE AND OPERATION FOR THE BUILDING, FACILITIES, EQUIPMENT AND FURNITURE ASSOCIATED WITH THE INFRASTRUCTURE (MOE)**

It consists of the integral management of Service of Maintenance and Operation s of all the components of the Hospital's physical infrastructure, including buildings and their exterior areas, their installations, systems and associated electromechanical equipment and the furniture associated with the Hospital's infrastructure, with the standards of automation and control of the conditions of safety, functionality, habitability, adequacy to the environment, environmental protection and universal accessibility, and especially within the framework of the regulations of the National Building Regulations and the Applicable Laws and Provisions.

The above in order to ensure its availability and reliable and safe operation by the Hospital personnel, guaranteeing the best condition of its elements and component systems, managing activities to minimize possible flaws and managing preventive and corrective actions, so as to ensure the support to the care work of service to patients, users and personnel of the Hospital.

The Service quality is related, but not limited to:

* Permanent uninterrupted availability of the functional facilities of the Hospital necessary for the healthcare tasks, as well as the functionality of the infrastructure supporting the healthcare tasks and the procedures for the care of the Hospital's users.
* Guarantee at all times, the quality, safety, reliability and availability of the performance of the components of the different systems implemented for the Hospital.
* Unrestricted compliance with the Applicable Laws and Provisions.

**Purpose**

To carry out the execution of maintenance and operation activities of the building, facilities, equipment and furniture associated with the infrastructure, as well as their efficiency and control, ensuring the integrity of the structure of the buildings, the correct operation of industrial services, energy systems, furniture associated with the infrastructure and electromechanical equipment, as established in the Technical File.

**Scope**

The CONCESSIONAIRE shall define processes, methods and resources, both technical and human, to carry out the maintenance and operation of the Building, Facilities, electromechanical equipment and furniture associated with the infrastructure, of all healthcare and non-healthcare environments, outdoor areas, roads, parking areas, green areas and signage within the scope of the Hospital project.

The CONCESSIONAIRE shall be responsible for resolving any occurrence or failure related to the Building, Facilities, industrial equipment, electromechanical equipment and furniture associated with the infrastructure, as well as the permanent operation thereof in accordance with the operational hours indicated in the "Time Availability" of this service, and shall take all the corresponding actions and measures to resolve any occurrences or failures that may arise, with the timeliness required by this Contract, in accordance with the response and correction times indicated in this section.

The CONCESSIONAIRE shall present in the POA a procedure for immediate reaction to unforeseen events, in order to guarantee the continuity of the service.

At least the following requirements shall be part of the Service and shall be included in the POA:

* Ensure the full availability and operability of the Building, Facilities, electromechanical equipment and furniture associated with the Hospital's infrastructure, ensuring compliance with the characteristics and conditions of habitability and functionality defined in the Technical File.
* Maintain permanently updated the inventory with the technical description of all the Hospital's assets defined in the Technical File, in accordance with the requirements established in the Contract.

Prepare and implement the Maintenance Plans for the building in general, for the furniture associated with the infrastructure, for each of the installations and industrial equipment and for the electromechanical equipment defined in the Technical File.

* Manage the service by means of the computer applications intended for the maintenance and operation of the infrastructure, and the SIGI-NS.
* Perform tasks on demand, such as the mobilization or transfer of goods or furniture from one environment to another, requested by the Hospital's health personnel, of analogous characteristics to those required for the maintenance service.
* Perform the respective readings and controls of the electrical energy equipment, water, fuels, medicinal gases, and other services or systems of the Hospital defined in the Technical Files and generate the respective reports with the periodicity defined by the Supervisor of Contract and Operations.
* Actively participate in the drills plan, emergency and contingency plan and evacuation plan, in accordance with the risk study defined in the Technical Files.
* Prepare reports and advise the Hospital Management, in relation to matters pertaining to the function of the CONCESSIONAIRE.
* Participate and collaborate in the Hospital's programs and actions regarding safety, self-protection and occupational risk prevention.
* Carry out the Certification and its full processing before the Authorized Bodies to the electrical installations, sanitary installations, elevators and other means of vertical transport, compressed air installations, air conditioning installations, fire-fighting installations, medicinal gas installations, fuel gas installations and others as appropriate in accordance with the definitions in the Technical File. Likewise, it shall keep such certifications permanently updated in accordance with Applicable Laws and Provisions.
* Prepare reports regarding damages to the building and its installations caused by natural phenomena, or provoked or as a consequence of any unforeseen event in case it is required by the GRANTOR. If applicable, it shall activate and process the corresponding guarantees or insurances that correspond according to what is established in the Contract.
* Include the list of minimum Physical Means to execute the maintenance.

The CONCESSIONAIRE shall maintain during the term of the Contract the same physical, aesthetic, structural and functional characteristics defined in the Technical Files, in order to ensure the continuous and efficient operation of all the installations, their corresponding electromechanical equipment and the equipment associated with the infrastructure.

The CONCESSIONAIRE shall perform the quality controls for each intervention to each of the systems during the preventive and corrective maintenance, and when requested by the GRANTOR, for which the CONCESSIONAIRE shall report it in the SIGI-NS.

In compliance with the Applicable Laws and Provisions regarding the installations subject matter of the Contract, the CONCESSIONAIRE shall ensure that all components of the buildings, plant species, equipment, systems, sewage and drainage evacuation, fuel supply and provision, energy services, communications services and technological systems do not cause or create any danger to the environment or to any person in the Hospital. Likewise, the CONCESSIONAIRE shall comply with the National Building Regulations, the National Policy on Safe Hospitals, the MINSA's Guide for Physical Infrastructure Maintenance and international standards within the framework of Applicable Laws and Provisions.

The CONCESSIONAIRE shall be responsible for performing the daily and permanent controls and measurements of all the systems that make up this service in order to ensure the highest level of service established in the Contract.

**Time Availability**

The CONCESSIONAIRE shall guarantee the general maintenance and building operation service, all the installations and industrial equipment, electromechanical equipment and furniture associated with the infrastructure, 24 hours a day, every day of the year, in order to meet any possible needs that may arise and ensure the continuous and efficient operation of the installations and equipment, minimizing possible interruptions to the Hospital's operations or loss of functionality of areas of the Hospital, including special situations and eventualities.

This service shall be provided minimizing interference with the Hospital's normal healthcare activity, and when this is unavoidable, requesting the corresponding work permits from the Hospital's Management. The CONCESSIONAIRE shall communicate to the respective areas, at least seven (7) Calendar Days in advance and through the Supervisor of Contract and Operations, the information related to the execution of scheduled maintenance, so that the corresponding actions and measures may be coordinated and implemented in order to plan its normal work. The CONCESSIONAIRE shall report on this matter in the POA and, in particular, shall report monthly, through the corresponding reports, the activities scheduled at the beginning of each calendar month in order to coordinate with the Hospital's Management.

The CONCESSIONAIRE shall have permanent personnel available at the Hospital during the Hospital's scheduled hours of activity, as well as the necessary resources to respond to any need or request that may arise outside such hours.

**Regulations**

For the provision of the Service, the CONCESSIONAIRE, considering the best practices and international standards, shall comply at least with the Applicable Laws and Provisions and the procedures established in this regard by the GRANTOR through the Supervisor of Contract and Operations, in order to guarantee at all times, the safety in terms of prevention of HAI, transmission of infectious and contagious diseases and occupational accidents.

In any case, the CONCESSIONAIRE shall comply with the technical standards set forth by the Ministry of Health, the GRANTOR or any other Competent Governmental Authority.

In particular, the CONCESSIONAIRE shall comply, as a minimum, with the following Applicable Laws and Provisions:

* National Building Regulations, approved by Supreme Decree No. 011-2006-VIVIENDA, on May 08, 2006, published on June 08, 2006 and its amendments. Updated 2019.
* Health Technical Standard NTS No. 110-MINSA/DGIEM-V.01 "Infrastructure and equipment of second-level health care facilities".
* Technical Health Standard NTS No. 119-MINSA/DGIEM-V.01 "Infrastructure and equipment of third-level health care facilities".
* Specific technical standards for Specialized Health Units - MINSA.
* Technical Standard No. 0021-MINSA/DGSP-V.03 "Health establishments categories".
* R.M. Nº 585-99-SA/DM, Manual of Good Storage Practices for Pharmaceutical and Related Products.
* Technical Standard No. 0031-MINSA/DGSP V.01, Technical Standard for Intensive and Intermediate Care Services.
* Technical Standard No. 072- MINSA/DGSP-V.01, Technical standard of health of the production unit of Service of Clinical Pathology s.
* Technical Standard No. 041-MINSA/DGSP-V.01, Technical Health Standard for the Control of Tuberculosis.
* Standards and measures recommended by the WHO for the prevention of Tuberculosis transmission in Health Institutions.
* Technical Standard No. 050-MINSA/DGSP V.01, Technical Standard for Intensive and Intermediate Care Services.
* Technical Health Standard No. 037-MINSA/OGDN-V.01, for Safety Signage of Health Establishments and Medical Support Services, R.M. No. 897-2005/MINSA.
* Technical Health Standard No. 030 MINSA/DGSP V.01 Technical Standard for Anesthesiology Services, R.M. No. 486-2005 /MINSA.
* RM No. 022-2011, which approves NTS No. 089: MINSA-DGSP V.01.
* Technical guide for architecture projects and equipment of Surgical Center and Surgery units, R.M. Nº 065-2001-SA/DM.
* Technical Health Standard “Infrastructure and Equipment of Second Level of Care Health Facilities", Ministerial Resolution No. 660-2014-MINSA.
* Technical Health Standard of the Production Unit of Diagnostic Imaging Service, R.M. No. 217-2010/MINSA (Pre-publication).
* Technical Health Standard of the Production Unit of Service of Hemodialysis s, R.M. No. 845-2007/MINSA.
* Technical Standards for Architecture Projects and Equipment for Hemodialysis Centers, R.M. Nº 307-99-SA/DM.
* Technical Health Standard of the Production Unit of Rehabilitation Medicine Services, R.M. N. 308-2009/MINSA.
* Technical Health Standard of the Production Unit of Pain Treatment Services, R.M. No. 1013-2007/MINSA.
* Approved Technical Health Standard for the Accreditation of Health Establishments Donors – Transplant centers, Ministerial Resolution No. 394-2019-MINSA.
* Technical Standard for the Referral and Counter-referral System of Health Establishments, R.M. Nº 751-2004/MINSA.
* Technical Health Standard for Patient Assistance Transport by Air Ambulance, R.M. Nº 336-2008/MINSA.
* Technical Health Standards for Patient Assistance Transport by Land, R.M. Nº 953-2006/MINSA.
* Health Directive Nº 001-MINSA-DGSP-V.02 "Health Guidelines for the Evaluation of Obstetric and Neonatal Functions in Health Establishments", Ministerial Resolution Nº 853-2012-MINSA.
* R.M. Nº 1142-2004. Guide for the categorization of Health Establishments.
* Standards and procedures for the accreditation of Health Establishments -MINSA.
* Law 29973 General Law on Persons with Disabilities.
* Building Code Requirements for Structural Concrete (ACI–318M) and Commentary (ACI–318RM) in its latest version.
* ACI *Manual Concrete Practice* (Reports ACI 207.1R-96, ACI 207-2R-95, ACI 207-4R-05, ACI 22-4R-01).
* Report ACI Committee 301-05 Standard Specification for Structural Concrete in its latest version.
* American Institute of Steel Construction (AISC) latest version.
* *American Society for Testing Materials* – ASTM.
* *American Welding Society* – AWS.
* National Council on Radiation Protection and Measurements (NCRP) Reports No. 49, No. 51, No. 79 and No. 144.
* DIN Standard 6847 part 2 "Installations of Linear Electronic Accelerators for Medical Use".
* Law No. 28028 "Law on the Regulation of the Use of Ionizing Radiation Sources".
* Supreme Decree No. 039-2008-EM, Regulation of Law No. 28028, Law on the Regulation of the Use of Ionizing Radiation Sources.
* Radiological Safety Regulations, Peruvian Institute of Nuclear Energy (IPEN).
* Radiological Safety Requirements for Teletherapy, National Authority Technical Office (OTAN).
* Standards on risk mitigation considerations for any disaster in terms of organization, function, structure (Pan American Health Organization, Civil Defense and others).
* Regulation on Technical Safety Inspections in Civil Defense, approved by Supreme Decree No. 066-2007-PCM.
* Chief Resolution No. 440-2005-INDECI "Manual for the execution of Technical Security Inspections in Civil Defense".
* National Electricity Code and its amendments.
* Technical Standards of the Electricity General Directorate of the Ministry of Energy and Mines.
* NFPA international safety standards.
* National Building Regulations EM-20, EM-030 and EM-050 Standard.
* NFPA 13 / 15 / 20 Standard (Installation of Fire Protection Systems).
* NFPA /101 / A- 20 Standard (Personal Safety).
* NFPA 90A Standard (Installation of Ventilation and Air Conditioning Systems).
* ASHRAE Standard (American Society of Heating, Refrigerating and Air Conditioning Engineers).
* "Guide for vulnerability reduction in the design of new Health Establishments", 2004 by PAHO/WHO (as reference).
* Minimum safety standards for construction, expansion, rehabilitation, remodeling and risk mitigation in Health Establishments - MINSA.
* Legislative Decree No. 1278, Law on Integrated Solid Waste Management and its regulation approved by Supreme Decree No. 014-2017-MINAM.
* R.M. N° 175-2008-MEM/DM, dated 04.11.08. Non-flame propagating conductors, free of halogens and corrosive acids.
* Requirements of INDECI and CGBVP.
* IEEE 802.3ab 1000 Base-T.
* IEEE 802.3z 1000 Base-T, 1000 Mbps (GbE) operation over fiber optic cable.
* ANSI/EIA/TIA 568B.3.1 Standard 50/125 multimode fiber optic cable systems.
* ANSI/EIA/TIA 569 B Telecommunications space and conduit standards.
* ANSI/EIA/TIA 606A Standards to Manage Telecommunications Infrastructures.
* ANSI/EIA/TIA 942 Telecommunications Infrastructure Standards for Data Centers.
* ANSI J STD 607A Standards for telecommunications grounding.
* NTS No. 144-MINSA/2018/DIGESA, Technical Health Standard: "Integrated Solid Waste Management in Health Establishments, Medical Support Services and Research Centers", Ministerial Resolution No. 1295-2018-MINSA.
* Pre-installation Manuals for High Technology Equipment.
* International Standards of American Society for Testing and Materials (ASTM).
* ANSI A156 Standard (Door Accessories).
* Resolution of the Comptroller General's Office No. 320-2006-CG, Internal Control Standards dated October 30, 2006.
* Law No. 29090 Law on the Regulation of Urban Allotments and Buildings, published on September 21, 2007 and its amendments.
* Regulations of Law No. 29090 approved by Supreme Decree No. 024-2008-VIVIENDA dated September 27, 2008, as amended.
* Law No. 29476 Law Amending and Supplementing Law No. 29090, Law on the Regulation of Urban Allotments and Buildings.
* ISO 7153 Standard, International Standard governing the inspection and selection of stainless steels available for use in the manufacture of surgical, dental and specific instruments for orthopedic surgery.
* Supreme Decree No. 027-2017-SA, National Policy on Safe Hospitals from Disasters, which contains the 2017-2021 Action Plan and creates the Multisectorial Commission on Hospitals Safe from Disasters.
* Hospital Safety Index for medium and low complexity facilities PAHO/WHO.
* Technical Guide on Standardization Criteria for the Implementation of Information and Communication Technologies (ICTs) in ESSALUD Health Care Centers.
* Supreme Decree No. 003-2016-VIVIENDA, supreme decree that modifies Technical Standard E.030 "seismic resistant design" of the National Building Regulations.
* Supreme Decree No. 001-A-2004-DE/SG approving the National Plan for Disaster Prevention and Attention.
* Supreme Decree Nº 013-2006-SA which approves the Regulation on Health Establishments and Medical Support Services.
* Supreme Resolution Nº 009-2004-SA which approves the Sectoral Plan for Emergency and Disaster Prevention and Attention in the Health Sector.
* Ministerial Resolution Nº 623-2009/MINSA, which establishes the National Committee of Safe Hospitals in Disasters.
* UL 1008 *Standard for Safety of Transfer Switch Equipment*.
* USEPA *Code of Federal Regulations*
* *Scottish Health Technical Memorandum 08-04: Specialist services pneumatic tube transport systems Part B: Design considerations and good practice guide*.
* NFPA 70: Standard for electrical safety in the workplace.
* NFPA 101: Human Safety Code.
* UNE EN 6094:2007 (*Low voltage switchead and control gear*).
* UNE EN 61009:2004 (*Residual current operated breakers with integral over current protection for household and similar users*).
* UNE EN 60269 :2007 (*Low voltage fuses*).
* ANSI/IEEE C62.41 (*Guide on the Surge Environment in Low-Voltage (1000 V and less) AC Power Circuits*) *American National Standard Institute*.
* TIA/EIA-568 standard recommendations.
* IEEE Recommendations (Institute of Electrical and Electronic Engineers).
* NEMA Recommendations (*National Electrical Manufacturers Association*).
* ICEA Recommendations (*Insulated Cable Engineers Association*).
* NESC Recommendations (*National Electrical Safety Code*).

**Equipment and Supplies**

The CONCESSIONAIRE shall provide, at its own expense, cost and responsibility, the supplies, spare parts and tools necessary for the performance of the maintenance tasks, including scaffolding, cranes, rigging, machinery, etc., as well as consumable materials or supplies, pieces, parts and devices to ensure the proper performance of the maintenance of infrastructure, installations, electromechanical equipment and furniture, and shall be responsible for their transportation, use, transfer, cleaning, storage and removal, ensuring the proper cleanliness of the area. The CONCESSIONAIRE shall supply any original spare part, accessory or element necessary to restore the functionality of a piece of equipment or to complete its maintenance tasks. For this purpose, the CONCESSIONAIRE shall have a stock of high turnover parts and spare parts, in order to avoid delays in their availability and ensure the continuous operation of all the systems at its full charge, cost and responsibility.

When applicable, the CONCESSIONAIRE shall incorporate vehicles or electromechanical means for transporting or moving heavy equipment or elements and lifting elements for work at height and for hoisting heavy elements (over 40 kg) or as required by the Applicable Laws and Provisions.

The CONCESSIONAIRE shall provide control and monitoring elements to all those systems susceptible to automated management, including software for the management of electromechanical maintenance associated with the infrastructure. The CONCESSIONAIRE, through the software implemented, shall monitor the main service management indicators. These systems shall be auditable and accessible in accordance with the Applicable Laws and Provisions or as required by the GRANTOR.

The CONCESSIONAIRE shall be responsible for the provision and replacement of all the material necessary for the proper performance of the provision of this service and shall ensure the integration with the Hospital's corporate systems. Likewise, the CONCESSIONAIRE shall provide spaces with adequate conditions of maintenance, order, cleanliness, and environmental conditions of temperature, humidity and other conditions required by the manufacturers or established by good practices in the matter, for all the warehouses to be used for the storage of spare parts, accessories, consumables, supplies, materials, tools and equipment provided for the Service.

The CONCESSIONAIRE shall pay special attention to the safety, segregation and containment conditions for the storage of noxious or hazardous materials or elements, in accordance with the Applicable Laws and Provisions. The CONCESSIONAIRE shall establish rigorous controls of identification, labeling, expiration date control and useful life of all products and equipment used, with special emphasis on those that are harmful or hazardous.

In order to avoid any type of cross-contamination, it shall manage the supplies, materials, tools and equipment in the Service's own warehouses, separated according to category or type of criticality or risk, ensuring that they are kept locked, with a key in charge of the personnel responsible for the Service.

**Personnel**

The personnel that the CONCESSIONAIRE hires or subcontracts and makes available for the service must be certified as having passed psychological and, if applicable, psychiatric tests at accredited health establishments for such purpose, in order to prevent or avoid acts that violate the physical and mental integrity of patients, visitors and Hospital personnel.

The CONCESSIONAIRE shall provide and maintain the number of personnel necessary in accordance with the requirements of the Contract, as well as to cover breaks, vacations, medical breaks and unforeseen absences.

The CONCESSIONAIRE shall provide at least contracted personnel with the following profiles:

* Engineer: (civil, sanitary, electrical or mechanical) Engineer with experience in the general maintenance and operation of the Building, Facilities, electromechanical equipment and furniture associated with the infrastructure of Health Establishments, minimum 4 years. He/she will be the leader of the team of specialists.
* Electrical technician: degree in technical education, minimum of 3 years and with experience in general maintenance and operation of the Building, Facilities, electromechanical equipment and furniture associated with the infrastructure of Health Establishments, minimum 4 years.
* Electromechanical technician: degree in technical education, minimum of 3 years and with experience in general maintenance and operation of the Building, Facilities, electromechanical equipment and furniture associated with the infrastructure of Health Establishments, minimum 4 years.

The personnel shall have professional qualifications, while technical personnel such as electricians, mechanics or sanitary technicians, among others, shall be certified in technical education.

The personnel profiles shall be submitted to the Supervisor of Contract and Operations, for compliance with the corresponding technical standard, ten (10) days prior to the commencement of the Service. Any subsequent change shall be communicated and the corresponding profile shall be submitted to the Supervisor of Contract and Operations for his favorable opinion, at the latest one (1) day after the change occurs.

**Technical - Functional Specifications of the Service**

The POA of the Maintenance Service will determine the corresponding specifications and procedures within the framework of the Applicable Laws and Provisions and their updates or modifications during the execution of the Contract.

This service includes, but is not limited to, the maintenance and operation of the following components and systems:

* Maintenance of Building and Structures in accordance with Applicable Laws and Provisions.
* Maintenance and Operation of Clinical Vacuum System, Medicinal Gases (oxygen, nitrous oxide), Cryogenic Facilities and Industrial and Medical Compressed Air, in accordance with Applicable Laws and Provisions.
* Maintenance and Operation of the Air Conditioning System, Climate Control and Pressurization System of areas and environments and Thermal Power Plant, in accordance with the Applicable Laws and Provisions.
* Maintenance and Operation of the Distribution Networks, Installations and Health System Equipment, in accordance with the Applicable Laws and Provisions, composed of the following subsystems:
  + Drinking water subsystem, including connections, adductions, accumulation tanks, distribution networks, pump systems and all their functional components defined in the project.
  + Special water subsystem, including connections, tanks, distribution and disposal networks, systems and all their functional components defined in the project. Includes water quality analysis and maintenance protocols in accordance with Applicable Laws and Provisions, for the proper provision of dialysis services.
  + Drainage, sewage and rainwater evacuation subsystems and their devices and functional components defined in the project.
  + Subsystem of water tanks for fire network and its functional devices defined in the project.
  + Irrigation water distribution network system, including tanks and other functional devices defined in the project.
  + Other water systems considered in the Hospital in accordance with Applicable Laws and Provisions.
* Maintenance and operation of the Electric Systems, in accordance with the Applicable Laws and Provisions, composed of the following subsystems:
  + Distribution networks and junctions, including all components and functional devices defined in the project.
  + Emergency Power Systems for Generator Sets and their power supply systems, including high, medium and low voltage electrical systems defined in the project.
  + UPS systems and functional devices defined in the project.
  + Lighting systems and functional devices defined in the project.
  + Communications systems and technological infrastructure considered in the project.
* Maintenance and operation of the weak current system in accordance with the Applicable Laws and Provisions.
* Maintenance and operation of the elevator and lift system in accordance with the Applicable Laws and Provisions.
* Maintenance and operation of the Maintenance and Energy Saving System (SMAE).
* Maintenance and operation of the fire safety system in accordance with Applicable Laws and Provisions.
* Maintenance and operation of the pneumatic delivery system in accordance with the Applicable Laws and Provisions.
* Maintenance and administration of the Furniture Associated to the Infrastructure in accordance with the requirements and conditions of the Contract and Applicable Laws and Provisions.

For each component and system mentioned above, the CONCESSIONAIRE shall have an updated list of physical and technological means in accordance with the corresponding POA, the requirements of the Contract and the Applicable Laws and Provisions.

**Management of Hospital Assets (Annual Inventory)**

The CONCESSIONAIRE shall generate and keep the Annual Inventory updated), in accordance with the provisions of Directive No. 001-2015/SBN, called "Procedure for the Management of State Movable Property" approved by Resolution No. 046-2015/SBN or rule that modifies or replaces it and the Applicable Laws and Provisions. For the above, it shall coordinate the access of the information with the GRANTOR through the Supervisor of Contract and Operations.

The assets acquired by the CONCESSIONAIRE shall have means or systems that allow the registration of their status and disposition or location within the Hospital, allowing the issuance of updated and detailed reports at any time during the term of the Contract and access to its information at the request of the Supervisor of Contract and Operations. In the case of mobile equipment, a security system or device must be provided to warn of its unauthorized departure from the Hospital's facilities.

The Supervisor of Contract and Operations may at any time generate a SIRI through SIGI-NS, which must be updated with respect to the Registration of the Procedure for the Management of State Movable Property (PGBME).

**Maintenance of Buildings and Structures**

The CONCESSIONAIRE shall be responsible for maintaining the structures and their components, including anti-seismic isolation devices, façade systems, protection systems, lattices, curtains and other functional devices of the building, the interior materiality of the Hospital premises in accordance with Applicable Laws and Provisions, special indications of the Hospital and the requirements established in this Contract.

The CONCESSIONAIRE shall indicate the Preventive maintenance plans in the corresponding section of the POA of the Service of Maintenance and Operation.

This service shall include the preventive and corrective maintenance of the assets and elements described below, although the detail of such description shall not justify lesser services than those required.

The CONCESSIONAIRE shall perform the care of the concession area: maintenance and cleaning of drains, sewers and grease traps, plaster decanter systems and other functional devices defined in the Technical Files. Likewise, maintenance and cleaning of street furniture (includes benches, planters, flower pots, garden planters, waste garbage cans, etc.), all fixed equipment and signage as defined in the Technical Files.

In addition, the CONCESSIONAIRE shall be responsible for the assembly, disassembly, decoration and erection of the structures and lighting of the decorations with the exterior design to be defined, during the Christmas holidays, national holidays, anniversary of the Hospital and Social Security Day. For all other holiday activities or health campaigns required by the GRANTOR, the CONCESSIONAIRE shall provide the necessary facilities and support for their realization.

**Structure, Structural Elements and Non-Structural Attached Elements**

The CONCESSIONAIRE shall carry out inspections on the behavior of the structure and those non-structural elements attached to it, once every six months and every time an earthquake of magnitude equal to or greater than 5 on the Mercalli scale occurs and in accordance with the intensity defined by the Geophysical Institute of Peru and the Applicable Laws and Provisions. In the event that faults or damages are detected, the CONCESSIONAIRE shall remedy them within the terms and deadlines established by the Supervisor of Contract and Operations.

In the event of severe damage to the structures, the CONCESSIONAIRE shall take the necessary steps to enforce the guarantees and insurance commitments in accordance with the provisions of the Contract in order to carry out the corresponding repairs in coordination with the Hospital's healthcare tasks.

Without prejudice to the application of the Applicable Laws and Provisions, the following shall be considered structural elements:

* Foundations and overlays and ground anchorage systems.
* Concrete pillars, columns, beams, girders, joists, slabs, and chains.
* Floor slabs and inclined slabs.
* Steel structures
* Timber structures
* Retaining walls
* Structural walls
* Seismic isolation system devices.
* Partitions and supports
* Composite structural elements

Fixing elements and supports for substructures, devices, equipment and artifacts defined in the Technical File.

During the first year of operation of the Hospital, the CONCESSIONAIRE must carry out an inspection every six months, as well as the maintenance activities, in addition to the corresponding corrective actions, if applicable, as established in the Technical File, considering as a minimum the following activities that must be included in the POA of the service, and recorded in the SIGI-NS system:

**Table 16: Structural Elements**

| **Structural element** | **Activity** |
| --- | --- |
| All Structures | Revision, through a *Check list*. |
| All reinforced concrete structures: Keep the coating intact so as not to put the steel components at risk. | Verification and repair or replacement, if required. |
| All reinforced concrete structures: Retain their structural construction properties, as well as all protective elements defined in the Technical File, including structural headwalls (anticorrosive and fireproofing, among others). | Verification and repair or replacement, if required. |
| Preservation of intumescent paint on all structural metal elements defined in the Technical File. | Verification and repair or replacement, if required. |
| Concrete beams and pillars: Preservation of initial properties, without deflections and without cracks. | Maintenance |
| Deck slabs and lightened slabs on flat roofs: Keep in good condition their waterproofing and thermal insulation characteristics, according to the initial design conditions. | Maintenance |
| Coverings on lightened slabs on flat roofs: Maintain in good condition their waterproofing and thermal insulation characteristics, according to the initial design conditions. | Maintenance |
| Water tanks: ensuring watertightness | Carry out repairs as necessary |
| Seismic isolators | * Cleaning of metal parts so that they remain free of rust. * Application of anti-corrosion paint defined by the manufacturer. * Verification of bolts and revision of geometry according to the technical specifications defined by the manufacturer. * Bolt torque check. * Review and repair if applicable of protection elements. * Any other action specified by the manufacturer. * Review of geometry and verification of their behavior, according to the technical specifications defined by the manufacturer. * Any other action recommended by the manufacturer in order to guarantee their functionality. |

From the second year of operation, the CONCESSIONAIRE shall define in its annual maintenance program to be included in the POA, the inspection and maintenance periods for each of the structural elements defined in the Technical Files, which shall have the compliance of the Supervisor of Contract and Operations.

**Finishings**

The CONCESSIONAIRE shall perform preventive maintenance on a quarterly basis, unless another frequency is indicated for some other element in particular, and the corresponding corrective maintenance activities, if applicable, as established in the Technical Files and as defined in the corresponding POA of the service.

In particular, the following elements:

* Floors and constituent elements dust caps, flashings and expansion joints. The CONCESSIONAIRE shall inspect the different types of flooring and all its constituent elements indicated in the Technical Files: appearance of depressions, cracks, fissures, dimples, peeling, wear, humidity, stains, scratches, dirt, and any other defect or alteration of its original physical conditions.

In particular, if defects are evidenced that represent a risk of detachment or compromise the continuity of the surface and the safety of the people passing through it, the CONCESSIONAIRE shall restore it to its original condition, within the times determined by the Supervisor of Contract and Operations and in coordination with the Hospital's Management.

In the event of damage to parts of the surface of floors, skirting boards and baseboards in various sectors, which is massive, the CONCESSIONAIRE shall replace the entire area, with no changes in material or shades being accepted, with the prior opinion of the Supervisor of Contract and Operations.

The performance of the work shall follow the following guidelines:

* + Its planning shall be carried out with the prior opinion of the Supervisor of Contract and Operations.
  + It should be carried out in the shortest possible time.
  + Special floors, with semiconductor characteristics, must be subjected to conductive tests according to electrical standards, with the results recorded in the SIGI-NS. Based on these results, the decision to replace them will be made.
* Stairs and constituent elements (handrails and others). The CONCESSIONAIRE shall inspect the stairs and all their complementary elements and any others indicated in the Technical Files. In the event that defects are found that may pose a risk of detachment or compromise the safety of persons, the CONCESSIONAIRE shall immediately repair or replace them, within the times established by the Supervisor of Contract and Operations.

In particular, the CONCESSIONAIRE shall permanently maintain the functionality and availability of the vertical safety circulation cores and all the components of its systems and, in particular, their pressurization conditions and other conditions required by the Applicable Safety Laws and Provisions in force.

* Interior wall cladding, wall guards and wall protection elements. The CONCESSIONAIRE shall replace any of the deteriorated interior elements with new ones of similar technical quality to that defined in the Technical Files. No cloth or surfaces with different characteristics or different colorations shall be admitted, so that complete surfaces shall be considered and in no case patches or solutions that generate differences shall be accepted. Such replacement shall have the GRANTOR's non-objection with the favorable opinion of the Supervisor of Contract and Operations.

In the case of replacement of coatings and in particular those that serve as protection against radiation in walls, ceilings, roofs and floors, as well as doors, windows, glazed sight glasses and other elements, they must be made with materials of equal quality to the one established in the Technical Files and in accordance with the Applicable Laws and Provisions. After the execution of maintenance activities on any element, which entails modifying the initial thickness of the radiological protection coatings of the same, the shielding of the environments must be verified in compliance with the national standards in force regulated by the Peruvian Institute of Nuclear Energy and others that may apply.

The paint on the walls will be replaced annually or at the frequency determined by the Supervisor of Contract and Operations after evaluation of the deterioration. Preventive maintenance of joints and construction joints between the structure and the partitions should also include: flashings, expansion joint seals, smoke and fire seals, among others as appropriate.

* Ceilings, false ceilings, modular ceilings or other ceiling systems. As part of the preventive maintenance, the CONCESSIONAIRE shall check the condition of the elements: false ceilings and concrete slabs, cornices, metal ceilings, modular slabs, wood or any other material indicated in the Technical Files, as well as their elements or support systems.

Repair or replacement times shall be as follows:

**Table 17: Repair or replacement Times**

|  |  |
| --- | --- |
| **Zone Criticality** | **Correction time from the request of the requirement in SIGI-NS** |
| Critical and semi-critical zones | No more than 6 hours |
| Other areas (non-critical) | Maximum 48 hours |
| If, throughout the Hospital, hard or continuous ceilings are found to be damaged or stained by fluid runoff of any kind, the repair shall be complete. | No more than 6 hours |

* Doors, windows, skylights, glazing, louvers and shutters and other ventilation or natural lighting elements. The CONCESSIONAIRE shall perform monthly maintenance of these elements in order to ensure the good condition and operation of the doors, including the closing and opening mechanisms, interlocks, coating and lubrication, among others.
* Waterproofing. The CONCESSIONAIRE shall register in the SIGI-NS those cases where any sign of humidity in walls or floors is evidenced, or the presence of "leaks" in the roofs, coverings or roofing elements, having to perform the inspection and analysis of the causes, deliver the respective technical report within the term defined by the Supervisor of Contract and Operations, and attaching a schedule of the corrective actions to be performed to provide a complete solution to the damages caused.

The revision of the roofs and the pluvial network must consider the following activities and their frequency, without prejudice that a higher frequency is established in the POA:

**Table 18: Frequency of activities**

| **Activity** | **Minimum frequency** | **Description** |
| --- | --- | --- |
| Inspect | 6 months | Check for leaks and if any are detected, they should be repaired immediately (especially during the rainy season). |
| Check for deformation or water leaks in canoes and downspouts. If any are detected, they should be repaired immediately (especially during the rainy season). |
| Checking of stagnation in the gutters, canoes, due to accumulation of leaves or others, if present, it must be cleaned immediately.  Review and cleaning of drains |
| 1 year | General review of the state of conservation of the entire roof, roof coverings and elements of the roofing and rainwater network, check the roofing, guttering, rain gutters, rainwater downspouts and manholes, an inspection should be made before the rainy season begins to carry out the interventions required to prepare the structure and another at the end, in order to observe the performance of the structure. |
| Renew | 5 years | Replacement of deteriorated canoes, deformed or broken downspouts. |
| Repainting of the roof covering. |
| Renew | 5 years | Replacement of deteriorated veneer bricks, deformed overhead gutter, deformed, broken or cracked rainwater uprights. If there are cracked overhead concrete gutters, seal them and clear the water outlet through the gargoyle from obstruction. |

Notwithstanding the foregoing, the Supervisor of Contract and Operations may recommend immediate repairs for good cause.

* Signage and interior signage. The CONCESSIONAIRE shall maintain in perfect condition all the signage elements, signs, signaling devices, demarcations and other safety, guidance and information signaling elements defined in the Non-objected Technical File, which shall be detailed in the corresponding POA of the service.

When any element, sign or supporting or fixing element shows deterioration or alterations, it must be restored to its original condition, with the same quality and technical characteristics as those defined in the Technical File, which shall be included in the corresponding POA of the service.

* Other protections considered in the non-objected Technical Files.

**Exterior works and elements**

The CONCESSIONAIRE shall include in the POA of the service a program of inspections of the following elements, in order to detect failures in time and correct them before they cause loss of functionality:

* Roofs, gutters and downspouts. Maintenance shall consider, as a reference, at least the following, without prejudice to the determination of a different minimum frequency in the POA of the service:

**Table 19: External Works and Elements**

| **Activity** | **Minimum frequency** |
| --- | --- |
| Cleaning of covers and all its components | Semiannual |
| Revision and repair of the cover and its paint, in case of rust or loss of cover. The CONCESSIONAIRE shall repair the damaged areas. | Annual |
| Revision and sealing of joints (embedded or recessed, sealed, thermo-fused, and others considered by the project) and with elastic seals. | Annual |
| Expansion joints, construction joints and joints in floors, walls and ceilings, finishing devices and elements. | Annual |
| Review and repair of high-efficiency insulation systems incorporated in metal roofs, as appropriate. | Annual |
| Review and repair of waterproofing seals on reinforced concrete or other roofing material in accordance with the definitions in the Technical File. | Annual |
| Cleaning and maintenance | Semiannual |
| Revision and replacement of anti-bird nets and spikes, anti-insect screens installed on mechanical floors, cornices, terraces, windows or where defined in accordance with the Technical File. | Quarterly |
| Cleaning and maintenance of ventilation and extraction ducts and protection elements. | Quarterly |
| Verification and removal of rust from metal structures, with the corresponding application of anti-rust paint and finishing paint if applicable. | Annual |
| Apply anti-rust paint to the entire metal structure. | At least every 4 years or less frequently as specified in the Technical File. |
| Revision and repair of other elements of the roof included in the Technical File. | Defined by the Supervisor of Contract and Operations. |

Likewise, the CONCESSIONAIRE shall carry out:

* Application of paint, in case of pre-painted decks, follow the manufacturer's instructions for each element.
* Repair of waterproofing seals on reinforced concrete decks, if applicable.
* Repair of the roof structure and its respective fastenings, welds, anchors, tensors, insulation, among others.
* Exterior pavements. The CONCESSIONAIRE shall carry out a fortnightly inspection of the exterior floor coverings, such as tiles, ceramics, pavers, cobblestones, paving stones and others indicated in the Technical File, painted road and safety signage, if necessary. If defects are evidenced that represent a risk of detachment or compromise the continuity of the surface and the safety of the people passing by, the CONCESSIONAIRE shall repair or replace them, as appropriate, within the times defined by the Supervisor of Contract and Operations. In the event of damage to parts of the surface in a larger area, the CONCESSIONAIRE shall replace the entire area, with no changes in material or shades being accepted, subject to the opinion of the Supervisor of Contract and Operations.
* Street furniture, benches, seats and other outdoor elements. The CONCESSIONAIRE shall perform at least a semi-annual inspection of the outdoor furniture (benches, trash cans, playground equipment, bicycle racks and others) contemplated in the Technical File.
* Eaves (exterior skies) canopies and others. The CONCESSIONAIRE shall perform the semi-annual review and repair, if applicable, of the different types of ceilings, cornices and all the constituent elements of exterior ceilings, defined in the Technical File.
* Enclosures and gates. The CONCESSIONAIRE shall carry out the verification of the condition and repair semi-annually, if applicable, the balconies, doors, gates, locks and their complementary elements of metallic objects of the buildings, electric motors, supports, protections and others included in the Technical File.
* Cladding of walls, facades and thermal envelope. The frequency of the activities will be at least the following, the POA being able to establish a higher frequency:

**Table 20: Frequency of Activities**

| **Activity** | **Minimum frequency** |
| --- | --- |
| Inspect the condition of the wall coverings, whether stone, ceramic, metallic, curtain or others indicated in the Technical File. | Semiannually |
| Replace or repair the paint on the walls. | At the request of the Supervisor of Contract and Operations |
| Inspect and repair, if necessary, the different types of wall and facades (granite, fiber cement, porcelain tile, walls, curtains, among others), according to the Technical File, maintaining functionality, aesthetics and harmony between them. | Semiannually |
| Check and repair, if necessary, doors, windows, building metalwork, replace glass and sealing systems, if applicable. | Semiannually |
| Check that all the elements that make up the building envelopes and their components are properly secured and are not in danger of falling or detachment. | Semiannually |
| Cleaning of windows and glass | Quarterly |
| Cleaning of walls, facades and unglazed thermal envelope. | Semiannually |

The maximum correction times for the following activities will be as follows:

**Table 21: Maximum Correction Times**

|  |  |
| --- | --- |
| **Activity** | **Maximum correction time from the request of the requirement to SIGI-NS** |
| Repair of damaged coatings. No changes of material or shades, or patches that generate differences will be allowed. | 30 days |
| Replacement of glass in general, where appropriate, including thermo-panes and the like. | 6 hours |
| Removal of broken or "cracked" elements. | 1 hour |
| Replacement of glass | 30 days |

The CONCESSIONAIRE shall maintain the conditions of use, safety and operability of the system for the function of cleaning and maintenance of the external parameters. Likewise, inform the Supervisor of Contract and Operations 24 hours in advance of the execution of the aforementioned tasks.

* Sidewalks, roadways, vehicle parking areas and emergency vehicle operation areas and related signage. The CONCESSIONAIRE shall carry out a six-monthly inspection and, if necessary, repair or replace the missing elements, ensuring the continuity of the surfaces of the pedestrian and vehicular circulation, in order to maintain the functionality, aesthetics and harmony of the elements. Special attention should be paid to the painting of the horizontal signage on the roadway (parking lot division, numbering, indicative signs and safety zones).

**Green Areas**

The CONCESSIONAIRE shall perform the maintenance activities of the irrigation system and the plant species. The CONCESSIONAIRE shall also perform the operation of this service, which includes irrigation, automatic or manual, and the cleaning of the green areas, interior courtyards, hard areas and ornamental elements that make up the project.

The CONCESSIONAIRE shall comply with the following:

* The conservation, development and promotion of the landscaped area both inside and outside the institution, grounds and external elements of the Hospital, performing scheduled, preventive and corrective maintenance to keep said areas in perfect condition.
* The CONCESSIONAIRE will always seek the use of native species, low water consumption, which should be recycled as far as possible, and the use of chemical products that respect the environment.
* Carry out the mowing and replacement of the lawn, maintenance of plant species, removal of grass and weeds, planting and pruning of trees and shrubs, replacement or replenishment of seasonal or damaged or missing plant species, inter-rowing of garden areas, raking, phytosanitary treatments, maintenance of the irrigation network and the final removal of waste and debris from the service performed, safety signage and demarcations and in general all actions shall result in maintaining the initial design as set forth in the Technical File, unless recommended by the Supervisor of Contract and Operations.
* Report in the SIGI-NS, all inputs or chemicals used in the provision of the service, by means of a technical sheet containing, at least, the following: quantities, dilutions, safety measures and storage, as well as the flammable and toxic condition.
* Maintain the external transit way in safe, clean and properly signposted conditions to facilitate the access of users to the different areas of the Hospital.
* Maintain within the Concession Area the normal functioning and appearance of front yards, gardens, pedestrian walkways, exterior and interior patios, terraces, parks or squares, green areas and others.
* Perform maintenance and operation of the irrigation system in accordance with the Technical File.
* Establish a plan for fumigation, fertilization and of the corresponding safety measures, in compliance with Applicable Laws and Provisions.
* Provide, at its cost and risk, all inputs, such as: disinfectants, insecticides, fertilizers, among others; the necessary plant species for replacement, compost, decorative stones and any other element that will ensure the maintenance of the conditions defined in the Technical File.

**Maintenance and Operation of the Clinical Vacuum System, Medical Gases (oxygen, nitrous oxide), Cryogenic Installations and Industrial and Medical Compressed Air, in accordance with the Applicable Laws and Provisions.**

The CONCESSIONAIRE shall perform the maintenance and operation of the vacuum and medical air system and its distribution to the consumption points.

The CONCESSIONAIRE shall manage, operate and control in a timely manner the distribution, control, measurement and replenishment of the different types of clinical gases defined in the Technical File (those in liquid or gaseous state), to the different points of consumption, and shall also ensure the service to the Care areas that require the delivery and withdrawal of bottles or cylinders, which shall be defined by the Supervisor of Contract and Operations, 24 hours a day, every day of the year. In this regard, the CONCESSIONAIRE shall carry out a daily control of the gas cylinders by means of measuring equipment, which shall be identified in the POA of the service and reported to the SIGI-NS.

The system must be able to be operated from a centralized control system by the corresponding alerts and alarms in order to anticipate any difficulty with the provision of the service.

The packaged clinical gases (gaseous oxygen, nitrous oxide, etc.) and liquid oxygen, as defined in the Technical File, shall be supplied by a supplier company, contracted for this purpose by the GRANTOR.

The CONCESSIONAIRE shall coordinate with the Supervisor of the Contract and of the Operations the time and day on which the system shall be checked and tested and leakage control shall be carried out, in order to prevent them from affecting the normal operation of the Hospital. Likewise, the CONCESSIONAIRE shall provide alternative means for patients connected to clinical gases when appropriate.

The CONCESSIONAIRE shall ensure that all equipment, networks and components are permanently in good condition with their respective color codes and flow direction.

The CONCESSIONAIRE shall coordinate with the Service of Sanitation and Cleaning, the cleaning activities to be carried out in the areas where there is industrial clinical gas and vacuum equipment, as well as the areas where gas cylinders are stored. Said cleaning shall be carried out by trained personnel according to the risk involved in these facilities.

The CONCESSIONAIRE shall maintain, at its own cost and risk, a stock of spare parts and pieces of higher turnover, as well as secondary equipment and outlets, in order to guarantee the continuous operation of the system.

The CONCESSIONAIRE shall comply with the following minimum requirements:

**Medical gas plant**

The CONCESSIONAIRE shall perform the maintenance of the equipment and components, such as: vacuum pumps, *manifolds*, gas backup system, regulators, electrical and control panels, alarms, signage, among others, in accordance with the specifications and recommendations established for this purpose by each manufacturer and the Applicable Laws and Provisions.

As a reference, maintenance actions will be carried out with a frequency of:

**Table 22: Frequency of maintenance actions**

| **Equipment or component** | **Activities** | **Frequency** |
| --- | --- | --- |
| Central Gas Plant | Review of pressure values, possible leaks, identification plates or signage, general condition of the plant and its correct operation, and correct the defects identified. | Monthly |
| Leak Tests | Carry out tightness tests and correct the identified defects. | Semiannual |
| Pressure Regulators | Replacement of repair kit spare parts (stem, seat, spring, o-ring). | Annual |
| Check Valve | Replace | Annual |
| Signaling and safety valve | Replacement | Every 2 years |
| Gas Plant Fence | Painting | Every 2 years |

* Medical air and vacuum generation equipment must be maintained at least once a month or according to the manufacturer's maintenance manual and warranty and insurance conditions, and shall include: inspection and replacement of gaskets, oil levels, filters, among other items specified in the manufacturer's maintenance manual. In addition, maintenance and cleaning of the electrical panel.
* The CONCESSIONAIRE shall verify at least monthly the quality of the air produced by measuring H2O, CO2, CO, SO2, SO2, NOx (nitrogen monoxide and dioxide) and oil, and make the necessary changes of spare parts or adjustments.

**Medical gas distribution networks**

The CONCESSIONAIRE shall perform the maintenance of the networks and components: valves, installation conduits, signage, among others, according to the requirements indicated in the following table.

**Table 23: Requirements**

|  |  |  |
| --- | --- | --- |
| **Equipment or component** | **Activities** | **Minimum frequency** |
| The entire network to monitor the condition of pressure gauges, shut-off valves, signage, nameplates or signage labeling of elements and supports. | Review and rectification of the identified defects. | Semiannual |
| Tightness tests | Perform tightness tests and remedy identified defects | Yearly |
| Gas networks and signage | Painting and replacement of signage | Every 3 years |

**Healthcare facilities with medical gases**

The CONCESSIONAIRE shall perform the maintenance of the networks and components: gas and suction intakes, regulators, installation ducts, signage, among others, according to the following requirements, without prejudice to the fulfillment of greater requirements established in the manufacturer's maintenance manual or due to duly qualified conditions of use.

**Table 24: Maintenance of Networks and Components**

| **Equipment or component** | **Activities** | **Minimum frequency** |
| --- | --- | --- |
| All gas and suction intakes, including shut-off valves, signage, nameplates or signage labeling of elements and supports. | Review and rectification of the identified defects. | Semiannual |
| Leak Tests | Perform leak testing and correct identified defects. | Annual |

The CONCESSIONAIRE shall have the following secondary equipment in back up: flow meters, vacuum regulators, suction bottles, humidifiers, among others, in case of failure of the equipment in use.

**Alarm Systems and Valve Boxes**

The CONCESSIONAIRE shall perform the maintenance of the alarm systems and valve boxes, as indicated by each manufacturer and according to the conditions of use, which shall be qualified by the Supervisor of Contract and Operations. Additionally, it shall perform the following actions:

**Table 25: Frequency of Actions**

|  |  |  |
| --- | --- | --- |
| **Equipment or component** | **Activities** | **Minimum frequency** |
| Alarms and valve boxes | Inspection that will include the revision of all the alarms and valve boxes, operation and signaling, having to correct the detected defects. | Semiannual |
| Pressure switches and gauges | To carry out the operation tests consisting in the resetting (setup) of the pressure switches, and checking the calibration of the pressure gauges, having to correct the detected defects. | Semiannual |

For the operation of the system, the CONCESSIONAIRE shall take into consideration the following:

* Daily check, record of filling, cleaning and removal of ice.
* Review of valves and performance of tests agreed with the supplier.
* Review of metal fences and enclosure door, locking systems, lighting, alarms and pressure gauges.
* Review of tank anchor bolts and components.
* The CONCESSIONAIRE shall remedy the occurrences or failures or requests made through SIGI-NS according to the service level indicators.

**Table 26: Maximum Correction Time**

| **Activity** | **Maximum time for correction counted from the request of the requirement in SIGI-NS** |
| --- | --- |
| Transfer and delivery of medical gas cylinders to the user, requested in advance and scheduled. | 2 hours |
| Urgent transfers of medical gases | 15 minutes |
| Non-urgent repairs of the network or its elements and secondary equipment. | 48 hours |
| Failures in the network of any of its elements or secondary equipment, on an urgent basis. | 15 minutes |

**Maintenance and Operation of the Air Conditioning System, Climate control and Pressurization System of areas and environments and Thermal Power Plant, in accordance with the Applicable Laws and Provisions.**

The system shall be operational 24 hours a day, every day of the year. The CONCESSIONAIRE must ensure its operation in person or through a centralized automation and control system, according to the provisions of the Technical Files, having to develop operation protocols for the latter, which must have the GRANTOR's non-objection prior opinion of the Supervisor of Contract and Operations, before its implementation and be included in the POA of the service.

The following operating conditions shall be considered for the operation of the system:

* Normal daytime
* Normal nighttime
* Fire in the Thermal Power Plant
* Fire in other Hospital buildings.
* After seismic movement or earthquakes.
* Partial power outage
* Total power outage
* Operation with emergency generator.
* Others that could be defined by the GRANTOR.

The CONCESSIONAIRE shall submit annual reports to the Supervisor of Contract and Operations including the parameters and statistical record of the effective operation of the equipment throughout the year, in order to compare them with the requirements defined in the Technical File. The Supervisor of Contract and Operations will request corrective measures and replacement of the installations or equipment, depending on the deviations recorded.

**Table 27: Frequency of Activities**

| **Activity** | **Minimum frequency** |
| --- | --- |
| Measure and report in the SIGI-NS all fluid and energy consumption, for each of the hospital's environments. | Daily |
| Perform the operation of the anti-Legionella Pneumophila (\*) system, according to the established temperature parameters, in the cooling towers or where there is a risk of proliferation of this bacterium that may contaminate the air conditioning systems. | Daily |
| Perform maintenance of all shut-off and regulation devices, ensuring that they are available and operational. | Quarterly |

(\*) Anti Legionella Pneumophila systems include treatment based on biocides, descaling systems (chemical cleaner that prevents salt deposits on boiler walls, etc.), as well as technologies to control water temperature to prevent the formation or proliferation of bacteria.

Maintenance should include the following activities, without prejudice to others indicated in the manufacturer's maintenance and operation manual, which should be included in the service's POA.

**Table 28: Maintenance activities**

|  |  |
| --- | --- |
| **Maintenance of Air Conditioning System Installations** | **Activities** |
| Cleaning and maintenance of ventilation ducts |
| Correction of air leaks from ductwork |
| Cleaning of diffusers and duct grilles |
| Change of filters in air handlers, according to use. |
| Review and correction of refrigeration circuits and piping |
| Refrigerant measurement and recharge |
| Restoration of thermal insulation on system components |
| Repair or replacement of solar panels, if any |
| Maintenance of cooling and water heating tanks and systems |
| Other |

The CONCESSIONAIRE shall comply with the following minimum requirements:

**Climate Control Systems**

The maintenance of the air conditioning system equipment should consider at least the following table.

**Table 29: Maintenance Activities**

| **Maintenance of Climate Control Systems Equipment** | **Activities** |
| --- | --- |
| Technical cleaning routines |
| Lubrication |
| Inspections |
| Filter changes |
| Air quality measurements |
| Hose and belt testing and overhauls |
| Pressure tests and disassembly |
| Revision of elements and accessories: control instruments, pressure switches, thermostats, among others, as defined in the POA. |
| Others in frequency indicated by the manufacturer and according to conditions of use. |

* It shall replace the absolute filters of each air equipment defined in the Technical File, and shall additionally perform the D.O.P. (DiOctyl-Phthalate) test or other test with prior opinion of the Supervisor of Contract and Operations, which certifies the efficiency of each absolute filter replaced and its respective installation. Likewise, it shall perform air quality measurements (particulate level and calculation of air renewals), in the environments where absolute filters are installed, each time it performs a change of the same.
* Likewise, the design parameters must be maintained for those environments that are certified by the ISO standard, as well as the cleaning of the electrical duct corresponding to the air conditioning, climate control and pressurization systems of environments.
* The CONCESSIONAIRE shall perform humidity controls, pressure measurements and particle control measurements for the areas of Surgical Center, ICU, parenteral nutrition and clean rooms as determined by the GRANTOR.
* At the request of the Supervisor of Contract and Operations, the CONCESSIONAIRE shall perform additional air quality measurements, for sanitary reasons that evidence airborne contamination. In case of contamination attributable to air quality, the CONCESSIONAIRE shall carry out the corresponding corrective actions, within the term defined by the Supervisor of Contract and Operations.
* Likewise, the CONCESSIONAIRE must carry out the activities indicated in the following table.

**Table 30: Frequency of Activities**

| **Activity** | **Minimum frequency** |
| --- | --- |
| Maintenance of equipment operating 24 hours a day continuously. | Monthly |
| Tightness tests on the filter boxes of the air handling equipment, on the energy recovery equipment and on the injection and extraction ducts. Depending on the results of these tests, the Supervisor of Contract and Operations will request the CONCESSIONAIRE to replace, substitute or repair the systems. | Annual |
| Replace the components of the climate control equipment control panels. | According to manufacturer's manual or conditions of use |
| Inspect the condition of the bearings of the climate control equipment and the condition of the networks at the points that cross the expansion joint, between the building linked to the ground and the seismically isolated building, carrying out the corresponding corrective actions. | Semiannual |
| Inspect and upon request of the Supervisor of Contract and Operations, the condition of the cable tensioners inserted into the ducts, all in coordination with the Service of Maintenance and Operation of the fire protection system. | Semiannual |
| Perform maintenance of all temperature and fluid flow control systems and actuators. | Quarterly or the frequency determined by the Supervisor of Contract and Operations for particular cases. |

* Likewise, the maximum correction times for any of the occurrences indicated below shall be according to the following table:

**Table 31: Maximum Correction time**

|  |  |
| --- | --- |
| **Activity** | **Maximum correction time from the request of the requirement to SIGI-NS** |
| * Leakage of water from air or condensed steam inside the enclosures. * Activation and deactivation of one or more air conditioning equipment, outside the system operating program for rooms, such as:   + Isolation rooms   + Halls,   + Central mixing plant, among other enclosures. * Poor temperature performance in any enclosure outside the ranges established in the Technical File. | 30 minutes or as determined by the POA for particular cases |

**Thermal Power Plant (including boilers)**

The boilers for hot water generation, steam generation and their corresponding accessories (burners, fuel pumps, valves, thermostats, thermal insulation, chimneys, among others) shall operate according to the conditions established in the Technical Files and the Applicable Laws and Provisions.

The CONCESSIONAIRE shall carry out gas and particulate material measurements according to the Applicable Laws and Provisions.

Likewise, the CONCESSIONAIRE shall perform the following activities:

**Table 32: Frequency of Activities**

| **Activity** | **Minimum frequency** |
| --- | --- |
| Measure and report in the SIGI-NS all fluid and energy consumption for each of the Hospital's rooms. | Daily |
| It shall operate the water softening system of the Thermal Power Plant, recharging with salts when necessary. | Daily |
| Inspect that the thermal insulation conditions of the networks, valves and tanks remain in accordance with the requirements, carrying out the corresponding corrective or replacement actions. | Semiannual |
| Report in the SIGI-NS the levels of fuels consumed and the level of the respective tank. | Daily |
| Perform visual and structural inspections of the facilities where the Thermal Power Plant is located, proceeding to repair any of its elements if necessary, all of which must be recorded in the SIGI-NS. All this in order to maintain the habitability and functionality as indicated in the Technical File. Likewise, carry out the inspection every time a seismic event of magnitude equal to or greater than 5 degrees on the Mercalli scale occurs. | Quarterly |
| Perform maintenance of the conduit and piping system of the Thermal Power Plant, verifying that there are no leaks or rust. | Quarterly |
| Perform maintenance of all shut-off and regulation devices, ensuring that they are available and operative. | Quarterly |

It shall guarantee the full operability of the Thermal Power Plant.

The maintenance of the Thermal Power Plant and its generating equipment, hot water heat exchangers and storage tanks for heating and sanitary hot water shall include, at least, the dismantling of the boilers, revision of the mantle and tightness and pressure tests, and others required by Applicable Laws and Provisions. Notwithstanding the foregoing and with a minimum monthly frequency, the CONCESSIONAIRE shall carry out inspections, technical cleaning, lubrication, insulation repair, leak checks, gasket changes, among other activities. Said maintenance shall have a minimum annual frequency, notwithstanding the maintenance work to be carried out in accordance with the manufacturer's maintenance manuals and the frequencies indicated therein.

The CONCESSIONAIRE shall coordinate with the Service of Sanitation and Cleaning, a cleaning and sanitation program for the areas in which there is industrial equipment, such as boilers, hot water plants, among others.

All equipment and accessories must always have identification signs in good condition.

The CONCESSIONAIRE must keep a daily record of water quality parameters, such as hardness, pH, among others. The CONCESSIONAIRE shall also carry out activities such as purging the bottom of the boiler, measuring STD, sulfites, sulfates and other quality measurements to ensure the correct operation of the system.

**Maintenance and Operation of the Distribution Networks, Installations and Equipment of the Sanitary System, in accordance with the Applicable Laws and Provisions.**

This service includes the maintenance and operation of the following subsystems:

* Drinking water supply subsystem, including connections, adductions, accumulation tanks, distribution networks, pump systems and all their functional components as defined in the Technical File.
* Special water supply subsystem, includes junctions, tanks, distribution and disposal networks, systems and all its functional components defined in the Technical File.
* Subsystems of drains, sewers and rainwater evacuation and their devices and functional components defined in the Technical File.
* Subsystem of water tanks for fire network and its functional devices defined in the Technical File.
* Irrigation water distribution network system, includes tanks and other functional devices defined in the Technical File.
* Other water systems for the Hospital in accordance with Applicable Laws and Provisions.
* Fuel gas storage and distribution subsystem.

For each of the subsystems, the CONCESSIONAIRE must have an updated CAD (Computer Aided Design) referenced system in the SIGI-NS, where the plans are shown dynamically and the inventory components, with their specific updated attributes (equipment, type of services, location, life cycle, among others).

The CONCESSIONAIRE shall comply with the following minimum requirements:

**Drinking water supply subsystem, including connections, pipelines, storage tanks, distribution networks, pump systems and all their functional components defined in the Technical File.**

* Tanks and Pump Rooms Cold Drinking Water Pumping System. The CONCESSIONAIRE shall carry out the activities with a minimum frequency as indicated in the following table.

**Table 33: Tanks and Pump Rooms Cold Drinking Water Supply System**

| **Activity** | **Minimum frequency** | **Objective to be pursued** |
| --- | --- | --- |
| * Visual inspections on the structure. * Verify the absence of leaks and contamination. | Quarterly; and also when an earthquake of 5 degrees or higher (Mercalli scale) occurs. | Ensure that they are watertight |
| * Internal and external inspection and cleaning of storage tanks. * Filter cleaning * Repair of leaks * Verification of the condition of inspection hatches. * Chemical analysis of stored water. | Semiannual and as instructed by the Supervisor of Contract and Operations. | Ensure the potability of stored water in accordance with Applicable Laws and Provisions. |

The chemical analysis of the water shall be performed by an authorized and certified laboratory, and the results of said analysis shall be recorded in the SIGI-NS. The cost of the chemical analysis of the water shall be borne entirely by the CONCESSIONAIRE.

The CONCESSIONAIRE shall ensure the quality of the water delivered through online monitoring from a centralized control room, reporting any anomalies to the Supervisor of Contract and Operations.

The CONCESSIONAIRE shall constantly verify that the lids and hatches of the tanks remain closed and secure without risk of falling or emptying of contaminating elements.

* Pump Room:
  + The pumping and impulsion system should have a preventive maintenance program. The operation of the system and the alternation of the pumps must be monitored, allowing for a predictive determination of partial or total system replacement.
  + Pump rooms and tank surroundings should be kept clean and free of risk of contamination or discharge of unwanted products into the water.
  + Ensure the pressure and flow rates at the consumption points according to what is established in the Technical File.
  + Maintain the labeling and identification of each element, in a clear and permanent manner.
  + Likewise, the CONCESSIONAIRE shall carry out the following activities at least once a year:

**Table 34: Pump Room**

| **Activity** | **Minimum frequency** |
| --- | --- |
| Exterior cleaning and inspection of pipes and valves in and out of the tanks. | Annual |
| Maintenance of the engine room and pumps, including checking the condition of walls, *manifolds* and hydropneumatics, and the correction, repair or replacement of the elements, if necessary. | Quarterly |
| Maintenance of the cold drinking water impulsion system. | Monthly |
| Maintenance of electrical and control panels | In accordance with Applicable Laws and Provisions |

Without prejudice to the recommendations of the manufacturers of the pump system control panels, these shall be replaced at least every 6 years of operation.

The CONCESSIONAIRE shall keep an on-line record of system pressure parameters.

* Hot and cold Drinking water piping system. The CONCESSIONAIRE shall perform the following activities with a minimum frequency of:

**Table 35: Potable, Hot and Cold Water Piping System**

|  |  |
| --- | --- |
| **Activity** | **Minimum frequency** |
| Inspection of the condition of the Drinking water matrix and its repair, if applicable. | Annual |
| Inspection of all shut-off devices, check valves, filters, support systems, condition of thermal insulation, network identification paint and pipe labeling. It includes any other mechanical element that is susceptible to lose its condition of use in time. | Quarterly |
| Inspection of the hanging of the networks to structural elements or to the corresponding ones to avoid their detachment and their repair, if applicable. | Quarterly |
| Inspection of the correct functioning of the nets at the points where they cross the expansion joint between the building linked to the ground and the seismically isolated building, and their repair, if applicable. | Semiannual |
| Maintenance of the color codes of the networks and constituent elements. | Semiannual |
| Maintenance of the Drinking water recirculation system. | Quarterly |

Likewise, the CONCESSIONAIRE shall inform the Supervisor of Contract and Operations of any failure recorded in the SIGI-NS. The maximum correction times, according to the criticality zones, shall be as follows:

**Table 36: Drinking, Hot and Cold Water Piping System: Maximum Correction Times**

| **Criticality of the area** | **Maximum correction period**  **from the request of the requirement to the SIGI-NS** |
| --- | --- |
| Critical and semi-critical zones | 15 minutes  in particular cases, a longer period of time may be agreed upon, which must be authorized by the Supervisor of Contract and Operations. |
| The rest of the zones | 30 minutes  in particular cases, a longer period of time may be agreed upon, which must be authorized by the Supervisor of Contract and Operations. |

* Sanitary Fixtures and Faucets. The CONCESSIONAIRE shall perform the following activities with a minimum frequency of:

**Table 37: Sanitary Fixtures and Faucets**

| **Activity** | **Minimum frequency** |
| --- | --- |
| Inspection of sanitary fixtures and their faucets and shut-off valves, in order to prevent problems of obstruction or leaks in their connections and constituent elements. | Weekly |
| Inspection and maintenance of the dishwashers, in order to guarantee their correct, safe and continuous operation, according to the manufacturer's recommendations, especially the emptying, washing and satin-finishing processes and the opening systems and controls of these devices. | Weekly |
| Review of electronic faucets and mixing valves, among other elements. | Weekly |

The CONCESSIONAIRE shall inform the Supervisor of Contract and Operations of any failure recorded in the SIGI-NS. The maximum correction times, according to the criticality zones, shall be as follows:

**Table 38: Sanitary Fixtures and Faucets: Maximum Correction Times**

| **Criticality of the area** | **Maximum correction period**  **from the request of the requirement to the SIGI-NS** |
| --- | --- |
| Critical and semi-critical zones | 15 minutes  in particular cases, a longer period of time may be agreed upon, which must be authorized by the Supervisor of Contract and Operations. |
| The rest of the zones | 30 minutes  in particular cases, a longer period of time may be agreed upon, which must be authorized by the Supervisor of Contract and Operations. |

**Special and treated water system, including connections, tanks, distribution and disposal networks, systems and all their functional components defined in the project.**

* General Requirements. The CONCESSIONAIRE shall perform the following maintenance activities:

**Table 39: General Requirements**

| **Activity** | **Minimum frequency** |
| --- | --- |
| Inspection of the Treated Water Plants, performing at least the following activities:   * Water softening, by means of the use of salts and resins appropriate for this purpose, according to the manufacturer's instructions. The supplies will be at the CONCESSIONAIRE’s cost and risk. * Revision of the installations and distribution networks, verifying the condition of the valves, among the components, as well as proceeding to the washing or change of membranes. * Verification of the non-existence of leaks, proceeding to their immediate repair, if any. * Permanent revision of water levels monitored from the centralized control system. * Register of consumption, revision and regulation of flow rates and pressure. * Review and adjustment of electrical and control panels. * Review of alarms * Pump system maintenance, review and adjustments of parameters. | Daily |
| Maintenance of the water treatment equipment, through the administration of the corresponding warranties and by a technical service authorized by the manufacturer, guaranteeing its proper operation. | Every 2 months |
| In case of water treatment for hemodialysis, maintenance must be performed by a company with experience in treated water plants for these purposes, which must be approved by the Supervisor of Contract and Operations. | Monthly |

The CONCESSIONAIRE shall perform water softening sampling after each salt load and between loads. These measurements must be recorded and reported through SIGI-NS.

The CONCESSIONAIRE shall take all necessary measures to ensure that the Hospital has soft water 24 hours a day, every day of the year. Failure to comply will be cause for a deduction, in accordance with the corresponding service level indicators, without prejudice to the fines established in the Contract.

The rooms where the plants are located must always be kept clean, with dry floors, as well as all its elements, such as: boards, circuits and accumulation tank.

* Regarding the water plant for Hemodialysis:
  + Ensure that the water plant for hemodialysis is operational 24 hours a day, every day of the year, permanently guaranteeing compliance with the respective authorizations of the health authority.
  + Ensure that the quality of water for dialysis is analyzed by authorized and certified laboratories in accordance with Applicable Laws and Provisions. The aforementioned water analysis must be performed at least quarterly, in accordance with the requirements of current regulations, the results of which will make it possible to warn, correct or propose alternatives for improvement in the maintenance of water quality.
  + Likewise, the CONCESSIONAIRE must inform the Supervisor of Contract and Operations of any anomaly in the operation of the water treatment plants registered in the SIGI-NS. The maximum correction times will be as follows:

**Table 40: Regarding the water plant for hemodialysis**

|  |  |
| --- | --- |
| **Criticality of the area** | **Maximum correction period from the request of the requirement in SIGI-NS** |
| Any area of the Hospital | 15 minutes  in particular cases, a longer period of time may be agreed upon, which must be authorized by the Supervisor of Contract and Operations. |

* Regarding plants and water systems for sterilization:
  + Ensure that the plant and water systems for sterilization are operational 24 hours a day, every day of the year and at all times of operation.
  + Measure water quality according to the manufacturer's requirements, making the necessary corrections in order to obtain the ranges required by Applicable Laws and Provisions.
  + Clean the tanks at least every 2 months.
* Laboratory and pharmaceutical water plants and systems:
  + Ensure that the Laboratory and Pharmacy water plant and systems are operational 24 hours a day, every day of the year and at all times of operation.
  + Check daily the demineralized equipment in the Laboratory and Pharmacy areas, as appropriate, including: washing or replacement of filters or membranes, repair or replacement of parts, filters and pieces affected by use or end of useful life, among others.
  + Measure the water quality according to the manufacturer's requirements, making the necessary corrections in order to obtain the ranges required by the Applicable Laws and Provisions.
  + Clean the tanks at least every 2 months.

**Drainage, sewerage and rainwater drainage subsystems and their functional devices and components as defined in the project**

The CONCESSIONAIRE shall be responsible for maintaining the discharge to the public sewage system within the parameters and conditions established by the Applicable Laws and Provisions. Likewise, perform daily controls to the sewage neutralizing system, in accordance with the Applicable Laws and Provisions, as applicable. The CONCESSIONAIRE shall perform the following maintenance activities:

**Table 41: Maintenance Activities**

| **Activity** | **Minimum frequency** |
| --- | --- |
| Cleaning and other maintenance activities of floor grates and gutters, basins, collection chambers, inspection chambers, sidewalks, lids, steps, walls, reception and delivery points, grease traps, hair traps, pipes, collectors and trap chambers with baskets to collect non-degradable solid objects, among others. | Quarterly |
| Cleaning and maintenance treatment of special grease chambers according to their size and use. | 4 months; may be reduced by the Supervisor of Contract and Operations, depending on the level of use of the operations. |
| Accumulation pond and lifting plants, if applicable, according to the Technical File:   * Inspection to verify their normal operation, including the absence of leaks from the tanks. * Carry out a program of removal of sludge from sewage and cleaning of buried and surface tanks, unless indicated by the Supervisor of Contract and Operations. | Inspection: daily;  Removal program: semi-annual. |

The maintenance of the lifting plants shall be carried out by a technical service authorized by the manufacturer of the same, which guarantees their proper operation.

Likewise, the CONCESSIONAIRE shall inform the Supervisor of Contract and Operations of any sewage leaks registered in the SIGI-NS. The maximum correction times shall be as follows:

**Table 42: Correction Times**

|  |  |
| --- | --- |
| **Criticality of the area** | **Maximum correction period**  **from the request of the requirement in SIGI-NS** |
| Any area of the Hospital | 15 minutes or the time determined by the Supervisor of Contract and Operations, in particular cases, a longer period may be agreed upon, which must be authorized by the Supervisor of Contract and Operations. |

**Subsystem of water tanks for fire network and its functional devices defined in the project**

The CONCESSIONAIRE shall permanently check all the components and devices of the system and, in case of loss of functionality, repair or replace the damaged elements.

**Irrigation water distribution network system, including tanks and other functional devices defined in the project**

The CONCESSIONAIRE shall inspect pipes, sprinklers, faucets, cameras and other system components on a quarterly basis and, in case of loss of functionality, repair or replace the damaged elements.

The CONCESSIONAIRE shall check and maintain the control panels and systems at least on a monthly basis.

**Other water systems considered at the Hospital in accordance with Applicable Laws and Provisions**

The CONCESSIONAIRE shall carry out a permanent revision of the system components and in case of loss of functionality, proceed to repair or replace the damaged elements.

**Fuel gas storage and distribution subsystem**

The CONCESSIONAIRE shall permanently review the system components in order to guarantee their availability and in case of loss of functionality, proceed to repair or replace the damaged elements.

The procedures and frequencies of the maintenance activities shall be those defined in the Technical File and those required in accordance with the Applicable Laws and Provisions.

**Maintenance and operation of the high, medium and low voltage electrical systems defined in the project, in accordance with Applicable Laws and Provisions**

It includes splices and distribution networks, including all the components and functional devices defined in the project.

The CONCESSIONAIRE shall ensure the operation of the power and artificial lighting system in an effective, efficient and timely manner, 24 hours a day, every day of the year, maintaining the networks and support equipment used for this purpose in good condition.

The CONCESSIONAIRE shall implement contingency plans in the event of power supply failures from the public grid, and develop strategies for alternative power supply systems. In the event of failures, the CONCESSIONAIRE shall notify the Supervisor of Contract and Operations so that the latter authorizes the application of the corresponding contingency plan.

The CONCESSIONAIRE shall coordinate with the Service of Sanitation and Cleaning, the cleaning of the areas: generator set room, switchboard and transformer rooms, among others), so that it is carried out by trained personnel according to the risk involved in these facilities.

In the case of waste and residues from maintenance and replacement of electrical parts and elements, the CONCESSIONAIRE shall act in coordination with the Service of Integrated Hospital Waste Management.

The CONCESSIONAIRE shall prepare a replacement or substitution program for the electrical equipment based on measurements and tests, manufacturer's recommendations and Applicable Laws and Provisions.

The CONCESSIONAIRE shall also develop a replacement plan for 100% of the exterior and interior lighting equipment at the end of the tenth year of operation, without prejudice to the replacement or substitution to be made due to failures, defects and damages that they may experience. These replacements or restocking must be of similar or superior quality to the initial one defined in the Technical File.

The CONCESSIONAIRE shall comply with the following minimum requirements:

* Minimum functional conditions. The CONCESSIONAIRE shall carry out visual and structural inspections of the different elements that make up this System, which shall be carried out quarterly and every time an earthquake of magnitude equal to or greater than 5 on the Mercalli scale occurs.
  + Electrical power must always be available and reach each consumption point in all areas, safely, 24 hours a day, every day of the year, either through the electricity company's supply or through backup power systems, in accordance with the provisions of these technical specifications.
  + The facilities where electrical equipment is installed, such as transformers and generators, among others, must preserve their structural characteristics and maintain their functionality.
  + The adequate ventilation and temperature of the areas where the electrical equipment is located must be ensured, for which purpose the corresponding maintenance of the air conditioning systems must be coordinated, leaving the respective record in the SIGI-NS, always guaranteeing compliance with the manufacturers' recommendations regarding maximum and minimum temperatures and other permissible environmental considerations.
  + All lighting fixtures and their on/off mechanisms must be inspected at least every six months, including the repair, replacement of defective elements, such as: lamps, tubes, transformers, diffusers, housings, seals, electrical junction boxes, photocells, sensors in general, emergency lamps, among others.
  + The reading of installed systems such as power, amperage and voltage must be recorded through an automated centralized control system to ensure compliance with the established parameters.
  + An annual comparative record of the measurements of the grounding meshes must be kept, between initial on-site measurements and periodic measurements to be taken during the operation stage. These records must comply with the provisions of the standard in force.
  + Once a year, certifications must be made to show the correct operation of the electric redialing systems.
  + Any failure in the artificial lighting or electrical circuits recorded in the SIGI-NS must be reported to the Supervisor of Contract and Operations. Maximum correction times, according to criticality zones, shall be as follows:

**Table 43: Maximum Correction Times**

|  |  |  |
| --- | --- | --- |
| **Criticality of the zones** | **Maximum correction times counted from the request in SIGI-NS** | |
| **Artificial lighting failures** | **Failures in electrical circuits** |
| Critical and semi-critical zones | 30 minutes | 15 minutes  in particular cases, a longer period of time may be agreed upon, which must be authorized by the Supervisor of Contract and Operations. |
| The rest of the zones | 60 minutes | 30 minutes  in particular cases, a longer period of time may be agreed upon, which must be authorized by the Supervisor of Contract and Operations. |

* Quality of power provided. The CONCESSIONAIRE shall guarantee the quality of the electric power specified in the Technical File, complying with the tolerances in the power supply to the equipment and consumption points in general, as established in the standards and regulations in force. Transient phenomena, voltage regulations, frequencies, voltage drops and all those circumstances that may alter the normal supply shall be considered.

The CONCESSIONAIRE shall perform monthly inspections and maintenance of the equipment according to the manufacturer's recommendations, including adjustments, replenishments or replacements.

In the event of discrepancy regarding compliance with the established requirements, the Supervisor of Contract and Operations may request the CONCESSIONAIRE to hire, at its cost and risk, a duly authorized third party to indicate the status and quality of the electric power at the indicated point.

In order to guarantee the quality of the power, the CONCESSIONAIRE shall carry out the following activities:

* + Perform maintenance of transformers, voltage stabilizers, filters, suppressors and capacitor banks, among other equipment, as indicated by the manufacturer and current standards. Frequency: monthly.
  + Review and monitor the operation of the electrical equipment that regulates the quality of the electric power, carrying out the pertinent maintenance and corrections. The CONCESSIONAIRE shall ensure adequate ventilation and cleaning of the same.
  + At the request of the Supervisor of Contract and Operations, the CONCESSIONAIRE shall perform transformer insulation tests and protective earth (resistivity) measurements in accordance with the Applicable Laws and Provisions and particularly as indicated in the Ministerial Resolution No. 051-2015/Minsa "Technical Guide for Ground Access Well Maintenance in Health Care Facilities". When anomalous situations or reasons for verification of electrical parameters arise from internal controls carried out in the Hospital, recorded in the SIGI-NS. Notwithstanding the foregoing, the CONCESSIONAIRE shall implement a continuous improvement system for the management of electrical energy consumption and the quality of the same. The values resulting from the tests shall be considered for the replacement plan of said electrical equipment.
  + Carry out lighting measurements every year, record the results in the SIGI-NS, in order to verify whether the lighting levels and performance are in accordance with what is defined in the Technical File; if not, the CONCESSIONAIRE shall propose corrective actions, with the prior approval of the Supervisor of Contract and Operations.
  + The CONCESSIONAIRE shall carry out insulation and protective earth measurements to the insulation transformers defined in the Technical File, with the frequency established in the Applicable Laws and Provisions and complying with the current regulation on the electricity code, and shall register it in the SIGI-NS. Likewise, the annual maintenance of the Torgel installation.
* Physical Conditions. During the tenth Operation Year, the CONCESSIONAIRE shall carry out a general review of the entire electric network, carrying out insulation, operation and operability tests, and the replacement of damaged elements, with loss of capacity or end of useful life, including feeders and subfeeders ("*overhaul*").

The CONCESSIONAIRE shall comply with correcting, at its own cost and risk, the following events and within the following time periods:

**Table 44: Physical Conditions**

|  |  |
| --- | --- |
| **Event to correct** | **Maximum correction period from the request of the requirement to SIGI-NS** |
| Any of the following occurrences or failures:   * Label boards or with outdated information; * Wiring, sub feeders or feeders with loss of identification or in disarray; * Electrical installations by means of extension cords. * Open or broken electrical enclosure and exposed wiring. * Electrical fixtures without labeling. * Other as considered by the project and requested by the Supervisor of Contract and Operations. | 4 hours |
| Replacement of damaged items such as: lamps, light fixtures of any kind, sockets, switches, spare parts, protections, fluorescent tubes, light bulbs, lamps, bulbs, among others.  NOTE: The Supervisor of Contract and Operations may fix a shorter period, if it considers it necessary, in order to maintain the normal operation of the affected area. | 1 week |

It is worth mentioning that the quality of the replacement referred to shall be of equal or higher quality than that initially defined.

Likewise, the CONCESSIONAIRE must carry out the following activities with the frequency indicated below and comply with the following obligations:

**Table 45: Activities To Be Performed**

| **Activity** | **Minimum frequency** | **Additional obligations of the CONCESSIONAIRE** |
| --- | --- | --- |
| Monitoring of the electrical installations, their networks and electrical appliances, so that their labeling remains in time and is always up to date. | Semiannual | In the event of a modification, an update shall be made by the CONCESSIONAIRE |
| Inspection and verification of the order and labeling of feeders, subfeeders and electrical cables. | Semiannual | Maintain the electrical panels always clean with their fastenings and anchorages in good condition, with no foreign or extraneous elements inside them, with undamaged fire seals. Information shall be kept up to date on the electrical diagrams on site and in the SGI. |
| Review and monitoring of the conditions of use of the electrical appliances and installations in regular use by hospital personnel: lighting equipment, installation conduits and column feeders, sockets, isolation transformers. | Weekly and biweekly | The CONCESSIONAIRE shall carry out the pertinent maintenance and corrections. |
| Maintenance of trays and wall-mounted electrical trunking, electrical boxes, etc. | Quarterly | The CONCESSIONAIRE shall ensure that they are properly secured and closed. |
| Revision of all inspection chambers of the grounding grids. | Annual | The CONCESSIONAIRE shall repair them, if necessary. |
| Inspection of the condition of all types of lighting fixtures. | Annual | The CONCESSIONAIRE shall proceed with the removal of rust and treatment of anti-rust paint, if applicable. |
| Application of anti-rust paint and finishing paint. | Every 3 years or such other period as determined by the Supervisor of Contract and Operations | The entire structure of each exterior luminaire must be inspected. |
| Maintenance of the lightning protection system according to the manufacturer's recommendations. | Annual | Ensure the good condition of the anchoring systems and lightning arrester system winds, which shall remain tight and steady and shall not show instability or low mechanical strength. |

The CONCESSIONAIRE shall carry out measurements to evaluate the loads, protection systems and cable insulation. In case of installing more equipment or replacement equipment that exceeds the amperage of the replacement equipment, it shall verify if the conductors are adequate to support the load increase and carry out corrective measures if necessary.

**Emergency Power Systems for Generator Sets and their power supply systems**

In the event of a power outage, the CONCESSIONAIRE shall provide 100% power supply by means of generator sets and UPS in the places defined in the Technical File.

The CONCESSIONAIRE shall carry out load tests and automatic activation of the emergency system involving power cut-off, controlling the time and delay of the automatic activation of the emergency generators and UPS of the system. To this end, it shall coordinate with the Hospital Management and user services.

In order to guarantee power backup, the CONCESSIONAIRE shall comply with at least the following:

* Generator sets. In addition to the activities indicated in the manufacturer's manual, the CONCESSIONAIRE shall perform the following activities:

**Table 46: Generator Sets**

|  |  |
| --- | --- |
| **Activity** | **Minimum frequency** |
| Inspection, verification of operation, including checking and recording of parameters. | Daily |
| Routine maintenance including: check and record of parameters, cleaning and idle operation, among others. Also, review and repair, as appropriate, of the alarms associated with the generator sets, such as: hour meters, voltmeters for battery charging, cooling water temperature meter. | Monthly |
| Maintenance and verification of the correct operation of the transfer panels, which must be carried out directly by a technical service authorized by the manufacturer or its authorized distributor. | Semiannual |
| Revision, maintenance and the corresponding tests to the fuel networks, which must be in perfect conditions, without leaks and well identified, complying with the standard in force. | Semiannual |

The CONCESSIONAIRE shall, at its own cost and risk, carry out the necessary actions to comply with the environmental regulations in force.

* *Uninterruptible Power Supply* System. The CONCESSIONAIRE shall ensure adequate ventilation and temperature in the areas where the UPS are located, and therefore shall coordinate the maintenance of the corresponding air conditioning systems, leaving the respective record in the SIGI-NS, ensuring that the manufacturer's recommendations regarding maximum and minimum temperatures and other permissible environmental considerations are always complied with.

Likewise, the following activities must be carried out without prejudice to the activities established in the manufacturer's technical service manual:

**Table 47: Uninterruptible Power Supply System**

|  |  |
| --- | --- |
| **Activity** | **Minimum frequency** |
| Review and monitor the operation of UPS or power backup systems, transfer boards and general boards, among others. The pertinent maintenance and corrections should be carried out. | Monthly |
| Maintenance, which shall be carried out directly by a technical service authorized by the manufacturer or its authorized distributor. Likewise, the CONCESSIONAIRE shall measure the charge of the UPS batteries and, based on this, shall propose the corresponding replacements. | Annual |

**Lighting systems and functional devices defined in the project**

It shall maintain and ensure the permanent operation of the artificial lighting systems in all areas of the hospital, including the emergency lighting systems, performing all the necessary tests to maintain the system in the conditions established in the Technical File and in accordance with the Applicable Laws and Provisions.

The CONCESSIONAIRE shall ensure the operation of the power and artificial lighting system in an effective, efficient and timely manner, 24 hours a day, every day of the year, maintaining the networks and support equipment used for this purpose in good condition, in accordance with the provisions of these technical specifications.

**Maintenance and Operation of the Weak Current System in accordance with Applicable Laws and Provisions**

This service includes the maintenance and operation of the following subsystems:

* Structured Cabling Subsystem
* Public address and loudspeaker subsystem.
* Shutdown alarm subsystem.
* Nurse call subsystem
* Insured care module subsystem.
* Other subsystems: radio communications, time signaling and TV antennas and open and closed circuit TV.

The CONCESSIONAIRE shall perform the maintenance of the following subsystems, as well as their operation, complying with the minimum requirements indicated below:

**Structured cabling subsystem**

This service includes the maintenance and operation of the system and is required, at least:

* Monitor this service continuously to detect any anomaly in the cabling and its accessories that could affect the availability and quality of the communications network signal, registering in the SIGI-NS the reasons why the service was altered or damaged and the solution to it.
* Keep telephone sets, racks and wall boxes, among other components of the communications and IT system, operational and available 24 hours a day, every day of the year. It is necessary to ensure that the telephone system is free of noise and interruptions.
* Inform the Supervisor of Contract and Operations of any occurrence recorded in the SIGI-NS, the respective evaluation and deadline to remedy the same, within a maximum of 30 minutes from the request of the requirement in the SIGI-NS.

**Public address and loudspeaker subsystem**

The CONCESSIONAIRE shall provide the operation of ambient music and audio message signals, through the public address and loudspeaker subsystem, which shall be delivered by equipment located in the automation and centralized control room, and shall also carry out the maintenance and operation of all the elements that make up this subsystem. For this purpose, the following, at least, must be carried out:

* Maintain availability 24 hours a day, every day of the year.
* Carry out messages requested by the Hospital's SIGI-NS duly authorized for these purposes, when appropriate.
* Perform quarterly inspections of the installed public address system and shall permanently train Hospital officials for their proper use of the equipment.
* Shall be responsible at its cost and risk for the background music services.
* Perform quarterly maintenance of the subsystem including speaker lines, open circuits and short circuits to ground or any other irregularities, speakers, software, among other components.
* Correct any occurrence or failure that means an interruption of service, in accordance with the service level indicators, within the following term:

**Table 48: Public Address and Sound System Subsystem**

| **Criticality of the area** | **Maximum correction period from the request of the requirement in SIGI-NS** |
| --- | --- |
| Any area of the Hospital | 48 hours  in particular cases, a longer period may be agreed upon, which must be authorized by the Supervisor of Contract and Operations. |

**Shutdown alarm subsystem**

This service includes the maintenance and operation of the system and is required, at least:

* Perform preventive and corrective maintenance according to the manufacturer's guidelines and its replacement shall be carried out at the end of its useful life, at its cost and risk of the CONCESSIONAIRE.
* To remedy any occurrence or failure that means an interruption of the service, within the following term:

**Table 49: Shutdown Alarms Subsystem**

|  |  |
| --- | --- |
| **Criticality of the area** | **Maximum correction period from the request of the requirement in SIGI-NS** |
| Any area of the Hospital | 48 hours  in particular cases, a longer period may be agreed upon, which must be authorized by the Supervisor of Contract and Operations. |

**Nurse call subsystem**

This service includes the maintenance and operation of the system and requires, at least:

* Keep available 24 hours a day, every day of the year.
* Preventive and corrective maintenance must be done according to the manufacturer's recommendations and must include at least the following elements: ductwork, cabling, switchboard, intercom devices and all its accessories, call console, push buttons, cancellers, microphones, loudspeakers, signaling lamps, call system power kit with its power supplies, filter, batteries, among others.
* Inform the Supervisor of Contract and Operations of any occurrence recorded in the SIGI-NS, the respective evaluation and deadline to remedy the same, within a maximum time of 30 minutes, counted from the request of the requirement in the SIGI-NS.

**Subsystem of the insured's service module**

This service includes the maintenance and operation of the system and is required, at least:

* Preventive and corrective maintenance should be done according to the manufacturer's recommendations and should consider both its own installations and those of the conduit, central wiring, console, power supplies, among others.
* It must have a contingency plan in case of failure of one more turnomatic, which must always be coordinated with the Hospital. The deadline for repairing or replacing equipment will be:

**Table 50: Turnomatic Subsystem**

| **Criticality of the area** | **Maximum correction period**  **from the request of the requirement in SIGI-NS** |
| --- | --- |
| Any area of the Hospital | 48 hours  in particular cases, a longer period may be agreed upon, which must be authorized by the Supervisor of Contract and Operations. |

**Other subsystems: radio communications, time signaling and TV antennas, and open and closed circuit TV**

This service includes the maintenance and operation of the system and is required, at a minimum:

* Preventive and corrective maintenance should be done according to the manufacturer's recommendations and should consider the weak current system, either as independent systems or associated with the structured cabling of the radio communications subsystems, time signaling and TV antennas and open and closed circuit TV.
* The radio communications subsystem and closed circuit TV, for clinical use, must be fully operational.
* It shall have a contingency plan in case of failure of the open circuit TV subsystem, which shall always be coordinated with the Hospital. Likewise, it shall perform maintenance on a quarterly basis, of the supports and anchorages of TV screens so that they do not represent a risk of falling, and making the corresponding adjustments and repairs for these purposes. The term for repairs will be:

**Table 51: Other Subsystems**

|  |  |
| --- | --- |
| **Criticality of the area** | **Maximum correction period**  **from the request of the requirement in SIGI-NS** |
| Any area of the Hospital | 24 hours  In particular cases, a longer period may be agreed upon, which must be authorized by the Supervisor of Contract and Operations. |

* The CONCESSIONAIRE shall inform the Supervisor of Contract and Operations of any occurrence or failure recorded in the SIGI-NS, the respective evaluation and deadline to remedy the same, within a maximum time of 30 minutes, counted from the request of the requirement in the SIGI-NS.
* The CONCESSIONAIRE shall prepare a five-yearly replacement plan for the weak current equipment, such as the Nurse Call, Shutdown Alarm, among other equipment, or as often as necessary due to normal wear and tear.

**Maintenance and operation of the Maintenance and Energy Saving System (SMAE)**

The CONCESSIONAIRE shall consider the maintenance and operation of the system, which shall respond to protocols that comply with the design requirements and operating standards established in the Technical File. The CONCESSIONAIRE shall comply with the following minimum requirements:

* Supervise and control remotely, 24 hours a day, every day of the year, the different elements, systems and equipment connected to the SMAE, providing communication and control of their operation, automatically, by means of the specialized software defined in the Technical File. By virtue of the foregoing, in case any variation of parameters or standards of the operation processes is identified, the CONCESSIONAIRE shall carry out the corrective actions through the SMAE, or arrange for the correction of the same through the SIGI-NS.
* Guarantee the operability of the SMAE, having to comply with a minimum operability percentage of 98% semiannually, in accordance with the Service Level Indicators.
* Have a contingency plan, which will be approved by the Supervisor of Contract and Operations, for possible system interruptions, whether due to failures or maintenance. The systems supervised, controlled and operated from the SMAE must be prioritized according to the risk and impact that each one of them has on the functionality of the Hospital, which will be qualified by the Supervisor of Contract and Operations. In accordance with this prioritization, plans must be implemented that incorporate strategies for supervision and action in response to warnings, alerts or remotely operated commands.
* Establish the interoperability of the SMAE with the SIGI-NS, allowing the online transfer of the corresponding information and records. Likewise, the SMAE must allow the export of information from the different records stored and that account for the performance of the different operations controlled.
* Carry out the maintenance plan established in the POA of the service, which should at least consider the following:

**Table 52: Maintenance and operation of the maintenance and energy saving system (smae)**

|  |  |  |
| --- | --- | --- |
| **Maintenance** | **Minimum frequency** | **Must include** |
| Preventive maintenance to all equipment defined in the Technical File, according to the manufacturer's recommendations. | Semiannual | Visual inspection of the indicated devices; external cleaning of computer equipment, interfaces, controllers, sensors and actuators; internal cleaning of controllers; revision of networks and connections including retightening of the sensors and actuators to the controllers; comparison and analysis of values measured by the controllers with respect to standard instruments, to detect deviations; and measurement of power supply to both controllers and sensors and actuators. |
| Preventive maintenance of the *software* to be included in the SMAE | Semiannual | According to the system manufacturer's or supplier's manuals. |

* Ensure the permanent electrical backup of the SMAE, as established in the Technical File.

**Maintenance and operation of the elevator and lift system in accordance with Applicable Laws and Provisions.**

This service includes the maintenance and operation of the system. The CONCESSIONAIRE shall comply with the following minimum requirements:

* Inspection with a minimum monthly frequency of the units that make up the elevator and lift system as defined in the Technical File, whose actions must be carried out in coordination with the Supervisor of Contract and Operations and the Hospital Management in order not to interfere with the Care task, assuming the cost of such interventions, devoting special attention to all safety devices and vital elements of the elevator apparatus.
* Maintain in permanent operation 50% of the equipment comprising each battery of elevators defined in the Technical File. Notwithstanding the foregoing, the CONCESSIONAIRE shall maintain in operating conditions, simultaneously, 90% of the totality of the elevators.
* Ensure 24 hours a day, every day of the year, timely Care to remedy the functionality problems presented by the units, such as: emergency requests for rescue of persons, unlocking of doors, replacement of lights, personalized operation of the elevator upon request of any user of the SIGI-NS.
* The CONCESSIONAIRE shall perform the maintenance of the units according to the provisions of the Applicable Laws and Provisions. It shall hire a company authorized for these purposes, upon the opinion of the Supervisor of Contract and Operations, at its cost and risk, to perform the maintenance audit of the elevator and lift equipment.
* Maintain the machinery spaces, clean and orderly, free of scrap material, spare parts or material from other equipment.
* Inform the Supervisor of Contract and Operations of any occurrence or failure recorded in the SIGI-NS, the respective evaluation and deadline to remedy the same, within a maximum time of 15 minutes counted from the request of the requirement, for particular cases a longer period may be agreed, those that must have the opinion of the Supervisor of Contract and Operations.
* Monthly preventive maintenance in order to anticipate breakdowns or irregularities in the operation, performing adjusted revisions and checks, replacing those parts that may undermine the guarantee of operation or cause breakdowns within what is reasonably possible to foresee.
* The maintenance of the elevator and lift system should consider, in addition to what is indicated by the manufacturer in its technical service manual, the following:
  + Scheduling the change of the different cards, cables, infrared screens, control boards, among other elements, in order to guarantee the continuous operation according to the required standards.
  + Maintain the cabin quality conditions defined in the Technical File, such as: comfort, floor coverings, walls, ceilings, button panels, lighting systems, communication systems, air extraction, alarms, security sensors, audiovisual signage, preservation of emergency and security signage, among others.
  + Maintain the functionality conditions defined in the Technical File, in relation to: leveling with each floor during the opening of doors, button panels, doors, security sensors, audiovisual signage, among others. Likewise, the elevator and lift systems must maintain connectivity with the active and passive fire protection systems and the centralized automation and control system defined in the Technical File.
  + Ensure the existence and availability of the elevator keys for manual operation in the event of emergencies or Hospital needs within a maximum of 10 minutes from the time the request is made in the SIGI-NS.
  + Repairs and replacement of parts, keeping the installations in good working and safety conditions, covering the elements of the elevator apparatus subject to wear and tear, including, but not limited to, those listed below:
    - Reduction elements, wormgear and crowngear, or oleodynamic press machine and their cylinders, pistons and valves.
    - Drive motors and electro-brakes.
    - Speed limiters and pulleys of any kind.
    - Brakes, brake pads, etc.
    - Suspension, compensating and speed limiter cable.
    - Contactors, relays, coils, power and auxiliary contacts, capacitors, resistors, diodes, fuses, timers, motor guards, reactors, printed circuit boards, micros, as well as any switchboard accessories.
    - Stop contacts, endstops, levelers, aluminum shields and brackets and wedging contacts.
    - Selector switches, push buttons and pilot lights.
    - Shunting hose, shaft electrical conductors, cabin and shunting panel.
    - Retractable slips, slides of all types, sliders and mechanical wedging elements.
    - Closing dampers, locks, operator presence switches, hinges, torsion springs and retainers.
    - Gearboxes, microswitches, cams, V-belts, sprocket chains, suspension carriages, doors, as well as any accessory of CONCESSIONAIRE’s automatic door.
    - Lubricating oils and oleodynamic circuit.

**Maintenance and operation of the fire safety system in accordance with the Applicable Laws and Provisions.**

The CONCESSIONAIRE shall provide and ensure the Service of Maintenance and Operation 24 hours a day, every day of the year, including all passive, active and software elements, among others, as established in the Technical File and the Applicable Laws and Provisions.

The CONCESSIONAIRE shall perform the maintenance of each of the elements that make up the system, including the following, among others:

**Table 53: Maintenance and Operation of the fire safety system in accordance with applicable Laws and Provisions**

| **Activity** | **Minimum frequency** |
| --- | --- |
| * Inspection of the anchoring and fixing systems of the respective elements and active protection devices of the fire protection system, as defined in the Technical File. * Maintenance of signage and demarcations, ensuring that they are available and legible, as established in the Technical File. * Inspection and verification of accessibility to the elements and devices that make up the Fire Protection System. * Inspection and verification of labeling of all the system's component elements, such as: pipes, sprinklers, detectors, push buttons, alarms, cabinets, among others. | Quarterly |

Likewise, the CONCESSIONAIRE is responsible for operating the system, under the terms defined in the Technical File.

The CONCESSIONAIRE must include a replacement plan for the items indicated in the following table.

**Table 54: Replacement Plan**

| **Replenishment or replacement of** | **Frequency of replenishment or replacement** |
| --- | --- |
| Fire protection system and components control panel | Every 10 years of operation or in accordance with the useful life established by the manufacturer according to the conditions of use. |
| Hoses | Every 10 years of operation or in accordance with the useful life established by the manufacturer according to the conditions of use. |
| Water network pumping and pressurization system | Every 10 years of operation or according to the useful life established by the manufacturer according to the conditions of use |
| Detectors, alarms, push buttons | Every 5 years of operation or in accordance with the useful life established by the manufacturer according to the conditions of use. |

In addition, the CONCESSIONAIRE shall comply with the following particular requirements:

* Fire Extinguishing System.

**Table 55: Fire Extinguishing System**

| **With water-based systems** | **By means of dry chemical powder agent, CO2 or other clean agent considered in the Technical File.** |
| --- | --- |
| Inspection of valves with water based system. | * Visual inspection of cylinders, gauges, signaling, nozzles and hoses, from the actuator to the trigger, and replace if necessary. |
| Maintenance of the water tank and the pumping and impulsion system. | * Visual inspection of the airtightness of the areas where there are automatic gas extinguishing systems, if applicable. |
| Extinguishing system pumping tests. | * Inspection of the parameters defined for the system in the Technical File not objected to for the pumping system. |
| Visual inspection of sprinklers and hoses, also verifying the condition of the wet networks, detecting leaks and defective or stuck valves or valves, which could prevent their use and correct operation in case of emergency, and proceeding to their repair or replacement in such case. | * Verify that the weight of the cylinder is registered by an authorized and certified company, as appropriate. This maintenance shall include the review and analysis of the extinguishing agent, as well as its condition, recharge or replacement of the same. |
| Revision of hose winding and unwinding, including piton and valves. | Perform equipment tests according to the manufacturer's recommendations, applicable standards and others in force. |
| Verification of the existence and condition of the signage or labeling, established for the identification of the element, and if appropriate, proceed to its replacement. | * Inspect compliance in terms of quantity and location of extinguishers, according to the Technical File. |
| The maintenance of the irrigation water supply and storage equipment from the Hospital's internal accumulation system, if so established in the Technical File, must be carried out according to current standards. |  |
| Maintenance of the dry network should include inspection, cleaning and repair if necessary. |  |

* Detection system.
  + Visual inspection of peripheral devices (detectors, push buttons, communication systems, inert network, among others defined in the Technical File), in order to verify their condition and proceed to their repair or replacement as appropriate.
  + Review of the complete system using the automatic check tool of the control panel, which consists of a walkthrough of all the elements of the system.
  + External cleaning of the dirty detectors, indicated by the automatic check and push buttons.
  + Verification of the existence and condition of the signage or labeling, established for the identification of the element and, if necessary, proceed to its replacement.
  + Measurement of the voltage of the control panel backup battery system, and its cleaning, adjustment, recharge or replacement as appropriate.
  + Interior and exterior cleaning of the fire panel and monitors as appropriate.
  + Maintenance of software and information systems to be included in the system, according to manufacturer's recommendations.
* Evacuation system.
  + Conduct joint training and fire drills, according to the emergency plan, in coordination with the Hospital.
  + Exterior cleaning of loudspeakers and strobe lights.
  + Testing of the audio evacuation system.
  + Inspection of evacuation signage, according to the Technical File.
  + Visual inspection of peripheral devices in order to verify their condition and proceed to their repair or replacement as appropriate.
  + Review of the complete system consisting of a total revision of the elements of the system.
* **Operation**.
  + The CONCESSIONAIRE shall have qualified personnel available 24 hours a day, every day of the year, in the automation and centralized control room.

**Maintenance and operation of the pneumatic delivery system in accordance with the reference standards**

The CONCESSIONAIRE shall perform the maintenance and operation of the system, as well as Care in the event of service interruptions. Likewise, it shall comply with the following minimum requirements:

* Perform maintenance, according to the design established in the Technical File and the recommendations provided by the respective manufacturer. Likewise, it shall consider a preventive maintenance of the system as a whole, with a semi-annual frequency.
* Maintain permanently at the disposal of the Supervisor of Contract and Operations, two sets of capsule spares, of the sizes and characteristics defined in the Technical File.
* Replenish or replace, partially or totally, the different constituent elements of the system, such as, capsules, brake valves, sensors, turbines, or other elements, whether they present any failure or have fulfilled their useful life.
* Ensure 24 hours a day, every day of the year, timely Care to remedy the functionality problems presented by the units, such as, emergency rescue requests and capsule unblocking, when required by any SIGI-NS user.
* Carry out the rescue of the capsules trapped in the system within a maximum period of 1 hour, from the request of the requirement in SIGI-NS, in accordance with the Service Level Indicators.
* Perform corrective actions in the sending stations, upon request of a SIGI-NS user, in accordance to the Service Level Indicators.
* Perform adjustments to the system and schedules, based on requirements made by the Supervisor of Contract and Operations.
* Train Hospital personnel, on the operation of the system, at the request of the Supervisor of Contract and Operations.

**Maintenance of the furniture associated with the infrastructure in accordance with Applicable Laws and Provisions**

The CONCESSIONAIRE shall perform inspection and preventive and corrective maintenance activities, in order to maintain the functionality, aesthetics and harmony of the premises and the image of the Hospital.

The frequency of the maintenance activities is shown in the following table:

**Table 56: Frequency of Activities Furniture associated with the Infrastructure in accordance with Applicable Laws and Provisions**

| **Type of furniture** | **Minimum frequency** | **Maintenance shall include, at least** |
| --- | --- | --- |
| Wooden furniture: closets, shelves, hanging furniture, library furniture, glazed display cabinets, wooden counters, clean and dirty work desks, nursing stations and all those containing wood as a constituent element. | Quarterly | Change or repair of hardware fixtures, handles or knobs, gluing, varnishing, stain removal, anchoring to walls or floors, coatings, etc., in accordance with the materiality established in the Technical File and manufacturer's instructions |
| Metal furniture made of stainless steel and other materials: cold room shelves, others. | Quarterly | Cleaning, lubrication, removal of rust, revision and revision of welds, tightening of bolts, etc.  Replacement, if necessary, of wheels, parts and pieces, hardware fixtures, handles or knobs, gluing, varnishing, stain removal, anchoring to walls or floors, coatings, etc., according to the materiality established in the Technical File and manufacturer's indications. |
| Mixed furniture: furniture structured in steel and covered in wood or other material (polypropylene, PVC, etc.). | Quarterly |
| Cold storage | Quarterly | Checking and refilling of oil and coolant, if applicable, alarm systems and leak detection and corrective actions as appropriate, according to the materiality established in the Technical File and manufacturer's indications. |
| Semiannual | Evaporating and condensing units, pipes, hoses, electrical installation, lighting, electrical and control panels, shut-off and thermostatic valves, solenoid, among others. Also: revision of partition walls, chamber components, joints and seals, the tightness of doors and the state of their hardware fixtures, drains and any other component defined in the Technical File. |
| Other | To the opinion of the Supervisor of Contract and Operations | Other elements considered in the Technical File that are not listed in this table |

The CONCESSIONAIRE shall maintain the accessories of the different Hospital premises, such as mirrors, toilet lids and other similar items, and shall replace them when they are damaged.

In no case may the CONCESSIONAIRE remove any element or furniture without the knowledge and opinion of the Supervisor of Contract and Operations. In the event a piece of furniture is removed, the CONCESSIONAIRE shall deliver an alternative so as not to affect the functionality of the premises during the time it is under maintenance.

**Response times**

Contingencies of all kinds must be foreseen and, therefore, the response times established must be taken into account. The CONCESSIONAIRE shall guarantee a response time (until the CONCESSIONAIRE accesses the equipment) from the time the breakdown or occurrence report is notified, which in no case may be longer than that established in the following table. In those cases, in which the correction time exceeds the established standard time, the CONCESSIONAIRE shall provide adequate justification.

**General asset maintenance**

**Table 57: Response Times**

| **Category** | **Maximum response time** | **Maximum correction time** |
| --- | --- | --- |
| Emergency (if the Hospital is required to cease its healthcare activities). | 10 minutes | The time will be established in the POA |
| Urgent (if it delays times in medical and surgical procedures). | 10 minutes | The time will be established in the POA |
| Ordinary (other than emergency and urgency services). | 15 minutes | The time will be established in the POA |

Note: This time will depend on the criticality of the event, i.e., if such event compromises the patient's life.

For particular cases, times other than those indicated in the above table may be considered in accordance with what is established in the POA of the Contract.

For the purposes of the above table, upon the occurrence of a contingency (Emergency, Urgent or Ordinary), the CONCESSIONAIRE shall register, monitor and resolve all the requests submitted by the SIGI-NS users defined in this Contract, regarding the alterations or faults detected in the Building, Facilities, equipment and furniture associated with the infrastructure. Likewise, the CONCESSIONAIRE shall promptly notify the Supervisor of Contract and Operations, through the SIGI-NS, of the estimated repair time, so that the Hospital's Management may manage the corresponding actions in order not to affect the continuity of the operation.

**Service Organization**

For this service, the CONCESSIONAIRE shall meet the requirements of the service itself, as well as those requested by each user area through the SIGI-NS.

The CONCESSIONAIRE shall propose the functional Service organization, considering that during the Operational Stage it shall be provided in coordination with the GRANTOR.

**Documentation**

* Initial information to be submitted by the CONCESSIONAIRE. The CONCESSIONAIRE shall prepare the Service’s POA that includes its direct application. The Service’s POA shall determine the corresponding specifications and procedures within the framework of the Applicable Laws and Provisions and their updates or modifications during the execution of the Contract, as described in Annex 21.

* Periodic information to be submitted by the CONCESSIONAIRE during the Contract
  + The CONCESSIONAIRE shall deliver to the GRANTOR a monthly report containing statistical information on the operation of the service. This report shall contain, at least, the following information:
    - Number of work requests, by type of maintenance performed.
    - Number and causes of occurrences.
    - Efficiency performance of equipment associated with the infrastructure.
    - Energy consumption
    - Percentage of deteriorated infrastructure and equipment over existing infrastructure and equipment.
    - Percentage of idle equipment over existing equipment.
    - Number of Maintenance Work Order (MTO) without attention.
    - Substantiated report of compliance with the Appendix indicated in Annex III, which must be approved by the Supervisor of Contract and Operations.
    - Report on the status of the equipment, informing if there are inoperative or pending repair, detailing the actions taken.
    - Monthly analysis of the efficiency of the equipment associated with the infrastructure.
    - Other information considered relevant for monitoring the Service quality and whose inclusion in the monthly report shall be agreed between the GRANTOR and the CONCESSIONAIRE.
  + The CONCESSIONAIRE shall periodically submit to the GRANTOR for its non-objection, prior favorable opinion of the Supervisor of Contract and Operations, the long-term plans (5 years) for buildings and facilities.
  + Whenever there is a preventive or corrective maintenance action by the CONCESSIONAIRE, it shall issue a work report, which shall include, at least, the following concepts:
    - Date of performance.
    - Location.
    - Model and serial number.
    - Breakdown characteristics.
    - Replacement material.
    - Overhauls performed.
    - Next revision.
    - Statistical information of service management according to the contents and requirements established in ANNEX III., which must be managed from the SIGI-NS System.

The CONCESSIONAIRE shall develop a Seismic vulnerability and risk assessment for this Service, once the Hospital starts operating in order to determine the Mitigation measures to be implemented at its full cost to ensure the continuity of the service. The CONCESSIONAIRE shall submit the terms of reference of the mentioned studies for the non-objection by the GRANTOR with the favorable opinion of the Supervisor of Contract and Operations, prior to the beginning of the operation of the Service. The studies shall be developed and completed within the first sixty (60) days counted from the Service operation start date.

**Definition of terms**

* Asset: A set of assets or rights held by an employing entity. (Glossary of Interinstitutional Terms SUNAT-ESSALUD).
* Sewer or sewage system: The system of structures and pipes used to transport wastewater or sewage (sanitary sewage) or rainwater (storm sewage) from the place where it is generated to the place where it is discharged into a watercourse or to the place where it is considered for treatment.
* State Assets: Movable and immovable assets whose ownership, administration and maintenance corresponds to the Entities, regardless of the level of government to which they belong. They may be Public Domain Assets or Private Domain Assets (Article 5 of the Regulations of Law No. 29022, Law for the Strengthening of the Expansion of Telecommunications Infrastructure, approved by Supreme Decree No. 003-2015-MTC).
* Central gas plant: The premises where the containers of medical grade gases such as oxygen and nitrous oxide are located exclusively, with manifolds, benches, heads and automatic or manual safety control devices, to supply all gases to the distribution networks in gaseous form and in a safe manner, which includes all the necessary installations and the spaces of the tributary areas. All the necessary isolation and protection conditions must be met with the respective signs; which is specified below.
* Cover: They are structures of superior closing, which serve as Exterior Enclosures, whose fundamental function is to offer protection to the building against climatic agents and other factors, for shelter, privacy, acoustic and thermal insulation, as well as all other vertical enclosures.
* Ridge: It is the end of a roof that usually overlaps the last tile of the limatesa tile. It is used to join two high elevation lines, i.e. that it is at the top.
* *Uptime*: It refers to the time when a system, server, device or hardware works without interruptions, i.e. the percentage of operability.
* Structural elements: It refers to those parts of a building that keep it standing, including foundations, columns, load-bearing walls, beams and mezzanines, designed to transmit loads through the beams, columns and foundations to the ground. The failure of one of these elements can generate serious problems to the building, even its total destruction.
* Non-structural elements: Non-structural elements are those elements that are not part of the support system of the building. They are those components that may or may not be attached to the structural parts such as: partitions, windows, doors, enclosures, false ceilings, etc., the vital systems that allow the development of the functions -electrical, hydraulic, sewage disposal networks, heating, ventilation, air conditioning systems, etc.-, and the contents of the building -medical and laboratory equipment, office equipment and furniture, among others.
* Emergency: Sudden and high priority demand for sterilization of materials, which will have response times for emergency care in cases of emergency for medical and surgical material. Example pipe breakage, drainage collapse, etc.
* Equipment linked to Civil Works: Corresponds to equipment associated with the civil work of the Hospital building, such as equipment and devices that are part of and necessary for the operation of all Hospital systems, as well as furniture elements attached to the civil work that corresponds to all structures and furniture attached to walls, floors, ceilings or horizontal or vertical structures, including sanitary devices and others defined by each specialty of the Definitive Engineering Project of Architecture and Specialties as part of the detailed engineering of the project and in the Seismic Vulnerability Study and Risk Study.
* Foundations: Foundations or grounds, it is the system that a construction has to unload or lower the loads from the building components to the firm ground.
* Medical gases: Those that are supplied to the patient in gaseous form, such as oxygen and nitrous oxide, regardless of the state in which they are stored in containers and comply with the purity and presentation characteristics indicated by the regulations.
* Compressed gases: Compressed gases are defined as any gas or mixture of gases contained within a container at an absolute pressure greater than 2.8 kg/cm2 at an ambient temperature of 21°C.
* Liquefied gases: Some gases, depending on their characteristics, the temperature conditions and the pressure to which they are subjected can pass to the liquid state (liquefy 5) this is the case for nitrous oxide, which liquefies at ordinary temperatures and with pressure from 1.7 to 176 kg/cm2.
* Non-liquefiable gases: Non-liquefiable gases are elements or compounds that have relatively low boiling temperatures, from about -90°C and below. These gases become liquid when cooled below the boiling temperature or boiling point. These gases that liquefy at these extremely low temperatures are called "cryogenic liquids". Oxygen is an example of a cryogenic liquid.
* Inventory: Procedure that consists of physically verifying, coding and recording the assets that the entity has at a certain date. In order to verify the existence of the assets, contrast the results with the accounting record, investigate any differences that may exist and proceed to the corresponding regularization. It must follow what is indicated in Directive No. 001-2015/SBN, called "Procedure for the Management of State Movable Property" approved by Resolution No. 046-2015/SBN. This procedure must be auditable at any time and accessible to its information by the administration.
* Limahoya (valley): Intersection between two roof skirts inclined inward, becoming a channel for water coming from rain.
* Slabs: Slabs are construction elements made of reinforced concrete or prefabricated materials of full rectangular cross section or with holes, of little thickness and covering an important surface of the floor. They are used to form floors and ceilings in a building and are supported on beams or walls. They may have one or several continuous spans.
* Manifold: It is a medical gas manifold that controls the flow, either of a single gas or of several gases, when the use of combined gases is required. It is one of the most important parts of a medical gas distribution system in a hospital.
* OTM: Maintenance Work Order. Standardized format in which all the information referring to the individual intervention carried out on a given installation is collected.
* Pavements: horizontal base of a given construction or the different bases of each level of a building.
* Pillar: A pillar is an object that supports or holds up something. Therefore, it can be a kind of column that contributes to the maintenance of a structure.
* Distribution network: It is the piping system that links the supply source located in the gas plant to the terminal devices or wall outlets, including all branch isolation valves, as well as the pressure regulators at the final points of application of the gases.
* Coatings: The action and effect of lining (covering, disguising, simulating). The concept is used to name the covering or layer that allows a surface to be decorated or protected.
* Emergency: Care provided when the user requires surgical material to attend urgent cases, whose time is 10 to 15 minutes.
* Beams: A beam is a series of structural members extending from the edge to the perimeter, designed to support the roof deck or type of load, associated with the elements that make up the roof of a building. Beams are not only intended to support pressure and weight, but also bending and tension.
* Phreatic layer: An accumulation of groundwater found at a relatively shallow depth below ground level.
* Equipment: A generic term that includes fittings, fixtures, devices, appliances, arrangements, apparatus and the like used as part of or in connection with an electrical supply or with communications systems.
* Electrical supply equipment: Equipment that feeds, modifies, regulates, controls, or protects an electrical supply. Synonym: supply equipment.
* Underground cable: Set of conductors insulated from each other, with one or more sheaths and which may be directly buried.
* Roadway: The portion of a street or highway including emergency stop lanes for vehicular use.
* Camera for transformer: An enclosure enclosed above or below ground with fire-resistant walls, floor and ceiling, in which transformers and their associated equipment are installed, and which is not continuously attended during operation. See also: chamber.
* Chamber: A structurally sound enclosure located above or below ground with access restricted to qualified personnel for installation, maintenance, operation, and inspection of the equipment or cables housed in the enclosure, the enclosure may have openings for ventilation, personnel access, cable entry, and other openings necessary for the operation of the equipment housed in the chamber.
* Raceway: Any raceway expressly designed to be used for the sole purpose of housing conductors.
* Current-carrying capacity: The current carrying capacity of an electrical conductor under stated thermal conditions, expressed in amperes.
* Circuit: A conductor or system of conductors designed so that an electric current can flow through them.
* Conduit: A structure containing one or more ducts. A conduit may indicate a metallic pipe, a duct at the level of a surface, etc. If a duct contains only one duct it is called a single duct, if it contains more than one duct it is called a multiple duct, usually specifying the number of ducts, for example: two-duct pipeline.
* Conductor. A material, usually in the form of wire, cable, or rod capable of conducting electric current. Circuit breaker. An on-off device, capable of carrying and interrupting currents under normal circuit conditions and currents under abnormal conditions of a specified duration such as currents under fault conditions.
* Line: An arrangement of conductors, insulating materials and accessories to transmit electricity between two points in a system.
* Grounded: Connected to or in contact with earth or connected to a conductive body acting as the ground.
* Safety signs: Indications, signs, labels, that give directives to be followed to avoid electrical risk, or other hazards and that their compliance helps the development of activities with greater safety.
* Fall Arrest System: The set of equipment such as a safety belt for line workers, overhead lanyard, or full body harness in conjunction with connecting means, with or without an energy absorbing device, and an anchorage to limit the stresses a worker may experience during a fall.
* Fall prevention system: a system that may include a positioning device designed to prevent a worker from falling from an elevated point.
* Fall protection system (equipment): Consists of either a fall prevention system or a fall arrest system.
* Substation: Set of installations, including any buildings required to house them, intended for the transformation of electrical voltage and the switching and protection of circuits or only for the switching and protection of circuits and is under the control of qualified persons.
* Supply: Set of installations that allow the supply of electrical energy in a safe manner and that reaches the point of delivery.
* Inspection box cover: Corresponds to a removable cover that closes the entrance to the inspection box or similar enclosures below the surface.
* Voltage: The effective potential difference between any two conductors or between a conductor and ground. Voltages are expressed in nominal values unless otherwise stated. The nominal voltage of a system or circuit is the value assigned to the system or circuit for a given voltage class in order to have a suitable designation. The operating voltage of the system may vary above or below this value.
* OTM: Medical equipment and clinical furniture maintenance work order, can be a scheduled medical equipment or clinical furniture maintenance activity or a maintenance request from an authorized SIGI-NS user for the maintenance or repair of medical equipment or clinical furniture.
  1. **SERVICE OF ADMINISTRATION, ACQUISITION, MAINTENANCE AND AVAILABILITY OF EQUIPMENT (MEM)**

It consists of the integral management of services of the highest standard for the technical, legal and administrative administration of the processes of acquisition, maintenance and availability of Equipment, in order to guarantee that these assets comply with the Procedures for the Management of State Movable Property. For all purposes, the instruments will be included in the equipment acquisition process and its corresponding inventory management, however, for the Hospital's instruments, only its acquisition, provision and inventory will be considered, and the maintenance and availability obligation will be excluded.

Likewise, the service considers the integral management of services for the renewal of equipment over time in order to guarantee the technological update for the maximum use of the service potential, in support of the healthcare tasks, through technological management, identification of needs, planning, evaluation, acquisition, installation, training, use, maintenance and disposal process, in order to obtain the maximum level of efficiency in support of medical services and its healthcare activities.

The above in order to ensure its administration, availability and reliable and safe operation by the Hospital personnel, guaranteeing the best condition of its parts and components, facilitating the achievement of functions and benefits, managing activities to minimize possible stoppages as a result of failures and managing preventive and corrective actions, in order to guarantee the support to the care work of service to patients, users and personnel of the Hospital.

The Service quality is related, but not limited to:

* Permanent uninterrupted availability of the functional performance of the medical equipment necessary for the healthcare tasks, as well as the functionality of the non-clinical furniture necessary for the support activities for the healthcare tasks and the procedures for the care of the Hospital's users.
* Guarantee at all times, the safety, reliability and availability of the performance of the equipment components of the different systems implemented for the Hospital.
* Unrestricted compliance with all Applicable Laws and Provisions.

**Purpose**

The service consists of carrying out the acquisition, technical administration of the assets, inventory management and maintenance of all the equipment acquired by the CONCESSIONAIRE in accordance with the provisions of this Contract and the Applicable Laws and Provisions.

Likewise, the replacement of the equipment that is terminated or is determined according to the procedures and opportunities established in the Contract.

For all the Equipment that the CONCESSIONAIRE acquires or provides as a requirement of the Contract, it shall generate and manage its inventory, keeping it permanently updated and accessible to the Hospital's administration, including instruments and non-expendable medical material.

The service must manage and maintain the goods acquired in perfect working order at all times, in order to guarantee their availability, reliability and safety in their operation, and must be managed from the perspective of the integrity of the processes involved throughout their life cycle.

**Scope**

This service corresponds to the technical administration of the Equipment, applying the technological management cycle, which involves the identification of needs, planning, evaluation, acquisition, installation, training, use, maintenance, availability and disposal process, i.e. these assets must be managed and administered from the perspective of the comprehensiveness of the processes involved throughout their life cycle.

The Equipment that the CONCESSIONAIRE acquires or provides as a requirement of the Contract, the CONCESSIONAIRE must manage it and maintain it in perfect working order at all times in order to guarantee its availability, reliability and safety in its operation. The responsibility for this service shall be understood to include the transport vehicles (ambulances, vans, etc.) defined in the Contract as part of the Hospital's equipment, in respect of which the obligations established for the rest of the equipment, including insurance, shall apply.

The areas of responsibility of the CONCESSIONAIRE shall be as follows, without prejudice to the definitions established in the POA of the Service:

* Procurement, installation and user training management
* Administration, coding and maintenance management
* Warranty, insurance, repair and contingency plan management
* Technology management, identification of needs, planning and evaluation
* Technical Care management of requirements through the SIGI-NS system
* Replenishment management, retirement procedure and replacement procedure
* Permanent management of inventories and record of their disposition in the Hospital.

Additionally, the CONCESSIONAIRE shall be responsible for the transfer of the Equipment under its responsibility, in order to guarantee the sustainability, conservation, useful life and integral maintenance of the assets, in permanent coordination with the Hospital's medical Head of Service s in accordance with the provisions of this Annex.

**Time Availability**

The CONCESSIONAIRE must provide the service on a continuous and uninterrupted basis, every day of the year, guaranteeing the administration, availability, operability and safety of the Equipment, as appropriate.

The CONCESSIONAIRE must provide permanent personnel at the Hospital during the Hospital's business hours, as well as the necessary resources to respond to any need or request that may arise outside such hours.

**Regulations**

For the provision of the Service, the CONCESSIONAIRE, considering the best practices and international standards, shall comply at least with the Applicable Laws and Provisions and the procedures established in this regard by the GRANTOR through the Supervisor of Contract and Operations, in order to guarantee at all times, the safety in terms of prevention of HAI, transmission of infectious and contagious diseases and occupational accidents.

In any case, the CONCESSIONAIRE shall comply with the technical standards set forth by the Ministry of Health or any other Competent Governmental Authority.

In particular, the CONCESSIONAIRE shall comply, as a minimum, with the following Applicable Laws and Provisions:

* Directive No. 001-2015/SBN, called "Procedure for the Management of State Movable Property" approved by Resolution No. 046-2015/SBN.
* Law No. 29151, General Law on the National System of State Property.
* Regulations of Law No. 29151.
* Administrative Directive: Technical Procedures for the Reception and Delivery of Equipment for the various Health Establishments. Ministry of Health. 2012.
* Technical guide for the preventive maintenance of the standard neonatal incubator. General Directorate of Infrastructure, Equipment and Maintenance. Ministry of Health. 2011.
* Technical guide for preventive maintenance of the capnograph. General Directorate of Infrastructure, Equipment and Maintenance. Ministry of Health. 2011.
* Technical guide for preventive maintenance of general use laparoscopic surgery equipment. General Directorate of Infrastructure, Equipment and Maintenance. Ministry of Health 2011.
* Medical device needs assessment. WHO technical document series on medical devices. World Health Organization. 2012. 2012 and other updated versions.
* Introduction to medical equipment inventory management. WHO technical document series on medical devices. World Health Organization. 2012. 2012 and other updated versions.
* Computerized maintenance management system. WHO technical document series on medical devices. World Health Organization. 2012. 2012 and other updated versions.
* Guidelines for the development of the equipment plan for Health Establishments. Ministry of Health. 2012.
* IEC 60601 standard and IEC 62353.
* IEC 60364-7-710: 2002-11, general electrical safety requirements for electro-medical equipment.
* DGE 011-CE-01 Standard. Standard on connections for electrical energy supplies up to 10 kW.
* Regulation on Safety and Health at Work for Electrical Activities.
* Other standards related to medical equipment.

**Equipment and Accessories**

The CONCESSIONAIRE shall bear the full cost and risk of all spare parts, accessories, parts and pieces of equipment and materials necessary to carry out the corresponding Maintenance.

All spare parts, parts and accessories used by the CONCESSIONAIRE shall correspond to original units and of equal or superior technical characteristics to those indicated by the manufacturer in its manuals of procedures, as well as everything not detailed in said procedures, but necessary for the correct operation of the equipment. In case this condition should be temporarily or permanently modified for justified cause, the CONCESSIONAIRE shall submit an alternative to the Supervisor of Contract and Operations for his opinion and compliance.

Likewise, in accordance with the provisions of this Contract, the maintenance, acquisition and replacement of the Equipment, or any other element that the CONCESSIONAIRE uses for the provision of this Service, shall be provided by the CONCESSIONAIRE at no additional cost and when required by the equipment.

Note that in the event of any contradiction in the accessory catalogs of local suppliers for a piece of equipment, in relation to the manufacturer's catalogs, the manufacturer's documents shall prevail.

Among the service obligations are included those elements of the equipment that may be called "consumable", exhaustible or consumable in the manufacturer's manuals, but that are part of the original equipment, which will be the responsibility of the CONCESSIONAIRE to consider them in the maintenance and replacement work, such as Galvanic Cells, Batteries, Lamps, etc.

Excluded from this obligation are those consumables that are not part of the equipment, but which as a whole fulfill a specific function.

**Personnel**

The CONCESSIONAIRE shall have sufficient qualified professional, technical and auxiliary personnel for the performance of the functions within the scope of the service, complying with the requirements established in the Contract, so that the activity is not interfered with by issues related to lack of human resources (sick leave, training, absences, etc.).

In order to ensure that the service is provided in accordance with the provisions of the Contract, the CONCESSIONAIRE must have an organizational structure and staffing that meets such requirements. Said personnel shall have sufficient experience and training to adequately perform their work, which shall be defined in the POA corresponding to the service.

Notwithstanding the foregoing, the minimum conditions for the service personnel shall comply with the following requirements:

* Service Supervisor: Civil Engineer or Mechanical Engineer or Electrical Engineer or Electronic Engineer or Biomedical Engineer with 7 years of professional experience and 5 years of experience in similar positions in Health Establishments.
* Specialized Technicians: Mechanical or Electrical or Electronic Technician with a minimum work experience of 5 years and 3 years of experience in similar positions in Health Establishments.
* Assistants and others: Minimum work experience of 3 years.

The uniform of the technical personnel must be clearly identified, with the company's name displayed on the back of the technical personnel's shirt; they must also have the safety equipment required to perform their work, as well as equipment, devices and tools compatible with the work for which they have been hired and with the work safety conditions, which will be defined in the POA corresponding to the Service.

The personnel profiles shall be submitted to the Supervisor of Contract and Operations, for compliance with the corresponding technical standard, ten (10) days prior to the start of the Service. Any subsequent change shall be communicated and the corresponding profile shall be submitted to the Supervisor of Contract and Operations for a favorable opinion, at the latest one (1) day after the change occurs.

**Technical - Functional Specifications of the Service**

**Service administration**

For an adequate management of the administration, the CONCESSIONAIRE, through the SIGI-NS system established in this Contract, shall perform, as a minimum, the following activities:

* Register, monitor and resolve all the requests submitted by the SIGI-NS users defined in this Contract, regarding alterations or failures detected in the Equipment. Likewise, the CONCESSIONAIRE shall timely notify the Supervisor of Contract and Operations, through the SIGI-NS, the estimated repair time, so that the Hospital's Management may manage the corresponding actions in order not to affect the continuity of its healthcare operation.
* Monitor all activities carried out on the Hospital Equipment, coordinating the Preventive and Corrective Maintenance schedules, recording them in SIGI-NS, in order to carry out a management of the service history.
* Maintain a system of alerts for the replacement of the Equipment, considering its useful life and the behavior of its history, which allows maintaining its functionality and operability in optimal conditions, according to the manufacturer's recommendations.
* Monitor the performance of the Equipment according to its availability, the Care offer by the Hospital and its effective use, informing through periodic reports (monthly) prepared by the CONCESSIONAIRE and online access, through the SIGI-NS established in this Contract.
* Perform all the necessary steps for the technical, legal and administrative administration of the equipment and its corresponding inventories, manage subcontracts, warranties, insurance and support services.
* All computer systems for recording maintenance activities must be provided with an interface so that the GRANTOR, through its technical area at the central level can have such information in real time.
* The record of maintenance activities of the equipment on loan; for example: infusion pumps or infusion syringes, etc., must be communicated to the GRANTOR, with a copy to the Supervisor of Contract and Operations.

**Procedure for the provision of maintenance services**

The CONCESSIONAIRE shall prepare and update the following maintenance record and control documents in accordance with the definitions set forth in the POA:

* Maintenance work order (MTO) or requests through SIGI-NS.
* Technical file (FT) of equipment and furniture.
* Historical record (RH)
* Other reports established in the POA.

The information shall be integrated with the maintenance computer systems of the GRANTOR in coordination with the SIGI-NS. The maintenance program and procedures shall be defined by the CONCESSIONAIRE in the corresponding POA and validated by the Supervisor of Contract and Operations in coordination with the technical area designated by the GRANTOR.

The CONCESSIONAIRE for the execution of the maintenance works shall:

* Coordinate with the head of the User Service or whoever the Hospital Management designates, through the Supervisor of Contract and Operations, the start or execution of the scheduled maintenance activity, in such a way that the work of the user service is not interrupted.
* It will execute the maintenance using the means and resources defined in the approved POA.
* When the work is concluded, it will demonstrate to the user the efficiency of the maintenance executed, through the reception procedures defined in the POA, which will be coordinated and reported to the Hospital Management through the Supervisor of Contract and Operations.
* The CONCESSIONAIRE will receive the repair or technical Care requests through SIGI-NS. Such notices may be registered by the SIGI-NS users defined by the Hospital. In this regard, the CONCESSIONAIRE shall generate a OTM for its attention. Once the equipment has been repaired, it must be registered in SIGI-NS for traceability.

**Management of Hospital Assets (Inventory, Equipment - IE)**

The CONCESSIONAIRE shall generate and keep updated the inventory of Equipment, which shall be called (IE) including that which has been incorporated on loan or otherwise by the Hospital's Management, in accordance with the provisions of Directive No. 001-2015/SBN, entitled "Procedure for the Management of State Movable Property" approved by Resolution No. 046-2015/SBN. Notwithstanding the aforementioned, the CONCESSIONAIRE must keep the corresponding inventory of equipment. For the foregoing, it must coordinate the access to the information with the Hospital Management through the Supervisor of Contract and Operations. Likewise, it must comply with the Applicable Laws and Provisions.

These rules define the procedures for the registration, cancellation, acquisition, administration, disposal, supervision and registration of the Hospital's personal property, which are included in the National Catalog of State Property, as well as those assets that are not or are likely to be incorporated into the assets of the entities. The update will be carried out through the use of SIGI-NS.

Regarding the surgical instruments, the CONCESSIONAIRE shall, by means of a codification, unequivocally establish the individuality of each asset, being in charge of the control and traceability of such instruments.

The goods acquired by the CONCESSIONAIRE corresponding to this service shall be included in the SIGI-NS System Database, and shall correspond to the Inventory of Medical Equipment and Clinical Furniture (IEMMC), which is part of the Annual Inventory.

The Supervisor of Contract and Operations may at any time generate a SIRI through the SIGI, which must be updated with respect to the Registry of the Procedure for the Management of State Movable Property (PGBME).

**Acquisition process**

It consists of the acquisition of the Equipment required for the Hospital, in accordance with the Technical File and the provisions of this Contract. These goods must be new and unused and of the latest model and technology.

The CONCESSIONAIRE is responsible for the management of the acquisition, transfer, installation and commissioning of the Equipment considered during the term of this Contract, as well as for the training of the Hospital's employees, users of the same, when applicable, in accordance with the terms defined in this Annex. For these purposes, the acquisition includes the items of Equipment necessary for the operation of the Hospital, which are incorporated for the first time by the CONCESSIONAIRE.

The acquisition conditions, as well as the technical specifications of each Equipment to be acquired by the CONCESSIONAIRE shall be previously validated by the GRANTOR, through the Supervisor of Contract and Operations.

The CONCESSIONAIRE shall register all the acquisition processes and its follow-up in the SIGI-NS, according to the provisions of this Contract. For the provision of the Medical Equipment, Clinical and Non-Clinical Instruments and Furniture Procurement Service, the CONCESSIONAIRE shall comply with the Applicable Laws and Provisions.

The CONCESSIONAIRE shall provide the Hospital, in the applicable cases, with the Equipment that has international certification to be operated, requiring at least FDA (*U.S. Food and Drug Administration*) or EC (*European Community*) approval and current sanitary registrations. Likewise, at least the following certificates, as applicable, shall be required:

* ELECTRICAL SAFETY CERTIFICATE: UL, AAMI, NFPA, IEC, EN, CSA, FCC or equivalent.
* ISO 13485:2016 CERTIFICATE: Issued by Independent Institution. Certifications that demonstrate equivalence to the standards required by ISO 13485:2016 will be accepted.
* ISO 9001:2015 CERTIFICATE: Issued by Independent Institution, which endorses the quality of the product. Certifications that demonstrate the equivalence of the standards required by ISO 9001 will be accepted.

The CONCESSIONAIRE shall guarantee that the service is provided in accordance with the provisions of this Contract, and shall have an organizational and staffing structure that meets the requirements set forth therein. For these purposes, it shall comply, as a minimum, with the following:

* Personnel in charge of the service in accordance with the provisions of this Contract.
* The personnel must demonstrate the technical training in the areas of administration and technical purchases necessary for the provision of the service and must demonstrate at least 5 years of work experience in the area of Equipment purchases.

**About the discharge process**

This is the procedure that consists of the incorporation of an asset into the entity's asset register. This incorporation also implies its corresponding accounting record, which is made according to the regulations of the national accounting system. It shall incorporate the GRANTOR'S patrimonial codes, for which it shall be coordinated with the Hospital's Management through the Supervisor of Contract and Operations.

Any discharge of any Equipment installed in the Hospital must follow the procedures of the "Administrative Directive: Technical Procedures for the Reception and Delivery of Equipment for the different Health Establishments. Ministry of Health. 2012" or its equivalent of the GRANTOR or the one that replaces it.

All additions shall be registered in the Maintenance computer systems available to the CONCESSIONAIRE and in the SIGI-NS system, thus becoming part of the Annual Inventory.

The registration of assets in the SIGI-NS system in accordance with the Procedure for the Management of State Movable Property shall be called PGBME and must be kept permanently updated. The foregoing shall be a condition for the Supervisor of Contract and Operations to authorize the installation, disposition and reception of each piece of equipment so that the CONCESSIONAIRE may proceed to include it in the IEMMC inventory.

**About the instructions for use**

The CONCESSIONAIRE shall include in the POA corresponding to the service, the user and technical service manuals of the Equipment that so require. In the event that the original instructions for use are in a language other than Spanish, the CONCESSIONAIRE shall deliver a translation into Spanish, attaching a copy of the accreditation to the translation, without omitting the responsibility that the CONCESSIONAIRE would incur in the event of detecting any error, fraud or bad faith in the interpretation of such translation.

During the start-up period, together with the user training activities, the CONCESSIONAIRE shall deliver the instructions for use of each Equipment that requires it, to its own personnel, to the Hospital's personnel and to the Supervisor of Contract and Operations and the Services Operation Manuals, in accordance with the provisions of the POA of the service.

If during the term of the Contract, one Equipment is replaced by another; the CONCESSIONAIRE shall be responsible for delivering to the Hospital's personnel and to the Supervisor of Contract and Operations, the corresponding instructions for the changed device, in the terms mentioned above.

**About reception, opening, packing, storage and installation**

For the installation of the equipment, the CONCESSIONAIRE shall deliver new, unused goods, with all the accessories, parts and pieces necessary for their correct use.

The aforementioned goods shall be deposited at the place and time indicated by the Hospital in coordination with the Supervisor of Contract and Operations. The CONCESSIONAIRE is responsible for the reception, opening, packing, storage and installation of the same.

For the installation of said goods, compliance with the following clauses shall be an essential requirement:

* The Equipment must be supplied with all those interconnection devices or elements, supplies and accessories necessary for a total and correct operation and all the corresponding support, anchorage, fastening and termination systems, in accordance with the approved Technical Files.
* In case of replacement, the above good must be properly uninstalled and packed according to the instructions given by the Supervisor of Contract and Operations, after coordination with the Hospital Management.

**About the commissioning**

The CONCESSIONAIRE shall include in the POA the Equipment Commissioning Program, in which it shall chronologically define the activities to be carried out for the operation tests, such as: failures, safety conditions, backup, alarms, risks, alternate plans, among others.

The CONCESSIONAIRE shall guarantee during the Pre-operational Stage the correct functionality of all the Equipment defined in the Technical File and validated by the GRANTOR, for which the CONCESSIONAIRE shall consider the provision of consumables, installation networks and everything necessary for the performance of the functional tests, which shall be approved by the CONCESSIONAIRE and the Supervisor of Contract and Operations in accordance with the procedures established for such purpose.

The Supervisor of Contract and Operations shall have all the powers of verification and inspection, and may carry out such controls as it deems appropriate in order to ensure that the Equipment is functioning correctly and that its installation complies with the requirements of the Contract and its Annexes.

Once the performance tests have been carried out, the CONCESSIONAIRE shall deliver to the Hospital and to the Supervisor of Contract and Operations, within a maximum period of six (6) Days after each test, a written report containing the results of the test, which shall serve as a reference to establish the base quality level of performance.

The CONCESSIONAIRE shall deliver a physical copy and a digital copy of such written report to the Supervisor of Contract and Operations and to the Hospital's Management, and shall make the corresponding record in the maintenance systems and the SIGI-NS system.

**About the training**

The CONCESSIONAIRE shall be obliged to train both the Hospital's personnel and the CONCESSIONAIRE’s personnel in charge of this service during the Pre-operational Stage so that they may properly operate the Hospital Equipment.

The training to be provided by the CONCESSIONAIRE shall include all the personnel linked operationally to the direct use of each Hospital Equipment during the entire term of the Contract. Upon a change of equipment for any reason whatsoever, at any time during the term of the Contract, the CONCESSIONAIRE shall be obliged to provide training to the personnel of the CONCESSIONAIRE and to the Hospital's personnel, operationally linked to this type of equipment.

The training plans shall include, among others, aspects such as operation, conservation and cleaning of the Equipment as appropriate, which shall be qualified by the Supervisor of Contract and Operations.

The CONCESSIONAIRE shall submit to the Hospital Management and the Supervisor of Contract and Operations, as part of the corresponding POA, a document detailing the contents for providing the training, including: scope, contents, scheduling, location, maximum quota per group and registration and evaluation methods to guarantee the quality of the training.

The CONCESSIONAIRE shall be responsible for implementing a technical library and video library (if applicable) with the technical manuals, operation manuals and other technical documents of each equipment acquired or replaced for the Hospital, keeping it updated and available for easy use or consultation. The implementation of such library may be verified by the Supervisor on a periodic basis.

**About maintenance actions**

The CONCESSIONAIRE’s obligation to maintain the Equipment shall commence upon its installation and shall terminate upon the expiration of the term of this Contract.

The CONCESSIONAIRE is responsible, at its sole cost and risk, for executing the maintenance actions, which shall include, at least, the following:

* Inspect and control the reference values of operation, which correspond to the different equipment, according to the corresponding service manuals with the presence of the Supervisor of Contract and Operations and in coordination with the Hospital personnel.
* Perform preventive and corrective maintenance activities of the Equipment, including the replacement of their respective parts and accessories.
* Report monthly on future maintenance requirements to ensure continuity of equipment operability.
* Comply with the level of availability of the Equipment indicated in the list established in this Contract.
* Ensure that all the Equipment, in accordance with the maintenance program, is permanently calibrated according to the manufacturer's recommendations, operating in optimal conditions as established in this Annex, the corresponding technical specifications set forth in this Contract and the Applicable Laws and Provisions, thus minimizing the risks for patients and user personnel as a result of failures and interruptions.

These maintenance actions should be carried out under the following premises:

* Ensure with its actions the integrity of the equipment, so that they develop continuously, without interruptions or deficiencies and without affecting the normal operation of the Care service where the equipment is installed;
* Minimize the impact or inconvenience that could be caused by the service in the Care units;
* Provide a service with maximum quality and efficiency and according to the Applicable Laws and Provisions at all times.

Therefore, the CONCESSIONAIRE shall carry out the inspections and preventive and corrective maintenance operations according to the indications of these technical clauses, guaranteeing the proper use, good conservation and durability of the equipment.

**Inspections**

The CONCESSIONAIRE shall perform daily inspections, prioritizing operating rooms and intensive care or critical treatment units, and others indicated by the Supervisor of Contract and Operations, both at the beginning and at the end of the day, recording any occurrences in a daily record, at which time a corrective action shall be taken to remedy them, which shall be recorded in the SIGI-NS system. This procedure must be detailed in the POA of the service.

**Preventive maintenance**

The POA shall include scheduled preventive maintenance actions on the equipment included in the scope of the Contract, on a scheduled basis, including all cleaning activities, measurements, checks, process certifications, calibrations, regulations, inspections, adjustments, settings, lubrication and others indicated by the manufacturer, as well as all those actions that tend to ensure the optimum condition of the equipment.

Within the scheduled preventive maintenance of the equipment, the verification of the leakage currents of each piece of equipment shall be performed, when appropriate. Likewise, equipment adjustments must be carried out with instrumentation that has current certification by an accredited entity for this purpose. In any case, it is required that the verification of parameters (biomedical metrology) must be performed once a year, even if the preventive maintenance is every 6 months.

On a monthly and permanent basis, the CONCESSIONAIRE must inform the Supervisor of Contract and Operations, with a copy to the Hospital Management, of the maintenance program and associated activities corresponding to the month following the report, with details of the dates and times of intervention by equipment. This schedule shall be adjusted according to the Care needs of the Care Services.

The CONCESSIONAIRE shall submit, each year as part of the service's POA, the Scheduled Preventive Maintenance plan to the corresponding authorities of the Hospital.

Once the scheduled preventive maintenance has been carried out, a detailed technical report shall be submitted to the Supervisor of Contract and Operations, with a copy to the Hospital, indicating all the problems encountered and the corrective actions carried out. Likewise, the preventive maintenance protocols will obligatorily include reference to the calibration certificates and their expiration date on all equipment used, as well as the information corresponding to the results of the electrical safety tests. The above may be delivered digitally by e-mail or other available means and in any case must be duly recorded in the SIGI-NS.

The scheduled preventive maintenance includes the replacement of all the parts that, due to the manufacturer's recommendation or because they are out of order, need to be replaced. The CONCESSIONAIRE shall assume the cost thereof, expressly including the necessary maintenance kits.

In the case of preventive maintenance of highly specialized biomedical equipment, where highly specialized personnel are required (such as CT scanners, resonators, angiographs, linear accelerators), the CONCESSIONAIRE shall submit to the Supervisor of Contract and Operations the document certifying that the manufacturer will be in charge of preventive maintenance.

**Corrective maintenance**

The CONCESSIONAIRE shall efficiently manage the corrective maintenance of the hospital equipment, considering the timely and efficient execution of repairs and their subsequent commissioning. Likewise, it shall provide support and technical advice to the Care users who request it, including a support and technical advice service for user requests through the SIGI-NS system and proceed to attend to the request within the maximum response times established in the Contract.

This service must be provided minimizing interference with the normal activity of the Care service, and when this is unavoidable, coordinating the opportunity to carry out corrective maintenance activities with the Hospital's management through the Supervisor of Contract and Operations.

The operational criteria will be as follows:

* Correct any type of failure that affects or may affect the equipment, which will be known by the CONCESSIONAIRE through the following ways:
  + By means of a communication issued by the SIGI-NS users of the equipment.
  + By means of the maintenance inspection carried out by the CONCESSIONAIRE itself and communicated to the technical services.
  + By means of communications from the Supervisor of Contract and Operations.
* Those interventions involving equipment stoppages or risk of stoppage on other components in operation shall be previously authorized by the engineering area or whoever takes its place, through the Supervisor of Contract and Operations and carried out on the dates and times to be established in agreement with the CONCESSIONAIRE.
* The CONCESSIONAIRE shall describe in the OTM the detail of the works performed once its interventions are finished, which shall be available for the engineering area or whoever takes its place. In case the repair of an equipment exceeds the correction time, due to the delay in the shipment of a spare part, accessory or consumable, the CONCESSIONAIRE shall submit to the Supervisor of Contract and Operations, and through the SIGI-NS system, the following information:
  + Request of the spare part or accessory to the supplier with the corresponding technical specifications.
  + Quotation of the spare parts, pieces or parts.
  + Coordination communications with the supplier (letters, e-mails, etc.).
  + Purchase Order with the respective delivery date.
  + Document that evidences that the purchase has been made.
* All corrective interventions performed on each Equipment shall be recorded in the historical record of each Equipment in the SIGI-NS system.
* The CONCESSIONAIRE is responsible for ensuring that all Equipment purchased or replaced is available above the Minimum Availability levels established in the list indicated in this Contract. If an Equipment is stopped due to preventive, corrective or repair maintenance, whether scheduled or not, and the resulting level of availability is lower than the Minimum Availability level established in this Contract, the Hospital may not fail to provide the corresponding health services. For these purposes, the CONCESSIONAIRE shall act as follows:
  + In the case of Equipment corresponding to any of the following biomedical equipment: Diagnostic Support, Endoscopic Support, Therapeutic Support or Monitoring, which have been installed in the critical zoning, the CONCESSIONAIRE shall replace the equipment that is failing for another one, provided that the shutdown exceeds the established correction times set at zero (0) and its repair is prolonged in time enough so that the normal Care activity is affected. Such replacement equipment shall be of similar or better characteristics that provides the same functionalities within the Hospital and shall not entail any cost for the GRANTOR.
  + In the case of those equipment that are part of the CONCESSIONAIRE’s scope, whose lack of availability means an impact on the Care activity, once the correction time has passed without having returned the availability of the same, the CONCESSIONAIRE shall provide all the necessary and appropriate means so that the Care activity is not affected, even if such measures entail contracting an external provider, and the CONCESSIONAIRE shall assume in full the costs generated by this solution, including the transfer of patients to that location, without prejudice to the corresponding penalties attributable to the quality or availability failure attributable to the CONCESSIONAIRE. To this end, the CONCESSIONAIRE shall submit the following to the Supervisor of Contract and Operations for approval:
    - A proposal for an agreement for the provision of health services with Health Establishments in the city. These health service providers must be duly authorized before the Health Authority and accredited by it as appropriate, which will be qualified by the Supervisor of Contract and Operations.
    - A proposal of the administrative procedure for the implementation of the aforementioned agreement, which will allow to meet the daily demand of inpatients and outpatients.

Once the Equipment has been repaired, the Supervisor of Contract and Operations shall verify its operational restoration, in coordination with the Hospital's service managers, in order to verify that all its functionalities are available, which shall be recorded in the SIGI-NS system.

**Maintenance outside the Hospital's facilities**

In order to achieve better results in the contracted service, and in special situations, the Hospital may authorize the maintenance of the equipment outside its facilities.

The service responsible for the equipment shall coordinate with the Supervisor of Contract and Operations or patrimony area, as the case may be, where the corresponding output slip shall be drawn up, where the equipment shall be identified, the conditions in which the equipment is being removed from the Hospital including a photographic record of the same, which shall be duly signed by the company's representative, the technician in charge of supervising the work and the coordinator of the maintenance service.

For the entry of the goods into the Hospital, the CONCESSIONAIRE shall coordinate with the Supervisor of Contract and Operations and the Hospital authorities and shall present the exit ticket, which shall be the only proof of having left the Hospital's facilities.

For these purposes, the transportation of equipment into and out of the Hospital shall be the sole responsibility of the CONCESSIONAIRE.

**Computerized service management**

The CONCESSIONAIRE shall keep a computerized record, which shall include at least the one that must be approved by the Supervisor of Contract and Operations.

The CONCESSIONAIRE, through the software implemented, shall monitor the main service management indicators. This computer system may be part of the SIGI-NS system. The SIGI-NS system shall have a tool organized as a contingency plan for cases in which it temporarily loses operability, said contingency plan shall consider the replacement of the information in the SIGI-NS system so as to guarantee the security of the information, continuity of records, traceability, measurements, operability and other functionalities of the system.

Notwithstanding the above, the CONCESSIONAIRE shall implement the necessary measures for the integration with the maintenance systems of the GRANTOR in order to visualize the maintenance management.

**Functional safety and reliability**

All maintenance activities carried out must permanently ensure compliance with Applicable Laws and Provisions, both with regard to the safety of patients and personnel. For these purposes, the necessary analyses, tests and trials must be carried out to guarantee the preservation of both the electrical safety and the functional safety of the equipment.

After the technical work has been carried out, the CONCESSIONAIRE must verify that the initial characteristics and technical specifications are maintained by means of the corresponding calibrations, in order to guarantee the safety and reliability of the equipment after the intervention. The analyses, tests and calibrations include:

* All tests that are part of the background and recommendations to that effect provided by the manufacturer's technical and service manual.
* Electrical and functional safety test to medical equipment loaned or donated to the Hospital.

For the provision of the service, the CONCESSIONAIRE shall have the corresponding analyzers, simulators and calibrators to verify, calibrate and perform the acceptance tests of all the Equipment under the control of the CONCESSIONAIRE. The instruments used by the CONCESSIONAIRE must have a valid calibration certificate.

The CONCESSIONAIRE shall label the equipment that underwent maintenance: with the date the maintenance was performed, the date of the next maintenance, the type of maintenance and the name and signature of the person who performed the maintenance; if a calibration is required, a booklet with the calibrations performed shall be attached to the OTM, duly dated and signed by the qualified personnel who performed the calibrations and the validity of the calibrations. The above will be validated by the Supervisor of Contract and Operations and registered through SIGI-NS.

If the equipment is inoperative, it shall be duly labeled as inoperative with the date on which it became inoperative, and shall be removed to the area designated by the CONCESSIONAIRE for this purpose.

The CONCESSIONAIRE shall keep updated in the SIGI-NS the registry of these equipment and devices, indicating the serial number and copy of the calibration certificate of each one. This shall be recorded in the technical data sheet of each piece of equipment, as appropriate.

The CONCESSIONAIRE shall have all the calibration equipment required for its activity, which must have a valid calibration certificate and be validated by the Supervisor of Contract and Operations.

* All labels must be protected to prevent deterioration.
* In the POA of this Service, the equipment and devices used for the maintenance of the Hospital Equipment are detailed. In the event that the calibration of any specific parameter of the Equipment is required, and the list delivered does not include the necessary instrument, the CONCESSIONAIRE shall request the calibration through an external company or acquire the appropriate calibrator at its entire cost and risk. The CONCESSIONAIRE shall record the registration of this equipment and apparatus, indicating the serial number and copy of the calibration certificate of each one, which shall be registered in the SIGI-NS system.
* The CONCESSIONAIRE shall accredit, at the beginning of the Operational Stage and every 12 (twelve) months, the corresponding calibration certification in those equipment and apparatus that so require it.
* The Supervisor of Contract and Operations shall verify the correct execution of the revisions and repairs carried out by the CONCESSIONAIRE, and may request the CONCESSIONAIRE to repeat the aforementioned tests in a substantiated manner.

The CONCESSIONAIRE shall keep itself informed of the Health Alerts issued by the entities in charge of Health Technology Assessment (national and international) and the manufacturers, in order to detect failures or anomalies in the operation of the medical equipment and take the corresponding actions, in order to avoid putting patients and users at risk. In this sense, the Health Alerts or recommendations for action from the *Emergency Care Research Institute* (ECRI) and the manufacturers will be reviewed monthly and in coordination with the GRANTOR, the Supervisor of Contract and Operations and the CONCESSIONAIRE, in the event of anomalies detected in the operation, proceeding to their resolution in accordance with the indications received.

For all purposes, the CONCESSIONAIRE may not provide the Hospital with Equipment that lacks international certification to be operated, requiring at least FDA (U*.S. Food and Drug Administration*) or CE (*European Community*) approval, when applicable.

**Termination process**

Any deregistration of any equipment installed in the Hospital must follow the procedures of Directive No. 001-2015/SBN, entitled "Procedure for the Management of State Movable Property" approved by Resolution No. 046-2015/SBN.

Supplementary to the aforementioned Directive, the cancellation of an item may only be requested in any of the following situations:

* The equipment item has reached the end of its useful life or is in poor condition.
* That the item has been discontinued due to exceeding the legal time for the supply of spare parts or the impossibility of locating original spare parts in the market.
* That the amount of the spare parts or repair exceeds 40% of the replacement value of the asset (it is not cumulative) and it does not have a warranty or insurance in force, which must be accredited by a report of an expert or external expert independent from the CONCESSIONAIRE, hired at its cost and risk, and prior approval of the Supervisor of Contract and Operations. For this purpose, such report shall include at least the following information and shall be recorded in the SIGI-NS system:
  + Equipment information (including but not limited to: make, model, series, asset code, origin, year of manufacture, date of commissioning, supplier name, initial cost, physical location).
  + Historical information on maintenance performed (including but not limited to: OTM number, type of maintenance, date of request, description of maintenance service performed, downtime, maintenance time, cost of maintenance and corresponding support).
  + Analysis of the causes of the damage (including but not limited to: caused by water, natural events, fire, explosion, terrorism, vandalism, civil commotion, robbery, theft or unlawful appropriation, damage caused by error or human error of the users, the CONCESSIONAIRE or third parties that do not correspond to damage due to negligence, fraud or inexcusable fault; all of them accompanied by the corresponding support).
  + Technical diagnosis of the damage (attaching supporting documents).
  + Description of the maintenance procedure (attaching supporting documents).
  + Cost of the maintenance procedure (attaching the quotations or market studies that support the amount).
  + Comparative evaluation of equipment of similar characteristics (comparative table with details of at least three (03) pieces of equipment, using the technical specifications established in the equipment acquisition requirement; attaching, in addition, the catalogs, brochures and manuals of the equipment used in the comparison).
  + Comparative table of the acquisition costs of the equipment of similar characteristics in relation to the cost of the procedure (attaching the quotations or market studies that support such amounts).
  + Conclusions of the technical reports on the proposed disposal of the equipment.
* That the Equipment warranty is in force and the supplier shall make the corresponding replacement.
* If the insurance of the Equipment provided for in this Contract does not cover its repair or replacement.
* That a health alert or regulation recommends the non-use of a certain Equipment.

In the event that a good does not have the manufacturer's warranty, 2 or more of the other situations mentioned above must be fulfilled in order to proceed with its cancellation.

For that Equipment to be written off, the CONCESSIONAIRE shall:

* Carry out the deinstallation, removal and final disposal of the equipment at its own expense, cost and risk. This activity will be scheduled and must have prior authorization from the Supervisor of Contract and Operations, who will coordinate with the Property Control Unit or whoever takes its place. In the event that the Equipment requires a complex de-installation, the CONCESSIONAIRE shall submit a De-installation and Relocation Plan to the compliance of the Supervisor of Contract and Operations, prior to its execution.
* Manage the guarantees before the suppliers, when it corresponds the replacement of the decommissioned item.
* Manage with the corresponding insurance company the processing of the claims settlement that will allow financing the replacement of the decommissioned item.

**Replenishment process**

It consists of the replacement of the Equipment required for the Hospital, in accordance with the provisions of this Contract.

The CONCESSIONAIRE is responsible for the management of the replacement, de-installation and transfer of the Equipment considered during the period of this Contract, in accordance with the terms defined in this Annex. For these purposes, this relocation service includes the replacement of Equipment items corresponding to units already acquired by the CONCESSIONAIRE in a previous investment within the APP Contract period. The provision of this service shall be coordinated with the Hospital. The goods acquired for replacement must be new and unused and of the latest model and technology.

The CONCESSIONAIRE shall provide the service on a continuous basis in accordance with the Hospital's requirements, according to the procedure established in this Contract. The CONCESSIONAIRE shall register all replacement processes and their follow-up in the SIGI-NS, in accordance with the provisions of this Contract.

For the provision of the Service, the CONCESSIONAIRE shall comply with the Applicable Laws and Provisions.

**Unscheduled Replenishments**

Equipment replacements during the term of the Contract, in accordance with the provisions of Clause 6.41.

**Response times**

Contingencies of all kinds shall be foreseen and the response times established in this section shall be taken into account. The CONCESSIONAIRE shall guarantee a response time (until the CONCESSIONAIRE accesses the equipment) from the moment the fault or occurrence report is notified, which in no case may be longer than that established in the following table. In those cases, in which the resolution time exceeds the established standard time, the CONCESSIONAIRE shall provide adequate justification for the following.

**Table 58: Response Times**

| **Category** | **Maximum response time** | **Maximum solution time** |
| --- | --- | --- |
| Emergency (if it requires the cessation of the activity of a Health Service Provider Unit of the Hospital) or if the life of any person is at risk, which will be qualified by the Supervisor of Contract and Operations. | 10 min | The time foreseen by the Supervisor of Contract and Operations |
| Urgency (whether it generates delays in the timing of medical procedures). | 10 min | The time foreseen by the Supervisor of Contract and Operations |
| Ordinary (the rest) | 15 min | The time foreseen by the Supervisor of Contract and Operations |

For the purposes of the above table, upon the occurrence of a contingency (Emergency, Urgency or Ordinary), the CONCESSIONAIRE shall communicate to the Supervisor of Contract and Operations, within the times indicated, the cause of the contingency, the solution to be implemented to provide a solution and the estimated time to carry out the correction work, time and solution to be provided by the Supervisor of Contract and Operations in the SIGI-NS system in coordination with the Hospital. The time finally foreseen by the Supervisor of Contract and Operations shall be the time available to the CONCESSIONAIRE to solve the contingency, which shall be duly recorded in the SIGI-NS system.

In the event that the CONCESSIONAIRE does not comply with the solution time foreseen by the Supervisor of Contract and Operations, it shall be considered as non-compliance and the deductions considered in the Contract or the effects established in the regulation associated to the service level indicators shall be applied.

In the event of requiring the importation of any part or part of the equipment necessary for its repair, the Supervisor of Contract and Operations may determine a maximum solution time different to that established in the preceding table, upon presentation by the CONCESSIONAIRE of a report supported by the opinion of the Supervisor of Contract and Operations, which shall be formally communicated to the CONCESSIONAIRE.

**Service Organization**

For this service, the CONCESSIONAIRE shall satisfy the requirements of the service itself, as well as for each user area through the SIGI-NS.

The CONCESSIONAIRE shall propose the functional Service organization, in order to provide the service to all the user areas, considering that during the Operational Stage it shall be provided in coordination with the GRANTOR through the technical areas indicated by the latter, as appropriate, and also with all the Hospital's services.

**Documentation**

* Initial information to be submitted by the CONCESSIONAIRE prior to Commissioning. The CONCESSIONAIRE shall prepare the Service’s POA that includes its direct application. The Service’s POA shall determine the corresponding specifications and procedures within the framework of the Applicable Laws and Provisions and their updates or modifications during the execution of the Contract, as described in Annex 21.
* Information to be submitted during the Operational Phase
* On a semi-annual basis, a report must be submitted on the activities carried out during the period for the correct provision of the service, the problems attended to during the period, control and improvement measures.

**Definition of terms**

* Asset: A set of assets or rights held by an employing entity. (SUNAT-ESSALUD Glossary of Interinstitutional Terms).
* State Property: Movable and immovable property whose ownership, administration and maintenance corresponds to the Entities, regardless of the level of government to which they belong.
* Assets of Public Domain or Assets of Private Domain (Article 5° of the Regulation of Law No. 29022, Law for Strengthening the Expansion of Telecommunications Infrastructure, approved by Supreme Decree No. 003-2015-MTC).
* Availability of medical equipment: Corresponds to the time in which the equipment is available for use and operation by Hospital personnel. The availability of medical equipment implies that the equipment is ready for use and has all the necessary components and accessories for its safe and reliable operation, at the discretion of the medical personnel. For example: "Mechanical ventilator with its backup battery and its other accessories."
* Equipment: That means the equipment for medical use, electromechanical equipment, biomedical equipment, clinical instruments, clinical and non-clinical furniture and any other type of equipment considered in the technical proposal of the successful bidder and in the Contract as the responsibility of the CONCESSIONAIRE with respect to its acquisition, maintenance and availability.
* Inventory: Procedure that consists of physically verifying, coding and recording the assets that the entity has at a certain date. In order to verify the existence of the assets, contrast the results with the accounting record, investigate any differences that may exist and proceed to the corresponding regularization. It must follow what is indicated in Directive No. 001-2015/SBN, called "Procedure for the Management of State Movable Property" approved by Resolution No. 046-2015/SBN. This procedure must be auditable at any time and accessible to its information by the administration.
* Medical procedure: Health care provided individually to the user population for preventive, diagnostic or therapeutic purposes, which is performed by the health care professional of the Health Establishments. (Supreme Decree Nº024-2005-SA, which approves the Standard Health Data Identifications).
* Acceptance Tests: These are the tests defined by the Hospital and instructed by the Supervisor of Contract and Operations to the CONCESSIONAIRE for the reception, at any stage of the Contract, of the medical equipment prior to its commissioning, use and operation.
* PGBME: Registration of assets in the SIGI-NS system in accordance with the Procedure for the Management of State Movable Property.
* Support Medical Services: These are units producing health services that operate independently, or within an inpatient or outpatient facility, as appropriate, that provide complementary or auxiliary services to medical care, and are intended to assist in the diagnosis and treatment of clinical problems (Supreme Decree No. 013-2006-SA, which approves the Regulation on Health Establishments and Support Medical Services).

* 1. **SERVICE OF HEMODIALYSIS**

It consists of providing a Service of Hemodialysis of excellence to patients with Chronic or Acute Renal Insufficiency who require such treatment, supervising at all times that the installations, equipment, supplies and personnel are in optimal conditions to provide comprehensive care and excellence to the patient.

As part of the Service of Hemodialysis, the patient's condition must be evaluated, which facilitates the hemodialysis process.

The Service quality is related (but not limited to) with:

* Unrestricted compliance with all protocols associated with the service, such as hand washing, sterile connection of the central venous catheter, safety pause prior to circuit connection, among others.
* Timely and efficient attention to patients' requirements in comfortable conditions.
* Safety in patient care, avoiding the risk of contamination attributable to inadequate cleaning, protection and care conditions.
* Compliance with Applicable Laws and Provisions.

**Purpose**

The purpose is to provide integral Service of Hemodialysis to all patients with Acute or Chronic Renal Insufficiency. This service will be granted to all patients referred by the GRANTOR through authorized users by means of the procedure defined by the Parties, including seronegative and seropositive patients with hepatitis B, C and HIV, or any other type of infectious diseases.

**Scope**

To grant the Service of Hemodialysis to all patients referred by the GRANTOR, through authorized users according to the procedure defined in the POA.

The scheduling of hemodialysis sessions will be carried out jointly between the GRANTOR and the CONCESSIONAIRE.

Patients with nephrology prescription of chronic dialysis will be attended in the Service of Hemodialysis.

For hospitalized patients, who are clinically stable and require dialysis, they will be attended in the Service of Hemodialysis. Patients who are clinically unstable will be attended with mobile equipment in the service where they are hospitalized. The clinical condition will be qualified by the professional Nephrologist of the GRANTOR.

The transfer of patients within the Hospital with dialysis requirements shall be the responsibility of the GRANTOR.

The CONCESSIONAIRE shall be responsible for:

* Providing Service of Hemodialysis s in the Hospital's facilities for patients with acute or chronic renal failure.
* That the activities comply with hygiene and safety standards for users, employees and the general public.
* That its personnel comply with the code of ethics in the handling of information, as well as in the treatment of users and officials.
* Complying with service protocols.
* Having personnel trained in the area of hemodialysis and patient treatment.

**Time Availability**

The Service of Hemodialysis for chronic patients shall be available from Monday to Saturday from 6:00 a.m. to 1:00 a.m. the following day (the CONCESSIONAIRE may adjust the number of shifts according to the behavior of the demand, subject to the GRANTOR's prior favorable opinion of the Supervisor of Contract and Operations).

The CONCESSIONAIRE shall schedule patient care according to the availability required for the service, as well as the Technical Standard established by MINSA, with the exception of emergency cases, which shall be indicated by the nephrologist on duty at the Hospital.

The CONCESSIONAIRE shall be responsible for providing the Service of Hemodialysis for chronic patients up to the maximum capacity established in the feasibility studies.

The Service of Hemodialysis for acute patients shall be available 24 hours a day, every day of the year, and shall be activated according to the GRANTOR’s request. This procedure may be carried out in other units of the Hospital, for example, ICU, hospitalization, recovery or in the same hemodialysis unit and shall be indicated by an interconsultation issued by an authorized medical professional of the GRANTOR, addressed to the authorized representative of the CONCESSIONAIRE in the Service of Hemodialysis, reason for which the CONCESSIONAIRE shall have nephrologists on duty 24 hours a day.

**Regulations**

For the provision of the Service, the CONCESSIONAIRE, considering the best practices and international standards, shall comply at least with the Applicable Laws and Provisions and the procedures established in this regard by the GRANTOR through the Supervisor of Contract and Operations, in order to guarantee at all times, the safety in terms of prevention of HAI, transmission of infectious and contagious diseases and occupational accidents.

In any case, the CONCESSIONAIRE shall comply with the technical standards set forth by the Ministry of Health or any other Competent Governmental Authority.

In particular, the CONCESSIONAIRE shall comply, as a minimum, with the following Applicable Laws and Provisions:

* General Management Resolution No. 1094-GG-ESSAUD-2015 or the rule that replaces it.
* Ministerial Resolution 845-2007/MINSA, (NTS) No. 060-MINSA/DGSP-V.01 Technical Health Standard of the Production Unit of Service of Hemodialysis and its subsequent update.
* Superintendence Resolution No. 005-2015- SUSALUD/S, approves the IPRESS Selective Supervision instrument applicable to the Production Units of Hemodialysis Health Service of public and private IPRESS throughout the national territory.
* Resolution of the Executive Presidency No. 656-PE-ESSALUD-2014, which approves the new Organic Structure and the Regulation on Organization and Functions of the Social Health Insurance System - ESSALUD.
* Executive Presidency Resolution No. 426-PE-ESSALUD-2007, which changes the name of Hemodialysis Center to National Center for the Renal Health and approves the Organic Structure and Regulation on Organization and Functions of the National Kidney Health Center.
* General Management Resolution No. 272-GG-ESSALUD-2013, which approves the "Biosafety Manual for Dialysis Units in the Social Health Insurance System (ESSALUD)".
* Resolution of Central Management of Health Services No. 048-GCPS-ESSALUD-2008, which approves the Technical Document for the National Renal Health Plan 2008-2013 and extends its validity in ESSALUD, through Circular Letter Nº 449-GCPS-ESSALUD-2014, while it is being updated.
* Resolution of Central Management of Health Services Nº 028-GCPS-ESSALUD-2010, which approves the "Clinical Practice Guide on the Management of Chronic Kidney Disease in ESSALUD".
* Resolution of Central Management of Health Benefits No. 050-GCPS-ESSALUD-2012, which approves the "Guide for the Prevention and Management of Infectious Complications Associated with Dialysis Access".
* Health Services Central Management Resolution No. 94-GCPS-ESSALU D-2013, which approves the Nursing Standards and Procedures Manual for the Care of Patients with Chronic Kidney Disease Undergoing Hemodialysis Treatment.
* Infrastructure Central Management Resolution No. 003-GCl-ESSALUD-2014, which approves the "Manual of Technical Procedures for Preventive Maintenance for Reverse Osmosis Water Treatment Plant for Hemodialysis".
* Resolution of Management of the National Center of Renal Health No. 84-CNSR-ESSALUD-2014, which approves the Clinical Guide for the Treatment of Protein-Energy Wear in Dialysis Patients of the National Center of Renal Health.
* The Care guidelines issued by the Institute for the Evaluation of Health Technologies and Research (IETSI) must be applied.
* General Management Resolution No. 1050-GG-ESSALUD-2018, which approves the "Technical Standard for cleaning and disinfection in the IPRESS of the Social Health Insurance System - ESSALUD".
* General Management Resolution No. 913-GG-ESSALUD-2016, which approves the "Standards for Management and Handling of Solid Waste in the Social Health Insurance System- ESSALUD".
* General Management Resolution No. 1517-GG-ESSALUD-2015, which approves the "Standards for the Referral and Counter-Referral process in ESSALUD".
* General Management Resolution No. 1127-GG-ESSALUD-2019. "Biosafety Standards of the SOCIAL HEALTH INSURANCE SYSTEM- ESSALUD".
* Resolution of Central Management of Health Benefits No. 57-GCPS-ESSALUD-2016, which approves "Standards and Procedures of the Central and Sterilization Unit of the Social Security Health.
* Resolution of the Institute for the Evaluation of Health Technologies and Research No. 84-IETSI-ESSALUD-2017. "Clinical practice guideline for hemodialysis Adequacy".
* Resolution of the Institute for Health Technology Assessment and Research No. 85-IETSI-ESSALUD-2017. "Clinical Practice Guideline for the Management of Bone Mineral Disorders in Chronic Kidney Disease".
* Resolution of the Institute for Health Technology Assessment and Research N° 89-IETSI-ESSALUD-2017. "Clinical Practice Guideline on Diagnosis and Management of Anemia in Patients with Chronic Kidney Disease".
* Management Resolution of the National Kidney Health Center No. 101-CNSR-ESSALUD-2016, which approves "The Subsystem for Surveillance and Monitoring of Vascular Access for Hemodialysis of the National Kidney Health Center".
* General Management Resolution No. 4-GG-ESSALUD-2020 which approves General Management Directive No. 1-CNSR-ESSALUD-2020 V.01" Surveillance of Stage 5 Chronic Kidney Disease in dialysis therapy through ESSALUD's national dialysis registry".

**Equipment and Supplies**

* Physical Facilities. The CONCESSIONAIRE undertakes to maintain the facilities and assets in good condition and use throughout the term of the Contract. In other words, it shall be responsible for the proper state and conservation of the installations and equipment, including their cleaning, disinfection, maintenance and safety.

The facilities must be conditioned in compliance with the provisions of Ministerial Resolution 845-2007/MINSA, (NTS) No. 060-MINSA/DGSP-V.01. Technical Health Standard of the Production Unit of Service of Hemodialysis s - MINSA or the standard that replaces it.

The hemodialysis area shall be organized in a maximum of three (3) modules. The hemodialysis modules shall have up to (5) five hemodialysis stations, (1) one machine for medical emergency.

The distribution of monitors shall be considering in patients with positive serology who shall also be attended in the last shift.

* Equipment. The CONCESSIONAIRE undertakes to implement the Service of Hemodialysis with equipment at least as established in General Management Resolution No. 1094-GG-ESSALUD-2015 or the standard that replaces it, which allows providing the service with safety and quality, as well as the necessary clinical furniture that guarantees the comfort of patients and personnel. The CONCESSIONAIRE must guarantee the operability of the equipment during the shifts of attention.

The CONCESSIONAIRE must install multi-parameter monitors in each room, according to the level of complexity of the patients to be attended.

The CONCESSIONAIRE must have the updated technical data sheet of each hemodialysis machine, which allows the control of the useful life of the equipment (monitor) in hours or years of operation equivalent to (30.000) thirty thousand hours or (7) seven years of use (whichever occurs first shall be taken into account).

The CONCESSIONAIRE shall have hemodialysis machines for medical emergencies, technical support in case of failures, to ensure compliance with the treatment of each patient.

Each piece of equipment shall have its instruction manual, in Spanish, and shall be available to the personnel as well as to the Supervisor of Contract and Operations or external entity, whenever required.

The CONCESSIONAIRE shall install and be responsible for the maintenance of the computer applications necessary for the proper execution of the object of the Contract, assuming the cost thereof. Likewise, it shall be compatible with the systems used in the Hospital.

The CONCESSIONAIRE shall be responsible for the calibration of the equipment that so requires. The document supporting such calibration shall be available to the Supervisor of Contract and Operations or external entity, whenever required.

The CONCESSIONAIRE shall have accredited technical personnel with training and experience in preventive and corrective maintenance activities of biomedical equipment, by its own services or by third parties.

It must also have an annual program of preventive and corrective maintenance of the equipment, as well as monthly reports on the follow-up of its compliance, which shall be prepared and signed by the responsible engineer. The documents generated shall be sent to the hospital providing the service.

The CONCESSIONAIRE shall keep the technical data sheet of the biomedical equipment up to date and accessible for supervision.

The CONCESSIONAIRE shall have sheets and blankets for the care and comfort of patients and shall keep a spare stock for the shift and a reserve stock for contingencies, in coordination with the Clothes and Laundry Management Service, which shall be verified by the Supervisor of Contract and Operations.

* Inputs:
  + The CONCESSIONAIRE shall supply, at its own expense and risk, the supplies and consumables that guarantee 100% service provision. These shall be 100% new and shall include at least the following: arteriovenous lines, dialyzer, physiological solution, bio-patches, transparent patches, bicarbonate solution (prepared), acetate, chlorine and vinegar for cleaning, quaternary ammonium for cleaning and disinfection, connection and disconnection kit for arteriovenous catheters and fistulas, "y" adapter catheter in accordance with the Applicable Laws and Provisions.
  + Dialyzers (filters) may not be reused, according to technical standard No. 060-MINSA or rule that modifies or substitutes it.
  + As established in General Management Resolution No. 1094-GG-ESSALUD-2015, supplies must comply at least with the following:
    - Dialysis supplies (medicines and medical material) must have Health Registration issued by DIGEMID.
    - They must have a supply of synthetic membrane dialyzers (polysulfone, polyethersulfone, polyamide or others), with low flux and high efficiency.
    - They must use acid and bicarbonate concentrates for hemodialysis, taking into account the different forms of presentation available as solutions, hydration salts or sterile bicarbonate powder in cartridges.
    - They must have the supply of personal protective equipment - PPE, (at least, waterproof aprons, masks, caps, gloves, face shields and in the case of professionals in the washing room, these must have respiratory protection masks, waterproof boots and long-sleeved waterproof aprons, among others.) in quantity proportional to the demand, keeping a spare stock for the shift and a reserve stock for contingency attention.
    - They must have the supply of inputs and materials according to the attention positions and maintain the minimum stock for emergency cases.
    - In case of updating the technology and standards, the changes must be authorized by the GRANTOR.
* Medications
  + The CONCESSIONAIRE must have a timely and continuous supply of the necessary medicines for the application of anemia management protocols (EPO, Iron, vitamin B12), bone mineral disorders (Calcitriol, paricalcitriol, among others), as well as medicines to attend intradialytic and infectious complications of vascular access and medicines for the emergency trolley (in medical emergencies).
  + Likewise, the Supervisor of Contract and Operations must be provided with information issued by specialized companies to validate the suitability of their use. In no case shall this compliance limit the responsibility of the CONCESSIONAIRE with respect to the consumables used for its procedures.
  + The CONCESSIONAIRE shall have the appropriate conditions for the operation of the Service and the management of the expiration and expiration of the supplies and medicines, for the proper performance of the activity.
  + The medicines used by the CONCESSIONAIRE shall have a sanitary registration for their use.
* Ambulance service and others. As part of this service, the CONCESSIONAIRE shall have its own or a contracted ambulance service for the transfer of hemodialysis patients in emergency situations. This service must cover the entire service hours.

**Personnel**

The CONCESSIONAIRE shall have sufficient health care personnel, technical specialists and other non-health care personnel for the proper operation of the service, complying with the provisions of General Management Resolution No. 1094-GG-ESSALUD-2015 or the rule that modifies or replaces it.

The Service as a minimum shall have the following personnel:

* Chief Position.
  + **Medical Director**: Professional degree of Medical Surgeon, with National Registry for Nephrology Specialist and certificate of current Professional Qualification. Have work experience of at least (05) five years as Nephrologist.

**Other requirements**: A minimum of one shift per week will be scheduled to perform the duties of the position; must not hold a position in any GRANTOR institution directly related to patient referral; must hold the position in only one IPRESS - Hemodialysis.

* + **Head Nurse**: Professional Degree of Nursing, with Specialist Degree in Nephrology Nursing or Certificate of Graduation. Current professional licensure and certificate of professional qualification. With work experience of (03) three years in Hemodialysis.

**Other requirements**: Responsible for managing and supervising the nursing processes; perform the position in a single IPRESS - Hemodialysis; the position will be performed by a Nurse; in case the position cannot be performed by a Nurse, a Coordinator will be included with a maximum of 30% of scheduled hours; shifts of (6) six (6) effective hours per day must be scheduled.

* Healthcare Professional.
  + **Attending Physician**: Professional Degree of Medical Surgeon, with National Registry of Specialist in Nephrology and proof of current Professional Qualification.

**Other requirements**: Responsible for up to (03) three treatment modules per shift.

* + **Nurse**: Professional Degree in Nursing, with Professional Registration and certificate of Professional Qualification in force, with professional experience of (06) six months in hemodialysis care prior to starting work, except for those nurses with a specialty in Nephrology Nursing or proof of graduation.

**Other requirements**: One Nurse should be scheduled for each Hemodialysis station.

* About the Nursing Technician.
  + **Nursing Technician for the treatment room**: Certificate or Degree recognized by the Government or equivalent from a Higher Institute. Have minimum experience of (06) six months in the area of Hemodialysis.

**Other requirements**: A minimum of one (1) Technician will be scheduled for every (05) five (05) Hemodialysis positions.

* + **Nursing Technician for the priming room of extracorporeal systems and washing of biocontaminated material**: Certificate or Degree recognized by the Government or equivalent from a Higher Institute, with minimum experience of (06) six months in the area of Hemodialysis.

**Other requirements**: One (1) Technician will be scheduled for every (05) five (05) Hemodialysis positions.

* About the Supporting Professional personnel.
  + **Nutritionist**: Professional degree in Nutrition, with current professional license and certificate of professional qualification. Have minimum experience of (06) six months in the management of patients with Chronic Kidney Disease in Hemodialysis area.

**Other requirements**: Responsible for the nutritional evaluation and management of patients.

* + **Psychologist**: Professional degree in Psychology, with current professional license and certificate of Professional Qualification, with minimum experience of (06) six months in the management of patients with Chronic Kidney Disease in Hemodialysis area.

**Other requirements**: Responsible for the evaluation and psychological management of patients.

* + **Social Worker**: Professional degree in Social Service, with current professional license and certificate of Professional Qualification, with minimum experience of (06) six months in the management of patients with Chronic Kidney Disease in Hemodialysis area.

**Other requirements**: Responsible for the evaluation and social management of patients.

* About Equipment Maintenance Professional Technician.
  + **Equipment Maintenance Technician**: Professional Degree in Electronics Technician, or other related career with minimum experience of (03) three months in the management of Hemodialysis equipment.

**Other requirements**: One (1) Technician will be scheduled per patient care shift.

* About scheduling of Care personnel. The CONCESSIONAIRE shall submit the monthly schedule of the Care personnel to the GRANTOR, within the last five (5) days of the preceding month, which shall be published in a visible place of the Hemodialysis UPSS and shall be of mandatory compliance.

The CONCESSIONAIRE shall have accredited standby personnel to make up for unforeseen absences of the Care personnel. In addition to having scheduled Care personnel, it shall have cleaning personnel.

The supervision of the service itself shall carry out verification visits to verify the mandatory permanence of the scheduled Care personnel.

* About the formulation and execution of the Care training plan. It is the CONCESSIONAIRE’s responsibility to present and execute the annual continuous training plan aimed at keeping the Care personnel updated to strengthen their professional competencies. It is mandatory to have an induction plan for new personnel.

The CONCESSIONAIRE shall periodically submit to the Supervisor of Contract and Operations the report on the execution of the training program.

The Supervisor of Contract and Operations shall verify compliance with the training plan for the CONCESSIONAIRE’s Care personnel.

* About the accreditation of health care personnel. The CONCESSIONAIRE's Care personnel shall request to the GRANTOR, individually, the accreditation.

The GRANTOR shall verify through the Supervisor of Contract and Operations that the Care personnel complies with the technical and legal requirements to perform functions in the Service of Hemodialysis, valid for two (2) years from the date of issue and may be renewed periodically, among those indicated below:

* + Skills profile by occupational group, as indicated in this Contract.
  + Serological evaluation for hepatitis C (AcVHC), hepatitis B (AgHBs, total AcHBc and AcHBs) and HIV. The tests must be no more than six months old.

All personnel must comply with the corresponding medical and psychological check-ups and examinations for the performance of their work and have the corresponding vaccination.

The personnel shall have all the PPE protective elements to perform their activity with full guarantees for the personnel, the patient and the environment.

The CONCESSIONAIRE shall establish shifts that ensure the continuity of the requested service.

The CONCESSIONAIRE shall guarantee the existence of the same number and qualification of human resources necessary for the continuity of the service during each shift.

**Functional Technical Specifications of the Service**

The Service of Hemodialysis managed by the CONCESSIONAIRE shall provide care to patients, as defined in the objective of this service, in accordance with the provisions of the “**Referral and Counter-referral Process Manual in ESSALUD**”.

* Basic activities. The basic functions or activities to be provided by the CONCESSIONAIRE shall be the following:
  + The CONCESSIONAIRE’s nephrologist shall provide personalized attention to the patients assigned by the GRANTOR.
  + Attend dialysis emergencies. In case of complications that cannot be solved or when the patient's health situation warrants it, the CONCESSIONAIRE shall communicate and transfer the patient to another health care center if necessary.
  + Guarantee the care of seronegative and seropositive patients, hepatitis B, C and HIV positive patients, or any other type of patients suffering from infectious or contagious diseases of any kind, being the responsibility of the GRANTOR's medical personnel to diagnose them in a timely manner.
  + The CONCESSIONAIRE shall not refer patients to another outsourced IPRESS Hemodialysis, unless expressly authorized by the GRANTOR.
  + The CONCESSIONAIRE shall be responsible for the medical and nursing services of outpatient hemodialysis care provided under the Contract, assuming all risks for damages that may arise therefrom or that may be suffered by the patient.
  + The CONCESSIONAIRE shall ensure the timely treatment of infectious patients who shall be previously identified by the GRANTOR during the last shift, with the aim that the implementation of the clinical procedures established for these cases, guarantee the safety of all patients requiring this type of treatment.
  + The CONCESSIONAIRE shall grant facilities to the Supervisor of Contract and Operations and to the personnel of the GRANTOR for the fulfillment of the medical or nursing audit actions.
* Outpatient Care of the patient by the CONCESSIONAIRE. The CONCESSIONAIRE shall perform outpatient care to the patient, taking into account the following:
  + Provide treatment to patients referred by the GRANTOR, seronegative or with hepatitis B virus infection, HIV, pregnant women, BK tuberculosis.
  + In the hemodialysis session, will apply the dialysis dosing protocol that includes the prescription of medication necessary for the treatment of intradialytic complications.
  + Attend to the treatment of hemodialysis complications (e.g. over hydration or hyperkalemia) in one or more additional hemodialysis sessions according to the patient's situation.
  + In cases of patients treated in the Service of Hemodialysis managed by the CONCESSIONAIRE who present complications and require emergency care; the physician on duty shall coordinate the transfer of the patient with the Head of the on-duty personnel, attaching the corresponding medical report.
  + The intradialytic administration of drugs for the treatment of chronic complications of stage 5 CKD in hemodialysis.
  + Treatment of vascular access infections for outpatient management.
* About Diagnostic Aid for patients treated by the CONCESSIONAIRE. The laboratory tests for the patients attended by the CONCESSIONAIRE shall be requested by the GRANTOR's Nephrologists. However, the quality control analysis of the water for dialysis on a monthly basis for microbiological and endotoxin analysis and on an annual basis for the physical-chemical control shall be performed by the Supervisor of Contract and Operations.
* About reporting and compliance with pharmacological treatment:
  + The CONCESSIONAIRE shall submit the evaluation report of the patient's clinical condition to the GRANTOR’s Nephrology Department/Service.
  + The GRANTOR’s Nephrology Department/Service, in a meeting with the CONCESSIONAIRE, shall evaluate the report submitted by it, defining the consensual prescription of the medicines in accordance with the protocols in force.
  + The medical prescription agreed between the GRANTOR's attending physician (in outpatient consultation) and the CONCESSIONAIRE is issued and delivered to the patient.
  + The patient will receive its prescriptions and will exchange them at the Hospital's pharmacy, who will deliver the medicines and their medical indication to the CONCESSIONAIRE for their administration according to the prescription agreed upon by the CONCESSIONAIRE and the Hospital.
  + The CONCESSIONAIRE shall send the report on the compliance with the administration of the medications to the GRANTOR’s Nephrology department/service on a periodic basis.
  + The CONCESSIONAIRE shall submit the individualized, consolidated and periodic outcome evaluation report to the GRANTOR's Nephrology Department(s).
* About Referral and Transfer. The CONCESSIONAIRE is obliged to admit for care the patients referred by the GRANTOR.
  + **About referral**. The CONCESSIONAIRE shall refer the patient to the service operated by the CONCESSIONAIRE, in application of the **“Referral and Counter-referral Process Manual in ESSALUD”.**
  + **About Transfer**. The GRANTOR may transfer, following the same procedure stipulated in the Applicable Laws and Provisions, and the CONCESSIONAIRE shall attend the patients according to the terms of this Contract.
* Expected demand for service provision. The demand of patients with indication of ambulatory hemodialysis to be attended by the Service of Hemodialysis will be estimated by the GRANTOR. This estimated demand will be updated and reviewed quarterly by the GRANTOR.
* Response times. The CONCESSIONAIRE shall comply with the following maximum response times:
  + For stable outpatients undergoing treatment, the procedure will begin no later than 30 minutes after the scheduled start time of hemodialysis.
  + For stable outpatients initiating treatment, the treatment shall be scheduled no later than 3 Calendar Days after the request is received at the Hemodialysis Unit.
  + For acute or chronic patients with acute complications, the dialysis procedure should be initiated no later than 60 minutes after the request is received at the Dialysis Unit.
* Quality assurance. The CONCESSIONAIRE shall design and manage, through a continuous quality improvement model, the following aspects:
  + Quality perceived by users (treatment)
  + Quality perceived by Hospital personnel
  + Technical quality: structure, processes, results

In the area of quality perceived by users and personnel, satisfaction surveys should be implemented as established in the section on levels of Service of Hemodialysis.

Regarding the technical quality, it is of utmost importance that the professionals who will attend the Service of Hemodialysis not only have all the necessary skills, but also that they are provided with an operation manual that indicates the correct performance of all processes, such as:

* Protocol for patient pre-connection safety pause.
* Protocol for preparation and administration of anticoagulant drug and other medications.
* Protocol for hand washing and use of alcohol gel.
* Protocol for standard precautions where the use of PPE is included.
* Protocol for connection and disconnection of patients with central venous catheter (CVC).
* Needle puncture and needle removal protocol for patients with arteriovenous fistulae (AVF).
* Protocols for disinfection and sterilization of reusable medical equipment, furniture and material.
* Protocols for the management of biocontaminated solid waste.

The evaluation of vascular accesses with complications will require complementary radiological examinations (Echo Doppler).

In addition to the above, the Service of Hemodialysis should have an entity in charge of supervising compliance with these protocols in order to achieve optimal results in patient care.

On the other hand, there should be a contingency plan in case of natural disasters, including education to personnel and patients on the plan to follow in certain situations, in addition to having a plan in case of flooding, lack of water (such as, for example, having the support of firefighters) and even personnel failure, so that the treatment of patients is not affected.

Activities and results should be reported on a quarterly basis.

At the latest, by the third year from the start of the Contract operation, the Service of Hemodialysis must have ISO 9001:2015 certification for the chronic hemodialysis process.

**Organization**

The CONCESSIONAIRE shall propose an organization and management system that meets the defined scope and complies with all the necessary conditions for an adequate operation of the service.

The planning of this service shall be carried out in coordination with the services of maintenance and operation of the Building, Facilities, electromechanical equipment and furniture associated with the infrastructure (MOE); Administration, acquisition, maintenance and availability of the Equipment (MEM), as well as the Clothes and Laundry management service. On the other hand, the operation of the service must be carried out in coordination with the following services: Cleaning, sanitation and vector management, Integrated Solid Waste Management Service, Information and communications technologies and provision and availability of technological infrastructure.

An important part of this organization is the permanent supervision of the quality of the treated water to be used for hemodialysis treatment.

The Service of Hemodialysis will coordinate in the same way with the Nephrology Service, ICU, Medical Sub-direction, Hospital Pharmacy.

**Documentation**

In addition to the specific information that the CONCESSIONAIRE must submit as established in the previous sections related to this service, the CONCESSIONAIRE shall submit the following information:

* Initial information to be submitted by the CONCESSIONAIRE. The CONCESSIONAIRE shall prepare the Service’s POA that includes its direct application. The Service’s POA shall determine the corresponding specifications and procedures within the framework of the Applicable Laws and Provisions and their updates or modifications during the execution of the Contract, as described in Annex 21.
* Periodic reports to be submitted during the Contract.
  + The CONCESSIONAIRE shall deliver to the Supervisor of Contract and Operations with copy to the GRANTOR the periodic reports containing the statistical information of the operation of the service. This report shall contain, at least, the following information:
    - Monthly outcome evaluation indicators.
    - Monthly production of hemodialysis sessions and additional sessions due to overhydration or hyperkalemia.
    - Monthly report of the ESSALUD National Kidney Registry Information (RENDES).
    - Daily log of water quality.
    - Annual results of the User Satisfaction Survey.
    - Other information considered relevant for monitoring the Service quality and whose inclusion in the monthly report shall be agreed between the GRANTOR and the CONCESSIONAIRE.

**Definition of Terms**

* Priming of extracorporeal systems: Procedure to remove the sterilizing solution from the extracorporeal system, using a hemodialysis machine, osmosis water and saline solution. According to what is established in the nursing procedures manual for the care of patients with chronic kidney disease on hemodialysis treatment.
* Adequate dialysis: quantity and quality of dialysis sufficient to achieve the patient's well-being, better quality of life, decreased complications and long survival, assessed through clinical evaluation and behavior of treatment quality indicators.
* Chronic kidney disease (CKD): Decrease in renal function or progressive and irreversible renal damage greater than three months, expressed in decreased values of glomerular filtration rate or presence of markers of renal damage.
* CKD stage 5: Stage of chronic kidney disease defined by a glomerular filtration rate less than 15 lt/min/1.73 m2, in which patients may require renal replacement therapy.
* Hemodialysis (HD): a renal function replacement method that employs a synthetic external dialytic membrane and an extracorporeal blood circuit to carry out the dialytic procedure.
* Inputs or consumables: Items, mostly disposable and single-use, that are not part of a piece of equipment, but which as a whole serve a specific function.
* IPRESS: Health Service Provider Institution, duly accredited.
* IPRESS - Hemodialysis: The Center where outpatient hemodialysis care services are provided.
* Hemodialysis Machine: Biomedical equipment used to perform hemodialysis treatment, consisting of two fluid transport systems: one circuit for the extracorporeal circulation of blood and another for the preparation and circulation of the dialysis solution or dialysis bath.
* Hemodialysis module: set of hemodialysis stations up to a maximum of five stations.
* Hemodialysis station: Designation assigned to a hemodialysis machine unit - chair.
* Hemodialysis sessions: Time determined within the hours of service, in which hemodialysis treatment is provided to a group of patients.
* Glomerular filtration rate (TFG): It is the creatinine free renal plasma flow rate, estimated in unit time and expressed in ml/min. Currently there are different methods for its determination such as creatinine clearance.
* Attendance shift: Established schedule in which hemodialysis treatment is provided to a group of patients for a determined period of time. The personnel required to attend a shift consists of nephrologist physician (shift leader), nurse, nursing technician and maintenance technician.
* Water treatment unit: Set of equipment whose function is to remove organic and inorganic substances, microbial contaminants and generate pure water, to dilute the salt concentrate and form the dialyzing solution.
  1. **SERVICE OF CLINICAL PATHOLOGY: LABORATORY**

It corresponds to the taking and analysis of human biological samples by a multidisciplinary team, which will provide information for the prevention, diagnosis, control or evaluation of health problems of the persons referred by the GRANTOR.

The Service quality is related (without being limitative) with:

* Timely and efficient attention to sample collection and analysis requirements.
* To guarantee safety and good patient care.
* Compliance with the Applicable Laws and Provisions.

**Purpose**

The purpose will be to provide to the GRANTOR the service of microbiological, immunological, hematological, biochemical or other analysis in order to provide information for the prevention, diagnosis, control or evaluation of health problems of the people. This service shall be provided to all patients referred by the GRANTOR.

**Scope**

The CONCESSIONAIRE shall be responsible for:

* The timeliness and quality of pre-analytical, analytical and post-analytical activities of the tests included in the established portfolio of services, taken from all possible human biological samples.
* That the activities comply with safety standards for users, officials and the general public.
* The personnel complies with the code of ethics[[2]](#footnote-2) in the handling of information, as well as in the treatment of users and employees.

**Services Portfolio**. The CONCESSIONAIRE shall provide at least the tests included in the Hospital's portfolio of services (also known as catalog of tests/determinations), which shall conform to the current standard nomenclature, as indicated in Appendix 4 of this Annex.

This portfolio shall be reviewed and updated at least annually and included in the POA, in order to be consistent with the Hospital's portfolio of services.

The CONCESSIONAIRE shall provide the infrastructure and equipment with its respective maintenance, at its full charge and cost, during the entire term of the Contract for the GRANTOR to perform the laboratory tests that are not included in the portfolio offered by the CONCESSIONAIRE, agreeing on the pertinent coordination measures in the POA.

**Time Availability**

The CONCESSIONAIRE shall provide the laboratory service according to the following modalities:

* Unscheduled tests, are the Emergency tests, which must be available 24 hours a day, every day of the year and whose scope will be the entire Hospital, including critical care, emergency and hospitalization, among others.
* Scheduled Tests, shall be available Monday through Saturday from 7:00 a.m. to 7:00 p.m., except on holidays.

The CONCESSIONAIRE shall ensure the continuous availability of the personnel necessary for the proper operation of the service through on-call shift systems that shall at least include:

* One professional on on-call: Medical Technologist, Biologist or Clinical Pathologist) every day of the year.
* One professional as on-call: physician every day of the year.

**Regulations**

For the provision of the Service of Clinical Pathology, the CONCESSIONAIRE shall comply at least, but not limited to, the following standards and documents, as well as their eventual updates, substitutions or additions:

* Peruvian Technical Standard NTP-ISO 15189:2014 CLINICAL LABORATORIES. Particular requirements for quality and competence and their respective updates throughout the horizon of the term of the Contract.
* Healthcare and Medical Procedures Catalog of the health sector, approved by Ministerial Resolution No. 902-2017/MINSA and their respective updates throughout the horizon of the term of the Contract.
* Health Technical Standard (NTS) No. 072-MINSA/DGSP-V.01 of the Production Unit of Service of Clinical Pathology s, approved by Ministerial Resolution 627-2008/MINSA and its subsequent update.
* RM No. 519-2006/MINSA Health Quality Management System.
* RM No. 676-2006/MINSA National Plan for Patient Safety 2006-2008.
* NTP 042-MINSA 2007: Technical Health Standard for Emergency Departments Clinical Pathology and Anatomic Pathology Request ESSALUD 2014.
* NTS No. 119-MINSA/DGIEM-V01 "Infrastructure and equipment of tertiary health care establishments".

**Infrastructure, Equipment and Supplies**

* Physical Facilities. The CONCESSIONAIRE shall maintain the facilities and assets in good condition and use during the execution of the Contract. In other words, it shall be responsible for the proper condition and conservation of the facilities, including their cleanliness, maintenance and safety.

The laboratory facilities and associated offices shall comply with the Occupational Safety and Health Law, to ensure compliance with the following conditions:

* + It should control access to areas that affect the quality of analyses.
  + It should protect clinical information, patient samples and laboratory resources from unauthorized access.
  + It should allow interface with ESSALUD's ESSI system.
  + The respective facilities shall allow for the correct performance of the analyses. Conditions to be controlled include, for example: power sources, lighting, ventilation, noise, water, waste disposal, and environmental conditions.
  + Communication systems within the laboratory should be appropriate to the size and complexity of the facility to ensure efficient transfer of information.
  + Safety facilities and devices should be in place and their operation should be checked regularly.

Patient sampling facilities should have separate areas for reception/waiting room and sampling. During sampling, consideration should be given to the privacy, comfort, and needs of the patient (e.g., handicapped access, restroom) and the person accompanying the patient (e.g., guardian or interpreter).

The facilities in which sampling procedures are performed should allow for sampling to be conducted in a manner that does not invalidate results or adversely affect the quality of the analysis and also allow for traceability of samples from the pre-analytical phase.

The laboratory should monitor, control and record environmental conditions as required by the relevant specifications or when they may influence sample quality, results, or personnel health. Attention should be paid to factors such as lighting, sterility, dust, noxious or hazardous vapors, electromagnetic interference, radiation, humidity, power supply, temperature, sound and vibration levels, workflow logistics, as appropriate to the activities involved so that these do not invalidate results or adversely affect the required quality of any analysis.

There should be effective separation between sections of the laboratory where incompatible activities exist. Procedures should be implemented to avoid cross-contamination when analytical procedures represent a hazard or when the work could be affected or influenced by the lack of separation.

**Equipment**. The CONCESSIONAIRE shall provide the necessary equipment to provide the laboratory services associated with the portfolio of services established in Appendix 4 of this Annex; ensuring its maintenance and replacement through the medical equipment management service. Each piece of equipment shall have its instruction manual in Spanish, as well as the preventive maintenance schedule, and shall be available to both the personnel and the supervisor or external entity, whenever required.

The CONCESSIONAIRE shall install and be responsible for the maintenance of the computer applications (LIS) necessary for the proper execution of the object of the Contract, assuming the cost thereof. Likewise, it shall be compatible with the systems used in the Hospital, allowing relevant information to be obtained to enable the development of management and efficiency indicators, etc.

The CONCESSIONAIRE shall be responsible for the calibration of the equipment that requires it. The document supporting such calibration shall be available to the Supervisor or external entity, whenever required.

The laboratory shall have a documented procedure for the calibration of equipment that directly or indirectly affect the results of the analysis. This procedure shall include:

* + Conditions of use and manufacturer's instructions;
  + Metrological traceability records of the calibration standard and the traceable calibration of the equipment;
  + Verification of the required measurement accuracy and operation of the measurement system at defined intervals;
  + Recording of calibration status and recalibration date;
  + When calibration results in a set of correction factors, the previous calibration factors shall be correctly updated;
  + Security measures to prevent tampering or adjustments that could invalidate the analysis results.

All control measures shall be included in contingency measures and corrective actions documents.

The CONCESSIONAIRE shall provide the necessary facilities and equipment to carry out analytical determinations of biological agents that imply a risk for the employees or the population, such as laminar flow cabinets.

* Supplies and Reagents. The CONCESSIONAIRE shall provide, at its own expense and risk, the supplies and reagents necessary for the operation of the laboratory. These reagents and general supplies must be certified and approved by the health authority, these certifications shall only cease to be required from the CONCESSIONAIRE in the exceptional case that the latter demonstrates that, for a certain reagent, the certification requirement is not applicable due to its technical characteristics, being necessary to provide the Supervisor of Contract and Operations with a copy to the CONCESSIONAIRE the information that allows verifying that there are no equivalent products that do have such certifications.

Likewise, the Supervisor of Contract and Operations shall be provided with information issued by specialized companies that allow validating the suitability of its use. Based on this information, the Supervisor of Contract and Operations may approve the use of such reagent. In no case shall this approval limit the responsibility of the CONCESSIONAIRE with respect to the reagents it uses for its procedures.

The CONCESSIONAIRE shall have the necessary reagents available and in the appropriate operating and expiration conditions, for the proper performance of the activity. The storage conditions and space must be such as to ensure the continuous integrity of the sample, documents, equipment, reagents, consumables, records, results and any other item that could affect the quality of the analysis results.

Clinical specimens and materials used in analytical processes should be stored in a manner that prevents cross-contamination. Storage and disposal facilities for hazardous materials should be commensurate with the hazards of the materials, as specified by applicable requirements.

* Other materials. The CONCESSIONAIRE shall provide the following services:
  + The material used to obtain specimens or samples shall be sterile and disposable. Vacuum extraction system will be used for blood sampling and for containers for automated complete urine examination.
  + All the necessary material for the handling and labeling of samples, as well as their traceability.
  + It shall have the necessary material or supplies to deal with any occurrence that may occur as a result of the sample collection procedure.

Hazardous products or reagents should be stored in such a way as to ensure their control and avoid risks associated with their handling. Each product should have its corresponding safety data sheet, updated and available to the professional who is going to use them.

**Personnel**

The service must be directed by a Registered Physician, specialist in Clinical Pathology with a minimum experience of 5 years. He/she shall supervise the correct performance of the methodological procedures by the subordinate personnel.

The CONCESSIONAIRE shall have sufficient healthcare personnel, technical specialists and other non-healthcare personnel (clinical pathologist, medical laboratory technologist, laboratory technician) for its proper functioning in the scheduled and non-scheduled modalities, who shall have the required legal qualifications and the necessary technical training for the exercise of its activity, in accordance with the Applicable Laws and Provisions, as well as specific training for the use of medical equipment and technological innovations.

All personnel must comply with the corresponding medical and psychological checkups and examinations that allow them to perform their work correctly, as well as have the pertinent vaccinations.

The personnel must have all the personal protective equipment (PPE) to carry out their activities with full guarantees for the personnel, the sample, and the environment, in compliance with health, occupational safety, and biosafety standards, among others.

For personnel involved in management and technical processes, a continuing education program should be available, which will include ethics training in addition to technical and operational aspects. The personnel shall take part in the continuing education and the effectiveness of the program shall be reviewed periodically.

The CONCESSIONAIRE and the GRANTOR shall agree on a code of ethics that shall regulate aspects such as confidentiality in the handling of information, treatment of users, officials and the public in general.

The personnel profiles shall be submitted to the Supervisor of Contract and Operations, for compliance with the corresponding technical standard, ten (10) days prior to the commencement of the Service. Any subsequent change shall be communicated and the corresponding profile shall be submitted to the Supervisor of Contract and Operations for a favorable opinion, at the latest one (1) day after the change has occurred.

**Functional Technical Specifications of the Service**

The operation of the Laboratory consists of three (3) phases: pre-analytical, analytical and post-analytical, and includes the development of multiple, complex and interrelated activities aimed at:

* Production: comprises all the components necessary to achieve the results.
* Clinic: comprises the activities of applying knowledge to the choice, validation and interpretation of tests and results, preparation of reports, and analysis of the effectiveness and appropriateness of procedures.
* Ensure compliance with quality standards for all phases.

The basic functions or activities to be performed are as follows:

* Pre-Analytical Phase.
  + Examinations may only be requested by personnel authorized by the Hospital in accordance with the established protocols. The Hospital shall inform and keep updated the list of authorized personnel for communication to the CONCESSIONAIRE.
  + The CONCESSIONAIRE shall be responsible for taking and transferring samples for outpatients and hospitalized patients, necessary to meet the services portfolio, with the exception of those samples taken for specialized procedures (e.g. cerebrospinal fluid, synovial fluid, peritoneal fluid, others).
  + For outpatients, the CONCESSIONAIRE shall be responsible for scheduling outpatient care, as well as informing the patient or companion about the necessary indications prior to sample collection (e.g. fasting, medication intake, etc.); the CONCESSIONAIRE shall agree with the Hospital on the indications and conditions to be given to the patients or companions.
  + For hospitalized patients, the sample shall be taken in the respective service, for which the CONCESSIONAIRE’s personnel shall coordinate with the service, which shall provide the access facilities required to ensure the timeliness of the sample taking.
  + The CONCESSIONAIRE shall have a manual regulating the sample taking process, as well as its transportation, specifying the procedure and the conditions for its transportation (temperature range and adequate preservatives).
  + Samples must be traceable to the identified patient.
  + The CONCESSIONAIRE shall be responsible for the identification, labeling, reception, preparation and preservation of the specimens or biological samples.
  + The specimens shall be adequately preserved for the time required to guarantee the Service quality:
    - Three (3) days under refrigeration for urine biochemistry samples.
    - Serum samples will be frozen for eight (8) months.

The quality and adequacy criteria shall be agreed between the CONCESSIONAIRE and the GRANTOR.

* + For the samples delivered by the Hospital, these will be registered and identified upon admission to the unit and their acceptability will be verified. The acceptance and rejection criteria shall be agreed between the CONCESSIONAIRE and the Hospital.
  + For urgent samples, there will be a procedure to ensure their priority handling.

**Tolerance times for compliance with medical orders**

The CONCESSIONAIRE shall respond to the examination requests issued by the authorized user, within the maximum time limits defined in the following table:

**Table 59: Compliance with Examination Requests**

|  |  |
| --- | --- |
| **Unscheduled Services** | **Maximum time** |
| Immediate Urgency (code red) | 10 minutes |
| Medium Urgency | 20 minutes |
| Not Urgent | 40 minutes |
| **Scheduled Services** | **Maximum time** |
| Outpatients | 45 minutes |

For unscheduled services, the time will be counted from the time the request is received by the service. The condition of the level of urgency will be qualified by the authorized personnel of the Hospital.

For scheduled services, the time will be counted from the time the patient is admitted to the service.

This procedure shall be detailed in the AOP.

* Analytical Phase.
  + The CONCESSIONAIRE will be responsible for the calibration of each technique, according to the procedure previously validated by the GRANTOR for the Hospital, which will include at least: calibrator to be used; when a technique must be calibrated; rules for calibration acceptance; rules to be followed in case of calibration rejection; documentation of the technical specifications of each calibrator and its traceability; historical record of the calibration. All processes associated with calibration shall be periodically reviewed and changes shall be reported to the GRANTOR in a timely manner.
  + If a change of test or methodology generates changes in values or interpretation, it must be immediately communicated to the GRANTOR.
* Post analytical phase.
  + The CONCESSIONAIRE shall verify, validate and submit the results report digitally through the LIS.
  + The criteria and formats for verification, validation and presentation of the results report shall be agreed between the CONCESSIONAIRE and the Hospital. The format of the report shall include at least the following information:
    - Report identification number and date of report.
    - Patient identification, age and sex.
    - Identification of the applicant and recipient.
    - Identification of specimen type, date obtained and date of arrival at the Laboratory.
    - Result of the analytical determination performed.
    - Units of the results.
    - Reference values or clinical classification limits as appropriate.
    - Methodology used.
    - Analyzer or equipment used.
    - Validation of the process by the practitioner responsible for the Laboratory.
    - In the tests that require it, the corresponding reference values should be detailed and, if necessary, the technique used in their performance.

The CONCESSIONAIRE shall send the report through the Hospital's information system to the users to be determined between the CONCESSIONAIRE and the GRANTOR.

The CONCESSIONAIRE’s professionals will coordinate with the services, units and Care levels to provide technical Care on the results obtained.

* Response times - Deadlines.
  + **Routine Tests**: From the moment the sample is received, until the computerized issuance of the report, the CONCESSIONAIRE shall respond within the following deadlines:

**Table 60: Routine Tests**

| **Services** | **Sample Collection/Sample Reception** | | **Delivery of results as soon as the medical order is received by the laboratory.** |
| --- | --- | --- | --- |
| **Outpatients** | Monday to Friday | All day | Within 24 hours |
| Saturday | Before 2pm | Within 24 hours |
| After 2pm | The following Monday, before 8:00 am. |
| **Hospitalization** | Monday to Sunday | All day | Maximum turnaround time: 6 hours |
| **Intensive Care Unit/Emergency/Critically Ill Hospitalized Patients** | Monday to Sunday | All day | Maximum delivery time: 45 minutes (except for ABG, electrolytes and other determinations defined between the Hospital and the CONCESSIONAIRE). |

* Special Tests. The delivery of the results shall be in less than 48 hours from the moment the sample enters the laboratory, with the exception of those tests that by their nature require more time, which shall not exceed ten (10) Calendar Days. In this respect, the CONCESSIONAIRE shall submit to the Hospital, for its consideration, a list of tests that require this treatment.
* Cultures. Up to 2 reports shall be made, in the following terms:

**Table 61: Cultures**

|  |  |
| --- | --- |
| **Type of Report** | **Delivery of results from the moment the medical order is received by the laboratory.** |
| Preliminary Culture Report for hospitalized patients | Within 48 hours |
| Preliminary report (Gram direct, examination of the physical characteristics of the sample, etc.), only for hospitalized patients. | Within four (4) hours |
| Final report | Within five (5) days |

Unscheduled cultures should be processed by automated means.

For unscheduled examinations of immediate urgency, the following maximum times from receipt of the sample must be complied with:

**Table 62: Maximum Times from Receipt of Sample**

| **Test** | **Response Time** |
| --- | --- |
| Troponins  CPK  Arterial blood gas analysis (ABG)  Electrolytes in blood: Na+, K+, Cl+ | 40 min  40 min  10 min  10 min |
| Hemoglobin  Platelets, count  Clotting time  Bleeding time  Transaminase TGP  Transaminase TGO  Blood count  Glucose  Urea  Creatinine  Total fractionated bilirubin  Total fractionated protein  Calcium  Amylase  Magnesium  Albumin  Phosphorus  Prothrombin Time  Partial Thromboplastin Time  Fibrinogen  Lactate Dehydrogenase (LDH)  Quantitative D-dimer  Reticulocytes  Rapid Influenza Test  Gram of body fluids  Alkaline phosphatase  CSF cytochemistry  C-reactive protein  Inflammatory reaction  Lipase  Mixing study  Biological liquid cytochemicals  Agglutinations | 40 min |
| Complete manual urinalysis  Automated complete urinalysis | 40 min  15 min |
| HIV Test  Hepatitis B test (HBV) | 4 hours |

Note: this list of tests and times may be modified during the development of the AOP, in coordination with the Hospital, the CONCESSIONAIRE and the Supervisor of Contract and Operations.

* Information System. The CONCESSIONAIRE must have systems such as LIS (Laboratory Information System), scheduling, BI (Business Intelligence) and others necessary for the fulfillment of its activities.

All the systems must be integrated to the Hospital's information system and be available in real time, so prior to its contracting it must be approved by the GRANTOR.

The CONCESSIONAIRE shall train the authorized users of the Hospital in the handling and exploitation of the information systems provided.

The computer supports shall allow the "inverse traceability" of the clinical reports of all the samples and determinations or the second optional opinions, as the case may be, and shall identify for each patient the outsourced determinations, keeping the records and analytical reports of the Laboratory or collaborating physician, at least for 5 years. The archive shall comply with the provisions of the Applicable Laws and Provisions on personal data protection.

* Quality assurance. The CONCESSIONAIRE shall design, manage and implement a continuous quality improvement model for the following minimum aspects:
  + Quality perceived by users (treatment).
  + Quality perceived by Hospital personnel.
  + Technical quality: structure, processes, results of the pre-analytical, analytical and post-analytical phases.

In the area of quality perceived by users and personnel, satisfaction surveys should be implemented in accordance with the provisions of the Service of Clinical Pathology levels section.

In the area of technical quality, at least the following criteria should be considered:

* Include external and internal quality controls.
* Internal quality control: 100% of on-site test portfolio (shall be a third opinion and include 2 levels for biochemistry, glycosylated Hb, hemostasis, urine tests and 3 levels for immunology, hematology and arterial gases).
* Definition of desirable analytical quality specifications based on biological variability for both imprecision, bias and maximum permissible total error specifications; and must be met for at least 90%[[3]](#footnote-3) of the analytes belonging to the portfolio of services performed on-site at the hospital itself, before the end of the 12 months of the Contract.
* Preparation and preservation of controls, frequency of controls and criteria for acceptance of results according to the levels specified by the work area.

Activities and results shall be reported on a quarterly basis.

**Organization and Management**

The CONCESSIONAIRE must propose an organization and management system that meets the defined scope and complies with all the necessary conditions for an adequate operation of the service.

The planning of this service must be carried out in coordination with the criteria for the design and construction of the infrastructure, as well as the equipment. The operation of the service must be carried out in coordination with the services of: Cleaning, sanitation and vector management, Integrated Solid Waste Management Service, Clothes Management, Information and Communication Technologies and Provision and Availability of Technological Infrastructure (Service of Maintenance and Operation for the Building, Facilities, Equipment and Furniture Associated to the Infrastructure; Administration, Acquisition, Maintenance and Availability of the Equipment).

**Documentation**

* The CONCESSIONAIRE shall prepare the Service’s POA that includes its direct application. The Service’s POA shall determine the corresponding specifications and procedures within the framework of the Applicable Laws and Provisions and their updates or modifications during the execution of the Contract, as described in Annex 21.
* Periodic reports to be submitted during the Contract. The CONCESSIONAIRE shall deliver to the Supervisor of Contract and Operations, with a copy to the GRANTOR, a monthly report containing statistical information on the operation of the service. This report shall contain, at least, the following information:
  + Equipment control and calibration results.
  + Results of quality control.
  + Volume of tests performed, classified by type of test, result and applicant.
  + Volume grouped by equivalent test, calculation of equivalent tests.
  + Periodic record of the indicators (production, quality, satisfaction, etc.) mentioned in the Technical Health Standard (NTS) No. 072-MINSA/DGSP-V.01 of the Production Unit of Service of Clinical Pathology s, approved by Ministerial Resolution 627-2008/MINSA and its subsequent update.
  + Institutional Microbiological Map, in compliance with the requirements of Epidemiology of the Ministry of Health. This information should be included on a quarterly basis and coordinated with the Clinical Pathology, Infectious Diseases and Epidemiology services of the Hospital.
  + Other information considered relevant for monitoring the Service quality and whose inclusion in the monthly report shall be agreed between the Hospital and the CONCESSIONAIRE.
  + Copy of the monthly reports of the results of analytes submitted to the interlaboratorial quality assurance program and external quality control, as well as the access codes with their ID to access the software of the aforementioned quality programs for their adequate supervision in real time.

**Definition of Terms**

* Analyte. It is a chemical species (ions, molecules, polymeric aggregates), whose presence or concentration is desired to know in a measurement process.
* Analysis: Set of operations aimed at determining the value or characteristics of a property.
* Internal Quality Control: It corresponds to the prospective control, valid to the processed analysis. The objective is to detect the possible existence of anomalies in the measurement process, it must also be particularly effective in detecting errors that exceed the maximum tolerable, i.e. to ensure that the results obtained do not present more errors than the characteristic of the procedure, or additional errors that compromise the quality of the results.
* External Quality Control: It is the retrospective control; it estimates the systematic error. It encompasses different processes through which the evaluation of the quality and accuracy of the results is exercised thanks to the intervention of an outside organization, through an external evaluation program or interlaboratory evaluation.
* Interlaboratory evaluation: Organization, performance and evaluation of measurements or tests of the same or similar items by 2 or more laboratories, according to predetermined conditions.
* Pre-analytical phase: It comprises all the activities that take place from the moment the analytical request is made until the sample analysis process begins. It is aimed at responding to analytical requests made by clinicians and obtaining and managing the specimens and delivering the samples to the analytical testing/determination work areas for processing, meeting the requirements established for the performance of the analytical tests/determinations.
* Analytical Phase: It comprises all the activities necessary for the performance of the analytical procedures, the obtaining of the results and the technical validation of the results. It aims at receiving the analytical requests made by clinicians and delivering the samples to the analytical tests / determinations work areas for processing, complying with the requirements established for the performance of the analytical tests/ determinations. Includes the work systematics for associating measurements to standard values (calibration).
* Post-analytical phase: It includes the optional validation of the analytical result, the preparation of the report and its distribution and delivery to the requesting physicians, as well as a series of complementary activities, such as the filing and conservation of samples, the filing of requests and reports, and the disposal of waste generated during the analytical process. This phase is mainly carried out in the administrative and knowledge areas of the clinical laboratory.
* Routine tests: These are the laboratory tests/determinations most frequently requested by the Hospital.
* Special tests: These are the laboratory tests/determinations that require the use of more complex techniques for their measurement. They are requested less frequently than routine tests.
  1. **SERVICE OF IMAGING**

The Service of Imaging consists of diagnostic support through the generation, acquisition and processing of high resolution and precision images by means of ionizing and non-ionizing radiation and other energy sources, which will allow the timely detection of diseases, their study and treatment.

The Service quality is related to (but not limited to):

* Timely and efficient attention to the Hospital's imaging exam requirements.
* Ensure safety and good treatment in patient care.
* Compliance with Applicable Laws and Provisions.

**Purpose**

The purpose of the Service of Imaging is to generate images, obtain morphological and functional data by means of ionizing or non-ionizing radiations and other energy sources, necessary for the health control, diagnosis or treatment of the persons referred by the Hospital. This service will be provided to all patients referred by the GRANTOR.

**Scope**

The CONCESSIONAIRE shall be responsible for:

* Delivering the Service of Imaging, scheduling and reception of patients, acquisition (capture), processing, referral and storage of images.
* Interpretation (reading) of images and issuance of the report, shall be performed for the defined examinations included in attached section.
* Complying with safety standards for users, officials and general public.
* Complying with the code of ethics[[4]](#footnote-4) in the handling of information, as well as in the treatment of users and employees.

The CONCESSIONAIRE shall be responsible for performing the following tests:

* Digital and specialized radiology (with and non-contrast).
* Ultrasound
* MRI (with and non-contrast).
* CT scan (with and non-contrast).
* Mammography
* Bone densitometry

The CONCESSIONAIRE shall not be responsible for the transfer of patients to and from the Service of Imaging.

The CONCESSIONAIRE shall be responsible for the interpretation (reading) of the images and the issuance of reports for:

* All emergency or unscheduled exams.
* Digital Radiology with contrast.
* MRI
* CT scan
* Ultrasound

For the examinations in which the CONCESSIONAIRE does not perform the diagnosis (does not issue reports), the CONCESSIONAIRE shall send the images to the Health Establishment defined by the GRANTOR by digital means, according to the procedure to be established in the POA.

The CONCESSIONAIRE shall not be responsible for the clinical indication, the clinical control to patients submitted to examinations, nor for the vital support to patients under mechanical ventilation.

The CONCESSIONAIRE shall be obliged, during the entire term of the Contract, to have at its disposal the human resources, materials, infrastructure, equipment and, in general, those resources necessary to carry out the activities object of the Contract with efficiency, quality and guarantee.

The CONCESSIONAIRE shall provide the portfolio of services (also known as catalog of examinations) described in the annex, which may be updated and revised periodically, in order to be consistent with the Hospital's portfolio of services.

The CONCESSIONAIRE shall provide the infrastructure and equipment with its respective maintenance, at its full charge and cost, during the whole term of the Contract so that the GRANTOR performs the imaging exams that are not included in the portfolio defined in Appendix 4 of this Annex, agreeing on the pertinent coordination measures in the POA. At the same time, it shall provide the personnel of the GRANTOR with the Personal Protective Equipment (PPE) to perform imaging diagnostic activities.

**Time Availability**

The Service shall provide diagnostic support care for elective procedures, according to demand and urgent or emergency procedures 24 hours a day, every day of the year.

* Unscheduled examinations, are those ordered by the clinical team for the diagnosis or follow-up of the patient's clinical condition. It must be available 24 hours a day and every day of the year. It is the Diagnostic Imaging Service intended to provide the service to the Units that require it, including at least Emergency, Hospitalization, Critical Care and Operating Rooms. According to the patient's condition, the examination may be performed at the patient's bedside or in the imaging unit.
* Scheduled Examinations, for exams ordered on a scheduled basis, the Service of Imaging will be available Monday through Saturday from 7:00 a.m. to 7:00 p.m. (excluding holidays). In case the demand exceeds the hourly offer, the opening hours may be extended.

Examinations should be available according to the following schedule:

**Table 63: Time Availability of Exams**

|  |  |  |
| --- | --- | --- |
| **Exam** | **Business Hours** | **Non-Business Hours** |
| Conventional radiology | Yes | Yes |
| Specialized radiology | Yes | Yes |
| Ultrasound | Yes | Yes |
| CT scan | Yes | Yes |
| MRI | Yes | Yes |
| Mammography | Yes | No |
| Densitometry | Yes | No |

* Continuous professional attention. On-call shifts should be established that at least include:
  + Monday to Friday:
    - The guard of physical presence of a professional (Radiologist Physician, Medical Technologist) every day of the year.
    - The guard of retention of professionals in accordance with the Applicable Laws and Provisions every day of the year.
  + Saturday, Sunday and holidays:
    - The existence of the necessary professionals to maintain the continuity of the service, according to the Applicable Laws and Provisions, shall be guaranteed during each working day.

**Regulations**

For the provision of the Service, the CONCESSIONAIRE, considering the best practices and international standards, shall comply at least with the Applicable Laws and Provisions and the procedures established in this regard by the GRANTOR through the Supervisor of Contract and Operations, in order to guarantee at all times, the safety in terms of prevention of HAI, transmission of infectious and contagious diseases and occupational accidents.

In any case, the CONCESSIONAIRE shall comply with the technical standards set forth by the Ministry of Health or any other Competent Governmental Authority.

In particular, the CONCESSIONAIRE shall comply, as a minimum, with the following Applicable Laws and Provisions:

* Technical Health Standard of the Production Unit of Diagnostic Imaging Service, according to Ministerial Resolution No. 217-2010/MINSA.
* General Standards for Radiological Protection and Safety of ESSALUD, approved with General Management Directive No. 11-GCPS-ESSALUD-2019 V.01.
* Use of MRI at the Social Health Insurance System-ESSALUD V.02, approved by Resolution of Central Management of Health Benefits N° 95-GCPS-ESSALUD 2017.
* Use of MRI at the Social Health Insurance System - ESSALUD General Management Resolution No. 095 -GG-ESSALUD-2012.
* Institutional Protocol of the Care Process of CT scan at the Social Health Insurance System - ESSALUD.

**Equipment and Supplies**

* Physical Facilities. The CONCESSIONAIRE undertakes to maintain the facilities and assets in good condition and use during the execution of the Contract. In other words, it shall be responsible for the proper condition and upkeep of the facilities, including their cleanliness, maintenance and safety.

The facilities of the Service of Imaging and associated offices shall provide a suitable environment for the tasks to be performed, to ensure compliance with the following conditions:

* + Easy access for the patient in different health conditions and be related to the main access, outpatient, hospitalization and critical areas.
  + Wide access doors and passageways that allow easy transit of stretchers, wheelchairs and equipment.
  + Away from areas with risk of contamination.
  + Written and symbolic signage that allows for the location and identification of environments and safety zones, emergency exits and no-smoking signs.
  + Waiting room and restrooms for the public.
  + Controlled access to areas that affect the quality of examinations.
  + Protect clinical information, patient examinations and service resources from unauthorized access.
  + The respective facilities should allow for the proper conduct of examinations. Conditions to be controlled include, for example: sufficient space for smooth processes, and compliance with radiation protection standards, power sources, lighting, ventilation, noise, water, waste disposal, and environmental conditions.
  + Communication systems within the facility should be appropriate to the size and complexity of the facility to ensure efficient transfer of information.
  + Safety installations and devices should be in place and their operation should be regularly verified.

Patient examination facilities should have separate areas for reception/waiting room and examination. During the examination, consideration should be given to the privacy, comfort and needs of the patient (e.g., handicapped access, restroom) and the person accompanying the patient (e.g., guardian or interpreter).

The facilities in which the examination procedures will be performed should allow for the examination to be conducted in a manner that does not invalidate the results or adversely affect the quality of the examinations.

The Service of Imaging should monitor, control and record environmental conditions, as required by the relevant specifications or when they may influence the quality of the examination, results, or the health of personnel. Attention should be paid to factors such as appropriate coverage of walls and openings to prevent the passage of lightning, as well as lighting, sterility, dust, noxious or hazardous vapors, electromagnetic interference, radiation, humidity, power supply, temperature, sound and vibration levels, workflow logistics, as appropriate to the activities involved so that they do not invalidate the results or adversely affect the required quality of any analysis.

* Equipment. The CONCESSIONAIRE shall equip the Service of Imaging, as well as attend to its maintenance and availability as of the entry into force of the Contract.

Each piece of equipment shall have its instruction manual, in Spanish, and shall be available to the personnel, as well as to the Supervisor or external entity, whenever required.

The CONCESSIONAIRE shall install and be responsible for the maintenance of the computer applications necessary for the proper execution of the object of the Contract, assuming the cost thereof. The digital storage, transmission and downloading system of radiological images PACS/ RIS, which shall be compatible with the systems used in the Hospital, shall be available.

The CONCESSIONAIRE shall be responsible for the calibration of the equipment that requires it. The document supporting such calibration shall be available to the GRANTOR or Supervisor of Contract and Operations whenever required.

Calibrations shall be performed according to the procedure detailed in the POA.

The methods shall be validated and approved by the GRANTOR, with the required anticipation, before going into operation. The state of the techniques shall be reviewed periodically. There should be standardized protocols or instructions of the techniques and summary sheets.

The Diagnostic Imaging Service shall have a documented procedure for the calibration of equipment that directly or indirectly affect the results of the examinations. This procedure shall include:

* + Conditions of use and manufacturer's instructions;
  + Ionizing radiation metrological traceability records of the calibration standard and traceable calibration of the equipment;
  + Record of verification of the required measurement accuracy and operation of the measurement system at defined intervals;
  + Record of calibration status and recalibration date;
  + Ensure that when calibration results in a set of correction factors, the calibration factors will be updated correctly;
  + Security measures to prevent tampering or adjustments that could invalidate test results.
* Inputs. The CONCESSIONAIRE shall acquire, at its own expense and risk, all the supplies and products necessary for the operation of the Service of Imaging, both for the examinations with contrast media, as well as for the management of the complications associated with their administration, which shall be certified by the respective authority. THE CONCESSIONAIRE shall provide the GRANTOR with a copy to the Supervisor of Contract and Operations of the information issued by specialized companies that allow validating the suitability of its use. Based on this information, the Supervisor of Contract and Operations may approve the use of such input. In no case shall this approval limit the responsibility of the CONCESSIONAIRE with respect to the supplies or reagents used for its procedures.

The CONCESSIONAIRE shall have the necessary inputs or reagents available and in the appropriate storage, operation and expiration conditions, for the correct development of the activity. The storage conditions and space must be such as to ensure the continued integrity of the test, documents, equipment, reagents, consumables, records, results and any other item that could affect the quality of the test results.

* Other materials. The CONCESSIONAIRE shall provide the following services:
  + All the necessary material for handling, printing or storing exams, if necessary.
  + The necessary material to attend to any occurrence that may occur as a result of the act of taking the exam.
  + The timely and continuous supply of the necessary supplies for personal protection (PPE).

The existence of hazardous products and reagents must be controlled and in specific cabinets and properly labeled for proper storage. Each product must have its corresponding safety data sheet or certificate, updated and available to the professional who requires it.

**Personnel**

The CONCESSIONAIRE shall have as a minimum the following professionals:

* Responsible for the Service of Imaging: Medical Surgeon registered as a specialist in Radiology and authorized by the Peruvian Medical College, with a valid individual license in the use of ionizing radiation, with experience in the specialty of no less than 5 years. With training in management, basic computer skills.
* Responsible for the specialized areas of the Service of Imaging: Medical Surgeon with specialist registration in Radiology and Qualified by the Peruvian Medical College, with individual license in force in the use of ionizing radiation, with experience in the specialty of the area corresponding to his chief (ultrasound, magnetic resonance, CT scan, mammography, bone densitometry) not less than 3 years. With management training, basic computer skills.
* Non-medical professional Degree in Medical Technology, specializing in Radiology, with professional degree, registered and authorized by the Medical Technologist College of Peru, with individual license in force in the use of ionizing radiation, with basic computer skills.
* Nursing personnel, licensed in nursing, with professional degree, registered and authorized by the College of Nurses of Peru, with training in the area and knowledge in the use of ionizing radiation.
* Professional and technical personnel with specialty or training in the maintenance of biomedical equipment, with training and experience in maintenance of ionizing and non-ionizing radiation equipment, with individual license in force in the maintenance of such equipment.
* Administrative personnel, who may work exclusively or partially, depending on the production and category of the facility.

To this end, the CONCESSIONAIRE shall document the qualifications of the personnel for each job position, which shall reflect adequate education, training and demonstrate the necessary and appropriate experience and skills for the tasks performed.

All personnel shall comply with the corresponding medical and psychological check-ups and examinations and relevant vaccinations.

Personnel shall have all the necessary personal protective equipment (PPE) to carry out their activities with full guarantees for the personnel themselves, the patient and the environment. For personnel who will operate equipment that emits ionizing radiation, in addition to the current license for the use of ionizing radiation, the use of a device or instrument that measures ionizing radiation doses over a given period of time (Dosimeter) will be required as a Radiological Surveillance measure.

A continuing education program should be available for personnel involved in the management and technical processes. The effectiveness of this program should be reviewed periodically.

The personnel profiles must be submitted to the Supervisor of Contract and Operations, for compliance with the corresponding technical standard, ten (10) days prior to the start of the Service. Any subsequent change shall be communicated and the corresponding profile shall be submitted to the Supervisor of Contract and Operations for a favorable opinion, at the latest one (1) day after the change occurs.

**Functional Technical Specifications of the Service**

The description of the operation of the Service of Imaging will be articulated in relation to the process, which will consist of three phases: reception, examination and report of the results and will include the development of multiple interrelated activities, aimed at:

* Production: comprises all the components necessary to obtain the results.
* Clinical: comprises the activities of applying knowledge to the choice, validation and interpretation of tests and results and the preparation of reports.

The basic functions or activities to be performed are as follows:

* Reception:
  + The prescription of an imaging exam must be performed only by physicians authorized by the GRANTOR.
  + The request for examinations shall be made in the formats of the GRANTOR, in accordance with the technical health standard and agreed with the CONCESSIONAIRE, which may be digital or printed.
  + Scheduling: The CONCESSIONAIRE will digitally manage the scheduling and follow-up of appointments, including the previous indications according to the requested exam (e.g. fasting or suspension of medication if required).
  + Patients may be scheduled up to 30 minutes before the scheduled time and report to the corresponding room of Radiodiagnosis according to the requested exam.
  + Prior to the exams, the CONCESSIONAIRE’S personnel will verify with the patient or companion physiological and clinical conditions, or background information that will allow establishing the level of risk that the procedure could represent for the patient (e.g. allergies, medication consumption, if the patient is pregnant, among others), which will be recorded in a record. All conditions must be defined in a verification protocol, which shall be previously agreed between the CONCESSIONAIRE and the GRANTOR and shall be updated in the POA.
  + Ask and verify that every patient has complied with the indications given by the personnel prior to the examination. These indications shall be agreed upon between the CONCESSIONAIRE and the GRANTOR and reviewed and updated in the POA.
  + The patient shall have privacy conditions to prepare him/herself before and after the examination, and the CONCESSIONAIRE shall safeguard his/her dignity, through the necessary means and infrastructure, as well as the adequate treatment of the personnel.
* Exam:
* Refers to the acquisition (capture) of the images.
* The time the procedure will take will depend on the type and degree of complexity of the exam, as well as the patient's condition, and overexposure of patients and personnel should be avoided.
* The CONCESSIONAIRE shall have an examination manual specifying the procedure and the conditions of the process.
* The CONCESSIONAIRE shall verify before the examination that the patient does not present any condition or element that represents a risk to his/her health. In case the patients require anesthesia or sedation, the CONCESSIONAIRE shall be responsible for their clinical management.
* Processing. Once the image is captured, the CONCESSIONAIRE is responsible for its processing (labeling, orientation, etc.) prior to the reading and report by the radiologist or its digital transfer to the CONCESSIONAIRE.
* Storage:
  + The CONCESSIONAIRE shall store and safeguard the images in digital media (PACS/RIS system) for at least 15 years according to the Applicable Laws and Provisions. Alternatively, they may be stored physically on plate, photographic or thermal paper or others.
  + The archive must comply with the standards established for health records.
  + The PACS/RIS system shall allow, in addition to the storage of the images, their transmission and download and shall be compatible with the GRANTOR's computer system in such a way that the GRANTOR has the images available within a maximum period of 2 Calendar Days and immediate access to them for a period of 2 months.

The request and receipt of radiological test results by the GRANTOR must be accessible through a single application in order to have access to all data and files.

* Report of results:
  + For the imaging studies that require a report, the report shall be issued by a duly authorized professional according to the Applicable Laws and Provisions.
  + The format of the report shall be agreed between the CONCESSIONAIRE and the GRANTOR according to the model established in the Procedures Manual and shall include as a minimum:
    - Letterhead and full name of the Diagnostic Imaging Service area, validated and signed by the responsible specialist physician.
    - Report identification number and date of the report.
    - Identification of the patient, age and sex.
    - Identification of the applicant and recipient.
    - Description of the images.
    - Diagnostic presumption.

The report shall be issued digitally and transmitted to the GRANTOR's information system. The procedures for submitting the reports and coordination with the clinical teams shall be agreed between the GRANTOR and the CONCESSIONAIRE and shall be specified in the POA.

The technical Care of the CONCESSIONAIRE to the Care services that allows an adequate information about the observed results shall be foreseen in the POA.

* PACS/RIS system features. The PACS/RIS system shall allow the management of all radiological processes, store and transmit radiological images for viewing and recording of results, ensuring their preservation and confidentiality.

The PACS/RIS system shall be 100% compatible with the GRANTOR's information system.

* Connectivity and integration. The exchange of images and files shall be governed by standards such as DICOM (*Digital Imaging and Communication in Medicine*) and HL7 (*Health Level Seven*).

Radiological information systems should be integrated with the other health information systems, particularly with the electronic medical record (HCE), so that patients' clinical information can be accessed at any point in the testing and reporting process.

* Response times in the fulfillment of medical orders. The CONCESSIONAIRE shall fulfill the "medical orders" requested by the authorized user, within the maximum times defined in the following table:

**Table 64: Time taken to comply with medical orders**

**(from receipt of order to performance of the examination)**

| **Unscheduled Services** | **Maximum time** |
| --- | --- |
| Immediate Urgency (code red) | 10 minutes |
| Medium Urgency | 20 minutes |
| Not Urgent | 40 minutes |
| **Scheduled Services** | **Maximum time** |
| Outpatients | 45 minutes |

The times will be counted from the moment the request enters the Diagnostic Imaging Service registered in the SIGI-NS.

* Quality Assurance. The CONCESSIONAIRE shall design and manage, through a continuous quality improvement model, the following aspects:
  + Quality perceived by users (treatment)
  + Quality perceived by Hospital personnel
  + Technical quality: structure, processes, results

In the area of quality perceived by users and personnel, satisfaction surveys should be implemented in accordance with the provisions of the section of Service of Imaging levels.

**Organization**

The CONCESSIONAIRE must propose an organization and management system that meets the defined scope and fulfills all the necessary conditions for the proper operation of the Service.

The planning of this Service must be carried out in accordance with the criteria for the design and construction of the infrastructure, as well as the medical equipment and clinical furniture. The operation of the service involves the following services: Cleaning, sanitation and vector management, Integrated Solid Waste Management Service, Information and Communication Technologies, provision and Availability of Technological Infrastructure; Maintenance Service and operation of the Building, Facilities, Equipment and Furniture associated with the Infrastructure, Administration, Acquisition, Maintenance and Availability of the Equipment).

The Service of Imaging shall in turn coordinate with the Medical Sub-Directorate, ICU, Emergency Unit. The CONCESSIONAIRE shall coordinate with the CONCESSIONAIRE to adapt the planning of its activities, as well as for operational purposes.

**Documentation**

In addition to the specific information that the CONCESSIONAIRE shall submit as established in the previous sections related to this service, the CONCESSIONAIRE shall submit the following information:

**Initial information to be submitted by the CONCESSIONAIRE**. The CONCESSIONAIRE shall prepare the Service’s POA that includes its direct application. The Service’s POA shall determine the corresponding specifications and procedures within the framework of the Applicable Laws and Provisions and their updates or modifications during the execution of the Contract, as described in Annex 21.

* Periodic reports to be submitted during the Contract. The CONCESSIONAIRE shall deliver to the Supervisor of Contract and Operations, with a copy to the GRANTOR, a monthly report containing statistical information on the operation of the Service. This report shall contain, at least, the following information:
  + Equipment control results.
  + Quality control results.
  + Volume of examinations performed, classified by type of examination.
  + Periodic record of the indicators (production, quality, satisfaction, etc.) mentioned in the Technical Health Standard (NTS) No. -MINSA/DGSP-V.01 of the Production Unit of Diagnostic Imaging Service, approved by Ministerial Resolution 217-2010/MINSA and its subsequent update.
  + Other information considered relevant for monitoring the Service quality and whose inclusion in the monthly report shall be agreed between the GRANTOR and the CONCESSIONAIRE.

**Definition of Terms**

* Radiological or Nuclear Accident: Any unintended event, including operating error, equipment failure or other mishap, with actual or potential consequences, which cannot be unknown from a radiation protection and safety standpoint.
* Controlled Area: Any area in which specific protective measures and safety provisions are or may be necessary to control normal exposures, and to prevent potential exposures or limit their magnitude.
* Supervised Area: Any area that is not defined as a controlled area, keeps under review the conditions of occupational exposures, even though protective measures and specific safety provisions are not normally necessary.
* Contamination: Presence of radioactive substances within a material or on its surface, in the human body or place where they are undesirable or could be harmful.
* Radiological or Nuclear Damage: Loss of human life, bodily injury, material or environmental damage, which occurs as a result of the hazardous properties of ionizing radiation.
* Radioactive Waste: Material resulting from practices or interventions, for which no further use is foreseen, that contains or is contaminated with radionuclides in quantities greater than exemption levels.
* DICOM: *Digital Imaging and Communication in Medicine*, is the standard for image communication.
* Dose: A measure of radiation received or absorbed by a medium and used interchangeably to express absorbed dose, organ dose, equivalent dose, effective dose, committed dose or committed effective dose.
* Absorbed dose: Fundamental quantity, defined by the expression:

Wherein is the absorbed dose, is the average energy imparted by the ionizing radiation to the matter in a volume element and is the mass of matter in that volume element. The unit of absorbed dose is the joule per kilogram (J/kg) and its special name is gray (Gy).

* Dosimetry: It is the measurement of the dose that the worker receives from external radiation fields to which they may be exposed. This measurement is made with a dosimeter.
* Exposure: Exposure of people to radiation or radioactive substances, which may be external, due to sources located outside the human body, or internal, caused by sources existing inside the human body.
* Source of Ionizing Radiation: They are equipment, substances or radiopharmaceuticals, materials or equipment such as Linear Accelerator, Cobalt Pump, X-Ray Generating Machine, etc., which emit ionizing radiation.
* Hl7: *Health Level Seven*, is the standard for health data communication.
* Radiological Protection: The application of a set of procedures, mechanisms and preventive measures used to control the risks that may arise from the use of ionizing radiation.
* Conventional Radiology: use of ionizing radiation for the diagnostic evaluation of organs and systems without the use of contrast media.
* Specialized radiology: use of ionizing radiation for the diagnostic evaluation of pathologies with the use of contrast media.
* X-rays: They are electromagnetic radiation and are identical to gamma rays; differing in their origin: gamma rays originate in the atomic nucleus and X-rays result from interactions between electrons. X-rays can be produced at much higher energies than gamma rays from radioactive decay.
* Protective Clothing: It acts by reducing the risks of radioactive contamination of the worker, of the clothing, serves for partial shielding of the worker against beta, RX radiation. Examples of the former are anti-contamination clothing, gloves, hoods and boots. Examples of the latter are lead aprons, gloves, leaded glasses and collars.
* Radiological monitoring: Measurement of exposure, dose or contamination for reasons related to the assessment or control of exposure to radiation or radioactive substances, and interpretation of the results.
  1. **SERVICE FOR LOGISTICS OF SUPPLIES, STRATEGIC GOODS, DRUGS AND NON-STRATEGIC SUPPLIES**

It consists of providing the integral management of the logistics service of supplies, strategic goods, drugs and non-strategic supplies based on a technological infrastructure with high levels of availability and productivity, in such a way that they contribute directly to the efficiency expected by the GRANTOR regarding the strategic materials, non-strategic materials and drugs acquired by the GRANTOR, except for those expressly indicated in the present section.

The CONCESSIONAIRE shall meet the logistics requirements arising from the personnel authorized and designated by the GRANTOR through the Information System for Integrated Service Level Management SIGI-NS, in accordance with the requirements set forth in this Annex, and in particular the requirement or provision, the reception and registration of strategic materials, non-strategic materials and medicines, its storage and custody, the preparation and delivery of orders, the Stock and Inventory control and the returns or changes as appropriate, under the conditions established in this Annex, in order to collaborate with the efficiency of the GRANTOR's work.

It is hereby stated for all purposes that the service shall be focused exclusively to all the supplies, strategic goods, drugs and non-strategic supplies purchased by the GRANTOR and the CONCESSIONAIRE shall guarantee at its full cost, charge and responsibility according to the terms of the present Contract.

The Service quality is related to (but not limited to):

* Permanent uninterrupted availability of the logistics services of supplies, strategic goods, drugs and non-strategic supplies, meeting the needs of all UPSS and UPS of the Hospital.
* Guarantee at all times, the security, confidentiality, integrity, availability and quality of all strategic materials, non-strategic materials and medicines acquired by the GRANTOR and the information associated to these which shall be available in the systems implemented for such purpose.
* The unrestricted compliance with all the Applicable Laws and Provisions.

**Purpose**

The purpose of the Service of supply Logistics, strategic goods, drugs and non-strategic supplies is the management of the logistic and physical processes of reception, storage, custody and distribution of strategic materials, non-strategic materials and drugs, acquired by the GRANTOR, this service will be provided considering the requirements of the GRANTOR, necessary to provide a timely and quality service to patients.

**Scope**

The decision of purchase, as regards its opportunity, quantity, prices, selection of suppliers and products, is of exclusive responsibility, charge and cost of the GRANTOR. The obligations of the CONCESSIONAIRE lie exclusively in the administration and management of the non-clinical Non-Strategic Materials, clinical Strategic Materials and medicines, which includes:

* Reception of all purchases made by the GRANTOR, in the premises that the CONCESSIONAIRE sets up in the CONCESSIONAIRE's Central Warehouse.
* Storage and custody of the goods received.
* Preparation of the orders requested.
* Delivery of the orders, in a timely manner to the healthcare and non-healthcare facilities requiring them.
* Stock and inventory control, which allows having traceability of each of the inventory movements within the premises of the GRANTOR.
* Product returns and exchanges.

In the provision of the service, the CONCESSIONAIRE shall be responsible for the following:

* That the activities comply with safety standards for users, employees and the general public.
* Its personnel comply with the code of ethics[[5]](#footnote-5) in the handling of information, as well as in the treatment of users and officials.

Excluded from this Service of supply Logistics, strategic goods, drugs and non-strategic supplies are those Strategic Materials that, due to their nature of use, and under express determination and written communication of the GRANTOR, are received and guarded directly and exclusively by the GRANTOR.

In the event that the CONCESSIONAIRE decides to centralize this service at the Hospital, it should guarantee the distribution of the Hospital's central warehouse.

**Time Availability**

The CONCESSIONAIRE must provide the Logistics service of supplies, strategic goods, drugs and non-strategic supplies continuously and without interruption, every day of the year, during the entire concession term, guaranteeing timely availability.

**Regulations**

For the provision of the Service, the CONCESSIONAIRE, considering the best practices and international standards, shall comply at least with the Applicable Laws and Provisions and the procedures established in this regard by the GRANTOR through the Supervisor of Contract and Operations, in order to guarantee at all times, the safety in terms of prevention of HAI, transmission of infectious and contagious diseases and occupational accidents.

In any case, the CONCESSIONAIRE shall comply with the technical standards set forth by the Ministry of Health or any other Competent Governmental Authority.

In particular, the CONCESSIONAIRE shall comply, as a minimum, with the following Applicable Laws and Provisions:

* Ministerial Resolution No. 132-2015/MINSA, approves "Manual of Good Storage Practices for Pharmaceuticals, medical devices and health care products".
* Directive No. 001-2015/SBN, called "Procedure for the Management of State Movable Property" approved by Resolution No. 046-2015/SBN.
* Law No. 29151, General Law on the National System of State Property.
* Supreme Decree Nº 007-2008-VIVIENDA) agreed, which approves the Regulations on Law Nº 29151.
* ESSALUD or hospital Health Care Associated Infection Prevention Regulations.

Notwithstanding the foregoing, it is the CONCESSIONAIRE’s responsibility to ensure that the Logistic service is rendered in accordance with the Applicable Laws and Provisions.

**Equipment and Supplies (Strategic Materials)**

The CONCESSIONAIRE shall ensure the sufficiency of equipment and technologies necessary for the provision of the service in accordance with the requirements of this section, and shall safeguard the safety of persons and the environment.

The maintenance, acquisition and replacement of the equipment and furniture, or any other element, used by the CONCESSIONAIRE for the provision of the service, shall be the exclusive responsibility of the CONCESSIONAIRE.

The CONCESSIONAIRE shall size the area, as well as provide, manage, maintain and replace all the equipment required for the operation of the Service, at its sole charge and cost, in accordance with the service levels and indicators established in this Annex.

All the equipment and systems required for the administration of medicines in the Central Pharmacy, as well as in the health care facilities, correspond to those defined in the Contract.

Likewise, the CONCESSIONAIRE shall have a Warehouse Management System or WMS referred to in this section for the provision of the Logistics service for supplies, strategic goods, pharmaceuticals and non-strategic supplies. This management system shall include the following minimum functionalities:

* Manage and co-exist multiple warehouses and locations, both physical and logical, including warehouses and storage locations, transit (receiving, staging and dispatch), adjust, shrink and quarantine.
* Manage different types of inventories, such as:
  + **Physical Inventory**: Units physically available and in good condition in the Warehouse.
  + **In-transit Inventory**: Units committed and confirmed by suppliers with a purchase order in force, and those units that are being transferred from a warehouse to a site.
  + **Reserved Inventory**: All those units in the warehouse stock that are requested and committed for future shipment to a site in accordance with a specific order already placed or scheduled, therefore, they are units that cannot be assigned to another order.
* Management and follow-up of item flows or tracking with barcode registration in each process and lot or expiration date control as appropriate.
* Management and tracking of reception and dispatch orders, with control of expiration date policies for both reception and dispatch.
* Management of cyclic inventories and total inventories.
* Order preparation management under FEFO policy.
* Tracking of order preparation, dispatch and delivery flows or tracking to each requesting location.
* Integration with automatic dispensing equipment, radio frequency equipment and other portable equipment with biometric control of the users’ communication system defined for this purpose.
* Integration with the information and communication system used to manage the Contract, in accordance with the requirements set forth in this section.

The warehouse management system shall provide at all times and at the GRANTOR’s request, a complete detail of the location and status of all the inventory, both within the warehouses and the automatic dispensing equipment managed by the CONCESSIONAIRE, and shall also provide detailed reports as defined in this section.

The warehouse management system provided by the CONCESSIONAIRE shall be integrated with the GRANTOR’s information systems, so that it can be read from the information systems available to the CONCESSIONAIRE.

Likewise, in case the GRANTOR so requires, the CONCESSIONAIRE shall integrate its WMS system to the CONCESSIONAIRE’s systems, under the conditions determined by the latter, for the purposes of the following activities:

* Integration of the information generated in the GRANTOR's system, which must be received and managed by the Warehouse System:
  + Issuance of Purchase Orders.
  + Replenishment Calendar.
  + Maintainer of Stockpiles or Item and Supplier Masters.
  + Maintainer of expiration date policies.
  + Order Generation.
* Integration for information generated or updated in the Warehouse System, which must be received by GRANTOR's Systems.
  + Receipt and Status of Purchase Orders.
  + Inventory status, location and quantity.
  + Tracking of order flows or complete tracking of orders, from preparation to delivery at the premises.
  + Inventory results.
  + Control of service quality indicators.

The CONCESSIONAIRE shall be responsible for the provision and replacement of all the material necessary for the proper performance of this service, and shall ensure integration with the Hospital's corporate systems. Likewise, the CONCESSIONAIRE shall provide spaces with adequate conditions of maintenance, order, cleanliness, and environmental conditions of temperature, humidity and others required by the manufacturers or established by the good practices in the matter, for all the warehouses to be used for the storage of spare parts, accessories, consumables, supplies, materials, tools and equipment provided for the Service, which shall be included in the Non-objected Technical File.

**Personnel**

The CONCESSIONAIRE shall guarantee that the service is provided in accordance with the provisions of the Contract, and shall have an organizational structure and staffing that meets such requirements. For these purposes, it shall comply with, at least, the following:

* Personnel in charge of the service.
* All personnel participating in the provision of the service must undergo a medical evaluation prior to their incorporation and be included in the biological and ergonomic risk prevention programs to be prepared by the CONCESSIONAIRE. Likewise, the personnel must have the hepatitis B vaccine or other national vaccination program in force, being the responsibility of the CONCESSIONAIRE to keep a copy of the documents evidencing compliance with this obligation.
* Personnel additional to those in charge of the service must accredit, as a minimum level of schooling, a completed high school education.
* All personnel must have at least 6 months of experience in the field of industrial warehouse management.

All personnel involved in the provision of the service shall accredit a specific initial training of at least 40 chronological hours in topics related to HAI. Likewise, the CONCESSIONAIRE shall update annually, in the corresponding topics, the above mentioned training to all the personnel that requires it, which shall be qualified by the CONCESSIONAIRE. The training must be given by health professionals or persons with experience in these matters in Health Establishments.

The personnel involved in the provision and supervision of this service must have personal protection elements according to the risk associated to it. It shall be the responsibility of the CONCESSIONAIRE to ensure that the personnel use the personal protection elements and work implements appropriately.

The personnel profiles shall be submitted to the Supervisor of Contract and Operations, for compliance with the corresponding technical standard, ten (10) days prior to the commencement of the Service. Any subsequent change shall be communicated and the corresponding profile shall be submitted to the Supervisor of Contract and Operations for his favorable opinion, at the latest one (1) day after the change occurs.

**Functional Technical Specifications Of The Service**

For the provision of the service, the CONCESSIONAIRE shall request to the GRANTOR within one hundred and twenty (120) Calendar Days prior to the request for commissioning, as established in the Contract, the following information:

* Batch or Item Master:
  + Internal Item Code.
  + Item Description.
  + Item Classification(s).
  + Presentation, grammage and format of each item, as applicable.
  + Required storage conditions of each item (e.g., Storage Temperature Conditions).
  + Registration and tracking conditions, i.e., if the movements of this item require the registration and control of Expiration Date or Batch.
  + Minimum unit of dispatch to premises.
  + Minimum unit of purchase.
  + Shelf life of the product, measured in days between the date of manufacture and the expiration date.
  + List of Welfare and non-Welfare Establishments where the item must be part of the Physical Stock available in the storage equipment defined by the CONCESSIONAIRE.
  + Quantity of units of each item that must remain in stock within each site; for each item defined in each site, the Hospital will indicate if this quantity corresponds to a minimum stock that must be ensured within the premises of the site (it can never go below this level) or if it corresponds to a replenishment level, i.e. the stock of units to be reached with each replenishment.
* Hospital Vendor Master, with the following data:
  + Identification.
  + Company name.
  + Address.
  + Responsible or contact person within the supplier.
  + Contact telephone number.
* Supply Calendar scheduled by the GRANTOR for the first year of Operation.
* Hospital dispatch and replenishment schedule as indicated in the POA.
* Due date policy for all items defined in the Batch or Item Master.
* Communication requirements and protocols and format of integrations required by the GRANTOR for integration with SIGI-NS.

The GRANTOR shall deliver through the communications system, the following information to the CONCESSIONAIRE, in the indicated opportunity:

* Summary of its monthly purchasing plan, for reference, thirty (30) Calendar Days in advance.
* Any changes or updates to the batch or item master, vendor master, dispatch schedule and due date policy, within 48 hours of the change occurring

The CONCESSIONAIRE shall dimension its warehouses for 2 months of hospital operation.

* Reception. In order to correctly receive the items, the CONCESSIONAIRE shall regularly enter in the communications system, the information of the issuance of the respective purchase order to the CONCESSIONAIRE for its internal planning, and shall also inform whether it is of a normal or urgent nature. Regarding the latter, the CONCESSIONAIRE shall coordinate the reception with the corresponding supplier(s) directly and shall endeavor to receive the goods within the first 24 hours following receipt of the information of this Purchase Order.

For the reception of the items carried out by the CONCESSIONAIRE, it shall consider the following:

* + The reception shall always be carried out from the existence of a purchase order issued by the GRANTOR to the supplier it defines, therefore, it shall not be authorized to receive units not supported by Purchase Orders validly issued, in force and not duplicated.
  + It will not be able to accept substitutions of articles, adjustments of quantities or suppliers different from those individualized in the respective Purchase Order without express authorization of the GRANTOR through the Supervisor of Contract and Operations.
  + It is a minimum condition for the reception of the items its identification with a system (e.g., bar code or QR) that allows to unequivocally associate the corresponding internal code of the item, which shall be defined by the GRANTOR. The CONCESSIONAIRE and the GRANTOR shall agree on a procedure in case the product does not have an internal code; furthermore, for those products subject to expiration date policy control, both for reception and internal distribution, it is necessary that they indicate on the unit packaging the date of elaboration and expiration date, as well as the production lot. These requirements shall be made and communicated by the GRANTOR to all the suppliers within the purchase process.
  + Prior to the reception, the supplier will have to make a schedule of the reception, which will have to be done from an online application through a web page enabled and managed from the communication system. In this application, the respective supplier shall indicate for each Purchase Order number of the items requested by the GRANTOR, the products and quantities to be delivered, and the tax document of the latter.

The CONCESSIONAIRE shall respond to the aforementioned scheduling, determining a date and time to receive the supplier within the following two (2) days of the reception request. The CONCESSIONAIRE shall maintain permanent contact and communication with the suppliers in order to manage the receptions in an efficient and timely manner. Notwithstanding the foregoing, for those purchase orders defined as urgent by the respective CONCESSIONAIRE, the supplier shall not be obliged to make the prior scheduling, and shall coordinate with the CONCESSIONAIRE the prompt delivery of the items.

* + It shall receive the items from the suppliers at the premises of the GRANTOR assigned to the respective Central Warehouse, during the hours defined by the CONCESSIONAIRE in the POA. Notwithstanding the above, the minimum schedule for the reception is from Monday to Friday between 8:00 a.m. and 4:30 p.m., except Saturdays, Sundays and holidays, and in other schedules it shall only receive those purchase orders referred as urgent by the GRANTOR.
  + It shall be the CONCESSIONAIRE’s responsibility to validate a purchase order submitted by the supplier and attached to the respective dispatch note and its respective data, as applicable, the quantities of products, qualities and presentation, delivery format and timeliness of deliveries according to the conditions defined by the CONCESSIONAIRE in each case. The CONCESSIONAIRE must make complete receptions of the respective dispatch guide, therefore these documents must fully coincide with the physical stock received, likewise it must verify the physical or organoleptic conditions of the products as it corresponds; otherwise it must reject the reception waiting for a delivery with corrected documents or the products replaced. This type of situations must be immediately reported to the GRANTOR through the Communications System (SIGI-NS). The CONCESSIONAIRE shall manage the possibility that the same purchase order is received in installments according to the requirements of the GRANTOR and the agreements adopted with the supplier in each case.
  + The entry of all the items to the GRANTOR's Warehouses shall be carried out with QR barcode capture technology or equivalent at unit level, validating that the item effectively has its barcode in each unit and that it is readable by the Warehouse Management systems. In addition, the WMS system, the CONCESSIONAIRE shall manage the possibility that the same item is associated with different barcodes, and shall inform the CONCESSIONAIRE of this situation through SIGI-NS.
  + For the receptions, the CONCESSIONAIRE shall consider the expiration date policy to be determined by the GRANTOR for each item. Suppliers that do not comply with the delivery of products within the expiration date parameters defined by the GRANTOR shall be rejected at the time of reception, and the CONCESSIONAIRE shall report these cases through SIGI. If it is detected that an item has been received without complying with the aforementioned requirements, it shall be immediately cancelled, and the CONCESSIONAIRE shall replace it at its full charge, cost and responsibility within a term not exceeding ten (10) Calendar Days, in accordance with the procedures defined in the POA.
  + The reception includes the entry and physical custody of the Strategic Materials and the respective registration in the SIGI-NS, which must always include, at least, the registration of the following antecedents:
    - Purchase order number (or equivalent).
    - Data of Waybill Header: Number, Supplier, Single Taxpayers Registry (RUC).
    - Date and time of receipt.
    - Quantity of each item received.
    - Received item code.
    - Processing and expiration dates (as applicable).
    - Price.

Once the items have been received in the WMS and this information has been transmitted to SIGI-NS, the CONCESSIONAIRE shall be responsible for their stock and maintenance in good conditions until their delivery to the Hospital's UPSS and UPS, and the items shall remain undamaged, protected against contaminating and damaging agents, intact and with their packaging in perfect condition, in strict compliance with the conditions set forth by the GRANTOR for such purpose. Besides, it shall inform through SIGI-NS, the change of state and reception according to the purchase order, whether it is a complete reception or a partial reception.

* + As long as the items set forth in each purchase order are not received, the CONCESSIONAIRE shall consider as "goods in transit" the inventories acquired by the GRANTOR with a purchase order in force that has not been received.

The CONCESSIONAIRE must inform the Hospital through SIGI-NS:

* + - Any purchase order that has not been received and is expired due to expiration date of the same.
    - Detail of the differences between the units and items purchased and those delivered by the respective supplier.

* Storage and Custody. The CONCESSIONAIRE is responsible, at its full charge and cost, of executing the adequate storage of the received items within the facilities of the GRANTOR's central warehouse, complying with all the requirements established in this section and, those specific to each item according to the indications of the respective manufacturer, having to perform, as a minimum, the following activities:
  + Manage, operate and control the physical space assigned to the GRANTOR's Central Warehouse areas.
  + Execute the correct turnover of the articles in inventories, that is to say, the criterion of dispatch of a determined article will be according to the expiration date closest to the date of dispatch or FEFO.
  + Implement tracking technology via barcode reading of product codes and recording of production and expiration dates, as appropriate and batch of each item, in the WMS system in each process that involves a relocation or change of condition of the items.

Manage the expiration date policy to be determined by the GRANTOR for each item in its stockpile. The products that do not comply with this expiration date policy shall be understood for all purposes as expired or expired, and its change of status shall be reported through SIGI, immediately. The CONCESSIONAIRE shall wait for the instructions given to this effect to the GRANTOR, to manage the return or exchange of units with the respective supplier, their disposal or delivery to the GRANTOR, as appropriate, the latter being the responsibility of the CONCESSIONAIRE, in accordance with the provisions of the Service of Integrated Hospital Waste Management.

* + Report online, through SIGI-NS, the status of all the products in stock in the GRANTOR's central warehouse, that is, the number of units of each product by expiration date and lot. Additionally, it shall make an online report for those products that do not comply with the established expiration date policy and those that are close (less than 30 Calendar Days) of not complying with it.
  + Perform cyclical inventory counts equivalent to at least 30% of the lot on a weekly basis, and 100% of the lot on a monthly basis; the records of these inventories must be part of the monthly auditable management control report of the service.

* Order preparation. The CONCESSIONAIRE shall fill the orders from the Hospital's UPSS and UPS in accordance with the conditions and frequencies established in the POA.

The preparation of orders considers the collection of the necessary items within the central warehouse, the conformation and packaging of the orders by destination, the documentation of the transfers, both physical and logical, and the timely transfer of the order to the delivery point.

The different procedures are detailed below, according to the type of item and requesting site:

* Medications. All medicines shall be distributed by the CONCESSIONAIRE directly from the central warehouse to the GRANTOR's central pharmacy, which shall use its own means to prepare, transfer and deliver the medicines to the corresponding health care facilities. The CONCESSIONAIRE is not responsible for the distribution of the medicines to other requesting healthcare facilities.

The CONCESSIONAIRE shall manage the "Master Pack" boxes of the medicines in its warehouses, and the minimum level of replenishment shall be the unit with the original packaging provided by the supplier of the same.

Given the above, the CONCESSIONAIRE shall resupply, against consumption or upon request made by the SIGI-NS user, from the GRANTOR'S Central Pharmacy, the medicines in the required quantities, at least four times a week between 09:00 and 16:00 hours.

The CONCESSIONAIRE shall not have any authorization to manipulate the medicines outside their original unitary packaging, which implies, for example, the express prohibition to open and break unitary seals, elaborate "unitary doses", trans-packaging, among others. Likewise, the CONCESSIONAIRE is not authorized to relabel the units with codes not authorized by the GRANTOR.

* Strategic Materials (medicines are not included). The CONCESSIONAIRE shall be responsible for the direct resupply of all the premises that require these items, through the following non-exclusive modalities:
  + **Scheduled**: It corresponds to the frequency requirements established in the dispatch calendar per site, and may be provided in 2 modalities:
    - Against Consumption, that is, against a standard predefined by the GRANTOR, and the CONCESSIONAIRE must attend directly to the GRANTOR's peripheral warehouses, or to automatic dispensing systems with a defined arsenal at item and quantity level.
    - Specific requirements.
  + **Unscheduled**, it corresponds to spontaneous requests not covered in the above-mentioned classification.

Each of these GRANTOR premises is responsible for its inventory once it has been received in accordance with the Strategic Materials replenishment.

* Non-Strategic Materials. The CONCESSIONAIRE shall replenish these Non-Strategic Materials to all the premises of the GRANTOR, as established for the items of Clinical Non-Strategic Materials, in the previously defined paragraph.
  + **Delivery of orders**. The Concession Company shall carry out all its delivery activities of the items considered in this service to the requesting premises through the procedure established in the regulations set forth in the Contract, taking into consideration the requirements set forth in this section.

In each delivery, a transfer of the physical, logical and documentary inventory shall be made, through the registration of the complete background of the same, using an electronic and portable system with Biometric control integrated to the WMS and integrated to the SIGI-NS Communications System, established in the Contract. The delivery and its registration shall be carried out in compliance with the following:

* + - The CONCESSIONAIRE’s personnel shall make the delivery to an authorized Communications System user for the reception thereof at the requesting premises, who shall jointly validate the delivery, by means of a portable biometric validation system, by means of fingerprint recognition or equivalent, provided by the CONCESSIONAIRE. In the case of automatic dispensers, both the CONCESSIONAIRE’s personnel and the authorized Communications System user, shall identify themselves with biometric control in the dispensing equipment to validate the opening of the system and register their appearance.
    - Likewise, the CONCESSIONAIRE personnel shall deliver a simple transfer guide, containing, at least, the following information: transfer document number, date, place and detail of the products delivered. The respective authorized SIGI-NS user shall review all the contents, i.e., quantity, presentation and compliance with the standards applicable to the items received. Once the contents have been validated, the physical waybill must be signed and the receipt in portable equipment must be confirmed.
    - The CONCESSIONAIRE shall deliver a comparative report with the order requested by the requesting precinct, indicating the detail of the products that are not being supplied and the reasons for this in each case.
    - In the case that automatic dispensers are considered, and that these are serviced by the Service of Administration, acquisition, maintenance and availability of the Equipment, the personnel of the CONCESSIONAIRE of this service shall replenish the equipment under the supervision of the authorized user of the requesting precinct, who shall ensure the correct and complete replenishment of the equipment.
    - After the delivery, the CONCESSIONAIRE is responsible for validating the corresponding logical records of goods in the communication system of the CONCESSIONAIRE, auditing the inventory movements and safeguarding for at least 365 Calendar Days the physical backups of the deliveries in case they exist.
    - The CONCESSIONAIRE shall operate continuously every day of the year at all hours for the attention of unscheduled requirements, and shall have a counter or service window in the Central Warehouse, equipped with a terminal connected to the Communications System, where any authorized Communications System user may pick up the order to the warehouse. The CONCESSIONAIRE’S personnel shall deliver the requested products immediately, according to the availability of stock in the central warehouse.
    - In case of occurrences or occurrences in the process of delivery of the material, the Communication System shall be notified.
  + **Stock and Inventory Control**. The CONCESSIONAIRE shall be responsible for coordinating and maintaining an inventory control program for all the stockpile under its custody, including the existing stockpile in the automatic dispensing systems of the GRANTOR. For these purposes, the CONCESSIONAIRE shall carry out, at least, the following activities:
    - Report each cyclical inventory carried out, indicating:
      * Detail of all differences found, indicating for each item, the differences in units and the corresponding valuation at the "last purchase" price, as well as the inventory level at the time of the "cyclical inventory" carried out.
      * Detailed report and support of the inventory adjustments made.
    - Report monthly the result of all inventories of the previous month and the adjusted amounts. In addition, the reasons for the differences should be reported and propose changes in the procedures to be implemented for the control of such differences.
    - In the case of the automatic dispensing equipment located in some precincts of the respective Health Establishments, the CONCESSIONAIRE shall carry out the inventory control management, each time the dispensing equipment is replaced. Excluded from this inventory control are the physical warehouses, shelves or racks of the precincts without a product output control performed by a computerized system.

The CONCESSIONAIRE shall always carry out this inventory in the presence of an authorized Communications System user, informing through an inventory report to be signed by both parties. The differences or discrepancies found in each inventory shall be recorded and reported to the Supervisor in the Communications System. Likewise, the CONCESSIONAIRE shall carry out a new replacement process within 4 hours of finding the discrepancy.

Notwithstanding the foregoing, the Supervisor of Contract and Operations may carry out an audit of the inventories reported by the CONCESSIONAIRE at any time during the provision of this service, and the CONCESSIONAIRE shall provide all the necessary facilities for the execution thereof.

* + **Returns and Exchanges**. The Supervisor of Contract and Operations may instruct the CONCESSIONAIRE, at the request of the respective Health Establishment Management, through the Communications System, to execute a return or exchange of units in accordance with criteria of strict responsibility of the GRANTOR, to the corresponding suppliers and in the quantities and scope determined by the GRANTOR. For these purposes, the CONCESSIONAIRE shall coordinate with the corresponding supplier the date and time of the respective return or exchange of items. In the case of exchange of units, the units entered must strictly correspond to the same code returned to the supplier, and only the data relating to the dates of manufacture and expiry and the production lot may be adjusted.

The CONCESSIONAIRE is not authorized to manage or implement commercial agreements of any kind with the GRANTOR’s suppliers on matters related to this section.

**Organization**

The CONCESSIONAIRE shall propose an organization and management system that meets the defined scope and complies with all the necessary conditions for the proper operation of the service.

The Logistics Service for supplies, strategic goods, drugs and non-strategic supplies shall be provided in coordination with all the services provided by the CONCESSIONAIRE, in particular: General Cleaning and Sanitation; Maintenance and Operation of the Infrastructure, Facilities, Industrial Equipment and Furniture associated with the infrastructure, Integrated Management of Hospital Waste, Security and Surveillance and any other that may be determined necessary.

**Documentation**

* Initial information to be submitted by the CONCESSIONAIRE. The CONCESSIONAIRE shall prepare the Service’s POA that includes its direct application. The Service’s POA shall determine the corresponding specifications and procedures within the framework of the Applicable Laws and Provisions and their updates or modifications during the execution of the Contract, as described in Annex 21.
* Information to be submitted during the Operational Phase. The CONCESSIONAIRE shall register all activities carried out by the Logistics service for supplies, strategic goods, drugs and non-strategic supplies in the Contract's information and communications system. Likewise, once the service has been provided, the Communications System user shall record the status in said system.

The CONCESSIONAIRE shall issue on a daily basis a complete electronic report related to the stock, which format shall be approved by the GRANTOR, containing, at least, the following information:

* + **General Inventory Status**: location and quantity of items, including lots and expiration dates. This report includes inventories of the dispensing equipment in the enclosures.
  + Detailed report of daily orders and dispatches to the facilities.
  + Projective report of the products that will be sold out if there is no new generation of purchase orders in the next 15 and 30 Calendar Days; this report is built by calculating the average daily consumption of the last 30 Calendar Days and calculating the days that can be supplied with the inventory available in the Central Warehouse, discounting the expirations that are about to occur and adding the merchandise in transit.
  + Report of the products that are about to expire, according to the expiration date policies, within 15, 30 and 60 Calendar Days.

**Definition of Terms**

* Settings: Administrative processes that adjust inventories in the warehouse management system to the units that are physically available in different states within the warehouse stockpile; adjustments are due to incomplete processes or errors in the execution of inventory management.
* Array: It corresponds to the list of items defined by the GRANTOR, according to the requirements of each of its clinical and non-clinical facilities. The items included in the arsenal are reviewed periodically and are subject to modifications by the GRANTOR, according to efficacy, quality, safety, cost and market availability.
* Item: Any material, input, drug, product or physical good that can be classified according to any of the following definitions:
  + **Non-strategic, non-clinical materials**: Strategic office supplies, such as forms, reams of paper, pencils, folders, etc., and, in general, any material that is not used under the concepts of Clinical Supplies or Medicines.
  + **Clinical strategic materials**: Any input, material or article, to be used directly in the clinical care of patients, provided that its principal intended action in the human body is not achieved by pharmacological, immunological or metabolic means, although such means may concur with its function; for the purpose of diagnosis, prevention, monitoring, treatment or alleviation of a disease, injury or disability; research or replacement or modification of the anatomy or a physiological process, or regulation of the conception, development or development of a disease, injury or disability.
  + **Medications**: Any substance, natural or synthetic, or mixture thereof, intended for human beings for the purpose of curing, attenuating, treating, preventing or diagnosing diseases or their symptoms, modifying physiological systems or the mental state for the benefit of the person to whom it is administered. Active raw materials, pharmaceutical preparations, pharmaceutical specialties and traditional herbal medicines are considered pharmaceutical products.
  + **Strategic material**. It is the set of material whose destination is strictly for medical use. It shall be composed of pharmaceutical products, medical devices and sanitary products for human use and other related products in accordance with the provisions of Law 29459 or the one in force.
  + **Non-strategic material**. It is the set of material whose destination is not for medical use. It is composed of non-perishable materials such as office supplies, stationery, furniture, among others.
* Logical Warehouse: Corresponds to an abstract figure within the warehouse management system that allows managing, equivalent to a physical warehouse, the location of inventories that are not physically available or that, due to their characteristics, need to be managed virtually and in parallel to the physical inventory.
* Gap: Refers to any item that must be written off or discarded from available inventory because it is not physically found within an inventory process.
* Supply Calendar: Monthly plan prepared by the GRANTOR, at item level, with the projection of the units to be purchased and delivered by suppliers to the CONCESSIONAIRE's Central Warehouse in the following month. The CONCESSIONAIRE shall collaborate with all the required background information and shall be informed about the supply planning, which shall be registered in the service systems, WMS and SIGI-NS.
* Quarantine: Temporary state of safeguard of the articles, necessary to rule out any contamination problem or other reason, which shall be qualified by the GRANTOR. The items subject to quarantine and the conditions of this process shall be informed by the Health Establishment on a case by case basis explicitly and in writing to the CONCESSIONAIRE.
* Automatic Dispensing Equipment: Dispensing cabinet or cabinet that allows to control and integrate the dispensing processes within the enclosures. This equipment reports online the inventory movements within the equipment through the network connection to a centralized control system, provided for this purpose in the COMMUNICATIONS SYSTEM. The Dispensing Cabinets also have Access Control and biometric registration of the COMMUNICATIONS SYSTEM user and the CONCESSIONAIRE’s personnel duly authorized for this purpose.
* Inventory: The process of counting and physical or logical review of the units within the warehouse, which may be complete or total, which implies the review of the entire inventory stockpile, or it may be partial or cyclical, which implies the counting of a specific subset of items, locations or a determined pattern.
* Goods in Transit: Merchandise to be received according to purchase orders in force.
* Losses: Refers to any item that, being physically in a specific warehouse, must be written off or discarded from the available inventory due to its physical condition, and is no longer available for dispatch and use.
* Order or Replenishment Order: Corresponds to a detail of the units that must be dispatched and replenished according to the replenishment policies of each item and for a specific site within the Health Establishment. This order can be generated automatically according to the replenishment policies of the precincts or by the users COMMUNICATIONS SYSTEM of the same according to their needs.
* FEFO Dispatch Policy: Procedure for picking units from the stockpile, which ensures the priority dispatch of the units with the closest expiration date in time. FEFO corresponds to the initials in English for "First expired, first out", i.e.: first expired, first out.
* Expiration date policy: This corresponds to the minimum period of time prior to the expiration date that items must be received from the respective supplier or distributed to the Health Establishment's facilities. This period shall be defined as a percentage of the remaining useful life of the item, i.e. the period, quantified in days, between the expiration date and the date of preparation of each batch of each item to be received or dispatched. The percentage defined in this "expiration date policy" corresponds to the minimum percentage of remaining shelf life that the item must have at the time of receipt or distribution. The expiration date policy must be defined by the GRANTOR.
* Supplier: Any company, partnership or individual that is defined by the Health Establishment to provide any product within the array of items.
* WMS System: Corresponds to a system developed for warehouse management (Receipts, storage, transfers and dispatches) that must be provided by the CONCESSIONAIRE in accordance with the requirements set forth in this section. WMS stands for Warehouse Management System.

1. **INDICATORS AND SERVICE LEVELS**

The indicators to which the Contract is subject and the zoning of the hospital are established below. The latter means that the indicators are more or less demanding or have greater importance depending on the area of the Hospital according to its criticality, where the service is carried out.

* 1. **ZONING OF THE HOSPITAL ACCORDING TO THE CRITICALITY OF THE CARE PROVIDED**

The Hospital's zoning is based on the criticality of each unit of the facility in relation to the care provided. For example, critical or high-risk areas are identified as those that, due to their characteristics and the procedures performed, pose a high risk or threat to patients.

Specifically based on the UPSS, UPS or environments defined in the Feasibility Study declared viable, the following criteria were used:

* Areas where patients with a high degree of risk/dependency are managed, that in case of service failure, there is a risk to the patient.
* Areas where invasive procedures are performed that can potentially have negative effects on the patient.

In view of the above, the classified zones are:

* Critical areas: These are those areas where patients with a high risk/dependency are managed or where invasive procedures that may generate high risk for the patient's health are carried out.
* Semi-critical areas: those areas where patients with a medium or low level of risk/dependence are managed or where less invasive or non-invasive procedures are carried out, which imply a medium or low risk for the patient's health.
* Non-critical areas or low-risk areas: are those areas where patients are not attended, so it does not imply a risk for the patient's health. They can be: indoor or outdoor.

The importance of defining the criticality of the hospital center lies in the fact that compliance or non-compliance with standards carries a greater or lesser weighting depending on the area where the service is provided. This is how the performance will subsequently translate into a greater deduction of payment in the event of non-compliance with the service levels.

**Table 65: Zoning by Criticality Piura Hospital**

| **UPSS / UPS / functional areas** | **Type of Zone** |
| --- | --- |
| UPSS Emergency | Critical |
| UPSS Critical Care |
| UPSS Surgical Center |
| UPSS Obstetric Center |
| UPSS Hemodialysis |
| UPSS Day Surgery |
| UPSS Isolated Hospitalization Ward |
| UPSS Chemotherapy |
| UPSS Interventional Radiology Room |
| UPSS Blood Bank - Hemotherapy | Semi critical |
| UPSS Pharmacy |
| UPS Nutrition and Dietetics (Food) - includes cafeteria |
| UPSS Peritoneal Dialysis |
| UPSS Central Sterilization |
| UPSS Diagnostic Imaging |
| UPSS Clinical Pathology |
| UPSS Anatomic Pathology |
| UPSS Outpatients (including Procedure Room) |
| UPSS Hospitalization |
| UPSS Physical Medicine and Rehabilitation |
| UPSS Radiotherapy |
| UPSS Nuclear Medicine |
| UPSS Ophthalmology |
| UPSS Information Management (Information Technology Area) | Non-Critical |
| UPS Cold Chain (Specialized Warehouse) |
| UPS Laundry and Clothes |
| UPS Cleaning |
| UPS General Warehouse |
| UPS Maintenance workshops |
| UPS Environmental Health |
| UPS Power House |
| UPS Central Gas Plant |
| UPSS Administration (General administrative units) |
| UPSS Chapel |
| UPS Multipurpose Room |
| UPS Personnel Residence (Medical Residence) |
| UPS Transportation |
| UPS Personnel Locker Room and toilet services |
| UPS Personnel Comfort |
| UPS Surveillance (Security Area) |

* 1. **SETTING INDICATORS FOR EACH SERVICE AND SERVICE LEVELS**
     1. **FOOD SERVICE INDICATORS (AL)**

1. **Indicator Name :** Diets delivered to patients within the time range scheduled in the POA (breakfast, lunch, dinner and snacks). Outcome indicator.

**Objective**: To measure the degree of compliance with the delivery of diets to patients at the scheduled times.

**Standard** : At least 98.5% of the diets are provided to patients within the scheduled time range.

**Measurement method**:

**Service Level Result**:

**Table 66: Service Level Result *Al1***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source**: Automatic calculation in SIGI-NS, where the program is registered in the schedule for the delivery of diets and the SIGI-NS user has indicated the closure of the activities. Failure to close an activity "in compliance", i.e. outside the scheduled time range, automatically translates into non-compliance.

**Calculation frequency**: Monthly.

1. **Indicator Name :** Compliance with the collection of dishes, trays, carts or utensils given the feeding of patients, according to the scheduled in the POA. (breakfast, lunch, dinner and snacks). Performance Indicator.

**Objective**: To measure the degree of compliance with the collection times of dishes, trays, carts or kitchenware according to schedule.

**Standard** **:** There is at least 97.0% compliance with the timetable, procedures and routes established for the collection of dishes, trays, carts or kitchenware by the service personnel, according to the POA.

**Measurement method**: (summation j=1 in which it has enclosure)

*x100*

**Service Level Result**:

**Table 67: Service Level Result *Al2***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data source**: Automatic calculation in SIGI-NS, where the schedule for the removal of dishes, trays and food is registered and the SIGI-NS user has indicated the closure of the activities. In case of non-compliant closure, i.e. outside the scheduled time range of an activity, it is automatically translated into non-compliance.

**Calculation frequency**: Monthly.

1. **Indicator Name :** Compliance with the caloric and nutritional requirements of the menus delivered to patients, according to the indications of the Hospital's nutritionist. Process indicator.

**Objective**: To measure the degree of compliance with the caloric and nutritional requirements requested in the patients' diets by the hospital nutritionist.

**Standard :** The menus offered cover 99.0% of the caloric and nutritional requirements of the patients according to the indications of the Hospital's nutritionist.

**Measurement method**:

**Service Level Result**:

**Table 68: Service Level Result *Al3***

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data source**: Corresponds to the taking of random samples during the month, carried out by the Supervisor of Contract and Operations or the CONCESSIONAIRE's Food Service Supervisor in the presence of the Supervisor of Contract and Operations. These results shall be recorded in SIGI-NS, for the purpose of automatic calculation. If the Supervisor of Contract and Operations does not perform the activity or the size is less than 30 samples, the service will be considered 100% compliant.

**Calculation frequency**: Monthly. Corresponds to the total number of samples taken in the month.

1. **Indicator Name** : Degree of compliance with optimum temperature and organoleptic conditions of food diets for patients. Process indicator.

**Objective**: To measure the degree of compliance with the temperature and organoleptic conditions of the diets.

**Standard :** At least 96.5% of the diets have optimal temperature and organoleptic conditions defined in the POA, from the time it leaves the procedure site to the patient. This temperature shall be measured at the exit site of the UPS-Feeding Center.

**Measurement method**:

**Service Level Result**:

**Table 69: Service Level Result *Al4***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data source**: Measurements performed randomly by the Supervisor of Contract and Operations during the month or by the support personnel he/she deems necessary for such purpose, in the presence of the CONCESSIONAIRE's Food Service Supervisor or manager. The results shall be recorded in SIGI-NS for the automatic calculation of the indicator. At least 30 measurements shall be made during the month. In the event that the Supervisor of Contract and Operations does not carry out supervisions in a month or these are less than 30, the indicator shall be considered 100% complied with.

**Calculation frequency**: Monthly. Corresponds to the total number of samples taken in the month.

1. **Indicator Name** : User satisfaction with the food service. Outcome Indicator.

**Objective**: To measure the degree of satisfaction of users, both patients on a regular basis and Hospital personnel with the food service.

**Standard :** The satisfaction of the users of the food service, patients with regular diet and Hospital personnel, shows a level of satisfaction equal to or higher than 75%.

The evaluation of satisfaction should be on a 5-point scale where notes 1 and 2 correspond to dissatisfaction, note 3 to neither satisfaction nor dissatisfaction, and notes 4 and 5 to satisfaction.

**Figure 1: Evaluation Scale *Al5***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Note 1** | **Note 2** | **Note 3** | **Note 4** | **Note 5** |
| **Dissatisfaction** | | **Indifference** | **Satisfaction** | |

**Measurement method**:

Both the satisfaction of users who are patients on a regular regimen and the satisfaction of hospital personnel have equal weighting in the total indicator.

**Service Level Result**:

**Table 70: Service Level Result Al5**

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data source**: Results of the user satisfaction study prepared by an independent company contracted for this purpose, which the Supervisor of Contract and Operations must upload to the SIGI-NS system for automatic calculation of the indicator.

**Calculation frequency**: Quarterly. The satisfaction survey should be conducted every 3 months. During the months that do not correspond to a measurement, the score obtained immediately before is maintained as an indicator. For the beginning, 100% compliance will be assumed until the first survey.

1. **Indicator Name** : Compliance with deadlines for meeting unscheduled food requests (NP). Outcome Indicator.

**Objective**: To measure the degree of compliance by the CONCESSIONAIRE in relation to unscheduled requests for food. For any of the units that require it.

**Standard** : 97.5% of unscheduled requests for any type of food are fulfilled within the response time defined in the POA for this purpose.

**Measurement method**:

=

**Service Level Result**:

**Table 71: Service Level Result *Al6***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 70% |
|  | 0% |

**Data source**: Automatic results of SIGI-NS, where the user has registered the request and has closed it upon receiving the response to the request.

**Calculation frequency**: Monthly.

1. **Indicator Name :** Refusals of diets served by the CONCESSIONAIRE to patients, for quality reasons. Performance indicator.

**Objective**: To measure the percentage of refusals of diets served to patients.

**Standard** : The percentage of refusals of the menus served by the CONCESSIONAIRE to patients on a regular diet must be below 2% as a simple average of all daily indicators during the month. The diets delivered during the day include breakfast, lunch and dinner. Refusal of a meal should be considered, due to bad taste for the patient, cold, bad presentation, food in bad condition, among others, all the reasons should be established in the POA. The rejection of a diet will be registered in the SIGI-NS by an authorized user, indicating the reason for the rejection.

**Measurement method**:

: Daily diet rate.

**Service Level Result**:

**Table 72: Service Level Result *Al7***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data source:** Automatic results from SIGI-NS, where the SIGI-NS user, or Supervisor of Contract and Operations has registered the rejection for quality, and the respective reason.

**Periodicity of measurement**: Daily

**Calculation frequency:** Monthly. All daily calculations for the month will be averaged. If three (3) Calendar Days in the month the daily rejection exceeds 5%, the indicator for the month is considered to be 0% met.

1. **Indicator Name**: : Compliance with food handling procedures. Process indicator.

**Objective:** To measure the degree of compliance with food handling procedures for the entire food service.

**Standard** : At least 98.0% of supervisions[[6]](#footnote-6) on the food handling procedures indicated in the POA and on which a checklist for supervision has been defined, meet the conditions of compliance.

**Measurement method**:

**Service Level Result**:

**Table 73: Service Level Result *Al8***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data source**: Measurements performed randomly during the quarter by the Supervisor of Contract and Operations or the support personnel he/she deems necessary for such purpose, in the presence of the CONCESSIONAIRE's Food Service Manager or Supervisor, the results of which are recorded in SIGI-NS for the automatic calculation of the indicator. At least 15 measurements shall be made during the period. In the event that the Supervisor of Contract and Operations does not carry out supervisions in the quarter or these are less than 15, the indicator will be considered 100% complied with.

**Calculation frequency**: Quarterly. During the months when it is not necessary to calculate the indicator, the level of service obtained in the previous measurement is maintained, without prejudice that the Supervisor of Contract and Operations performs the corresponding monthly verification. For the Commissioning, a service level of 100% is considered until the first calculation corresponding to the first quarter.

**Weighting of indicators in the Partial Food Service Level NSP- AL**

The weighting of each indicator in the Partial Food Service Level is as shown in the table below:

**Table 74: Weighting of each indicator for the Calculation of the Nsp – Al**

|  |  |
| --- | --- |
| **Food Service Indicators** | **Weighting** |
| Diets delivered to patients within the time range scheduled in the POA (breakfast, lunch, dinner and snacks). | **16.70%** |
| Compliance with the collection of dishes, trays, carts or utensils given the feeding of patients, according to the scheduled in the POA. (Breakfast, lunch, dinner and snacks). | **13.80%** |
| Compliance with the caloric and nutritional requirements of patients indicated by the hospital's clinical nutritionist. | **18.10%** |
| Degree of compliance with the optimal temperature of food diets for patients. | **10.70%** |
| User satisfaction with food service | **6.90%** |
| Compliance with deadlines for unscheduled feeding requests (NP). | **12.90%** |
| Refusals of diets served by the CONCESSIONAIRE to patients, for quality reasons. | **4.00%** |
| Compliance with food handling procedures | **16.90%** |
| **Total Food Service** | **100%** |

* + 1. **RYL CLOTHES AND LAUNDRY SERVICE**

1. **Indicator name**  : Compliance with the clean linen delivery schedules established in the POA for all Hospital units. Performance Indicator.

**Objective**: To measure compliance with the delivery of clean clothes to the different units, in accordance with the established timetable range.

**Standard** : The CONCESSIONAIRE complies with at least 98.5% of the schedules established in the POA for the delivery of clean clothes to the different units.

**Resolution time for compliance or tolerance**: 7 minutes.

**Measurement method**:

Corresponds to deliveries to all sites where clean linen must be delivered.

**Service Level Result**:

**Table 75: Service Level Result *Ryl1***

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data source**: Automatic results from SIGI-NS, where the user has registered the delivery of clean linen to compliance. Result indicator.

**Calculation frequency**: Monthly. Corresponds to the sum of all deliveries for the month.

1. **Indicator name** : User satisfaction with the Clothes and laundry service. Outcome indicator.

The users correspond to the hospital personnel who perform health care tasks.

**Objective**: To measure the satisfaction of the hospital personnel with the clothes and laundry service.

**Standard** : Hospital personnel satisfaction with the linen and laundry service is at least 78.0% or higher.

The evaluation of satisfaction should be on a 5-point scale where notes 1 and 2 correspond to dissatisfaction, note 3 to neither satisfaction nor dissatisfaction, and notes 4 and 5 to satisfaction.

**Figure 2: Evaluation Scale *Ryl2***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Note 1** | **Note 2** | **Note 3** | **Note 4** | **Note 5** |
| **Dissatisfaction** | | **Indifference** | **Satisfaction** | |

**Measurement method**:

**Service Level Result**:

**Table 76: Service Level Result *Ryl2***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data source**: Results of the user satisfaction study prepared by the independent company hired by the CONCESSIONAIRE for such purpose, which the Supervisor of Contract and Operations shall upload to the SIGI-NS system for the automatic calculation of the indicator.

**Calculation frequency**: Quarterly. The satisfaction survey should be conducted every 3 months. During the months that do not correspond to a measurement, the score obtained immediately before is maintained as an indicator. For the beginning, 100% compliance will be assumed until the first survey.

1. **Indicator name** **:** Percentage of clothing humidity. Process Indicator.

**Objective**: To measure the moisture content of clothing prior to delivery to user areas.

**Standard** : 98.5% of the clothing tested cannot exceed 2% humidity.

**Measurement method**:

**Service Level Result**:

**Table 77: Service Level Result *Ryl3***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data source**: Measurements performed by the Supervisor of Contract and Operations on a random basis during the quarter. The results of which are recorded in SIGI-NS for automatic calculation of the indicator. At least 15 measurements must be performed during the quarter. In the event that the Supervisor of Contract and Operations does not perform supervisions or these are less than 15, the indicator will be considered 100% complied with.

**Calculation frequency**: Quarterly. During the months in which it is not necessary to calculate the indicator, the level of service obtained in the previous measurement is maintained, without prejudice that the Supervisor of Contract and Operations performs the corresponding monthly verification. For the Commissioning, a service level of 100% is considered until the first calculation corresponding to the first quarter.

1. **Indicator name**  ***:*** Clothing rejection. Result indicator.

**Objective**: To measure the rejection rate of clothing supplied by the CONCESSIONAIRE.

**Standard** : The percentage of rejects of clothing supplied by the CONCESSIONAIRE shall never exceed 3% in the case of the Care areas under its responsibility.

**Repair time**: 10 minutes, to be in compliance.

**Measurement method**:

**Service Level Result**:

**Table 78: Service Level Result *Ryl4***

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data source**: Automatic calculation in SIGI-NS, given the entry of returns (non-compliance) of clothing returns.

**Calculation frequency**: Monthly.

1. **Indicator name** : Response time to unscheduled activities. Result Indicator.

**Objective**: To measure the degree of compliance by the CONCESSIONAIRE with respect to unscheduled requests for laundry by any of the units that require it.

**Standard** **:** 97.0% of the unscheduled requests for clothing are fulfilled within the response time defined for this purpose in the POA.

**Measurement method**:

**Service Level Result**:

**Table 79: Service Level Result *RYL5***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic results of SIGI-NS, where the user has registered the request and has closed it upon receiving the response to the request.

**Calculation frequency:** Monthly.

1. **Indicator name** : Compliance with the dirty clothes removal schedules established in the POA for all sites. Performance Indicator.

**Objective:** To measure compliance with the removal of dirty clothes from the different units according to the established time range.

**Standard** **:** The CONCESSIONAIRE complies with at least 98.0% of the established schedules for the removal of dirty clothes.

**Resolution time for compliance**: 10 minutes.

**Measurement method:**

**Service Level Result:**

**Table 80: Service Level Result *RYL6***

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic results from SIGI-NS, where the user has given closure at the time of dirty clothes removal to compliance.

**Calculation frequency:** Monthly.

**Weighting of indicators in the Partial Clothes and Laundry Service Level NSP-RYL**

The weighting of each indicator in the Partial Clothes and Laundry Service is as shown in the table below:

**Table 81: Weighting of Indicators Nsp-Ryl**

| **Clothes and Laundry Service Indicators** | **Weighting** |
| --- | --- |
| Compliance with the clean linen delivery schedules established in the POA for all hospital units. | **22.70%** |
| User satisfaction with Clothes and laundry service | **15.80%** |
| Moisture content of clothing. | **12.10%** |
| Rejection of clothing | **16.70%** |
| Response time to attention of unscheduled activities. | **15.80%** |
| : Compliance with the laundry removal schedules established in the POA for all sites. | **16.90%** |

* + 1. **SERVICE OF CLEANING, SANITATION AND VECTOR MANAGEMENT AYL – MV**
       1. **CLEANING AND SANITATION: AYL**

1. **Indicator name :** Cleaning activities carried out in critical areas. Performance Indicator.

**Objective:** To measure the degree of compliance with cleaning activities in critical areas.

**Standard** **:** 98.0% of the cleaning and sanitation activities in the areas defined as critical are carried out correctly, i.e., in terms of schedule, coverage and frequency.

**Measurement method:**

**Service Level Result:**

**Table 82: Service Level Result *AYL1***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the monthly program of cleaning and cleaning of critical areas is registered, and the SIGI-NS user has indicated the activities first "non-compliant" and then closed with compliance. If the activity closure is not validated by the SIGI-NS user within 48 hours, SIGI-NS will automatically validate it as closed with compliance.

**Calculation frequency:** Monthly.

1. **Indicator name** : Cleaning activities carried out in compliance in semi-critical areas. Performance indicator.

**Objective:** To measure the degree of compliance with cleaning and sanitation activities in semi-critical areas.

**Standard :** 97.0% of the cleaning and sanitation activities in the areas defined as semi-critical are carried out correctly, i.e. in terms of schedule, coverage and frequency.

**Measurement method:**

**Service Level Result:**

**Table 83: Service Level Result *AYL2***

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the monthly cleaning and cleaning program of the semi-critical areas is registered, and the SIGI-NS user has indicated the activities first as "non-compliant" and then closed with compliance. In case of non-validation of the activity closure by the SIGI-NS user, within 48 hours, the SIGI-NS will automatically validate it as closed with compliance.

**Calculation frequency:** Monthly.

1. **Indicator name** **:** Cleaning activities carried out in non-critical areas. Performance Indicator.

**Objective:** To measure the degree of compliance with cleaning and sanitation activities in non-critical areas.

**Standard** : 97.0% of the cleaning and sanitation activities in the areas defined as non-critical are carried out correctly, i.e. in terms of schedule, coverage and frequency.

**Measurement method:**

**Service Level Result:**

**Table 84: Service Level Result *AYL3***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the monthly program of cleaning and cleaning of non-critical areas is registered, and the SIGI-NS user has indicated the activities first "non-compliant" and then closed with compliance. If the activity closure is not validated by the SIGI-NS user within 48 hours, SIGI-NS will automatically validate it as closed with compliance.

**Calculation frequency:** Monthly.

1. **Indicator name :** Degree of compliance with unscheduled cleaning and sanitation activities (NP) Outcome Indicator.

**Objective:** To measure the degree of compliance with cleaning activities and cleaning of unscheduled activities (NP).

**Standard** : 97.0% of unscheduled cleaning and sanitation activities (NP) are completed within the timeframe stipulated in the POA in each of the zones.

**Service Level Result:**

**Table 85: Service Level Result *AYL4***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the response times for unscheduled cleaning and cleaning activities in critical, semi-critical and non-critical areas are recorded, and the SIGI-NS user has indicated the closure of activities.

**Calculation frequency:** Monthly.

1. **Indicator name** : Indicator of availability and removal of garbage bags and cleaning of dumpsters in critical areas, including laboratory. Performance indicator.

**Objective:** To measure the degree of compliance with the availability and removal of bags and cleaning of trash cans in critical areas, including the laboratory.

**Standard** : The number of non-compliance occurrences does not exceed 3 times in a month.

**Measurement method:**

Corresponds to the sum of all the occurrences of the month in critical areas and laboratory.

**Service Level Result:**

**Table 86: Service Level Result *AYL5***

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the number of occurrences of non-compliance during the month is recorded, by visual method, considering all the Hospital's departments.

**Measurement periodicity:** Daily

**Calculation frequency:** Monthly.

The methodology for the calculation corresponds to the average of all Daily measurements. If during the month there are three measurements that reach number 7, the service level will be equal to zero.

1. **Indicator name** **:** Indicator of availability and removal of garbage bags and cleaning of dumpsters in semi-critical and non-critical areas. Performance Indicator.

**Objective:** To measure the degree of compliance with the availability and removal of bags and cleaning of dumpsters in semi-critical and non-critical areas.

**Standard :** The number of non-compliance occurrences does not exceed 5 times in a month.

**Measurement method:**

Corresponds to the sum of all occurrences during the month in semi-critical and non-critical areas.

**Service Level Result:**

**Table 87: Service Level Result *AYL6***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the number of occurrences of non-compliance during the month is recorded, by visual method, considering all the Hospital's departments.

**Measurement periodicity:** Daily.

**Calculation frequency:** Monthly.

The methodology for the calculation corresponds to the average of all Daily measurements. If during the month there are three measurements that reach the number 10, the service level will be equal to zero.

1. **Indicator name** **:** Provision of signs and warnings regarding the performance of work involving any risk to patients, employees and the public in general. Process indicator.

**Objective:** To measure the CONCESSIONAIRE’s compliance with respect to having signs, precautions and warnings regarding the performance of work involving any risk to patients, employees and the public in general.

**Standard** : The number of non-conformities cannot exceed 7 times in a month.

**Measurement method:**

**Service Level Result:**

**Table 88: Service Level Result *AYL7***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the Supervisor of Contract and Operations or authorized SIGI-NS user has registered the non-compliance occurrences during the month, by visual method, considering the totality of the Hospital's facilities.

**Measurement periodicity:** Daily

**Calculation frequency:** Monthly.

The methodology for the calculation corresponds to the average of all Daily measurements. If during the month there are two measurements that reach the number 12, the service level will be equal to zero.

1. **Indicator name** : User satisfaction with hospital cleanliness. Outcome indicator.

**Objective:** To measure the degree of user satisfaction with the cleanliness of the hospital premises.

Users are understood to be, on the one hand, patients and accompanying persons and, on the other, hospital personnel.

**Standard :** The satisfaction of users with the cleanliness of the hospital premises reaches at least a level of satisfaction equal to or higher than 78%.

The evaluation of satisfaction should be on a 5-point scale, where notes 1 and 2 correspond to dissatisfaction, note 3 to neither satisfaction nor dissatisfaction, and notes 4 and 5 to satisfaction.

**Figure 3: Evaluation Scale *Ayl8***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Note 1** | **Note 2** | **Note 3** | **Note 4** | **Note 5** |
| **Dissatisfaction** | | **Indifference** | **Satisfaction** | |

**Measurement method:**

**Service Level Result:**

**Table 89: Service Level Result *AYL8***

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 90% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Results of the user satisfaction study prepared by the independent company hired by the CONCESSIONAIRE for such purpose, which the Supervisor of Contract and Operations shall upload to the SIGI-NS system for the automatic calculation of the indicator.

**Measurement periodicity:** Quarterly.

**Calculation frequency:** Quarterly. During the months that do not correspond to measurement, the grade obtained immediately before is maintained as an indicator. For the beginning, 100% compliance will be assumed until the first survey.

1. **Indicator name**: Result in compliance with cleaning and sanitation procedures. Performance indicator.

**Objective:** To measure the degree of compliance with the cleaning and sanitation protocols established in the POA.

**Standard** : At least 98.0% of supervisions[[7]](#footnote-7) on surface cleaning procedures established in the POA and on which a check list has been defined for supervision, meet compliance conditions.

**Measurement method:**

**Service Level Result:**

**Table 90: Service Level Result *AYL9***

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Measurements performed randomly during the quarter by the Supervisor of Contract and Operations or the support personnel he/she deems necessary for such purpose, in the presence of the Supervisor of the Service of Cleaning and Sanitation of the CONCESSIONAIRE or person in charge, and whose results are recorded in SIGI-NS for automatic calculation of the indicator. At least 10 measurements must be taken during the quarter. In the event that the Supervisor of Contract and Operations does not carry out supervisions in a quarter or these are less than 10, the indicator will be considered 100% complied with.

**Calculation frequency:** Quarterly. During the months when it is not necessary to calculate the indicator, the level of service obtained in the previous measurement is maintained, without prejudice that the Supervisor of Contract and Operations performs the corresponding monthly verification. For the Commissioning, a service level of 100% is considered until the first calculation corresponding to the first quarter.

* + - 1. **VECTOR MANAGEMENT MV**

1. **Indicator name** : Vector control and management activities. Process indicator.

**Objective:** To measure the degree of compliance with vector management activities as scheduled and approved in the POA.

**Standard** **:** 98.0% of vector management activities are carried out as scheduled and approved in the POA for the entire hospital site.

**Measurement method:**

**Service Level Result:**

**Table 91: Service Level Result *MV1***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the monthly program of vector management activities is registered, and the Supervisor of Contract and Operations has registered his compliance or non-compliance with respect to each activity.

**Calculation frequency:** Monthly.

**Weighting of indicators for the calculation of the Partial Cleaning, Sanitation and Vector Management Service Level NSP-AYL**

The weighting of each indicator in the Partial Sanitation, Cleaning and Vector Management Service Level is as shown in the table below:

**Table 92: Weighting of Indicators for the Calculation of the Nsp -Ayl**

| **Indicators Cleaning, sanitation and vector management services** | **Weighting** |
| --- | --- |
| Cleaning activities carried out in critical areas in compliance | **19.70%** |
| Cleaning activities carried out in compliance in semi-critical areas. | **15.70%** |
| Cleaning activities carried out in non-critical areas in compliance. | **9.50%** |
| Degree of compliance with unscheduled cleaning and sanitation activities (NP) | **10.10%** |
| Indicator of availability and removal of garbage bags and cleaning of dumpsters in critical areas (including laboratory). | **9.30%** |
| Indicator of availability and removal of garbage bags and cleaning of dumpsters in semi-critical and non-critical areas. | **8.20%** |
| AYL7 Provision of signs and warnings regarding the performance of work involving any risk to patients, employees and the general public. | **5.90%** |
| User satisfaction with hospital cleanliness | **6.50%** |
| Results in compliance with cleaning and sanitation procedures. | **7.00%** |
| Vector control and management activities. | **8.10%** |
| **Total Cleaning, Sanitation and Vector Management Service** | **100.00%** |

* + 1. **INTEGRATED SOLID WASTE MANAGEMENT SERVICE**

1. **Indicator name :** Compliance with the removal of containers/compactors in critical areas, indicated in the POA. Performance Indicator.

**Objective:** To measure compliance with the removal of containers/compactors from defined critical areas.

**Standard :** Occurrences of non-compliance of container/compactor removal in critical areas do not exceed 4 in the month.

**Measurement method:**

Corresponds to the sum of all non-compliance occurrences identified during the month in critical areas, including laboratory.

**Service Level Result:**

**Table 93: Service Level Result *GRS1***

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the Supervisor of Contract and Operations or authorized SIGI-NS user has registered the non-compliance occurrences during the month, by visual method, complaints from the user area, considering all the Hospital's facilities considered critical.

**Calculation frequency:** Monthly.

1. **Indicator name** : Compliance with the removal of containers/compactors in semi-critical areas, as indicated in the POA. Performance Indicator.

**Objective:** To measure compliance with the removal of containers/compactors from defined semi-critical areas.

**Standard** : Occurrences of non-compliance of container/compactor removal in semi-critical areas do not exceed 5 in the month.

**Measurement method:**

Corresponds to the sum of all non-compliance occurrences identified during the month in semi-critical areas.

**Service Level Result:**

**Table 94: Service Level Result *GRS2***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the Supervisor of Contract and Operations or authorized SIGI-NS user has registered the non-compliance occurrences during the month, by visual method, complaints from the user area, considering all the Hospital's facilities considered semi-critical.

**Calculation frequency:** Monthly.

1. **Indicator name** : Compliance of having at all times an updated record and traceability of the removal and disposal of solid waste according to the schedule approved in the POA. Process Indicator.

**Objective:** To measure compliance with having an updated record and traceability of solid waste removal and disposal.

**Standard** : There is 98.5% compliance with the updating of the registry and traceability of solid waste removal and disposal according to the approved program in the POA.

**Measurement method:**

**Service Level Result:**

**Table 95: Service Level Result *GRS3***

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Visual review by the Contract Supervisor and the Hospital Operations or user, of the information recorded in the SIGI-NS and any documentation that the CONCESSIONAIRE may provide.

**Calculation frequency:** Monthly.

1. **Indicator name** : Compliance with the activities established in tables 8, 9 and 10 related to hospital waste management. Process indicator.

**Objective:** To measure the degree of compliance with the activities established in tables 8, 9 and 10 related to hospital waste management.

**Standard** : At least 98.5% of the activities established in tables 8, 9 and 10 related to hospital waste management are complied with (GMRH)

**Measurement method:**

**Service Level Result:**

**Table 96: Service Level Result *GRS4***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Visual random review by the Supervisor of Contract and Operations, the Hospital Engineering Division or Hospital user and respective record in the SIGI-NS. For this purpose, a check list system must be defined in the POA for each of the points to be analyzed in each supervision.

**Calculation frequency:** Monthly.

1. **Indicator name** **:** Degree of compliance with responses to Unscheduled (NP) Integrated Solid Waste Management activities in all areas of the hospital (critical, semi-critical and non-critical areas). Performance Indicator.

**Objective:** To measure the degree of compliance with the response time of unscheduled Integrated Solid Waste Management activities (NP).

**Standard** : 92.0% of Unscheduled (NP) Integrated Solid Waste Management activities are responded to within 10 minutes or less.

**Measurement method:**

**Service Level Result:**

**Table 97: Service Level Result *GRS5***

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the response times for unscheduled activities in all areas of the Hospital for the month are recorded.

**Calculation frequency:** Monthly.

1. **Indicator name :** Degree of compliance with the resolution time of the activities of Integral Management of Unscheduled Solid Waste Management (NP) in all areas of the Hospital (critical, semi-critical and non-critical areas). Performance Indicator.

**Objective:** To measure the degree of compliance with the resolution time of unscheduled Integrated Solid Waste Management activities (NP).

**Standard** : 90.0% of Unscheduled Integrated Solid Waste Management activities (NP) are resolved within 20 minutes or less.

**Measurement method:**

**Service Level Result:**

**Table 98: Service Level Result *GRS6***

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the response times for unscheduled service activities in critical, semi-critical and non-critical areas are recorded, and the SIGI-NS user has indicated the closure of activities.

**Calculation frequency:** Monthly. All activities to resolve unscheduled requests for Integrated Solid Waste Management in all areas of the Hospital.

1. **Indicator name**  **:** Replacement time of products (bags, containers, among others) and damaged equipment associated with the Integrated Solid Waste Management service. Performance Indicator.

**Objective:** To measure the degree of compliance with the maximum replacement time for damaged products and equipment.

**Standard** **:** 95% of damaged products and equipment are replaced within the stipulated period.

The CONCESSIONAIRE shall have a maximum of 5 days to replace the damaged product(s) and equipment. The replacement shall be considered valid when the Supervisor of Contract and Operations issues the compliance within the following 48 hours of its replacement, also counting with the CONCESSIONAIRE’s compliance through the affected user area. If the damaged product and equipment, due to its characteristics and relevance for the user area, requires to be replaced in less time, the CONCESSIONAIRE shall replace it in the shortest time determined by the GRANTOR through the user area in conjunction with the Supervisor of Contract and Operations.

**Measurement method:**

**Service Level Result:**

**Table 99: Service Level Result *GRS7***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the response times to damaged products associated with the Integrated Solid Waste Management Service are recorded and the SIGI-NS user has indicated the closure of activities.

**Calculation frequency:** Quarterly. During the months in which it is not necessary to calculate the indicator, the level of service obtained in the previous measurement is maintained, without prejudice that the Supervisor of Contract and Operations performs the corresponding monthly verification. For the Commissioning, a service level of 100% is considered until the first calculation corresponding to the first quarter.

1. **Indicator name** : Transportation of solid waste according to its nature. Process indicator.

**Objective:** To verify compliance with the transportation of solid wastes according to their physical, chemical and biological nature, hazardous characteristics and incompatibility with other wastes.

**Standard** **:** 99.5% of solid waste transportation activities are carried out according to their physical, chemical and biological nature, hazardous characteristics, and incompatibility with other wastes.

**Measurement method:**

**Service Level Result:**

**Table 100: Service Level Result *GRS8***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Random on-site reviews by the GRANTOR or the Supervisor of Contract and Operations, the results of which are recorded in the SIGI-NS.

**Calculation frequency:** Quarterly. During the months in which it is not necessary to calculate the indicator, the level of service obtained in the previous measurement is maintained, without prejudice that the Supervisor of Contract and Operations performs the corresponding monthly verification. For the Commissioning, a service level of 100% is considered until the first calculation corresponding to the first quarter.

**Weighting of indicators for the calculation of the Partial Solid Waste Management Service Level NSP-GRS**

The weighting of each indicator in the Partial Solid Waste Management Service Level is as shown in the table below:

**Table 101**: **Weighting of Indicators for the Calculation of the Nsp -Grs**

| **Solid Waste Management Service Indicators** | **Weighting** |
| --- | --- |
| Compliance with the removal of containers/compactors in critical areas. | **19.70%** |
| Compliance with container/compactor removal in semi-critical areas. | **15.20%** |
| Compliance of having at all times an updated record and traceability of the removal and disposal of solid waste according to the schedule approved in the POA. | **12.40%** |
| Compliance with the activities established in tables 8, 9 and 10 related to hospital waste management. | **15.10%** |
| Degree of compliance with the responses to Unscheduled Integrated Solid Waste Management activities (NP). | **8.80%** |
| Degree of compliance with the resolution time for unscheduled Integrated Solid Waste Management activities (NP). | **12.90%** |
| Replacement time of damaged products and equipment associated with the Integrated Solid Waste Management service. | **9.70%** |
| Transport of solid waste according to its nature. | **6.20%** |
| **Total Solid Waste Management Service** | **100,00%** |

* + 1. **STERILIZATION SERVICE**

1. **Indicator name** : Provision of sterile material according to schedule. Performance indicator.

**Objective:** To measure the degree of compliance with the time scheduled and authorized in the POA for the supply of sterile material to be provided to the Hospital.

**Standard :** 99.5% of deliveries of sterile material are made within the times scheduled and authorized in the POA.

**Measurement method:**

Corresponds to the delivery to all units using the sterilization service.

**Service Level Result:**

**Table 102: Service Level Result *EE1***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, given the input of the results of the spot checks performed and recorded by Hospital Personnel and the Supervisor of Contract and Operations.

**Calculation frequency:** Monthly.

1. **Indicator name** : Compliance with the time scheduled and authorized in the POA for the collection of contaminated material. Performance Indicator.

**Objective:** To measure the degree of compliance with the time scheduled and authorized in the POA for the collection of Contaminated Material, as appropriate.

**Standard** : 98.0% of contaminated material collections are carried out within the scheduled and authorized times in the POA.

**Measurement method:**

Corresponds to the withdrawals of the total number of user units from which withdrawals are to be made.

**Service Level Result:**

**Table 103: Service Level Result EE2**

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, given the entry of the results of the spot checks recorded by GRANTOR personnel and the Supervisor of Contract and Operations.

**Calculation frequency:** Monthly.

1. **Indicator name** : Compliance with supply times for unscheduled requests (NP) from each of the user units. Performance Indicator.

**Objective:** To measure the degree of compliance with supply times in the face of unscheduled requests.

**Standard** : 97.0% of the supply of unscheduled sterile material is delivered within the timeframe defined in the POA.

**Measurement method:**

Corresponds to total deliveries to all user units where unscheduled deliveries are to be made.

**Service Level Result:**

**Table 104: Service Level Result *EE3***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, given the entry of the results to the unscheduled requests of the SIGI-NS user from the different user units.

**Calculation frequency:** Monthly

1. **Indicator name :** Compliance by the CONCESSIONAIRE with the controls for sterilization assurance of sterile material registered in the traceability system. Process indicator.

**Objective:** To measure the degree of compliance with the established procedure for the inspection and subsequent maintenance of sterile material (instruments, equipment, etc.).

**Standard** : Failure to comply with the procedures established for the inspection and subsequent maintenance of sterile material (instruments) cannot exceed 5 failures in the calculation period, in critical and semi-critical areas.

**Measurement method:**

Corresponds to the totality of the inspection protocols established in the POA.

**Service Level Result:**

**Table 105: Service Level Result *EE4***

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, given the entry of the results of the random reviews regularly recorded by GRANTOR personnel and the Supervisor of Contract and Operations. These reviews cannot be less than 10 in the quarter. In case of no supervision, or these are less than 10, it will be considered 100% compliance with the level of service of the indicator.

**Calculation frequency:** Quarterly. During the months in which it is not necessary to calculate the indicator, the level of service obtained in the previous measurement is maintained, without prejudice that the Supervisor of Contract and Operations performs the corresponding Monthly verification. For the Commissioning, a service level of 100% is considered until the first calculation corresponding to the first quarter.

1. **Indicator name** : Return of sterile material (clothing and instruments).

**Objective:** To measure sterile material return rate.

**Standard** : Returns of sterile material (sterile clothing and instruments) cannot exceed 2% of the total sterile material delivered.

**Repair time:** 10 minutes, to be in compliance.

**Measurement method:**

**Service Level Result:**

**Table 106: Service Level Result *EE5***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
| % | 100% |
|  | 90% |
| % | 50% |
| % | 0% |

**Data Source:** Automatic calculation in SIGI-NS, given the entry of returns (non-compliance) of sterile clothing and instrument returns.

**Calculation frequency:** Monthly.

1. **Indicator name** **:** Satisfaction of the employees of each of the areas using the sterilization service (hospital personnel, personnel, etc.).

**Objective:** To measure the level of satisfaction of the employees in each of the areas that use the sterilization service (hospital personnel, personnel, etc.).

**Standard :** The satisfaction of the users of the sterilization service shows a level of satisfaction equal to or higher than 76%.

The evaluation of satisfaction should be on a 5-point scale, where notes 1 and 2 correspond to dissatisfaction, note 3 to neither satisfaction nor dissatisfaction, and notes 4 and 5 to satisfaction.

**Figure 4: Evaluation Scale *Ee6***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Note 1** | **Note 2** | **Note 3** | **Note 4** | **Note 5** |
| **Dissatisfaction** | | **Indifference** | **Satisfaction** | |

**Measurement method:**

**Service Level Result:**

**Table 107: Service Level Result *EE6***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Results of the user satisfaction study prepared by the independent company hired by the CONCESSIONAIRE for such purpose, which the Supervisor of Contract and Operations shall upload to the SIGI-NS system for automatic calculation of the indicator.

**Calculation frequency:** Quarterly. The Satisfaction survey shall be carried out every 3 months. During the months that do not correspond to a measurement, the score obtained immediately before is maintained as an indicator. For the beginning, 100% compliance will be assumed until the first survey.

**Weighting of indicators for the calculation of the Sterilization Service Level NSP- EE**

The weighting of each indicator in the Partial Sterilization service level is as shown in the following table:

**Table 108: Weighting of Indicators for the Calculation of the Nsp -Ee**

|  |  |
| --- | --- |
| **Sterilization Service Indicators** | **Weighting** |
| Supply of sterile material according to schedule | **23.70%** |
| : Compliance with the time scheduled and authorized in the POA for the collection of contaminated material. | **15.70%** |
| : Compliance with supply times for unscheduled requests (NP) from each user unit. | **12.10%** |
| Compliance by the CONCESSIONAIRE with the controls for sterilization assurance of the Sterile Material registered in the traceability system. | **18.80%** |
| Return of sterile material | **16.90%** |
| : Satisfaction of the employees of each of the areas using the sterilization service. | **12.80%** |
| **Total Sterilization Service** | **100.00%** |

* + 1. **SERVICE OF SECURITY AND SURVEILLANCE**

1. **Indicator name** : Availability of security and surveillance personnel at their posts. Availability indicator.

**Objective:** To measure compliance with the total and effective staffing of security and surveillance personnel scheduled by the CONCESSIONAIRE.

**Standard** : That at least 98.0% of the security and surveillance personnel are in place to provide security at the Hospital. The POA will consider the conditions of the service to ensure security (indication of number of personnel, rounds, surveillance locations, alternative support systems such as drones or others, etc.).

**Measurement method:**

**Service Level Result:**

**Table 109: Service Level Result *SYV1***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Corresponds to the records made in the log that is defined as part of the SIGI-NS. In this case, the personnel time and attendance record will be used in turn.

**Calculation frequency:** Monthly.

1. **Indicator name :** Availability of CCTV Closed Circuit Television Surveillance. Availability indicator.

**Objective:** To measure CCTV availability.

**Standard** : That the CCTV system is available and in perfect conditions of use, at least 99.0% of the minutes of the month.

**Measurement method:**

: is the sum of the minutes in which the CCTV is working properly, during the month , is the total minutes for the month .

**Service Level Result:**

**Table 110: Service Level Result *SYV2***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Corresponds to the entries made in the log that is defined as part of the SIGI-NS.

**Calculation frequency:** Monthly.

1. **Indicator name** : Response to unscheduled requests. Performance Indicator

**Objective:** To measure response time to unscheduled requests.

**Standard** **:** At least 90% of Unscheduled Requests (NP) are required to be responded to within the timeframe stipulated in the POA.

**Measurement method:**

Corresponds to the total number of unscheduled requests from all sites.

**Service Level Result:**

**Table 111: Service Level Result *SYV3***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Corresponds to the entries made in the log that is defined as part of the SIGI-NS.

**Calculation frequency:** Monthly.

**Weighting for the calculation of the Security and Safety Service Level NSP-SYV**

The weighting of each indicator in the Partial Security and Surveillance Service Level is as shown in the following table:

**Table 112: Weighting of Indicators in the Nsp-Syv**

| **Security and Surveillance Service Indicators** | **Weighting** |
| --- | --- |
| : Availability of security and surveillance personnel in their posts | **35.0%** |
| : Availability of CCTV Closed Circuit Television Surveillance | **35.0%** |
| : Response to unscheduled requests | **30.0%** |
| **Total SYV** | **100%** |

* + 1. **SERVICE OF INFORMATION AND COMMUNICATIONS TECHNOLOGIES AND THE PROVISION AND AVAILABILITY OF TECHNOLOGICAL INFRASTRUCTURE**

1. **Indicator name** : Operability of the IP Telephony System. Availability Indicator

**Objective:** To measure the percentage of operability of the IP Telephony System.

**Standard** : At least 98.0% of the IP Telephony System (STIP) services are operational.

**Measurement method:**

**Service Level Result:**

**Table 113: Service Level Result *TICs1***

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the continuous availability time of the IP Telephony System is registered (STIP).

**Calculation frequency:** Monthly.

1. **Indicator name** : Operationality of the Insured Service Module. Availability indicator.

**Objective:** To evaluate the percentage of operability (available hours) of the Insured Service Module System.

**Standard** : At least 98.0% of the services of the Insured Service Module System (SMA) are operational.

**Measurement method:**

**Service Level Result:**

**Table 114: Service Level Result *TICs2***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the continuous availability time of the Insured Service Module System is registered.

**Calculation frequency:** Monthly.

1. **Indicator name** : Operability (availability) of the Life Monitoring System (LMS). Availability indicator.

**Objective:** To evaluate the percentage of operability of the Life Monitoring System (SMV)

**Standard** : At least 98.0% of the Life Monitoring System (LMS) services are operational.

**Measurement method:**

**Service Level Result:**

**Table 115: Service Level Result *TICs3***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in the SIGI-NS, where the continuous availability time of the Life Monitoring System is registered (SMV).

**Calculation frequency:** Monthly.

1. **Indicator name** : Operability (availability) of the Fire Detection and Alarm System (SDI). Availability indicator.

**Objective:** To evaluate the percentage of operability of the Fire Detection and Alarm System (SDI)

**Standard** **:** At least 98.0% of the Fire Detection and Alarm System (SDI) services are operational.

**Measurement method:**

**Service Level Result:**

**Table 116: Service Level Result *TICs4***

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the continuous availability time of the Fire Detection and Alarm System is registered (SDI).

**Calculation frequency:** Monthly.

1. **Indicator name** : Operability (availability) of the Nurse Call System (LLE). Availability indicator.

**Objective:** To evaluate the percentage of the Nurse Call System operability (LLE).

**Standard** **:** At least 98.0% of the Nurse Call System (LLE) services are operational.

**Measurement method:**

**Service Level Result:**

**Table 117: Service Level Result *TICs5***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the time of continuous availability of the Nurse Call System is registered (LLE).

**Calculation frequency:** Monthly.

1. **Indicator name** : Operability (availability) of the Local Area Networking System (RAL). Availability indicator.

**Objective:** To evaluate the percentage of operability of the Local Area Network System (*Networking*) (RAL)

**Standard :** At least 98.0% of the Local Area Networking System (RAL) services are operational.

**Measurement method:**

**Service Level Result:**

**Table 118: Service Level Result *TICs6***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the continuous availability time of the Local Area Networking System (RAL) is registered. Availability indicator.

**Calculation frequency:** Monthly.

1. **Indicator name** : Operability of the Image Management System (IMS). Availability indicator.

**Objective:** To evaluate the percentage of operability of the Image Management System (SGI).

**Standard** : At least 98.0% of the Image Management System (IMS) services are operational.

**Measurement method:**

**Service Level Result:**

**Table 119: Service Level Result *TICs7***

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the continuous availability time of the Image Management System (IMS) is recorded. Availability indicator.

**Calculation frequency:** Monthly.

1. **Indicator name** : Operationalization of the Health Management System (HMS). Availability indicator.

**Objective:** To evaluate the percentage of operability of the Health Management System (SGS)

**Standard** **:** At least 98.0% of the Health Management System (HMS) services are operational.

**Measurement method:**

**Service Level Result:**

**Table 120: Service Level Result *TICs8***

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the continuous availability time of the Health Management System is registered (SGS).

**Calculation frequency:** Monthly.

1. **Indicator name:**  Emergency Medical Response (RCE). Indicator result.

**Objective:** To evaluate the percentage of Emergency Medical Response (RCE) to the SIGI-NS user registration of an emergency, without exceeding the maximum correction time (MCR).

An emergency event is considered an emergency category event if, as a consequence of the interruption of any of the ICT systems, it generates the cessation of the Care activity of any of the Hospital's UPSS.

Emergencies are considered to be corrected in a timely manner when the maximum correction time is less than or equal to 3 hours, counted from the moment the CONCESSIONAIRE detects the emergency or is notified of it through the SIGI-NS, until the specialized personnel resolves the emergency, which is defined as the end of the correction time.

**Standard** : At least 99.0% of emergency medical responses are in the less than 3-hour solution range.

**Measurement method:**

**Service Level Result:**

**Table 121: Service Level Result *TICs9***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation through SIGI-NS, with the records made by the SIGI-NS user. In this case, the hourly record of the start and end of the correction time of each emergency will be used.

**Calculation frequency:** Monthly. In the event that no emergency is recorded in a month, the indicator will remain at 100%.

1. **Indicator name** : Occurrence Response (RAI) Level 1 (IN1). Performance Indicator.

**Objective:** To evaluate the percentage of Occurrence Response (RAI) Level 1 (IN1) to the SIGI-NS user registration of an Occurrence, with Maximum Time of Attendance (TMA).

An Occurrence Level 1 (IN1) is considered an Occurrence if it involves the entire application or software service stoppage associated with database crashes, general system crashes, substantial loss of data.

Occurrences are considered to be attended in a timely manner when the maximum attention time is less than or equal to 1 hour, counted from the moment the CONCESSIONAIRE detects the Occurrence or is notified of it through the SIGI-NS, until the specialized personnel attends to the occurrence, which is defined as the end of the response time.

**Standard** **:** At least 98.0% of the Occurrence Response (RAI) Level 1 (IN1) to the SIGI-NS user registration of an Occurrence is answered within a maximum of 1 hour.

**Measurement method:**

**Service Level Result:**

**Table 122: Service Level Result *TICs10***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Calculation through SIGI-NS, with the records made by the SIGI-NS user. In this case, the hourly record of the start and end time of each occurrence will be used.

**Calculation frequency:** Monthly

1. **Indicator name** : Occurrence Response (RAI) Level 2 (IN2). Outcome Indicator.

**Objective:** To evaluate the percentage of the Occurrence Response (RAI) Level 2 (IN2) to the SIGI-NS user registration of an Occurrence, not exceeding the Maximum Correction Time (TMC).

An Occurrence Level 2 (IN2) is considered an Occurrence if it affects certain areas of the software, such as service failure in any of the zones established in the Contract with loss of data upon entry.

Occurrences are considered corrected in a timely manner when the maximum correction time is less than or equal to 2 hours, counted from the moment the CONCESSIONAIRE detects the Occurrence or is notified of it through the SIGI-NS, until the specialized personnel attends to the occurrence, which is defined as the end of the response time.

**Standard** : At least 98.0% of the Occurrence Response (RAI) Level 2 (IN2) to the SIGI-NS user registration of an occurrence is answered within 2 hours.

**Measurement method:**

**Service Level Result:**

**Table 123: Service Level Result *TICs11***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Calculation through SIGI-NS with the records made by the SIGI-NS user. In this case, the hourly record of the start and end time of each occurrence will be used.

**Calculation frequency:** Monthly.

1. **Indicator name** : Occurrence Responses (IAR) Level 3 (IN3). Outcome Indicator.

**Objective:** To evaluate the percentage of Occurrence Response (RAI) Level 3 (IN3) to the SIGI-NS user record of an Occurrence Level 3.

A Level 3 (IN3) occurrence is considered to be all SIGI-NS user reports that generate a minor impact on the performance of the software and are associated with unexpected behavior when entering data.

**Standard** : At least 98.0% of Occurrence Response (IRR) Level 3 (IN3) are responded to within 5 hours.

**Measurement method:**

**Service Level Result:**

**Table 124: Service Level Result *TICs12***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Calculation through SIGI-NS, with the records made by the SIGI-NS user. In this case, the hourly record of the start and end of the attention time of each occurrence will be used.

**Calculation frequency:** Monthly.

1. **Indicator name** : Occurrence Response Level 4 (RAI4). Outcome Indicator.

**Objective:** To evaluate the percentage of Level 4 Occurrence Responses (RAI4) to the SIGI-NS user registration of an Occurrence, not exceeding the maximum attention time.

An Occurrence Level 4 (IN4) is considered to be an Occurrence reported by a SIGI-NS user that has a minor effect on software performance associated with syntax problems in the user interface or other similar problems.

Occurrences are considered to be attended in a timely manner, when the maximum attention time is less than or equal to 12 hours, counted from the moment the CONCESSIONAIRE detects the Occurrence or is notified of it through SIGI-NS, until the specialized personnel resolves the Occurrence, which is defined as the end of the response time.

**Standard** : At least 98.0% of Occurrence Response (IRR) Level 4 (IN4) are responded to within 12 hours.

**Measurement method:**

**Service Level Result:**

**Table 125: Service Level Result *TICs13***

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Calculation through SIGI-NS with the records made by the SIGI-NS user. In this case, the hourly record of the start and end time of each Occurrence will be used.

**Calculation frequency:** Monthly.

**Weighting of indicators for the calculation of the Information and communications technologies and technological infrastructure Service Level NSP- TICs**

The weighting of each indicator in the Partial ICT Service Level is as shown in the following table:

**Table 126: Weighting of Indicators for the Calculation of the Nsp- Tics**

| **ICT Service Indicators** | **Weighting** | |
| --- | --- | --- |
| IP Telephony System Operability | **6.0%** |
| Operationality of the Insured Attention Module | **6.0%** |
| Operationalization of the Life Monitoring System (SMV). | **10.0%** |
| Fire Detection and Alarm System Operability (SDI) | **9.0%** |
| Nurse Call System Operability (LLE). | **7.0%** |
| Local Area Network System Operability (Networking) (RAL). | **7.0%** |
| Image Management System operability (SGI). | **7.0%** |
| Health Management System operability (SGS). | **7.0%** |
| Emergency Medical Responder (RCE). | **11.0%** |
| Occurrence Response (RAI) Level 1 (IN1). | **10.0%** |
| Occurrence Response (RAI) Level 2 (IN2). | **8.0%** |
| Occurrence Response (RAI) Level 3 (IN3). | **7.0%** |
| Level 4 Occurrence Response (RCI4) | **5.0%** |
| **Total ICT Service** | **100.0%** |

* + 1. **SERVICE OF MAINTENANCE AND OPERATION FOR THE BUILDING, FACILITIES, EQUIPMENT AND FURNITURE RELATED TO THE CIVIL WORK**

1. **Indicator name** : Compliance with the maintenance activities scheduled in the Service's POA. Performance Indicator.

**Objective:** To evaluate the percentage of compliance with the maintenance activities scheduled in the Service's POA.

**Standard** **:** At least 98.5% compliance with the maintenance activities scheduled in the POA.

**Measurement method:**

**Service Level Result:**

**Table 127: Service Level Result *MOE1***

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the scheduled maintenance activities are registered and the Supervisor of Contract and Operations has closed the activities with compliance. In case of non-validation of the activity closure by the SIGI-NS user, within 48 hours, the SIGI-NS will automatically validate it as closed with compliance.

**Calculation frequency:** Semiannual. During the months in which it is not necessary to calculate the indicator, the level of service obtained in the previous measurement is maintained, without prejudice that the Supervisor of Contract and Operations performs the Monthly verification it deems appropriate. For the Commissioning, a service level of 100% is considered until the first calculation corresponding to the first half of the year.

1. **Indicator name** **:** Availability of Clinical Vacuum System, Medical Gases (oxygen, nitrous oxide), Cryogenic Facilities and Industrial and Medical Compressed Air (SGM). Availability Indicator.

**Objective:** To evaluate the percentage of availability of the Clinical Vacuum System, Medical Gases (oxygen, nitrous oxide), Cryogenic Facilities and Industrial and Medical Compressed Air (SGM), in accordance with the Applicable Laws and Provisions.

**Standard** : At least 98.0% of the operation services of the Clinical Vacuum System, Medical Gases (oxygen, nitrous oxide), Cryogenic Facilities and Industrial and Medical Compressed Air (SGM), in accordance with the Applicable Laws and Provisions, are operative.

**Measurement method:**

**Service Level Result:**

**Table 128: Service Level Result *MOE2***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the availability time of the operation service of the Clinical Vacuum System, Medicinal Gases (oxygen, nitrous oxide), Cryogenic Facilities and Industrial and Medicinal Compressed Air (SGM) is registered by a SIGI-NS user or the Supervisor of Contract and Operations.

**Calculation frequency:** Monthly.

1. **Indicator name** : Availability of the Air Conditioning System, Climate Control and Pressurization and Thermal Power Plant. Availability indicator.

**Objective:** To evaluate the percentage of availability of the Air Conditioning, Climate Control and Pressurization System and Thermal Power Plant, in accordance with the Applicable Laws and Provisions.

**Standard :** At least 98.5% of the air conditioning, climate control, pressurization and central heating system (SAC) operating services are operational.

**Measurement method:**

**Service Level Result:**

**Table 129: Service Level Result *MOE3***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the time of availability of the Air Conditioning, Climate Control and Pressurization System and Thermal Power Plant (SAC) operation service is registered, in accordance with the Applicable Laws and Provisions and the total time of the month.

**Calculation frequency:** Monthly.

1. **Indicator name** : Availability of the Drinking Water System (SAP). Availability indicator.

**Objective:** To evaluate the percentage of availability of the Drinking Water System (SAP) in accordance with Applicable Laws and Provisions.

**Standard** : At least 99.0% of the operating services of the Drinking Water System (SAP) are operational.

**Measurement method:**

**Service Level Result:**

**Table 130: Service Level Result *MOE4***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the time of availability of the service of operation of the Drinking Water System (SAP), registered by the user in SIGI-NS or the Supervisor of Contract and Operations, is registered.

**Calculation frequency:** Monthly.

1. **Indicator name**: Availability of the Special Water System (SAE). Availability indicator.

**Objective:** To evaluate the percentage of availability of the Special Water System (SAE), in accordance with Applicable Laws and Provisions.

**Standard** : At least 99.0% of the services of the Special Water System (SAE) is operational.

**Measurement method:**

**Service Level Result:**

**Table 131: Service Level Result *MOE5***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the availability time of the Special Water System (SAE) operation service, registered by the SIGI-NS user or the Supervisor of Contract and Operations, is recorded.

**Calculation frequency:** Monthly.

1. **Indicator name** **:** Power System Availability (SEL). Availability indicator.

**Objective:** To evaluate the percentage of availability of the Electric Systems (SEL), in accordance with the Applicable Laws and Provisions.

**Standard** **:** 99.0% of the Electric System Services (SEL) are operational.

**Measurement method:**

**Service Level Result:**

**Table 132: Service Level Result *MOE6***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the availability time of the Electric Systems operation service (SEL), registered by the SIGI-NS user or the Supervisor of Contract and Operations, is recorded.

**Calculation frequency:** Monthly.

1. **Indicator name** : Availability of Weak Current Systems (SCD). Availability indicator.

**Objective:** To evaluate the percentage of availability of the Weak Current Systems (SCD), in accordance with the Applicable Laws and Provisions.

**Standard** : 98.0% of the Weak Current Systems (SCD) services are operational 24 hours a day, every day of the month.

**Measurement method:**

**Service Level Result:**

**Table 133: Service Level Result *MOE7***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the time of availability of the service of operation of Weak Current Systems (SCD), registered by the SIGI-NS user or the Supervisor of Contract and Operations, is registered.

**Calculation frequency:** Monthly.

1. **Indicator name** : Elevator and Lift System Availability (ELA) Availability Indicator.

**Objective:** To evaluate the percentage of availability of the Elevator and Lift System (SAE), in accordance with Applicable Laws and Provisions.

**Standard** : At least 98.0% of the Elevator and Lift System (SAE) services are operational.

**Measurement method:**

**Service Level Result:**

**Table 134: Service Level Result *MOE8***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the availability time of the Elevator and lift System (SAE) operation service is registered by the SIGI-NS user or the Supervisor of Contract and Operations.

**Calculation frequency:** Monthly.

1. **Indicator name** : Availability of the Pneumatic Delivery System (SNA). Availability indicator.

**Objective:** To evaluate the percentage of availability of the Pneumatic Delivery System (SNA), in accordance with the Applicable Laws and Provisions.

**Standard** : At least 98.0% of the services of the Pneumatic Delivery System (SNA) are operational.

**Measurement method:**

**Service Level Result:**

**Table 135: Service Level Result *MOE9***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the availability time of the Pneumatic Delivery System (SCN) operation service is registered by the SIGI-NS user or the Supervisor of Contract and Operations.

**Calculation frequency:** Monthly.

1. **Indicator name** : Timely Emergency Care Response (RAE). Performance Indicator.

**Objective:** To evaluate the percentage of Emergency Care Responses (EAR) attended in a timely manner upon SIGI-NS user request for an Emergency.

The consideration of Emergency Category Event (ECE) will be defined in the POA.

Emergencies are considered to be attended in a timely manner when the maximum response time is less than or equal to 10 minutes, counted from the moment the CONCESSIONAIRE detects the emergency or is notified of it through the SIGI-NS, until the specialized personnel arrives at the emergency site, which is defined as the end of the response time.

**Standard** **:** At least 98.0% of Emergency Care Responses (ECR) are attended in a time less than or equal to 10 minutes, i.e. "in compliance”.

**Measurement method:**

**Service Level Result:**

**Table 136: Service Level Result *MOE10***

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Calculation through SIGI-NS with the records made by the SIGI-NS user. In this case, the hourly record of the start and end of the response time of each emergency will be used.

**Calculation frequency:** Monthly.

1. **Indicator name** : Emergency Medical Response (RCE). Performance Indicator.

**Objective:** To evaluate the percentage of corrections (solutions) made in a timely manner for an Emergency Attention. At the request of a SIGI-NS user of an Emergency.

Emergencies are considered corrected in a timely manner when the maximum correction time is less than or equal to 3 hours, counted from the moment the CONCESSIONAIRE detects the Emergency or is notified of it through SIGI-NS, until the specialized personnel resolves the emergency, which is defined as the end of the correction time.

**Standard** **:** At least 98.0% of Emergency Medical Response (RCE) are attended in less than or equal to 3 hours, i.e. "in compliance”.

**Measurement method:**

**Service Level Result:**

**Table 137: Service Level Result *MOE11***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Calculation through SIGI-NS with the records made by the SIGI-NS user. In this case, the hourly record of the start and end of the correction time of each emergency will be used.

**Calculation frequency:** Monthly.

1. **Indicator name :** Urgent Care Response (RAU). Performance Indicator.

**Objective:** To evaluate the percentage of timely Urgent Care Responses (RAU), when a SIGI-NS user registers an Urgency.

An event is considered an Urgency if it delays times in the Hospital's medical and surgical procedures.

Urgencies are considered to be attended in a timely manner when the maximum attention time is less than or equal to 15 minutes, counted from the moment the CONCESSIONAIRE detects the Urgency or is notified of it through the SIGI-NS, until the specialized personnel attends to the Urgency, which is defined as the end of the attention time.

**Standard** : At least 98.0% of the Urgency Care Responses are attended in a time less than or equal to 15 minutes, i.e. "in compliance”.

**Measurement method:**

**Service Level Result:**

**Table 138: Service Level Result *MOE12***

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Calculation through SIGI-NS with the records made by the SIGI-NS user. For this case, we will use the hourly record of the start and end time for each emergency.

**Calculation frequency:** Monthly.

1. **Indicator name** : Urgency Medical Response (RCE). Performance Indicator.

**Objective:** To evaluate the percentage of timely Urgency Medical Response (ECR), when a SIGI-NS user registers an Urgency.

An event is considered an emergency if it delays times in the Hospital's medical and surgical procedures.

Urgencies are considered timely corrected when the maximum correction time is less than or equal to 6 hours, counted from the moment the CONCESSIONAIRE detects the Urgency or is notified of it through SIGI-NS, until the specialized personnel resolves the Urgency, which is defined as the end of the correction time.

**Standard**: At least 98.0% of Urgency Medical Responses are resolved in less than or equal to 6 hours, i.e. "in compliance”.

**Measurement method:**

**Service Level Result:**

**Table 139: Service Level Result *MOE13***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Calculation through SIGI-NS with the records made by the SIGI-NS user. In this case, the hourly record of the start and end of the correction time of each urgency will be used.

**Calculation frequency:** Monthly.

1. **Indicator name** **:** Occurrence Response (RAI). Performance Indicator.

**Objective:** To evaluate the percentage of timely Occurrence Response (RAI) to the SIGI-NS user record of an Occurrence.

An Occurrence category event is considered to be all SIGI-NS user reports that do not have an urgency or emergency category.

Occurrences are considered to be attended in a timely manner when the maximum response time is less than or equal to 30 minutes, counted from the moment the CONCESSIONAIRE detects the Occurrence or is notified of it through the SIGI-NS, until the specialized personnel attends to the Occurrence, which is defined as the end of the attention time.

**Standard** : At least 98.0% Occurrences are responded to in a timely manner, i.e., in a maximum response time of 30 minutes or less.

**Measurement method:**

**Service Level Result:**

**Table 140: Service Level Result *MOE14***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Calculation through SIGI-NS with the records made by the SIGI-NS user. In this case, the hourly record of the start and end time of each occurrence will be used.

**Calculation frequency:** Monthly.

1. **Indicator name** **:** Occurrence Medical Response (RCI). Performance Indicator.

**Objective:** To evaluate the percentage of timely Occurrence Medical Response (RCI) to the SIGI-NS user record of an occurrence.

All SIGI-NS user reports that do not have an urgency or emergency category are considered an occurrence category event.

Occurrences are considered to be corrected in a timely manner when the maximum correction time is less than or equal to 12 hours, counted from the moment the CONCESSIONAIRE detects the occurrence or is notified of it through SIGI-NS, until the specialized personnel resolves the occurrence, which is defined as the end of the correction time.

**Standard** : At least 98.0% of occurrences are corrected in a timely manner, i.e., within a maximum correction time of 12 hours or less.

**Measurement method:**

**Service Level Result:**

**Table 141: Service Level Result *MOE15***

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Calculation through SIGI-NS with the records made by the SIGI-NS user. In this case, the hourly record of the start and end of the correction time of each occurrence will be used.

**Calculation frequency:** Monthly.

1. **Indicator name:** Timeliness of delivery of clinical gas cylinders.

**Objective:** To evaluate the percentage of timely delivery of clinical gas cylinders.

**Standard** : At least 98.0% of deliveries of clinical gas cylinders are delivered in a timely manner.

**Measurement method:**

**Service Level Result:**

**Table 142: Service Level Result *MOE16***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Calculation through SIGI-NS with the records of requests made by the SIGI-NS user and the record of timely and correct reception by the SIGI-NS user.

**Calculation frequency:** Monthly.

**Weighting of Indicators for the calculation of the Maintenance and Operation Building and installations Service Level NSP-MOE**

The weighting of each indicator in the Partial Maintenance and Operation, Building and Facilities Service Level is as shown in the table below:

**Table 143: Weighting of Indicators for the Calculation of the Nsp – Moe**

| **MOE Service Indicators** | **Weighting** |
| --- | --- |
| Compliance with the maintenance activities scheduled in the Service's POA. | **9.0%** |
| Availability of Clinical Vacuum System, Medical Gases (oxygen, nitrous oxide), Cryogenic Facilities and Industrial and Medical Compressed Air(SGM). | **5.0%** |
| Availability of the Air Conditioning System, Air Conditioning and Pressurization and Thermal Power Plant. | **7.0%** |
| Availability of Drinking Water System (SAP). | **7.0%** |
| : Availability of the Special Water System (SAE). | **7.0%** |
| Availability of Electrical Systems (SEL). | **7.0%** |
| Weak Current Systems Availability (SCD). | **5.0%** |
| Elevator and Lift System Availability (SAE) | **5.0%** |
| Pneumatic Delivery System Availability (SCN). | **5.0%** |
| Timely Response to Emergency Attendance (RAE). | **9.0%** |
| Emergency Medical Response (RCE). | **9.0%** |
| Emergency Care Response (RAU). | **6.0%** |
| Emergency Responder (RCU). | **6.0%** |
| Response to Occurrence Attention (RAI) | **5.0%** |
| Occurrence Correction Response (RCI). | **5.0%** |
| MOE16 Opportunity in the delivery of clinical gas cylinders | **3.0%** |
| **Total MOE Service** | **100.0%** |

* + 1. **SERVICE OF ADMINISTRATION, ACQUISITION, MAINTENANCE AND AVAILABILITY OF EQUIPMENT (MEM)**

1. **Indicator name** **:** Compliance with unscheduled NP maintenance activities for medical equipment in critical areas in accordance with the response times established in the POA. Performance Indicator.

**Objective:** To measure the degree of compliance with NP maintenance activities for medical equipment in critical areas.

**Standard** : At least 98.5% of the NP maintenance activities of medical equipment arranged in the areas defined as critical, at the request of a SIGI-NS user, are correctly completed within the response time scheduled in the POA.

**Measurement method:**

OTM: corresponds to the maintenance work orders of the Equipment.

**Service Level Result:**

**Table 144: Service Level Result *MEM1***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the requested OTMs are registered and the SIGI-NS user has closed the maintenance activities in compliance. In case of non-validation of the activity closure by the SIGI-NS user, within 48 hours, the SIGI-NS will automatically validate it as closed to compliance.

**Calculation frequency:** Monthly.

1. **Indicator name** : Compliance with unscheduled maintenance activities NP of medical equipment in semi-critical areas. Performance Indicator.

**Objective:** To measure the degree of compliance with NP maintenance activities for medical equipment in semi-critical areas.

**Standard** **:** At least 96.0% of the NP maintenance activities of medical equipment in the areas defined as semi-critical are correctly completed within the time scheduled in the POA.

**Measurement method:**

=

**Service Level Result:**

**Table 145: Service Level Result *MEM2***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the response time of unscheduled activities defined in the POA and for which the SIGI-NS user has closed the activities in accordance with the POA is recorded.

If the activity closure is not validated by the SIGI-NS user within 48 hours, the SIGI-NS will automatically validate it as closed in accordance with the following conditions.

**Calculation frequency:** Monthly.

1. **Indicator name** **:** Compliance with Technical Care Requests (TAS) for Equipment. Performance Indicator.

**Objective:** To measure the degree of compliance with Technical Care Requests (TAS) requested by SIGI-NS users.

**Standard** : At least 95.5% of the Technical Care Requests (TAS) of the Equipment associated with problems in the operation of equipment, problems in the printing of results, among others, required by SIGI-NS users are correctly fulfilled, i.e., within the schedule, coverage and frequency defined, as detailed in the POA.

**Measurement method:**

**Service Level Result:**

**Table 146: Service Level Result *MEM3***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the total accounting of SAT requested by SIGI-NS users is registered, as well as the registration of a SIGI-NS user who has closed the SAT in compliance.

In case of non-validation of the closing of the activity by the SIGI-NS user, within 48 hours, SIGI-NS will automatically validate it as closed to compliance.

**Calculation frequency:** Monthly.

1. **Indicator name** : Availability for medical equipment and clinical furniture in critical areas. Availability indicator.

**Objective:** To measure the availability of medical equipment and clinical furniture in accordance with the POA.

**Standard** : The availability of medical equipment and clinical furniture in critical areas, as defined in the POA, is at least 99.5%.

**Measurement method:**

**Service Level Result:**

**Table 147: Service Level Result *MEM4***

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the required availability of medical equipment and clinical furniture in critical areas and the record of unavailable hours made by the SIGI-NS user are registered.

**Calculation frequency:** Monthly.

1. **Indicator name** : Availability for medical equipment and clinical furniture in semi-critical areas. Availability indicator.

**Objective:** To measure the availability of medical equipment and clinical furniture in accordance with the POA.

**Standard :** The availability of medical equipment and clinical furniture in the semi-critical areas defined in the POA is at least 98.5%.

**Measurement method:**

**Service Level Result:**

**Table 148: Service Level Result *MEM5***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the required availability of medical equipment and clinical furniture in semi-critical areas and the record of unavailable hours made by the SIGI-NS user are registered.

**Calculation frequency:** Monthly.

1. **Indicator name** : Equipment inventory update. Performance Indicator.

**Objective:** To measure the availability of updated equipment inventory information.

**Standard** **:** At least 97.5% of the assets corresponding to the Equipment are correctly inventoried in accordance with the requirements of the Contract.

**Measurement method:**

**Service Level Result:**

**Table 149: Service Level Result *MEM6***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the total accounting of equipment and furniture registered in accordance with the Procedure for the Management of State Movable Property (PGBME) and the total amount of equipment registered in the inventory in SIGI-NS, after review by the Supervisor of Contract and Operations.

**Calculation frequency:** Monthly.

1. **Indicator name** : Compliance with the annual program of preventive and scheduled maintenance of medical equipment. Process indicator.

**Objective:** To evaluate compliance with the annual program of preventive and scheduled maintenance of medical equipment.

**Standard** **:** 98.5% of medical equipment receives preventive and scheduled maintenance in a timely manner, as defined in the POA.

**Measurement method:**

**Service Level Result:**

**Table 150: Service Level Result *MEM7***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the accounting of Medical Equipment with preventive and scheduled maintenance and the total amount of equipment with compliance in maintenance activity is registered by the Supervisor of Contract and Operations.

**Calculation frequency:** Semiannual. During the months in which it is not necessary to calculate the indicator, the level of service obtained in the previous measurement is maintained, without prejudice that the Supervisor of Contract and Operations performs the Monthly verification that it considers pertinent. For the Commissioning, a service level of 100% is considered until the first calculation corresponding to the first half of the year.

1. **Indicator name :** Compliance with the annual program of preventive and scheduled maintenance of clinical furniture. Process Indicator.

**Objective:** To evaluate compliance with the preventive and scheduled maintenance program for clinical furniture.

**Standard** : 98.5% of clinical furniture receives scheduled preventive maintenance in a timely manner during the six-month period defined in the POA.

**Measurement method:**

**Service Level Result:**

**Table 151: Service Level Result *MEM8***

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the accounting of equipment and clinical furniture with scheduled maintenance and the total amount of equipment with compliance in the maintenance activity by the Supervisor of Contract and Operations are registered.

1. **Calculation frequency**: Semiannual. During the months in which it is not necessary to calculate the indicator, the level of service obtained in the previous measurement is maintained, without prejudice that the Supervisor of Contract and Operations performs the Monthly verification it deems appropriate. For the Commissioning, a service level of 100% is considered until the first calculation corresponding to the first half of the year.

**Indicator name:**  Compliance with the preventive and scheduled maintenance program for non-clinical furniture. Process Indicator.

**Objective:** To evaluate compliance with the preventive maintenance program for non-clinical furniture.

**Standard** : At least 98.5% of non-clinical furniture receives preventive and scheduled maintenance in a timely manner during the six-month period defined in the POA.

**Measurement method:**

**Service Level Result:**

**Table 152: Service Level Result *MEM9***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the accounting of equipment and clinical furniture with scheduled maintenance and the total amount of equipment with compliance in the maintenance activity by the Supervisor of Contract and Operations are registered.

**Calculation frequency:** Semiannual. During the months in which it is not necessary to calculate the indicator, the level of service obtained in the previous measurement is maintained, without prejudice that the Supervisor of Contract and Operations performs the Monthly verification it deems appropriate. For the Commissioning, a service level of 100% is considered until the first calculation corresponding to the first half of the year.

1. **Indicator name:**  Compliance with response to maintenance work orders for medical equipment and clinical furniture. Performance Indicator.

**Objective:** To measure the degree of compliance with the response to Maintenance Work Orders for medical equipment and clinical furniture (MTO) requested by SIGI-NS users.

**Standard** : At least 95.5% of the maintenance work orders for medical equipment and clinical furniture (OTM) requested by SIGI-NS users are fulfilled correctly, i.e. in terms of schedule, coverage and frequency as established in the POA.

**Measurement method:**

**Service Level Result:**

**Table 153: Service Level Result *MEM10***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where all the OTMs requested by SIGI-NS users are registered and the SIGI-NS user has registered the OTMs with compliance or non-compliance. In case of non-validation of the activity closure by the SIGI-NS user, within 48 hours, SIGI-NS will automatically validate it as closed with compliance.

**Calculation frequency:** Monthly.

1. **Indicator name:**  Compliance with response to maintenance work orders for non-clinical furniture. Performance Indicator.

**Objective:** To measure the degree of compliance with the response to maintenance work orders for non-clinical furniture (OTM) requested by SIGI-NS users.

**Standard** : At least 95.5% of the maintenance work orders for non-clinical furniture (OTM) requested by SIGI-NS users are fulfilled correctly, i.e. in terms of schedule, coverage and frequency as established in the POA.

**Measurement method:**

**Service Level Result:**

**Table 154: Service Level Result *MEM11***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the total accounting of OTMs requested by SIGI-NS users is registered and the SIGI-NS user has indicated the OTMs closed with compliance. If the activity closure is not validated by the SIGI-NS user within 48 hours, SIGI-NS will automatically validate it as closed with compliance.

**Calculation frequency:** Monthly.

**Weighting of Indicators for the Calculation of the Equipment Management, Procurement, Maintenance and Availability Service Level NSP- MEM**

The weighting of each indicator in Partial MEM Service Level is as shown in the following table:

**Table 155: Weighting of Indicators for the Calculation of the Nsp- Mem**

| **MEM Service Indicators** | **Weighting** |
| --- | --- |
| Compliance with unscheduled maintenance activities NP of medical equipment in critical areas. | **12.0%** |
| Compliance with unscheduled maintenance activities NP for medical equipment in semi-critical areas | **10.0%** |
| Fulfillment of SAT Technical Care Requests | **8.0%** |
| Availability of critical areas for medical equipment and clinical furniture. | **12.0%** |
| Availability of medical equipment and clinical furniture in semi-critical areas. | **8.0%** |
| Equipment Inventory Reliability | **8.0%** |
| Compliance with the annual program of preventive and scheduled maintenance of medical equipment. | **9.0%** |
| Compliance with the annual program of preventive and scheduled maintenance of clinical furniture. | **67.0%** |
| Compliance with the annual preventive and scheduled maintenance program for non-clinical furniture. | **67.0%** |
| Compliance with response to maintenance work orders for medical equipment and clinical furniture. | **11.0%** |
| Compliance with response to maintenance work orders for non-clinical furniture. | **78.0%** |
| **Total MEM Service** | **100.0%** |

* + 1. **SERVICE OF HEMODIALYSIS HEM**

1. **Indicator name :** Vascular access infections. Process indicator.

**Objective:** To evaluate the number of vascular access infections, either arteriovenous fistula (AVF) or central venous catheter (CVC) in a given month.

**Standard** : Patients presenting vascular access infection, either AVF or CVC in the month do not exceed 2%.

**Measurement method:**

**Service Level Result**

**Table 156: Service Level Result HEM1**

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Calculation based on the clinical records of the hemodialysis patients that are registered. By protocol, all vascular access infections should be recorded in the SIGI-NS.

**Calculation frequency:** Monthly.

1. **Indicator name** **:** Compliance with central venous catheter connection and disconnection protocol. Process indicator.

**Objective:** To measure the degree of compliance with central venous catheter (CVC) connection and disconnection protocols by the CONCESSIONAIRE’s personnel.

**Standard** **:** 94% of CVC connection and disconnection protocols are complied with, monitored.

**Measurement method:**

**Service Level Result:**

**Table 157: Service Level Result *HEM2***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Supervisions of compliance with protocols carried out randomly during the month by the Supervisor of Contract and Operations or the support personnel he/she deems necessary for such purpose, in the presence of the Manager or Supervisor of the Service of Hemodialysis of the CONCESSIONAIRE, the results of which are recorded in SIGI-NS for the automatic calculation of the indicator. At least 16 supervisions must be performed during the month. In the event that the Supervisor of Contract and Operations does not perform supervisions in a month or these are less than 16, the indicator will be considered 100% complied with. The POA must establish the protocols to be supervised and the evaluation methodology during supervision.

**Calculation frequency:** Monthly.

1. **Indicator name** : Satisfaction of users with the care provided by health professionals, as well as satisfaction with the service provided by GRANTOR personnel. Outcome Indicator.

**Objective:** To measure the degree of patient satisfaction with respect to the care received by nurses, paramedical technicians, assistants and physicians. At the same time, to measure the degree of satisfaction of the hospital personnel with the Service of Hemodialysis.

**Standard** : User satisfaction with the Service of Hemodialysis is at least 75%.

The evaluation of Satisfaction should be on a 5-point scale where notes 1 and 2 correspond to Dissatisfaction, note 3 neither Satisfaction nor Dissatisfaction and notes 4 and 5 Satisfaction.

**Figure 4: Evaluation Scale Hem3**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Note 1** | **Note 2** | **Note 3** | **Note 4** | **Note 5** |
| **Dissatisfaction** | | **Indifference** | **Satisfaction** | |

**Measurement method:**

**Service Level Result:**

**Table 158: Service Level Result *HEM3***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Results of the user satisfaction study prepared by an independent company hired by the CONCESSIONAIRE for such purpose, which the Supervisor of Contract and Operations shall upload to the SIGI-NS system for automatic calculation of the indicator.

**Calculation frequency:** Quarterly. The Satisfaction survey shall be carried out every 3 months. During the months that do not correspond to a measurement, the score obtained immediately before is maintained as an indicator. For the beginning, 100% compliance will be assumed until the first survey.

1. **Indicator name** : Compliance with deadlines for dealing with patient complaints. Performance Indicator.

**Objective:** To measure the degree of compliance by the CONCESSIONAIRE with the complaints, suggestions and requests (RSS) made by patients of the Service of Hemodialysis.

**Standard** : 99% of complaints are answered in less than 5 days.

**Measurement method:**

RSS: Corresponds to Hemodialysis Complaints, Suggestions and Requests.

**Service Level Result:**

**Table 159: Service Level Result HEM4**

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic results of the SIGI-NS, where the Supervisor of Contract and Operations has registered the reason, date of receipt of the claim and date of response. The CONCESSIONAIRE shall also keep a copy of the dispatch of the responses to claims.

**Calculation frequency:** Monthly.

1. **Indicator name** : Compliance with Time Availability of the Service of Hemodialysis. Outcome indicator.

**Objective:** To measure compliance with the Time Availability stipulated in the Contract.

**Standard** : The Service of Hemodialysis for chronic patients must be available at least 98% of the stipulated hours (Monday to Saturday from 6.00 am to 01.00 am the following day).

**Measurement method:**

**Service Level Result:**

**Table 160: Service Level Result *HEM5***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the record made by the CONCESSIONAIRE and approved by the Supervisor of Contract and Operations regarding the opening and closing hours of the Service of Hemodialysis can be found.

**Calculation frequency:** Monthly.

1. **Indicator name** : Waiting time for start of procedure for stable outpatients under treatment. Process Indicator.

**Objective:** To measure the degree of compliance with waiting times for the start of procedures for stable outpatients under treatment.

**Standard** : 99% of stable outpatients under treatment start their procedure at the scheduled time. For this type of patient, the procedure should start no later than 30 minutes after the scheduled start time for hemodialysis.

**Measurement method:**

**Service Level Result:**

**Table 161: Service Level Result *HEM6***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** In the case of outpatients, the waiting and attention time registered in the "turnomatic" system integrated with the SIGI -NS, which the CONCESSIONAIRE must have, will be considered.

**Calculation frequency:** Monthly.

1. **Indicator name** : Appointment assignment time for stable outpatients starting treatment. Process Indicator.

**Objective:** To measure the degree of compliance with appointment scheduling times for stable outpatients.

**Standard** : 99% of stable outpatients who initiate treatment receive an appointment within the established timeframe. For stable outpatients who initiate treatment, this must be scheduled no later than three (3) calendar days after the request is received in the Hemodialysis Unit.

**Measurement method:**

**Service Level Result:**

**Table 162: Service Level Result HEM7**

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** For stable outpatients initiating treatment, the patient's request in the Hemodialysis Unit and the effective date of the first appointment, recorded in the patient's record and visible in the SIGI-NS, will be considered.

**Calculation frequency:** Monthly.

1. **Indicator name** : Time to initiation of treatment for acute or chronic patients with acute complications. Process indicator.

**Objective:** To measure the degree of adherence to treatment initiation times for acute or chronic patients with acute complications.

**Standard** : 99% of acute or chronic patients with acute complications start their procedure within the established time frame. For acute or chronic patients with acute complications, the dialysis procedure should be initiated no later than 60 minutes after the request is received in the Hemodialysis Unit.

**Measurement method:**

**Service Level Result:**

**Table 163: Service Level Result HEM8**

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** In the case of acute or chronic patients with acute complications, the time from receipt of the request at the dialysis unit recorded in the patient's file and in the SIGI-NS will be considered.

**Calculation frequency:** Monthly.

**Weighting of indicators at the Partial Hemodialysis Service Level NSP- HEM**

The weighting of each indicator in the Partial Hemodialysis Service of Level is as shown in the table below:

**Table 164**: **Weighting of each indicator for the Calculation of The Nsp – Hem**

| **Service of Hemodialysis Indicators** | **Weighting** |
| --- | --- |
| Vascular access infections | **12.50%** |
| Compliance with the protocol for connection and disconnection of central venous catheters. | **10.50%** |
| User Satisfaction with the Service of Hemodialysis | **9.50%** |
| Compliance with deadlines for dealing with complaints made by patients and employees (Health Establishment) | **5.50%** |
| Compliance with Time Availability of the Service of Hemodialysis . | **17.00%** |
| Waiting time for start of procedure for stable outpatients under treatment | **15.50%** |
| : Scheduling time for stable outpatients initiating treatment | **14.00%** |
| Time to initiation of treatment for acute or chronic patients with acute complications | **15.50%** |
| **Total Service of Hemodialysis** | **100.00%** |

**IV.2.11 Clinical Pathology Service indicators: Laboratory (LAB)**

1. **Indicator name** : Waiting time for sample collection. Process indicator.

**Objective:** To measure compliance with the waiting times for sample collection as established in the Contract.

**Standard** : Waiting time for scheduled outpatient and inpatient sampling cannot exceed 15 minutes.

**Measurement method:**

**Service Level Result:**

**Table 165: Service Level Result *LAB1***

| **Indicator value**  (minutos) | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** In the case of outpatients, the waiting time recorded in the laboratory information system integrated with the SIGI-NS, which the CONCESSIONAIRE must have, shall be considered. In the case of hospitalized patients, the times recorded in the SIGI-NS will be considered.

**Calculation frequency:** Monthly.

1. **Indicator name** : Compliance with measurement standards of analytical equipment according to the calibration program. Process indicator**.**

**Objective:** To measure the degree of compliance with measurement standards of laboratory analytical equipment in accordance with the calibration program established in the POA.

**Standard** : at least 98% of equipment calibrations are performed as planned for the quarter.

**Measurement method:**

**Service Level Result:**

**Table 166: Service Level Result *LAB2***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Record of planned and performed calibrations to be kept by the CONCESSIONAIRE and registered in the SIGI-NS. In turn, the Supervisor of Contract and Operations may request a visual record of the supporting documentation.

**Calculation frequency:** Quarterly. Corresponds to all the calibrations to be performed in the quarter. During the months when it is not necessary to calculate the indicator, the level of service obtained in the previous measurement is maintained, without prejudice that the Supervisor of Contract and Operations performs the corresponding Monthly verification. For the Commissioning, a service level of 100% is considered until the first calculation corresponding to the first quarter.

1. **Indicator name** : Percentage of compliance with internal quality controls, according to acceptability and rejection criteria established in the POA. Process indicator.

**Objective:** To detect the possible existence of anomalies in the measurement process and ensure that the results obtained do not present any error other than that which is characteristic of the procedure.

**Standard** : The percentage of compliance with internal quality controls reaches at least 98%.

**Measurement method:**

**Service Level Result:**

**Table 167: Service Level Result LAB3**

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Inspections of equipment markings to be recorded and validated by the Supervisor of Contract and Operations on the equipment and then recorded in SIGI-NS. These inspections will correspond to those stipulated in time and form in the POA.

**Calculation frequency:** Monthly.

1. **Indicator name** : Percentage of analytes that meet the minimum quality requirements established for evaluation by system defined in the POA. Process indicator.

**Objective:** To measure compliance with minimum analyte quality requirements.

**Standard** : At least 98.5% of the analytes comply with the stipulated coefficient of variation with respect to the manufacturer's theoretical coefficient of variation.

**Measurement method:**

**Service Level Result:**

**Table 168: Service Level Result LAB4**

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Control samples established in the operation manual and quality standards, to be inspected by the Supervisor of Contract and Operations.

**Calculation frequency:** Quarterly. During the months when it is not necessary to calculate the indicator, the level of service obtained in the previous measurement is maintained, without prejudice that the Supervisor of Contract and Operations performs the corresponding Monthly verification. For the Commissioning, a service level of 100% is considered until the first calculation corresponding to the first quarter.

1. **Indicator name** : Compliance of external quality controls performed through an external quality assessment (EEC) program. Performance Indicator.

**Objective:** To measure the degree of compliance with the established parameters of relative deviation of results.

**Service standard** : At least 98.5% of the external quality controls are within the deviation parameters established in the POA.

**Measurement method:**

**Service Level Result:**

**Table 169: Service Level Result LAB5**

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Control samples established in the operation manual and quality standards, to be inspected by the Supervisor of Contract and Operations.

**Calculation frequency:** Quarterly. During the months in which it is not necessary to calculate the indicator, the level of service obtained in the previous measurement is maintained, without prejudice that the Supervisor of Contract and Operations performs the corresponding Monthly verification. For the Commissioning, a service level of 100% is considered until the first calculation corresponding to the first quarter.

1. **Indicator name** : Satisfaction of users with the care provided by the laboratory service. Outcome Indicator.

**Objective:** To measure the degree of patient satisfaction with regard to the care received by nurses, paramedical technicians, assistants and physicians.

**Standard** : User satisfaction with respect to the laboratory service is at least 75%.

The evaluation of Satisfaction should be on a 5-point scale where notes 1 and 2 correspond to Dissatisfaction, note 3 neither Satisfaction nor Dissatisfaction and notes 4 and 5 Satisfaction.

**Figure 5: Evaluation Scale Lab6**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Note 1** | **Note 2** | **Note 3** | **Note 4** | **Note 5** |
| **Dissatisfaction** | | **Indifference** | **Satisfaction** | |

**Measurement method:**

**Service Level Result:**

**Table 170: Service Level Result LAB6**

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Results of the user satisfaction study prepared by the independent company hired by the CONCESSIONAIRE for such purpose, which the Supervisor of Contract and Operations shall upload to the SIGI-NS system for automatic calculation of the indicator.

**Calculation frequency:** Quarterly. The Satisfaction survey shall be carried out every 3 months. During the months that do not correspond to a measurement, the score obtained immediately before is maintained as an indicator. For the beginning, 100% compliance will be assumed until the first survey.

1. **Indicator name** : Delivery time for test results. The scope of this indicator is for the entire portfolio of laboratory services.

**Objective:** To measure compliance with the delivery times for laboratory test results established in the Contract and the POA.

**Standard** : 95% of test results meet established deadlines.

**Measurement method:**

**Service Level Result:**

**Table 171: Service Level Result *LAB7***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** SIGI-NS records. The times will be counted from the end of the exam (patient discharge).

**Calculation frequency:** Monthly.

1. **Indicator name** : Compliance with the Time Availability of the Laboratory service for Scheduled Tests. Performance Indicator.

**Objective:** To measure compliance with the Time Availability stipulated in the POA.

**Standard** : The Laboratory Service for scheduled tests must be available at least 98% of the stipulated hours.

**Measurement method:**

**Service Level Result:**

**Table 172: Service Level Result *LAB8***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the record made by the CONCESSIONAIRE and approved by the Supervisor of Contract and Operations regarding the opening and closing hours of the laboratory service is located.

**Calculation frequency:** Monthly.

1. **Indicator name** : Percentage of alert values reported to the attending physician (emergency department) within 30 minutes. Result indicator.

**Objective:** To measure compliance with warning values to the treating physician in case of emergency.

**Standard** : At least 90% of alerts for emergency tests are reported to the treating physician within 30 minutes of the test result, or as established in the respective POA.

**Measurement method:**

**Service Level Result:**

**Table 173: Service Level Result *LAB9***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the record made by the CONCESSIONAIRE is found and use of the Laboratory's computer support system to send the information to the treating physician.

**Calculation frequency:** Monthly.

**Weighting of Indicators for the Calculation of the Laboratory Service Level NSP- LAB**

The weighting of each indicator in the Partial Laboratory Service Level is as shown in the following table:

**Table 174: Weighting of Indicators for the Calculation of the Nsp -Lab**

| **Laboratory Service Indicators** | **Weighting** |
| --- | --- |
| Waiting time for sample collection | **10.00%** |
| : Compliance with measurement standards of analytical equipment according to the calibration program. | **14.00%** |
| : Percentage of compliance with internal quality controls, according to established acceptance and rejection criteria. | **11.00%** |
| Percentage of analytes that meet the minimum quality requirements established by system defined in the POA. | **12.00%** |
| Compliance of external quality controls through external quality assessment program (EEC) | **13.00%** |
| User satisfaction with the laboratory service | **7.00%** |
| Turnaround times for laboratory test results | **10.00%** |
| Availability of laboratory service for Scheduled Tests | **11.00%** |
| Notice of alert values to the treating physician | **12.00%** |
| **Total Laboratory Service** | **100.00%** |

* + 1. **IMAGING SERVICE INDICATORS (IMG)**

1. Indicator name:Waiting time for imaging exams. Process indicator

**Objective:** To measure compliance with waiting times for exams as established in the POA.

**Standard** : 97% of examinations are performed within the maximum waiting times established for both unscheduled (NP) and scheduled examinations (P).

**Measurement method:**

**Service Level Result:**

**Table 175: Service Level Result *IMG1***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** SIGI-NS records. The times will be counted from the moment the request is received by the Diagnostic Imaging Service .

**Calculation frequency:** Monthly.

1. Indicator name :Delivery time for results: Reading of images and interpretation of reading and issuance of results report. Process Indicator.

The scope of this indicator is for all emergency or unscheduled examinations, Conventional Radiology with contrast, MRI, CT scan and Ultrasound

**Objective:** To measure compliance with the delivery times of results of imaging tests subject to diagnosis, established in the POA.

**Standard** : At least 95% of test results that include diagnostics meet the timelines established in the POA.

**Measurement method:**

**Service Level Result:**

**Table 176: Service Level Result IMG2**

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** SIGI-NS records. The times will be counted from the end of the exam (patient discharge) to the end of the exam.

**Calculation frequency:** Monthly.

1. Indicator name :Delivery time for exams that only require imaging. Delivery through digital means of emission and download of images. Process indicator.

The scope of this indicator is for examinations in the service portfolio that do not require the issuance of a report and reading of images, as stipulated in the Contract and the POA.

**Objective:** To measure compliance with the delivery times for non-diagnostic imaging exams (delivery of images only) established in the POA.

**Standard** : 96% of non-diagnostic exams (imaging only) are delivered for reading and reporting according to the deadlines established in the POA.

**Measurement method:**

**Service Level Result:**

**Table 177: Service Level Result *IMG3***

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** SIGI-NS records. The times will be counted from the discharge of the completion of the examination (discharge of the patient).

**Calculation frequency:** Monthly.

1. Indicator name : Calibration of Imaging equipment. Process Indicator

**Objective:** To measure the degree of compliance with the calibration of imaging equipment in accordance with the calibration program established in the POA.

**Standard** : at least 98% of equipment calibrations are performed as planned for the quarter, as defined in the POA.

**Measurement method:**

**Service Level Result:**

**Table 178: Service Level Result *IMG4***

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Record of planned and performed calibrations to be kept by the CONCESSIONAIRE and registered in the SIGI-NS. In turn, the Supervisor of Contract and Operations may request a visual record of the supporting documentation.

**Calculation frequency:** Quarterly. During the months in which it is not necessary to calculate the indicator, the level of service obtained in the previous measurement is maintained, without prejudice that the Supervisor of Contract and Operations performs the corresponding Monthly verification. For the Commissioning, a service level of 100% is considered until the first calculation corresponding to the first quarter.

1. Indicator name : Rejection of test results (diagnostic and imaging). Result indicator.

**Objective:** To measure the percentage of rejections of diagnostic results, as well as the delivery of images for non-diagnostic tests.

**Standard** : The maximum percentage of rejection of imaging exams should be below 1.5% of the total number of deliveries in the month. Rejection should be considered for misdiagnosis, blurred or unclear images, among others. All reasons should be stated in the POA. The rejection of an exam will be registered in SIGI-NS by an authorized user, indicating the reason for the rejection.

**Measurement method:**

**Service Level Result:**

**Table 179: Service Level Result *IMG5***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic SIGI-NS results, where the SIGI-NS user, or Supervisor of Contract and Operations has recorded the rejection of the examination, and the respective reason for it.

**Calculation frequency:** Monthly.

1. Indicator name : Patient satisfaction with the care provided by health professionals, as well as satisfaction with the Service of Imaging by Hospital personnel. Outcome Indicator.

**Objective:** To measure the degree of patient satisfaction with respect to the care received, both by nurses, paramedical technicians, assistants and doctors. At the same time seek to measure the degree of satisfaction of GRANTOR's employees with the service.

**Standard** : User satisfaction with the Service of Imaging is at least 75%.

The evaluation of Satisfaction should be on a 5-point scale where notes 1 and 2 correspond to Dissatisfaction, note 3 neither Satisfaction nor Dissatisfaction and notes 4 and 5 Satisfaction.

**Figure 6: Evaluation Scale Img6**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Note 1** | **Note 2** | **Note 3** | **Note 4** | **Note 5** |
| **Dissatisfaction** | | **Indifference** | **Satisfaction** | |

**Calculation formula:**

**Service Level Result:**

**Table 180: Service Level Result *IMG6***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Results of the user satisfaction study prepared by an independent company contracted for this purpose, which the Supervisor of Contract and Operations must upload to the SIGI-NS system for automatic calculation of the indicator.

**Calculation frequency:** Quarterly. The Satisfaction survey shall be carried out every 3 months. During the months that do not correspond to a measurement, the score obtained immediately before is maintained as an indicator. For the beginning, 100% compliance will be assumed until the first survey.

1. Indicator name : Compliance with the Time Availability of the Service of Imaging for Scheduled Exams. Result Indicator.

**Objective:** To measure compliance with the Time Availability stipulated in the POA.

**Standard** : The Service of Imaging for Scheduled Exams must be available at least 98.0% of the hours stipulated in the POA.

**Measurement method:**

**Service Level Result:**

**Table 181: Service Level Result IMG7**

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the record made by the CONCESSIONAIRE and approved by the Supervisor of Contract and Operations regarding the opening and closing hours of the Service of Imaging can be found.

**Calculation frequency:** Monthly.

**Weighting of Indicators for the Calculation of the Imaging Service Level NSP- IMG**

The weighting of each indicator in the Partial Imaging Service Level is as shown in the following table:

**Table 182: Weighting of Indicators for the Calculation of the Nsp -Img**

| **Service of Imaging Indicators** | **Weighting** |
| --- | --- |
| Waiting time for imaging examinations | **10.00%** |
| : Delivery time for results Reading of images and interpretation of readings and issuance of results report | **16.00%** |
| : Delivery time for exams with image reading only | **24.00%** |
| Calibration of imaging equipment | **14.00%** |
| Rejection of test results (diagnostic and imaging) | **12.00%** |
| User Satisfaction with Service of Imaging | **8.00%** |
| : Compliance with Time Availability of the Service of Imaging for Scheduled Examinations | **16.00%** |
| **Total Service of Imaging** | **100.00%** |

IV.2.13 SERVICE INDICATORS FOR LOGISTICS, SUPPLIES, STRATEGIC GOODS, PHARMACEUTICALS AND NON-STRATEGIC SUPPLIES (LOG)

1. Indicator name On-time delivery of items received (strategic materials, non-strategic materials and medicines). Performance Indicator.

**Objective:** To evaluate the percentage of compliance with the scheduled delivery time of items received (strategic materials, non-strategic materials and medicines).

**Standard** : At least 98.5% compliance with the delivery activities scheduled in the POA.

**Time to maintain compliance for each response request**: 15 minutes (or the time established in the approved POA according to the complexity of the requirement)

**Measurement method:**

**Service Level Result:**

**Table 183: Service Level Result LOG1**

|  |  |
| --- | --- |
| **Indicator value** | **% of service level compliance** |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the scheduled delivery activities are registered and the Supervisor of Contract and Operations has closed the delivery activities. In case of non-validation of the activity closure by the SIGI-NS user, within 48 hours, the SIGI-NS will automatically validate it as closed to compliance.

**Calculation frequency:** Monthly.

1. Indicator name : Compliance in the unscheduled delivery time of items received (strategic materials, non-strategic materials and medicines). Performance Indicator.

**Objective:** To evaluate the percentage of compliance with the unscheduled delivery time of items received (strategic materials, non-strategic materials and medicines).

**Standard** **:** At least 98.0% compliance with the activities of unscheduled delivery of received items defined in the POA.

**Measurement method:**

**Service Level Result:**

**Table 184: Service Level Result LOG2**

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 90% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic calculation in SIGI-NS, where the unscheduled delivery activities of received items are registered and the Supervisor of Contract and Operations has closed the delivery activities to compliance (time and form of the order). In case of non-validation of the activity closure by the SIGI-NS user, within 48 hours, the SIGI-NS will automatically validate it as closed to compliance.

**Calculation frequency:** Monthly

1. Indicator name : Rejection of deliveries made by the Logistics service. Performance indicator.

**Objective:** To measure the percentage of rejections of deliveries made by the logistics service during the month.

**Standard** : The percentage of rejection of deliveries made by the CONCESSIONAIRE to the different user areas must be below 2% of the total deliveries in the month. Rejection of a wrong order, quantity less than requested, expiration of products, among others, should be considered. All reasons must be established in the POA. The rejection of an order will be registered in SIGI-NS by an authorized user, indicating the reason for the rejection.

**Measurement method:**

* : Daily delivery rejection rate.

**Service Level Result:**

**Table 185: Service Level Result *LOG3***

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Automatic results from SIGI-NS, where the SIGI-NS user, or Supervisor of Contract and Operations has registered the rejection for quality, and the respective reason.

**Measurement periodicity:** Daily

**Calculation frequency:** Monthly. All daily calculations in the month will be averaged. If on three days in the month the daily rejection exceeds 5%, the indicator for the month is considered to be 0% met.

1. Indicator name: Compliance with storage and custody conditions of received items. Process indicator.

**Objective:** To evaluate the degree of compliance with the storage conditions established in the POA for the items received.

**Standard** : At least 96.0% of the reviews correspond to the storage conditions established in the POA for the different items (strategic materials, non-strategic materials and medicines) received.

**Measurement method:**

**Service Level Result:**

**Table 186: Service Level Result LOG4**

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 70% |
|  | 50% |
|  | 0% |

**Data Source:** Review of the storage conditions of items received by the Supervisor of Contract and Operations at random during the month or by the support personnel he deems necessary for such purpose, in the presence of the CONCESSIONAIRE's Logistics Service Manager or Supervisor. The results shall be recorded in SIGI-NS for the automatic calculation of the indicator. At least 20 reviews shall be carried out during the month. In the event that the Supervisor of Contract and Operations does not carry out supervisions in a month or these are less than 20, the indicator shall be considered 100% complied with.

**Calculation frequency:** Monthly.

1. Indicator name: Stock Reliability.

**Objective:** To evaluate the reliability of the information system's information on the physical existence of Strategic Materials in warehouses.

**Standard** : At least 96.0% of the revisions for the period are within the tolerance ranges established for each year of operation.

**Table 187: Service Level Result LOG5**

| **Annual indicator target** | **Maximum deviation range /Stock tolerance** |
| --- | --- |
| Quarters year 1 | 2.0% |
| Quarters year 2 | 1.5% |
| Quarters year 3 | 1.0% |
| Quarters year 4 and subsequent | 0.5% |

If the percentage of stock deviation is within the tolerance range in a monitoring, it is considered as a compliant monitoring.

**Measurement method:**

**Service Level Result:**

**Table 188: Service Level Result LOG5**

| **Indicator value** | **% of service level compliance** |
| --- | --- |
|  | 100% |
|  | 50% |
|  | 0% |

**Data Source:** Amount of stock reported by the system (sample). The result of each inventory in the reporting or evaluation period will be averaged. Reported by the information system. From the total inventory or a group of items (minimum 100 items).

**Calculation frequency:** Quarterly.  During the months in which it is not necessary to calculate the indicator, the level of service obtained in the previous measurement is maintained, without prejudice that the Supervisor of Contract and Operations performs the corresponding Monthly verification. For the Commissioning, a service level of 100% is considered until the first calculation corresponding to the first quarter.

**Weighting of Indicators for the Calculation of the Logistics Service Level NSP- LOG**

The weighting of each indicator in the Partial Logistics Service Level is as shown in the following table:

**Table 189**: **Weighting of Indicators for the Calculation of The Nsp -Log**

| **Logistics Service Indicators** | **Weighting** |
| --- | --- |
| On-time delivery of received items | **25.00%** |
| : On-time performance of unscheduled delivery of received items | **20.00%** |
| : Rejection of deliveries (orders) Logistics service | **15.00%** |
| Compliance with storage conditions and custody of received items | **25.00%** |
| Stock Reliability | **15.00%** |
| **Total Logistics Service** | **100.00%** |

1. **GLOBAL SERVICE LEVEL**

The Global Service Level NSG corresponds to the total performance of the CONCESSIONAIRE in a given period of time, and is composed of the weighted sum of each of the Partial Service Levels NSP, i.e. the partial service level multiplied by the weighting or importance it has within the NSG.

Wherein:

|  |  |
| --- | --- |
|  | : Global Service Level in period i |
|  | : Partial Service Level in the period i |
|  | : Weighting factor |
|  | : Number of services delivered in the Contract |

**Summary of services**

Taking into consideration the totality of the Contract Services described above, the weighting of each of them within the NSG corresponds to that shown in the following table.

**Table 190: Weighting of each of the Nsp for the Calculation of the Nsg**

| **Acronym** | **Name of service** | **No. of indicators** | **Weighting Factor within the Global Service Level** |
| --- | --- | --- | --- |
| AL | FOOD SERVICE | 8 | **9,00%** |
| RYL | CLOTHES AND LAUNDRY MANAGEMENT SERVICE | 6 | **6,00%** |
| AYL | CLEANING, SANITATION AND VECTOR MANAGEMENT SERVICE | 10 | **8,00%** |
| SYV | SECURITY AND SURVEILLANCE SERVICE | 3 | **4,00%** |
| GRS | INTEGRATED SOLID WASTE MANAGEMENT SERVICE | 8 | **2,00%** |
| EE | STERILIZATION SERVICE | 6 | **7,00%** |
| TIC | SERVICE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY AND PROVISION AND AVAILABILITY OF TECHNOLOGICAL INFRASTRUCTURE. | 13 | **4,00%** |
| MOE | MAINTENANCE AND OPERATION OF THE BUILDING, FACILITIES, ELECTROMECHANICAL EQUIPMENT AND FURNITURE ASSOCIATED WITH THE INFRASTRUCTURE | 16 | **19,00%** |
| MEM | ADMINISTRATION, ACQUISITION, MAINTENANCE AND AVAILABILITY OF EQUIPMENT SERVICE | 11 | **17,00%** |
| HEM | SERVICE OF HEMODIALYSIS | 8 | **8,00%** |
| LAB | SERVICE OF CLINICAL PATHOLOGY : LABORATORY | 9 | **7,00%** |
| IMG | SERVICE OF IMAGING | 7 | **6,00%** |
| LOG | LOGISTICS SERVICE FOR SUPPLIES, STRATEGIC GOODS, PHARMACEUTICALS AND NON-STRATEGIC SUPPLIES. | 5 | **3,00%** |
|  | **Total** | **109** | **100,00%** |

1. **CONTROL OF SERVICE LEVELS**

**SERVICE LEVEL MANAGEMENT INFORMATION SYSTEM**

In order to carry out the registration of requirements, monitoring and control of the Service Levels, the CONCESSIONAIRE shall, at its own expense, cost and responsibility, make available to the GRANTOR, an Service Level Integrated Management Information System SIGI-NS that allows auditing, coordinating, registering and obtaining information in real time, of all the systems and processes associated to the operational functioning of the Hospital, as well as verifying the conditions of provision of the services contemplated in the Contract.

This System will be the main tool that the GRANTOR will have for the control, verification and control of the Service Levels granted by the CONCESSIONAIRE, during the term of the Contract. The foregoing without prejudice to the on-site inspection carried out by the GRANTOR or whoever it may designate on its behalf.

This System must have the GRANTOR's compliance, previous opinion of the Supervisor of Contract and Operations, and must be available to the users before the beginning of the Operational Stage of the Hospital. Such system shall be property of the GRANTOR and may be used in future similar contracts.

Failure to comply with any of the obligations set forth in this section shall give rise to the application to the CONCESSIONAIRE of the penalties or sanctions established in the Contract.

**Technology for the construction of the SIGI-NS**

The system must be built respecting all the general definitions of the Service Levels. For this purpose, the CONCESSIONAIRE shall propose a technological architecture that allows the GRANTOR, through the Supervisor of Contract and Operations, to inspect all the services regulated by Service Levels. The System shall automatically calculate each one of the service indicators, partial service levels (NSP) and global service level (NSG) in real time.

The CONCESSIONAIRE shall provide the SIGI-NS with all the protection capabilities in order to shield this system against attacks or intrusions from internal or external sources to the CONCESSIONAIRE or from any other element that may jeopardize the information generated or existing. Said capacities and protections must meet the respective quality standards and comply with the Applicable Laws and Provisions.

The SIGI-NS shall provide all the functionalities to the Hospital's operation, insofar as they affect the accounting of the Service Levels, so that the information recorded and processed by this system allows the parties to acquire certainty regarding the events that determine the calculation of the service indicators established in the Contract. Simultaneously, this system shall operate as a Management Control System, as a Datamart of all the activities involved in the determination of the Service Levels stipulated in the Contract.

All the information related to the processes that make up each of the Services shall be recorded and updated, as appropriate, in order to allow traceability management of each of the Services online in the SIGI-NS.

**Sigi - Ns as a management control system**

This System shall provide users with a dashboard showing the calculation of Service Level Standards or indicators in real time, for current events and the following time series: last 5 minutes, last half hour, last 3 hours, last 12 hours, current day, previous day, last three (3) Calendar Days, last week, current month, previous month, last 3 months, current semester, previous semester, current year, previous year, all years.

Each user shall have the ability to dynamically select, in self-service mode, the subset of indicators he/she wishes to observe and the comparisons between the time series he/she considers relevant.

For all ongoing events of the operation, the SIGI-NS shall offer a real-time alarm system for all events that do not comply with the standards and requirements established for each one of them. Each user of the system shall have the ability to dynamically select, in self-service mode, the subset of alarms he/she wishes to observe.

**Sigi - Ns as a datamart system**

This system must offer its users access to a database, which must contain a record of all activities associated with the provision of Hospital services throughout the term of the Contract. Each activity must be clearly described for monitoring purposes and all other information that will allow to know and evaluate the conditions under which each activity occurred. The SIGI-NS must also offer its users, in a preconfigured form, all the algorithms for calculating the Service Levels, so that comparisons and statistical operations on the activities and Service Levels can be carried out with them.

**Sigi - Ns as a mechanism for verifying service levels**

The CONCESSIONAIRE must enable the SIGI-NS for the exchange of data between it and GRANTOR or the Supervisor of Contract and Operations that it designates and other authorized users, which must be installed and operative during the entire term of the Contract.

This System, must manage a mechanism of computer registry logs generated by systems of support to the operation of the Hospital. It must keep an active backup of all the data contained in the logs system and in the SIGI-NS, which must be available for the access of the GRANTOR and other authorized users. Notwithstanding the foregoing. The CONCESSIONAIRE must deliver to the GRANTOR, a copy of such backup in the form and terms determined by the Supervisor of Contract and Operations.

This System shall have a common unified clock for the control and registration of its operations. This clock shall not have a deviation greater than 5 seconds of the Peruvian official time.

All the registry of activities incorporated in the SIGI - NS must be registered in real time, where the logs automatically and in real time, register the beginning, change of status and end of the activities on which the provision and operation of services contemplated in the Contract is carried out. Under no condition will it be accepted that this data be transcribed or modified after the occurrence of the activity to be recorded.

In turn, both the SIGI-NS and the data generated, recorded and stored by this system must be fully auditable, both in its data structure and in the content of such structures. The source code of these applications must also be auditable, except for those elements that are basic software or infrastructure.

**Conditions of Recruitment**

Within the maximum term of one hundred and twenty (120) Calendar Days counted from the starting date of the Contract term, the CONCESSIONAIRE shall submit to the GRANTOR, at least 3 (three) technical proposals from 3 (three) different companies, for the design and construction of the SIGI-NS. These companies shall prove at least experience in projects of a nature and size comparable to this System and mastery of all the requirements to fully comply with the Service Levels control. Each developer company must demonstrate at least experience in:

* 1. Participation in projects of a nature and size comparable to those of the bid,
  2. Development of databases on Oracle, and
  3. Development of WEB applications.

The GRANTOR in the maximum term of fifteen (15) Calendar Days counted from the reception of the antecedents, will select the winning company or will reject all of them fundamentally if it were the case; in this situation the process is repeated again with 3 (three) different technical proposals. The process will be repeated as many times as necessary until a company developing the system is selected.

The supplier shall provide the corresponding training for full understanding and capacity of use to all users authorized to operate the system.

**Construction Architecture**

**Technology**

The system shall be built following the incremental iterative method, using Microsoft .NET 3.5 on an Oracle 10g RDBMS Enterprise Edition database system. The CONCESSIONAIRE may propose to the GRANTOR the use of a different technology. The GRANTOR, through the Supervisor of Contract and Operations, shall issue its favorable opinion regarding such proposal, provided that such technology is fully compatible with the purpose of measuring the Service Levels.

The SIGI-NS shall provide all the functionalities required to assist the operation processes corresponding to the operation of the Contract as far as they affect the unquestionable accounting of the Hospital's operability and availability service, so that the information registered in the SIGI-NS and processed by the SIGI-NS allows both parties to acquire certainty regarding the service rendered. In substance, the accounting of the service contemplates, among others, the following processes: The recording of the inspection results in the established opportunity, of the provision of the service of operability and availability of the Hospital's services. The control of the timeliness of the status records, according to the existing records and the maximum intervals previously established. The registration of corrective conservation actions, the counting of the Hospital's operability or its units, not available due to preventive conservation actions, among others.

These processes involve the prior registration of the elements to be controlled of the Contract and its main components, duly identified, the generation of the identifiers of each indicator applied to such elements, the registration of the corresponding restoration periods and maximum intervals between statements. The records of the case must have structure, contents and identity codes fully consistent with the SIGI-NS.

It is also required to record the authorized signatures of the administrators of both parties, the identities and passwords of the assistants and supervisors, and the access levels for each type of user.

The SIGI-NS must guarantee the invariability of the information registered therein. To this effect, any operation that adds, modifies or deletes data from SIGI-NS must be carried out by means of documents that may be prepared externally or online, taking advantage of the facilities offered by the system. Such documents shall be nominated and reduced to a standardized form by SIGI-NS and, with the prior agreement of the SIGI-NS user, whether the Hospital itself, its Supervisor of Contract and Operations or the CONCESSIONAIRE, shall be provided by said user with passwords, electronic signature if applicable and date and time certification, in order to be registered and processed.

The Supervisor of Contract and Operations shall not issue an opinion of compliance of the SIGI-NS as long as any of the functionalities are not being adequately covered.

**SIGI-NS code and development documentation**

The CONCESSIONAIRE shall study in depth the requirements of the system to be built and operated. This analysis implies reaching a detailed prior understanding of the processes associated with the Hospital's services that the system must manage and of all the associated functionalities and interfaces. The results of such analysis must be expressed in the form of a formal system requirements specification and a system relationship entity diagram.

The CONCESSIONAIRE shall design the SIGI-NS, that is, specify the process model, the data model, the procedures and all user interfaces (screens, reports, input formats).

Modifications and enhancements introduced during the design process shall be reflected in updates to the requirements specification, in order to maintain traceability to a non-specialized understandable level.

The CONCESSIONAIRE shall deliver a document that clearly defines the process model, its structure, functions, processes involved, interrelationships, information outputs, that satisfies the operational needs of both the Hospital and the Supervisor of Contract and Operations, as well as the CONCESSIONAIRE. Likewise, the activities involved in the processes, roles, technical standards and the documentation linked to the information flows must be clearly specified.

Based on the entity-relationship model and the process model mentioned above, a data model must be provided to ensure the completeness and integrity of the information and efficient access to it for both parties. The data model must be built using the schema type: Object Oriented Modeling.

All use cases, data entry formats, screens and report format and content must be specified.

Before the beginning of the Operational Stage, the CONCESSIONAIRE must accredit the correct and total functioning of the SIGI-NS, which must have the favorable opinion of the Supervisor of Contract and Operations in order for the GRANTOR to issue its compliance, and must also deliver the following documentation:

1. Formal specification of system requirements
2. Entity-relationship diagram
3. Class diagram
4. Object diagram
5. Use case diagram
6. State diagram
7. Sequence diagram
8. Activity diagram
9. Collaboration diagram
10. Component diagram
11. Data dictionary
12. User's manual
13. Administration manual

The CONCESSIONAIRE shall deliver to the GRANTOR the source programs, duly documented, in a digital software version control repository, together with an automated procedure for their compilation, no later than one hundred and fifty (150) Calendar Days prior to the request for the commencement of the operation of the Hospital.

The CONCESSIONAIRE is obliged to ensure that the application that is in operation, from its first deployment in the final operating facilities, can always be built (compiled) based on the contents of the version control repository. The build and installation procedures, in turn, must also be in the same repository and have their respective manuals. Failure to comply with the deadline or any of the obligations set forth in this paragraph shall give rise to the application of penalties to the CONCESSIONAIRE.

**Operating Conditions**

All operations on SIGI-NS must be performed exclusively via the Internet (*Web Service*).

All operations performed on SIGI-NS must be traceable and auditable.

This system shall be accessible to the GRANTOR, the Supervision and all those authorized persons, all of which shall be called SIGI-NS users (GRANTOR's personnel with the respective credentials), CONCESSIONAIRE's personnel, as well as other related state entities. The GRANTOR shall deliver to the CONCESSIONAIRE a final list of the SIGI-NS users, with their corresponding privilege profiles (access levels).

The GRANTOR or the Supervision shall notify the CONCESSIONAIRE each time it deems necessary to create, eliminate or modify the privilege profile associated to a SIGI-NS user, in which case the CONCESSIONAIRE shall implement such action within one Calendar Day of notification of the request.

**Availability**

The SIGI-NS shall be available to all users at full functionality 24 hours a day, every day of the year, and during the entire term of the Contract. Failure to comply with this obligation shall cause the CONCESSIONAIRE to incur the corresponding penalty. The availability of this System shall be monitored by the CONCESSIONAIRE and the Supervisor of Contract and Operations in an auditable manner. Notwithstanding the foregoing, the GRANTOR may monitor such availability.

**Response times**

The response time of SIGI-NS shall be less than or equal to 5 seconds, for all operations associated to the use of such system and under any workload.

The GRANTOR may authorize, at the CONCESSIONAIRE’s justified request, longer response times in those operations involving intensive load processes or calculations. These shall be identified by the CONCESSIONAIRE and incorporated in such request for longer operation time.

This system and all the information contained therein shall be the property of the GRANTOR, and the CONCESSIONAIRE may not establish any limitation of material or intellectual property of the data and information contained therein, which system is considered an asset subject to the Contract.

**Loss of information**

The CONCESSIONAIRE is obliged to store in a safe place and keep available all documents endorsed by electronic signature if applicable. This backup must be performed on a daily basis.

The CONCESSIONAIRE must develop a procedure that allows the reconstruction of the databases, in the event of any loss of information, based on a description of the status of the accounting on a given date, the set of documents and date and time certificate backed up and the reentry, by the CONCESSIONAIRE, the GRANTOR or the Supervisor of Contract and Operations regarding the declarations, requests and authorizations made on the day of the loss of information.

Failure to comply with this obligation shall give rise to a penalty established in Annex 11 of the Contract.

* 1. **User Satisfaction Survey**

**Background**

GRANTOR’S users are understood to be patients, visitors and Hospital personnel who may be direct users of the services to be provided by the CONCESSIONAIRE (sterilization, personnel meals, laundry and laundry, among others).

The determination of the quality perceived by the users, as well as their degree of Satisfaction seeks to know the degree of compliance with the Service quality from the point of view of the demand and as a source of information for each of the services that contemplate user satisfaction indicators.

**Study Objectives**

**General Objective**

1. Know the level of the Hospital's service quality from the users' point of view and if these are in accordance with the Service Levels and Standards that regulate the Contract.
2. Determine the level of Satisfaction, for each of the types of internal and external users of the Hospital.
3. Be a source of information for the determination of standards of those services that contemplate Satisfaction studies.

**Specific objectives**

1. Elaborate an information gathering instrument (questionnaire) that allows obtaining relevant information regarding the perception and evaluation of the users of the respective Hospital in relation to the services to be surveyed. This information must provide elements for the implementation of improvement plans for the services delivered by the CONCESSIONAIRE.
2. Carry out surveys of the Hospital's users, by a trained surveyor, which in no case may be self-administered. Users of the Services shall be understood as: patients, companions and Hospital personnel.
3. Define a sample size that guarantees a confidence level higher than 95%. The universe of users, as well as the distribution of them, shall be proposed to the Supervisor of Contract and Operations for opinion and recommendation to the GRANTOR.
4. Make reports and presentations containing the collected information and to deliver recommendations.
5. Determine the level of satisfaction of the users with the services provided by the CONCESSIONAIRE.
6. Determine which variable(s)/attribute(s) affect user satisfaction.
7. Determine the evaluation that the users assign to each attribute and the degree of relevance that this represents on their level of total satisfaction.

**Conditions for Contracting**

The CONCESSIONAIRE shall be obliged to carry out a quarterly study to assess the degree of Satisfaction or Dissatisfaction with the services provided by the CONCESSIONAIRE from the users' point of view.

The responsibility for conducting user satisfaction studies shall be included among the aspects to be considered by the CONCESSIONAIRE in its self-control and quality assurance plan.

In order to measure the degree of user satisfaction with the services provided by the CONCESSIONAIRE, a study shall be conducted to identify the variables that each user considers relevant to their satisfaction and the importance and influence of these on the overall level of satisfaction. For such purposes, within a maximum term of 30 (thirty) days before starting the Operational Stage, the CONCESSIONAIRE shall propose to the Supervision and to the GRANTOR a third party of companies in the market research area that are not and have not been contractually bound to the CONCESSIONAIRE in the last 24 (twenty-four) months.

Said companies must be specialists in market research and must have at least ten (10) years of experience in the performance of this type of studies, preferably in the health sector, including those of the quantitative type, and that have state-of-the-art data processing software such as Lisrel, AMOS, BarbWin and SPSS (valid for all its previous versions).

In the shortlist, the CONCESSIONAIRE must indicate to Supervision the methodological proposal of each of the three companies, the evaluation method of each one of them, as well as indicate the selected company.

With this information, the Supervision and the GRANTOR shall authorize the CONCESSIONAIRE, within a maximum term of 15 (fifteen) days, to hire the selected company or instruct it to hire another of the companies of the trio, to carry out the market study described above within a maximum term of three (3) months, following exactly what is indicated in the methodology presented.

The selected company shall carry out the above mentioned market study for three (3) years, after which the selection process shall be repeated. The above with the purpose of safeguarding the methodological criteria to be used during an adequate period of time. The cost of each study shall be borne entirely by the CONCESSIONAIRE.

Additionally, the CONCESSIONAIRE shall be obliged to publish the results of the study in a newspaper of national and regional circulation, and expressly authorizes the GRANTOR to use these results for advertising purposes, of comparative regulation between the services of the Hospitals.

**Appendix 1: Food Service**

**Cold Chain Process**

The characteristics of the different stages of the cold chain process are set out below.

1. Preparation. The preparation areas will be different, according to the groups of products with homogeneous preparation and with direct access to chambers, and direct exit to seasoning areas. They shall be equipped with the pertinent equipment with refrigeration coverage, as well as isolated from each other and from the rest of the kitchen zones or areas. The CONCESSIONAIRE shall set deadlines for the execution and implementation of the planning of the times and ways of cooking the food and circuits to be followed during the food preparation process, in accordance with the Applicable Laws and Provisions.
2. Conditioning / serving.
   * This process should be carried out immediately after cooking (goods at a temperature above 65 ºC), to avoid any manipulation during the critical temperature phase (between 10 and 65 ºC). Containers used for conditioning should be the same as those used for final service:
     + Reusable material (porcelain, stainless steel, aluminum, etc.).
     + Single-use material (cardboard, polyethylene, aluminum, etc.).
     + Single portioning material.
     + Multiple portioning material.
   * In all cases, containers containing cooked dishes should be covered and closed to avoid contact with air and the fall of dust particles. Each container should be marked with:
     + Contents.
     + Date of manufacture.
     + Maximum date of consumption.
     + Storage temperature (3 ºC maximum).
   * There must be a synchronization between the finishing in the preparation of the products and the serving. It must be done in the kitchen and be controlled by dietetic technical personnel.
   * The menus will be served in individual trays and will maintain at all times an optimal state of cleanliness and hygiene.
3. Temperature drop / rapid cooling.
   * Once the food has been conditioned, it should be subjected to a rapid drop in temperature.
   * In the refrigerated cold chain, in less than 2 hours, the food should be at 10ºC. Afterwards, they should be stored in chambers at 3ºC.
   * Refrigeration should be carried out by electricity or cryogenic gas.
   * In the frozen cold chain, after the first temperature drop, the product should be frozen at -18ºC and stored at this temperature.
   * After cooking, the temperature inside the product (65-80 ºC) should be brought to 10 ºC in less than 2 hours (including conditioning time). This temperature decrease should be done by means of a rapid cooling cell (blast chiller). To avoid any proliferation of microbial flora, it is essential to cross the critical temperature zone (10 to 65°C) as quickly as possible. Thus, oxidation phenomena, which alter both the nutritional and organoleptic qualities of the food, must also be avoided.
   * The CONCESSIONAIRE should adapt the refrigeration time to each specific product.
   * Although hospital products are properly cooled in the Temperature Chiller, liquid products (sauces, soups, etc.) should be cooled by means of a cold bain-marie or a sauce cooler.
   * The CONCESSIONAIRE should take into account that the optimum thickness for rapid cooling is 8 cm.
4. Storage and conservation.
   * Storage conditions and the transition from high to low temperature or vice versa, are essential to control and avoid bacterial multiplication between temperatures of 3 to 65 ºC.
   * The storage of food once cooled will have an established maximum period, which should be counted from the moment cooking is finished. This period will be established with the Hospital's dietetics unit.
   * Cooked foods based on minced meat will have a maximum conservation period of 24 hours.
   * The conservation temperature should not be higher than 3ºC.
   * The preservation of cooked foods should be carried out in a specific chamber for them, which should be provided with a thermometer register, visible from the outside.
5. Distribution.
   * The distribution of the food to the patients will be carried out by means of transport cars to the floor with the necessary capacity for all the patients admitted in each one of them, with refrigeration, heating and programmable maintenance system, in such a way that the food is kept at the adequate temperature and preserves its organoleptic properties.
   * The conveyor cars for hot preparations must be thermal, hermetically sealed, made of shock-resistant material and resistant to frequent washing and disinfection processes, and must not transmit contamination or bad odors to the food. The interior walls should be smooth and easy to clean and disinfect. They should be kept in a good state of preservation and hygiene both inside and outside.
   * Between each food loading and unloading process, hygienic operations will be carried out in accordance with the Hygiene and Sanitation programs established by the Food Service.
   * The conveyor cars for the distribution of cold preparations should also be kept in a good state of conservation and hygiene and the food to be distributed should be protected to avoid cross contamination.
6. Regeneration / temperature recovery time.
   * Regeneration should be carried out in less than 1 hour and should allow a temperature of at least 65ºC to be reached within this time. This temperature should be maintained until the time of consumption.
   * The regeneration should be carried out once the tray is prepared for each patient.
   * The conservation of cooked dishes, after regeneration, should be limited to 2 hours. If not all of the regenerated product is consumed, the leftover should be discarded.

**Characteristics of raw materials and products supplied by the CONCESSIONAIRE**

The following are the information characteristics that the raw materials used by the CONCESSIONAIRE and the products supplied by the CONCESSIONAIRE must comply with:

1. Product name (sales denomination).
   * Labels should indicate the name of the product they accompany. In the case of a standardized product, the name provided for in the applicable legal provisions (RTS, quality standards, etc.) must be used. If there is no standard, the name established by Peruvian usage, or a description of the product if it is new.
   * The sales name shall be accompanied by the physical state of the product if its omission would mislead the consumer.
   * The name of the product may not be substituted (although it may be accompanied) by a trademark or a fancy name.
   * In the case of meat, the name of the piece and the class or type of carcass of origin must be indicated.
2. Commercial category (commercial category, variety, origin).
   * When so required by the Applicable Laws and Provisions on Quality, the CONCESSIONAIRE shall ensure that the typified categories appear (e.g.: Extra, First, etc.), and the use of different adjectives is prohibited.
3. List of ingredients.
   * It must be preceded by the word "Ingredients" and must list all ingredients used in the preparation of the food, in descending order of weight at the time of their addition to the food.
   * It is mandatory to indicate water in the list of ingredients if the water added to the product exceeds, by weight, 5% of the finished product.
   * The species from which the meat is derived must be specified, insofar as this is not deduced from the name of the product.
   * If an ingredient by itself reaches or exceeds 25% of the finished product, it must be followed by its own list of ingredients.
   * Additives must be preceded by the name of the category to which they belong: Colorant, Preservative and may be identified both by their number and by their name.
4. Exceptions.
   * Fruits, fresh vegetables and potatoes, except: peeled, cut or subjected to any similar treatment.
   * Foods consisting of a single ingredient.
   * Cheeses, butters, fermented milks and creams, if only ingredients from dairy products, enzymes and cultures of microorganisms necessary for the manufacture of these products have been added, and in the case of cheeses other than fresh or processed cheeses, the salt necessary for their manufacture.
5. Net quantity.
   * The net weight of the product must be indicated on the label, in units of volume for liquid products and in units of mass for other products.
   * When a solid product is presented in a covering liquid, the drained weight must also be indicated.

Exceptions

* + Unpackaged products, products which suffer shrinkage during their commercial life and which are either sold by unit or weighed.

1. Dates of consumption.
   * The best-before or use-by date should be indicated on the label.
   * The expiration date should be indicated when the product is microbiologically highly perishable and, therefore, may pose a health hazard once its shelf life is exceeded. After the expiration date the product cannot be consumed and should be withdrawn from the market. In other cases, the best-before date will be used, whereby the manufacturer recommends the consumption of its product preferably before that date, not implying that after that date the product is unfit for consumption. It is up to the manufacturer to determine the shelf life of its product. It should be remembered that these dates may NOT be indicated in relation to other dates that may appear on the label. e.g. Dates of manufacture or packaging.
   * In the first case: expiration date followed by the date or a reference to the place where it is located. (e.g. see cover). The best-before date should always include the day, month and possibly the year.
   * The best-before date should indicate the day, month and year. For products with a shelf life of less than 3 months, it is sufficient to indicate the day and month. If the shelf life is longer than 3 months, but does not exceed 18 months, it is sufficient to indicate the month and year. If the duration of the product is longer than 18 months, it is sufficient to indicate the year.

Exceptions

* + Products not packaged without standard or when the specific standard does not require date marking.
  + Cheese and sausages must indicate the date of consumption.

1. Storage instructions and instructions for use of the food according to the manufacturer's instructions, if applicable.
2. Identification of the producing/distributing company as appropriate.
3. Indication of the lot of the inputs as appropriate.
4. Means of transport.
   * Characteristics of the medium.
   * Conservation temperatures.
   * Hygiene norms in transport.

**Appendix 2: Technical Requirements for Maintenance Software**

The maintenance management information shall be managed through maintenance software compatible and interoperable with the current maintenance software of the GRANTOR, which shall be subject to the opinion of the Supervisor of Contract and Operations.

Notwithstanding the above, the maintenance software to be used shall comply at least with the following conditions and report to the SIGI-NS system or, be part of the SIGI-NS system:

**Table 191: Technical Requirements of the Maintenance Software**

|  |  |
| --- | --- |
| **Item** | **Fields** |
| Type of equipment | Type of equipment |
| Inspection and preventive maintenance procedures (IMP) |
| Frequency of IMPs |
| Risk level |
| Personnel in charge |
| Equipment model | Model number |
| Serial Number |
| Parts List |
| Parts code and name |
| IMP Procedures |
| Manufacturer/vendor | Manufacturer's code and name |
| Vendor code and name |
| Vendor's email address, phone and physical address |
| Name of manufacturer's contact person |
| Name of the vendor's contact person |
| Warehouse/spare parts | Warehouse code and name |
| Parts code and name |
| Parts order number |
| Personnel | Employee code |
| Employee's name |
| Employee position |
| Access Level |
| Training data |
| Maintenance | Inventory Number |
| Work order number |
| Support Service Provider |
| Service engineer code |
| Fault code and name |
| IMP Procedures |

**Appendix 3: Maintenance Service Management Indicators to be Considered in the Maintenance Software**

The following is a description of each of the indicators and their measurement methods:

**Total Availability**

It is the quotient of dividing the number of hours that a piece of equipment has been available to produce and the total number of hours in a period:

Once the availability of each significant piece of equipment has been obtained, the arithmetic mean must be calculated to obtain the total availability.

**Availability Due To Failures**

This is the same index as above, but taking into account only stoppages due to breakdowns, unscheduled interventions:

Availability due to breakdowns does not take into account scheduled equipment stoppages.

As in the previous case, it is advisable to calculate the arithmetic mean of the availability due to breakdown, in order to provide a single figure.

**MTBF (*Mid Time between Failures*)**

Allows to know the frequency of occurrence of failures:

**MTTR (*Mid Time To Repair*)**

It allows to know the importance of the failures that occur in an equipment considering the average time until their solution:

And, therefore:

**Number of Work Orders Generated in a Given Period**

**Number of Work Orders Generated By Sector or Zone**

**Number of Work Orders Closed**

**Number of Pending Work Orders**

It is convenient to distinguish between W.O.'s that are pending for reasons unrelated to maintenance (pending due to the receipt of a spare part, pending because production does not give its authorization to intervene on the equipment, etc.) from those due to the accumulation of tasks or poor maintenance organization.

For this reason, it is convenient to divide this indicator into the following ones:

* + Spare pending
  + Pending equipment shutdown
  + Pending due to other causes

**Number Of Emergency Work Orders (Highest Priority)**

**Estimated Hours Of Pending Work**

This is the sum of the estimated hours for each of the jobs pending completion. It is a more important parameter than the number of pending orders, since it allows us to know the estimated workload to be carried out.

**Planning Compliance Rate**

It is the proportion of orders that were completed on or before the scheduled date out of the total number of total orders. Measures the degree of success of planning.

**Average Deviation From Planned Time**

It is the quotient of dividing the sum of hours of deviation over the planned time by the total number of work orders.

There can be two versions:

1. Average deviation from the time of completion. Quotient of dividing the sum of the number of hours in which each of the orders has been exceeded over the estimated time of completion:
2. Average deviation of man-hours spent on a W.O. from the planned man-hours:

**Average Time To Resolve An Inquiry Using The Sigi-Ns System**

It is the quotient of dividing the number of WOs or requirements resolved through the SIGI-NS system by the number of hours dedicated to maintenance:

**Labor Cost By Section**

It is convenient to break down this cost for each of the zones or sections. If these have permanent maintenance personnel, the cost will be that of the personnel assigned to each of them. If it is a central department, the cost per section will be calculated based on the hours spent in each of the interventions.

**Maintenance Labor Cost Ratio**

It is the quotient of dividing the total number of hours spent on maintenance by the total cost of labor:

**Cost of Materials**

As many subdivisions can be made as deemed convenient: by section, by type (electrical, mechanical, consumables, generic spare parts, specific spare parts, etc.).

**Cost Of Subcontracts**

Subdivisions may also be made as deemed appropriate. Some common subdivisions are:

* Subcontracts to manufacturers and specialists
* Subcontracts for statutory inspections
* Subcontracts to generic maintenance companies

**Cost Of Auxiliary Means**

This is the sum of all auxiliary means that had to be rented or contracted: cranes, forklifts, rental of special tools, etc.

**Scheduled Maintenance Rate**

Percentage of hours invested in Scheduled Maintenance as a percentage of total hours.

**Correction Rate**

Percentage of hours invested in Corrective Maintenance as a percentage of total hours

**Emergency Rate**

Percentage of hours spent on top priority W.O. performance:

**Material Consumption**

They measure the consumption of spare parts and consumables in maintenance activities in relation to the total consumption of materials.

**Warehouse Turnover**

It is the quotient of dividing the value of the total consumed spare parts and the value of the material kept in stock (value of the spare parts inventory).

There is an interesting variation of this rate, when trying to determine if the stock of spare parts and consumables is well chosen. To determine this, it is more useful to divide this rate in two:

Another way to know if the maintenance warehouse is well sized is to determine the proportion of parts with incoming and outgoing movements. One use of this rate is to determine what percentage of parts have little movement, in order to try to eliminate them, declassify them, destroy them, sell them, etc...:

**Order Fulfillment Efficiency**

Ratio of unfulfilled purchase requisitions more than 3 months old to total purchase orders placed.

**Average Time For Receipt of Orders**

This is the average delay from the time an order is placed until it is received. This rate can be calculated by sampling (randomly taking a certain number of orders placed and taking the arithmetic mean of the time elapsed from request to receipt for each of them) or from the total number of orders placed.

**Accident Frequency Rate**

Indicates the ratio between the number of accidents with sick leave and the total hours worked.

**Lost Day Rate**

Ratio of hours lost due to sick leave to hours worked

**Average Residence Time Of Waste**

The average time that elapses from the time a waste is generated until it is removed by an authorized waste manager.

**Environmental Occurrence Frequency Rate**

It is the quotient between the number of serious environmental occurrences and the number of hours worked:

**Proportion Of Hours Dedicated To Education Or Training**

Percentage of hours per year dedicated to training as a percentage of total working hours.

**Proportion Of Development Of The Training Program**

Percentage of training hours completed out of the total scheduled training hours.

**Appendix 4: Laboratory Services Portfolio**

**Table 192: Laboratory Services Portfolio - Piura Hospital**

| **N°** | **CPMS CODE** | **TYPE OF TEST**  **ACCORDING TO STANDARD OF THE HEALTHCARE AND MEDICAL PROCEDURES CATALOG** | **TYPE** |
| --- | --- | --- | --- |
| 1 | 82947 | Dosing of Blood Glucose, quantitative (except reagent tape) | Routine |
| 2 | 84520 | Urea nitrogen; quantitative | Routine |
| 3 | 82565 | Dosing of Blood Creatinine | Routine |
| 4 | 84704 | Gonadotropin, chorionic (hCG); free beta subunit | Routine |
| 5 | 81001 | Urinalysis by test strip or tablet reagent, for bilirubin, glucose, hemoglobin, ketones, leukocytes, nitrite, pH, protein, specific gravity, urobilinogen, any number of these components; automated, with microscopy | Routine |
| 6 | 84450 | Aspartate aminotransferase (AST) (SGOT) | Routine |
| 7 | 84460 | Transferase; amino alanine (ALT) (SGPT) | Routine |
| 8 | 84443 | Thyroid-stimulating hormone (TSH) | Routine |
| 9 | 84439 | Thyroxine; free | Routine |
| 10 | 84075 | Dosing of Phosphatase, alkaline | Routine |
| 11 | 82247 | Dosing of Bilirubin; total | Routine |
| 12 | 82803 | Dosing of blood gas, any combination of pH, pCO2, pO2, CO2, HCO3 (including calculated O2 saturation) | Routine |
| 13 | 82977 | Dosing of Glutamyl transferase, gamma (GGT) | Routine |
| 14 | 84153 | Dosing of Total prostate specific antigen (PSA) | Routine |
| 15 | 82465 | Dosing of Total cholesterol in whole blood or serum | Routine |
| 16 | 84478 | Triglycerides | Routine |
| 17 | 84550 | Uric acid; in blood | Routine |
| 18 | 83721 | Direct determination of Low Density Lipoprotein (LDL cholesterol) | Routine |
| 19 | 83718 | Direct determination of High Density Lipoprotein (HDL cholesterol) | Routine |
| 20 | 83719 | Direct determination of very low density lipoprotein (VLDL cholesterol) | Routine |
| 21 | 83615 | Dosing of Lactate dehydrogenase (LD), (LDH) | Routine |
| 22 | 84481 | Triiodothyronine T3; free | Routine |
| 23 | 82378 | Dosing of Carcinoembryonic antigen (CEA) | Routine |
| 24 | 83036 | Dosing of Hemoglobin; glycosylated (A1C) | Routine |
| 25 | 84100 | Dosing of inorganic phosphorus (phosphate) | Routine |
| 26 | 84154 | Dosing of free prostate specific antigen (PSA) | Routine |
| 27 | 82310 | Dosing of Calcium; total | Routine |
| 28 | 82150 | Dosing of Amylase | Routine |
| 29 | 82570,01 | Creatinine in simple urine | Routine |
| 30 | 83540 | Dosing of Iron | Routine |
| 31 | 82728 | Dosing of Ferritin | Routine |
| 32 | 82043 | Dosing of Urine albumin, microalbumin; quantitative | Routine |
| 33 | 82550 | Dosing of Creatine kinase (CK), (CPK); total | Routine |
| 34 | 82553 | Dosing of Creatine kinase (CK), (CPK); MB fraction only | Routine |
| 35 | 84146 | Dosing of Prolactin | Routine |
| 36 | 83002 | Dosing of Gonadotropin; luteinizing hormone (LH) | Routine |
| 37 | 83001 | Dosing of Gonadotropin; follicle-stimulating hormone (FSH) | Routine |
| 38 | 89051 | Cell count in miscellaneous body fluids (e.g. cerebrospinal fluid, joint fluid), except blood; with differential count | Routine |
| 39 | 84540,01 | Urea in 24-hour urine | Routine |
| 40 | 82951 | Dosing of Glucose; tolerance test (GTT), three samples (including glucose) | Routine |
| 41 | 82040 | Dosing of Albumin; serum, plasma, or whole blood | Routine |
| 42 | 82271 | Qualitative determination of occult blood by peroxidase activity (guaiacol test) in other sources | Routine |
| 43 | 84702 | Chorionic gonadotropin (hCG); quantitative | Routine |
| 44 | 82670 | Dosing of Estradiol | Routine |
| 45 | 83735 | Dosing of Magnesium | Routine |
| 46 | 83690 | Dosing of Lipase | Routine |
| 47 | 82570,02 | Creatinine in 24-hour urine | Routine |
| 48 | 82248 | Dosing of Bilirubin; direct | Routine |
| 49 | 82310,01 | Calcium in 24 hours urine | Routine |
| 50 | 84560,01 | Uric acid in 24 hours urine | Routine |
| 51 | 82020 | Dosing of ADA (Adenosine amino acid deaminase) | Routine |
| 52 | 84144 | Dosing of Progesterone | Routine |
| 53 | 84402 | Testosterone; free | Routine |
| 54 | 84484 | Troponin, quantitative | Routine |
| 55 | 84105 | Dosing of Inorganic Phosphorus (Phosphate); urine | Routine |
| 56 | 84560 | Uric acid; other source | Routine |
| 57 | 80051 | Electrolyte profile, this profile should include the following: carbon dioxide (82374), chloride (82435), potassium (84132) and sodium (84295) | Routine |
| 58 | 82575 | Dosing of Creatinine; clearance | Routine |
| 59 | 82308 | Dosing of Calcitonin | Routine |
| 60 | 83735,01 | Dosing of Magnesium in 24h Urine | Routine |
| 61 | 82360 | Quantitative chemical analysis of Calculus | Routine |
| 62 | 82340,01 | Simple urine calcium | Routine |
| 63 | 83550 | Study of iron binding capacity | Routine |
| 64 | 81015 | Urinalysis, microscopic only | Routine |
| 65 | 82705 | Dosing of Fecal fat or lipid; qualitative | Routine |
| 66 | 82570 | Dosing of Creatinine; other source | Routine |
| 67 | 82945 | Dosing of Body fluid glucose, other than blood | Routine |
| 68 | 83010 | Dosing of Haptoglobin; quantitative | Routine |
| 69 | 82172 | Dosing of Apolipoprotein; each | Routine |
| 70 | 84119 | Porphyrins in urine; qualitative | Routine |
| 71 | 84157 | Total protein, except by refractometry, other source (Example: synovial fluid, cerebrospinal fluid) | Special |
| 72 | 83525 | Dosing of Insulin; total | Special |
| 73 | 82607 | Dosing of Cyanocobalamin (vitamin B-12) | Special |
| 74 | 82746 | Dosing of Folic Acid; serum | Special |
| 75 | 83970 | Dosing of Parathyroid hormone (parathyroid hormone) | Special |
| 76 | 84466 | Transferrin | Special |
| 77 | 82105 | Dosing of Alpha-fetoprotein; serum | Special |
| 78 | 82232 | Dosing of Beta-2-microglobulin | Special |
| 79 | 82785 | Dosing of Gamma-globulin; IgE | Special |
| 80 | 82784,03 | Dosing of Immunoglobulin G | Special |
| 81 | 82784,04 | Dosing of Immunoglobulin M | Special |
| 82 | 82627 | Dosing of Dehydroepiandrosterone-sulfate (DHEA-S) | Special |
| 83 | 82784,01 | Dosing of Immunoglobulin A | Special |
| 84 | 84681 | C-peptide | Special |
| 85 | 82024 | Dosing of Adrenocorticotropic hormone (ACTH) | Special |
| 86 | 84432 | Thyroglobulin | Special |
| 87 | 84165 | Proteins; fractionation and quantitative determination by electrophoresis; serum | Special |
| 88 | 83003 | Dosing of Human Growth Hormone (HGH) (somatotropin) | Special |
| 89 | 82530 | Dosing of Cortisol; free | Special |
| 90 | 80164 | Dosing of Valproic Acid | Special |
| 91 | 82055 | Dosing of Alcohol (ethanol); any specimen except breath | Special |
| 92 | 83525,01 | Basal Insulin 30, 60, 90, 90, 120 | Special |
| 93 | 80184 | Dosing of Phenobarbital | Special |
| 94 | 83020 | Dosing of Hemoglobin, fractionation and quantitative analysis; electrophoresis (i.e. A2, S, C and/or F) | Special |
| 95 | 82670,01 | Dosing of Free Estradiol | Special |
| 96 | 80156 | Dosing of Total Carbamazepine | Special |
| 97 | 82784,02 | Dosing of Immunoglobulin D | Special |
| 98 | 80186 | Dosing of Free Phenytoin | Special |
| 99 | 82088 | Dosing of Aldosterone | Special |
| 100 | 82955 | Dosing of Glucose-6-phosphate dehydrogenase (G6PD); quantitative | Special |
| 101 | 80162 | Dosing of Digoxin | Special |
| 102 | 83874 | Dosing of Myoglobin | Special |
| 103 | 82677 | Dosing of Estriol | Special |
| 104 | 82651 | Dosing of Dihydrotestosterone (DHT) | Special |
| 105 | 85730 | Partial thromboplastin time (PTT); in plasma or whole blood | Routine |
| 106 | 85610 | Prothrombin time | Routine |
| 107 | 85670 | Thrombin time; plasma | Routine |
| 108 | 85384 | Fibrinogen activity measurement | Routine |
| 109 | 85018 | Hemoglobin | Routine |
| 110 | 85652 | Erythrocyte sedimentation rate; automated | Routine |
| 111 | 85031,01 | Complete blood count, 5 blood smears (No., Formula, Hb, Ht, Hto, Corpuscular constants, Platelets) | Routine |
| 112 | 85007 | Blood smear with microscopic examination with manual differential leukocyte formula. | Routine |
| 113 | 85045 | Automated reticulocyte counts | Routine |
| 114 | 85380 | Measurement of fibrin degradation products, dimer D, ultrasensitive (e.g. evaluation for venous thromboembolism), qualitative or semi-quantitative | Routine |
| 115 | 85170 | Clot retraction | Routine |
| 116 | 85810 | Blood viscosity | Routine |
| 117 | 85002 | Bleeding time | Routine |
| 118 | 85246 | Coagulation; factor VIII, VW factor antigen | Special |
| 119 | 85305 | Coagulation inhibitors or anticoagulants; Protein S, total | Special |
| 120 | 85300 | Coagulation inhibitors or anticoagulants; antithrombin III, activity | Special |
| 121 | 85557 | Erythrocyte osmotic fragility; with incubation | Special |
| 122 | 85300,01 | Lupus anticoagulant | Special |
| 123 | 85230 | Coagulation; factor VII (proconvertin, stable factor) | Special |
| 124 | 85306 | Coagulation inhibitors or anticoagulants; protein S, free | Special |
| 125 | 85250 | Coagulation; factor IX (PTC or Christmas) | Special |
| 126 | 85301 | Coagulation inhibitors or anticoagulants; antithrombin III, antigenic assay | Special |
| 127 | 85220 | Coagulation; factor V (AcG or proaccelerin), labile factor | Special |
| 128 | 85999 | Hematology and coagulation procedure not listed | Special |
| 129 | 85410 | Fibrinolytic factors and their inhibitors; alpha-2 antiplasmin. | Special |
| 130 | 85291 | Coagulation; factor XIII (fibrin stabilizing factor), solubility screening | Special |
| 131 | 85307 | Activated protein C resistance testing | Special |
| 132 | 85520 | Heparin analysis | Special |
| 133 | 85415 | Fibrinolytic factors and their inhibitors; plasminogen activator | Special |
| 134 | 85576 | Platelets; aggregation (in vitro), each agent | Special |
| 135 | 85999,02 | Sucrose test | Special |
| 136 | 86900 | Blood typing; ABO | Routine |
| 137 | 86140 | C-reactive protein | Routine |
| 138 | 86592 | Syphilis test; nontreponemal antibody; qualitative (e.g. VDRL, RPR, ART) | Routine |
| 139 | 86301 | Quantitative immunoassay for tumor antigen CA 19-9 | Routine |
| 140 | 86300 | Quantitative immunoassay for tumor antigen CA 15-3 (27.29) | Routine |
| 141 | 86431 | Rheumatoid factor; quantitative | Routine |
| 142 | 80058 | Hepatitis profile: Hepatitis B surface antigen (HBsAg), Antibody to hepatitis B surface antigen (HBsAb), Antibody to hepatitis B nucleocapsid antigen (HBsAb). | Routine |
| 143 | 86304 | Quantitative immunoassay for tumor antigen CA 125 | Routine |
| 144 | 86803 | Antibody to hepatitis C | Routine |
| 145 | 86060 | Antistreptolysin O; titer | Routine |
| 146 | 86880 | Anti-human globulin test (Coombs' test); direct, each antiserum | Routine |
| 147 | 86709 | Antibody to hepatitis A (HAAb); IgM antibody | Routine |
| 148 | 86886 | Anti-human globulin test (Coombs' test); indirect, each titer of antibody | Routine |
| 149 | 86706 | Antibody to hepatitis B surface antigen (HBsAb) | Routine |
| 150 | 86704 | Antibody to hepatitis B nucleocapsid antigen (HBcAb); total | Routine |
| 151 | 86705 | Antibody to hepatitis B nucleocapsid antigen (HBcAb); IgM antibody | Routine |
| 152 | 86708 | Antibody to hepatitis A (HAAb); total | Routine |
| 153 | 86593 | Syphilis test; nontreponemal antibody, quantitative | Routine |
| 154 | 86707 | Antibody to hepatitis Be (HBeAb) | Routine |
| 155 | 86000,04 | Paratyphi B agglutinations | Routine |
| 156 | 86000,01 | Brucella: Agglutinations in Sheet (or Plate) | Routine |
| 157 | 86000,03 | Paratyphi A agglutinations | Routine |
| 158 | 86768,02 | Antibody to; Salmonella (Typhi O) | Routine |
| 159 | 86768,01 | Antibody to; Salmonella (Typhi H) | Routine |
| 160 | 86703 | Antibodies; HIV-1 and HIV-2, single test | Special |
| 161 | 86594 | Antithyroid Antibodies - Anti TPO - Thyroglobulin | Special |
| 162 | 86645 | Antibodies; cytomegalovirus (CMV), IgM | Special |
| 163 | 86777 | Antibody to; Toxoplasma | Special |
| 164 | 86778 | Antibody to; toxoplasma, IgM | Special |
| 165 | 86644 | Antibody; cytomegalovirus (CMV), IgM | Special |
| 166 | 86762 | Antibody; Rubella | Special |
| 167 | 86762,01 | Rubella IGM | Special |
| 168 | 86038 | Antinuclear Antibodies (ANA) | Special |
| 169 | 86160 | Complement; antigen, each component | Special |
| 170 | 86695 | Antibodies; herpes simplex, type 1 | Special |
| 171 | 86696 | Antibodies; herpes simplex, type 2 | Special |
| 172 | 86695,01 | IgM Herpes Simplex type 1 | Special |
| 173 | 86800 | Antibody to thyroglobulin | Special |
| 174 | 86696,01 | Herpes 2 IgM | Special |
| 175 | 86021 | Antibody identification; leukocyte antibodies; ANCA A, ANCA P, anti HU, Anti YO, NR1, R1, smooth muscle | Special |
| 176 | 86360 | T-lymphocytes; absolute CD4 and CD8 counts, including CD4/CD8 ratio | Special |
| 177 | 87389 | Detection of infectious agent antigen by enzyme immunoassay technique, qualitative or semi-quantitative, multi-step method; HIV-1 antigen(s), with HIV-1 and HIV-2 antibodies, single result | Special |
| 178 | 86225 | Deoxyribonucleic acid (DNA), antibody to; native or double-stranded DNA | Special |
| 179 | 86663 | Antibodies; Epstein-Barr virus (EB), early antigen (EA) | Special |
| 180 | 86687 | Antibodies; HTLV-I | Special |
| 181 | 86147 | Cardiolipin, antibody, (phospholipid), each Ig class. | Special |
| 182 | 86688 | Antibodies; HTLV-II | Special |
| 183 | 86147,01 | Cardiolipin, antibody, (phospholipid), IgM | Special |
| 184 | 86008 | Brucella study: Agglutinations, blockers. | Special |
| 185 | 86335 | Immunofixation Electrophoresis, in other fluids with concentrations (e.g. urine, CSF) | Special |
| 186 | 86664 | Antibodies; Epstein-Barr virus (EB), nucleocapsid antigen (EBNA) | Special |
| 187 | 86665 | Antibodies; Epstein-Barr virus (EB), virus capsid antigen (VCA) | Special |
| 188 | 86691 | Western blotting for hydatidosis | Special |
| 189 | 86277 | Human growth hormone (HGH), antibody to | Special |
| 190 | 86235 | Antibodies to extractable nuclear antigen, any method (e.g. nRNP, SSA, SS-B, Sm, RNPScl70, JO1), each antibody | Special |
| 191 | 86161 | Complement; functional activity, each component | Special |
| 192 | 86009 | Brucella Study: Rose Bengal | Special |
| 193 | 86157 | Cryoagglutinin; titer | Special |
| 194 | 86148 | Anti-phosphatidylserine antibody (phospholipid) | Special |
| 195 | 86376 | Microsomal antibodies (e.g. anti-thyroid or anti-liver-kidney), each | Special |
| 196 | 86000,02 | Brucella: Tube Agglutinations | Special |
| 197 | 86325 | Immunoelectrophoresis; other fluids (e.g. urine, cerebrospinal fluid), with concentration | Special |
| 198 | 86332 | Immune complex analysis | Special |
| 199 | 86631 | Antibodies; chlamydia | Special |
| 200 | 86632 | Antibodies; chlamydia, IgM | Special |
| 201 | 87088 | Urine culture with isolation and presumptive identification of each isolate | Routine |
| 202 | 87045 | Bacterial culture, stool, aerobic, with isolation and preliminary examination (e.g., KIA, LIA) of Salmonella and Shigella species | Routine |
| 203 | 87040 | Bacterial culture, blood, aerobic, with isolation and presumptive identification of strains (includes anaerobic culture, if necessary) with MIC | Routine |
| 204 | 87340 | Detection of infectious agent antigens by enzyme immunoassay technique, qualitative or semiquantitative, multistep method; hepatitis B surface antigen (HBsAg) | Routine |
| 205 | 89055 | Leukocyte evaluation, in stool, qualitative or semi-quantitative | Routine |
| 206 | 87115 | Bacilloscopy: BK | Routine |
| 207 | 87177 | Direct smear and concentration test for identification of eggs and parasites. | Routine |
| 208 | 87205 | Primary source smear with interpretation, Gram or Giemsa or Wright staining for bacteria, fungi or cell types | Routine |
| 209 | 87179 | Functional stool examination | Routine |
| 210 | 87102 | Fungal culture (spore or yeast), isolation, with presumptive identification of isolates); other source (except blood) | Routine |
| 211 | 87220 | KOH examination of skin, hair, or nail samples for fungi, ectoparasite eggs or mites (e.g., scabies). | Routine |
| 212 | 89060 | Crystal identification by light microscopy with or without polarizing lens analysis, in tissue or any body fluid (except urine). | Routine |
| 213 | 87210 | Wet mount smears for identification of infectious agents (e.g. saline solution, India ink, KOH preparations) | Routine |
| 214 | 89320 | Semen analysis; complete (volume, count, motility and differential) | Routine |
| 215 | 87163 | Body fluid culture (CSF, pleural, ascitic, pericardial, amniotic, other) | Routine |
| 216 | 87178 | Graham's test | Routine |
| 217 | 87207 | Primary source smear with interpretation, with special staining for inclusion bodies or parasites (e.g. malaria, coccidia, microsporidia, trypanosomes, herpes virus) | Routine |
| 218 | 89225 | Identification of starch granules in feces. | Routine |
| 219 | 87162 | Culture of secretions (pharyngeal, urethral, vaginal, sputum, wounds, other) | Routine |
| 220 | 87211 | Parasitological - cup sedimentation | Routine |
| 221 | 87070 | Bacterial culture, in any source except urine, blood or feces, with isolation and presumptive identification of strains. | Routine |
| 222 | 89322 | Semen analysis, volume, count, motility, and differential using strictly morphological criteria (e.g. Kruger). | Routine |
| 223 | 87164 | Darkfield examination, any source (e.g. penis, vagina, mouth, skin); includes specimen collection | Routine |
| 224 | 87116 | Culture of tubercle bacilli or any other acid-fast bacilli (e.g. tuberculosis, AFB, mycobacteria); any source, with isolation and presumptive identification of isolates | Special |
| 225 | 87351 | Detection of Age for Hepatitis B (HBeAg) | Special |
| 226 | 82330 | Dosing of Calcium; ionized | Routine |
| 227 | 82340 | Quantitative Dosing of Calcium in urine; time-measured sample. | Routine |
| 228 | 82950 | Dosing of Glucose; after a dose of glucose (includes glucose) | Routine |
| 229 | 83873 | Dosing of Myelin, basic protein, cerebrospinal fluid | Routine |
| 230 | 84145 | Dosing of Procalcitonin (PCT) | Routine |
| 231 | 84545 | Measurement of blood urea nitrogen (BUN) clearance | Routine |
| 232 | 80202 | Dosing of Vancomycin | Special |
| 233 | 82383 | Dosing of Catecholamines in blood | Special |
| 234 | 83925 | Dosing of Opioid (i.e. drug and metabolites, each procedure) | Special |
| 235 | 83935 | Osmolality test; urine | Special |
| 236 | 85042 | ADDIS test | Routine |
| 237 | 85060 | Peripheral blood smear, interpretation and written report by physician | Routine |
| 238 | 85244 | Coagulation; factor VIII related antigen | Special |
| 239 | 85245 | Coagulation; factor VIII, VW ristocetin cofactor | Special |
| 240 | 85302 | Coagulation inhibitors or anticoagulants; protein C, antigen | Special |
| 241 | 85303 | Coagulation inhibitors or anticoagulants; protein C, activity | Special |
| 242 | 85540 | Leukocyte alkaline phosphatase with count | Special |
| 243 | 85660 | Erythrocyte sickle cell formation, reduction | Special |
| 244 | 85999,01 | Ham HPN test | Special |
| 245 | 86320 | Immunoelectrophoresis; serum | Special |
| 246 | 86355 | Total B-cell count | Special |
| 247 | 86359 | T-lymphocytes; total count | Special |
| 248 | 86361 | T-lymphocytes; absolute CD4 count | Special |
| 249 | 86665,01 | Epstein Barr Virus VCA IgM | Special |
| 250 | 86689 | Antibodies; antibody to HTLV or HIV, confirmatory test (Example: Western blot) | Special |
| 251 | 86690 | Western blotting for cysticercosis | Special |
| 252 | 86787 | Antibody to; varicella zoster | Special |
| 253 | 86787,01 | Antibody to; varicella zoster IgM | Special |
| 254 | 86790 | Antibody to; virus, not elsewhere specified | Special |
| 255 | 86790,01 | Antibody; Zika | Special |
| 256 | 86790,02 | Antibodies; Zika, IgM | Special |
| 257 | 86790,03 | Antibodies; Chikungunya | Special |
| 258 | 86790,04 | Antibodies; Chikungunya, IgM | Special |
| 259 | 86790,05 | Antibodies; dengue | Special |
| 260 | 86790,06 | Antibodies; dengue, IgM | Special |
| 261 | 86804 | Hepatitis C antibody; confirmatory test (e.g. "immunoblot") | Special |
| 262 | 87071 | Bacterial culture, quantitative, aerobic, with isolation and presumptive identification of strains, any source except urine, blood or feces | Routine |
| 263 | 87101 | Fungal culture (spore or yeast), isolation (with or without presumptive identification); skin, hair or fingernails | Routine |
| 264 | 87115,01 | Bacilloscopy: BK, serial 3 specimens | Routine |
| 265 | 87161 | Anaerobic culture | Routine |
| 266 | 87169 | Macroscopic parasite examination | Routine |
| 267 | 87172 | Pinworm examination (e.g. tape test) | Routine |
| 268 | 87206 | Primary source smear with interpretation; fluorescent and/or acid-fast staining for bacteria, fungi, parasites, viruses or cell types | Routine |
| 269 | 87208 | Extended smear, primary source, with interpretation; direct or concentrate, dehydrated, for eggs and parasites | Routine |
| 270 | 87046 | Bacterial culture, stool, aerobic, additional pathogens, isolation and presumptive identification of strains, each plate | Special |
| 271 | 87072 | Culture or direct bacterial identification method, each organism, with commercial kit, any source except urine. | Special |
| 272 | 87073 | Bacterial culture, quantitative, anaerobic, with isolation and presumptive identification of strains, any source except urine, blood or feces | Special |
| 273 | 87075 | Bacterial culture, from any source except blood, anaerobic with isolation and presumptive identification of strains | Special |
| 274 | 87076 | Bacterial culture, anaerobic isolation, additional methods, required for definitive identification, each isolate | Special |
| 275 | 87077 | Bacterial culture, aerobic isolation, additional methods required for definitive identification, each isolate. | Special |
| 276 | 87081 | Culture of presumptive pathogenic organisms, for screening purposes only. | Special |
| 277 | 87082 | Presumptive culture, pathogenic organisms, evaluation only, by commercial kit (specify type); for single organism | Special |
| 278 | 87083 | Presumptive culture, pathogenic organisms, evaluation only, by commercial kit (specify type); multiple organisms | Special |
| 279 | 87084 | Culture of presumptive pathogenic organisms with colony count estimation by density chart | Special |
| 280 | 87085 | Presumptive culture, pathogenic organisms, evaluation only, by commercial kit (specify type); with colony counting | Special |
| 281 | 87103 | Fungal culture (spore or yeast), isolation, with presumptive identification of isolates; blood | Special |
| 282 | 87140 | Immunofluorescence typing culture, each antiserum | Special |
| 283 | 87147 | Typing culture by immunological method other than immunofluorescence (e.g. agglutination grouping), each antiserum | Special |
| 284 | 87166 | Darkfield examination, any source (e.g. penis, vagina, mouth, skin); no specimen collection | Special |
| 285 | 87209 | Primary source smear with interpretation, with special complex staining (e.g. trichrome, hematoxylin iron) for eggs and parasites | Special |

**Appendix 5: Service of Imaging s Portfolio**

**TABLE 193: SERVICE OF IMAGING S PORTFOLIO - PIURA HOSPITAL**

| **Nº** | **CPMS Code** | **Type of test according to the standard of the Healthcare and Medical Procedures Catalog** |
| --- | --- | --- |
| X-RAYS | | |
| Head and Neck | | |
| 1 | 70150 | Radiological exam, facial bones; complete, minimum 3 occurrences |
| 2 | 70328 | Radiological examination, temporomandibular joint, open and closed mouth; unilateral |
| 3 | 70330 | Radiological exam, temporomandibular joint, open and closed mouth; bilateral |
| 4 | 70370 | Radiological exam of pharynx or larynx, including fluoroscopy technique and/or magnification technique |
| 5 | 70370.01 | Radiological examination of pharynx or larynx (CAVUM) |
| 6 | 70250 | Radiological exam, skull; less than 4 occurrences |
| 7 | 70360 | Radiological exam of soft tissue of neck |
| 8 | 70170 | Dacryocystography of nasolacrimal duct, radiologic monitoring and interpretation (requires fluoroscopy with digital subtraction) |
| 9 | 70160 | Radiological examination, nasal bones; complete, minimum of 3 occurrences |
| 10 | 70220 | Radiological examination; paranasal sinuses; complete, minimum of 3 occurrences |
| 11 | 70140 | Radiological examination, facial bones; less than 3 occurrences |
| 12 | 70100 | Radiological examination, lower jaw; partial, less than 4 occurrences |
| 13 | 70101 | Radiological examination, upper jaw; partial, less than 4 occurrences |
| 14 | 70101 | Radiological examination, upper jaw; complete, less than 4 occurrences |
| 15 | 70120 | Radiological examination, mastoid; less than three occurrences per side |
| 16 | 70110 | Radiological examination, lower jaw; complete, minimum of 4 occurrences |
| 17 | 70200 | Radiological examination; orbits; complete, minimum of 4 occurrences |
| 18 | 70210 | Radiological examination; paranasal sinuses, less than 3 occurrences |
| 19 | 70390 | Sialography; radiologic supervision and interpretation (requires fluoroscope with digital subtraction) |
| 20 | 70240 | Radiological examination of the sella turcica |
| 21 | 70391 | Bilateral Cerebral arteriography (\*\*\*). Panangiography |
| Thorax | | |
| 22 | 73010 | Radiological examination of the scapula, complete |
| 23 | 71120 | Radiological examination, sternum, minimum of 2 occurrences |
| 24 | 71100 | Radiological examination, ribs, unilateral; 2 occurrences |
| 25 | 71010 | Radiological examination of thorax; frontal and lateral |
| 26 | 71022 | Radiological examination of thorax, 2 occurrences, frontal and lateral; with oblique projections |
| 27 | 73011 | Radiological examination of Scapula, one side, two occurrences |
| Abdomen | | |
| 28 | 74020 | Radiological examination of the abdomen, complete, including standing and/or decubitus occurrences. |
| 29 | 74000 | Radiological examination of the abdomen, anteroposterior occurrence. |
| 30 | 74010 | Radiological examination of the abdomen, anteroposterior occurrence, and additional oblique and tangential occurrences. |
| Gastrointestinal | | |
| 31 | 74210 | Radiological examination of pharynx and/or cervical esophagus |
| 32 | 74220 | Radiological examination of esophagus |
| 33 | 74240 | Radiological examination, upper gastrointestinal tract; with or without delayed films, without visualization of kidneys, ureters or bladder |
| 34 | 74270 | Radiological examination, colon; barium enema, with or without visualization of kidneys, ureters and bladder |
| 35 | 74280 | Radiological examination, colon; air contrast with specific high-density barium, with or without glucagon |
| 36 | 74245 | Radiological examination, upper gastrointestinal tract; with small bowel, including serial multiple x-rays |
| 37 | 74250 | Radiological examination, small bowel, including multiple serial films |
| 38 | 74249 | Radiological examination, air contrast with upper gastrointestinal tract, with specific high density barium, effervescent agent, with or without glucagon; with small bowel transit monitoring |
| Spine and Pelvis | | |
| 39 | 73510 | Radiological examination, hip, unilateral; complete, minimum of two views. |
| 40 | 73520 | Radiological examination, hip, bilateral, minimum of two views of each hip, including anteroposterior view of pelvis |
| 41 | 72120 | Radiological examination, lumbosacral spine, functional occurrences, views in bent position only, 2 or 3 occurrences |
| 42 | 72050 | Radiological examination, cervical spine; 4 or 5 occurrences |
| 43 | 72052 | Radiological examination, cervical spine; 6 or more occurrences |
| 44 | 72070 | Radiological examination, spine; thoracic, 2 occurrences |
| 45 | 72072 | Radiological examination, spine; thoracic, 3 occurrences |
| 46 | 72069 | Radiological examination, spine; thoracolumbar, standing (scoliosis) |
| 47 | 72080 | Radiological examination, spine; thoracolumbar, 2 occurrences |
| 48 | 72100 | Radiological examination, lumbosacral spine; 2 or 3 occurrences |
| 49 | 72110 | Radiological examination, lumbosacral spine; minimum of 4 occurrences |
| 50 | 72220 | Radiological examination, sacrum and coccyx; minimum of 2 views |
| 51 | 72040 | Radiological examination, cervical spine; 2 or 3 occurrences |
| 52 | 72170 | Radiological examination, pelvis; anteroposterior occurrence, 1 or 2 occurrences |
| 53 | 72040.03 | Radiological examination of cervical spine, oblique views |
| 54 | 72040.04 | Radiological examination of cervical spine, selective C2 |
| 55 | 72040.02 | Radiological examination, cervical spine, functional two occurrences |
| 56 | 72074 | Radiological examination, spine, minimum of 4 occurrences |
| 57 | 72020 | Radiological examination, spine, single view, specify level |
| 58 | 72090 | Radiological examination, spine; scoliosis study, including studies in supine and upright position |
| 59 | 72114 | Radiological examination, lumbosacral spine; complete, including views in bent position, minimum of 6 occurrences |
| 60 | 72200 | Radiological examination, sacroiliac joints; less than three views |
| 61 | 73500 | Radiological examination, hip, unilateral; one view |
| 62 | 73540 | Radiological examination, pelvis and hips, infant or child; minimum of two views |
| 63 | 72190 | Radiological examination, pelvis; complete, minimum of three views |
| Upper limbs | | |
| 64 | 73120 | Radiological examination, hand; two occurrences |
| 65 | 73090 | Radiological examination of forearm each side, 2 occurrences |
| 66 | 73060.01 | Radiological examination of bilateral humerus |
| 67 | 73000 | Radiological examination of clavicle, complete |
| 68 | 73070 | Radiological examination of elbow; 2 occurrences |
| 69 | 73140 | Radiological examination, fingers, minimum of 2 occurrences |
| 70 | 73131 | Radiological examination of hand, bone age (frontal) |
| 71 | 73030 | Radiological examination, shoulder; complete, minimum of two views |
| 72 | 73060 | Radiological examination, humerus, minimum of 2 occurrences |
| 73 | 73130 | Radiological examination, hand; minimum of three occurrences |
| 74 | 73668.01 | Adult upper limb radiological exam |
| 75 | 73100 | Radiological examination, wrist; 2 occurrences |
| 76 | 73020 | Radiological examination, shoulder; 1 occurrence |
| 77 | 73080 | Radiological examination, elbow; complete, minimum of three views |
| Lower limbs | | |
| 78 | 73650 | Radiological examination, calcaneus, minimum of two views |
| 79 | 73550 | Radiological examination, femur, 2 occurrences |
| 80 | 73668 | Adult lower limb assessment |
| 81 | 73620 | Radiological examination, foot; 2 occurrences |
| 82 | 73630 | Radiological examination, foot; complete, minimum of three views |
| 83 | 73590 | Radiological examination, tibia and fibula, 2 views |
| 84 | 73590.01 | Radiological examination, tibia and fibula, bilateral |
| 85 | 73560 | Radiological examination, knee, 1 or 2 occurrences |
| 86 | 73560.01 | Radiological examination of knee, bilateral |
| 87 | 73567 | Radiological examination of patella, frontal and lateral, 2 occurrences |
| 88 | 73600 | Radiological examination, ankle; 2 occurrences |
| 89 | 73667 | Lower limb assessment, children |
| 90 | 73562 | Radiological examination of knee, 3 occurrences |
| 91 | 73660 | Radiological examination, toes, minimum of two views |
| Genitourinary Tract | | |
| 92 | 74450 | Retrograde urethrocystography, radiological supervision and interpretation. |
| 93 | 74930 | Cystography, minimum three views, radiological supervision and interpretation |
| 94 | 74430 | Cystography, minimum three occurrences, radiological supervision and interpretation. |
| 95 | 78740 | Study of ureteral reflux (radiopharmaceutical voiding cystogram) |
| 96 | 78730 | Bladder residual study (List it separately in addition to the primary procedure code). |
| 97 | 74740 | Hysterosalpingography, radiologic monitoring and interpretation |
| 98 | 77074 | Radiological examination, limited bone survey (e.g. for metastases) |
| 99 | 74426 | Excretory urography |
| 100 | 74400 | Urography (pyelography), intravenous, with no visualization of kidneys, ureters and bladder, with or without CT scan |
| ULTRASOUND SCAN | | |
| Head and Neck | | |
| 101 | 76506 | Echoencephalography, real-time with image documentation (grayscale) (for determination of ventricular size, brain mapping, and detection of fluid masses or other intracranial abnormalities), including A-mode encephalography, as a secondary component when indicated |
| 102 | 75945 | Intravascular ultrasound (non-coronary vessel), radiologic monitoring and interpretation; initial vessel |
| 103 | 76536.03 | Thyroid ultrasound |
| 104 | 76604.01 | Thymus ultrasound |
| 105 | 76536 | Head and neck soft tissue ultrasound (e.g. thyroid, parathyroid, parotid), real time with imaging documentation |
| 106 | 76536.01 | Ultrasound of cervical region |
| 107 | 76536.02 | Ultrasound of parotid and salivary glands |
| 108 |  | Strain Elastography, Thyroid, breast, soft tissues |
| Thorax | | |
| 109 | 76604 | Thorax ultrasound (including mediastinum), real-time with imaging documentation |
| 110 | 76645 | Breast (s) Ultrasound (unilateral or bilateral), real-time with imaging documentation |
| Abdomen and Retroperitoneum | | |
| 111 | 76700 | Complete abdominal ultrasound, real time with image documentation. |
| 112 | 76770 | Adrenal glands Ultrasound. |
| 113 | 76770 | Retroperitoneal ultrasound (renal, aorta, lymph nodes), real-time with documented images, complete. |
| 114 | 76999 | Unlisted ultrasound procedure (Example: diagnostic, interventional) |
| 115 | 76942 | Ultrasonographic guidance of needle placement (Example: biopsy, aspiration, injection, localization device), image monitoring and interpretation |
| 116 | 76856 | Pelvic ultrasound (non-obstetrical), real time with image documentation; complete |
| 117 | 76770 | Kidney Ultrasound |
| 118 | 76776 | Kidney ultrasound and doppler in the transplanted kidney, with imaging documentation. |
| 119 |  | Echo-Doppler of hepatic portal |
| 120 | 76775.01 | Vesical ultrasound |
| 121 |  | Prostate vesicle ultrasound |
| 122 |  | Elastography (Shear Wave) (Liver) |
| 123 | 76872 | Transrectal ultrasound |
| Upper Limbs | | |
| 124 | 76882 | Real-time, non-vascular Limbs ultrasound with image documentation; limited, anatomic site-specific |
| 125 | 75945.01 | Arterial or Venous Peripheral Vascular Doppler Ultrasound |
| 126 | 76880.01 | Elbow Ultrasound |
| 127 | 76604.02 | Shoulder Ultrasound |
| 128 | 76880.02 | Wrist Ultrasound |
| Lower Limbs | | |
| 129 | 76880.04 | Ankle Ultrasound |
| 130 | 76880.03 | Knee Ultrasound |
| 131 | 93923 | Venous or Arterial Doppler ultrasound of lower limb |
| 132 | 76880.05 | Region Specific Muscle Ultrasound |
| Genitalia | | |
| 133 | 76870 | Ultrasound, scrotum and contents |
| 134 | 76830 | Transvaginal ultrasound |
| 135 |  | Other types of Elastography |
| CT SCAN | | |
| 136 | 70460 | CAT scan, head or brain; with contrast material(s) |
| 137 | 70470 | CAT scan, brain; non-contrast material, followed by contrast material(s) and additional sections |
| 138 | 70470.01 | CT brain perfusion |
| 139 | 70480 | CT orbit, sella turcica or posterior fossa, or external, middle, or inner ear non-contrast material |
| 140 | 70480.01 | CT scan of paranasal sinuses non-contrast material |
| 141 | 70481 | CAT scan orbit, sella turcica or posterior fossa, or external, middle or inner ear; with contrast material |
| 142 | 70482 | CT orbit, sella turcica or posterior fossa, or external, middle or inner ear with contrast material; non-contrast material, followed by contrast material(s) and additional sections |
| 143 | 70482.01 | CT scan of external, middle or inner ear with contrast material |
| 144 | 70482.02 | CT scan of paranasal sinuses with contrast material |
| 145 | 70482.03 | CT scan of sella turcica with contrast material |
| 146 | 70486 | CT scan of maxillofacial area non-contrast material. |
| 147 | 70486.01 | CT scan, temporomandibular joint; non-contrast material. |
| 148 | 70487 | CAT scan, maxillofacial area; with contrast material |
| 149 | 70488 | CT scan, maxillofacial area; non-contrast material, followed by contrast material(s) and additional sections |
| 150 | 70488.01 | CT scan, Temporomandibular joint; with contrast material |
| 151 | 70490 | CT scan, soft tissue of the neck; non-contrast material |
| 152 | 70491 | CT scan, soft tissue of the neck; with contrast material |
| 153 | 70492 | CAT scan, soft tissue of the neck; non-contrast material, followed by contrast material(s) and additional sections |
| 154 | 70496 | CT angiography, head and/or neck, with contrast(s), including non-contrast images, if taken, and post image processing |
| 155 | 70497 | Angio tac, neck, non-contrast , followed by contrast material and subsequent sections, including image post-processing |
| 156 | 70498 | CT angiography, neck, with contrast material, including non-contrast images, if performed, and image post-processing |
| 157 | 71250 | Thorax CT scan; non-contrast material |
| 158 | 71250.01 | CT of rib cage; non-contrast material |
| 159 | 71250.01 | CT of rib cage; non-contrast material |
| 160 | 71260 | CAT scan, Thorax ; with contrast material |
| 161 | 71270 | CT scan, thorax; non-contrast material, followed by contrast material(s) and additional sections |
| 162 | 71270.01 | CT scan of the coronary arteries |
| 163 | 71270.02 | CT scan of virtual tracheobronchoscopy |
| 164 | 71275 | CT angiography, thorax (noncoronary), with contrast material(s), including non-contrast images, if performed, and image post-processing |
| 165 | 72125 | CAT scan, cervical spine; non-contrast material |
| 166 | 72127 | CAT scan, cervical spine; non-contrast material, followed by contrast material and additional sections |
| 167 | 72128 | CAT scan, thoracic spine; non-contrast material |
| 168 | 72129 | CAT scan, thoracic spine; with contrast material |
| 169 | 72130 | CAT scan, thoracic spine; non-contrast material, followed by contrast materials and additional sections |
| 170 | 72131 | CAT scan, lumbar spine; non-contrast material |
| 171 | 72131.01 | CT scan, lumbar spine - sacrum-coccyx; non-contrast material |
| 172 | 72132 | CAT scan, lumbar spine; with contrast material |
| 173 | 72132.01 | CT scan, lumbar spine - sacrum coccyx; with contrast material |
| 174 | 72133 | CT angiography, lumbar spine; non-contrast material, followed by contrast material and additional sections |
| 175 | 72191 | CT angiography, pelvis, with contrast material(s), including non-contrast images, if performed, and image post-processing |
| 176 | 72192 | CT scan, pelvis; non-contrast material |
| 177 | 72193 | CAT scan, pelvis; with contrast material(s) |
| 178 | 72194 | CAT scan, pelvis; non-contrast material, followed by contrast materials and additional sections |
| 179 | 73200 | CAT scan, upper Limbs; non-contrast material |
| 180 | 73200.01 | CT scan, arm; non-contrast material |
| 181 | 73200.02 | CT scan of forearm; non-contrast material |
| 182 | 73200.03 | CT scan, hand; non-contrast material |
| 183 | 73200.04 | CT scan, Wrist; non-contrast material |
| 184 | 73200.05 | CT scan - elbow; non-contrast material |
| 185 | 73200.06 | CT scan - shoulder; non-contrast material |
| 186 | 73201.01 | CT scan of arm; with contrast material |
| 187 | 73201.02 | CT scan - forearm; with contrast material |
| 188 | 73201.03 | CT scan - hand; with contrast material |
| 189 | 73201.04 | Wrist CT scan; with contrast material |
| 190 | 73201.05 | CT scan - elbow; with contrast material |
| 191 | 73201.06 | CT scan - shoulder; with contrast material |
| 192 | 73202 | CAT scan, upper limbs; non-contrast material, followed by contrast material and additional sections |
| 193 | 73206 | CT angiography, upper limbs, with contrast material, including non-contrast images, if performed, and post image processing |
| 194 | 73700 | CAT scan angiography, lower limbs; non-contrast material |
| 195 | 73700.01 | CT scan, leg; non-contrast material |
| 196 | 73700.02 | CT scan, foot; non-contrast material |
| 197 | 73700.03 | CT scan, knee; non-contrast material |
| 198 | 73700.04 | CT scan - ankle; non-contrast material |
| 199 | 73700.05 | CT scan, thigh; non-contrast material |
| 200 | 73701 | CT scan, lower limbs; with contrast material(s) |
| 201 | 73701.01 | CT scan, leg; with contrast material(s) |
| 202 | 73701.02 | CT scan, foot; with contrast material |
| 203 | 73701.03 | CT scan, knee; with contrast material |
| 204 | 73701.04 | CT scan, ankle; with contrast |
| 205 | 73701.05 | CT scan - thigh; with contrast |
| 206 | 73702 | CAT scan, lower limbs; non-contrast material, followed by contrast materials and additional sections |
| 207 | 73706 | CT angiography of lower limbs, with contrast material, including non-contrast images, if performed, and post image processing |
| 208 | 74150 | CT scan of the abdomen non-contrast |
| 209 | 74160 | CT scan of the abdomen; with contrast material |
| 210 | 74170 | CT scan of the abdomen; non-contrast material, followed by contrast material(s) and additional sections |
| 211 | 74170.01 | Dynamic CT scan of liver - pancreas |
| 212 | 74170.02 | CT scan with hepatic volumetry. |
| 213 | 74174 | CT angiography abdomen and pelvis, with contrast material(s), including non-contrast images, if performed, and post-processing of images |
| 214 | 74175 | CT angiography abdomen, with contrast material(s), including non-contrast images, if performed, and post-processing of images |
| 215 | 74176 | CT scan of the abdomen and pelvis, non-contrast material |
| 216 | 74177 | CT scan of abdomen and pelvis, with contrast material(s) |
| 217 | 74178 | CT scan of abdomen and pelvis, non-contrast material in one or both body regions, followed by contrast material(s) and additional sections in one or both body sections |
| 218 | 74400 | Urography (pyelography), intravenous, with no visualization of kidneys, ureters and bladder, with or without CT scan |
| 219 | 74426 | Excretory urography |
| 220 | 74740 | Hysterosalpingography, radiological monitoring and interpretation |
| 221 | 75571 | CT scan of the heart, non-contrast material, with quantitative assessment of coronary calcium. |
| 222 | 75722 | Unilateral renal angiogram with contrast material |
| 223 | 75724 | Bilateral renal angiogram with contrast material |
| 224 | 77074 | Radiological examination, limited bone survey (e.g. for metastases) |
| 225 | 77078 | CT scan, bone mineral density testing, 1 or more sites, axial skeleton (e.g. hip, pelvis, spine) |
| 226 | 77079 | CT scan, bone mineral density testing, 1 or more sites, appendicular skeleton (e.g. radius, wrist, heel) |
| 227 | 78730 | Bladder residual study (List separately in addition to the primary procedure code. |
| 228 | 78740 | Study of ureteral reflux (radiopharmaceutical voiding cystogram) |
| 229 | 0 | Three-phase study of the liver |
| 230 | 0 | Three-phase study of the Pancreas |
| 231 | 0 | Upper abdominal hydro angiogram |
| 232 | 0 | Cerebral angiography + 3D reconstruction |
| 233 | 74400 | Urography (pyelography), intravenous, with or without visualization of kidneys, ureters and bladder, with or without CT scan. |
| 234 | 74426 | Excretory urography |
| 235 | 77074 | Radiological examination, limited bone survey (e.g. for metastases) |
| MRI | | |
| 236 | 76390 | MR Spectroscopy |
| 237 | 76391 | MR Diffusion |
| 238 | 76392 | MR Perfusion |
| 239 | 70559.01 | Brain perfusion, advanced sequence for the evaluation of the irrigation level of brain lesions by MRI |
| 240 | 70547 | MR Angiography of Neck non-contrast |
| 241 | 70548 | MR Angiography of Neck with Contrast |
| 242 |  | MR angiography of head non-contrast |
| 243 |  | MR angiography of head with contrast |
| 244 |  | MR of functional brain with Bold technique |
| 245 | 70551.01 | MR of selar and parasellar region - Pituitary, non-contrast . |
| 246 | 70542 | MR of orbit, face and/or neck, with contrast. |
| 247 | 70542.01 | MR of ear, with contrast |
| 248 | 70542.03 | MR of neck, with contrast |
| 249 | 70553 | MR of brain (including brain stem); non-contrast material, followed by contrast material(s) and additional sections |
| 250 | 70540.03 | MR of neck, non-contrast material |
| 251 | 70543 | MR of orbit, face and neck; non-contrast material, followed by contrast material(s) and additional sections |
| 252 | 70546 | MR angiography of head; non-contrast material, followed by contrast material(s) and additional sections |
| 253 | 70549 | MR angiography of neck; non-contrast material, followed by contrast material(s) and additional section(s) |
| 254 | 71550.01 | MR of mediastinum non-contrast material |
| 255 | 71550.02 | MR of Thorax wall non-contrast material |
| 256 | 70551 | MR of brain (including brain stem) non-contrast material |
| 257 | 70555 | MR, brain, functional MRI, requiring physician or physiologist for administration of all neurofunctional testing |
| 258 | 70551.02 | Tractography, specialized study of the neurosensory and motor pathways of the brain |
| 259 | 71550 | MR of thorax (e.g. for evaluation of hilar and mediastinal lymphadenopathy); non-contrast |
| 260 | 71552 | MR of thorax (e.g. For evaluation of hilar and mediastinal lymphadenopathy); non-contrast material, followed by contrast material(s) and additional sections |
| 261 | 71551 | MR of the thorax (e.g., for evaluation of hilar and mediastinal lymphadenopathy); with contrast material |
| 262 | 71551.01 | MR of mediastinum with contrast material |
| 263 | 71551.02 | MR of thorax wall with contrast material |
| 264 | 71555 | MR angiography of the thorax (excluding myocardium), with or without use of contrast material |
| 265 | 72159 | MR angiography, spinal canal and its contents, with or non-contrast materials |
| 266 | 77059 | MR of Breast, with or non-contrast material, bilateral |
| 267 | 77058 | MR of breast, with or non-contrast material, unilateral |
| 268 | 74181 | MR (e.g. protons), abdomen, non-contrast |
| 269 | 74182 | MR (e.g. protons), abdomen, with contrast material(s) |
| 270 | 74183 | MR (e.g., protons), abdomen; non-contrast material(s), followed by contrast material(s) and subsequent sequences |
| 271 | 74320.01 | Cholangioresonance |
| 272 | 74185 | MR angiography, abdomen; with or non-contrast material(s) |
| 273 | 74485.01 | MR Urography non-contrast |
| 274 | 74485.02 | MR Urography with contrast |
| 275 | 72141 | MR (e.g., proton), spinal canal and its contents, cervical; non-contrast material(s) |
| 276 | 72142 | MRI (e.g., proton), spinal canal and its contents, cervical; with contrast materials |
| 277 | 72146 | MRI (e.g., proton), spinal canal and its contents, thoracic; non-contrast material |
| 278 | 72147 | MRI (e.g., proton), spinal canal and its contents, thoracic; with contrast material |
| 279 | 72148 | MRI (e.g., proton), spinal canal and its contents, lumbar; non-contrast material |
| 280 | 72149 | MRI (e.g., proton), spinal canal and its contents, lumbar; with contrast material |
| 281 | 72195 | MRI (e.g., proton), pelvis, non-contrast material. |
| 282 | 72156 | MRI (e.g., proton), spinal canal and its contents, non-contrast material followed by contrast material and additional sequences; cervical |
| 283 | 72157 | MRI (e.g. proton), spinal canal and its contents, non-contrast material followed by contrast materials and additional sequences; thoracic |
| 284 | 72158 | MRI (e.g., proton), spinal canal and its contents, non-contrast material followed by contrast materials and additional sequences; lumbar |
| 285 | 73721.01 | MR of the hip; non-contrast material. |
| 286 | 73722.01 | MR of the hip; with contrast material |
| 287 | 72198 | MR Angiography, pelvis; with or non-contrast material |
| 288 | 73218 | MRI (e.g., proton), upper Limbs, except joints non-contrast material |
| 289 | 73220 | MRI (e.g. proton), upper Limbs, except joints non-contrast materials followed by contrast materials and subsequent sequences |
| 290 | 73221.03 | MR of Shoulder; non-contrast material |
| 291 | 73222.03 | MR of Shoulder; with contrast material |
| 292 | 73219.02 | MR of Arm; with contrast material |
| 293 | 73218.02 | MR of Arm; non-contrast material |
| 294 | 73218.01 | MR of forearm; non-contrast material |
| 295 | 73219.01 | MR of forearm; with contrast material |
| 296 | 73222.01 | MR - Elbow; with contrast material |
| 297 | 73221.01 | MR - Elbow; non-contrast material |
| 298 | 73222.02 | MR - Wrist; with contrast material |
| 299 | 73221.02 | MR - Wrist; non-contrast material |
| 300 | 73218.04 | MR - Hand; non-contrast material |
| 301 | 73219.04 | MR - Hand; with contrast material |
| 302 | 73218.03 | MR of Brachial Plexus; non-contrast material |
| 303 | 73219.03 | MR of Brachial Plexus, with contrast material |
| 304 | 73218.06 | MR Plexography |
| 305 | 73225 | MR angiography, upper Limbs, with or non-contrast material(s) |
| 306 | 73719 | MRI (e.g., proton), lower Limbs, except joints, with contrast material(s) |
| 307 | 73718 | MRI (e.g., proton), lower Limbs, except joints, non-contrast material(s) |
| 308 | 73720 | MR (e.g. proton), lower Limbs, except joints, non-contrast material, followed by contrast materials and additional sections |
| 309 | 73721 | MR (e.g. proton), any joint of lower Limbs non-contrast material |
| 310 | 73718.01 | MR of Thigh; non-contrast material |
| 311 | 73719.01 | MR of Thigh; with contrast material |
| 312 | 73718.02 | MR of Leg; non-contrast material |
| 313 | 73719.02 | MR of Leg; with contrast material |
| 314 | 73721.02 | MR of Knee; non-contrast material |
| 315 | 73722.02 | MR of Knee; with contrast material |
| 316 | 73721.03 | MR of Ankle; non-contrast material |
| 317 | 73722.03 | MR of Ankle; with contrast material |
| 318 | 73718.03 | MR of Foot; non-contrast material |
| 319 | 73719.03 | MR of Foot; with contrast material |
| 320 | 74430 | Cystography, minimum three occurrences, radiological supervision and interpretation. |
| 321 | 78740 | Study of ureteral reflux (radiopharmaceutical voiding cystogram) |
| 322 | 78730 | Bladder residual study (List it separately in addition to the primary procedure code. |
| 323 | 74740 | Hysterosalpingography, radiologic monitoring and interpretation |
| 324 | 77074 | Radiological examination, limited bone survey (e.g. for metastases) |
| 325 | 74426 | Excretory urography |
| 326 | 74400 | Urography (pyelography), intravenous, with no visualization of kidneys, ureters and bladder, with or without CT scan |
| MAMMOGRAPHY | | |
| 327 | 77055 | Mammography, unilateral |
| 328 | 77056 | Mammography, bilateral |
| 329 | 77057 | Screening mammogram, bilateral (2 images of each breast) |
| 330 | 77055.01 | Mammography, unilateral, with focal magnification |
| 331 | 77055.02 | Mammography, unilateral, with focal compression |
| 332 | 77031 | Stereotactic localization guidance for breast biopsy or needle placement (e.g., wire localization or for injection), each lesion, radiologic supervision and interpretation |
| 333 | 76095 | Stereotactic guidance for breast biopsy, each lesion, radiologic supervision and interpretation |
| 334 | 77053 | Ductogram or galactogram, single duct, radiological monitoring and interpretation |
| 335 | 77054 | Ductogram or galactogram, multiple ducts, radiologic supervision and interpretation |
| 336 |  | Breast tomosynthesis |
| DENSITOMETRY | | |
| 337 | 78351 | Bone densitometry (bone mineral content), at one or more sites, double photon absorptiometry |

**Appendix 6: Mandatory Non-Healthcare Services**

**Cafeteria Service**

This service is mandatory at the Hospital and at the entire cost and risk of the CONCESSIONAIRE, and for this purpose, two (2) indicators are defined that must be complied with by the CONCESSIONAIRE. Failure to comply with the standards defined for said indicators shall be subject to the penalties indicated in the respective annex.

**Purpose**

The purpose of this service is the integral management of the cafeteria activities, offering a varied service with different alternatives for meals, cafeteria and beverages.

**Extent and Scope of Application**

The CONCESSIONAIRE shall offer an integrated service of cafeteria to the general public, complying with the Applicable Laws and Provisions regarding hygiene for the preparation, distribution and trade of prepared foods.

The integral service shall include:

* Provisioning, storage and conservation of food products.
* Preparation of menus.
* Distribution of services.
* Cleaning (including washing of crockery, tableware, trays, trolleys, machinery, equipment, facilities, utensils, etc.).
* Maintenance of facilities and furnishings.
* The sale of tobacco and alcoholic beverages is prohibited.

**Time Availability**

The hours for the provision of the Cafeteria Service shall be every Calendar Day of the year, at least from 7:00 am until 11:00 pm.

The hours that shall govern the provision of the dining service shall be at least from 1:00 pm to 4:00 pm for lunch and from 8:00 pm to 10:00 pm for dinner.

Any change in the hours described above must be approved by the GRANTOR, which shall require the prior favorable opinion of the Supervisor of Contract and Operations.

**Material Resources**

The place for the provision of the service corresponds to the place established for such purpose by the Hospital. The execution of any work or improvement shall be at the CONCESSIONAIRE’s expense, subject to the prior non-objection of the GRANTOR, after a favorable opinion of the Supervisor of Contract and Operations.

The physical dimension of the premises for the rendering of the Service is the one determined by the Project.

The CONCESSIONAIRE shall purchase and install the Equipment, appliances and materials it deems necessary for the provision of the Service and maintain them in optimum conditions of use.

The crockery, kitchenware and linen necessary for the service, as well as their replacement, shall be entirely at the CONCESSIONAIRE’S expense.

The GRANTOR shall establish minimum conditions of quality, type of material, finishes, etc., which must be complied with by the CONCESSIONAIRE.

The GRANTOR may order the substitution of any equipment or material in case it deems necessary, provided that there is a technical reason to support the substitution and that the capacity to provide the Service is not affected.

The CONCESSIONAIRE shall comply with certain minimum conditions regarding the decoration of the cafeteria premises, which must have the prior favorable opinion of the Supervisor of Contract and Operations.

The goods to provide the Cafeteria service are not part of the Concession Assets, and shall be the sole and exclusive responsibility of the CONCESSIONAIRE.

**Personnel**

The CONCESSIONAIRE shall provide and maintain the number of personnel necessary according to Time Availability requirements, as well as to cover breaks, vacations, medical breaks and unforeseen absences, complying with all Applicable Laws and Provisions.

**Technical - functional specifications of the service**

The characteristics of the cafeteria service shall be part of the CONCESSIONAIRE’s proposal and shall be agreed in detail with the GRANTOR in the POA.

The CONCESSIONAIRE shall guarantee that the food reaches the consumer in optimal form and time, which shall be defined in the service manual according to the type of food.

The CONCESSIONAIRE shall guarantee a high level of quality in the selection and preservation of the food and complementary products, as well as in their handling, preparation, organoleptic characteristics, nutrition and temperature. These tasks will be carried out not only in accordance with the indications established by the Applicable Laws and Provisions, in particular the food code, but also with the specific instructions of the dietetic unit, which may decide whether the conditions of quality, presentation and hygiene of the raw materials, food and beverages are adequate and, if not, reject them.

There shall be a menu of the day consisting of three "starter" options, three "main course" options and three dessert options to choose from, bread and juice or beverage. Under no circumstances may leftovers from the previous day be served. Menus shall rotate at most every fifteen (15) Calendar Days.

The sale of cigarettes and alcoholic beverages is expressly prohibited.

The CONCESSIONAIRE shall ensure that no activities other than those typical of a restaurant and its complementary activities (such as hawking, assemblies, games of chance, etc.) are carried out on the premises.

No products with expired expiration dates shall be sold.

**Fee Charges**

The CONCESSIONAIRE shall establish maximum rates to be charged to the users, which shall have the favorable opinion of the Supervisor of Contract and Operations, in order to obtain the non-objection of the GRANTOR. These rates shall be the only remuneration that the CONCESSIONAIRE shall have for the provision of the Cafeteria service. The collection of user fees is at the CONCESSIONAIRE’s cost and risk.

**Service Organization**

The CONCESSIONAIRE shall propose the functional organization necessary to provide the Service, considering that, during the Operational Stage, there shall be the pertinent coordination with the Food, Maintenance, Cleaning and Sanitation, Security and Surveillance, and Solid Waste Management Service.

**Cafeteria Service Indicators**

1. **Indicator name :** Time Availability of the cafeteria. Result indicator.

**Indicator objective**: To measure the degree of compliance with established cafeteria hours.

**Standard :** The cafeteria is available at the established hours 98.0% of the time during the month.

**Measurement method:**

**Indicator Result C1**:

**Table 194: Indicator Result *C1***

|  |  |
| --- | --- |
| **Indicator value** | **% compliance with the Indicator** |
|  | 100%. No penalties apply. |
|  | 50%. Subject to Penalties established in the Contract. |
|  | 0%. Subject to penalties established in the Contract. |

**Data Source:** Hourly information recorded by the CONCESSIONAIRE and validated by the Supervisor of Contract and Operations.

**Calculation frequency:** Monthly.

1. **Indicator name** : User satisfaction with the cafeteria service. Outcome indicator.

**Objective:** To measure the degree of satisfaction of users, understood as the general public as well as hospital personnel.

**Standard :** Satisfaction of the users of the cafeteria service shows a level of Satisfaction equal to or higher than 75% Satisfaction.

The evaluation of Satisfaction should be on a 5-point scale where Notes 1 and 2 correspond to Dissatisfaction, Note 3 neither Satisfaction nor Dissatisfaction and Notes 4 and 5 Satisfaction.

**Figure 7: Evaluation Scale *C2***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Note 1** | **Note 2** | **Note 3** | **Note 4** | **Note 5** |
| **Dissatisfaction** | | **Indifference** | **Satisfaction** | |

**Measurement method:**

**Service Level Result:**

**Table 195: Indicator Result C2**

|  |  |
| --- | --- |
| **Indicator value** | **% compliance with the Indicator** |
|  | 100% Not subject to Penalties |
|  | 50% Subject to Penalties established in the Contract |
|  | 0%. Subject to Penalties established in the Contract |

**Data Source:** Results of the user satisfaction study carried out by an independent company hired by the CONCESSIONAIRE for this purpose.

**Calculation frequency:** Quarterly. The Satisfaction survey should be performed every 3 months.

**Appendix 7: NON-COMPULSORY NON-HEALTHCARE SERVICES**

The CONCESSIONAIRE may optionally propose the execution of non-health services in the Hospital, for which it shall require the approval of the GRANTOR, prior favorable opinion of the Supervisor of Contract and Operations.

The execution of the non-health services shall be at the account, cost and risk of the CONCESSIONAIRE and shall not affect the compliance with the Service Indicators, the technical specifications or any other obligation of the CONCESSIONAIRE. In no case shall the approval of the execution of these non-health services given by the GRANTOR be considered as an exemption of liability.

Each of the goods associated with any of these types of services do not form part of the Concession and shall be at the entire cost and expense of the CONCESSIONAIRE.

**APPENDIX 8 : Equivalence Factors**

Remuneration for variable services is based on the price offered by the winning bidder and the so-called equivalent service quantities above a minimum quantity established for each service. This minimum quantity is defined as an alpha percentage of the hospital's design capacity for that service.

The table below shows the alpha values and hospital capacity for each of the seven services with variable compensation:

**Table 1: Factors of each Variable Service, Piura Hospital**

| **Service** |  | **Design capacity**  **[equivalent quantities]** |
| --- | --- | --- |
| Clothes and Laundry Management | 36% | 915.117 |
| Food | 36% | 2.804.577 |
| Solid Waste Management | 59% | 410.709 |
| Sterilization | 53% | 167.227 |
| Hemodialysis | 32% | 42.276 |
| Clinical Pathology | 26% | 2.088.976 |
| Imaging | 13% | 7.343.061 |
| **Average** | **36%** |  |

Source: Prepared by IKONS/Tetra Tech

Each bidder must specify in its economic offer the unit price for supplying an additional equivalent unit above the minimum established for each service, which is obtained by multiplying the alpha factor by the design capacity of each service.

From the above, the Variable Monthly Economic Compensation for the services rendered would be determined according to the following expression:

Wherein:

|  |  |
| --- | --- |
|  | : Variable Monthly Economic Compensation to be received by the Concessionaire for the Services in the service rendering month m of the calendar year t. |
|  | : It is the Reference Unit Price to be paid for the equivalent amount for Service j in service month m of calendar year t, based on a percentage of the equivalent maximum production for service j. |
|  | : It is the equivalent amount of service j actually performed in service month m of calendar year t. |
|  | : It is the proportion of the total maximum production of service j that would be paid as Fixed Monthly Financial Compensation for Services Provided. |
|  | : This is the total annual amount of equivalent activities planned for service j, with the hospital operating at full capacity with respect to that service, divided by twelve. |

Equivalent quantities for each service are obtained in the following ways:

* The laundry service does not require equivalence factors because it is remunerated on the basis of the total weight of the laundry, so a kilo of sheets is the same as a kilo of blankets.

*QEm,t,1* (j=1 denotes the first service) is equal to the total weight of laundry in month m of the year t.

* For the food service, it corresponds to the number of equivalent rations, which will be calculated with the following weightings:

**Table 2: Equivalency Factors for Food Service**

| **Benefits** | **Factor** |
| --- | --- |
| Breakfast | 3,39 |
| Lunch | 8,21 |
| Snack | 1,74 |
| Dinner | 7,18 |
| Water | 1,00 |

Source: Prepared by IKONS/Tetra Tech

*QEm,t,2* (j=2 denotes the second service) is equal to the total breakfasts served in month m of year t multiplied by 3.39 plus the total meals served in the same period multiplied by 8.21 plus the total snacks served in the same period multiplied by 1.74 plus the total dinners served in the same period multiplied by 7.18 plus the total water rations served in that month multiplied by 1.

* The waste management service does not require equivalence factors either, because it will be remunerated based on the total weight of waste generated in the period, regardless of the origin of the waste (biosanitary, cytostatic, chemical or RSU).

*QEm,t,3* (j=3 denotes the third service) is equal to the total weight of waste generated in month m of year t.

* For the sterilization service, it corresponds to the total number of interventions during the period, using the following weightings:

**Table 3: Equivalency Factors for Sterilization Service**

| **Intervention** | **Factor** |
| --- | --- |
| SURGICAL | 4,53 |
| NON SURGICAL | 1,00 |

Source: Prepared by IKONS/Tetra Tech

*QEm,t,4* (j=4 denotes the fourth service) is equal to the total number of surgical procedures performed in month m of year t multiplied by 4.53 plus the total number of non-surgical procedures performed in the same period multiplied by 1.0.

* The Service of Hemodialysis does not require the number of total sessions performed during the period.

*QEm,t,5* (j=5 denotes the fifth service) is equal to the total number of Service of Hemodialysis s provided in month m of year t.

* For the laboratory service, it corresponds to the sum of all hematological, biochemical, microbiological and immunological procedures, weighted by their equivalence factor.

**Table 4: Equivalency Factors for Laboratory Service**

| **Group** | **EQUIVALENCE FACTOR** |
| --- | --- |
| 1 | 1,00 |
| 2 | 2,43 |
| 3 | 3,96 |
| 4 | 5,18 |
| 5 | 6,04 |
| 6 | 7,24 |
| 7 | 10,08 |
| 8 | 12,40 |
| 9 | 13,45 |
| 10 | 14,50 |
| 11 | 17,52 |
| 12 | 22,14 |
| 13 | 25,06 |
| 14 | 54,77 |

Source: Prepared by IKONS/Tetra Tech

*QEm,t,6* (j=6 denotes the sixth service) is given by the following expression:

Wherein:

|  |  |
| --- | --- |
|  | total number of laboratory services (j=6) of group i provided in month m of year t. |
|  | equivalence factor of group i. |

The groups indicated in the table above were created based on the costs of the services and not according to their nature. The detail of the services contained in each of the fourteen groups indicated in the above table is as follows:

**Group 1: 109 services**

| **Code** | **Exam** | **Type** |
| --- | --- | --- |
| 86431 | Rheumatoid factor; quantitative | IMMUNOLOGY |
| 82803 | Blood gas dosing; any combination of pH, pCO2, pO2, CO2, HCO3 (including calculated O2 saturation) | BIOCHEMISTRY |
| 82575 | Creatinine dosing; clearance | BIOCHEMISTRY |
| 85557 | Erythrocyte osmotic fragility; with incubation | HEMATOLOGY |
| 84484 | Troponin, quantitative | BIOCHEMISTRY |
| 82105 | Alpha-fetoprotein dosing; serum | BIOCHEMISTRY |
| 86060 | Antistreptolysin O; titer | IMMUNOLOGY |
| 83735,01 | Dosing of magnesium in 24h urine | BIOCHEMISTRY |
| 84466 | Transferrin | BIOCHEMISTRY |
| 86000,02 | Brucella: Tube Agglutinations | IMMUNOLOGY |
| 85042 | ADDIS test | HEMATOLOGY |
| 85060 | Peripheral blood smear, interpretation and written report by physician | HEMATOLOGY |
| 85244 | Coagulation; factor VIII related antigen | HEMATOLOGY |
| 85245 | Coagulation; factor VIII factor VW, ristocetin cofactor | HEMATOLOGY |
| 85302 | Inhibitors of coagulation or anticoagulants; protein C, antigen | HEMATOLOGY |
| 85303 | Inhibitors of coagulation or anticoagulants; protein C, activity | HEMATOLOGY |
| 85540 | Leukocyte alkaline phosphatase with count | HEMATOLOGY |
| 85660 | Erythrocyte sickle cell formation, reduction | HEMATOLOGY |
| 85999,01 | Ham HPN test | HEMATOLOGY |
| 81001 | Urinalysis by test strip or tablet reagent, for bilirubin, glucose, hemoglobin, ketones, leukocytes, nitrite, pH, protein, specific gravity, urobilinogen, any number of these constituents; automated, with microscopy | BIOCHEMISTRY |
| 83615 | Dosing of Lactate dehydrogenase (LD)(LDH). | BIOCHEMISTRY |
| 82020 | Dosing of ADA (Adenosine deaminase) | BIOCHEMISTRY |
| 86000,04 | Paratyphi B agglutinations | IMMUNOLOGY |
| 86000,03 | Paratyphi A Agglutinations | IMMUNOLOGY |
| 86768,02 | Antibody to; Salmonella (Typhoid O) | IMMUNOLOGY |
| 86768,01 | Antibody to; Salmonella (Typhoid H) | IMMUNOLOGY |
| 86631 | Antibody; Chlamydia | IMMUNOLOGY |
| 87207 | Primary source smears with interpretation, with special staining for inclusion bodies or parasites (e.g. malaria, coccidia, microsporidia, trypanosomes, herpes viruses) | MICROBIOLOGY |
| 85306 | Coagulation inhibitors or anticoagulants; protein S,free | HEMATOLOGY |
| 85291 | Coagulation; factor XIII (fibrin stabilizer), solubility screening | HEMATOLOGY |
| 85520 | Heparin analysis | HEMATOLOGY |
| 85415 | Fibrinolytic factors and their inhibitors; plasminogen activator | HEMATOLOGY |
| 86161 | Complement; functional activity, each component | IMMUNOLOGY |
| 89322 | Semen analysis, volume, count, motility, and differential using strictly morphologic criteria (e.g. Kruger) | MICROBIOLOGY |
| 87164 | Darkfield examination, any source (e.g. penis, vagina, mouth, skin); includes specimen collection | MICROBIOLOGY |
| 85301 | Coagulation inhibitors or anticoagulants; antithrombin III, antigenic assay | HEMATOLOGY |
| 81015 | Urinalysis, microscopic only | BIOCHEMISTRY |
| 86009 | Brucella study: Rose Bengal | IMMUNOLOGY |
| 87220 | KOH examination of skin, hair, or nail samples for fungi, ectoparasite eggs or mites (Example: scabies) | MICROBIOLOGY |
| 83721 | Direct determination of low density lipoprotein (LDL cholesterol). | BIOCHEMISTRY |
| 86008 | Study of Brucella: Agglutinations, blockers. | IMMUNOLOGY |
| 82553 | Dosing of Creatine kinase (CK), (CPK); MB fraction only. | BIOCHEMISTRY |
| 89055 | Evaluation of leukocytes, in stool, qualitative or semiquantitative. | MICROBIOLOGY |
| 80051 | Electrolyte profile, this profile should include the following: carbon dioxide (82374), chloride (82435), potassium (84132), and sodium (84295). | BIOCHEMISTRY |
| 82705 | Dosing of Fecal Fat or Fecal Lipids; Qualitative | BIOCHEMISTRY |
| 82330 | Dosing of Calcium; ionized | BIOCHEMISTRY |
| 82340 | Dosing of Quantitative urine Calcium, time-measured sample | BIOCHEMISTRY |
| 82950 | Dosing of Glucose; after a dose of glucose (includes glucose) | BIOCHEMISTRY |
| 83873 | Dosing of Myelin, basic protein, cerebrospinal fluid | BIOCHEMISTRY |
| 84145 | Procalcitonin (PCT) dosing | BIOCHEMISTRY |
| 84545 | Measurement of blood urea nitrogen (BUN) clearance. | BIOCHEMISTRY |
| 80202 | Dosing of Vancomycin | BIOCHEMISTRY |
| 82383 | Dosing of Blood Catecholamine | BIOCHEMISTRY |
| 83925 | Dosing of Opioid (i.e. drug and metabolites, each procedure) | BIOCHEMISTRY |
| 83935 | Osmolality analysis; urine | BIOCHEMISTRY |
| 89225 | Identification of starch granules; stool | MICROBIOLOGY |
| 84165 | Proteins; fractionation and quantitative determination by electrophoresis; serum | BIOCHEMISTRY |
| 87205 | Primary source smears with interpretation, with Gram or Giemsa or Wright staining for bacteria, fungi or cell types. | MICROBIOLOGY |
| 83718 | Direct determination of High Density Lipoprotein (HDL cholesterol) | BIOCHEMISTRY |
| 85610 | Prothrombin time | HEMATOLOGY |
| 82955 | Glucose-6-phosphate dehydrogenase (G6PD) dosing; quantitative | BIOCHEMISTRY |
| 85384 | Fibrinogen activity measurement | HEMATOLOGY |
| 82271 | Qualitative determination of occult blood by peroxidase activity (guaiacol test) in other sources | BIOCHEMISTRY |
| 85652 | Erythrocyte sedimentation rate; automated | HEMATOLOGY |
| 86886 | Anti-human globulin test (Coombs' test); indirect, each titer of antibody | IMMUNOLOGY |
| 87211 | Parasitological - cup sedimentation | MICROBIOLOGY |
| 86900 | Blood typing; ABO | IMMUNOLOGY |
| 83690 | Dosing of Lipase | BIOCHEMISTRY |
| 82150 | Dosing of Amylase | BIOCHEMISTRY |
| 82977 | Dosing of Glutamyl transferase, gamma (GGT) | BIOCHEMISTRY |
| 85670 | Thrombin time; plasma | HEMATOLOGY |
| 85031,01 | Complete blood count, 5 blood counts (No., Formula, Hb, Hto, Corpuscular constants, Platelets) | HEMATOLOGY |
| 84560,01 | Uric acid in 24-hours urine | BIOCHEMISTRY |
| 84560 | Uric acid; other source | BIOCHEMISTRY |
| 83735 | Dosing of Magnesium | BIOCHEMISTRY |
| 84460 | Transferase; amino alanine (ALT) (SGPT) | BIOCHEMISTRY |
| 84478 | Triglycerides | BIOCHEMISTRY |
| 86593 | Syphilis test; nontreponemal antibody, quantitative | IMMUNOLOGY |
| 84550 | Uric acid; blood | BIOCHEMISTRY |
| 84075 | Dosing of Phosphatase, alkaline | BIOCHEMISTRY |
| 84157 | Total protein, except by refractometry, other source (e.g. synovial fluid, cerebrospinal fluid) | BIOCHEMISTRY |
| 84450 | Aspartate aminotransferase (AST) (SGOT) | BIOCHEMISTRY |
| 86592 | Syphilis test; nontreponemal antibody; qualitative (e.g. VDRL, RPR, ART) | IMMUNOLOGY |
| 82247 | Dosing of Bilirubin; total | BIOCHEMISTRY |
| 82248 | Dosing of Bilirubin; direct | BIOCHEMISTRY |
| 83540 | Dosing of Iron | BIOCHEMISTRY |
| 84100 | Dosing of Phosphorus; inorganic (phosphate) | BIOCHEMISTRY |
| 82040 | Dosing of Albumin; serum, plasma or whole blood | BIOCHEMISTRY |
| 84520 | Urea nitrogen; quantitative | BIOCHEMISTRY |
| 82465 | Dosing of Total Cholesterol in whole blood or serum | BIOCHEMISTRY |
| 84540,01 | Urea in 24 hours urine | BIOCHEMISTRY |
| 85007 | Blood smear with microscopic examination with manual differential formula of leukocytes | HEMATOLOGY |
| 85170 | Clot retraction | HEMATOLOGY |
| 83719 | Direct determination of very low density lipoprotein (VLDL cholesterol). | BIOCHEMISTRY |
| 82310 | Dosing of Calcium; total | BIOCHEMISTRY |
| 82565 | Dosing of Blood creatinine | BIOCHEMISTRY |
| 82728 | Dosing of Ferritin | BIOCHEMISTRY |
| 82947 | Blood Glucose, quantitative (except for reagent tape) | BIOCHEMISTRY |
| 85018 | Hemoglobin | HEMATOLOGY |
| 82570,01 | Creatinine in simple urine | BIOCHEMISTRY |
| 82570,02 | Creatinine in 24 hours urine | BIOCHEMISTRY |
| 82310,01 | Calcium in 24 hours urine | BIOCHEMISTRY |
| 82340,01 | Calcium in plain urine | BIOCHEMISTRY |
| 82945 | Dosing of Glucose in body fluids, other than blood | BIOCHEMISTRY |
| 87178 | Graham's test | MICROBIOLOGY |
| 82570 | Dosing of Creatinine; other source | BIOCHEMISTRY |
| 87210 | Wet mount smears for identification of infectious agents (e.g. saline, India ink, KOH preparations) | MICROBIOLOGY |
| 89060 | Crystal identification by light microscopy with or without polarizing lens analysis, in tissue or any body fluid (except urine) | MICROBIOLOGY |
| 85002 | Bleeding time | HEMATOLOGY |

**Group 2: 102 services**

| **Code** | | **Exam** | | **Type** |
| --- | --- | --- | --- | --- |
| 86687 | Antibodies; HTLV-I | | IMMUNOLOGY | |
| 86688 | Antibodies; HTLV-II | | IMMUNOLOGY | |
| 80058 | Hepatitis profile: Hepatitis B surface antigen (HBsAg), Antibody to hepatitis B surface antigen (HBsAb), Antibody to hepatitis B nucleocapsid antigen (HBsAb). | | IMMUNOLOGY | |
| 86696 | Antibodies; herpes simplex, type 2 | | IMMUNOLOGY | |
| 86695,01 | IgM Herpes Simplex type 1 | | IMMUNOLOGY | |
| 86696,01 | Herpes 2 IGM | | IMMUNOLOGY | |
| 86663 | Antibodies; Epstein-Barr virus (EB), Early Antigen (EA) | | IMMUNOLOGY | |
| 86665 | Antibodies; Epstein-Barr virus (EB), virus capsid antigen (VCA) | | IMMUNOLOGY | |
| 84704 | Gonadotropin, chorionic (hCG); free beta subunit | | BIOCHEMISTRY | |
| 87102 | Fungal culture (spore or yeast), isolation, with presumptive identification of isolates); other source (except blood) | | MICROBIOLOGY | |
| 87351 | Detection of Age for Hepatitis B (HBeAg) | | MICROBIOLOGY | |
| 87162 | Culture of secretions (pharyngeal, urethral, vaginal, sputum, wounds, others). | | MICROBIOLOGY | |
| 87045 | Bacterial culture, in stool, aerobic, with isolation and preliminary examination (Example: KIA, LIA) of Salmonella and Shiguella species. | | MICROBIOLOGY | |
| 84105 | Dosing of inorganic phosphorus (phosphate); in urine. | | BIOCHEMISTRY | |
| 86632 | Antibodies; chlamydia, IgM | | IMMUNOLOGY | |
| 84432 | Thyroglobulin | | BIOCHEMISTRY | |
| 82627 | Dosing of Dehydroepiandrosterone-sulphate (DHEA-S) | | BIOCHEMISTRY | |
| 82043 | Dosing of Urine albumin, microalbumin, quantitative | | BIOCHEMISTRY | |
| 86140 | C-reactive protein | | IMMUNOLOGY | |
| 83003 | Dosing of Human growth hormone (HGH) (somatotropin) | | BIOCHEMISTRY | |
| 86320 | Immunoelectrophoresis; serum | | IMMUNOLOGY | |
| 86355 | Total B cell count | | IMMUNOLOGY | |
| 86359 | T lymphocytes; total count | | IMMUNOLOGY | |
| 86361 | T-lymphocytes; absolute CD4 count | | IMMUNOLOGY | |
| 86665,01 | Epstein Barr Virus VCA IgM | | IMMUNOLOGY | |
| 86689 | Antibodies; antibody to HTLV or HIV, confirmatory test (Example: Western blot) | | IMMUNOLOGY | |
| 86690 | Western blot test for cysticercosis | | IMMUNOLOGY | |
| 86787 | Antibody to; varicella zoster | | IMMUNOLOGY | |
| 86787,01 | Antibody to; varicella zoster IgM | | IMMUNOLOGY | |
| 86790 | Antibody to; virus, not elsewhere specified | | IMMUNOLOGY | |
| 86790,01 | Antibody; Zika | | IMMUNOLOGY | |
| 86790,02 | Antibodies; Zika, IgM | | IMMUNOLOGY | |
| 86790,03 | Antibodies; Chikungunya | | IMMUNOLOGY | |
| 86790,04 | Antibodies; Chikungunya, IgM | | IMMUNOLOGY | |
| 86790,05 | Antibodies; dengue | | IMMUNOLOGY | |
| 86790,06 | Antibodies; dengue, IgM | | IMMUNOLOGY | |
| 86804 | Hepatitis C antibody; confirmatory test (e.g. "immunoblot") | | IMMUNOLOGY | |
| 86160 | Complement; antigen, each component | | IMMUNOLOGY | |
| 87070 | Bacterial culture, any source except urine, blood or stool, with isolation and presumptive identification of strains | | MICROBIOLOGY | |
| 82024 | Adrenocorticotropic hormone (ACTH) dosing. | | BIOCHEMISTRY | |
| 83036 | Hemoglobin; glycosylated hemoglobin (A1C) | | BIOCHEMISTRY | |
| 89051 | Cell count in miscellaneous body fluids (e.g. cerebrospinal fluid, joint fluid), except blood; with differential count | | BIOCHEMISTRY | |
| 86706 | Antibody to hepatitis B surface antigen (HBsAb) | | IMMUNOLOGY | |
| 86644 | Antibodies; cytomegalovirus (CMV) | | IMMUNOLOGY | |
| 87163 | Body fluid culture (CSF, pleural, ascitic, pericardial, amniotic, other) | | MICROBIOLOGY | |
| 86707 | Antibody to hepatitis Be (HBeAb) | | IMMUNOLOGY | |
| 87071 | Bacterial culture, quantitative, aerobic, with isolation and presumptive identification of strains, any source except urine, blood or feces. | | MICROBIOLOGY | |
| 87101 | Fungal culture (spore or yeast), isolation (with or without presumptive identification); skin, hair or fingernails | | MICROBIOLOGY | |
| 87115,01 | Bacilloscopy: BK, serial 3 specimens | | MICROBIOLOGY | |
| 87161 | Anaerobic culture | | MICROBIOLOGY | |
| 87169 | Macroscopic parasite examination | | MICROBIOLOGY | |
| 87172 | Pinworm examination (e.g. tape test) | | MICROBIOLOGY | |
| 87206 | Primary source smear with interpretation; fluorescent and/or acid-fast staining for bacteria, fungi, parasites, viruses or cell types | | MICROBIOLOGY | |
| 87208 | Extended smear, primary source, with interpretation; direct or concentrated, dehydrated, for eggs and parasites | | MICROBIOLOGY | |
| 87046 | Bacterial culture, stool, aerobic, additional pathogens, isolation and presumptive identification of strains, each plate | | MICROBIOLOGY | |
| 87072 | Culture or direct bacterial identification method, each organism, with commercial kit, any source except urine. | | MICROBIOLOGY | |
| 87073 | Bacterial culture, quantitative, anaerobic, with isolation and presumptive identification of strains, any source except urine, blood or feces | | MICROBIOLOGY | |
| 87075 | Bacterial culture, from any source except blood, anaerobic, with isolation and presumptive identification of strains | | MICROBIOLOGY | |
| 87076 | Bacterial culture, anaerobic isolation, additional methods required for definitive identification, each isolate. | | MICROBIOLOGY | |
| 87077 | Bacterial culture, aerobic isolation, additional methods required for definitive identification, each isolate. | | MICROBIOLOGY | |
| 87081 | Culture of presumptive pathogenic organisms, for screening purposes only. | | MICROBIOLOGY | |
| 87082 | Presumptive culture, pathogenic organisms, evaluation only, by commercial kit (specify type); for single organism | | MICROBIOLOGY | |
| 87083 | Presumptive culture, pathogenic organisms, evaluation only, by commercial kit (specify type); multiple organisms | | MICROBIOLOGY | |
| 87084 | Presumptive culture of presumptive pathogenic organisms with colony count estimation by density chart | | MICROBIOLOGY | |
| 87085 | Presumptive culture, pathogenic organisms, evaluation only, by commercial kit (specify type); with colony counting | | MICROBIOLOGY | |
| 87103 | Fungal (spore or yeast) culture, isolation, with presumptive identification of isolates; blood | | MICROBIOLOGY | |
| 87140 | Typing culture by immunofluorescence, each antiserum | | MICROBIOLOGY | |
| 87147 | Typing culture by immunological method other than immunofluorescence (e.g. agglutinin grouping), each antiserum | | MICROBIOLOGY | |
| 87166 | Darkfield examination, any source (e.g. penis, vagina, mouth, skin); no specimen collection | | MICROBIOLOGY | |
| 87209 | Primary source smear with interpretation, with special complex staining (e.g. trichrome, hematoxylin iron) for eggs and parasites | | MICROBIOLOGY | |
| 87340 | Detection of infectious agent antigens by enzyme immunoassay technique, qualitative or semiquantitative, multistep method; hepatitis B surface antigen (HBsAg) | | MICROBIOLOGY | |
| 82784,03 | Dosing of Immunoglobulin G | | BIOCHEMISTRY | |
| 82784,04 | Dosing of Immunoglobulin M | | BIOCHEMISTRY | |
| 82784,01 | Dosing of Immunoglobulin A | | BIOCHEMISTRY | |
| 86762,01 | Rubella IGM | | IMMUNOLOGY | |
| 87088 | Urine culture with isolation and presumptive identification of each isolate. | | MICROBIOLOGY | |
| 86376 | Microsomal antibodies (e.g. thyroid or liver-kidney) each | | IMMUNOLOGY | |
| 84153 | Dosing of Total Prostate-Specific Antigen (PSA) | | BIOCHEMISTRY | |
| 82308 | Dosing of Calcitonin | | BIOCHEMISTRY | |
| 82378 | Dosing of Carcinoembryonic antigen (CEA) | | BIOCHEMISTRY | |
| 84154 | Dosing of Free prostate specific antigen (PSA). | | BIOCHEMISTRY | |
| 83001 | Dosing of Gonadotropin; follicle-stimulating hormone (FSH) | | BIOCHEMISTRY | |
| 85810 | Blood viscosity | | HEMATOLOGY | |
| 86703 | Antibodies; HIV-1 and HIV-2, single test | | IMMUNOLOGY | |
| 84146 | Dosing of Prolactin | | BIOCHEMISTRY | |
| 83002 | Dosing of Gonadotropin; luteinizing hormone (LH) | | BIOCHEMISTRY | |
| 82677 | Dosing of Estriol | | BIOCHEMISTRY | |
| 82607 | Dosing of Cyanocobalamin (vitamin B-12) | | BIOCHEMISTRY | |
| 82785 | Dosing of Gamma globulin; IgE | | BIOCHEMISTRY | |
| 84481 | Triiodothyronine T3; free | | BIOCHEMISTRY | |
| 84439 | Thyroxine; free | | BIOCHEMISTRY | |
| 86157 | Cryoagglutinin; titer | | IMMUNOLOGY | |
| 82670 | Dosing of Estradiol | | BIOCHEMISTRY | |
| 84443 | Thyroid Stimulating Hormone (TSH) | | BIOCHEMISTRY | |
| 87115 | Bacilloscopy: BK | | MICROBIOLOGY | |
| 84144 | Dosing of Progesterone | | BIOCHEMISTRY | |
| 83525 | Dosing of Insulin; total | | BIOCHEMISTRY | |
| 82746 | Dosing of Folic Acid; serum | | BIOCHEMISTRY | |
| 84702 | Chorionic gonadotropin (hCG); quantitative | | BIOCHEMISTRY | |
| 85730 | Partial thromboplastin time (PTT); plasma or whole blood | | HEMATOLOGY | |
| 87177 | Direct smear and concentration test for identification of eggs and parasites. | | MICROBIOLOGY | |
| 87179 | Functional coprological examination | | MICROBIOLOGY | |

**Group 3: 39 services**

| **Code** | | **Exam** | | **Type** |
| --- | --- | --- | --- | --- |
| 85380 | Measurement of fibrin degradation products, dimer D, ultrasensitive (e.g. evaluation for venous thromboembolism), qualitative or semi-quantitative | | HEMATOLOGY | |
| 86147,01 | Cardiolipin, antibody, (phospholipid), IgM | | IMMUNOLOGY | |
| 82530 | Dosing of Cortisol; free | | BIOCHEMISTRY | |
| 85300 | Coagulation inhibitors or anticoagulants; antithrombin III, activity | | HEMATOLOGY | |
| 83010 | Dosing of Haptoglobin; quantitative | | BIOCHEMISTRY | |
| 82055 | Dosing of Alcohol (ethanol); any specimen except breath | | BIOCHEMISTRY | |
| 86664 | Antibodies; Epstein-Barr virus (EB), nucleocapsid antigen (EBNA) | | IMMUNOLOGY | |
| 82550 | Creatine kinase (CK), creatine kinase (CPK); total | | BIOCHEMISTRY | |
| 89320 | Semen analysis; complete (volume, count, motility and differential). | | MICROBIOLOGY | |
| 80162 | Dosing of Digoxin | | BIOCHEMISTRY | |
| 86762 | Antibody to rubella | | IMMUNOLOGY | |
| 86301 | Quantitative immunoassay for tumor antigen CA 19-9 | | IMMUNOLOGY | |
| 86645 | Antibodies; cytomegalovirus (CMV), IgM | | IMMUNOLOGY | |
| 86225 | Deoxyribonucleic Acid (DNA), antibody to; native or double stranded DNA | | IMMUNOLOGY | |
| 86300 | Quantitative immunoassay for tumor antigen CA 15-3 (27.29) | | IMMUNOLOGY | |
| 83970 | Dosing of Parathormone (parathyroid hormone) | | BIOCHEMISTRY | |
| 87116 | Culture of tubercle bacilli or any other acid-fast bacilli (e.g. tuberculosis, AFB, mycobacteria); any source, with isolation and presumptive identification of isolates | | MICROBIOLOGY | |
| 84681 | C-peptide | | BIOCHEMISTRY | |
| 86304 | Quantitative immunoassay for tumor antigen CA 125 | | IMMUNOLOGY | |
| 84402 | Testosterone; free | | BIOCHEMISTRY | |
| 86777 | Antibody to; toxoplasma | | IMMUNOLOGY | |
| 86778 | Antibody to; toxoplasma, IgM | | IMMUNOLOGY | |
| 86800 | Antibody to; thyroglobulin | | IMMUNOLOGY | |
| 86708 | Antibody to hepatitis A (HAAb); total | | IMMUNOLOGY | |
| 86021 | Identification of antibodies; leukocyte antibodies: ANCA A, ANCA P, anti HU, Anti YO, NR1, R1, smooth muscle | | IMMUNOLOGY | |
| 80164 | Dosing of Valproic acid | | BIOCHEMISTRY | |
| 82951 | Dosing of Glucose; Tolerance test (GTT), three samples (including glucose) | | BIOCHEMISTRY | |
| 80156 | Dosing of Total carbamazepine | | BIOCHEMISTRY | |
| 86325 | Immunoelectrophoresis; other fluids (e.g. urine, cerebrospinal fluid), with concentration | | IMMUNOLOGY | |
| 86803 | Hepatitis C antibody | | IMMUNOLOGY | |
| 85410 | Fibrinolytic factors and their inhibitors; alpha-2 antiplasmin | | HEMATOLOGY | |
| 80184 | Dosing of Phenobarbital | | BIOCHEMISTRY | |
| 86235 | Antibodies to extractable nuclear antigen, any method (e.g. nRNP, SSA, SS-B, Sm, RNPScl70, JO1), each antibody | | IMMUNOLOGY | |
| 82232 | Dosing of | | BIOCHEMISTRY | |
| 86705 | Antibody to hepatitis B nucleocapsid antigen (HBcAb); IgM antibody | | IMMUNOLOGY | |
| 86709 | Antibody to hepatitis A (HAAb); IgM antibody | | IMMUNOLOGY | |
| 80186 | Dosing of free phenytoin | | BIOCHEMISTRY | |
| 85300,01 | Lupus anticoagulant | | HEMATOLOGY | |
| 86704 | Antibody to hepatitis B nucleocapsid antigen (HBcAb); total | | IMMUNOLOGY | |

**Group 4: 7 services**

| **Code** | | **Exam** | | **Type** |
| --- | --- | --- | --- | --- |
| 87040 | Bacterial culture, blood, aerobic, with isolation and presumptive identification of strains (including anaerobic culture, if necessary) with MIC | | MICROBIOLOGY | |
| 85999 | Unlisted hematology and coagulation procedure | | HEMATOLOGY | |
| 85999,02 | Sucrose test | | HEMATOLOGY | |
| 83550 | Iron binding capacity study | | BIOCHEMISTRY | |
| 82172 | Dosing of Apolipoprotein each | | BIOCHEMISTRY | |
| 86038 | Antinuclear antibodies (ANA) | | IMMUNOLOGY | |
| 86695 | Antibodies; herpes simplex, type 1 | | IMMUNOLOGY | |

**Group 5: 5 services**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Code** | | **Exam** | | **Type** |
| 84119 | Porphyrins in urine; qualitative | | BIOCHEMISTRY | |
| 83874 | Dosing of Myoglobin | | BIOCHEMISTRY | |
| 83020 | Dosing of Hemoglobin, fractionation and quantitative analysis; electrophoresis (e.g. A2, S, C and/or F) | | BIOCHEMISTRY | |
| 82088 | Dosing of Aldosterone | | BIOCHEMISTRY | |
| 86594 | Anti-thyroid antibodies - Anti TPO - Thyroglobulin | | IMMUNOLOGY | |

**Group 6: 4 services**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Code** | | **Exam** | | **Type** |
| 86148 | Anti-phosphatidylserine antibody (phospholipid) | | INMUNOLOGY | |
| 85250 | Coagulation; factor IX (PTC or Christmas) | | HEMATOLOGY | |
| 86147 | Cardiolipin, antibody, (phospholipid), each Ig class. | | INMUNOLOGY | |
| 86000,01 | Brucella: Lamellar (or Plaque) Agglutinations | | INMUNOLOGY | |

**Group 7: 4 services**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Code** | | **Exam** | | **Type** |
| 82651 | Dosing of Dihydrotestosterone (DHT) | | BIOCHEMISTRY | |
| 82360 | Quantitative chemical analysis of Calculus | | BIOCHEMISTRY | |
| 86691 | Western blotting for hydatidosis | | IMMUNOLOGY | |
| 86880 | Anti-human globulin test (Coombs' test); direct, each antiserum | | IMMUNOLOGY | |

**Group 8: 2 services**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Code** | | **Exam** | | **Type** |
| 83525,01 | Basal Insulin 30, 60, 90, 90, 120 | | BIOCHEMISTRY | |
| 82670,01 | Dosing of Free Estradiol | | BIOCHEMISTRY | |

**Group 9: 3 services**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Code** | | **Exam** | | **Type** |
| 85305 | Inhibitors of coagulation or anticoagulants; protein S, total | | HEMATOLOGY | |
| 85230 | Coagulation; factor VII (proconvertin, stable factor) | | HEMATOLOGY | |
| 85220 | Coagulation; factor V (AcG or proaccelerin), labile factor | | HEMATOLOGY | |

**Group 10: 2 services**

|  |  |  |
| --- | --- | --- |
| **Code** | **Exam** | **Type** |
| 87389 | Detection of infectious agent antigen by enzyme immunoassay technique, qualitative or semi-quantitative, multi-step method; HIV-1 antigen(s), with HIV-1 and HIV-2 antibodies, single result | INMUNOLOGY |
| 86277 | Human growth hormone (HGH), antibody to | INMUNOLOGY |

**Group 11: 2 services**

|  |  |  |
| --- | --- | --- |
| **Code** | **Exam** | **Type** |
| 82784,02 | Dosing of Immunoglobulin D | BIOCHEMISTRY |
| 86335 | Immunofixation Electrophoresis, in other fluids with concentration (e.g. urine, CSF) | IMMUNOLOGY |

**Group 12: 2 services**

|  |  |  |
| --- | --- | --- |
| **Code** | **Exam** | **Type** |
| 86332 | Immune complex analysis | INMUNOLOGY |
| 86360 | T-lymphocytes; absolute CD4 and CD8 counts, including CD4/CD8 ratio | INMUNOLOGY |

**Group 13: 3 services**

|  |  |  |  |
| --- | --- | --- | --- |
| **Code** | **Exam** | | **Type** |
| 85307 | Analysis of activated protein C resistance. | HEMATOLOGY | |
| 85576 | Platelets; aggregation (in vitro), each agent | HEMATOLOGY | |
| 85246 | Coagulation; factor VIII, VW factor antigen | HEMATOLOGY | |

**Group 14: Automated reticulocyte counts**

|  |  |  |  |
| --- | --- | --- | --- |
| **Code** | **Exam** | | **Type** |
| 85045 | Automated reticulocyte counts | HEMATOLOGY | |

* For the Service of Imaging, it corresponds to the sum of radiology, MR, ultrasound, mammography, CT scans and densitometry exams, weighted by their equivalence factor.

**Table 5: Equivalency Factors for Service of Imaging**

| **GrOup** | **EQUIVALENCE FACTOR** |
| --- | --- |
| 1 | 1,00 |
| 2 | 1,87 |
| 3 | 6,42 |
| 4 | 12,12 |
| 5 | 15,51 |
| 6 | 17,80 |
| 7 | 27,98 |
| 8 | 33,15 |
| 9 | 39,77 |
| 10 | 45,37 |
| 11 | 67,17 |
| 12 | 85,25 |
| 13 | 120,39 |
| 14 | 159,38 |
| 15 | 191,48 |
| 16 | 215,12 |
| 17 | 267,19 |
| 18 | 303,10 |
| 19 | 309,64 |

Source: Prepared by IKONS/Tetra Tech

*QEm,t,7* (j=7 denotes the seventh service) is given by the following expression:

Wherein:

|  |  |
| --- | --- |
|  | : total number of Service of Imaging s (j=7) of group i rendered in month m of year t. |
|  | : equivalence factor of group i. |

The groups indicated in the table above were created based on the costs of the services and not according to their nature. The detail of the services contained in each of the sixteen groups indicated in the table above is as follows:

**Group 1: 36 services**

| **Code** | **Exam** | **Type** |
| --- | --- | --- |
| 70470 | CAT scan of the brain; non-contrast material, followed by contrast material(s) and additional sections | TOMO |
| 70480 | CT scan of orbit, sella turcica or posterior fossa, or external, middle or inner ear non-contrast material | TOMO |
| 70480,01 | CT scan of paranasal sinuses non-contrast material | TOMO |
| 70486 | CT scan of maxillofacial area non-contrast material. | TOMO |
| 70486,01 | CT scan, Temporomandibular joint; non-contrast material | TOMO |
| 70488 | CT scan, maxillofacial; non-contrast material, followed by contrast material(s) and additional sections | TOMO |
| 70490 | CT scan, soft tissue of the neck; non-contrast material | TOMO |
| 70497 | Angio tac, neck, non-contrast , followed by contrast material and subsequent sections, including post-processing images | TOMO |
| 71250 | CT scan, thorax; non-contrast material | TOMO |
| 71250,01 | CT scan of rib cage; non-contrast material | TOMO |
| 71250,01 | CT scan of rib cage; non-contrast material | TOMO |
| 71270 | CT scan of Thorax; non-contrast material, followed by contrast material(s) and additional sections | TOMO |
| 72125 | CAT scan, cervical spine; non-contrast material | TOMO |
| 72128 | CAT scan, thoracic spine; non-contrast material | TOMO |
| 72131 | CAT scan, lumbar spine; non-contrast material | TOMO |
| 72131,01 | CT scan, lumbar spine - sacrum - coccyx; non-contrast material | TOMO |
| 72192 | CAT scan, pelvis; non-contrast material | TOMO |
| 72194 | CAT scan, pelvis; non-contrast material, followed by contrast material and additional sections | TOMO |
| 73200 | CAT scan, upper Limbs; non-contrast material | TOMO |
| 73200,01 | CT scan of the arm; non-contrast material | TOMO |
| 73200,02 | CT scan - forearm; non-contrast material | TOMO |
| 73200,03 | CT scan - hand; non-contrast material | TOMO |
| 73200,04 | CT scan - Wrist; non-contrast material | TOMO |
| 73200,05 | CT scan - elbow; non-contrast material | TOMO |
| 73200,06 | CT scan - shoulder; non-contrast material | TOMO |
| 73202 | CAT scan, upper Limbs; non-contrast material, followed by contrast material and additional sections | TOMO |
| 73700 | CAT scan, lower Limbs; non-contrast material | TOMO |
| 73700,01 | CT scan, leg; non-contrast material | TOMO |
| 73700,02 | CT scan, foot; non-contrast material | TOMO |
| 73700,03 | CT scan, knee; non-contrast material | TOMO |
| 73700,04 | CT scan - ankle; non-contrast material | TOMO |
| 73700,05 | CT scan - thigh; non-contrast material | TOMO |
| 73702 | CAT scan, lower Limbs; non-contrast material, followed by contrast material and additional sections | TOMO |
| 74150 | CT scan of abdomen non-contrast material | TOMO |
| 74176 | CT scan of abdomen and pelvis, non-contrast material | TOMO |
| 75571 | CT scan of heart, non-contrast material, with quantitative assessment of coronary calcium. | TOMO |

**Group 2: 40 services**

| **Code** | **Exam** | **Type** |
| --- | --- | --- |
| 70330 | Radiological examination, temporomandibular joint, open and closed mouth; bilateral | RX |
| 70250 | Radiological examination, skull; less than 4 occurrences | RX |
| 70360 | Radiological examination, soft tissue of neck | RX |
| 70160 | Radiological examination, nasal bones; complete, minimum of 3 occurrences | RX |
| 70100 | Radiological examination, lower jaw; partial, less than 4 occurrences | RX |
| 70120 | Radiological examination, mastoid; less than three occurrences per side | RX |
| 70200 | Radiological examination; orbits; complete, minimum of 4 occurrences | RX |
| 70210 | Radiological examination; paranasal sinuses, less than 3 occurrences | RX |
| 73010 | Radiological examination of scapula, complete | RX |
| 71120 | Radiological examination; sternum, minimum of 2 occurrences | RX |
| 71100 | Radiological examination, ribs, unilateral; 2 occurrences | RX |
| 71010 | Radiological examination of thorax; frontal and lateral | RX |
| 71022 | Radiological examination of thorax, 2 occurrences, frontal and lateral; with oblique projections. | RX |
| 74000 | Radiological examination of the abdomen, anterior-posterior occurrence. | RX |
| 73520 | Radiological examination, hip, bilateral, minimum of two views of each hip, including anteroposterior view of the pelvis. | RX |
| 72120 | Radiological examination, lumbosacral spine, functional incisions, views in bent position only, 2 or 3 occurrences | RX |
| 72070 | Radiological examination, spine; thoracic, 2 occurrences | RX |
| 72080 | Radiological examination, spine; thoracolumbar, 2 occurrences | RX |
| 72100 | Radiological examination, lumbosacral spine; 2 or 3 occurrences | RX |
| 72220 | Radiological examination, sacrum and coccyx; minimum of 2 views | RX |
| 72040 | Radiological examination, cervical spine; 2 or 3 occurrences | RX |
| 72170 | Radiological examination, pelvis; anteroposterior occurrence; 1 or 2 occurrences | RX |
| 72040,02 | Radiological examination, cervical spine, functional two occurrences | RX |
| 73120 | Radiological examination, hand; two occurrences | RX |
| 73000 | Radiological examination of clavicle, complete | RX |
| 73070 | Radiological examination, elbow; 2 occurrences | RX |
| 73140 | Radiological examination, fingers; minimum of two occurrences | RX |
| 73030 | Radiological examination, shoulder; complete, minimum of two views | RX |
| 73060 | Radiological examination of humerus, minimum of 2 occurrences | RX |
| 73100 | Radiological examination, wrist; 2 occurrences | RX |
| 73650 | Radiological examination, calcaneus, minimum of two views | RX |
| 73550 | Radiological examination of femur, 2 occurrences | RX |
| 73668 | Adult lower limb assessment | RX |
| 73620 | Radiological examination, foot; 2 occurrences | RX |
| 73630 | Radiological examination, foot; complete, minimum of three views | RX |
| 73590 | Radiological examination, tibia and fibula, 2 views | RX |
| 73560 | Radiological examination, knee, 1 or 2 occurrences | RX |
| 73567 | Radiological examination of patella, frontal and lateral, two occurrences | RX |
| 73600 | Radiological examination, ankle; 2 occurrences | RX |
| 78351 | Bone densitometry (bone mineral content), one or more sites, dual photon absorptiometry | DENSI |

**Group 3: 43 services**

| **Code** | **Exam** | **Type** |
| --- | --- | --- |
| 70544 | Non-contrast MR angiography of the head | RMN |
| 74740RMN | Hysterosalpingography, radiological monitoring and interpretation | RMN |
| 76506 | Echoencephalography, real-time with image documentation (gray scale) (for determination of ventricular size, brain mapping and detection of fluid masses or other intracranial abnormalities), including A-mode encephalography, as a secondary component when indicated. | ECO |
| 76536,03 | Thyroid ultrasound | ECO |
| 76604,01 | Thymus ultrasound | ECO |
| 76536 | Head and neck soft tissue ultrasound (e.g. thyroid, parathyroid, parotid), real time with image documentation. | ECO |
| 76536,01 | Ultrasound of cervical region | ECO |
| 76536,02 | Ultrasound of parotids and salivary glands. | ECO |
| 0ECO1 | Strain Elastography, Thyroid, breast, soft tissues | ECO |
| 76604 | Thorax ultrasound (including mediastinum), real time with imaging documentation | ECO |
| 76645 | Breast(s) Ultrasound (unilateral or bilateral), real-time with image documentation | ECO |
| 76700 | Complete abdominal ultrasound, real-time with image documentation | ECO |
| 76770,02 | Ultrasound of adrenal glands | ECO |
| 76770 | Retroperitoneal ultrasound (renal, aorta, lymph nodes), real-time with documented imaging, complete | ECO |
| 76999 | Unlisted ultrasound procedure (Example: diagnostic, interventional) | ECO |
| 76942 | Ultrasonographic guidance of needle placement (Example: biopsy, aspiration, injection, localization device), image monitoring and interpretation | ECO |
| 76856 | Pelvic ultrasound (non-obstetrical), real time with image documentation; complete | ECO |
| 76770,01 | Kidney Ultrasound | ECO |
| 76776 | Kidney ultrasound and doppler in the transplanted kidney, with image documentation. | ECO |
| 0ECO2 | Echo-Doppler of hepatic portal | ECO |
| 76775,01 | Vesical Ultrasound | ECO |
| 0ECO3 | Prostate Vesicle ultrasound | ECO |
| 0ECO4 | Elastography (Shear Wave) (Liver) | ECO |
| 76872 | Transrectal ultrasound | ECO |
| 76882 | Real-time, non-vascular Limbs ultrasound with image documentation; limited, anatomical site-specific | ECO |
| 75945,01 | Peripheral Arterial or Venous Vascular Echo Doppler | ECO |
| 76880,01 | Elbow Ultrasound | ECO |
| 76604,02 | Shoulder Ultrasound | ECO |
| 76880,02 | Wrist Ultrasound | ECO |
| 76880,04 | Ankle Ultrasound | ECO |
| 76880,03 | Knee Ultrasound | ECO |
| 76880,05 | Region Specific Muscle Ultrasound | ECO |
| 76870 | Ultrasound, scrotum and contents | ECO |
| 76830 | Transvaginal Ultrasound | ECO |
| 0ECO5 | Other types of Elastography | ECO |
| 77055 | Mammography, unilateral | MAMO |
| 77055,01 | Mammography, unilateral, with focal magnification | MAMO |
| 77055,02 | Mammography, unilateral, with focal compression | MAMO |
| 77031 | Stereotactic localization guidance for breast biopsy or needle placement (e.g., wire or injection localization), each lesion, radiologic supervision and interpretation | MAMO |
| 76095 | Stereotactic guidance for breast biopsy, each lesion, radiologic supervision and interpretation | MAMO |
| 77053 | Ductogram or galactogram, single duct, radiological monitoring and interpretation | MAMO |
| 77054 | Ductogram or galactogram, multiple ducts, radiologic supervision and interpretation | MAMO |
| 0MAMO | Breast tomosynthesis | MAMO |

**Group 4: 41 services**

| **Code** | **Exam** | **Type** |
| --- | --- | --- |
| 70547 | MR angiography of the neck non-contrast . | RMN |
| 70551,01 | MR of selar and parasellar region - pituitary, non-contrast | RMN |
| 70553 | MR of brain (including brainstem); non-contrast material, followed by contrast material(s) and additional sections | RMN |
| 70540,03 | MR of neck, non-contrast material | RMN |
| 70543 | MR of orbit, face and neck; non-contrast material, followed by contrast material(s) and additional sections | RMN |
| 71550,01 | MR of mediastinum, non-contrast material | RMN |
| 71550,02 | MR of thorax wall non-contrast material | RMN |
| 70551 | MR of brain (including brainstem) non-contrast material | RMN |
| 71550 | MR of thorax (e.g., for evaluation of hilar and mediastinal lymphadenopathy); non-contrast material | RMN |
| 71552 | MR of thorax (e.g., for evaluation of hilar and mediastinal lymphadenopathy); non-contrast material, followed by contrast material(s) and additional sections | RMN |
| 74181 | MR (e.g., protons), abdomen, non-contrast material | RMN |
| 74183 | MR (e.g. Protons), abdomen; non-contrast material(s), followed by contrast material(s) and subsequent sequences | RMN |
| 74485,01 | MR non-contrast | RMN |
| 72141 | MR (e.g., proton), spinal canal and its contents, cervical; non-contrast material(s) | RMN |
| 72146 | MR (e.g., proton), spinal canal and its contents, thoracic; non-contrast material | RMN |
| 72148 | MR (e.g., proton), spinal canal and its contents, lumbar; non-contrast material | RMN |
| 72195 | MR (e.g., proton), pelvis; non-contrast material | RMN |
| 72156 | MR (e.g., proton), spinal canal and its contents, non-contrast material followed by contrast material and additional sequences; cervical | RMN |
| 72157 | MR (e.g. proton), spinal canal and its contents, non-contrast material followed by contrast materials and additional sequences; thoracic | RMN |
| 72158 | MR (e.g., proton), spinal canal and its contents, non-contrast material followed by contrast materials and additional sequences; lumbar | RMN |
| 73721,01 | MR of hip; non-contrast material. | RMN |
| 73218 | MR (e.g., proton), upper Limbs, except joints non-contrast material | RMN |
| 73220 | MR (e.g. proton), upper Limbs, except joints non-contrast materials followed by contrast materials and subsequent sequences | RMN |
| 73221,03 | MR of Shoulder; non-contrast material | RMN |
| 73218,02 | MR of Arm; non-contrast material | RMN |
| 73218,01 | MR of Forearm; non-contrast material | RMN |
| 73221,01 | MR of Elbow; non-contrast material | RMN |
| 73221,02 | MR of Wrist; non-contrast material | RMN |
| 73218,04 | MR of Hand; non-contrast material | RMN |
| 73218,03 | MR of Brachial Plexus, non-contrast material | RMN |
| 73718 | MR (e.g. proton), lower Limbs, except joints, non-contrast material | RMN |
| 73720 | MR (e.g. proton), lower Limbs, except joints, non-contrast material, followed by contrast materials and additional sections | RMN |
| 73721 | MR (e.g., proton), any joint of lower Limbs non-contrast material | RMN |
| 73718,01 | MR of thigh; non-contrast material | RMN |
| 73718,02 | MR of Leg; non-contrast material | RMN |
| 73721,02 | MR of Knee; non-contrast material | RMN |
| 73721,03 | MR of Ankle; non-contrast material | RMN |
| 73718,03 | MR of Foot; non-contrast material | RMN |
| 93923 | Venous or Arterial lower limb echo Doppler | ECO |
| 77056 | Mammography, bilateral | MAMO |
| 77057 | Screening Mammography, bilateral (2 images of each breast) | MAMO |

**Group 5: 26 services**

| **Code** | **Exam** | **Type** |
| --- | --- | --- |
| 70150 | Radiological examination, facial bones; complete, minimum of 3 occurrences | RX |
| 70370,01 | Radiological examination of pharynx or larynx (CAVUM) | RX |
| 70101 | Radiological examination, upper jaw; partial, less than 4 occurrences | RX |
| 70101,01 | Radiological examination, upper jaw; complete, minimum of 4 occurrences | RX |
| 70110 | Radiological examination, lower jaw; complete, minimum 4 occurrences | RX |
| 73011 | Radiological examination, scapula, one side, two occurrences | RX |
| 74010 | Radiological examination of abdomen, anteroposterior incisions, and additional oblique and tangential incisions. | RX |
| 74210 | Radiological examination of pharynx and/or cervical esophagus. | RX |
| 74240 | Radiological examination, upper gastrointestinal tract; with or without delayed plates, without visualization of kidneys, ureters or bladder | RX |
| 74245 | Radiological examination, upper gastrointestinal tract; with small bowel, including serial multiple x-rays | RX |
| 73510 | Radiological examination, hip, unilateral; complete, minimum of two views | RX |
| 72040,03 | Radiological examination, cervical spine, oblique | RX |
| 72040,04 | Radiological examination of cervical spine, selective C2 | RX |
| 72020 | Radiological examination, spine, single view, specify level. | RX |
| 72114 | Radiological examination, lumbosacral spine; complete, including views in bent position, minimum of 6 occurrences | RX |
| 72200 | Radiological examination, sacroiliac joints; less than three views | RX |
| 73500 | Radiological examination, hip, unilateral; one view | RX |
| 73540 | Radiological examination, pelvis and hips, infant or child; minimum of two views | RX |
| 73090 | Radiological examination, forearm each side, 2 occurrences | RX |
| 73668,01 | Adult upper limb radiological exam | RX |
| 73020 | Radiological examination of shoulder; 1 occurrence | RX |
| 73560,01 | Radiological examination of Knee, bilateral | RX |
| 73667 | Radiological examination of lower limbs, children | RX |
| 73660 | Radiological examination, toes, minimum of two views | RX |
| 74930 | Cystography, minimum of three views, radiological monitoring and interpretation | RX |
| 77074RX | Radiological examination, limited bone survey (e.g. for metastases) | RX |

**Group 6: 12 services**

| **Code** | **Exam** | **Type** |
| --- | --- | --- |
| 70328 | Radiological examination, temporomandibular joint, open and closed mouth; unilateral | RX |
| 70220 | Radiological examination; paranasal sinuses, complete, at least 3 occurrences | RX |
| 70140 | Radiological examination, facial bones; less than 3 occurrences | RX |
| 70240 | Radiological examination of sella turcica | RX |
| 74020 | Radiological examination, abdomen, complete, including standing and/or decubitus occurrences | RX |
| 72069 | Radiological examination, thoracolumbar spine, standing (scoliosis) | RX |
| 72190 | Radiological examination, pelvis; complete, minimum of three views | RX |
| 73131 | Radiological examination, hand, bone age (frontal) | RX |
| 73562 | Radiological examination of knee, 3 occurrences | RX |
| 76390 | MR Spectroscopy | RMN |
| 74430RMN | Cystography, minimum three occurrences, radiologic supervision and interpretation | RMN |
| 74400RMN | Urography (pyelography), intravenous, with or without visualization of kidneys, ureters and bladder, with or without CT scan. | RMN |

**Group 7: 7 services**

|  |  |  |
| --- | --- | --- |
| **Code** | **Exam** | **Type** |
| 70170 | Dacryocystography of nasolacrimal duct, radiological supervision and interpretation (requires fluoroscope with digital subtraction). | RX |
| 72090 | Radiological examination, spine; scoliosis study, including supine and upright studies. | RX |
| 73130 | Radiological examination, hand; minimum of three occurrences | RX |
| 73080 | Radiological examination, elbow; complete, minimum of three views | RX |
| 70546 | CT Angiography, head; non-contrast material, followed by contrast material(s) and additional sections | RMN |
| 70549 | CT Angiography, neck; non-contrast material, followed by contrast material(s) and additional sections | RMN |
| 78730RMN | Bladder residual study (List separately in addition to the primary procedure code. | RMN |

**Group 8: 7 services**

| **Code** | **Exam** | **Type** |
| --- | --- | --- |
| 72050 | Radiological examination, cervical spine; 4 or 5 occurrences | RX |
| 72072 | Radiological examination, thoracic spine; 3 occurrences | RX |
| 72110 | Radiological examination, lumbosacral spine; minimum of 4 occurrences | RX |
| 72074 | Radiological examination, spine; minimum of 4 occurrences | RX |
| 78740RMN | Study of ureteral reflux (radiopharmaceutical voiding cystogram) | RMN |
| 75945 | Intravascular ultrasound (non-coronary vessel), radiological supervision and interpretation; initial vessel | ECO |
| 74740TOMO | Hysterosalpingography, radiological supervision and interpretation. | TOMO |

**Group 9: 21 services**

|  |  |  |
| --- | --- | --- |
| **Code** | **Exam** | **Type** |
| 73060,01 | Radiological examination of bilateral humerus | RX |
| 73590,01 | Radiological examination, tibia and fibula, bilateral | RX |
| 76391 | MR Diffusion | RMN |
| 76392 | MR Perfusion | RMN |
| 70559,01 | Brain perfusion, advanced sequence for the evaluation of the irrigation level of brain lesions by MRI. | RMN |
| 70551,04 | MR of functional brain with Bold technique | RMN |
| 70555 | MR, brain, functional MR, requiring physician or physiologist for the administration of the entire neurofunctional test. | RMN |
| 70551,02 | Tractography, specialized study of the neurosensory and motor pathways of the brain. | RMN |
| 71555 | MR angiography of the thorax (excluding myocardium), with or without use of contrast | RMN |
| 72159 | MR angiography, spinal canal and its contents, with or non-contrast material. | RMN |
| 77059 | MR angiography of Breast, with or non-contrast material, bilateral | RMN |
| 77058 | MR of Breast, with or non-contrast material, unilateral | RMN |
| 74320,01 | Cholangioresonance | RMN |
| 72198 | MR angiography, pelvis, with or non-contrast material | RMN |
| 73218,06 | MR Plexography | RMN |
| 73225 | MR angiography, upper Limbs, with or non-contrast material(s) | RMN |
| 77074RMN | Radiological examination, limited bone survey (e.g. for metastases) | RMN |
| 74426RMN | Excretory urography | RMN |
| 74426TOMO | Excretory urography | TOMO |
| 78730TOMO | Bladder residual study (List separately in addition to the primary procedure code. | TOMO |
| 74426TOMO | Excretory urography | TOMO |

**Group 10: 6 services**

|  |  |  |
| --- | --- | --- |
| **Code** | **Exam** | **Type** |
| 74249 | Radiological examination, upper gastrointestinal tract, air contrast, with specific high-density barium, effervescent agent, with or without glucagon; with small bowel transit monitoring | RX |
| 72052 | Radiological examination of cervical spine; 6 or more occurrences | RX |
| 74426RX | Excretory urography | RX |
| 74185 | MR angiography, abdomen, with or non-contrast material(s) | RMN |
| 70492 | CT scan, soft tissue of the neck; non-contrast material, followed by contrast material(s) and additional sections | TOMO |
| 78740TOMO | Study of ureteral reflux (radiopharmaceutical voiding cystogram) | TOMO |

**Group 11: 2 services**

|  |  |  |
| --- | --- | --- |
| **Code** | **Exam** | **Type** |
| 74280 | Radiological examination, colon; air contrast with specific high-density barium, with or without glucagon | RX |
| 74400RX | Urography (pyelography), intravenous, with or without visualization of the kidneys, ureters and bladder, with or without CT scan | RX |

**Group 12: 28 services**

| **Code** | **Exam** | **Type** |
| --- | --- | --- |
| 70390 | Sialography; radiologic monitoring and interpretation (requires fluoroscope with digital subtraction) | RX |
| 70548 | MR angiography of neck with contrast | RMN |
| 70545 | MR angiography of head with contrast. | RMN |
| 70542 | MR of orbit, face and/or neck, with contrast | RMN |
| 70542,01 | MR of ears, with contrast | RMN |
| 70542,03 | MR of neck with contrast | RMN |
| 71551 | MR of thorax (e.g. for evaluation of hilar and mediastinal lymphadenopathy); with contrast | RMN |
| 71551,01 | MR of mediastinum with contrast material | RMN |
| 71551,02 | MR of thorax wall with contrast material | RMN |
| 74182 | MR (e.g. protons), abdomen, with contrast material(s) | RMN |
| 74485,02 | MR Urography with contrast | RMN |
| 72142 | MRI (e.g., proton), spinal canal and its contents, cervical; with contrast material(s) | RMN |
| 72147 | MRI (e.g., proton), spinal canal and its contents, thoracic; with contrast material(s) | RMN |
| 72149 | MRI (e.g., proton), spinal canal and contents, lumbar; with contrast material | RMN |
| 73722,01 | MR of Hip; with contrast material | RMN |
| 73222,03 | MR of Shoulder; with contrast material | RMN |
| 73219,02 | MR of Arm; with contrast materials | RMN |
| 73219,01 | MR of Forearm; with contrast material | RMN |
| 73222,01 | MR of Elbow; with contrast material | RMN |
| 73222,02 | MR of Wrist; with contrast material | RMN |
| 73219,04 | MR of Hand; with contrast material | RMN |
| 73219,03 | MR of Brachial Plexus; with contrast materials | RMN |
| 73719 | MRI (e.g. proton), lower Limbs, except joints, with contrast material | RMN |
| 73719,01 | MR of Thigh; with contrast material | RMN |
| 73719,02 | MR of Leg; with contrast material | RMN |
| 73722,02 | MR of Knee; with contrast material | RMN |
| 73722,03 | MR of Ankle; with contrast material | RMN |
| 73719,03 | MR of Foot; with contrast material | RMN |

**Group 13: 6 services**

| **Code** | **Exam** | **Type** |
| --- | --- | --- |
| 70370 | Radiological examination of the pharynx or larynx, including fluoroscopy and/or magnification technique. | RX |
| 74220 | Radiological examination of esophagus | RX |
| 74250 | Radiological examination, small bowel, including multiple serial films | RX |
| 72130 | CAT scan, thoracic spine; non-contrast material, followed by contrast materials and additional sections | TOMO |
| 72133 | CAT scan, lumbar spine; non-contrast material, followed by contrast materials and additional sections | TOMO |
| 74170 | CT scan, abdomen; non-contrast material, followed by contrast material(s) and additional sections | TOMO |

**Group 14: 18 services**

| **Code** | **Exam** | **Type** |
| --- | --- | --- |
| 78730RX | Bladder residual study (List separately in addition to the primary procedure code. | RX |
| 70470,01 | Brain perfusion CT scan | TOMO |
| 70482 | CT scan of orbit, sella turcica or posterior fossa, or external, middle, or inner ear with contrast material; non-contrast material, followed by contrast material(s) and additional sections | TOMO |
| 71270,01 | CT scan of the coronary arteries. | TOMO |
| 71270,02 | CT scan of virtual tracheobronchoscopy | TOMO |
| 74170,01 | Dynamic CT scan of liver - pancreas | TOMO |
| 74170,02 | CT scan with hepatic volumetry. | TOMO |
| 74178 | CT scan of abdomen and pelvis, non-contrast material in one or both body regions, followed by contrast material(s) and additional sections in one or both body sections. | TOMO |
| 74400TOMO | Urography (pyelography), intravenous, with no visualization of kidneys, ureters and bladder, with or without CT scan | TOMO |
| 77074TOMO | Radiological examination, limited bone survey (e.g. for metastases) | TOMO |
| 77078 | CT scan, bone mineral density study, 1 or more sites, axial skeleton (e.g. hip, pelvis, spine) | TOMO |
| 77079 | CT scan, bone mineral density study, 1 or more sites, appendicular skeleton (e.g. radius, wrist, heel) | TOMO |
| 0TOMO1 | Three-phase CT of liver | TOMO |
| 0TOMO2 | Three-phase CT of Pancreas | TOMO |
| 0TOMO3 | Upper abdominal hydro AngioTEM | TOMO |
| 0TOMO4 | Cerebral angiography + 3D reconstruction | TOMO |
| 74400TOMO | Urography (pyelography), intravenous, with or without visualization of kidneys, ureters and bladder, with or without CT scan. | TOMO |
| 77074TOMO | Radiological examination, limited bone survey (e.g. for metastases) | TOMO |

**Group 15: 4 services**

|  |  |  |
| --- | --- | --- |
| **Code** | **Exam** | **Type** |
| 70391 | Bilateral Cerebral arteriography (\*\*\*). Panangiography | RX |
| 74270 | Radiological examination, colon; barium enema, with or without visualization of kidneys, ureters and bladder. | RX |
| 78740RX | Study of ureteral reflux (radiopharmaceutical voiding cystogram). | RX |
| 74740RX | Hysterosalpingography, radiological supervision and interpretation. | RX |

**Group 16: 2 services**

|  |  |  |
| --- | --- | --- |
| **Code** | **Exam** | **Type** |
| 74450 | Retrograde urethrocystography, radiologic supervision and interpretation | RX |
| 74430RX | Cystography, minimum three occurrences, radiological supervision and interpretation. | RX |

**Group 17: 17 services**

| **Code** | **Exam** | **Type** |
| --- | --- | --- |
| 70482,02 | CT scan of the paranasal sinuses with contrast material. | TOMO |
| 70482,03 | CT scan of the sella turcica with contrast material. | TOMO |
| 70488,01 | CT scan of temporomandibular joint; with contrast material. | TOMO |
| 72132,01 | CT scan of lumbar spine - sacrum - coccyx; with contrast material | TOMO |
| 73201,01 | CT scan of arm; with contrast material | TOMO |
| 73201,02 | CT scan of forearm; with contrast material | TOMO |
| 73201,03 | CT scan of hand; with contrast material | TOMO |
| 73201,04 | CT scan of wrist; with contrast material | TOMO |
| 73201,05 | CT scan of elbow; with contrast material | TOMO |
| 73201,06 | CT scan of shoulder; with contrast material | TOMO |
| 73701,01 | CT scan of leg; with contrast material | TOMO |
| 73701,02 | CT scan of foot; with contrast material | TOMO |
| 73701,03 | CT scan of knee; with contrast material | TOMO |
| 73701,04 | CT scan of ankle; with contrast material | TOMO |
| 73701,05 | CT scan of thigh; with contrast | TOMO |
| 74174 | CAT scan of abdomen and pelvis, with contrast material(s), including non-contrast images, if performed, and image post-processing | TOMO |
| 74177 | CT scan of abdomen and pelvis, with contrast material(s) | TOMO |

**Group 18: 2 services**

|  |  |  |
| --- | --- | --- |
| **Code** | **Exam** | **Type** |
| 70482,01 | CT scan of external, middle or inner ear with contrast material. | TOMO |
| 72127 | CAT scan, cervical spine; without contrast material, followed by contrast material and additional sections | TOMO |

**Group 19: 16 services**

| **Code** | **Exam** | **Type** |
| --- | --- | --- |
| 70482,01 | CT scan of external, middle or inner ear with contrast material. | TOMO |
| 72127 | CAT scan, cervical spine; without contrast material, followed by contrast materials and additional sections | TOMO |
| 70460 | CAT scan, head or brain; with contrast materials | TOMO |
| 70481 | CAT scan, orbit, orbit, sella turcica or posterior fossa, or external, middle or inner ear; with contrast material | TOMO |
| 70487 | CAT scan, maxillofacial area; with contrast material | TOMO |
| 70491 | CAT scan, soft tissue of the neck; with contrast materials | TOMO |
| 70496 | CT Angiography, head and/or neck, with contrast(s), including non-contrast images, if taken, and post image processing | TOMO |
| 71260 | CAT scan, thorax; with contrast materials | TOMO |
| 71275 | CT Angiography, thorax (non-coronary), with contrast material(s), including non-contrast images, if taken, and post image processing | TOMO |
| 72129 | CAT scan, thoracic spine; with contrast material | TOMO |
| 72132 | CAT scan, lumbar spine; with contrast material | TOMO |
| 72193 | CAT scan, pelvis; with contrast material | TOMO |
| 73206 | CT Angiography, upper Limbs, with contrast material, including non-contrast images, if performed, and post image processing | TOMO |
| 73701 | CT scan, lower limbs; with contrast material(s) | TOMO |
| 73706 | CT Angiography, lower Limbs, with contrast material, including non-contrast images, if performed, and post image processing | TOMO |
| 74160 | CT scan of abdomen; with contrast material(s) | TOMO |
| 75722 | Unilateral renal angioTEM with contrast material | TOMO |
| 75724 | Bilateral renal angioTEM with contrast material | TOMO |

The activities expressed in the equivalence factors shall be subject to review every five (5) years from the beginning of the Operational Stage at the request of any of the Parties. In order to carry out such review process, the Parties shall submit to the Expert established in Clauses 23.10 and 23.11 of this Contract.

The process of revision of activities in the equivalence factors shall not generate an increase in the Economic Compensation for the provision of the Services.

**Annex No. 9**

**SENTINEL INDICATORS**

For all purposes, a Sentinel Event will be understood as established in number 57 of the definitions listed in Chapter I of the Contract.

Sentinel Events are characterized by a low probability of occurrence and a high impact on patient care. The purpose of setting Sentinel Indicators is to identify the potential responsibility of the CONCESSIONAIRE in case of a Sentinel Event and to allow taking the necessary actions to guarantee patient safety.

The Sentinel Indicators identify the appearance of a serious event whose occurrence must be immediately investigated by the Contract and Operations Supervisor, including the GRANTOR, as appropriate, through the management of the Hospital or other corresponding bodies, being able to request in turn, independent audits.

These indicators are applied each time the GRANTOR or the Contract and Operations Supervisor identifies a Sentinel Event and reports it as such in the SIGI-NS.

Each time a Sentinel Event occurs, it must be declared by the Contract and Operations Supervisor and communicated to the CONCESSIONAIRE, with a copy to the GRANTOR, within a maximum period of two (2) Days from the occurrence of the aforementioned event, categorizing it in Type I or Type II. At the same time, the Contract and Operations Supervisor must report this situation with the authorization of the GRANTOR to the Competent Government Authority, if applicable.

The CONCESSIONAIRE, within a maximum period of two (2) days after receiving the information by the Contract and Operations Supervisor, may express in writing his disagreement with the Sentinel Event that has been charged, presenting the Contract Supervisor and Operations with a copy to the GRANTOR, a report that includes the evidence it deems necessary to support his position.

If the CONCESSIONAIRE does not express his disagreement, he must pay the amount of the penalty, as indicated in Exhibit No. 11.

In case the CONCESSIONAIRE expresses his disagreement within the established term, the Contract and Operations Supervisor within a maximum period of seven (7) Days and after verifying the evidentiary means presented by the CONCESSIONAIRE and other evidence that he deems appropriate, must communicate his decision to the CONCESSIONAIRE with a copy to the GRANTOR, either rejecting the qualification of the Sentinel Event or maintaining his initial decision.

If the GRANTOR, with the opinion of the Contract and Operations Supervisor, maintains his initial decision and is not considered in conformity by the CONCESSIONAIRE, a dispute will be generated, which must be resolved according to the procedure established in the Contract.

The following two types of Sentinel Indicators are set for the Hospital:

* **Type I:** Corresponds to indicators that measure Sentinel Events of a very critical nature for the assistance work of the Hospital.
* **Type II**: Corresponds to indicators that measure Sentinel Events of a critical nature for the assistance work of the Hospital.

TABLE: IDENTIFICATION OF SENTINEL INDICATORS BY TYPOLOGY

| **Typology of Sentinel Indicators** | **Indicators** |
| --- | --- |
| Type I: Very critical | 1. Food poisoning of one (1) or more patients or staff, due to the provision of the Food Service of patients and staff. 2. Preparation or provision of the wrong diet to patients or staff with a different medical prescription or with a marked intolerance or allergy. 3. Illness, infection or complication of the health status of one (1) or more patients as a result of the Services provided by the CONCESSIONAIRE. 4. Failure in life support (pulmonary, cardiovascular or renal) that puts life or health condition of each patient at risk, as a result of failure to provide the Services. 5. Allergies or food intolerances in one (1) or more patients for feeding the wrong diet. 6. Effects on the life or health of each patient due to the error of hemodialysis procedures, such as connecting a hemodialysis patient with a circuit corresponding to another patient; loss of any type of vascular access in a patient on hemodialysis; misuse of filters, among others, attributable to the CONCESSIONAIRE. 7. An episode of contamination (cross or environmental) or reagents or supplies without the respective certification or authorization (FDA, CE or ISO in force) that influences the quality of the sample in the provision of the Clinical Pathology Service, Laboratory. 8. Error in the therapeutic indication as a result of errors in the Clinical Pathology or Imaging Services, which include, among others, wrong identity or wrong results for each patient. 9. Act against life or integrity by each patient or visitor or hospital or administrative staff, caused by the staff of the CONCESSIONAIRE. |
| Type II: Critical | 1. The delivery of food rations to one (1) or more patients without complying with the medical indications and restrictions reported by the Hospital's nutrition area. 2. Reuse remnants of food preparations or rations for new food preparations or rations, whether for patients, staff or others, as part of the Food Service for patients and staff. 3. Failure to comply with the frequency, measurements or quality of drinking water stored in accumulation ponds by the Applicable Laws and Provisions. 4. Failure to comply with the Applicable Laws and Provisions regarding the management, collection and final disposal of waste for the provision of the Comprehensive Management and Solid Waste Management Service, identified as part of the duties of the Contract and Operations Supervisor. 5. The CONCESSIONAIRE uses supplies or reagents or consumables in all the services provided by the CONCESSIONAIRE for Clinical Pathology, Imaging or Hemodialysis, not authorized by the GRANTOR. 6. Fall of one (1) or more patients during a hemodialysis session (entry, procedure and exit of the patient), an imaging process or while performing a laboratory examination. 7. Hematoma at the puncture site that requires surgical treatment, the product of poor handling of the patient by the CONCESSIONAIRE staff, in the Clinical Pathology Service. 8. Loss of examination material or loss of samples from one (1) or more patients. 9. Manipulation of the video surveillance record and the electronic medical record. 10. Suspension or delay of patient care as a result of the Services provided by the CONCESSIONAIRE. 11. Failure to measure air quality in critical areas or change air conditioner filters and monitoring according to the manufacturer's instructions and by Applicable Laws and Provisions. |

**Annex No. 10**

**GENERAL INDICATORS**

## 

Establishment of General Indicators

The General Indicators show the extent to which certain requirements and regulations are complied with by the CONCESSIONAIRE, being applicable the provisions set forth in Chapter XXV of the Contract.

TablE: IDENTIFICATION OF GENERAL INDICATORS BY TYPOLOGY

| **Subject** | **Indicator** |
| --- | --- |
| Administrative | The CONCESSIONAIRE delivers all the required documentation within the established terms, for example: statistical reports, financial statements, cost reports, manuals and procedures, among others.  All companies subcontracted by the CONCESSIONAIRE are qualified or authorized by the GRANTOR. |
| Regulatory | The CONCESSIONAIRE complies with the Applicable Laws and Provisions, their updates, the internal regulations of the GRANTOR and authorizations required for each of the Services.  The CONCESSIONAIRE keeps an updated record of the periodicity of equipment calibration and maintenance.  The CONCESSIONAIRE keeps an updated record of availability of supplies and reagents, with their respective certificates and safety data sheets for the services requiring them. |
| Observations Hospital Facility and other entities | The CONCESSIONAIRE complies with the observations issued by the epidemiology service for detecting and controlling infections or similar in the Hospital.  The CONCESSIONAIRE complies with the observations issued by the hospital engineering division or other entity regarding solid waste management.  The CONCESSIONAIRE complies with the observations by other governmental entities regarding the Services provided by it. |
| Personnel | The personnel of each of the services provided by the CONCESSIONAIRE complies with the training set forth in the Annual Operation Plan.  The personnel responsible for each of the services complies with the minimum required profile.  The personnel of each one of the services is paid in the stipulated terms and complies with the Applicable Laws and Provisions.  The personnel of each of the services have the personal protective equipment (PPE), according to the work performed.  Personnel who operate ionizing radiation equipment use a dosimeter (periodic recording of radiation levels to which personnel are exposed).  The personnel of the different services provided by the CONCESSIONAIRE wear the uniform corresponding to their function and are visibly identified. |
| Relationship with users | The CONCESSIONAIRE shall respond to complaints and suggestions for each of the Services within five (5) days of receipt of the notice, to the Contract and Operations Supervisor. |
| Operational | The CONCESSIONAIRE carries out evacuation and security and surveillance drills as stipulated in the AOPs.  The CONCESSIONAIRE uses original spare parts materials, accessories, parts and pieces (same brand) and comply with the technical requirements of the manufacturer of the Equipment.  The CONCESSIONAIRE keeps an updated inventory of the assets, according to the standards requested by the patrimony.  The CONCESSIONAIRE keeps an updated inventory of all items (strategic materials, non-strategic materials and medicines) as part of the Logistics Service. |



**TABLE OF PENALTIES**

**Table No. 1:**

**Penalties related to Chapter VI of the Contract: Property Regime**

| **Contract Clause** | **Amount**  **(in UIT -Tax Units)** | **Description of non-compliance** | **Application Criteria** |
| --- | --- | --- | --- |
| 6.9 | 10 | Transfer any of the Concession Assets destined to the execution of the Contract outside the Concession Area, without authorization of the GRANTOR. | For each non-compliance and every Calendar Day until reinstatement |
| 6.10 | 20 | Transfer any of the Concession Assets destined to the execution of the Contract separately from the Concession or to mortgage them, without the authorization of the GRANTOR. | Every Calendar Day until reinstated or regularized |
| 6.11 | 2 | Failure to register in the Public Registries in the name of the GRANTOR the corresponding Concession Assets within the established term. | Every Calendar Day of delay |
| 6.12 | 2 | Failure to register in the Public Registries in the name of the CONCESSIONAIRE the right of the Concession within the established term. | Every Calendar Day of delay until the respective registration is obtained. |
| 6.25 | 1 | Submit the Annual Inventory to the GRANTOR or correct the observations to such Inventory, out of the established term. | Every Calendar Day of delay until submission or correction |
| 6.25 | 1 | Submit the Works Inventory to the GRANTOR or correct the observations to such Inventory, out of the established term. | Every Calendar Day of delay until submission or correction |
| 6.25 | 1 | Submit the Final Inventory to the GRANTOR or correct the observations to such Inventory, out of the established term. | Every Calendar Day of delay until submission or correction |
| 6.29 | 0.5 | Failure to register in the Public Registries in the name of the GRANTOR, if applicable, the Easements that have been constituted for the execution of the Contract and have been imposed on property owned by third parties. | Every Calendar Day of delay until the respective registration is obtained. |
| 6.34 | 1 | Extinguishment of an Easement due to the CONCESSIONAIRE's fault, and for this reason, the need for a new Easement is generated. | Each Time |
| 6.34 | 1 | Failure to obtain the new Easement required over the one that was extinguished due to the CONCESSIONAIRE's fault. | Every Calendar Day of delay until the new easement is obtained |
| 6.35 | 10 | Failure to exercise possessory defenses in the event of any affectation, dispossession, occupation, usurpation, among others, falling on the Concession. | Each Time |
| 6.35 | 1 | Failure to communicate within the established term to the GRANTOR any affectation, dispossession, occupation, usurpation, among others. | Every Calendar Day of delay until communicating to the GRANTOR |
| 6.36 | 5 | Once the Termination has occurred, failure to revert to the GRANTOR, the Concession Assets within the term established in the Contract. | For every Calendar Day of delay until the fulfillment of the obligation. |
| 6.36 | 1 | Once the Termination has occurred, failure to revert to the GRANTOR, the remainder of the Concession Assets in a second event. | Every Calendar Day of delay until the effective delivery of the remaining Concession Assets. |
| 6.40 | 3 | Failure to fulfill the Scheduled Replacements with respect to biomedical equipment, according to the established in the Equipment Replacement and Upgrade Plan. | Every Calendar Day of delay |
| 6.40 | 1 | Failure to fulfill the Scheduled Replacements with respect to Equipment other than biomedical equipment, according to the established in the Equipment Replacement and Upgrade Plan. | Every Calendar Day of delay |
| 6.41 | 1 | Failure to provide the information required to determine the difference between the additional cost of the Unscheduled Replacement and the cost savings benefits for the CONCESSIONAIRE. | Every Calendar Day of delay |
| 6.42 | 3 | Failure to replace at its own cost the biomedical equipment that may be damaged or lost within the term established for such purpose. | Every Calendar Day of delay |
| 6.42 | 1 | Failure to replace at its own cost the Equipment other than the biomedical equipment, which may be damaged or lost within the term established for such purpose. | Every Calendar Day of delay |

**Table No. 2:**

**Penalties related to Chapter VII of the Contract: Permits, licenses and authorizations.**

| **Contract Clause** | **Amount**  **(in UIT -Tax Units)** | **Description of non-compliance** | **Application Criteria** |
| --- | --- | --- | --- |
| 7.1 | 5 | Failure to obtain or maintain in force all permits, licenses and authorizations required for the execution of its obligations during the term of the Contract. | For every Calendar Day of delay in obtaining or renewing each license, permit or authorization |

**Table No. 4:**

**Penalties related to Chapter VIII and IX: Preliminary Studies and Technical File and Construction of the Works.**

| **Contract Clause** | **Amount**  **(in UIT - Tax Units)** | **Description of non-compliance** | **Application Criteria** |
| --- | --- | --- | --- |
| 8.7 | 1 | Failure to deliver the Technical File Work Plan, including the Technical File Elaboration Schedule and its contents to the GRANTOR and to the Supervisor of Design, Construction and Equipment. | Every Calendar Day of delay |
| 8.9 a) | 1 | Submit the Draft Project to the GRANTOR and to the Supervisor of Design, Construction and Equipment, out of the established term. | Every Calendar Day of delay |
| 8.9 b) | 1 | Submit the Basic File to the GRANTOR and to the Supervisor of Design, Construction and Equipment, out of the established term. | Every Calendar Day of delay |
| 8.9 c) | 3 | Submit the Final File to the GRANTOR and to the Supervisor of Design, Construction and Equipment, out of the established term. | Every Calendar Day of delay |
| 8.11 | 1 | Failure to fulfill with the procedure for the modification of the non-objected Technical File. | Every Calendar Day until regularization |
| 8.12 | 1 | Failure to deliver to the GRANTOR all the physical and electronic files related to the elaboration of the Technical File. | Every Calendar Day of delay |
| 8.13 and 8.14 | 50 | Failure to fulfill with the intellectual and industrial property obligations. | Each Time |
| 9.2 | 10 | Failure to initiate the execution of the Works of the Technical File within the maximum established term. | Every Calendar Day of delay |
| 9.7 | 10 | Complete the execution of the Infrastructure Construction Activity, out of the maximum established term. | Every Calendar Day of delay |
| 9.11 and 9.14 | 1 | Failure to submit to the Supervisor of Design, Construction and Equipment, with copy to the GRANTOR, the updated Works Execution Schedule and the other documents established in the Contract. | Every Calendar Day of delay |
| 9.16 | 10 | Failure to fulfill with the maximum terms established in the Works Execution Schedule. | Every Calendar Day of delay |
| 9.19 and 9.20 | 1 | Failure to submit the Operation and Maintenance Manuals within the established term. | Every Calendar Day of delay |
| 9.24 | 1 | Failure to open and keep updated the corresponding Design and Works Notebooks. | Every Calendar Day of delay |
| 9.25 | 0.5 | Send to the Supervisor of Design, Construction and Equipment, with copy to the GRANTOR, the copies of the notes of the Design and Works Notebook, out of the established term. | Every Calendar Day of delay |
| 13.10 | 1 | Deliver monthly progress or additional information required by the Supervisor, out of the established term. | Every Calendar Day of delay |
| 12.4 | 14 | Delay in the commencement of the Operational Stage. | Every Calendar Day of delay |

**Table No. 5:**

**Penalties related to Chapter X: Equipment Endowment**

| **Contract Clause** | **Amount**  **(in UIT -Tax Units)** | **Description of non-compliance** | **Application Criteria** |
| --- | --- | --- | --- |
| 10.12 and 10.14 | 10 | Failure to submit the Equipment Plan and Schedule within the established term. | Every Calendar Day of delay |
| 10.1 | 5 | Failure to fulfill with the Equipment Activity within the established term and according to the Equipment Implementation Plan. | Every Calendar Day of delay |
| 10.1 | 5 | Failure to fulfill with the Pre-installation works within the established term. | Every Calendar Day of delay |
| 10.6 | 20 | Acquire Equipment without the approval of the Supervisor of Design, Construction and Equipment, or with technical specifications different from those approved. | Each time |
| 5.7 | 5 | Failure to submit the SIGI-NS for GRANTOR's approval, within the established term. | Every Calendar Day of delay |
| 5.6 | 2 | Failure to submit the Annual Operation Plan (POA) for the GRANTOR's approval, within the established term. | Every Calendar Day of delay for each Service |
| **Table No. 6:**  **Penalties related to Chapter XI: Commissioning** | | | |
| **Contract Clause** | **Amount**  **(in UIT -Tax Units)** | **Description of non-compliance** | **Application Criteria** |
| 11.6 and 11.7 | 10 | Failure to fulfill with the term for the execution of the Commissioning process. | Every Calendar Day of delay |
| 11.8 | 5 | Failure to submit the Commissioning Schedule. | Every Calendar Day of delay |
| 11.12 | 10 | Failure to fulfill with the Commissioning Schedule. | Every Calendar Day of delay |
| 11.16 | 2 | Failure to report the progress of the Commissioning Schedule at least once a week. | Each time |
| 11.17 | 1 | Failure to notify the Supervisor of Design, Construction and Equipment within the established term of situations that alter or hinder the Commissioning. | Each time |
| 11.18 | 3 | Failure to notify the Supervisor of Design, Construction and Equipment of any changes or modifications required in the non-objected Technical File. | Each time |
| 11.22 and 11.23 | 1 | Failure to correct the observations during the operational tests within the established term. | Every Calendar Day of delay |
| 11.26 and 11.27 | 1 | Failure to correct the observations found by the Works and Equipment Verification and Acceptance Committee within the term established for such purpose by this Committee. | Every Calendar Day of delay |
| 11.31 c) | 2 | Failure to have the Annual Operation Plan (POA) approved for each Service prior to the commencement of the Operational Stage. | Every Calendar Day of delay |
| 11.31. d) | 1 | Failure to have all the human resources indicated in Annexes 7 and 8 for the implementation of the Operational Stage, considering the Services under its responsibility. | For each missing human resource and day of persistence. |
| 11.31. f) | 2 | Failure to have executed the training programs on the use and service of the Equipment, SIGI-NS and other IT systems. | Each time |
| **Table No. 7:**  **Penalties related to Chapter XII: Operation and Maintenance** | | | |
| **Contract Clause** | **Amount**  **(in UIT -Tax Units)** | **Description of non-compliance** | **Application Criteria** |
| 12.3. b) and 12.3. m) | 5 | Failure to submit the Monthly Management Report | Every Calendar Day of delay |
| 12.3. b) | 2 | Failure to develop or apply the Internal Regulations, Organization and Function Regulations, Operating Procedures and others; or to organize or manage the Services, according to the organizational structure of the Hospital. | For each non-compliance |
| 12.3. e) | 1 | Failure to implement occupational health and safety policies in accordance with current labor legislation. | For each non-compliance |
| 12.3. i)  Annex 8 VI.1 | 5 | Failure to have a computerized maintenance and operation control system in place, which must be integrated with the SGS and the SIGI-NS, as established in the non-objected Technical File. | Each time |
| 12.3. j) | 2 | Failure to implement channels for patient feedback or communication through electronic and physical media. | Each time |
| Annex 8 VI.1 | 10 | Losing information found in the SIGI-NS. | Each time |
| Annex 8 VI.1 | 1 | Failure to have the SIGI-NS available. | Each hour until availability is restored |
| 12.3. l) | 5 | Failure to submit the documentation required by the GRANTOR or the Supervisor of the Contract and Operations, related to the fulfillment of the obligations of the Contract. | Every Calendar Day of delay |
| 12.3. o) | 5 | Failure to submit monthly and annual reports to the Supervisor of Contract and Operations, with copy to the GRANTOR. | Every Calendar Day of delay |
| 12.4 | 5 | Exceed the maximum term established in the contract for the commencement of the Operational Stage. | Every Calendar Day of delay |
| 12.12 | 5 | Failure to have a physical, phone or digital Complaints and Claims Book, in compliance with the Applicable Laws and Provisions. | Every day of non-compliance |
| 12.16 | 0.2 | Failure to obtain and maintain in force during the Operational Stage the quality certifications established in Annex 22. | For every Calendar Day of delay and for each certification |
| 12.19 | 2 | Failure to submit the information related to the personnel appointed to occupy the administrative executive positions of the Hospital, during the entire term of the Concession. | Each time |
| 12.19 | 2 | Failure to submit the information related to the personnel appointed to occupy administrative executive positions. | For every Calendar Day of delay until hired |
| 12.14 | 2 | Failure to submit the information related to subcontractors for the provision of Hospital Services, during the entire term of the Concession. | Each time |
| 12.20 | 1 | Failure to develop and implement policies, management measures and improvement actions regarding environmental, social, safety and occupational health management. | Each event |
| 12.22  k) | 20 | Handle, edit or deliver false information, in a malicious manner, regarding the declarations, requests and authorizations made during the Operational Stage. | Each time |
| Annex 8 | 1 | The loss of information by the CONCESSIONAIRE with respect to the declarations, requests and authorizations made. | Each time |
| Annex 8 VI.1 | 1 | Failure to deliver the source programs, duly documented, in a digital software version control repository, together with an automated procedure for their compilation, within the established term. | Every Calendar Day of delay |
| 12.24 | 50 | Failure to submit the Equipment Replacement and Upgrade Plan (PRAE) together with the POA. | Every Calendar Day of delay |
| 12.28 | 2 | Failure to submit the implementation planning for the replacement of the Equipment. | Every Calendar Day of delay |
| 12.30 | 10 | Failure to make available to the GRANTOR the old Equipment for its withdrawal, during the established term. | Each Time |

**Table No. 8:**

**Penalties related to Chapter XIII: About the supervision**

| **Contract Clause** | **Amount**  **(in UIT- Tax Units)** | **Description of non-compliance** | **Application Criteria** |
| --- | --- | --- | --- |
| 13.3  Annex 12 (3.5) | 2 | Failure to fulfill with the necessary contributions to the Administration, Payments and Guarantee Parent Trust, to cover the payments in favor of the Supervisor of the Contract and Operations or the Supervisor of Design, Construction and Equipment, within the established term and opportunity. | Every Day of delay |
| 13.10 | 2 | Failure to provide to the Supervisor of Design, Construction and Equipment, with copy to the GRANTOR, the monthly progress of the preparation of the Technical File and the Environmental Management Instrument, including all the complementary information requested by the Supervisor, as well as the access to the activities and studies that the CONCESSIONAIRE is going to carry out or will carry out for this purpose. | Every Day of delay |
| 13.11 and 13.16 | 1 | Failure to provide all the necessary facilities for the fulfillment of the purposes of the Supervisor of Design, Construction and Equipment or the Supervisor of Contract and Operations. | Each time |
| 13.9 and 13.12 | 2 | Failure to fulfill or attend to instructions or observations of the Supervisor within the term indicated in the Contract or by the latter, except for those with a special penalty for such non-compliance. | Every Day of delay |

**Table No. 9:**

**Penalties related to Chapter III, XIV and XV: Financial Closing and Economic Regime.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Contract Clause** | **Amount**  **(in UIT- Tax Units)** | **Description of non-compliance** | **Application Criteria** |
| 14.5 and 14.6 | 5 | Failure to prove the Financial Closing within the established term. | For every Calendar Day of delay |
| 3.3. b) | 3 | Failure to prove the payment of 50% of the minimum capital stock, at the latest within twelve (12) months following the Closing Date. | For every Calendar Day of delay |
| 3.3. b) | 3 | Failure to prove the payment of 100% of the minimum capital stock, at the latest within twenty-five (25) months following the Closing Date. | For every Calendar Day of delay |
| 15.33 | 3 | Failure to pay all taxes, contributions and fees applicable, among others, to the Concession Assets or those to be constructed or incorporated to the Concession, whether such taxes are administered by the National, Regional or Municipal Government, from the time of taking possession, provided that such taxes, contributions and fees are directly related to the Contract. | For every Calendar Day of delay |

**Table No. 10:**

**Penalties related to Chapter XVI: Guarantees**

|  |  |  |  |
| --- | --- | --- | --- |
| **Contract Clause** | **Amount**  **(in UIT - Tax Units)** | **Description of non-compliance** | **Application Criteria** |
| 16.3 and 16.4 | 10 | Deliver, renew or reinstate the Contract Performance Bond, under the required conditions and within the required term. | Every Calendar Day of delay |

**Table No. 11:**

**Penalties related to Chapter XVII: Insurance Regime**

|  |  |  |  |
| --- | --- | --- | --- |
| **Contract Clause** | **Amount**  **(in UIT - Tax Units)** | **Description of non-compliance** | **Application Criteria** |
| 17.9 and 17.11 | 18 | Failure to fulfill any of the conditions required for the approval of each insurance policy. | Each time and per policy |
| 17.11 | 1 | Deliver to the GRANTOR the copies of the definitive policies, out of the established term. | Every Calendar Day of delay |
| 17.11 | 1 | Communicate to the GRANTOR the dates when the corresponding policies will be renewed, out of the established term. | Every Calendar Day of delay |
| 17.11 | 150 | Failure to fulfill the contracting and renewal of the insurance policies within the established term. | Every Calendar Day of delay |
| 17.14 | 38 | Delay in reporting a damage to the insurance company and to the GRANTOR. | Every Calendar Day of delay |
| 17.15 | 1 | Delay in the submission of the coverage report to the GRANTOR. | Every Calendar Day of delay |

**Table No. 12:**

**Penalties related to Chapter XVIII: Socio-Environmental Considerations**

| **Contract Clause** | **Amount**  **(in UIT - Tax Units)** | **Description of non-compliance** | **Application Criteria** |
| --- | --- | --- | --- |
| 18.5 | 2 | Failure to submit to the GRANTOR the social and communicational management plan, within the established term. | Every Calendar Day of delay |
| 18.7 | 10 | Failure to process the licenses, permits or technical opinions of the Competent Governmental Authorities that are necessary for the elaboration, submission or approval of the Environmental Management Instrument. | Every Calendar Day of delay |
| 18.13 | 3 | Failure to carry out the trainings to its workers, in topics related to the corresponding Environmental Management Instrument approved by the Competent Governmental Authority for the Project, of the environmental regulations in force, of the Applicable Laws and Provisions; prior to the commencement of the Infrastructure Construction Activity and during the whole term of the Contract. | Every Calendar Day of delay |
| 18.17 | 2 | Failure to communicate to the GRANTOR the finding of Environmental Liabilities or Contaminated Sites that by their nature could not have been detected during the elaboration of the environmental baseline, within the established term. | Every Calendar Day of delay |
| 18.19 | 5 | Failure to elaborate a Remediation Plan project according to the Applicable Laws and Provisions in a term of up to ninety (90) Days since the identification of the finding of an Environmental Liability or Contaminated Site that generates significant risk for the development of the Project was communicated to the GRANTOR. | Every Calendar Day of delay |
| 18.20. b) | 5 | In the event that archaeological or historical remains are found, failure to suspend all activities in the area of the finding and immediately notify to the Ministry of Culture and the GRANTOR. | Each time |
| 18.20. c) | 5 | Failure to relocate or restate the Works that could be affected by the finding, in the event of finding archaeological or historical remains that cannot be the subject of an archaeological rescue. | Each time |
| 18.21 | 2 | Delay in the delivery of the Socio-Environmental Report to the GRANTOR in the Infrastructure Construction Activity. | Every Calendar Day of delay |
| 18.22 | 2 | Delay in the delivery of the Socio-Environmental Report to the GRANTOR in the Operational Stage. | Every Calendar Day of delay |
| 18.25 | 1 | Failure to deliver to the GRANTOR or to the Supervisor of the Contract and the Operations a copy of the official notices, announces, environmental reports required by the Competent Governmental Authorities in environmental matters, within the term and conditions established by them or any communication, notice, resolution, information, or similar that the CONCESSIONAIRE receives from the Competent Governmental Authorities, within a maximum term of five (5) Days counted from the Day following its receipt by the CONCESSIONAIRE. | Every Calendar Day of delay |

**Table No. 13:**

**Penalties related to Chapter XIX: Relationships with Strategic Partner, Third Parties and Personnel**

|  |  |  |  |
| --- | --- | --- | --- |
| **Contract Clause** | **Amount**  **(in UIT - Tax Units)** | **Description of non-compliance** | **Application Criteria** |
| 19.1 | 2 | Failure to communicate within the established term any act, business, contract or agreement that may affect the percentage of the Strategic Partner's Minimum Participation after at least five (5) years have elapsed since the subscription of the Certificate of Commencement of the Operational Stage. | Every Calendar Day of delay |

**Table No. 14:**

**Penalties related to Chapter XXIV: Termination of the Contract**

|  |  |  |  |
| --- | --- | --- | --- |
| **Contract Clause** | **Amount**  **(in UIT - Tax Units)** | **Description of non-compliance** | **Application Criteria** |
| 24.2.2 | 500 | Incur in a serious breach as set forth in Clause 24.2.2, unless a penalty has been previously applied for such cause. | One-time only |

**Table No. 15:**

**Penalties related to Chapter XXVII: Confidentiality**

|  |  |  |  |
| --- | --- | --- | --- |
| **Contract Clause** | **Amount**  **(in UIT - Tax Units)** | **Description of non-compliance** | **Application Criteria** |
| 27.1 | 50 | Failure to fulfill confidentiality obligations. | Each time |

**Table No. 16:**

**Penalties related to the Cafeteria service**

|  |  |  |  |
| --- | --- | --- | --- |
| **Contract Clause** | **Amount**  **(in UIT - Tax Units)** | **Description of non-compliance** | **Application Criteria** |
| Annex 8 | 0.5 | Failure to fulfill with the Cafeteria's opening hours. | Each time it occurs |
| Annex 8 | 1 | Obtain a negative satisfaction survey. | Each time it occurs |

**Table No. 17:**

**Penalties related to Centinela Indicators**

|  |  |  |  |
| --- | --- | --- | --- |
| **Contract Clause** | **Amount**  **(in UIT - Tax Units)** | **Description of non-compliance** | **Application Criteria** |
| 25.12  Annex 9 | 7 | Centinela Event Type I | For each event identified in SIGI-NS |
| 25.12  Annex 9 | 5 | Centinela Event Type II | For each event identified in SIGI-NS |

**Table No. 18:**

**Penalties related to General Indicators**

|  |  |  |  |
| --- | --- | --- | --- |
| **Contract Clause** | **Amount**  **(in UIT - Tax Units)** | **Description of non-compliance** | **Application Criteria** |
| 25.12  Annex 10 | 5 | Non-compliance with General Indicators | Each time it occurs |

**Annex No. 12 GENERAL GUIDELINES OF THE ADHESION DOCUMENT TO THE PARENT TRUST**

**SECTION I: DEFINITIONS**

The terms whose first letter is capitalized will have a meaning that is assigned in this Exhibit; or, if applicable, the one assigned to them in the Contract or the Parent Trust of Administration, Payments and Guarantee.

**SECTION II: PURPOSE AND SUBSCRIPTION**

* 1. Purpose: to guarantee the adequate and timely fulfillment of the obligations derived from this Contract, the GRANTOR, the CONCESSIONAIRE and the TRUSTEE will sign the Adhesion Document to the Parent Trust of Administration, Payments and Guarantee, through which will mainly establish the rules of administration of the funds destined to the payment of the Economic Compensation in favor of the CONCESSIONAIRE.

It is stated that the Adhesion Document to the Parent Trust of Administration, Payments and Guarantee must respect the terms and procedures established in the Parent Trust of Administration, Payments and Guarantee.

* 1. Content: in the Adhesion Document to the Parent Trust of Administration, Payments and Guarantee, the accounts, rules and instructions issued by the GRANTOR through their subscription are inserted, which are established in this Exhibit, to comply with the provisions in the Terms and Conditions, in the Contract and in this Exhibit, expressly indicating the opportunities and amounts for the payment of the relevant obligations.
  2. Subscription: both the minute and the public deed of the Adhesion Document to the Parent Trust of Administration, Payments and Guarantee Trust must be signed between the CONCESSIONAIRE, the GRANTOR and the Trustee within the terms established for such purposes in numeral 9.3 of the Parent Trust of Administration, Payments and Guarantee and literal k) of clause 3.2 of the Concession Contract.

SECTION III: OPERATION OF THE ACCOUNTS

* 1. Identification and opening: the Adhesion Document to the Parent Trust of Administration, Payments and Guarantee will add the following accounts to the Trust Accounts of the Parent Trust of Administration, Payments and Guarantee: (i) Specific Collection Account; (ii) Specific Reserve Account; (iii) Supervision Account; (iv) Deductions and Penalties Account; (v) Equipment Replacement Account; (vi) Insurance Indemnity Account; and, (vii) Deduction Account.

The Trustee will manage the opening of the Supervision Account, Specific Collection Account and Specific Reserve Account within five (5) Days following the date of subscription of the Adhesion Document to the Parent Trust for Payments, Administration and Guarantee; and, the rest of the accounts mentioned in the previous paragraph, with the anticipation of ten (10) Days to the third year counted from the Closing Date. All the aforementioned accounts will be opened only in Soles, except for the Specific Collection Account, the Equipment Replacement Accounts and the Insurance Indemnity Accounts, which will be opened in Soles and Dollars.

* 1. Specific Collection Account: The funds that enter into the Specific Collection Account will come exclusively from the General Paying Account, according to the payment instructions indicated in Chapter XV of the Contract or that the GRANTOR remits to the Trustee for said purposes.

The resources that have entered into the Specific Collection Account will be channeled by the Trustee in accordance with the following:

1. To cover the payment amounts of the concepts that make up the Economic Compensation that will be instructed by the GRANTOR, after applying the deductions or discounts for the corresponding penalties and will be transferred by the Trustee to the freely available account of the CONCESSIONAIRE, except for the amounts corresponding to the deductions instructed by the CONCESSIONAIRE, which will be transferred to the Deduction Account. Said transfers will be subject to cancellation.

The effective payment of the Economic Compensation for the Service object of the Concession, corresponding to the fixed and variable components of the Economic Compensation for the Services (CEMSF and CEMSV), will come from the Specific Collection Account.

For such purposes, after having followed the procedure established in Clauses 15.19 and following of the Contract, the GRANTOR, once received the payment receipt from the CONCESSIONAIRE for the total amount to be paid, will send an instruction to the Trustee, with a copy to the CONCESSIONAIRE, detailing all the components of the Economic Compensation and corresponding deductions, attaching the corresponding credit note, if applicable.

1. The aforementioned transfers will be subject to cancellation, so once they have been made, the payment obligations for Economic Compensation in favor of the CONCESSIONAIRE will be deemed fulfilled, under this Contract.

In case the amounts credited in the Specific Collection Account are not sufficient to meet the payment of the obligations instructed as indicated above, the Trustee will use the amounts of the Specific Reserve Account that are necessary to complete said obligations, as established in the numeral 3.4 of this Exhibit.

1. To transfer the amounts corresponding to deductions and penalties, if necessary, applied as indicated in point (i) or as determined by the Contract Operation Supervisor, respectively, they will be transferred by the Trustee to the Deductions and Penalties Account.
2. To cover the amounts necessary to meet the payment of the Equipment Replacement Compensation, the full amount of the PRE will enter into the Equipment Replacement Account opened in Soles.
3. The amounts remaining after the operations indicated in points (i), (ii) and (iii) been carried out, will be transferred by the Trustee to the Specific Reserve Account until the PPP Reserve Amount is completed or replaced. Once said amount is complete in the Specific Reserve Account, the remaining amounts will be allocated as indicated in point (v) below.
4. The remaining amounts after having completed all the items mentioned in the previous points will be released to the GRANTOR's freely available account.
   1. Deductions and Penalties Account: the amounts that enter into the Deductions and Penalties Account will be withheld for a maximum period of three (3) months, a period in which the result of the claims that were filed by the CONCESSIONAIRE regarding the deductions applied to the Economic Compensation or penalties must be determined. Exceptionally, the referred amounts may remain longer in the Deductions and Penalties Account when a dispute resolution mechanism has been initiated in this regard, which must be informed by the GRANTOR or by the CONCESSIONAIRE to the Trustee, attaching the corresponding supporting documentation, in whose case will remain in said account until the Trustee is notified of the result of the referred procedure. The Trustee will notify the CONCESSIONAIRE or GRANTOR, as appropriate, the notification received.

In case a claim is resolved in favor of the CONCESSIONAIRE, the corresponding funds will be transferred by the Trustee to the freely available account of the CONCESSIONAIRE; and, if it is resolved against the CONCESSIONAIRE or the period of 3 months indicated in the previous paragraph expires without a claim by the CONCESSIONAIRE, the corresponding funds will be transferred by the Trustee to the freely available account of the GRANTOR, except that the Reserve Amounts are not complete, in which case they must be transferred to the Specific Reserve Account until said amounts are completed. Said transfers will be made by the Trustee in accordance with the instructions communicated by the GRANTOR.

* 1. Specific Reserve Account: the Specific Reserve Account will receive from the Specific Collection Account, the amounts necessary to complete or replace, as appropriate, the sum equivalent to the “PPP Reserve Amount” which amounts to (\*)[[8]](#footnote-8), in accordance with numeral 2.15 and 2.16 of the Parent Trust of Administration, Payment and Guarantee Agreement.

The amounts credited in the Specific Reserve Account will be used to complete the missing amounts in the Specific Collection Account to meet the concepts mentioned in point (i) of numeral 3.2. of this Exhibit, according to the following: the "PPP Reserve Amount" will be used to complete the payment of the concepts that make up the Economic Compensation.

* 1. Supervision Account: the CONCESSIONAIRE undertakes to maintain in the Supervision Account the amounts necessary to meet supervision payments, including the applicable General Sales Tax, in accordance with the provisions of the Contract. For this purpose, the GRANTOR will instruct the Trustee to withhold from the amounts that correspond to collect monthly to the CONCESSIONAIRE from the Specific Collection Account, the amount corresponding to the monthly payment of the Supervisor and allocate said funds to the Supervision Account prior the release of the retained earnings to CONCESSIONAIRE's freely available account.

The amounts credited to the Supervision Account will be transferred by the Trustee for the cancellation of the supervision tasks contracted according to the Contract. For such purposes, the GRANTOR must send the Trustee an instruction in this regard, attaching the invoices or payment vouchers that support said instruction. The Trustee will make the payments instructed directly to the supervisor's accounts or will issue a cashier's check payable to him.

In case the monthly payments instructed are less than the deposits made on behalf of the CONCESSIONAIRE, the remaining amounts will be kept in the Supervision Account and will be used to attend to additional instructions from the GRANTOR destined to pay the additional supervision services that have been contracted.

At the end of each Calendar Year and after having attended the instructions corresponding to the month in which it ends, the Trustee will transfer the entire amount of the remaining amounts to the Specific Reserve Account until it is completed.

* 1. Equipment Replacement Accounts: the Equipment Replacement Account opened in Soles will receive the amounts from the Specific Collection Account, according to numeral 3.2 of this Exhibit.

The amounts credited in the Equipment Replacement Accounts will be transferred by the Trustee in Soles equivalent to the Exchange Rate corresponding to the amount invoiced in Dollars by the CONCESSIONAIRE to an account freely available to the CONCESSIONAIRE, after the latter complies with carrying out the Equipment Replacement and after it has been approved by the GRANTOR and, consequently, the respective payment has been duly authorized, as established in the Contract. For such purposes, the CONCESSIONAIRE must issue and send to the GRANTOR the respective proof of payment for the acquisition made, as well as the other financial information required. The Exchange Rate considered must be of the issuance invoice date.

The funds in these accounts, depending on the currency in which they are found, must follow the rules:

1. The funds from the Equipment Replacement Account will be transferred by the Trustee in favor of the CONCESSIONAIRE, upon instruction of the GRANTOR.
2. If the funds available in the Equipment Replacement Account are not sufficient to make Equipment Replacement Payments, the Trustee will transfer said funds to the CONCESSIONAIRE, to the extent it.

The remaining amount that could not have been paid will be transferred by the Trustee to the CONCESSIONAIRE once the Equipment Replacement Account has sufficient funds, this treatment does not apply in Termination. In case there is more than one payment pending to be completed, priority will be given to the payment voucher issued with the greatest antiquity

1. The remaining balances of the Equipment Replacement Account after the previous payments have been made, will be used for future Equipment Replacement Payments, at the GRANTOR's instruction, in accordance with literal a) above.

Likewise, with a charge to said remaining funds, investments may be made in accordance with the terms of paragraph 3.10. of this Exhibit. The flows generated by the profitability of said investments will form part of the corresponding Equipment Replacement Account and will follow the same treatment as the rest of the funds.

Upon expiration of the Concession term, according to the terms of the Contract, the funds will be transferred to the CONCESSIONAIRE, upon instruction of the GRANTOR.

* 1. Insurance Compensation Account: the funds that will enter into this account will come from the execution of the insurance policies contracted with the insurance companies, in accordance with the terms of the Contract; and, they will be transferred by the Trustee at the instruction of the GRANTOR, in favor of the CONCESSIONAIRE or GRANTOR as appropriate, and should only be used to replace or repair the damaged assets, as well as any other claim covered by the respective insurance.
  2. Deduction Account: the Withdrawal Account opened in Soles will receive the amounts for the deductions that are generated as a result of the payments made by the GRANTOR for the invoices issued by the CONCESSIONAIRE, at the GRANTOR's instruction. The amounts credited to this account will be transferred by the Trustee to the CONCESSIONAIRE's account at Banco de la Nación.
  3. Other Instructions to the Trustee: from the date of subscription of the Act of Verification and Acceptance of the Works and Equipment until the end of the fifth year from the signing of said act, the GRANTOR will instruct the Trustee so that the funds that were to be released to his favor are previously used by the Trustee to meet the monthly payment of the Economic Compensation for Services (CEMSF and CEMSV).
  4. Investments: the applicable rules for the investments to be made against the resources of the General Reserve Account, in accordance with the provisions of point (iii) numeral 8.3. of the Parent Trust of Administration, Payments and Guarantee will also apply for the resources of the Specific Reserve Account and the Equipment Replacement Accounts of the Adhesion Document to the Parent trust of Administration, Payments and Guarantee.
  5. Administration in case of early termination of the Contract: in the event of the early termination of the Contract, the procedure will be in accordance with the provisions of Chapter XXIV of the Contract, for which the Trustee will follow the GRANTOR's instructions, in such a way that: (i ) the funds of the Specific Collection Account, the Deductions and Penalties Account, the Specific Reserve Account, the Supervision Account and the Insurance Compensation Account are transferred in favor of the GRANTOR; and, (ii) the funds from the Equipment Replacement Account, only for the amount of the Equipment effectively replaced, will be transferred in favor of the CONCESSIONAIRE following the provisions of clause 15.20 of the Contract and the balance will be transferred to the GRANTOR. In turn, the funds from the Withdrawal Account will be transferred in accordance with the provisions of section 3.8. above, and said contract will remain in force for a period of six (6) months after payment of the settlement
  6. Assignment of rights in favor of third parties: the CONCESSIONAIRE may assign the collection rights and flows that correspond to receive in favor of third parties, prior approval of the GRANTOR, for which will incorporate procedures in the Adhesion Document to the Parent Trust of Administration

Annex No. 13 SEMI-DETAILED ENVIRONMENTAL IMPACT STUDY

**Annex No. 14 TECHNICAL BASICS TO BE CONSIDERED BY THE CONCESSIONAIRE**

1. **General**

From Exhibit No. 14 to Exhibit No. 19 a set of aspects related to the technical obligations of the CONCESSIONAIRE related to each of the Project activities is developed.

The CONCESSIONAIRE shall consider as mandatory compliance the Functional Medical Program of the feasibility study declared viable (See Exhibit No. 6).

The CONCESSIONAIRE will consider for the development of the Technical File, the Architectural Medical Program, contained in the feasibility study declared viable, as well as the architectural proposal that emanates from it (architectural preliminary project, facilities or specialties preliminary project, among others) are referential and are subject to their own review, analysis, clarifications, normative update, inclusion of new hospital concepts, international experiences, scope of the services to be provided, among other aspects.

The variations, readjustments or modifications to the Architectural Medical Program will be made by the CONCESSIONAIRE at his expense, cost and risk, having to obtain the approval of the Design, Construction and Equipment Supervisor and the GRANTOR's no objection, according to Clauses 8.9 and 8.11 of the Contract.

It is important that the CONCESSIONAIRE consider, from the planning and development of the Technical File, the following aspects:

Differentiate, according to the Services transferred according to the Contract, the systems, supplies or supply of water, electrical installations, medicinal gases, fuels and others in order to measure and calculate their consumption, differentiating payments, own and common, which correspond to the CONCESSIONAIRE and the GRANTOR for said supplies.

Consign, develop and define all the protocols, tests, certifications and others that correspond to implement in the execution of the Works, the provision of the Equipment, the Commissioning, as well as in the Operation and Maintenance.

Include and develop the procedures, processes, manuals, guides, protocols, plans and others related to the activities and scopes, responsibility of the CONCESSIONAIRE, in the Preoperative Stage and in the Operational Stage.

1. **Specific considerations**
2. Technical standards

Depending on the nature and characteristics of the Project, the CONCESSIONAIRE must comply with the technical standards that are applicable to the nature of the Contract that do not conflict with those issued by any Competent Government Authority. Also, may only consider different, international or other technical standards as long as they have a higher standard than the national one, indicating the code and version, title or name and, if necessary, the field of application or object of the cited technical standard, prior favorable opinion of the GRANTOR and the Design, Construction and Equipment Supervisor.

1. BIM methodology

For the development of this Project, the CONCESSIONAIRE will consider what is established in the Contract and in the Supreme Decree No. 289-2019-EF or the regulation that modifies or replaces it.

The CONCESSIONAIRE is responsible for the implementation of the digital modeling of the applicable information in the Preoperative Stage and in the Operational Stage.

It is the responsibility of the CONCESSIONAIRE, GRANTOR, Design, Construction and Equipment Supervisor, among others, to act within the framework of the BIM methodology, formulating and generating the necessary conditions for the adoption and sustainability of the tools, platforms and gradual knowledge that is required.

1. Project Management

The vision and implementation of a Project management or Project administration is essential in the conduction of the methodologies, approaches, planning and orientation of the Project, considering the convenience and need to carry out the tasks required for the fulfillment of the goals, the verification of the deadlines and the correct sustained development of the financial scope in the horizon of the Project.

The Project management to be implemented by the CONCESSIONAIRE, essentially with the BIM methodology, considers a high degree of demand for the criteria of management and direction of the activities that links the technical, administrative and operational aspects. The structured, flexible and controlled application of the knowledge, skills, tools and techniques whose main responsibility lies with the CONCESSIONAIRE, who will be in charge of managing the Project from the Closing Date and throughout all stages of the Project.

It is important to highlight the Project management in the transition or trafficability or concordance between the various activities of the Project which may be sequential (for example, the Activity of Preparation of the Technical File and the Activity of Building the Infrastructure) or those that converge or that maintain parallel activities (for example, Construction and the provision of Equipment).

In the Activity of Preparation of the Technical File, it is important that the CONCESSIONAIRE consider articulating on a sustained basis and with consensus criteria among the actors involved in the Design process that it is conveniently disseminated during the development of the Project. For this, he will implement specific management resources so that the deliverables of the Technical File are coordinated and directed through joint work meetings, with the strategic intervention of both the Design, Construction and Equipment Supervisor and the GRANTOR, when appropriate, with a regular frequency during the development of these activities.

Regardless of the complete, concrete or specific methods that are implemented (PMBOK, PRINCE2 or others), the processes must guarantee the expected results considering the typology and complexity of the Project and its performance or hospital bias in the area in which it is developed.

1. **Location and characteristics of the Hospital's area**

The area is located on the outskirts of the city of Piura, a few meters from the Panamericana Norte and approximately 10 minutes from the downtown. It includes Sub Lote 02, Mz. D, Parcela J, Zona Industrial adjacent to the Extension of Av. Sánchez Cerro, North-West Sector, district of 26 de octubre, province and department of Piura.

The area owned by the GRANTOR, donated by the Municipality of Piura, is available and registered in the National Superintendency of Public Registries - SUNARP Piura with registration No. 11093928. It has an area of 50,000.30 m² and a perimeter of 894.82 m.



*Picture 01: Location of the future Specialized Hospital of the Piura Healthcare Network in open land.*

*Source: Feasibility Study*

It has the following boundaries:

• To the North: with Sub Lote 01, in a straight section of 230.31 ml.

• To the East: with Sub Lote 01, in a straight section of 217.10 ml.

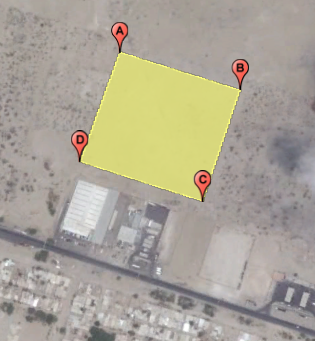
• To the South: with Avenida 05, in a straight section of 230.31 ml.

• To the West: with Colectora Secundaria, in a straight section of 217.10 ml.

Note: The roads and avenues indicated are projected.

*Picture 02: Location of the future Specialized Hospital of the Piura Healthcare Network*

*Source: Feasibility Study*



Area for the EsSalud Specialized Hospital in Piura

*Picture 03: New area, in which the future hospital will be located, a few meters from the Panamericana Norte*

*Source: Feasibility Study*

Physical legal documentation of the property:

The area is owned by the GRANTOR in accordance with the donation granted by the Provincial Municipality of Piura through Municipal Agreement No. 129-2009-C / PPP dated April 15, 2009 signed in Public Deed No. 2508 of October 6, 2009, appearing in the archived title N ° 2010-23264. In relation to the donation made, through Municipal Agreement No. 046-2018-C / PPP, dated May 23, 2018, the Provincial Municipality of Piura approves for the last time the extension of the term for a period of four (4) years, under warning of reversion of the property in case of non-compliance, the same that expires on May 23, 2022.

The Negative Real Estate Registration Certificate dated March 11, 2016 indicates that, with thirty (30) years old, there are no liens, charges or titles pending registration regarding Electronic Item No. 11093928.

Through Certificate of Urban and Building Parameters N ° 150-2018 dated December 26, 2018 issued by the Submanagement of Cadastre and Urban Qualifications of the District Municipality of 26 de Octubre, confirm, among others, the Zoning as Health (H1, H2 , H3, H4), Specialized Hospital as well as the maximum permissible height, building coefficient, minimum percentage of free area and separations resulting from the respective project, adequate to the requirements and needs of the activity, subject to the rules of the National Building Regulations and the provisions of the Ministry of Health, as well as the municipal urban planning provisions of the area in which it is located. The certificate in question expires on December 26, 2021.

By means of the Certificate of Zoning and Roads N ° 145-2019 dated July 23, 2019 from the Office of Urban and Rural Planning and the Division of Urban Development and Expansion of the Provincial Municipality of Piura, specifies that the property is located within the urban area, according to the Urban Development Plan 2032-OM 122-02-CMPP of 2014, also recording the zoning, land use and compatibility as H (Health). The certificate in question expires on July 23, 2022.

By means of a Management Resolution of the Urban Enabling License No. 0151-2020-MDVO-GDU dated October 19, 2020, the Urban Development Management of the District Municipality of 26 de Octubre, approves the Urban Housing License of the Single Lot, Type B - Health Use "Hospital of High Complexity of Piura" authorizing the Social Health Insurance - EsSalud to execute in a term of (36) thirty-six months the work of Urban Habilitation of Single Lot, Type B - Health Use "High Complexity Hospital of Piura ”Whose project is approved. The aforementioned resolution is valid until October 19, 2023.

Feasibility of public services:

Through Letter N ° R-466-2018/ENOSA dated August 20, 2018, the electrical services concessionaire ENOSA issues the update of the electrical feasibility and the design point, stating that it is possible to meet the demand of 3,700 KW in In accordance with current regulations, however, it is classified as a Free User and due to its magnitude it should be considered as a Medium Voltage Utilization System whose design point is located in the Sala de Celda Coscomba – Barra 10 KV, and having to prepare the technical file and execution of the work of the Medium Voltage Utilization System for the corresponding electricity supply by the CONCESSIONAIRE. The validity period of said feasibility has a period of 02 years, which expires on August 20, 2020.

Through Official Letter N ° 773 -2020 - EPS GRAU S.A.-30-370-100 dated October 15, 2020 from the General Management of EPS GRAU S.A. The GRANTOR is informed that after the technical evaluation carried out on site, it has been determined that there are no nearby networks in said sector to meet the requirement; However, it has been determined to grant said feasibility reconsideration according to report No. 202-2020-EPS GRAU SA-370-30, specifying that the feasibility for the drinking water system can be granted through the construction of an independent adduction line from the existing elevated La Planicie reservoir, located in the Los Portales urbanization, so as not to affect the normal operation of the drinking water supply in Sector N ° 03, to the site where the hospital will be built.

In relation to Sewerage, EPS GRAU S.A. indicates that it is feasible to connect the sewerage to a collector mailbox near the lot in question parallel to Avenida Sánchez Cerro, which has as final disposal the Aypate Wastewater Pumping Chamber, specifying that, prior to discharge by the user, the appropriate treatment of their wastewater must be considered to guarantee that they do not exceed the maximum admissible values, therefore, all the technical aspects necessary to guarantee this purpose must be considered.

EPS GRAU S.A. specifies that the designer, the CONCESSIONAIRE, must take into account the technical aspects indicated, which are valid for 06 months.

By Letter No. 680-GR-RAPE-ESSALUD-2016 dated on April 22, 2016, the GRANTOR requests Telefónica del Perú S.A. the feasibility of telecommunications for the construction of Piura High Complexity Hospital of Healthcare Network. The company Telefónica del Perú S.A. said that it is possible to meet the requested telecommunications feasibility.

Reference technical information available:

The feasibility study declared viable records information from a topographic survey dating from 2015 carried out by the Global SIC company, which records that the lot presents a practically flat orography with slopes of 1 meter and is clear, does not present constructions or buildings inside, the floor being made of sand-type material.

Likewise, said feasibility study consigns a soil mechanics study dating from 2015 carried out by the company MdG Andina SAC that has considered an embedded surface foundation at level A. It detects the following units: at Level 0, Heterogeneous filling of fine sands with remains of organic matter and garbage (0.4-0.5 m.); in Level A, detrital packet with fine-grained sand, poorly graded variable silty matrix (up to 4.4-9.5m.) and, Level B, myocene substrate, versatile clays and siltstones, with fine and/or silty sands with small levels of sandstones, with hard levels.

Specific annotation:

Near the area, the preexistence of an Establishment for the Sale of Liquid Fuel to the Public and LPG (gas station) located at a distance less than that foreseen by the sectoral technical regulations of the Project has been identified, which indicates that the health establishment should not be located at a distance of less than 100 meters equidistant from the property limit of the land of the fuel service station. This establishment is located in Mz. A, Lote A-1-a, Sector Parcela J, Industrial Zone, district of 26 de Octubre, Province and Department of Piura, with proximity to the hospital grounds.

In this regard, through Official Letter No. 0600-2016-DGIEM/MINSA dated on May 5, 2016, the General Directorate of Infrastructure, Equipment and Maintenance of the Ministry of Health in response to the query made by the GRANTOR related to the use of the area, points out that, considering that the effective use of the area and the limit of the building allow compliance with what is indicated in the regulations, it is possible to use the area with the analysis and justification that validate the proposal. In this sense, the CONCESSIONAIRE must consider what is indicated by the regulatory entity in relation to said regulatory restriction, with the corresponding scopes in the design preparation and development stage.

**Annex No. 15 OBLIGATIONS OF A TECHNICAL NATURE OF THE CONCESSIONAIRE IN RELATION TO THE TECHNICAL FILE**

1. **Applicable regulations**

The elaboration of the preliminary studies, Preliminary Project, Technical File, as well as the considerations referred to the obtaining of licenses, permits or authorizations, the execution of the Works and the Operation and Maintenance, shall be carried out in accordance with Exhibit No. 14, the Applicable Laws and Provisions and other current technical regulations.

The CONCESSIONAIRE shall comply with its obligations adapting to the Applicable Laws and Provisions of a general or specific nature of the health sector that are in force at the date of compliance with its obligations (including specific regulations of the specific health services providers such as surgical center, obstetric center, intensive care unit, among others), including the regulations that may be approved after the Closing Date considering and agreeing them with the regulations related to each of the Services set forth in Exhibit 8.

It shall also consider the following regulations, including but not limited to:

1. Specific, issued by EsSalud:

* General Management Resolution No. 464-GC-ESSALUD-2011, which approves Directive No. 010-GC-ESSALUD-2011 “Regulations for the Organization and Operation of the Emergency and Urgent Care System of the Social Health Insurance - ESSALUD.”
* Central Infrastructure Management Resolution No. 017-GCI-ESSALUD-2014 that approves the Directive “Hospital Eco-efficiency for New ESSALUD Hospital Centers.”
* Central Investment Project Management Resolution No. 001-GCPI-ESSALUD-2016, which approves the directive: “Eco-efficiency Policy for Existing Facilities,” dated on March 3, 2016.
* Quality Standards for Seismic Isolators, of the Terms of Reference for the Elaboration of the Technical File, GCPI, SGED, ESSALUD.
* Project Management Plan, of the Terms of Reference for the Elaboration of the Technical File, GCPI, SGED, ESSALUD.
* Scope of BIM Modeling, of the Terms of Reference for the Elaboration of the Technical File, GCPI, SGED, ESSALUD.
* Signage and Integral Setting Manual of the Service Units of the Social Health Insurance - ESSALUD, Office of Institutional Relations, last version.
* ICT Minimum Technical Specifications for Public-Private Partnership Projects - PPP, Central Management of Information and Communication Technologies, Production Management, EsSalud, 2020.
* General Criteria for Installations of Information and Communications Technology Solutions, SGED, GEI, GCPI, ESSALUD.
* Resolution from the Institute for Health and Research Technology Assessment No. 13-IETSI-ESSALUD-2018 that approves the Directive No. 01-IETSI-ESSALUD-2018 V.01 “Directive that Regulates the Requests for Medical Devices, Biomedical Equipment and other related Technologies of EsSalud.”
* General Management Resolution No. 1563-GG-ESSALUD-2019, which approves the General Management Directive No. 667-ESALUD-2019 V.01 “Hospital Maintenance Management Regulation in EsSalud.”

1. Concerning technical aspects:

* National Electricity Code Use 2006, and its modifications.
* National Electricity Code Supply 2011, and its modifications.
* Supreme Decree No. 034-2008-E.M., which sets forth energy-saving measures in the public sector.
* Peruvian Technical Standard NTP IEC 60598-2-22. 2007 Specific requirements for emergency lighting.
* Technical Standards of the General Directorate of Electricity of the Ministry of Energy and Mines.
* Peruvian Technical Standards on building installations (INDECOPI).
* Standard IEC 60364-7-710: 2002-11 Electrical installation in buildings - Requirements for Special Installations or Enclosures - Medical Installations.
* National Electricity Code Supply 2011, and its modifications.
* Procedures Standard for the elaboration of projects and execution of works in medium voltage utilization systems in distribution concession areas. D.R. No. 018-2002-EM/DGE.
* Standards DGE: “Terminology in Electricity and Graphic Symbols in Electricity.” M.D No. 091-2002-EM/VME.
* Technical Standard for the Quality of Electrical Services and its modifications. S.D. No. 020-97-EM.
* Regulations of Occupational Safety and Hygiene of the Electricity Subsector. M.R. No. 263-2001-EM/VME.
* Standard NTP IEC 60884-1. 2007 “Plugs and socket-outlets for household and similar purposes. Part 1: General requirements.”
* Standard NTP IEC 60364-8-1 “Low-voltage electrical installations. Part 8-1: Energy efficiency.”
* International standard IEC-61557-8 “Electrical safety in low voltage distribution systems up to 1 000 V AC and 1 500 V DC - Equipment for testing, measuring or monitoring of protective measures. Part 8: Insulation monitoring devices for IT systems.”
* Standard IEC 61439-1 “Low-voltage switchgear and distribution panel - Part 1: General rules.”
* Standard IEC 61439-2 “Low-voltage switchgear and distribution panel.”
* Standard IEC 60439-1: “Low-voltage switchgear- Type-tested and partially type-tested assemblies.”
* Standard IEC 60364-5-53: “Electrical installations of buildings - Part 5-53: Selection and erection of electrical equipment - Isolation, switching and control.”
* Standard IEC 62305-3. “Protection against lightning. Part 3: Physical damage to structures and life hazard.”
* Standard IEC 60364, on grounding connection diagrams (GCD)
* Standard ISO/IEC 11801, addenda 1 and 2, 2nd Edition, on Telecommunications Cabling System.
* Standard ANSI/EIA/TIA 942, Telecommunications Infrastructure Standards for Data Centers
* Standard ANSI/TIA-310-D “Cabinets for electrical and telecommunications equipment.”
* ANSI J STD 607A, Standards for telecommunications grounding.
* ANSI/TIA-606-B, Administration Standard for the Telecommunications Infrastructure of Commercial Buildings.
* ANSI/TIA-492- AAAC, optical properties of attenuation in fibers optic.
* ANSI/TIA/EIA-758 Customer-Owned Outside Plant Telecommunications Putlet Standard and its addenda.
* Standard IEC 60332-3 Fire resistance, halogen free and low smoke emission.
* Peruvian Technical Standard NTP-ISO/IEC 17799:2007, Code of Good Practices for information security management.
* Peruvian Technical Standard NTP-ISO/IEC 27001:2008, Security Techniques. Information security management systems.
* Standard IEEE STD 142-1991, on Single Earth.
* Standard IEEE 802.3at and IEEE 802.3af, on Power over Ethernet (PoE)
* Standard IEEE 802.11n, on wireless connectivity
* IEEE 802.3an “Physical Layer and Management Parameters for 10Gb/s Operation - Type 10GBASE-T.
* IEEE 802.3az (Energy Efficient Ethernet)
* IEEE 802.3z 1000 Base-T, operation at 1000 Mbps (GbE) on fiber optic cable.
* ANSI/TIA-1179-2010, Healthcare Infrastructure Standard.
* ANSI/TIA-568-C.0-2008, Generic Telecommunications Cabling for Customer Premises.
* [ANSI/TIA-568-C.1: Commercial Building Telecommunications C](http://blog.siemon.com/standards/ansitia-568-c-1-commercial-building)abling.
* ANSI/TIA-568-C.2-2009, Balanced Twisted-Pair Telecommunications Cabling and Components Standard.
* ANSI/TIA-568-C.3-2008, Optical Fiber Cabling Components Standard
* ANSI/TIA-569-C-2012, Commercial Building Standard for Telecommunications Pathways and Spaces.
* ANSI/TIA 942-A Telecommunications Infrastructure Standards for Data Centers.
* ANSI/TIA-606-B “Administration Standard for the Telecommunications Infrastructure of Commercial Buildings”
* ANSI/TIA-607-B “Commercial Building Grounding (Earthing) and Bonding Requirements for Telecommunications”
* ANSI/TIA-492- AAAC, optical properties of attenuation in fibers optic.
* BICSI - 002 Data Center Design and Implementation Best Practices.
* BICSI - 005 System Design and Implementation. Best Practices
* TIA 1179 “Healthcare Facilities Telecommunications Infrastructure Standard”
* NFPA 72: “National Fire Alarm Code”
* NFPA 75. Standard for the Fire Protection of Information Technology Equipment.
* NFPA 76. Standard for the Fire Protection of Telecommunications Facilities.
* NFPA 72: “National Fire Alarm Code”.
* NFPA 75. Standard for the Fire Protection of Information Technology Equipment.
* NFPA 99 Standard for Health Care Facilities.
* IEC61340-4-1 Electrical resistance and static control standards.
* ROHS Regulations (Restriction of Hazard Substances).
* Ministerial Resolution No. 175-2008 MEM/DM, dated on April 11, 2008 Non-flame propagating conductors, free of halogens and corrosive acids.
* STANDARD UL94V-0 or STANDARD IEC 61048-1, self-extinguishing properties of gutters.
* ASTM E 814-97 Fire Stop Through FIRE Stops
* NTP IEC 60884-1 2007 N Plugs and Sockets for household and similar purposes.
* Standard ANSI/IEC 60529-2004 IP Protection Degrees.
* NFPA 2001 Standard for Clean Agent Fire Extinguishing Systems.
* Standard ANSI/TIA-310-E “Cabinets for electrical and telecommunications equipment.”
* Standard NFPA 13 / 15 / 20 (Installation of Fire Fighting Systems).
* Standard NFPA /101 / A- 20 (Life Safety).
* Standard NFPA 90A (Installation of Air-Conditioning and Ventilating Systems).
* ASHRAE Standard (American Society of Heating, Refrigerating and Air Conditioning Engineers).
* PAHO/WHO Guidelines for Vulnerability Reduction in the Design of New Health Facilities, 2004 (for reference.)
* International Standards of the American Society for Testing and Materials (ASTM).
* ACI Manual Concrete Practice (Reports ACI 207.1R-96, ACI 207-2R-95, ACI 207-4R-05, ACI 22-4R-01).
* Report ACI Committee 301-05, Standard Specifications for Structural Concrete in its latest version.
* American Institute of Steel Construction (AISC) last version.
* Minimum Design Loads for Building and Other Structures,” ASCE/SEI 7-16, Structural Engineering Institute of the American Society of Civil Engineers, Reston, Virginia, USA, 2017.
* American Society for Testing Materials - ASTM.
* ASTM A36 Standard Specification for Carbon Structural Steel.
* ASTM A108 Standard Specification for Steel Bar, Carbon and Alloy, Cold-Finished.
* ASTM A240 Standard Specification for Chromium and Chromium - Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications.
* ASTM A325 Standard Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength.
* ASTM A572 Standard Specification for High-Strength Low-Alloy Columbium-Vanadium Structural Steel.
* ASTM A1011 Standard Specification for Steel, Sheet and Strip, Hot- Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength.
* ASTM B29 Standard Specification for Refined Lead.
* ASTM B505 Standard Specification for Copper Alloy Continuous Castings.
* ASTM D395 Standard Test Methods for Rubber Property - Compression Set.
* ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers - Tension.
* ASTM D429 Standard Test Methods for Rubber Property - Adhesion to Rigid Substrates.
* ASTM D573 Standard Test Method for Rubber - Deterioration in an Air Oven.
* ASTM D624 Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers.
* ASTM D1149 Standard Test Methods for Rubber Deterioration- Cracking in an Ozone Controlled Environment.
* ASTM D1229 Standard Test Method for Rubber Property-Compression. Set at Low Temperatures.
* ASTM D2137 Standard Test Methods for Rubber Property-Brittleness Point of Flexible Polymers and Coated Fabrics.
* ASTM D2240 Standard Test Method for Rubber Property - Durometer Hardness.
* ASTM D3183 Standard Practice for Rubber - Preparation of Pieces for Test Purposes from Products.
* ASTM D4894 Standard Specification for Polytetrafluoroethylene (PTFE) Granular Molding and Ram Extrusion Materials.
* ASTM D4895 Standard Specification for Polytetrafluoroethylene (PTFE) Resin Produced from Dispersion.
* ASTM E4 Standard Practices for Force Verification of Testing Machines.
* ASTM E37 Standard Test Methods for Chemical Analysis of Pig Lead.
* SSPC-SP6 Steel Structures Painting Council (SSPC) SP6 - Commercial Blast Cleaning.
* AWS-D1.1 American Welding Society (AWS) D1.1 - Structural Welding Code - Steel.
* Regulations of Measurement Estimates for Building Works (DR No. 073-2010/VIVIENDA/VMCS-DNC).
* Supreme Decree No. 011-2019-TR Regulations of safety and health at work for the construction sector
* Law 29783, “Law on Occupational Safety and Health.”
* Guidelines for Surveillance, Prevention and Control against the spread of COVID-19, applicable to the project, in force and decreed by the Ministry of Health of Peru.
* National Building Regulations, approved by Supreme Decree No. 011-2006-VIVIENDA, on May 8, 2006 and published on June 8, 2006, as amended.
* National Building Regulations: E.030 Earthquake-Resistant Design V2018 and E.031 Seismic Isolation Systems V2019.
* Ministerial Resolution No. 440-2018-VIVIENDA approved on November 30, 2018 that amends the Technical Standard EM.020 Telecommunications Installations.
* BIM standards applicable to the project, including the BIM execution plan, issued by the Ministry of Economy and Finance.

1. **Considerations for developing the Technical File**

The CONCESSIONAIRE shall be responsible for the elaboration of the Technical File at the work execution level, prepared within the parameters defined in the Contract and the current technical regulations.

The CONCESSIONAIRE shall carry out the following actions in relation to the Hospital:

* + Implement project management activities.
  + Execute the preliminary assessments in the indicated areas.
  + Elaborate the Technical File.
* Deliverables for developing the Technical File

The CONCESSIONAIRE shall consider the deliverables and terms for developing the Technical File as set forth in the Contract. The CONCESSIONAIRE shall consider the peremptory dates of the documents managed and necessary for the development of the Technical File.

* Content of the deliverables of the Technical File

The content indicated below is the minimum necessary, and may be expanded according to the level of development corresponding to the deliverables and the regulatory scope of the Services:

1. Content of Deliverable 1: Preliminary Project

Volume 01: Executive summary

* + - Technical data sheet.
    - General table of contents.
    - List of drawings by specialty.
    - General work specifications, including urban determining factors and parameters, situation of the feasibility of services, descriptive summary of the specialties, resulting Architectural Medical Program and comparative with the feasibility assessment including circulation and walls calculated in the specialty of architecture, estimated value of the work based on the cost of construction per m2, among others.

Volume 02: Architecture and Signaling

* + - Architectural work specifications, describing in detail the conceptualization of the architectural design, design determining factors, compatibility with specialties, among others.
    - List of rooms or architectural program containing code of rooms, name of rooms, number of rooms among others.
    - Table of areas per level, differentiating by UPSS and UPS indicating partial area, total area and percentages of walls and circulation.
    - Signaling work specifications, developing the general criteria of the specialty.

Volume 03: Safety and Evacuation

* + - Specifications on safety and evacuation, indicating the general criteria, location of evacuation stairs, routes, regulatory distances, external meeting areas, use of fireproof materials, among others.
    - Preliminary calculation report: capacity, evacuation time, means of evacuation.
    - Preliminary risk management plan in the planning of the execution of works.

Volume 04: Structures

* + - Work specifications.
    - Structural calculation report of pre-dimensioning of structural elements: columns, foundations (footings, pilings, plates, etc.) beams, slabs, insulators, among others.
    - Substantiation of the type of seismic isolation technology, advantages, structural approach, applicable seismic standard, method of support of perimeter foundations, important structural elements, among others.

Volume 05: Sanitary Installations

* + - Work specifications.
    - Preliminary calculation report.

Volume 06: Electrical Installations

* + - Work specifications.
    - Preliminary calculation report: Maximum demand according to rule 050-206 of the CNE (normal and emergency), Calculation of equipment capacities (electrical transformers, generator sets, ups, etc.), Calculation of room dimensions (Electrical substation, General switchboard room, Generator set, technical rooms by blocks and levels, etc.).
    - Feasibility of supply and fixation of the design point granted by the concessionary company of electric energy distribution in the area.

Volume 07: Mechanical Installations

* + - Work specifications.
    - Preliminary calculation report according to demand, architectural and functional conditions, number of elevators (bed lifts, passenger elevators, service elevators); pre-dimensioning of the air conditioning system, extraction and/or mechanical ventilation of each Service Producing Unit; pre-dimensioning according to the demand, capacity and type of the Medicinal Gas Plants, which must meet the established standards; pre-dimensioning according to the demand (generator set) of the Storage Tank, Daily Tank and Supply Piping; pre-dimensioning according to the demand of equipment (Water Heaters, stoves, burners, etc.) of the Storage Tank and the Supply Piping.

Volume 08: Information and Communication Technologies:

* + - Work specifications.

Description of each of the IT Area rooms (Communications Service Entrance Room, Telecommunications Rooms, Technical Ducts, Communications Center, Surveillance and Security Center, Supported Service, Equipment Room, Computer Center Management Room, Electrical Control Room), including design, architecture, distribution schemes, technological improvements, location, among others.

It should also be borne in mind that:

* The minimum areas accepted in the IT room project shall be those indicated in the technical health standard corresponding to the level of care.
* The computer center is composed of: equipment room, computer center management room and electrical control room.
* Entry to the equipment room must be from the data management room and to the electrical control room from the equipment room.

Description of each of the Information and Communications Technology Solutions at the preliminary project level.

Description of the trunk and horizontal channels.

* + - List of computer and telecommunications equipment.
    - Other Documents

Excel table of IT Rooms, indicating location level, axes, dimensions, area, among others.

Volume 09: Equipment

* + - Approved Functional Medical Plan and approved Architectural Medical Plan.
    - List of rooms indicating the corresponding NTS (113, 110 and 119) (from the portfolio of services and the Functional Medical Plan).
    - Complete list of equipment by UPSS (supplier, specialty, type: comes from generic group, key used in the drawings, name, UPSS, room code, room, room area in m2, quantity of equipment that allows the determination of the required electrical energy).
* Biomedical Equipment (code, name, quantity)
* Complementary Equipment (code, name, quantity)
* Electromechanical Equipment (code, name, quantity)
* Surgical Instruments (code, name, quantity)
  + - Clinical and Administrative Furniture (code, name, quantity) Vehicle (code, name, quantity) Specific list of Equipment and pre-installation requirements.
    - Calculation report of services and equipment that require justification according to the demand and that have incidence in the definition of the architectural spaces (sterilizers, laboratory or blood bank refrigerators, cold chain among others).

Volume 10: Drawings at the Preliminary Project Level

* + - Architecture and Signaling
* Position and localization drawing, with regulatory format, compatible with the topographic drawing. Include immediate surroundings, accesses, boundaries, elevations, magnetic north, road sections, data from the Certificate of Urban and Building Parameters, data from the preliminary project.
* Zoning and Flow Drawings, all levels, including basement or technical floor, at a scale of 1/250 or 1/200, with axes compatible with specialties, show all UPSS and UPS with chromatic legend, show lines and directions of the different circulation flows according to hospital regulations.
* General distribution drawings, all levels, including basement or technical floor, at a scale of 1/250 or 1/200, with axes compatible with specialties, general dimensions, inclusion of topographic lines in the corresponding levels, finished floor levels, integral approach, pedestrian and vehicular accesses, exterior treatment, sidewalks, ramps, gardens, fences, guard houses, electrical substation, cistern, pump room, environmental health, data center, communications rooms, technical rooms, ducts and uprights compatible with specialties, patios, terraces, spaces for mechanical air system equipment, among others.
* General roof drawings, at a scale of 1/250 or 1/200, with axes and general dimensions, all blocks or volumes, finished floor levels, finished roof levels.
* General cutaway drawings, at a scale of 1/250 or 1/200, with axes and general dimensions, including topographic survey of the land, including perimeter and boundaries, sidewalks, exterior tracks, among others (minimum 06 cutaways), finished floor levels, finished roof levels.
* Landscape approach drawings considering the planning and design of outdoor spaces, land or health infrastructure, including garden treatment, definition of plants according to the geographical area, climate, among others.
* General elevation drawings, at a scale of 1/250, with axes, finished floor levels, finished roof levels.
* Layout drawings, at a scale of 1/100, with axes, general dimensions, names and codes of rooms, showing doors, windows, fixed furniture, sanitary appliances, types of partition walls, among others.
* Cutaway drawings, at a scale of 1/100 with axes and dimensions, names of rooms, height of bays, roofs, fixed furniture, partitions, others.
* Elevation drawings at a scale of 1/100, with levels and axes.
  + - Safety and Evacuation
* Distribution drawings highlighting the location, differentiation and classification of stairs. Main evacuation routes, preliminary verification of distances and regulatory, dimensioned exits. Verification of the regulatory width of the means of evacuation. General compartmentalization of areas.
* Location of emergency light fixtures, fire extinguishers, smoke detectors, temperature detectors, fire alarm push buttons, fire alarm panel and control panel, fire sprinklers and cabinets, fire hydrants and t Siamese valves.
* Preliminary, interior and exterior signaling drawings.
  + - Structures
* Foundation floor drawings with tables of columns compatible with architecture, indication of column pre-dimensioning, seismic isolators, type of foundation. Indicate levels of finished floor, land dimensions and bottom of foundation.
* Seismic isolation interface drawings in plant with the location of the seismic isolators differentiating the types of supports to be used:
  + - If elastomeric, specify type (HDR, LRB, NRB, others)
    - If it is a friction pendulum type, indicate its main characteristics.
* Roof slab formwork floor plan, interface between the fixed and insulated areas.
* Light covering floor drawings, as well as the distribution of their supporting metallic structures.
  + - Sanitary Installations
* Proposed supply of Drinking Water and Sewage services from the point set by the corresponding utility company.
* Floor drawings compatible with architecture showing the layout and route of the branches or sanitary networks compatible with the other specialties, uprights, ducts, flexible joints, safety seals, pluvial discharge system, roofs, patios and exteriors.
  + - Electrical Installations
* Equipment Distribution drawing in the rooms of Electric Substation, Generator Set and General Board Room.
* Route drawing of the feeders (horizontal and vertical uprights) showing the general, distribution and power electrical boards (normal, emergency, stabilized and uninterrupted voltage), in each of the respective technical rooms (by block and level). Also show the equipment in the technical rooms of the critical areas (isolated, stabilized and uninterrupted electrical system).
* General Electrical Diagram of the health facility, including general, distribution and power boards (normal, emergency, stabilized and uninterrupted voltage). Electrical systems with renewable energy generation should be shown, if recommended by the sustainability specialist.
* Diagrams of the isolated, stabilized and uninterrupted electrical systems for critical areas (Operating Rooms, ICU Rooms, Hemodialysis Rooms, Main Communications Room, etc.).
* Route of the Medium Voltage Network (Medium Voltage Utilization System) from the design point, granted by the Concessionary Company of Electrical Energy Distribution of the area, to the projected electrical substation.
  + - Mechanical Installations.
* Floor drawings compatible with architecture and other specialties, showing the preliminary location of the plants, routes of the main networks and uprights of each of the systems.
* Drawings with the pre-dimensioning of the vertical transport system, considering the service elevators, as well as the machine room.
* Location Drawing of the Medical Gas Plants and the Main Connections of each system to the Service Producing Units.
* Location Drawing of the steam power plant, main networks and uprights.
* Location Drawing of the pneumatic transport plan, main networks and uprights.
* Location Drawing of Petroleum, LPG or natural gas Fuel Tanks, main networks and uprights
* Location Drawings for air conditioning, ventilation and mechanical extraction equipment.
  + - Information and Communication Technologies:
* Proposed supply of communications from the point set by the company providing the service.
* Structured cabling floor drawings, compatible with architecture and equipment, showing the layout and route of the telecommunications branches or networks compatible with other specialties, uprights, flexible ducts, flexible duct connections, technical rooms, safety seals, preliminary location of interior and exterior manholes. The drawings shall contain, at least, the following:
  + - IT rooms (Communications Service Entrance Room, Telecommunications Rooms, Communications Center, Surveillance and Security Center, Technical Support, Equipment Room) as indicated in the technical health standard, as for the level of service.
    - The Uprights (Technical Ducts), outside the telecommunications rooms and for the exclusive use of the specialty.
    - Trunk Channel (Underground) from the Communications Service Provider’s Design Point to the Communications Service Entrance Room.
    - Trunk Channel (Underground, Communications Tray) from the Communications Service Entrance Room to the Equipment Room, show the technical ducts for routing this channeling.
    - Show on the drawings the communications tray to scale, both horizontal and vertical, as well as the GDS and GDP to scale and with the front (one leaf) and rear (two leaves) doors open, respecting the internal circulation spaces indicated in the current regulations.
    - Equipment.
* Floor drawings compatible with the architecture showing the distribution of the main equipment that affect the dimensioning of the rooms, pointing out those that require pre-installation compatible with the specialties.
* Fully equipped drawings indicating the following requirements: energy points (single-phase, three-phase, normal or stabilized and if special load), data point, water point (cold, hot, soft, osmosis) drainage, steam, compressed air (medical, dental, industrial), oxygen, vacuum, CO2, gas evacuation, weights of equipment that are important for structure (usually those weighing more than 400 kg with load), the pre-installations should consider reinforcements of those equipment attached to the walls drywall type, among others.
* Project the routes of entry of heavy and/or bulky equipment, compatible with the architectural proposal.
  + - Volumetric scale model, professional finish, at a scale of 1/250 or 1/200, monochromatic, with rigid base exterior setting, verified by the Design, Construction and Equipment Supervisor.

Volume 11: Exhibits

* + - Situation report of the land inspection (on-site verification, record of the visit of the design team).
    - Legal technical documents: Registry certificate, certificate of building parameters, CIRA, zoning and road certificate, urban habilitation certificate, among others.
    - Final land survey.
    - Final soil mechanics assessment.
    - Other preliminary surveys (geological, hydrogeological, seismic hazard, etc.)
    - Water analysis assessment, certified by a laboratory accredited by INACAL.
    - Feasibility of drinking water and sewage services.
    - Accreditation of water availability and groundwater use license, if applicable.
    - Feasibility of electric power services.
    - Telecommunications service feasibility granted by the service providers.
    - Report on the Semi-Detailed Environmental Impact Assessment.
    - Photographic record of the land, surroundings, utility networks, fitting out, nearby roads, among others.
    - Perspectives with photomontage of the existing or notes from different points that allow visualizing all the facades of the building. At least five (5) notes or 3D views.
    - Virtual tour at preliminary project level, showing the most relevant elements of the design, exterior and interior (minimum duration of 3 minutes), in high definition (HD or higher), with great-impact virtual images and sound.
    - Isometric of the uprights of the sanitary, electrical and mechanical installations.

Volume 12: Management

* + - Management plan of this activity of development of the Technical File.
    - Updated schedule or Gantt of the development of this activity.
    - Outcome of the initial coordination and its impact on the Preliminary Project related to the road impact survey.
    - Verification report and technical scopes of the feasibility study, regarding the integral solution and by specialties considered as referential or minimum compliance.
    - Design and Work Notebook, updated to date, with the corresponding signatures.

1. Content of Deliverable 2: Basic File

Volume 01: Executive Summary

* + - Technical data sheet
    - General table of contents
    - Updated general work specifications
    - List of updated drawings by specialty

Volume 02: Architecture and signaling

* + - Updated architectural work specifications
    - Updated list of rooms
    - Updated area chart
    - Resulting Architectural Medical Program
    - Finishes chart
    - Updated signaling work specifications

Volume 03: Safety and Evacuation

* + - Updated safety and evacuation work specifications
    - Calculation of capacity, evacuation time, distances of evacuation routes and means of evacuation.
    - Indication of evacuation exits and internal and external safe zones.
    - Identification and numbering of evacuation stairs, pressurized stairs
    - Specification of fire doors, fire glass and smoke seals. Explain the compartmentation system
    - Risk management in work execution planning

Volume 04: Structures (including temporary works, preliminary works, health and safety on site)

* + - Updated work specifications
    - Structural calculation report
    - Seismic isolation system calculation report
    - Non-structural element calculation report
    - On-site seismic isolator installation procedures

Volume 05: Sanitary Installations

* + - Updated work specifications (including design criteria, feasibility of water, sewage, pluvial, complementary works).
    - Calculation report of all systems, including:
* Cold water (hard water)
* Soft water
* Hot water
* Hot water return
* Firefighting water
* Drainage and ventilation
* Storm drainage and groundwater drainage, if applicable
* Condensate drainage
* Water and sewage treatment plants
* Solid waste collection, transportation and management
* Hemodialysis system, if applicable
* Calculation and dimensioning of equipment
* Irrigation system for green areas

If applicable, add items referring to the maintenance and energy saving system, describing equipment, monitoring parameters, others. Attach a detailed table:

* Equipment to monitor
* Location of the equipment on the drawing
* Parameter per monitored equipment
* System-compatible equipment interface
* System-compatible usage protocol
* Alarm by parameter, configured in the system.

Volume 06: Electrical Installations

* + - Work specifications of the low voltage systems
    - Detailed calculation report in spreadsheets:
* Calculation of the maximum demand of all the projected electrical boards and sub-boards.
* Feeder calculation
* Thermomagnetic circuit breaker calculation, board sizing
* Lighting calculation for typical UPSS and UPS areas
* Calculation of the grounding system
* Selective calculation of the electrical substation and genset equipment.
  + - Work specifications of the medium-voltage utilization system and electrical substation
    - Calculation report of the medium-voltage utilization system
    - Technical specifications of the medium-voltage utilization system materials
    - If applicable, add items referring to the maintenance and energy saving system, describing equipment, monitoring parameters, others. Attach a detailed table:
* Equipment to monitor
* Location of the equipment on the drawing
* Parameter per monitored equipment
* System-compatible equipment interface
* System-compatible usage protocol
* Alarm by parameter, configured in the system.

Volume 07: Mechanical Installations

* + - Work specifications by systems
    - Calculation report:
* Medicinal gas systems (medicinal oxygen, vacuum, dental compressed air, industrial compressed air, medicinal compressed air, gas evacuation); calculation of power plants and distribution networks
* Air conditioning and mechanical ventilation system
* Fuel system (DB5 Oil and LPG); calculations of storage tanks and their distribution networks.
* Steam generation and distribution system; power plant and distribution network calculations
* Cold rooms
* Solar thermal installation equipment
* Pneumatic transport system

Vertical transport system (elevators, bed lifts and service elevators)

If applicable, add items referring to the maintenance and energy saving system, describing equipment, monitoring parameters, others. Attach a detailed table:

* Equipment to monitor
* Location of the equipment on the drawing
* Parameter per monitored equipment
* System-compatible equipment interface
* System-compatible usage protocol
* Alarm by parameter, configured in the system.

Volume 08: Information and communication technologies:

* + - Work specifications
* Description of functional rooms of the IT Area (Communications Service Entrance Room, Telecommunications Rooms, Technical Ducts, Communications Center, Surveillance and Security Center, Supported Service, Equipment Room, Electrical Control Room, Management Room), including design, architecture, distribution schemes, technological improvements.
* Development, detail and adaptation of the considerations indicated in the Preliminary Project.
* Description of the information and communications technology solutions, detailing: description, development technology, principle of operation, logical scheme, list of components of each IT solution.
* Description of the trunk and horizontal channels.
* Chart of IT Rooms, where it shall be indicated, location level, axes, dimensions, area, among others.
* Chart of Data Outputs considered in the IT Solution - Structured Cabling (PC, Telephone, Printers, Projectors, Clock, TV, Nurse Call, IP Cameras, Access Point, Access Control, Biometric Attendance Markers, Network Controller for the Maintenance and Energy Saving solution), indicating the location level of the output, height from the finished floor, environment, quantity, IT solution which it belongs to, among others.
* Chart of equipment and components (Jacks, single or double face plate, data output patch cord, patch panel, patch cord for patch panel, switches, fiber optic tray, GDS, GDP, among others) used by the Structured Cabling system, resulting from the previous chart.
* Chart of the equipment to be considered (servers, gateways, among others) in the IT Solutions that shall use structured cabling as a means of communication, where it shall be indicated: RU’s, IT solution which it belongs to, among others.
* Chart for the Maintenance and Energy Saving Solution, agreed with the specialties of Electrical Installations, Sanitary Installations and Mechanical Installations, indicating: equipment to be monitored, variables of such equipment, range of each variable by which the equipment is in good working order, alarm message in case it is in the indicated range, interface, protocol, location in plan (axes) of the interface of the equipment to be monitored. This documentation must be countersigned by each specialist and by the Project Manager.
* Excel Power Chart of GDS, GDP, secondary cabinets, fire panel, BMS cabinets among others, where stabilized and uninterrupted or general current is required. Information sent to the specialist of Electrical Installations.
* Technical support of the dimensioning of the projected equipment for IT Solutions: Centralized Storage System, Video Surveillance System, Maintenance and Energy Saving System, Image Management System (PASC), among others.

Volume 09: Equipment

* + - Technical Specifications of Equipment, validated by the GRANTOR, considering the specifications elaborated by the IETSI (Institute for the Evaluation of Health Technologies and Research of EsSalud) and developing those that are not in such request.
    - List of equipment by room, including types of furniture, fixed furniture coordinated with architecture; sanitary appliances and accessories coordinated with the sanitary specialty; fire extinguishers coordinated with the safety specialty.
    - Description of type of header panels and type of gas supply column in the operating rooms.
    - Estimate of Computer and Communications Equipment (computers, printers, multimedia projector, telephones, clocks, televisions, etc.) for referral to the communications specialist for consideration in the budget.
    - List of keys used in the drawings, indicating the name or description of the equipment or furniture, and whom it belongs to.
    - General list of Equipment by generic group, indicating quantities including furniture and its classification (Biomedical Equipment, Complementary Equipment, Electromechanical Equipment, Computer and Communications Equipment, Clinical and Administrative Furniture, Surgical Instruments, Vehicles, Linen and Tableware).
    - Pre-installation list, for the Technical File:
* List of Equipment requiring electrical pre-installation.
* List of Equipment requiring sanitary pre-installation.
* List of Equipment requiring pre-installation - medicinal gases.
* List of Equipment requiring pre-installation - air conditioning.
* List of Equipment requiring pre-installation - structural.
* List of Equipment requiring pre-installation - architecture.
* Site Planning of medium and high technology Equipment (if applicable).
* Drawing of critical access routes for each Equipment (if applicable).
* List of Equipment requiring pre-installation - communications.
* Equipment requiring a data point
* Equipment that is integrated into the RIS/PACS system.
* Equipment that is integrated into the HIS system
* DICOM Imaging Equipment
* Non-DICOM Imaging Equipment (VNA)
* Equipment requiring RSS (Remote Service System)
* Equipment providing clinical data of the patient (HL7)
* Equipment that is integrated into the LIS system
* Integrated operating room equipment.
* List of Equipment that is integrated into the BMS system.
* List of Equipment to be integrated to the SCADA system (if applicable)
* Other systems according to technological advances and the computer system (for pathological anatomy, traceability of sterilization center or others).
* List of equipment that requires anti-seismic installation conditions.

Volume 10: Drawings

* + - Architecture
* Layout drawings at work execution level, by level, zones or units, at a scale of 1/50, containing name and code of rooms, finished floor levels, type of partition walls graphically differentiated, notes, legends, table of bays, code of finishes, internal distribution of bathrooms, location and code of fixed furniture, uprights, ducts for installations, location of the electrical sub-station, cistern, evacuation stairs, doors with anti-panic system, others, dimensions to axes and per room, indication of cutaways and elevations, exterior treatment (pedestrian and vehicular ways and green areas), compatible with the specialties.
* Roof drawings at the work execution level, by zones or units at a scale of 1/50 with percentage of slopes, finished roof levels, rain drainage gutters compatible with the sanitary specialty.
* Cutaway drawings at a scale of 1/50 (minimum three (3) per sector) with dimensions of exterior to interior heights by levels, name and code of rooms, finished floor level, axes, plotting furniture, appliances, ceilings, type of partition, others.
* Elevation drawings at a scale of 1/50, all facades, indicating finishes, levels, axes.
  + - Signage
* Signaling drawings by levels, compatible with architecture and other specialties, at a scale of 1/50
* Development of pictograms for all the signs in the orientation signage system, indoors and outdoors.
* Sign and logo on the main facade and where applicable
  + - Safety and Evacuation
* Drawings at a scale of 1/50, compatible with architecture and signaling and other specialties.
* General drawings at a scale of 1/100 or other as appropriate for the purposes of the specialty.
* Evacuation drawings, with evacuation routes, capacity calculations and distances to escape exits (according to RNE safety regulations for health facilities), showing the compatible equipment.
* Specify and indicate door or stairway widths for each route according to regulations. Doors with anti-panic system and emergency stairways.
* Safety drawings, indicating smoke and temperature detectors, ACI buttons, strobe lights, sound alarms (compatible with ICT), emergency lights (compatible with electrical), fire cabinets, sprinklers, hydrants and valves (compatible with Sanitary), fire extinguishers (compatible with Equipment). Compartmentalization of rooms differentiating critical care units and use of PCF, fireproof glass and smoke seals (compatible with architecture), signage corresponding to external and internal safe areas, evacuation flow arrows, prohibitive and indicative safety signs and others (compatible with architecture).
  + - Structures
* Drawings at the work execution level, by level, zones or units, to scale 1/50, compatible with architecture and other specialties.
* Foundation drawings with columns, retaining walls in floor and elevation, seismic isolator pedestals, elevation and sections of foundation beams and others.
* Floor drawings and sections between the building and the isolated block and the accesses such as stairs, ramps and others.
* Floor drawings and sections with the structural configuration of the elevators and service elevators with respect to the isolated block.
* Elevation drawings with the layout of the seismic isolators.
* Structural drawings of beams showing elevations and main sections.
* Drawings of solid or lightened roof slabs (in one or two directions), floor slab of the isolation interface with details of stairs with geometry, dimensions and reinforcement to be used.
* Supporting drawings of lightweight roof trusses or other rational solution showing the engineering for the fabrication of metal structures.
* Drawings of non-structural elements (partitions, ceilings, etc.).
* Structural drawings of exterior works: sidewalks, rigid and flexible pavement, fence walls, others.
* Drawings of cistern, machine and boiler room, generator set, electrical substation, generator set, others, with construction details to be used.

* + - Sanitary Installations
* Drawings at the work execution level, by level, zones or units, at a scale of 1/50, compatible with architecture and other specialties.
* General drawing of cold-water networks (hard water), soft water, hot water, hot water return and irrigation of green areas. Drawings of interior networks at a scale of 1/50.
* General drawing of the fire network, with the location of cabinets, uprights and sprinkler control station. Interior network drawings at a scale of 1/50.
* General drawing of the drainage and ventilation network, with uprights and route of collectors, horizontal and vertical pipes, all points up to the evacuation to the public network. Interior network drawings to scale 1/50.
* General drawing of pluvial drainage network, with uprights, overhead and floor gutters, all points up to the drainage point, condensate drainage. Interior network drawings at a scale of 1/50.
* General drawing including the networks of the hemodialysis system and the machine room with the treatment units and drive equipment. Interior network drawings at a scale of 1/50.
* Drawings of the solid waste collection, transportation and management system, showing the routes.
* Floor and cutaway drawings of water storage structures, pump and equipment rooms, treatment drawings, others.
* Layout drawings of interior sanitary installations at a scale of 1/50.
* Drawings of complementary water, drainage or pluvial networks, as appropriate.
  + - Electrical Installations
* Drawings at the work execution level, by level, zones or units, at a scale of 1/50, compatible with architecture and other specialties.
* Final drawings of feeders, location of general electrical boards, normal and emergency distribution boards and sub-boards, stabilized and uninterrupted voltage system electrical boards, power and special load boards. Dimensioning of manholes, ducts and trays. Use regulatory symbols of attached, recessed and self-supported boards.
* Location of technical rooms with equipment for isolated electrical systems (critical areas such as Operating Rooms, Delivery Rooms, ICU, HCU, Data Center, Hemodialysis, Radiotherapy, others). Chart of feeder code, technical rooms and electrical cabinets of the feeder network.
* Final drawings of electrical, horizontal and vertical uprights.
* Final layout drawings of interior lighting fixtures per room, on the false ceiling drawing (make compatible with architecture), differentiating type of fixture, type of luminaire, type of installation (attached, recessed or hanging), type of control (local or remote). Distribution of autonomous emergency and security lighting equipment (make compatible with safety and evacuation).
* Final drawings of distribution of exterior lighting fixtures.
* Final layout drawings for outlets, differentiating types for general use and stabilized and uninterrupted voltage (for biomedical, computer and communications equipment). Differentiate by installation height (0.40 m., 1.20 m., floor, ceiling). Show the distribution of the equipment, indicating the nominal powers of the equipment, voltage levels and the installation heights of the power or connection outlets. Show all outlets or power or connection outlets. Show the outlets or special electrical outlets required by the specialties (communications, mechanical and sanitary).
* Final drawings of the distribution of power outlets of the air conditioning and mechanical ventilation system equipment. Show the power outlets on the air conditioning and mechanical ventilation equipment floor drawings, indicating the nominal power ratings of the equipment, voltage levels and installation heights.
* Floor drawing of the grounding system indicating the values of each well and the system it belongs to.
* Drawings of the general single-line diagram and single-line diagrams of the boards and sub-boards indicating installed power, maximum demand and the electrical characteristics of all the protection elements and electrical conductors, main and derivative in each single-line diagram compatible with the spreadsheets.
* Drawings with the load charts of all electrical boards and sub-boards.
  + - Mechanical Installations
* Design of power plants and distribution networks for medicinal gas systems.
* Design of air conditioning, heating or mechanical ventilation systems, defining equipment, ducts, air inlet and outlet uprights.
* Design of fuel systems, storage tanks and distribution networks for petroleum fuels BD5 and LPG.
* Design of the steam generation system, boilers, reducing stations, distribution networks to each of the services.
* Design of the vertical transport system, passenger elevators, bed lifts and service elevators, presentation of drawings compatible with architecture and structures.
* Application of the eco-efficiency directive in the systems involved, design of solar collectors, heaters, hot water storage tanks and distribution network.
* Drawings at the work execution level, by level, zones or units, at a scale of 1/50, compatible with architecture and other specialties.
* Mechanical ventilation drawings.
* Air conditioning or heating drawings.
* Cold room drawings.
* Medicinal gas drawings.
* DB5 oil and LPG or natural gas fuel drawings.
* Steam system drawings.
* Genset drawings.
* Vertical transport drawings.
  + - Information and Communication Technologies:
* Drawings at the work execution level, by level, zones or units, at a scale of 1/50, compatible with architecture and other specialties, structured cabling, weak currents, fire detection and alarm and maintenance and energy saving compatible with all specialties.
* Develop all ICT solutions, bearing in mind the requirements of stabilized and general electrical outlets, decorative or precision air conditioning, among others.
* Develop the dimensioning and routing of the channeling: communications tray, cabinets (GDS and GDP) respecting the current regulations.
* Structured Cabling Drawing where are located:
  + - The Uprights (Technical Ducts), which should not be located inside the telecommunications rooms and should be for the exclusive use of the specialty.
    - Trunk Channel (Underground) from the Communications Service Provider’s Design Point to the Communications Service Entrance Room.
    - Trunk Channel (Underground, Communications Tray) from the Communications Service Entrance Room to the Equipment Room, technical ducts shall be used for routing this channeling.
    - Trunk Channel (Underground, Communications Tray) from the Equipment Room to each Telecommunications Room, technical ducts shall be used for routing this channeling.
    - The drawings must include the development of all the data outlets, pull box, channeling (with their respective diameters) from the communications tray to the data outlet, pull box attached to the tray, among others. Indicated in the Excel table of Data Outputs considered in the IT Solution - Structured Cabling, of the Work Specifications.
    - Communication tray channelings to the described outlets, indicating their diameter, which shall be independent from the channelings considered for Weak Currents, Fire Alarm and Maintenance and Energy Saving.
    - Referring to the Maintenance and Energy Saving Solution, these drawings should show the channeling and Data outputs that shall be used in the solution, indicating that for more detail the Maintenance and Energy Saving drawings shall be checked.
    - The drawings must have all the data outputs required by other specialties, Mechanical Installations (Vertical Transport, Pneumatic Transport, medicinal gas alarm panels, among others).
    - The drawings must have the power ratings of the GDS, GDP, secondary cabinets, among others; where stabilized and uninterrupted or general current is required.
* Drawings of Weak Currents, where are located:
  + - Analog TV outlets, speakers, volume control, pull boxes, pull boxes attached to communication tray and others considered by the consultant of the specialty according to experience; indicating location of the outlets, heights from the finished floor, dimensions of the pull boxes (also indicate their height), etc.
    - Communications tray channelings to the described outlets, indicating their diameter. They shall be independent to the channelings considered for the Structured Cabling, Fire Alarm and Maintenance and Energy Saving.
* Fire Alarm and Detection Drawing, where are located:
  + - Smoke/temperature detector outputs, manual station, strobe light + siren, among others considered by the specialty consultant according to his experience.
    - Channeling used for this system indicating its diameter, which shall be independent of the channeling considered for Structured Cabling, Weak Currents, and Maintenance and Energy Saving.
    - Channeling to the Control Boards of the Electromechanical equipment to be monitored by this system: Elevator Control Board, Pressurization Equipment Control Board, among others or those that the designer deems convenient according to experience.
    - Channeling to: the Fire Water Control Valve, smoke detectors at the inlets of the pressurization equipment or some other device that according to the designer’s experience should be monitored by this system.
    - Drawings shall show fire panel ratings (main, additional secondary, etc.) where stabilized and uninterrupted or general current is required.
* Maintenance and Energy Saving Drawing, where are located:
  + - The equipment of the specialties of electrical installations, mechanical installations and sanitary installations to be monitored by the system. The location of the equipment must be according to the location in the drawings projected by the respective specialists.
    - Outlets for network controllers, indicating the height of the finished floor.
    - The cabinets for the network controllers, indicating the height of the finished floor.
    - Channeling of the communications tray to the outputs of the network controllers indicating its diameter, which shall be independent of the channeling considered for Structured Cabling, Weak Currents, and Fire Detection and Alarm.
    - Channelings from the network controllers to the field controllers or interfaces of the equipment to be supervised, indicated by the respective specialists.
    - Drawings shall show cabinet ratings for network controllers and for field controllers; where stabilized and uninterruptible or general current is required.
* If pull boxes are considered, they must indicate height and dimensions.
* Location of the rooms destined for the administration of the solutions of information and communication technologies. Data Center, telecommunications rooms, communications entry room, communications center, surveillance and security center, supported service, among others.
* Location of the service module to the insured person, coordinated with the specialty of architecture and equipment.
* Indicate the independence of channeling for structured cabling, channeling for weak current cabling and channeling for fire detection and alarm cabling and channeling for maintenance and energy saving solution.
* Location of all the cabinets at scale, in the respective rooms.
* Location of antennas of the VHF/HF radio system, coordinated with the specialties of architecture, safety and structures.
* Telecommunications grounding system (considering TMGB, TGB, TBB, communications tray grounding, among others), coordinated with the specialty of electrical installations.

All drawings must include the respective legend, compatible with the specialties of architecture, equipment, electrical installations, mechanical installations, sanitary installations, safety, among others.

* + - Equipment
* Equipment floor drawings at the work execution level (including fixed furniture and sanitary fixtures) at a scale of 1/50 must indicate electrical and data outlets for all equipment requiring it, pre-installation requirements including weight of equipment weighing more than 400kg. Include the list of keys (the indicated information is a precision, verification and update at work level of what was requested in the Preliminary Project stage).
* Drawing with route of entry of heavy, bulky equipment.
* Pre-installation drawing of the equipment requiring it, indicating the location of the supply outlets (water, drainage, energy, data, steam, oxygen, vacuum, compressed air, etc.).

Volume 11: Road Impact (if applicable)

* + - Road impact assessment approved by the relevant entity.

Volume 12: Energy eco-efficiency assessment (in accordance with the Directive: “Hospital Eco-efficiency for New ESSALUD Hospitals.”)

* + - Sustainability
* Justification report of minimum requirements on the thermal enclosure according to subparagraph 6.1.2.1 of the Eco-efficiency Directive.
* Complete simulation assessment and passive optimization of the building according to articles 5 and 6 of subparagraph V.3 of Exhibit V of the Eco-efficiency Directive and justification of subparagraph 6.1.2.2 thereof.
* Justification report of the subparagraphs 6.1.3 and 6.1.4 of the Eco-efficiency Directive on the production of cold, heat, ventilation and hot water.
* Justification report of subparagraph 6.1.5 on lighting equipment of the Eco-efficiency Directive
* Justification report of subparagraph 6.1.6 on the consumption of the lifts of the Eco-efficiency Directive.
* Justification report of requirements on occupant comfort according to subparagraph 6.4 of the Eco-efficiency Directive.
* Justification report of the requirements on the use of materials according to subparagraph 6.5 of the Eco-efficiency Directive.
* Justification report of the requirements on the efficient management of the building according to subparagraph 6.6 of the Eco-efficiency Directive.
* Mechanical diagrams and schemes of thermal production with renewable energies (if applicable), and of interconnection with the mechanical system of the building, compatible and integrated with the specialty of mechanical installations.
* Electrical diagrams and schemes of electrical production with renewable energies (if applicable), and of interconnection with the electrical system of the building, in self-consumption mode, compatible and integrated with the specialty of electrical installations.
* Diagrams of consumption analysis, measurement and monitoring systems according to Exhibit VIII of the Eco-efficiency Policy, compatible with the specialties of electrical installations and communications installations.

Volume 13: Exhibits

* + - Updated perspectives, at Basic File level, with photomontage of existing or sketches. At least five (5) notes or 3D views.
    - Isometric for sanitary, electrical and mechanical installation uprights

Volume 14: Management

* + - Charge for the presentation of the road impact assessment to the relevant entity.
    - Design and Construction Notebook updated to date.
    - Updated Gantt chart of the development of the Technical File.
    - Projects for the supply of basic services of drinking water, sewage, electricity, communications from the point of supply set in the feasibility of services of the corresponding local concessionaires.
    - Projects for the supply of petroleum fuels Diesel DB5 or LPG to obtain the ITF by Osinergmin.
    - Paperwork evidence made before DIGESA to obtain the approval of the Semi-Detailed Environmental Impact Assessment or the corresponding environmental certification.
    - Paperwork evidence of the file to obtain the building license for the project before the corresponding municipality.
    - File to manage the building license.

1. Content of Deliverable 3: Final File

The information contained in this deliverable also considers the information developed, completed, supplemented or finished in the previous deliverable.

Volume 01: Executive Summary

* + - Technical data sheet
    - General documentation table of contents
    - General work specifications of the Technical File
    - Summary Budget
    - Breakdown of overheads
    - List of drawings by specialty
    - Term for the execution of the work
    - Gantt Chart
    - PERT-CPM Scheduling
    - Valuated Schedule of the work progress
    - List of the CONCESSIONAIRE’s minimum construction equipment.

Volume 02: Architecture and signaling

* + - Architectural work specifications
    - Signaling work specifications
    - Architectural medical program.
    - Chart of areas by levels and by UPSS and UPS.
    - Finishes chart
    - Technical specifications per architecture and signaling budget item
    - Architecture and signaling budget
    - Unit price analysis
    - List of inputs
    - Estimates spreadsheet

Volume 03: Safety and Evacuation

* + - Work specifications
    - Technical specifications by budget item

Volume 04: Structures (including temporary works, preliminary works, health and safety on site)

* + - General work specifications
    - Detailed calculation report, analysis and general structural design.
    - Calculation report of the seismic isolation system
    - Calculation report of non-structural elements
    - Technical specifications per budget item
    - Technical specifications of the insulation system according to the technology to be used
    - Technical specifications of materials and construction processes
    - Item corresponding to Safety Equipment and Complementary Collective Prevention for COVID-19, in accordance with MR No. 87-2020-VIVIENDA or current applicable regulation.
    - Budget
    - Unit price analysis
    - List of inputs
    - Estimates spreadsheet
    - Manufacturing, testing and commissioning schedule for seismic isolators.
    - Seismic isolator maintenance program with a timetable schedule of activities.

Volume 05: Sanitary Installations

* + - Work specifications
    - Calculation report
    - Technical specifications per budget item
    - Budget
    - Unit price analysis
    - List of inputs
    - Estimates spreadsheet
    - Specialty equipment maintenance program with the timetable schedule of activities.

Volume 06: Electrical Installations

* + - Work specifications
    - Calculation report
    - Technical conformity of the project for the use of medium voltage for the electricity supply of the health facility, issued by the concessionaire company of electricity distribution in the area.
    - Technical specifications per budget item
    - Quotation (low and medium voltage utilization system)
    - Unit price analysis
    - List of inputs
    - Estimates spreadsheet
    - Specialty equipment maintenance program with the timetable schedule of activities.

Volume 07: Mechanical Installations

* + - Work specifications
    - Calculation report
    - Technical specifications per budget item
    - Budget
    - Unit price analysis
    - List of inputs
    - Estimates spreadsheet
    - Specialty equipment maintenance program with the timetable schedule of activities.

Volume 08: Information and Communications Technologies:

* + - Work specifications
    - Development, detail and adequacy of the considerations indicated in the Basic File.
    - Technical specifications of IT solutions equipment and devices.
    - Technical specifications by budget item compatible with the budget and unit price analysis of equipment and devices for IT solutions.
    - Timetable schedule for the implementation of ICT solutions
    - Budget
    - Unit price analysis
    - List of inputs
    - Estimates spreadsheet
    - Quotations

Volume 09: Equipment

* + - Work specifications
* List of Equipment requiring sanitary registration.
* List of Equipment requiring all-risk or adverse event insurance.
* List of Equipment with respective international certification (ISO 13485, IEC 60601, DIN)
* Conditions for the storage of Equipment by generic group.
* Climatic conditions (m.a.s.l.; climate, humidity, atmospheric pressure, among others) for the Equipment to work optimally.
* List of Equipment complementing and ensuring the correct operation.
* List of Equipment requiring consumables or supplies for its correct operation.
* Considerations for the acquisition of Equipment by type (formats, guarantees, sustainability, among others).
* List of instruments, simulators, analyzers or others that are required at the commissioning of the Equipment for its parameter verification.
* Support for the provision of Equipment not considered in the feasibility assessment.
  + - Equipment Plan.
    - Equipment Schedule, includes the approval and acquisition of the Equipment (timeline vs. budget item) and the corresponding progress certification, foreseeing the acquisition of those requiring pre-installation works for their timely provision during the execution of the work.
    - Equipment Replacement and Updating Plan (PRAE for its acronym in Spanish).
    - Conditions of installation, pre-installation and operational tests, pre-operational, vacuum tests, including no load and commissioning.
    - Protocols, preliminary tests, positioning, installation, according to manufacturers or suppliers.
    - Warranties, manuals, guides, formats and others. Technical and user training video.
    - Training programs in use and service of Equipment, SIGI-NS, HIS, other computer systems.
    - Equipment maintenance program, at all costs assumed by the CONCESSIONAIRE, including cost sheets for parts, pieces and labor.
    - Technical specifications.
    - Schedule of approval, acquisition, pre-installation and commissioning of the equipment.
    - Referential budget of the Equipment
    - Quotations

Volume 10: Drawings

* + - Architecture
* Position and localization plan, with regulatory format, compatible with the topographic drawing. Include immediate surroundings, accesses, boundaries, dimensions, magnetic north, road sections, data from the certificate of urban and building parameters, Project data.
* General distribution drawings, all levels, including basement or technical floor, at a scale of 1/250, with axes compatible with specialties, general dimensions, inclusion of topographic lines in the corresponding levels, finished floor levels, integral approach, pedestrian and vehicular accesses, exterior treatment, sidewalks, ramps, gardens, fences, guard houses, electrical substation, cistern, pump room, environmental health, data center, communications rooms, technical rooms, ducts and uprights compatible with specialties, patios, terraces, spaces for mechanical air system equipment, others.
* General roof drawings, at a scale of 1/250, with axes and general dimensions, all blocks or volumes, levels of finished floor, levels of finished roof.
* Drawings of general cutaways, at a scale of 1/250, with axes and general dimensions, including topographic survey of the land, including perimeter and boundaries, sidewalks, exterior tracks, others (minimum six (6) cutaways), finished floor levels, finished roof levels.
* General and detail drawings, specifications and other landscape treatment.
* General elevation drawings, at a scale of 1/250, with axes, finished floor levels, finished roof levels.
* Floor drawings by level, sector, zone or unit at a scale of 1/50 compatible with all specialties.
* Roof drawings at a scale of 1/50 of all sectors, zones or units.
* Cutaway drawings of all sectors, zones or units (minimum 3 per sector) at a scale of 1/50, compatible with all specialties.
* Elevation drawings of all sectors, zones or units at a scale of 1/50.
* Modulation drawings and detail of false ceiling.
* Drawings of sections and details of finishes.
* Drawings of bays (partitions, doors, windows, grills, others).
* Details of stairways, ramps.
* Details of bathroom.
* Details of wood, metal, glass carpentry.
* Details of furniture
* Construction details
* Details of gardening and exterior works
  + - Signaling
* Signaling drawings by levels at a scale of 1/50 (signs shall be plotted at a scale of 1/25 for better appreciation).
* Pictogram development drawing of all the signs to be used in the system of orientation signage.
* Sign and logo of main facades.
  + - Safety and Evacuation.
* Drawings developed at a scale of 1/100 or 1/50 as appropriate for the purpose of the specialty and the Project.
* Construction and installation detail drawings, at a suitable scale (1/25, 1/10, 1/5, 1/2.5).
* Identify and assign names to evacuation and pressurized stairways according to the evacuation plan. Establish compartmentalization of critical care and general services units.
* Evacuation drawings, interior and exterior, indicating evacuation routes, capacity calculations and distances to escape exits (according to the safety regulations of the National Building Regulations for health facilities).
* Specify and place door or stairway widths for each route as required by the standard.
* Safety drawings, interior and exterior, indicating signage for smoke and temperature detectors, ACI buttons, strobe lights, audible alarms (compatible with communications) emergency lights (compatible with electrical), fire cabinets, sprinklers, fire hydrants and valves if required (compatible with sanitary), fire extinguishers (compatible with equipment), fire extinguishers (compatibility with sanitary) fire extinguishers (compatibility with equipment) compartmentalization of rooms and use of PCF, fireproof glass and smoke seals (compatibility with architecture) signage corresponding to external and internal safe areas, evacuation flow arrows, prohibitive signs and safety indications and others.
  + - Structures
* Final foundation drawings and construction details referring to the geometry and dimensions of the shallow or deep foundations (isolated footings, foundation slabs or piles), retaining walls in plan and elevation, columns, elevation and sections of foundation beams and others.
* Final drawing indicating the geometry, dimension and location of the seismic isolators according to the technology to be used and details referred to the supporting plates (dimension and thickness) as well as anchor bolts (length, diameter, quantity and others).
* Final drawings of the seismic isolation interface in plan with detail and location of the seismic isolators indicating by colors the types of supports to be used, their characteristics and technology.
* Final drawings in plan and sections with details of the solution regarding the structural configuration of the lifts and service elevators with respect to the isolated block.
* Detail of concrete heads where the seismic isolation devices shall be installed.
* Final elevation drawings showing the layout of the seismic isolators.
* Drawings of retaining walls with cross and longitudinal sections as well as construction details.
* Final drawings of beams showing elevations and main sections.
* Final drawings of solid and lightened roof slabs (in one and two directions) and floor slab of the isolation interface, also include details of stairways where the geometry, dimensions and reinforcement to be used are indicated.
* Final drawings referring to light covering supports, truss type or other rational solution, where the basic engineering for the manufacture of metallic structures is shown.
* Final drawings of non-structural elements (partitions, ceilings, etc.)
* Final structural drawings of the exterior works: sidewalks, rigid and flexible pavement, fence walls, etc.
* Final drawings of cistern and machine room with construction details to be used.
* Drawings of platforms or base levels where the buildings, pavements and free areas shall be located, including the peripheral levels outside the land.
* Technical Specifications Drawing indicating characteristics and information of the materials of the structural elements, including the technical specifications of the seismic isolation devices.
* Retaining Walls Drawing. It contemplates the drawing of location of walls and their foundations and drawings of cutaways and details of each type of retaining wall.
  + - Sanitary Installations

Drawings at the sanitary installation execution level, at a scale of 1/50 and others in the case of construction details, compatible with the technical specifications, calculation reports and with all the specialties.

* Drawings of the cold-water system, soft water, hot water, hot water return, irrigation water for green areas and their respective details.
* Drawings of the hemodialysis system and the machine room with treatment units, drive equipment and their respective details.
* Drawings of the firefighting system and its respective details.
* Drawings of the drainage and ventilation system and condensate collection with their respective detailed drawings.
* Drawing of the pluvial system with its respective details.
* Solid waste management drawings, including equipment.
* Water and wastewater treatment plants with their respective detailed drawings.
* Drawings of complementary works of the drainage system.
* Drawings of complementary works of the pluvial drainage system to existing systems.
* Drawings of the machine room and its respective details.
* If applicable, drawings of complementary water, drainage or pluvial works.
* Isometric drawing and scheme of hard, hot, soft, return, osmosis, drainage and ventilation networks and ACI (fire water).
* Isometric drawing of the pump room with the development of the corresponding pumping systems and networks.
  + - Electrical Installations

Drawings at work execution level of Electrical Installations, at a scale of 1/50 and others in the case of construction details, compatible with the technical specifications, calculation reports and with all the specialties.

* Feeder and board routing drawings.
* Electrical upright drawings.
* Interior lighting drawings.
* Exterior lighting drawings.
* Power outlet and output drawings.
* Electrical power supply and control drawings for the air conditioning and mechanical ventilation system equipment.
* Grounding system drawings. Construction details.
* General single-line diagram plan.
* Single-line diagram drawing of all the projected electrical board and sub-boards.
* Layout drawing of the electrical substation, generator set and switchboard room compatible with the medium voltage utilization system file (with the conformity of the area’s electric power distribution Concessionary Company) Elevations, cutaways and details must be shown.
* Diagrams of analysis, measurement and monitoring system diagrams of consumption according to the Eco-efficiency Directive, compatible with the Communications specialty.
* Drawing of legends and details of electrical installations.
* Detailed plan of electrical outlets in the communications center and in the data center.
* Detailed drawings of electrical outlets in the Machine Room.
* Detail drawings of electrical outlets in the solid waste treatment plant, if applicable.
* Detailed drawings of electrical outlets in the waste water treatment plant, if applicable.
* Detailed drawings of electrical outlets in critical areas as operation rooms, intensive care room, among others.
* Intensive surveillance unit, intensive care rooms, hemodialysis rooms, among others.
* Project of the use system in medium voltage and approved electrical substation with the approval signature and seal of the electric power distribution concessionaire company in the area.
  + - Mechanical Installations

Work execution drawings of mechanical installations, at 1/50 scale and others in the case of construction details compatible with technical specifications, calculation reports and all the disciplines.

* Drawing of the medicinal gas system.
* Design drawings of the oxygen, vacuum, compressed air centers.
* Drawings of the DB5 and LPG fuel systems.
* Design drawings of fuel centers, storage tanks, distribution networks and generator.
* Drawings of the vertical transport system.
* Drawings of the air conditioning system, design and distribution of air conditioning and heating systems.
* Drawings of the steam generator system.
* Design drawing of the power house.
* Solid waste treatment plant, if applicable, power supply.
* Drawings of mechanical ventilation systems. Detail of installations.
* Drawings of the pneumatic transport system, design of comprised air center and supply of distribution networks.
* Drawings of the eco-efficiency study systems in systems with intervention, design of solar collectors, heaters, hot water storage tanks, among others.
  + - Information and Communications Technologies:

Work execution drawings of information and communications technologies, at 1/50 scale and others in case of construction details, compatible with the technical specifications, calculation reports and all the disciplines.

* Development, detail and adaptation of scopes, drawings and other, as per the project development, mentioned in the requirements of the Basic File.
* Location map, distribution of the computer center (considering the technical floor, false ceilings, if any, complimentary areas, uninterrupted power supply, electrical protection equipment, temperature control system, detection system, warning and automatic fire extinguishing, access control system, security cameras system and monitoring, structured cabling system, equipment, among others) compatible with all the involved disciplines.
* One-line drawings with all the information and communication technologies solutions.
* Drawings must show the dimensioning and routes of channels: communication trays, cabinets (GDS and GDP) according to the development proposed by the CONCESSIONAIRE and meeting the Applicable Laws and Provisions.
* Communication Channels, all the channeling from the external plant, internal plant and the main distribution cabinet of the data center; the type of channeling, dimensions, height, protection (in heavy traffic areas) must be mentioned, among others.
* Location of the areas assigned for the administration of information and communications technologies solutions: data center, telecommunication rooms, communication inlet room, communications center, security and surveillance center, IT support, among others.
* Distribution of all the outlets, all the information and communication technologies solutions and their corresponding channels mentioning their diameters in accordance with the established in the ANSI/TIA-569-C-2012 technical standard, Commercial Building Standard for Telecommunications Pathways and Spaces.
* Mention the channeling independence for: structured cabling, weak currents cabling and detection and fire alarm cabling.
* Location of all the proposed cabinets at scale in the corresponding areas.
* Antennas location of the VHF/HF radio system that must be coordinated with the architecture, safety and structure disciplines.
* Grounding system of telecommunications that must be coordinated with the electrical installation discipline.
* Typical cuts of underground channeling mentioning the presence of electrical, sanitary, mechanical channeling among others, indicating the distance among them and depths (compatibility with other disciplines is important), use of concrete ducts in places with heavy traffic.
* Typical drawing of water pipelines, sewage pipelines and pipelines of any other liquid, and ventilation ducts with communication trays. It must be compatible with the corresponding disciplines so the communication trays in those crossings pass over the ducts at a minimum distance of 0.30m.
* Typical detail drawing of communications tray installation showing: position of the hanging tray, position of the attached tray (for vertical channeling use), trays connection (connected in all the contour and not only at the sided), connection of seismic joints, grounding of trays, among others.
* Longitudinal and cross-sectional typical cut indicating the final location of equipment, devices, cabinets, entry of communications tray, outlets and electrical boards, medicinal gas panels, furniture, etc. (compatibility with other disciplines is necessary) of the following rooms:
  + - Communications inlet room
    - Telecommunications room
    - Communications center
    - Security and surveillance center
    - IT support
    - Equipment room
    - Administration room
    - Electric control room
    - Upright

Detail of the primary and secondary distribution cabinet mentioning the location of devices and equipment of IT solutions (fiber optic tray, patch panel, switches, servers, UPS, PDU, among others.

* Any additional details that the supervision deems convenient for a best understanding of the IT solutions implementation.

All the drawings must include the corresponding caption and must be compatible with the disciplines of architecture, equipment, electrical installations, mechanical installations, sanitary installations, safety, among others.

* + - Equipment

Work execution drawings of equipment at 1/50 scale and others, in case of construction details, compatible with the technical specifications, list of equipment and with all the specialties.

* Distribution drawings of equipment at a work execution level and compatible with other specialties. They must be included in the key list drawing.
* Drawing with the entry route of the heavy and large equipment.
* Drawing with pre-installation reference details of the equipment, when needed, indicating the location of the supply’s outlet (water, sewage, power, data, steam, oxygen, vacuum, compress air, etc.). Description and development of reinforcements in partition and/or walls compatible with the architecture.
* Equipment drawings in accordance with the Equipment List per areas and Services. Preparation of dynamic blocks containing information related to:
* Floor or level
* Sector
* UPSS
* Room Code
* Room
* Equipment key
* Equipment description
* Generic group
* Recoverable condition
* Preparation of equipment layers per generic group:
  + Medical or Biomedical Equipment
  + Clinical and Administrative Furniture
  + Complimentary Equipment,
  + Surgery Instrumentation
  + Vehicle
  + Electromechanical Equipment
* Creation of pre-installation layers of equipment – electrical, sanitary, temperature control, medicinal gases, communications (data), structures and others associated.

All drawings must be compatible with each discipline, as well as with the calculation reports and the technical specification of each discipline, (latest version without observations) considering those that belong to the development of the Basic File, not mentioned in this item.

Volume 11: Road Impact Study (if applicable).

* + - Road Impact Study (approved)

Volume 12: Eco-efficiency Energy Study (final version)

Volume 13: Exhibits

* + - Topographical survey and its corresponding report
    - Soils Mechanics Study
    - Geological Study
    - Hydrogeological Study
    - Seismic Risk Study
    - Other preliminary studies
    - Favorable Technical Report for the use of fuel (ITF)
    - Building License and authorizations for work execution
    - Protocols and tests of all systems
    - Operations and Maintenance Manual
    - Commissioning Considerations
    - Updated photographic record
    - Perspective with photomontage of the existing or updated notes. Minimum 5 external perspectives and 5 internal decorated perspectives, in A4 format, full color in high resolution.
    - BIM Modelling
    - Work Design and Notebook.
    - Risk management for the works execution planning
    - Quotations of materials and supplies per discipline
    - Scale Model (see requirements in subparagraph 3. Requirements for documents submission, paragraph b))
    - Explanatory video and with updated virtual tour (minimum duration of 5 minutes) in high definition (HD or superior) and with high impact sound.

Volume 14: About Management (final and latest version)

Temporary Works

The CONCESSIONAIRE shall submit the file with the temporary works drawings at 1/100 or 1/50 scale, if applicable, as well as the work specifications, technical specifications, estimations and budget.

Management Documents

THE CONCESSIONAIRE shall prepare, fill-up and attach the following documents:

* Supporting Report of the Public Investment Project changes during the investment phase regarding the results of the Technical File preparation at a definitive study level with the estimated amount in the pre-investment study at a feasibility level and declared viable).
* Areas Comparative table of the architectural program rooms of the pre-investment study at a feasibility level and declared viable with the room areas resulting from the Project.
* Other documents requested by the Unique Text of Administrative Procedures of the corresponding Municipality.

1. **Requirements for the submission of documents**

All the documents to be submitted by the CONCESSIONAIRE as part of the preparation of the Technical File must comply with the establishments in the National Building Regulations (RNE).

1. Requirements for the submission of written documents – All the deliverables

They shall be submitted in 80g/m2 Bond paper, white color, A4 size (210 x 297 mm) or multiples, as appropriate. Sheets must have the logo of the CONCESSIONAIRE. All the required files must be submitted in non-editable digital format (with .pdf extension) and in editable format (.doc, xlsc, etc.). The calculation tables of any nature must be submitted in original format to allow the effective verification of the results.

The documents shall be duly paged, with the index or table of contents, submission date, labeled, with an image or realistic photo in the front page and the name of the project. The printing of the text must be of optimal quality (first printing) by a bubble or inkjet printer (ink cartridge) or laser system. The Software to be used will be Microsoft Word Office.

All documents must be clearly printed.

1. Requirements for the submission of graphic documents – All the deliverables

The CONCESSIONAIRE shall submit drawings and graphics of each discipline, in one (1) copy for its evaluation and after the “no objection” of the deliverable, one (1) second printed copy shall be submitted, as well as, two (2) copies (scanned with signatures) in PDF format and one (1) copy with digital files (dwg, rvt, doc, xlsx, mpp, etc.), stored in any of the following resources: (USB, CD-ROM, DVD, Blue Ray).

Drawings must be submitted printed in 90g/m2 “Bond” paper, “A” format (ISO/DIN), folded in A4 format, in polypropylene clipboards (transparent film) and filed in white-color laminated pioners with three holes, labeled and with an image or realistic photo in the front page and the name of the project in the spine (in coordination with the Design, Construction and Equipment Supervisor).

All drawings must be clearly printed.

Additionally, architecture drawings must be approved and signed by the safety specialist in civil defense as conformity.

1. Requirements for the Scale Model Submission – Preliminary Project, Technical File

The CONCESSIONAIRE shall present a simple volumetric scale model for the Preliminary Project and a detailed volumetric scale model for the Technical File. High quality material shall be used. The scale model shall be 1/200 or 1/100 scale or other that agrees the previous coordination with the Design, Construction and Equipment Supervisor.

The product shall be a scale model with the topographical representation of the land and part of the environment, using high quality materials as model cardboard, plastic, acrylics, etc.

It shall have a melamine rigid base with melamine frames and thick bolted edges to ensure its stability and transport. It shall include the letterhead with the names of the Project, the GRANTOR and the CONCESSIONAIRE.

It shall have a geodesic dome of transparent thick acrylic, attached and secured to the base to guarantee its safety and transport.

1. **BIM and Modelling Requirements**

The CONCESSIONAIRE shall consider the following main objectives for the BIM Modelling:

* Design of disciplines under the BIM methodology
* Interference’s detection
* Coordination and compatibility
* Collaborative and work and Networking
* Calculation of areas
* Others related to the Contract activities:
  + Planning of 4D work
  + Models of efficiency energy
  + Visualization on site
  + Administration of the building over time

The CONCESSIONAIRE shall submit the drawings complying with the specifications herein for the preparation and presentation with the BIM – REVIT technology (Architecture, Structure and MEP) or any similar. Also, the submission of drawings shall be in CAD format – dwg.

The CONCESSIONAIRE shall consider, as minimum, the normative document named BIM Modelling Specifications of the Terms of Reference for the Preparation of the Technical File, GCPI, SGED, ESSALUD and governed by the establishments set in this subparagraph.

In addition, the CONCESSIONAIRE shall submit the BIM Model of the Project with all the disciplines that may apply, as well as its original files. The detail level of the BIM model, consistent with the different architectural and engineering elements, shall be in line with the description of each deliverable considering the following:

* The BIM Model detail level of the Preliminary Project design for the deliverable 1: Preliminary Project shall be LOD 200.
* The BIM Model detail level of basic design for the deliverable 2: Basic File shall be LOD 300.
* The BIM Model detail level of the detailed design for the deliverable 3: Final File shall be LOD 450.

The CONCESSIONAIRE shall consider that this subparagraph has a direct relation to the BIM Methodology described in Exhibit 14; therefore, the product or BIM model specified herein shall allow its use in the Project horizon, that is to say, its use in the Construction Activity of the Infrastructure, the provision of Equipment, Commissioning, and Operation and Maintenance.

The CONCESSIONAIRE shall active aspects referred to quality control and good practices to avoid the duplication of geometry, draw in 3D, incorporation of theoretical elements and software native notes, among others. Likewise, the CONCESSIONAIRE shall provide the facilities when applicable to the Design, Construction and Equipment Supervisor.

1. **Design Criteria**

The CONCESSIONAIRE shall previously visit the site to verify and make the surveys of the land that deem necessary where the Project shall be developed to achieve a better support for its proposal, its technical approach or conceptualization of the architecture design on its own, cost and risk.

The Architectural Medical Program of the definitive study shall consider the statements in the applicable and effective MINSA’s Health Technical Standard at the health facility level and category, or the effective regulation to develop the Project or the best medical functional practices or technological solutions or other type of technical-healthcare criteria prior supporting documentation of the CONCESSIONAIRE with the technical opinion of the Design, Construction and Equipment Supervisor and the non-objection of the GRANTOR, without infringing the Applicable Laws and Provisions specifically of the health sector. The non-objection procedure is adjusted to the period terms and deliveries of the Technical File (See the Contract Clause 8.9).

The development of the architectural project comprises, among others, the review, interpretation, preparation or validation of the Architectural Medical Program and the evaluation of the areas and the proposed ones, in accordance with the Applicable Laws and Provisions or other considered without infringing its technical scopes.

The technology, installations, and Equipment to be implemented shall be performed in accordance with the Applicable Laws and Provisions, specially, the ones of the health sector with the implementation and consolidation of the CONCESSIONAIRE experience in the design, construction and operation and maintenance of the hospital infrastructure. The structural system is proposed according to the provision of the architectural project, and complying with the National Building Regulations and international standards ACI, ASTM, AISC.

The technological validity of construction that will promote a better habitability and comfort for the new infrastructure is the material construction to be chosen according to the availability of resources and guaranteeing the safety and health of the establishment.

Easy operation and maintenance of electrical, sanitary, mechanical installations. The CONCESSIONAIRE shall consider criteria of appropriate lighting, ventilation and suitable areas for the use, cleaning, repair, inspection, and maintenance of the electrical and sanitary installations of the health facilities. To that effect, the National Building Regulations shall be considered (GE. 040, Titles III.3 and III.4).

The description of the architectural approach is made breaking down the analysis in the following considerations:

* According to the spatial, formal, and functional characteristics of the UPSS and UPS where the deployment of the land shall be analyzed and defined, the sunlight, the wind direction, the geography and weather, external vehicle roads and pedestrian walkways, the feasibilities of service, as well as physical characteristics of the unit and the circulation flows per type of user and materials.
* According to the zoning and flows between UPSS and IPS and the type of finishing of the UPSS and UPS, defining the architectural group of the Proposal at a preliminary project and its compatibility with the preliminary proposal of safety and evacuation, structure and installations. In this analysis, the punctual considerations of the UPSS and UPS shall be emphasized where any specialized treatment or considerations may be required (for example: surgical center, ICUs, imaging area, others).
* According to preliminary constraints that impact the design or conception of the infrastructure, such as: the survey of the land, preliminary studies (soil mechanics study; risk assessment report; environmental impact; road impact studies; eco-efficiency, landscapes, urban, bioclimatic studies, etc.).
* The rooms and areas proposed shall be stated with the defined criteria considering the appropriate ergonomic and anthropometric evaluation. Some of the spatial characteristics of the areas or zones shall be determined by the Equipment that request the infrastructure.
* The health facility shall have a spatial, formal, functional treatment in accordance with the applicable Laws and Provisions, the architectural proposal at a zoning level and the preliminary project shall be kept to the effective health technical standard and other applicable and issued by the GRANTOR.
* As complimentary regulations, the project shall take considerations of the National Building Regulations. In dimension and location terms, urban development drawings, coordinated development drawings, annual operation drawigns, and others shall be consulted.

The CONCESSIONAIRE shall consider at least the following main principles or criteria, without limitations, that will govern its proposal or hospital design on:

* + 1. Safe Hospital

The criteria defined by the “National Policy of Safe Hospitals against Disasters contained in the Action Plan 2017-2021”, approved by Supreme Decree No. 027-2017-SA, shall be applicable; as well as with the Hospital Safety Index – Guide for Evaluators of the Pan American Health Organization (PAHO) – World Health Organization. [[9]](#footnote-9) Likewise, the Sendai Framework for the Resolution of Disasters Risk 2015-2030 shall be applicable and used as reference for the UNO members countries.

* + 1. Humanization of spaces

The CONCESSIONAIRE shall consider safety and privacy criteria of patients and medical staff that contribute to the humanization of the physical room, the promotion of the individual safeguard and the elevation of dignity of each person as a user of the health facility. The quality of the building is presented as a response of users’ requirements.

The CONCESSIONAIRE shall guarantee that environmental conditions as extreme temperatures, contaminated air, disturbing noises or poor lightning and others shall not exist.

* + 1. Eco-efficiency

The CONCESSIONAIRE shall apply LEED (Leadership in Energy and Environmental Design) principles considering the impacts on the construction design and Operation and Maintenance.

The CONCESSIONAIRE shall consider the established in chapters 6.1, 6.2, 6.3, 6.4, 6.5 y 6.8 of the direction proposal “Eco-efficiency Policy for existing facilities”.

* + 1. Intelligent and Energy Management Systems

The CONCESSIONAIRE shall establish procedures or methodologies to quantify the rational use of energy resources in all its ways to be implemented in the new infrastructure.

To achieve that, the Ministerial Resolution No. 186-2016-MEM/DM[[10]](#footnote-10)  dated May 16, 2016 shall be used as reference, or a regulation that amends of replaces it, whereby criteria are approved for the preparation of energy audits to be made by public institutions.

1. **Design Subcontractor**

The CONCESSIONAIRE may contract an architectural and engineering company or office that provides the design service and the preparation of the Technical File. Said company or office shall certify, as minimum, the execution of two (2) design contracts of hospital infrastructure that comply with the following characteristics:

1. The experience is certified with hospital infrastructure projects whose simple sum of designed area has been at least of fifty hundred square meters (50.000m2) provided that at least one of the certified projects has been of at least thirty thousand square meters (30.000m2). The design must have been made in the past ten (10) years.
2. For purposes of the foregoing, a hospital infrastructure shall mean the one intended to provide health services, provided that it includes areas for the provision of at least the services of imaging, emergency, hospitalization, intensive care and surgery.

Only square meters of projects where the design has been developed for a new construction, an extension or a total replacement shall be acceptable. The urbanism area, the external area, the public area and parking in surface or in external areas shall not be considered. Total replacement shall mean the work where a total demolition of the existing structure took place.

1. **Components of the Technical File**
2. Feasibility of Services:

It refers to the feasibility of electricity, water and drainage (sanitation) and telecommunications of the property where the Hospital and PCC will be located. The CONCESSIONAIRE must carry out the procedures and procedures before the service provider companies in a timely manner in order to comply with the scheduled delivery dates of the components of the Technical File.

As part of the preliminary work for the development of the Projects, the CONCESSIONAIRE must coordinate with public or private service companies, until the issuance or update of the feasibility of water and sewage service, electricity service and telephone and communications service is achieved that he will use for the development of the Technical File as well as those considerations that this implies (complementary technical studies, complementary works, facilities, technical studies, complementary networks, others) at its cost, account and risk. As a reference, he may consider the documents in this regard in the feasibility study declared viable or other updated ones provided by the GRANTOR.

* + - 1. Feasibility of the water and sewage service

The CONCESSIONAIRE must process and achieve the feasibility of the water and sewage service before the public service provider company, assuming the integrity of the calculations, documents, requests, procedures or others, prior coordination with the Grantor. If this is the case, he must assume the considerations that are required for the correct installation of secondary networks and of any nature that the company stipulates so that the Projects have the expected supply.

* + - 1. Feasibility of electricity service

The CONCESSIONAIRE must process and achieve the feasibility of the electrical service before the company providing the public service as well as the setting of the design point for the preparation of the project of the medium voltage use system and electrical substation assuming the integrity of the calculations, documents, requests, procedures or others, prior coordination with the Grantor. He must prepare the aforementioned project according to what is established in the current R.D. Nº 018-2002-EM / DGE, until obtaining technical approval from the company providing the public electricity service. If this is the case, he must assume the considerations that are required for the correct installation of secondary networks, medium voltage lines and of any nature that the company stipulates in order that the Projects have the expected supply.

* + - 1. Feasibility of the telephony and communications service

The CONCESSIONAIRE must process and achieve the feasibility of the telephony and communications service with the company providing the public service assuming the integrity of the calculations, documents, requests, procedures or others, prior coordination with the GRANTOR. If this is the case, he must assume the considerations that are required for the correct installation of secondary networks and of any nature that the company stipulates in order for the Projects to have the expected service.

1. Preliminary Studies

There is a need to carry out the topographic survey, the definitive soil mechanics study - geotechnical (or terrain vulnerability), the seismic hazard study, the hydrological and hydrogeological study, the geophysical study and the environmental studies, or others that the CONCESSIONAIRE deems it pertinent for the correct preparation and design of the Projects, assuming full responsibility for the results obtained and their utilization and use in the Projects.

The Preliminary Studies also contemplate the management, monitoring and obtaining of the zoning and roads certificate and certificate of urban and building parameters in the corresponding Municipality, which must be managed in a timely manner, the scope of which must be taken into account in the proposal of the preliminary architectural design.

The CONCESSIONAIRE must carry out a field study and prepare a situational report, which must contain:

* Comprehensive field inspection and on-site verification.
* The certificate of urban and building parameters, urban planning drawings (subdivision and road sections), issued by the corresponding Municipality.
* The feasibility of drinking water, sewage, electricity, communications, LPG, oil (Diesel 2), and others, issued by the corresponding entities or concessionaires.
* Evaluation and report of the climatological aspects and of the characteristics of the communication routes; as well as the availability of construction materials and their respective transportation.

The GRANTOR will provide access facilities to places and people related to the development of the Projects. The CONCESSIONAIRE must carry out the procedures before the service provider companies in a timely manner in order not to alter the scheduled delivery dates of the Technical File.

1. Soil Study

The soil study mechanics for the foundations of Hospital and PCC buildings is the study that must meet at least the content, form and background requirements established in Standard E.050 - 'Soils and Foundations' and Standard E .030 - Earthquake Resistant Design of the National Building Regulations.

For this purpose, the CONCESSIONAIRE must carry out at least the following activities, which includes all the tests, analyzes and repairs that are required:

* Excavations must, at all times, be carried out under the permanent direction and supervision of the responsible professional.
* Includes the tasks of: mobilization and demobilization of equipment, tools and personnel, demolition of slabs or floors (if necessary), excavations, sampling, filling and compaction of pits (covering), replacement of floors or gardens, the elimination of surpluses, as well as any other task necessary for the service and for the restitution of the elements of the infrastructure that are affected during the explorations.
* Cabinet work: preparation of the technical report and corresponding certifications.
* The study must be adapted to the specific needs of the Project, increasing the scope of any of its items, if the conditions found require it; However, the following works and aspects are considered as a minimum:
  + In said study, it must analyze and evaluate the type of soil for foundation purposes and slope stability, as well as recommend the type of foundation and retaining wall, considering the architectural proposal and, if applicable, the soil treatment for the improvement of its bearing capacity.
  + The Project considers the use of seismic isolators, which will have a technical floor (basement) that must be considered to determine the depth of the investigation for the pits; Likewise, in non-isolated buildings, the foundation level must also be defined and calculated.
  + During the execution of field activities, will be responsible for ensuring safety, for which he must take the necessary measures to avoid personal accidents or material damage.

Fieldworks:

* Study of crushed stone quarry, concrete, coarse sand, fine sand, indicating the description of the quarry, location, access, and its study, area, volume of material, period of exploitation, performance and characteristics of the material.
* Electrical resistivity test determined by the OHM of the soil.

Laboratory tests:

* Chemical analysis (SO4, SST, CL, PH) in soil and water.
* Proctor and CBR tests.
* Direct cut test.
* Special tests to be required
* Appropriate test to evaluate the shear strength of the soil according to the conditions found in the field.
* Test to estimate the parameters involved in estimating the settlements.
* Percolation test.

Analysis:

* The slope stability analysis will be carried out (necessary parameters).
* The analysis of possible footings in the adjoining land or existing buildings will be carried out.
* it must analyze and evaluate the type of soil for foundation purposes and slope stability; likewise, recommend the type of foundation and retaining walls, considering the architectural proposal and, if applicable, the treatment of the soil to improve its bearing capacity.

The technical report: must include at least the following components

* General data
* Location and access to the study area.
* Project features.
* Objectives of the study
* Study methodology
* Field exploration
* Description of the field work.
* Fieldworks.
* Sampling and exploration log.
* Exploration of spring waters.
* Geology
* General and local geology
* Geomorphology
* External geodynamic phenomena.
* Hydrology and hydrography.
* Soil seismic parameters (according to the E.030 standard and standards for seismic isolators)
* Water table or groundwater
* Laboratory tests
* Evaluation of the bearing capacity of the land based on the selected foundation tests
* Permissible load capacity (according to E.050standard)
* Earthquake resistant classification analysis
* Classification by shear waves.
* Verification by SPT or shear strength.
* Calculation of expected settlement
* Calculation of total and differential settlements.
* Analysis of collapsibility or liquefaction of the soil or expansiveness.
* Slope stability analysis
* Parameters of lateral soil pressure.
* Recommendations for the design of footers or anchored wall, if required.
* Recommendations for interior floors, slabs and sidewalks.
* Geotechnical study for paving purposes
* Calculation report.
* CBR tests and other necessary tests.
* Study of quarries.
* Conclusions and recommendations
* Conclusions and recommendations.
* Tables or Exhibits.
* Drawings
* Georeferenced location (UTM) of the pits on a location plan of the land, duly bounded, in such a way that it allows locating their position with respect to a topographic landmark or existing building. Scale 1/100 to 1/200.
* Stratigraphic profile per point investigated.
* Longitudinal profile and cross-sectional profile showing the stratigraphy of more than one research point and the excavation depth Df.
* Exhibits
* Original laboratory tests (carried out in laboratories authorized by INACAL or in public institutions of recognized prestige such as Universities, Ministries and Institutions of technical training, and others).
* Photographic album (with views of the excavation, inspection and covering of each pit, duly referenced).
* Certificate of calibration of laboratory equipment.

1. Topographic Survey

For this purpose, the CONCESSIONAIRE must carry out at least the following activities, which includes all the tests, analyzes and repairs that are required:

* The service includes the tasks of: mobilization and demobilization of equipment, tools and personnel, demolition of some element (if necessary), excavations (if necessary).

Cabinet work:

* + - * Preparation of the technical report and corresponding certifications.
      * The study must be adapted to the specific needs of the Project, increasing the scope of any of its items, if the conditions found require it.
      * During the execution of field activities, the CONCESSIONAIRE will be responsible for guaranteeing safety.
      * Obtain the national geocentric geodetic network in the official geodetic network UTM geocentric system.

The field work that will be developed are:

* Topographic Survey
* Polygonal support:
  + The vertices of the polygonal support will be marked or monumental, considering the demands and limitations of the area under study, with corrugated iron or other suitable material on a concrete base or painted on a pre-existing concrete surface with high traffic paint that ensures its conservation.
  + The position coordinates and elevations of the polygonal support must be compensated and adjusted, in order to minimize angular and altimetric closure errors; considering the use of total station topographic equipment as a minimum.
  + Placement of three (3) monumental BM's topographic control points with concrete bases and a steel rod.
* Altimetric and planimetric survey
  + The total station will be used to obtain the altimetry of the details of the area of the enclosure under study, in order to be able to interpolate contour lines at an equidistance between the curves of 0.25m.
* Differential GPS positioning in 2 control points
  + The determination of geodetic control points must be developed based on the guidelines of the "Project of Technical Standards for Geodetic Surveys" of the National Geographic Institute (IGN).
  + Dual Frequency Differential GPS equipment must be used.
  + The data sheets of the geodetic control points will be presented in the service report, which will be prepared according to the IGN model (referential format), signed by the professional in charge of the service provider.

The technical report must include at least the following components:

* location of the Hospital and PCC.
* General floor of the Hospital and PCC, by floors (includes ceilings). It should be indicated graphically (hatched) which buildings are original and which are added.
* General cuts of the Hospital and PCC, transversal and longitudinal. It should be indicated graphically (hatched) which environments or elements are original and which are added.
* General elevations of the Hospital and PCC, on all fronts. It should be indicated graphically (hatched) which environments or elements are original and which are added.
* General table of areas.
* Photographic record that includes the facades and interior spaces of the property, as well as the surrounding streets where the property is located, allowing the urban profile to be read.
* Property documents. [[11]](#footnote-11)
* Architectural survey by floor of each building (includes roofs, terraces, roofs and basements), duly delimited.
* Definition of the elevation or floor level of each floor.
* Definition of uses of the environments. Coding of environments.
* Definition of useful areas by environment, floor and building.
* Indication of spans (types and dimensions).
* Cross-sectional and longitudinal sections or sections of each building. bounded.
* Elevations or facades of each building (all).
* Annotated photographic exhibit.
* The planimetric survey will be carried out with the total station, using the radiation method from the vertices of the topographic polygonal support, and the necessary auxiliary control points established.
* All the details and physical elements existing on the surface of the internal and external environment accessible and adjacent to the land and immediate relevant streets necessary for the development of the Technical File will be obtained.
* Setting out of vertices of the terrain:
  + Location of basic services.
  + The perimeter fence, the boundaries and the vertices of the land must be set out in the field, and the vertices of the land must be made in accordance with the legal documentation in public records.
  + Location of basic services.
  + Location of basic services, electrical supply, electrical networks, water and sewage networks, communications and others.
  + Details of the existing drinking water and sewerage systems (networks, diameter, length, type of pipe or material, etc.), if applicable.

1. Seismic hazard study

The seismic hazard study of the buildings must be submitted by the CONCESSIONAIRE and must meet at least the content, form and background requirements established by Standard E.030 and E.031 - Seismic Resistant Design and Seismic Isolation, respectively, belonging to the National Building Regulations.

For this purpose, the CONCESSIONAIRE must carry out at least the following activities, which includes all the tests, analyzes and repairs that are required:

* Preparation of the technical report and corresponding certifications.
* The study must be adapted to the specific needs of the Project, increasing the scope of any of its items, if the conditions found require it; However, the following works and aspects are considered as a minimum:
  + Use seismogenic sources and appropriate attenuation laws in seismic hazard analysis.
  + Generate Iso-acceleration curves for the Ancash region for return periods of 475 and 2475 years, in the following structural periods: 0.005, 0.2, 0.5, 1, 2, 3 and 4 seconds.
  + Generate the uniform hazard spectrum for maximum horizontal accelerations with a 10% exceedance in 50 years (return period of 475 years) at the Project location.
  + Generate the uniform hazard spectrum for maximum horizontal accelerations with a 2% exceedance in 50 years (return period of 2475 years) at the Project location.
  + Determine the appropriate Z factor for the location of the building, which will be used to generate the design spectra.
  + Generate design spectrum for an earthquake with a return period of 475 years.
  + Generate design spectrum for an earthquake with a return period of 2475 years.
  + Simulate a record of accelerations equivalent to an earthquake with a return period of 475 years.
  + Simulate a record of accelerations equivalent to an earthquake with a return period of 2475 years.

The technical report must include at least the following components:

* General data
* Location and access to the study area.
* Project features.
* Objectives of the study
* Methodology of the study
* Seismology and seismicity
* Parameters for seismic hazard evaluation

o Seismogenic sources

o Attenuation laws

* Evaluation and results of the seismic hazard analysis
* Exhibits
  + Georeferenced Location Drawing (UTM) of the seismic hazard analysis point in a location plan of the land, duly delimited. Scale 1/100 to 1/200.
  + Map with iso acceleration curves for the Ancash region for return periods of 475 and 2475 years, in the following structural periods: 0.005, 0.2, 0.5, 1, 2, 3 and 4 seconds.
  + Map of seismogenic sources used.

1. Hydrological and hydrogeological study

The CONCESSIONAIRE must meet at least the content, form and substance requirements established in the Hydrology, Hydraulics and Drainage Manual.

For this purpose, the CONCESSIONAIRE must carry out at least the following activities, which includes all the tests, analyzes and repairs that are required:

* Preparation of the technical report and corresponding certifications.
* The CONCESSIONAIRE will prepare the hydrogeological and hydrological study for foundation purposes, taking into account the considerations of the current technical building standards.
* The study must be adapted to the specific needs of the Project, increasing the scope of any of its items, if the conditions found require it.
* Exploration of the subsoil by drilling and tomography to determine the groundwater water table.
* Characterization of the rainfall parameters of the Project area.
* Determine the need for underground drains for the purpose of dejection of the water table.
* Propose from representative modules, dimensions, characteristics, use of pipes in underground drains.
* Mathematical modeling of the seasonal variation of the water table, demonstration using Modflow software or similar.
* The flow of the groundwater table plus the flow of rainwater must be considered in the design of the drains.
* Mathematical modeling of the abatement produced by the proposed drains, so that the water table does not affect the foundation (lower level), using modflow software or similar.
* Design of surface drainage works and design of the sub-drains to protect the retaining walls and the projected foundations, proposing their respective evacuation.
* During the execution of field activities, the CONCESSIONAIRE will be responsible for guaranteeing safety, for which he must take the necessary security measures to avoid personal accidents or material damage.
* Evaluate the geomorphological, geological, edaphological characteristics, vegetation cover and its soils.
* Evaluation of the entire hydrographic system of the micro-basin or area of ​​influence where the Project is located, drainage density, most important characteristics of surface water sources, contributions to rivers, lagoons, springs and wetlands, if any.
* To record the source of the hydrological data, the SENAMHI data must be purchased and this must go in the annex with the physical document with the SENAMHI seal.
* Maximum precipitation maps must be generated for the return times considered.
* It should indicate the level of precipitation that could be expected in an eventual maximum precipitation for the return years considered in the studies.
* It should be complemented with structural mitigation measures to prevent and reduce the risk of storm flooding and river flooding with respect to the Project.

Field work

* The depth of excavation of the planned explorations will be determined according to the water table.
* 820m electrical tomography test.
* Laboratory tests.
* Chemical Analysis (SO4, SST, CL, PH) in the soil if applicable.
* Physical, chemical and bacteriological analysis.

Analysis

* An analysis of the power of the water table will be carried out.
* Mathematical analysis of the design of the surface drains and underground drains.

The Technical report will include

* Location and access to the study area.
* Project features.
* Objectives of the study
* Methodology of the study
* Field exploration
  + Description of the field work.
  + Water table of the drillings.
  + Electrical tomography.
  + Gauges of nearby water points (runoff, seepage, springs, etc.).
* Description of the Hydrogeological Units
  + Description of the sedimentary aquitard of Piura. Interpretation of the field exploration with tomography to detect the depth of the aquifer.
  + Soil runoff coefficient.
  + Soil permeability coefficient, according to the layer indicated in the EMS.
  + Depth to the impermeable layer of the subsoil.
* Climatology
  + Treatment of the meteorological parameters of the Project area.
* Local hydrogeological balance
* Hydrological analysis of extreme precipitation events
  + Characterization of the extreme rainfall parameters in the Project area based on historical data belonging to SENAMHI, to determine design rainfall intensities (IDF curves).
  + Flood simulation or modeling
* Design of drainage/sub-drainage works
* Drawings
  + Drawings of drainage and sub-drainage.
  + Regional hydrogeological map.
  + Drawing of the water system in the Project area.
  + Local hydrogeological balance, location, sections and details of the gutters, grids, deliveries of the surface drainage system, location, sections and details of the sub-drainage in retaining walls.
* Exhibits
  + Historical monthly temperature records, accumulated monthly precipitation from at least three nearby meteorological stations, issued by SENAMHI in a 10-year report. Current and potential evapotranspiration worksheet. Historical records of maximum daily precipitation of the pluviometric stations). Field sheets of the gauges in surface water sources in the area.
  + Photo album.
  + Certificate of calibration of laboratory equipment.
  + Electrical tomography tests.
  + Groundwater tests.

1. Geophysical Survey

The geophysical survey for the purpose of building foundations must meet at least the content, form and background requirements established by Standard E.050 - Soils and Foundations and Standard E.030 - Seismic-resistant Design of the National Building Regulations.

For this purpose, the CONCESSIONAIRE must carry out at least the following activities, which includes all the tests, analyzes and repairs that are required:

* Mobilization and demobilization of equipment, tools and personnel, demolition of slabs or floors (if necessary), excavations, sampling, filling and compaction of the land, replacement of floors or gardens, elimination of surpluses, as well as any other task necessary for the service and for the restitution of the elements of the Hospital or PCC infrastructure that are affected during the explorations.
* Preparation of the technical report and corresponding certifications.
* The study must be adapted to the specific needs of the Project, increasing the scope of any of its items, if the conditions found require it; However, the following works and aspects are considered as a minimum:
  + Use of seismic isolators, which will have the technical floor (basement), for which the CONCESSIONAIRE must determine the period Tp and TL of the land on which it will be founded and that will be used for the generation of the design spectra.
  + During the execution of field activities, the CONCESSIONAIRE will be responsible for guaranteeing safety.

Fieldworks

* Field work must comply with the content, substance and form requirements established in Standard E.050 - Soils and Foundations and E.030 Earthquake Resistant Design, in the corresponding part.

Geophysical Testing (minimum)

* Multichannel Analysis of Surface Waves MASW-2D.
* Measurements of Microtrepidation in Multichannel Arrays (MAM).
* Seismic refraction tests.

Laboratory tests and cabinet analysis:

* Analysis of information through software of the equipment to be used.
* Preparation of soil layer profiles.

The technical report will include:

* General data
* Location and access to the study area.
* Characteristics of the Project.
* Objectives of the study
* Methodology of the study
* Field exploration
* Description of the field work.
* Field work.
* Sampling and exploration log.
* Geology
* General and local geology
* Geomorphology
* External geodynamic phenomena.
* Hydrology and hydrography.
* Geophysical tests
  + MASW-2D trials
  + MAM trials
  + Seismic refraction tests.
* Evaluation of the bearing capacity of the land based on the selected foundation system
  + Interpretation of MASW drillings, seismic refraction and microtremor,
  + One-dimensional profiles of shear waves (Vs),
  + Tomographic profile of compressional waves (Vp), which will be correlated with the results of direct explorations (pits and drillings).
  + Calculation of the elastic parameters of the soil such as shear modulus (G), modulus of elasticity (E) and Poisson's ratio (v).
  + Determination of the average speed of the shear waves of the first 30 meters.
  + (Vs, 30) to determine the type of soil profile, to later be able to obtain site parameters such as the soil factor "S" and the predominant periods TP and TL.
* Analysis of earthquake resistant classification
  + Classification by shear waves.
  + Verification of shear strength.
* Conclusions and recommendations
* Drawings
  + Georeferenced location (UTM) of the points and axes in a location drawing of the land, duly bounded, of all the tests carried out. Scale 1/100 to 1/200.
  + Stratigraphic profile per point investigated.
  + Longitudinal profiles of the refraction tests, showing the stratigraphy of the layers, with their depths and properties of each layer, up to a minimum depth of 30m.
  + Exhibits
  + Original laboratory tests carried out in laboratories authorized by the Competent Government Authority.
  + Photographic album (with views of the excavation, inspection and covering of each pit, duly referenced).
  + Certificate of calibration of laboratory equipment.

In the event that the CONCESSIONAIRE needs to carry out new or other complementary preliminary studies in the area, they must be carried out in accordance with the Applicable Laws and Provisions. Carrying out these studies will not lead to an extension of the established deadlines for submitting the deliverables of the Technical File.

1. Development of the Technical File
2. Specific considerations for the preparation of the Preliminary Project

These specific considerations refer to the definition of the conceptualization of the architectural design compatible with structures, equipment and safety, as well as the preliminary conceptualization of all the specialties involved in this activity.

The Preliminary Project will be defined and elaborated considering the technical guidelines established in:

* Preliminary Studies
* The certificate of urban and building parameters
* The feasibility of basic services

For the preparation of the Preliminary Project, the CONCESSIONAIRE must take into account the following:

* The characteristics of the lands.
* The rules and regulations indicated in this document; as well as, the Laws and Applicable Provisions that, on the subject and others for each specialty, are necessary.
* Design conditions in general (urban and building parameters: recesses, free area, building coefficient, authorized building heights, adjoining roads and sections thereof, among others; boundaries, volumetry, elevations and facades; functional relationship; circulation and flows of personnel, material, polluting waste; internal and external particular security; external works, among others).
* The urban and architectural, structural, functional and other characteristics that allow an optimal response and that the architectural proposal is a landmark in the area.
* The Project must be in harmony with the urban space and respect the architectural characteristics and typology in terms of its volume and design in order to preserve the architectural identity of the tradition and cultural heritage.
* The possibility of future growth of its infrastructure. In the development and execution of the Hospital and PCC, only this possibility will be considered at the level of the regulatory free area.
* The participation of the different specialties in order to define in an agreed and compatible way the conceptualization of architectural design. The CONCESSIONAIRE must contemplate and define in the Preliminary Project the supply point for all basic services, technical areas that are required by specialty (electrical sub-station, generator set, engine room, boiler rooms, technical rooms, ducts, uprights, among others. ).
* The articulation of the different functional units, in such a way that they offer a rational use of the land and a logical relationship.
* The concepts of universal design and inclusion of people with disabilities in the integral development of the architectural proposal.
* The characteristics and conditions for the dimensioning of environments, in such a way that they house the equipment indicated in the Project and that they involve complementary areas. The environments will not be limited to the minimum dimensions required by the manufacturers. The CONCESSIONAIRE must have the information on the pre-installations of the Equipment that requires it for the development of his architectural proposal.
* That the environments and spaces are necessary and sufficient for the installation of the equipment, the location of the treatment plants, generating sets and the like.
* The architectural proposal must reflect the management of biosafety controls and respect for the patient.
* Waiting areas should offer natural lighting and ventilation preferably; If possible, avoid the location of waiting areas in corridors, unless they are spatially defined and totally differentiated.
* The construction systems to be proposed must be feasible to execute, showing technological validity, and susceptible to effective maintenance.
* The Civil Defense requirements and the National Building Regulations, for security and evacuation.

The Preliminary Project will be prepared taking into account the following specialties:

* + Regarding Architecture and Signage
  + Regarding Security and Evacuation in civil defense
  + Regarding Structures
  + Regarding Sanitary Installations
  + Regarding Electrical Installations
  + Regarding Mechanical Installations.
  + Regarding Information Technology and Communications Facilities: structured cabling, data networks
  + Regarding Equipment

1. Considerations regarding the preparation of the Technical File

The Technical File will be prepared on the basis of the Preliminary Project, the scopes and what is indicated in these technical annexes. The conception of the building must consider and foresee the urban, architectural, structural and functional conditions, as well as those of the basic services, among others.

General design conditions, boundaries, volumetric relationship, building height, elevations and facades, functional relationship, circulation and flows of personnel, material, polluting waste, internal and external particular security, exterior works, among others, will be evaluated and analyzed by the CONCESSIONAIRE, taking into account the urban qualification, subdivision and road sections; as well as, the National Building Regulations, the Certificate of Urban and Building Parameters, Municipal Ordinances, Regulations for Technical Security Inspections in Civil Defense, standards and Applicable Laws and Provisions, and others that are necessary for each specialty.

All proposed systems must be feasible to build, show technological validity and be capable of effective maintenance.

The Technical File will be prepared taking into account the following considerations:

* + Regarding the Project Management.
  + Regarding Architecture and Signage.
  + Regarding Safety and Evacuation.
  + Regarding Structures.
  + Regarding Sanitary Installations.
  + Regarding Electrical Installations.
  + Regarding Mechanical Installations.
  + Regarding Information and Communication Technologies.
  + Regarding Equipment.
  + Regarding Quantity list, Costs and Budget (by specialty).

1. Considerations regarding each specialty in the development of the Technical File
2. Architecture and Signage

The Basic File and the Final File will be based on the Preliminary Project, and the CONCESSIONAIRE must deepen or improve the technical aspects without reducing the scope of the resulting Architectural Medical Program.

It is necessary for the CONCESSIONAIRE to verify the occupation of the land, the surroundings, dimensions, materials and others, indicating its relationship with the immediate surroundings.

Following the same line of the Preliminary Project, the Basic File and the Final File must contemplate all the criteria and minimum requirements of architectural design established in Standard A.010, Standard A.050 and Standard A.120 of the National Building Regulations and Technical Health Standards, primarily NTS 110-MINSA / DGIEM or, NTS 119-MINSA / DGIEM or NTS 113-MINSA / DGIEM when appropriate, the Applicable Laws and Provisions, among others that, due to their experience, it deems necessary to apply prior technical support.

At this stage, it must be specified the details and construction system, construction materials and finishes, technical specifications, quantity lists, which must be compatible with each other. Regarding the design of the construction details, it should be noted that they will serve as a basis for the description of items and measurements, as well as for the calculation of costs.

The functional, environmental, ventilation, climate, location and security technical conditions established in the Applicable Laws and Provisions must be met.

It must consider those aspects related to the particular security inside and outside the building. The building must comply with the safety and accident prevention requirements established in Standard A.130 of the National Building Regulations. The criterion of non-structural vulnerability in architectural aspects should be considered as a basic design criterion.

The CONCESSIONAIRE must determine a detailed design of floors, both exterior and interior, indicating pattern, colors, combinations according to the table of finishes. Likewise, must design the baseboards in general, indicating colors, combinations, etc., according to the table of finishes. At this stage of the Project, must necessarily define the range of colors to be used in the Hospital and PCC, both outdoors and indoors, in accordance with the "Signage and Integral Setting Manual of the Service Units of the Social Health Insurance" of the GRANTOR.

The Basic File and the Final File of signage will form part of the development of the architectural project. The signaling system to be implemented, the adaptation of the logo and the institutional colors must be in accordance with the directives of the GRANTOR and the CONCESSIONAIRE, if applicable.

It is part of the architecture and signaling:

* Zoning and differentiated flows

The CONCESSIONAIRE must take into account that for zoning it must consider as the differential logical ordering of the UPSS and UPS determined in the architectural program based on the following principles: orientation and location of the land, accessibility, circulation criteria, flows and functional relationships between themselves and the other architectural spaces with related or complementary functions.

The CONCESSIONAIRE will design the Hospital and PCC based on the architectural program based on the Functional Medical Program and, consequently, with the portfolio of health services determined in the feasibility study declared viable.

The UPSS and UPS will be zoned considering their functional interrelation and the circulation and evacuation flows to safe areas. The areas of the UPSS and UPS rooms are minimum referential standards. The final area is determined by the quantity and disposition of the Equipment, functionality and the number of users (external and internal).

* Table of areas by levels

The CONCESSIONAIRE will develop the support of the respective areas of the Project based on the Functional Medical Program of the feasibility study declared viable and making the comparison with the result of the Architectural Medical Program at all levels of the development of the Technical File.

* Table of Finishes

Regarding the finishes, the CONCESSIONAIRE must consider his professional experience, not being limiting and being able to be improved in coordination with the technical opinion of the Design, Construction and Equipment Supervisor.

It should be taken into account that the floors will have a non-slip finish, non-porous for high traffic use with abrasion resistance type PEI-4, chemical resistant and easy to clean. The main rooms will have a sanitation base with a minimum height of 10 cm above the finished floor level.

The circulation corridor will have a stretcher impact protector. The walls that form right angles and the doorway or frame have aluminum profile up to a height of one meter high.

The hemodialysis room, dialyzer washing room, priming room, procedure and biocontaminated room will be covered with a base of glazed or laminated material up to a minimum height of 1.50 m above the sanitary baseboard.

The other rooms will be plastered and covered with smooth surfaces at a height of not less than 1.50 m above the sanitary threshold. The uncoated area will be plastered and painted with non-toxic and washable material.

The sinks installed on fixed furniture will have an apron sink not less than 30 cm above the finish level of the respective furniture, tabletop or bench.

* Building details

The CONCESSIONAIRE must elaborate in the Technical File the construction details, understood as such as the detailed graphic representation of an area of the Project to be built, such as, for example, an area where different materials or construction typologies converge in which it is necessary to deepen to make it clear its development during the execution of the work.

* Fixed furniture

It is all furniture attached to the infrastructure that allows the development of support in the work of the Hospital and the PCC (both in clinical or administrative tasks). The CONCESSIONAIRE must furnish the Hospital and PCC according to the comprehensive design proposal, the Equipment to be installed, as well as the functional requirements.

* Interior and exterior signage

The exterior identification and the orientation and information within the Hospital and PCC are indicated in the GRANTOR's "Signage and Integral Setting Manual of the Service Units of the Social Health Insurance".

Physical access barriers will be eliminated for people who have some degree of disability, older adults and there will be an eloquent and signposted circulation system, incorporating special easy-to-read measures for these signs.

The general criteria on signage for people with disabilities will be subject to what is indicated in Standard A120 of the National Building Regulations or standard that modifies or replaces it.

* Landscaping

The CONCESSIONAIRE will generate the maximum use of the land surface projecting in the green areas the respective treatment as an ecological and aesthetic approach so that, using the different elements, an effect of visual assessment of the environment can be achieved.

* Soundproofing

The CONCESSIONAIRE must consider the materials and design in the Project for acoustic insulation, as a control of the propagation of sound in the Project.

The CONCESSIONAIRE must anticipate the design of the soundproofing system according to the noise levels recommended by international standards for hospital infrastructure.

* Compatibility and coordination of facilities and Equipment

The CONCESSIONAIRE must take into account the specific considerations related to the conceptualization of the architectural design compatible with structures, Equipment and security, as well as the conceptualization of all the specialties of the Project. The point of supply of all basic services and technical areas required by specialty must be considered and defined in the Project (electrical sub-station, generator set, engine room, boilers, technical rooms, ducts, uprights, among others).

1. Safety and Evacuation

The Technical File must contemplate the necessary requirements in matters of security and evacuation in Civil Defense, which are, among others:

* To anticipate the flows of the escape routes, means of evacuation to safe areas and calculate the capacity of the capacity of the premises.
* Interior and exterior security signage, if applicable photo-luminescent, emergency / evacuation lights, fire extinguishers, sprinklers, smoke detectors, alarm pushbuttons, fire alarm center or alternative systems where appropriate, in coordination with the specialties involved (architecture, electrical installations, sanitary installations, telecommunications, structures among others)
* Propose fireproof or retardant materials in coordination with the different specialties.
* Evacuation plan

The technical standards referring to safety must be taken into account for the development of the Project. The safety proposal must consider INDECI evaluation factors, in addition to what is indicated in Standards A.130, A120, A.050, A.010, A.080 of the National Building Regulations NFPA 70 and 72 and the Laws and Provisions Applicable.

Consider criteria for the correct and adequate radiological safety, counting on the specific calculations and the authorizations of both the environment and the equipment.

Threat characterization documents and specific design procedures for each of the threats identified according to the location of the Hospital and the PCC will be considered as an integral part of the Technical File.

The security project must be coordinated with the different specialties contemplating the protection systems to be designed, taking into account minimum quality standards to be included in the project, which will be presented in writing as part of the descriptive memory.

In the descriptive memory, the periods of functional independence of the following supplies must be specified in relation to possible switches in drinking water (number of hours), electricity (number of hours), oxygen (number of days), crude oil (number of days) or other supplies (number of hours / day) that are considered necessary, which will be duly coordinated and determined with each specialist according to their scope of action.

For the development of the security system, the identification and location of the proposed fire network should be considered, as well as the location of fire extinguishers, emergency lighting, smoke / temperature detectors, manual stations and strobe lights, sprinklers, fire extinguishers, cabinet against fire, valve locations and signage.

Considerations regarding mitigation criteria

The architectural and functional project must guarantee the projection objectives for establishments with normal conditions and in emergency situations, mainly in the event of potential natural disasters such as earthquakes, heavy rains, floods, among others.

The protection objectives against these natural phenomena will refer to the capacity of the infrastructure to deal with them satisfactorily. Protection against man-made disasters such as fires, explosions, etc. must be guaranteed.

The Technical File at the level of work execution will implement the conditions and characteristics so that the infrastructure of the future Hospital and the PCC comply with the denomination of safe hospital for which the GRANTOR will order the evaluation of the Project under the parameters of the Pan American Health Organization in relation to hospital safety.

It is part of the security and evacuation:

* Capacity

The CONCESSIONAIRE must calculate the capacity of the premises. The calculation of occupants will be made according to what is established in the specific Standards A.050.

One person must be considered for each furniture unit where the specific furniture is located for the activity it performs. The verification of the calculation of the number of occupants (density) must be based on statistical information for the Project.

Regardless of the type of methodology used to calculate the number of people in all areas of the Project, for the purposes of calculating the number of people, the sum of all people (evacuees) must be used. When there is the same area that has different uses, it should be used for calculation purposes, always the one with the highest occupancy density. The Project cannot accommodate more people than the one established in the calculated capacity.

* Safe areas

The CONCESSIONAIRE must foresee the flows of the escape routes to the security zone. The security zones must be signposted according to the INDECI parameters.

The Project must have signage that makes it easier for the patient, visitors and staff to quickly and easily identify the different environments and areas of the Hospital and PCC. This signage must be complemented with safety signs indicating caution, emergency, evacuation, obligation, prohibition, and fire protection. The different areas of the building must have graphics that indicate the evacuation routes to safety zones.

In this way, the Project must consider the design of internal and external security zones, taking into account that in essential buildings such as hospitals, variations in the density of occupation are observed depending on the different hours of the day.

* Safety routes

Evacuation routes should be established in the event of any contingency. Contingency is understood as any event that interrupts the normal course of activities and that can endanger the lives of those involved.

The rooms with specific hazards and the pipes through which dangerous fluids circulate must be clearly identified. Escape doors with an anti-panic lock that opens in the direction of the evacuation flow are essential in exit areas.

The Project must have horizontal or vertical evacuation routes that, in addition to complying with safety requirements, have exits in number, capacity and location and with the appropriate identification to allow the safe, rapid and expeditious exit of all its occupants towards security zones.

The exit doors must not open against the direction of evacuation and their entrances must be kept marked and free of obstructions. These exits may be kept ajar, but not closed with a key, padlock or any other means that prevent the easy opening.

* Compartmentalization

Partitioning of critical care units and general services must be established in accordance with the fire-retardant protection indicated in Standard A.130 of the National Building Regulations.

* Physical vulnerability study and risk estimation

The CONCESSIONAIRE must present the respective study of physical vulnerability and risk estimation, carrying out the vulnerability and risk analysis of the Hospital and the PCC; It is applied after having the threat assessment and a physical diagnosis of the Project.

* Preliminary risk management plan in programming the work execution

The building must comply with the safety and accident prevention requirements established in Standard A.130 of the National Building Regulations.

1. Structures

Include the elaboration of the structural project of the Technical File. The structural design must respect what is indicated in the current technical construction standards and the titles, standards and annexes of the National Building Regulations, the Applicable Laws, provisions and international standards if applicable.

The CONCESSIONAIRE will prepare the integral structure project, containing the design of the seismic isolation system, the complete design of the superstructure and the retaining wall system considering the current technical building standard E.050 Soils and Foundations, E.020 Loads and E. 030 Earthquake Resistant Design of the National Building Regulations (RNE) or standard that modifies or replaces it.

The structural specialist must define the final location, types and quantity of seismic isolation devices. The facilities have to be flexible and adequate to move from the isolated area to the non-isolated area.

The structural project as a whole will be developed as follows:

* Combination of loads to determine maximum effects and final design: the loads obtained will be combined according to what is indicated in the National Building Regulations to determine the maximum effects for the design.
* Design of resistant elements according to the latest national design standards and where the most recent foreign standards are applicable.
* Design of the details of the non-structural elements.
* Design of exterior works, if applicable.
* Design of the retaining wall and slurry wall on the slopes.

It is part of the structural project:

* Structuring and dimensioning

Structuring, dimensioning and prior analysis in coordination with professionals from different specialties, in order to define the structure in a coordinated way.

* Load estimate

On the basis of the information obtained, the gravity loads that are expected to act on the structure or the resistant structural elements will be determined. Likewise, the structure load estimate will be carried out, which will serve to determine the equivalent static seismic load.

* Vertical load analysis

The structure will be prepared for the stresses generated by own weights, dead loads and service overloads.

* Seismic analysis

Seismic vulnerability must be taken into account, both for the structural component and the non-structural component.

The three-dimensional structural model must be prepared using computer software for the dynamic modal and spectral analysis of buildings, from which the lateral forces will be obtained and must be compared with the equivalent static seismic loads. The maximum stresses due to gravity and seismic loads will be presented in the structure and will be determined in accordance with the Applicable Laws and Provisions.

It is specified that "Seismic Vulnerability" does not include the study of seismic risk. However, it must be evaluated that the location of the Projects is outside areas of geological faults, proximity to volcanoes, unstable soils, among others in accordance with NTS 110-MINSA / DGIEM or, NTS 119-MINSA / DGIEM or the NTS 113-MINSA / DGIEM, when applicable.

This analysis must be carried out considering, first, the structure without seismic isolation and later with the seismic isolation systems, for which the following must be carried out:

* + Seismic modeling and analysis of the infrastructure, with the proposed structural configuration, the seismic isolation system, the architectural distribution, overloads, soil parameters, foundation and the maximum displacement without seismic isolator and with the desired isolator. The maximum mezzanine drift must be less than 0.0025.
  + THE CONCESSIONAIRE shall support and deliver to the Design, Construction and Equipment Supervisor the type of isolators, isolator and system design, design displacement, total design displacement, maximum displacement, maximum total displacement, effective horizontal stiffness and effective damping.
* Quality standards for seismic isolators

The minimum requirements for seismic isolation systems must comply with what is indicated in the document "Quality Standards for Seismic Isolators of the Terms of Reference for the Preparation of the Technical File" issued by the GRANTOR.

* Design of special structural elements

The three-dimensional model should be prepared using appropriate structural analysis software capable of modeling structures where isolator-type seismic protection systems are incorporated into the base.

Static analysis with linear models can be used as long as the requirements indicated in the ASCE / SEI 7 standard are met.

The maximum stresses due to gravity and seismic loads will be presented in the structure and will be determined in accordance with the Applicable Laws and Provisions.

For seismic loads, the maximum possible design earthquake should be used in order to calculate the total design displacement of the isolation system, the forces and the lateral displacements.

As a result of this analysis, the limits of displacement between floors corresponding to the design lateral force will be determined, including the horizontal displacement due to the deformation of the isolation system.

Design of resistant elements according to the latest national design standards and where the most recent foreign standards are applicable:

* Standard E-060-Reinforced Concrete.
* Standard E-070-Masonry
* Standard E-090-Metallic Structures-ACI-318-Reinforced Concrete-Latest Edition
* AISC last edition.
* Structural component

The operability of the facilities must be ensured in the event of mild and moderate earthquakes. The non-structural components of the building and its Equipment should not be adversely affected.

Extreme displacements, torsions and excessive efforts caused by the occurrence of a severe earthquake should be avoided. Minimize possible non-structural and structural damage that may occur in a severe earthquake. In no case, the possibility of partial or total collapse of the buildings will be considered, so it must be structured so that the system used behaves stably in the face of the greatest seismic demand that may arise, in accordance with the provisions of the Standard earthquake resistant design NTE E-030.

* Non-structural component

This aspect includes those elements that, without being part of the structural system, are essential for the proper development of the Hospital and PCC operation and is made up, among others, by vital lines: medical and industrial gas systems, electrical networks in general, communication and computer systems, networks and systems for water, sewage, steam, air conditioning and pipes and ducts in general. Additionally, it includes the Equipment, as well as the Supplies and inputs and their storage and distribution means. Within this component, it has architectural elements, such as: divisions and interior partitions, facades, false ceilings, decorative elements attached to the building, coatings, glass, antennas, etc.

Reducing the vulnerability of this component implies work so that this component presents a low vulnerability to the identified threats, especially to the occurrence of mild and moderate earthquakes and reduces its vulnerability to severe earthquakes, so that the building can maintain its operational capacity or to restore it in a short time in the case of a large-scale event.

Likewise, the CONCESSIONAIRE must fulfill, among others, the following:

* Design of the structural elements of the Project.
* Design of the foundation
* Design of the retaining wall system.
* Design of the floor and isolation interface.
* Design of support pedestals and capitals.
* Design (dimensioning and structural parameters) of the isolation devices.

1. Sanitation Installations

An integral system must be designed for the networks of: cold water (hard water) for which the physical, chemical and bacteriological analysis of the water provided by the local water and sewerage company will be required, allowing the CONCESSIONAIRE the soft water treatment and others. Likewise, you must design the hot water system, hot water return, firefighting system water, irrigation water, sewage (drainage), ventilation, storm drain system, groundwater drainage (if necessary), drainage of condensates, treatment system and solid waste collection.

In the descriptive memory of the Technical File must be indicated that the CONCESSIONAIRE, upon signing the Acceptance and Verification of Work and Equipment, will deliver a complete set of drawings for sanitary facilities to the GRANTOR. Likewise, at that time, it will carry out training for the maintenance personnel of the Hospital and PCC on the facilities and equipment installed in the Hospital and PCC. The CONCESSIONAIRE is obliged to present the supporting calculations for the design of the elements, equipment or parts of each of the networks that make up the integral system of the Project's sanitary facilities.

The health facilities specialty project must include the following:

* 1. Cold water system
* Supply from the public network to the storage system.
* Calculation of water demand, storage volume and regulation of water for daily consumption and reserve against fire, maximum simultaneous demand.
* Justifying calculations for the pressurization system for normal distribution regime. Selection of control devices and operation of pressurization equipment.
* Design of the horizontal distribution network, vertical feeders, consumption control.
* Justifying calculation to determine the diameter and route of the pipes of the cold-water network, distribution pipes to the points of use.
* Justifying calculation of the water network for garden irrigation.
* Supporting and fixing supports for pipes.
* Protection and signaling of pipes.
  1. Water treatment system
* Water treatment to improve water quality (if necessary) duly justified.
* Water disinfection.
* Water treatment for special softening.
* Supporting calculations for the steam generating equipment that feed the sterilizers.
  1. Soft water system
* Calculation of soft water demand, storage volume and regulation.
* Justifying calculations for the pressurization system for normal distribution regime. Selection of control devices and operation of pressurization equipment.
* Design of the horizontal distribution network, vertical feeders, consumption control.
* Justifying calculation to determine the diameter and route of the pipes of the soft water network, distribution pipes to the points of use.
* Supporting and fixing supports for pipes.
* Protection and signaling of pipes.
  1. Hemodialysis water treatment system
* Calculation of the volume of water for hemodialysis.
* Determination of design parameters.
* Calculation and selection of softening equipment, filters and reverse osmosis equipment.
* Definition of inert systems for storage and conduction of osmotic water.
  1. Hot water system
* Equipment of heaters for hot water, production and storage.
* Distribution of pipes, insulation, control and return.
* System for return in controlled recirculation.
* Justifying calculation to determine the diameter and route of the hot water network pipes, hot water return, distribution pipes to the points of use.
* Protection and signaling of pipes.
  1. Firefighting system
* Regulatory reserve, convenient water volume for safety.
* Equipment for pressurization and permanent availability of water against fire.
* Network of sprinklers and cabinets for manual operation and internal use.
* Siamese valve connection for fire department uses.
* Justifying calculation to determine the diameter and route of the fire water network pipes, distribution pipes to the points of use, indicating pressure drops and flow rates for each service.
* General distribution of portable fire extinguishers, appropriate for each area.
* Protection and signaling of pipes.
  1. Drainage and ventilation system
* Drainage network for toilets and groups of services.
* Sanitary ventilation network.
* Justifying calculation to determine the diameter and route of the drainage and ventilation network pipes, indicating flow rates for each service.
* Vertical and horizontal collectors until discharge into the public network of the local public water and sewerage service concessionaire or existing network.
* Grease traps for kitchen, cafeteria and grease maintenance area.
* Plaster traps, in trauma emergency topics and in other environments where it is required.
* Drainage collection chamber in basements and non-clogging pumping equipment, up to the gravity discharge network.
* Supporting and fixing supports for pipes.
* Protection and signaling of pipes.
  1. Sewage collector system
* Drainage network for toilets and groups of services.
* Sanitary ventilation network.
* Justifying calculation to determine the diameter and route of the drainage and ventilation network pipes, indicating flow rates for each service.
* Vertical and horizontal collectors until discharge into the public network of the local public water and sewerage service concessionaire or existing network.
* Grease traps for kitchen, cafeteria and grease maintenance area.
* Plaster traps, in trauma emergency topics and in other environments where it is required.
* Drainage collection chamber in basements and non-clogging pumping equipment, up to the gravity discharge network.
* Supporting and fixing supports for pipes.
* Protection and signaling of pipes.
  1. Sewage treatment system
* Design of pretreatment systems, according to the results of the evaluation of the need for pretreatment of sewage, duly justified.
* Justifying calculations for each of the unit processes.
  1. Storm drainage system
* Collection and evacuation of rainwater at floor and ceiling levels.
* Rainwater evacuation uprights.
* Justifying calculation to determine the diameter and route of the rainwater evacuation pipes, indicating flow rates for each case.
* Sinks and drainage of open areas, for rain or surface water runoff.
* Drainage of rainwater infiltrated into the subsoil.
* Conditioning of its final disposal towards the public service or another evacuation point.
  1. Solid waste disposal
* Conditioning of the collection center for the final disposal of solid waste in accordance with the Applicable Laws and Provisions.
* Solid waste transportation and collection system.
* Classification by type for final disposal.
* Autoclave with pre-crushed, compactor and bagged, if applicable according to the Applicable Laws and Provisions.
  1. Sanitary equipment
* Technical specifications that consider top quality appliances, taps and accessories for hospital use, with reduced water consumption and taps that operate with modern technology.
* Toilets for hygienic services must be of the type supported on the wall or floor.
* Bathroom accessories such as liquid soap dispensers, paper towels, toilet paper, etc. They must be made of stainless steel or of a higher quality.
* If necessary, after the drainage traps, they must include preliminary treatment before their connection to the secondary drainage network.
* The taps of the sanitary appliances will be made of chrome-plated bronze or of a higher quality. In the case of water for toilets and urinals, the taps must be of the fluxometric type. For sinks, laundries, and dumps, the supply pipe must be equipped with an angle key and a canopy on the wall. Sanitary appliances with delivery of drainage to the wall must have the corresponding canopy.
* Coding of sanitary devices by sectors, for use in the maintenance service.
  1. Electromechanical equipment
* Calculation of equipment, electric pumps (cold water system, hot water system, hot water return system, space heating systems, firefighting system, water treatment and drainage equipment), hydropneumatic tanks, others.
* Distribution of pumping equipment and pressurization equipment in the engine room.
* Network of pipes and valves, installed visible and of heavy quality.
* Technical specifications of the equipment attaching quotes.

1. Electrical Installations

An integral system for electrical installations must be designed to guarantee an adequate and essential electrical supply from the public distribution network to the Hospital and PCC.

In the descriptive memory of the Technical File, it must be indicated that the CONCESSIONAIRE, with the signing of the Certificate of Works and Equipment Verification and Acceptance, will deliver a complete set of electrical installation drawings. Likewise, at that time it will carry out training for the maintenance personnel of the Hospital and PCC on the facilities and equipment installed in the health establishment. It is important to point out the obligation of the CONCESSIONAIRE to present the supporting calculations for the design of the elements, equipment or parts of each of the networks that make up the integral system of the electrical installations of the Project.

The CONCESSIONAIRE must design the electrical system that includes the following:

1. Electrical supply system:

Establish the electricity supply needs and the corresponding voltage level according to the calculation of the maximum demand and the feasibility of the electricity supply granted by the electric power distribution concessionaire in the area. Carry out the management and coordination with the local energy supply concessionaire, as established in the R.D. No. 018-2002-MS/DGE; also, carry out the design of the emergency power supply system.

For diagnostic imaging and high technology equipment, an exclusive electrical transformer should be considered for the electrical supply of such equipment.

Short-circuit current and power calculation memory of the projected electrical system. Adjustment of protection devices.

Design of the electrical and communications installations related to the pre-installation of the Equipment.

Design of the general system, equipotential for grounding protection, justified with the respective calculations.

Design and sizing of the capacitor bank to correct the power factor, TVSS and harmonic filter.

1. Emergency power supply system

Distribution of autonomous emergency lighting equipment according to the environments and security project.

Design of the emergency electrical power supply system, through the use of a generator set that includes the automatic transfer board that feeds the emergency electrical charges, in accordance with the provisions of the National Electricity Code and technical health standards.

1. Medium voltage utilization system

Design the medium voltage utilization system. Prepare the project of the primary use system according to the technical conditions indicated in the document of the design point or the applicable technical health standard, until obtaining technical approval of the project of the medium voltage use system, by the local service concessionaire of electricity, at the voltage level indicated in the service feasibility document and design point. It includes the design of the network of ducts and mailboxes from the electrical supply point and the electrical substation of the health establishment.

1. Stabilized tension system

Design of the stabilized voltage system for the supply of electrical energy to the computer system equipment and biomedical equipment in general, with a 15-minute autonomy UPS.

1. Low voltage electrical system

Design of the electrical system in low voltage, normal general boards, normal distribution boards, emergency, and stabilized and uninterrupted voltage, power and special load boards.

Design of the horizontal trunk networks and vertical uprights of the feeders of all the projected electrical panels and sub-panels.

Definition of the location and sizing of electrical rooms, according to current regulations, for the installation of electrical panels and for electrical equipment such as UPS and isolation transformers, close to the environments that it feeds or controls.

Short-circuit electricity and power calculation memory of the projected electrical system. Adjustment of protection devices.

Calculation memory for the selection of feeders by electricity capacity and verification by voltage drop.

Power supply for the power and control panels of the imaging and high-tech diagnostic equipment, leaving the corresponding tubing for the power supply of said equipment and their respective controls. Once the Equipment is known, all the facilities must be complemented according to the Design criteria.

1. Interior and exterior lighting system

Design of the interior lighting system according to the lighting levels recommended by international norms and hospital infrastructure standards, selection of lighting devices indicating their technical characteristics, both of the equipment and of its control and operation accessories. Selection of appliances according to the type of installation (recessed, attached or hung) and the ambient conditions (IP protection index, lighting regulation).

Distribution of autonomous emergency lighting and signaling equipment according to the environments and the security and evacuation project.

Design of exterior and perimeter lighting for pedestrian or vehicular circulation, monumental and security, with control, protection and automatic operation devices.

1. Electric outlet system, strength and specials

Design of the electrical power supply and control system for air conditioning and mechanical ventilation equipment based on the design of mechanical installations.

Design of the electrical and communications installations related to the pre-installation of the Equipment.

Design of the horizontal trunk networks and vertical uprights of feeders to main boards and distribution and power boards in the engine room, leaving the corresponding tubing for powering the motors and their respective controls. Location of dash cabinets.

Once the Equipment is known, all the facilities must be complemented according to the Design criteria.

Design of the electric outlet system, power outlets and special loads based on the equipment plan and other specialties.

1. General equipotential grounding protection system

Design of the grounding system, general system of special equipment, equipotential protection system. Justify with the respective calculations.

1. Lightning rod system

Design of the lightning rod system, if applicable.

1. Mechanical Installations

An integral system for mechanical installations must be designed to guarantee the adequate and essential functioning of the essential electromechanical networks and equipment in the Hospital and PCC.

The CONCESSIONAIRE, when applicable, must take the necessary steps to obtain authorizations from OSINERGMIN.

In the descriptive memory of the Technical File, it should be indicated that the CONCESSIONAIRE, with the signing of the Certificate of Works and Equipment Verification and Acceptance, will deliver a complete set of mechanical installation drawings. Likewise, at that time he will carry out training for the maintenance personnel of the Hospital and PCC on their facilities and Equipment. It is important to point out the obligation of the CONCESSIONAIRE to present the supporting calculations for the design of the elements, equipment or parts of each of the networks that make up the integral system of the electrical installations of the Project.

The CONCESSIONAIRE must design, supply and install the mechanical systems that comprise the following:

1. Definition of the work of mechanical installations (air conditioning, cold heat), mechanical ventilation, medical oxygen, clinical vacuum, medical and normal compressed air, LPG, NG, Diesel 2, necessary refrigeration chambers.
2. Design of the mechanical emergency electrical power supply system, through the use of a generator set that includes the automatic transfer board that feeds the emergency electrical loads, in accordance with the provisions of the National Electricity Code.
3. Vertical transport system

* The CONCESSIONAIRE must foresee the differentiated installation, according to the functional criteria or justifying calculation, of elevators (bed elevators and passengers), for medical use, services or visits, if applicable, forklifts (clean and dirty) with room of machines, considering the conceptualization of the architectural design, as well as the elevator (s) that correspond to the administrative area.
* Calculation of the service of elevators, bed elevators, passengers and forklifts to achieve the waiting interval and transport capacity, according to international standards, differentiating the type of users: health personnel and inpatients, visitors, outpatients, public and personal administrative, dirty and clean forklift.
* Definition of type and size indicating the speed of transport in each case.
* Definition of the size of each well or pit, sizing the overrun and the location of the machine room and opening of the doors, in coordination with the possible suppliers of the equipment.
* Present technical specifications and quotes for equipment and accessories.

1. Mechanical ventilation system

Design of mechanical ventilation systems through the injection or extraction of air as the case may be, for kitchen environments, laundry, workshops, substations, machine rooms, laboratories, sterilization, archives, exhaust hood and other services that require, for which he must submit the following:

* Number of air changes per hour.
* Selection of fan and injector equipment.
* Justifying calculation for the determination of the size and shape of the air injection and extraction ducts, grilles, diffusers and regulation dampers.
* Control and protection system and devices.
* Technical specifications and quotes for equipment and materials.

1. Air conditioning system

Carry out the design of the air conditioning system by zones for the environments of the computer center, surgical center, operating rooms, delivery rooms, recovery rooms, intermediate care unit, intensive care unit, intensive surveillance unit, emergency, pharmacy and other services, considering the asepsis that the environments must maintain, special equipment for operating rooms with 100% air renewal or recirculation, positive or negative pressure, with humidity and temperature control, absolute filters according to the requirements of each environment , for which he must do the following:

* Calculation of thermal load for summer.
* Psychometric calculation of latent heat and sensible heat.
* Determination of type and capacities of equipment, indicating technical characteristics and operating parameters.
* Justifying calculation for the determination of the size and shape of the air supply and return ducts, grilles, diffusers and regulation dampers.
* Justifying calculation and selection of refrigeration chambers.
* Protection devices, humidity and temperature control.
* Definition of requirements for electrical and sanitary installations.
* Technical specifications and quotation of equipment, devices and materials.

1. Medical gas system

Carry out the design of each of the medical gas systems, considering the sizing of the plants, size of equipment, distribution networks and points of use appropriate for each service, for which the following must be presented:

* Justifying calculation to determine the type and size of the oxygen plant.
* Equipment selection.
* Justifying calculation to determine the size of the central vacuum, compressed air for medical and dental use, compressed air for general use.
* Justifying calculation to determine the diameter and route of the copper pipes of the medical gas systems, indicating pressure drops and flow rates for each system.
* Selection and location of the devices for use and control, operation and alarm for each of the medical gas systems.
* Technical specifications and quotes for equipment, devices and materials.
* Sizing of space and bases of equipment and medicinal gas plants.

1. LPG or NG liquefied petroleum gas system

Establish the requirements for the use of LPG or Natural Gas for hot water, laboratory, kitchen and other services that require it, for which the following must be submitted:

* Justifying calculation to determine the size of the LPG or NG plant.
* Justifying calculation to determine the diameter and route of the storage tank filling and return pipes, distribution pipes to the points of use, indicating pressure drops and flow rates for each service.
* Selection and location of the control, operation and alarm devices of the LPG or GN system.
* Technical specifications of equipment, devices and materials.
* According to the capacity of the LPG tank, the CONCESSIONAIRE will carry out the corresponding procedures before OSINERGMIN.
* Sizing of space and of the storage tank foundation base. Location of the supply outlet.

1. Oil system (Diesel B5)

Establish the requirements for the use of oil (Diesel B5), considering the equipment of a generator set, for which a storage system, pumping and oil distribution networks must be designed. For this, the following must be presented:

* Justifying calculation to determine the size of the general storage tank and daily tank for each pressurization equipment and electric pump.
* Justifying calculation to determine the diameter and route of the storage tank filling and return pipes, distribution pipes to points of use, indicating pressure drops and service flows.
* Selection and location of the control, operation and alarm devices of the system.
* Technical specifications of equipment, devices and materials.
* According to the capacity of the diesel oil storage tank B5, the CONCESSIONAIRE will carry out the corresponding procedures before OSINERGMIN.
* Sizing of space and bases for storage tank, daily tanks and electric pump.

1. Favorable technical report (ITF)

The CONCESSIONAIRE must attach the ITF (favorable technical report) issued by OSINERGMIN with a favorable technical opinion of said entity on the installation or modification project, in relation to compliance with the Applicable Laws and Provisions, especially the current regulations of the hydrocarbon subsector.

1. Generator set

Sizing of the generator set capacity according to the emergency electrical load.

Sizing of the powerhouse environment that will house the generator set, considering the ventilation and volume of fresh air necessary for its operation and its capacity, for which it must present the following:

* + - * + Sizing of space and foundation bases for the generator set, according to the characteristics provided by the manufacturers.
        + Design of the Diesel B5 oil system.
        + Calculation of ventilation air volume and fresh air.
        + Design of the soundproofing system according to the noise levels recommended by international standards for hospital infrastructure.
        + Combustion gas expulsion system.
        + Fuel supply and return points.
        + Technical specifications and quotes for equipment, control devices and materials.

1. Steam and condensate return system

It includes the generation and distribution or supply lines of steam from the header or distribution manifold to each of the equipment that uses steam in its process, such as the kitchen, laundry, sterilization and solid waste autoclave areas. The steam and condensate return system will be made up of the following components:

* Boilers and equipment.
* Pressure reducing stations.
* Boiler feed water tanks.
* Feed water pumps to the boilers.
* Boiler feed water lines.
* Boiler purge lines.
* Steam lines and condensate return from consumption points.
* Valves and accessories, expansion joints.
* Boiler chimneys.
* LPG or oil supply lines (Diesel B5).

1. Solid Waste Treatment System (If applicable)

The dimensions of the environment that will house the biocontaminated solid waste treatment equipment will be coordinated with the specialty of sanitary facilities and architecture and must consider the following:

* Dimensioning of the capacity of the biocontaminated waste treatment equipment (autoclave with pre-shredding) according to the solid waste production of the health facility.
* Sizing of space and foundation bases for the equipment, according to the characteristics provided by the manufacturers.
* Sizing of waste storage areas classified according to the degree of contamination.
* Determination of evacuation routes or routes for treated and common solid waste.
* Steam, raw water, soft water and electrical power supply points.
* Technical specifications and quotes for equipment, control devices and materials.

1. Pneumatic mail system

The CONCESSIONAIRE may implement and design the pneumatic system after justifying analysis. If implemented, it must be installed during the construction of the Hospital and the PCC.

1. Renewable Energy System

The CONCESSIONAIRE may implement a duly justified renewable energy system.

1. Information and Communication Technologies

The various systems linked to information and communication technologies that guarantee the adequate and essential integrated operation of the Hospital and PCC must be considered.

In the descriptive memory of the Technical File, it must be indicated that the CONCESSIONAIRE, with the signing of the Certificate of Works and Equipment Verification and Acceptance, will deliver a complete set of plans for facilities related to information and communication technologies. Likewise, at that time, will carry out training for the maintenance personnel of the Hospital and PCC on the facilities and equipment installed. It is the obligation of the CONCESSIONAIRE to present the supporting calculations for the design of the elements, equipment or parts of each of the networks that make up the integral system of the Project.

The CONCESSIONAIRE must comply as a minimum with what is established in the technical document called: "Minimum Technical Requirements TIC of the Data Center for Public Private Partnership Projects - PPP" of the GRANTOR or regulation that modifies or replaces it.

The CONCESSIONAIRE must design and supply what corresponds to information and communication technologies that considers the conduits, trunk wiring, technological solutions that need to be implemented to optimize the management and administration of the Hospital and PCC, computer and telecommunications equipment, hardware and software, HIS that supports the equipment integration platform with recognizable protocols and standards, considering the following:

1. Data Center

Must consider an optimal technological infrastructure for its operation, obtaining levels of tightness, security, temperature and electrical protection, in accordance with the international standard TIA 942 (Telecommunications Infrastructure Standard for Data Centers).

This environment is made up of the following areas:

- Equipment Room

- Administration Room

- Electrical Control Room

1. Structured cabling system

The installation and characteristics of the system must comply with current national and international norms and standards, offering installation flexibility and independence from providers and protocols, as well as providing a wide capacity for growth and ease of administration.

1. Centralized storage system

A centralized storage system must be implemented in the Hospital and PCC, including the means to obtain backup copies of the data obtained.

1. Centralized processing system

A centralized processing system must be implemented in the Hospital and PCC that allows the processing of information from the different systems.

1. PAC/RIS Image Management System

A medical image management system (Diagnostic Imaging and Radiotherapy) must be implemented through the integrated PACS/RIS systems considered as Equipment.

1. Connectivity system (Networking)

A connectivity system must be implemented through at least one fiber optic or copper medium.

1. Centralized wireless network system

A centralized wireless network system should be implemented.

1. IP telephone exchange

A telephone exchange must be implemented to meet and manage voice communication needs, clearly and efficiently, between the different areas of the Hospital and PCC, other assistance centers of the GRANTOR and abroad (PSTN).

1. Music and megaphone systems

A music and megaphone system must be implemented that allows the transmission of audible voice messages or background music.

1. IP security camera system

A security camera system must be implemented through images and videos obtained by the different cameras located inside and outside the Hospital and PCC. This includes at a minimum a remote assistance system, quality of care monitoring, and event log

1. IP Nurse Call System

A nurse call system must be implemented that provides the two-way communication service between the patient and the nurses station, recording the activities of assistance service or nursing care.

1. IP TV system

An IP TV system must be implemented that allows the commercial television signal (cable, satellite, free, digital HD TV and others) to be carried to the televisions distributed in the different environments of the Hospital and PCC. Additionally, the system must allow the transmission of institutional videos of an informative nature and of orientation to the public.

1. Access control system and IP security

An access control and security system must be implemented to prevent unauthorized persons from accessing some areas of the Hospital or PCC considered critical areas, as established in Annex 8. The system will also provide the physical location online, of high-cost assets, allowing the prevention of theft.

1. IP Synchronized Clock System

A synchronized clock system should be implemented in the various environments of the Hospital and PCC. It should also be used to keep the time of all computer equipment (servers, workstations, IP phones, etc.) synchronized and of the devices used to control and record staff attendance, control of work times, access control to certain restricted areas, among others.

1. IP Attendance Clock System

A system of clocks must be implemented for the assistance of the assistive and administrative personnel who work in the Hospital and PCC.

1. VHF/HF radio communication system

A VHF / HF radio communication system should be implemented.

1. Fire detection and alarm system

A fire detection and alarm system must be implemented that allows early detection of fires, issuing and controlling alerts on occurrences; as well as the registration and monitoring of systems related to fire safety.

1. Maintenance and energy saving system

A maintenance and energy saving system must be implemented in the Hospital and PCC.

1. Insured service modules

The modules aimed at facilitating the care of the insured must be implemented by validating the insured's information, assigning offices and rescheduling medical appointments.

1. Telepresence system

A telepresence system must be implemented that allows specialized remote assistance with audio and video between the Hospital or PCC and other establishments or teaching organizations, national and international, in order to provide and receive support in the study of special cases in real time.

1. EsSalud cabins online

The online EsSalud booths should be implemented to facilitate the access of the insured to the GRANTOR's services through a telephone call to access: medical appointments, confirmation and follow-up of appointments by referral and attention to requirements and requests.

1. Public phones

The Hospital and PCC will have batteries of public telephones that cover the communication demand of the patients. The technology and operating principles of the system will depend on the telecommunications service provider.

1. Equipment
2. Comprehensive Equipment Design

The CONCESSIONAIRE must prepare the distribution drawings of the Equipment with their respective room codes, list of keys used in the drawings, general list and reference cost with quotes that support said cost. The Equipment that requires special installations will have attached the power data, number of phases, Hz and pre-installation requirements.

The Equipment proposal must be in accordance with technological progress and with the necessary conditions to make use of these to their maximum capacity.

Equipment needs will be indicated in relation to number and basic characteristics, according to the establishment level, considering some complex or sophisticated Equipment and according to what is specified in Annex 8.

It is convenient for the CONCESSIONAIRE to reliably differentiate in the documents of the Technical File those that correspond to the Equipment from those that correspond to the Equipment Linked to Civil Works to facilitate the process of verification and acceptance of works and equipment.

In relation to the Equipment, the following is mentioned for its considerations in the preparation of the Technical File:

• Regarding the Clinical and Administrative Furniture The CONCESSIONAIRE must comply that all the metal parts of the furniture must have a special anticorrosive treatment to withstand humid climates, solar radiation and exposure to the environment. It must be modern and ergonomic.

• Regarding Surgical Instruments, the pieces of instruments must be manufactured at least in high quality surgical stainless steel, which must comply with the DIN 58298 standard and ISO 7153 standard or the standard that modifies or replaces it.

The manufacturer's information must be attached describing the chemical composition and special coating of the metals for each of the pieces offered, according to international standards DIN 58298, AISI, ASTM, among others. Likewise, it must be attached the international quality certifications DIN EN ISO 9001, DIN EN 46001 or equivalent.

In each of the pieces of surgical instruments offered, it must have an electrolytic or similar recording indicating the brand and code and the name "ES" - "H.CH." in the case of the Hospital and "ES" - "PCC" in the case of the PCC, guaranteeing that the engraving process does not alter the microstructures of the surgical instruments and avoid micro-fissures, allowing their recognition in case of loss/misplacement/theft : "ES" is the acronym EsSalud, "H.CH." stands for Hospital and “PCC” stands for PCC.

Each container of each set of instruments must be uniform in its presentation, being that at least the sterilizable aluminum container must have a permanent filter system and a maintenance-free barrier system of 285 x 280 x 100 mm with a perforated steel sheet basket and a thickness of 0.8 mm.

• A list of the electromechanical equipment linked to civil works must be included, differentiating it from the Equipment.

1. General list of Equipment

The CONCESSIONAIRE will attach the list of all the Equipment included in the drawings with an indication of the environment where they are located, their quantity, a description and the type to which it belongs.

1. Referential cost and quotes

The CONCESSIONAIRE will present the referential cost of the Equipment by generic group, considering the quantities by type of Equipment, the partial cost of the Equipment, storage, freight and insurance, Maintenance (with the annual percentage) and the total cost.

1. Special and pre-installation installations

The supplier of the Equipment will present the pre-installation requirements that are required, these must be executed by the CONCESSIONAIRE, assuming all the costs. Its execution will be in coordination with the provider. To prepare the installation of the Equipment it must be taken into account the cold water, hot water, soft water and hot water recirculation networks, drainage networks, lighting networks, power, grounding, and installation of the generator set (uninterrupted power for some environments), emergency signaling and lighting, propane gas networks, industrial compressed air networks, oxygen and medical vacuum networks, detection system, fire extinguishing and centralized fire alarm, monitoring and security system, nurse call system, megaphone system and background music, communication system (voice, data, CATV and multimedia). Reinforcements in partitions or walls that require the attachment of equipment or furniture that due to its weight have an impact on the structural or non-structural design.

In the assembly process, tests, the energy installations that the tests consume, as well as the fuel and everything that is required for its installation and operation of the Equipment will be provided by the CONCESSIONAIRE, assuming the cost.

1. Quantities, Costs and Budgets (by specialty)

The Technical File in the development of this specialty considers the inclusion of coordination meetings, agreements, partial conformities of: quantities, items, analysis of unit prices and quotes by specialty. It will be prepared taking into account the following considerations for the development of the metrics, costs and budgets of the work:

* 1. List of inputs.
  2. Quantity list by budget item.

Likewise, the CONCESSIONAIRE must attach, by specialty, the following information:

• EXECUTIVE SUMMARY

* Data sheet
* General index of the documentation.
* Summary budget.
* Disaggregation of general expenses.
* List of drawings by specialty.
* Term of execution of the work.
* Gantt chart.
* PERT-CPM programming.
* Schedule valued.
* List of the minimum equipment of the work.

• ARCHITECTURE AND SIGNAGE - SECURITY AND EVACUATION

* Budget for architecture and signage.
* Analysis of unit prices budget item.
* List of inputs.
* Quantity list by budget item

• STRUCTURES (INCLUDES PROVISIONAL WORKS, PRELIMINARY WORK, SAFETY AND HEALTH ON SITE)

* Budget of provisional works, preliminary works, safety and health on site - Structures
* Analysis of unit prices by budget item.
* List of inputs.
* Quantity list by budget item

• SANITATION INSTALLATIONS

* Budget of sanitary facilities.
* Analysis of unit prices by budget item.
* List of inputs.
* Quantity list by budget item
* ELECTRICAL INSTALLATIONS
* Budget for electrical installations.
* Analysis of unit prices by budget item.
* List of inputs.
* Quantity list by budget item

• MECHANICAL INSTALLATIONS

* Budget of mechanical installations.
* Analysis of unit prices by budget item.
* List of inputs.
* Quantity list by budget item.

• INFORMATION AND COMMUNICATIONS TECHNOLOGIES

* Budget.
* Analysis of unit prices by budget item.
* List of inputs.
* Quantity list by budget item.

• EQUIPMENT

* Referential budget of the Equipment.
* Technical specifications of the equipment.
* Purchase conditions, includes installation, maintenance, warranty, training, etc.
* Quantity list by budget item.

1. Semi-Detailed Environmental Impact Study

The CONCESSIONAIRE must have a Semi-Detailed Environmental Impact Study, according to what is indicated in the Contract

1. Road impact study (if applicable)

• The road impact study must contain at least:

* Executive Summary.
* Descriptive memory.
* General aspects of the Project, its urban and road environment, area of influence.
* Current situation of the area where the project will be developed.
* Description of the activities to be developed.
* Table of areas.
* Determination and location of the number of parking lots according to the type of vehicle.
* Description of the vehicle access control system.
* Description of supply operations, solid waste disposal, outpatient and emergency admission.
* Urban diagnosis of area of influence.
* Determination of the area of influence.
* Land uses.
* Road infrastructure and street furniture.
* Estimated value of the work.

• Information on future projects that affect the roads in the area.

• Study of traffic and transportation, with field data no older than six (6) months, taken in periods of regular development of activities and in critical periods, in the area of influence.

• Road impact of the Project, current and future scenario.

* Hypothesis of negative impacts.
* Description, evaluation and analysis of vehicular and pedestrian traffic in the area of influence.
* Queue analysis and internal operation.
* Analysis of the possible road impacts in the peak seasons of the Project and in critical periods of the area of influence.

• Development of the mitigation proposal in the area of influence with its corresponding works, facilities or mitigation measures.

* Area of immediate influence.
* Primary area of influence.
* Area of secondary influence.

• List of drawings

* Location map and delimitation of the immediate area of ​​influence to be studied, with a comparative table of normative parameters and those used by the project.
* Drawings of access and exit routes, both vehicular and pedestrian at a scale of 1: 500.
* Photographs of the area, with a reference map for the location of each shot.
* Topographic map of the current situation including: land use, furniture, traffic directions, signaling, within a radius of 100m. on the roads around the lot, duly bounded. Adequate scale according to the size of the lot, presented in A1 format and on a known scale.
* Distribution drawing of the project on an adequate scale, depending on the size of the lot, presented in A1 format and on a known scale, which includes all the perimeter roads.
* Negative impact mitigation drawing detailing the area of ​​intervention in signaling and works on public roads, to be executed by the project promoter, also containing the final distribution of the project, location of accesses and control mechanisms, internal circulation routes and a summary table coding the impact mitigation works; on a suitable scale, according to the size of the lot, presented in A1 formats and on a known scale.
* Monitoring plan during the operation of the Project, according to indicators, three (3) months and one year after the start of the Operational Stage.

1. Risk assessment studies

The CONCESSIONAIRE must present the respective study of physical vulnerability and risk estimation, carrying out the vulnerability and risk analysis of hospitals; For this, a threat assessment and a physical diagnosis of the Project under study must be available.

1. Appendixes
2. Zoning and building parameters

Consign the Certificate of Urban and Building Parameters in force, processed and obtained by the CONCESSIONAIRE, in compliance with the Applicable Laws and Provisions.

1. Urban development drawings

Obtain and consign the Urban Development drawings in order to prepare the Technical File in accordance with said documentation.

1. Building license

Obtain and consign the Building License, in compliance with the Applicable Laws and Provisions.

1. Functional Medical Program

Consign the Functional Medical Program.

1. Comparative Architectural Medical Program, with support

The CONCESSIONAIRE, once the Technical File is completed, must make the comparative chart of the Architectural Medical Program with the normative architectural program, with the respective support; The resulting Architectural Medical Program must comply with the minimum regulatory requirements (number of rooms and minimum regulatory area) and the Applicable Laws and Provisions.

1. Contingency and emergency plan

The CONCESSIONAIRE shall prepare a contingency and emergency plan, which must contain at least the following elements:

* Contingency and emergency plan in the event of natural disasters.
* Contingency and emergency plan for prolonged failures in the provision of domiciliary public services.
* Contingency and emergency plan in the event of terrorist or vandalism acts.

The contingency and emergency plan will be reviewed annually.

1. Occupational health and safety management system

The CONCESSIONAIRE shall prepare the document that describes its occupational health and safety management system, which must comply with the Applicable Laws and Provisions, considering the activities that the CONCESSIONAIRE must develop.

The occupational health and safety plan is subject to the rules that regulate the labor relations of workers in private activity. Likewise, where appropriate, the special work regimes will be applicable.

**Annex No. 16 TECHNICAL OBLIGATIONS OF THE CONCESSIONAIRE IN RELATION TO THE BUILDING OF THE INFRASTRUCTURE**

1. **General information**

The CONCESSIONAIRE must contemplate, comply with and follow during the Infrastructure Construction Activity with the considerations established in this Exhibit, taking into account that the implementation of the infrastructure construction (which includes the Equipment Linked to Civil Works) maintains direct correspondence with the Technical File that is of his authorship and that all the activities that impact on the Provision of the Equipment, as well as the Start-up and Operation and Maintenance activities are of his sole responsibility, cost, account and risk.

1. **Considerations for the execution of the Work**
2. General Plan

The General Plan must be presented by the CONCESSIONAIRE as part of his obligations within the terms established in the Contract, and must contain the following:

* Information on the general and detailed construction procedure.
* The detailed schedule including times and resources for each activity.
* The occupational health and safety plan. Including any plan or requirement by the Competent Government Authority for the surveillance, prevention and control of COVID-19, if applicable.
* Comprehensive programming of the activities required for the commissioning of the Hospital, including, in addition to construction, pre-operational, administrative and legal activities.
* Others at the CONCESSIONAIRE's discretion.

The General Plan must have the technical verification of the Design, Construction and Equipment Supervisor.

1. Knowledge of the Work and its execution

* The CONCESSIONAIRE has the exclusive responsibility of visiting and inspecting the entire place and areas where the Work will be executed; carry out the necessary evaluations, soundings and inquiries; carry out the verifications and analysis that he deems pertinent taking into account the conditions of the place and area where the Work will be executed, the accesses, conditions of the transport of personnel and materials, handling, storage, disposal, sources of materials, availability of labor, water, energy and communications, and in general all the elements and conditions that may directly and indirectly affect it; identify difficulties, contingencies and possible risks, in order to take the corresponding considerations that allow guaranteeing the execution of all the required works, so that the final product is in accordance with the objectives pursued, all of this under his own cost, account and risk .
* Any fault, negligence, error or omission of the CONCESSIONAIRE in obtaining the information will not release him from the responsibility of adequately assessing the difficulties and costs, for the satisfactory execution of the Work and the fulfillment of the obligations derived from the Contract. Therefore, the CONCESSIONAIRE may not claim, under any circumstance, lack of knowledge of the conditions of the Work or variation of the physical conditions in relation to those indicated in the technical documents or others that are linked to the execution of the Works.
* The CONCESSIONAIRE, through the resident engineer, must carry out a detailed analysis of the work execution schedule and consequently of the equipment that will be necessary to meet the established deadlines, taking into account the climatic characteristics and any other nature, that are related to the process of its execution.
* In cases involving subcontractors, the CONCESSIONAIRE will present the following to the Design, Construction and Equipment Supervisor:
* List of subcontractors.
* Copy of the texts or contracts to be signed, stating objectives, work, material or equipment and places of execution or delivery, etc.
* List of works to be subcontracted that will be executed in accordance with the provisions of the Contract.

1. Compliance with contractual documents

The CONCESSIONAIRE will be fully and entirely responsible for the correct, complete execution of the Work in strict accordance with the Contract, the Technical File and the other documents that are part of it.

In the event of a defect, omission or insufficiency of the Work, or that the CONCESSIONAIRE does not comply with or infringe the rules and his contractual obligations, he is obliged to remedy the possible damages or losses caused, which could affect the GRANTOR. For which he must comply with the provisions of Clause 8.6 of the Contract.

The modifications made to the technical file during the work execution process must have the approval of the Design, Construction and Equipment Supervisor and the GRANTOR's approval.

1. Resident engineer

The CONCESSIONAIRE must maintain in the Work during its execution and permanently, a qualified and specialized civil engineer for the performance of the functions of the resident engineer.

By the sole appointment of him, the resident represents the CONCESSIONAIRE as the technical manager of the Work, not being empowered to agree to modifications to the Contract; likewise, all the instructions that were given will be considered as given to the CONCESSIONAIRE. He may represent the CONCESSIONAIRE and act for him during the execution of the works and take the contractual and logistical management of the Contract with regard to the technical aspects of the construction until its liquidation.

The resident engineer will be the only person authorized by the CONCESSIONAIRE to make the annotations on his behalf in the Design and Construction Logbook. Likewise, must receive and duly attend to the instructions, observations, objections, suggestions, or any other intervention of the Design, Construction and Equipment Supervisor.

In case the CONCESSIONAIRE requires to replace the Resident Engineer or one of his specialists, he must notify the Design, Construction and Equipment Supervisor of said change within a maximum period of two (2) Calendar Days after the replacement occurred.

1. Construction aspects of the Work

* Layout of the Work

The CONCESSIONAIRE will be responsible for the correct layout of the Work in accordance with the Preliminary Studies, drawings and technical specifications in relation to the original coordinates and reference dimensions, he will also be responsible for the accuracy of the heights, dimensions and alignments of all the parts of the Work including the supply of all the instruments, equipment and workers necessary for this purpose. If in any activity of the Work, an error originated by the CONCESSIONAIRE is evidenced in regard to the positions, heights, dimensions or alignments of any part of the Work, he must rectify such error at his cost, account and risk.

The CONCESSIONAIRE will consider that the layout drawings must be completed for the beginning of the Verification and Acceptance of Works and Equipment process.

It is the responsibility of the CONCESSIONAIRE to carefully protect and preserve all the milestones, alignments, leads, marks and other objects used in the topography of the Work. The verification of the layout or of any line or level by the Design, Construction and Equipment Supervisor will not exonerate the CONCESSIONAIRE in any way from his responsibility for the accuracy of them.

* Supply of materials, construction equipment and personnel

The CONCESSIONAIRE must supply all the materials, national and imported equipment, temporary works and personnel for the construction of the Work, including the technical management personnel, as well as all other supplies that are needed for the construction, completion and maintenance of the Work.

* Materials testing laboratory

The CONCESSIONAIRE will carry out the analyzes and tests necessary for the control of the Work in accordance with the technical specifications of the Technical File.

It is an essential requirement to continue with the following activities of the Work that the approval of the Supervisor of Design, Construction and Equipment is previously obtained with respect to the results of the laboratory tests carried out by the CONCESSIONAIRE.

The CONCESSIONAIRE must supply, at his own cost, account and risk, all the consumable materials, auxiliary labor and transportation necessary for the execution of such tests.

The tests will be carried out in laboratories of public or private institutions of recognized prestige and that have the prior approval of the Design, Construction and Equipment Supervisor.

1. Testing and quality control

The quality control of the Work will be carried out during the work execution process and will be in charge of the Design, Construction and Equipment Supervisor in each of the specialties, in order to ensure that during said process all the specifications established in the Technical File are met, as well as in compliance with the Applicable Laws and Provisions.

For the verification and acceptance of the Work, the protocol of tests during the execution of the Work must be considered, among others, in all the specialties that are included in the technical specifications of the Technical File. The test protocols must be signed by the CONCESSIONAIRE and the Design, Construction and Equipment Supervisor.

1. Surveillance

The CONCESSIONAIRE will be responsible for taking the necessary measures to obtain the safety and protection of the people and facilities of the Work, for which he must provide during the work, the surveillance personnel, fences, lighting and other adequate elements that are required.

The CONCESSIONAIRE must provide general guardianship and auxiliary service personnel for the Work staff and the facilities for common use.

1. Monthly reports and meetings

On a monthly basis, the CONCESSIONAIRE will deliver to the Design, Construction and Equipment Supervisor in three (3) copies, progress reports detailing the status of the works, problems that have arisen, statistics of the Works, number of personnel, equipment, and others, whose presentation form will be agreed with the Design, Construction and Equipment Supervisor.

He must also report on the status of the Equipment, manufacture, tests, transport and assembly. The report must be delivered on the last Day of each month.

Coordination meetings will be held periodically on the situational status of the Work between the Design, Construction and Equipment Supervisor and the CONCESSIONAIRE. The frequency of these meetings will be defined by the Design, Construction and Equipment Supervisor.

The monthly progress of the Work must be recorded in a photographic album and in videos, which will be made by the CONCESSIONAIRE. Both the videos and the album should show, above all, the progress of the different sections of the Work, as well as particular details of the supply. The size of the photographs will be 15 x 9 cm. and they will have a description in each photograph. At the end of the Work, one (1) original in color with one (1) CD of the photographic album and one (1) video containing the record, in high definition, must be delivered to the GRANTOR.

1. Other obligations of the CONCESSIONAIRE

* The CONCESSIONAIRE shall implement the necessary actions for the actual compliance with the Laws and Provisions Applicable to the Work; as well as, for the supply and transport of materials and equipment, actions that he undertakes to comply with and respect, the GRANTOR is not liable for any claims made by the CONCESSIONAIRE for the infringement of these claims.
* The CONCESSIONAIRE must comply with all Applicable Laws and Provisions in labor matters, social and health insurance, occupational health and safety, environmental impact, hygiene and safety of the construction industry at the Work site or camps that he establishes.
* The CONCESSIONAIRE has the obligation to ensure the safety of the workers during the execution of each and every one of the works, providing the equipment and material necessary for this purpose. The risk resulting from the non-observance of this obligation will be borne solely by the CONCESSIONAIRE.
* During the performance of the works and other activities corresponding to the Work, the CONCESSIONAIRE will strictly adhere to the deadlines set forth in the work progress and material acquisition calendars that will be part of the Contract, respecting the Work Execution Schedule and what is established in the Contract.
* It will be the responsibility of the CONCESSIONAIRE that any discovery of historical interest or of another nature or of significant value that is discovered in the area of the Work is immediately notified to the Supervisor of Design, Construction and Equipment, who will notify the GRANTOR about the discovery and determine the way to proceed in accordance with the provisions in force on the matter.

1. Liability for damages

* Damage to the Work, people and owners

The CONCESSIONAIRE is responsible and has the obligation to protect the works executed against damages, loss of materials and negative impacts caused to the Work, to the people and the properties of third parties (including the GRANTOR and any person hired by him in relation to or not with the execution of the Work), to his employees or workers, including those of their subcontractors, and that are due to acts, omissions, accidents of any nature (including fortuitous events or force majeure), which are verified during the construction of the Work and until its completion.

If there are damages, loss of materials and negative impacts caused to the Work, they will be at the CONCESSIONAIRE's account and risk, whether they come from acts or omissions of himself or from other causes attributable to him. In any case, the CONCESSIONAIRE must immediately repair or replace the damaged or lost. The time required for the repair or replacement of the damage suffered shall not be a reason for the extension of the terms established in the Contract.

The CONCESSIONAIRE shall be responsible for the injury or death of the CONCESSIONAIRE's personnel and the loss or damage suffered by the material assets that occur during the term of the Contract or as a consequence thereof, in compliance with the Applicable Laws and Provisions.

In addition, the CONCESSIONAIRE must provide at his own cost the solution of the inconveniences and the repair of the aforementioned damages and must hold the GRANTOR harmless from any claim for damages that are a consequence of the displacement of the Equipment or the Equipment Linked to Civil Work or provisional works, inside and outside the area of the Work; as well as the claims, actions and demands that are filed or promoted, in relation to the execution of the Work.

* Property protection and restoration

The CONCESSIONAIRE shall not enter another's property without obtaining the corresponding permits; He will be responsible for the care of all public and private property that may be affected by the Work, and will use all reasonable precautions to prevent damage or damage to them.

When or where there is damage or flaws due to an act attributable to the CONCESSIONAIRE, to private or public property, he will have the obligation to repair the damaged properties at his own cost until they are in a condition similar or equal to the one it had before damaging them, or to compensate the damage as soon as possible.

* Public and workplace safety

The CONCESSIONAIRE must adopt all reasonable precautions to minimize the risks of loss of life or damage to people's health during the execution of the Work. He must implement the mechanisms that are required to protect the perimeter and neighboring areas to all work and construction areas of any nature and will install at least signs, lights, reflectors and guards.

The CONCESSIONAIRE will respect and apply all the applicable safety regulations recognized in the Laws and Applicable Provisions for this type of Works, being responsible for compliance with the safety regulations for his personnel, including that of subcontractors.

When, in the opinion of the Design, Construction and Equipment Supervisor, any operation or work condition entails danger to people or property, such operation must be immediately interrupted, and the CONCESSIONAIRE must adopt all safety measures before continuing with the work.

The provisions of the preceding paragraph shall not be construed, in any way, as an exoneration of the CONCESSIONAIRE's responsibility in the execution of the Work.

* Report of accidents or legal actions

The CONCESSIONAIRE will give immediate notice to the GRANTOR, within a maximum of twenty-four (24) hours, of any accident or event that occurs during the execution of the Work, which determines damages to third parties or to the properties or could cause damage to them. Said notice will be supplemented by presenting to the Design, Construction and Equipment Supervisor, within five (5) Calendar Days of the event, a complete and precise written report of the events.

Likewise, the CONCESSIONAIRE must immediately send to the Design, Construction and Equipment Supervisor two (2) copies of any summons, notice or other document received by him and that derive from any legal action and that, in one way or another, could be related with the Contract or its execution.

The provisions of the preceding paragraphs shall not be construed, in any way, as an exemption from the CONCESSIONAIRE's liability.

* Temporary field and food facilities

The CONCESSIONAIRE shall provide the facilities, electric power supply, water supply and appropriate facilities for all his workers, technical, administrative and staff personnel at his own cost.

* Compliance by subcontractors

The CONCESSIONAIRE shall be responsible for ensuring that his subcontractors comply with provisions of the previous items.

* Labor legislation

The CONCESSIONAIRE must respect the Laws and Applicable Provisions in force with respect to all the personnel under his charge for the execution of the Work. The Design, Construction and Equipment Supervisor will be in charge of verifying compliance.

1. Material equipment and temporary works

* Quality of the materials and their testing

All the materials and the quality of the related services must be in accordance with the technical specifications inserted in the Technical File not objected and as stipulated in the Contract and, without prejudice to this, subject to the verification of the Design, Construction and Equipment Supervisor. Such materials and services will be periodically subject to the quality tests that the Design, Construction and Equipment Supervisor determines.

It is the responsibility of the CONCESSIONAIRE to supply the assistance, the instruments, the machinery, the workers and the materials that are normally necessary for the examination, measurement and development of the test protocols related to any service and to the quality, weight or quantity of any material used.

The CONCESSIONAIRE must, at his own cost, obtain the material samples before they are incorporated into the Work to be subjected to tests in accordance with the instructions issued by the Design, Construction and Equipment Supervisor. The inspections or tests carried out by the Design, Construction and Equipment Supervisor will not relieve the CONCESSIONAIRE of any of his obligations under the Contract and the execution of the Work.

* Construction site sign

The CONCESSIONAIRE will assume the costs of the Construction site signs, which will be at least two (2). In said Construction site signs the name of the Work will be placed with the characteristics indicated below. The materials of the Construction site signs will be: posts and slats of planed timber or metal, plywood panel or metallic plate with primer or billboard printed on canvas made of tear-resistant plastic material. The measurements of this Construction site sign will be: 4.00 m wide x 3.00 m high. Art and text will be coordinated with the GRANTOR. The Construction site sign must be installed within three (03) days of the start of the Infrastructure Building Activity.

1. Development of work - inspections and authorizations

* Access to the work site and manufacturing sites

The GRANTOR and the Design, Construction and Equipment Supervisor, as well as any person authorized in writing, will at any time have access to the Work, as well as to any office and premises where work is being carried out or where the materials, manufactured items come from or equipment for use in the construction sites and the CONCESSIONAIRE must facilitate, in the best possible way, this access, providing for this purpose all the necessary assistance. Such visits or inspections shall not interfere with the CONCESSIONAIRE's work.

* Prior inspection of the Works

No work will be covered or completed without prior examination and approval of the Design, Construction and Equipment Supervisor, and the CONCESSIONAIRE must provide ample facilities for the Design, Construction and Equipment Supervisor to examine them.

The CONCESSIONAIRE will notify the Design, Construction and Equipment Supervisor through the Design and Work Notebook when the works are ready to be examined, and the Design, Construction and Equipment Supervisor must without justified delay, carry out the measurement of it and note the results in the respective Design and Work Notebook.

The CONCESSIONAIRE will notify the Design, Construction and Equipment Supervisor, with due advance notice, the date and time when a work will be started or restarted.

* Removal of materials for inspection

The CONCESSIONAIRE must discover any part or parts of the Work or make soundings or perforations in it or through it, if the Design, Construction and Equipment Supervisor requests it, having to replace and repair that part or parts removed or perforated, in accordance with the Design, Construction and Equipment Supervisor.

* Removal of materials and re-execution of inadequate services

It corresponds to the Design, Construction and Equipment Supervisor during the execution of the Work, the power to determine in writing the following requests to the CONCESSIONAIRE:

* The removal from the site, within the period specified by notification, of any material that is proven not in accordance with what is specified in the Technical File.
* The substitution of the above-mentioned materials for the appropriate and adequate ones.
* The demolition and appropriate re-execution, regardless of any previous test or intermediate payment, of any work that at the discretion of the Design, Construction and Equipment Supervisor is not in compliance with the Technical File regarding materials or quality of service and work.

In the event that the CONCESSIONAIRE does not comply within a period of ten (10) Days with an order of the nature of this item, the Design, Construction and Equipment Supervisor may order the execution of said orders, being that all the expenses that this measure originates, will be borne by the CONCESSIONAIRE.

1. Night work and holidays

The CONCESSIONAIRE may work night shifts, overtime and on Sundays and holidays. In these cases, the CONCESSIONAIRE assumes such situation at his cost, account and risk, and must comply with the Applicable Laws and Provisions. The CONCESSIONAIRE must notify the Design, Construction and Equipment Supervisor in writing, with no less than twenty-four (24) hours in advance, about his intention to carry out work at night, overtime or on Sundays and holidays. It is the responsibility of the CONCESSIONAIRE to manage and obtain the necessary permits from the Competent Government Authorities to carry out said works.

When working at night, the CONCESSIONAIRE must provide the open work areas with sufficient lighting for the safety of his personnel and the correct execution of the work and its corresponding inspection.

1. **Work execution program**

It is the logical sequence of constructive activities that are carried out in a certain execution period; which includes only the budget items of the Technical File, as well as the links that may arise. The work execution program is prepared by applying the CPM or similar method and is the basis for the elaboration of the Work Execution Schedule.

The results of the foregoing will be summarized in the Gantt chart in which the schedule of the Works is represented with the duration of the tasks or activities. This chart must be dated by months beginning in the month that corresponds to the start date of the Infrastructure Building Activity.

1. **Relevant aspects of the Work execution**

The works will be executed in accordance with what is indicated in the Contract and its Exhibits, Bases, technical specifications of the work and in the Technical File not objected, taking the necessary actions to minimize the environmental impact.

1. Vehicular and pedestrian circulation

The vehicular and pedestrian access roads in the workplaces must be kept in good condition and adequately marked.

The Work must have a perimeter fence that limits and isolates the work area from its surroundings. This fence must include pedestrian doors and gates for the access of machinery duly marked and have surveillance for access control.

When loading and transporting machinery is used in traffic lanes, including those in which manual loading and unloading operations are carried out, a sufficient safety distance or adequate means of protection must be provided for the personnel that may be present at the site

1. Cleaning of the Works

The Work will be kept constantly clean, for which waste will be periodically eliminated, which must be deposited in specific designated areas or appropriate containers duly labeled in accordance with Applicable Laws and Provisions.

1. Identification signs

The necessary and precise measures must be adopted so that the Work has sufficient signage in accordance with the Applicable Laws and Provisions.

Without prejudice to the provisions of Applicable Laws and Provisions, occupational health and safety signs must be used whenever the analysis of existing risks, foreseeable emergency situations and the preventive measures adopted, highlights the need to:

* Call the attention of workers to the existence of certain risks, prohibitions or obligations.
* Alert workers when a certain emergency situation occurs that requires urgent protection or evacuation measures.
* Provide workers with the location and identification of certain means or facilities for protection, evacuation, emergency or first aid.
* Guide workers who carry out certain dangerous maneuvers.

The sites indicated by the security officer must be indicated in accordance with the signage characteristics of each particular case. These signaling systems (posters, fences, beacons, chains, sirens, etc.) will be maintained, modified and adapted according to the evolution of the works and their emerging risks.

Where possible, appropriate signage will be posted around the hazardous area around the construction.

1. Extraction of surplus and debris

The waste resulting from the excavation must be deposited in the specific areas indicated. This waste area must be located within the maximum distance provided for this purpose in the technical specifications and treated as stipulated in the Semi-Detailed Environmental Impact Study.

1. **Management systems:**

Without being limiting, these systems regulated in the current national legislation and regulations may be the following:

* + - Occupational health and safety management system (OHSAS 18001: 2007, ISO 45001: 2018 Standard)

System aimed at identifying and controlling risks and adopting the necessary measures to prevent the occurrence of accidents by linking other types of management systems.

* + - Social responsibility management system (SA 8000: 2014 Standard)

System applied by the company in the face of the impacts of its activities and decisions and its repercussion on society with emphasis on the contribution of sustainable development, health and well-being of society.

* + - Environmental management system (ISO 14001: 2015 Standard)

System that uses methodological tools to develop an organizational structure with responsibilities, practices, procedures, processes and resources to determine and achieve a responsible environmental policy.

* + - Water management system (Water Responsibility, Blue Certificate)

System that allows identifying a certain company as responsible for water management, generating awareness of the efficient use of water within the company and the community in general.

* + - Energy management system (ISO 50001: 2011 Standard)

System that seeks to improve energy efficiency that implies the deployment of various functions of the company that influence the cost, consumption, surveillance, control, monitoring and planning of energy performance.

* + - Anti-bribery management system (ISO 37001: 2016 Standard)

System that encourages and focuses plausible efforts in the prevention and internal control of corruption through the adoption and business management that avoids the commission of crimes and the promotion of ethical values.

1. **Workplace Health and Safety Plan**

The CONCESSIONAIRE must comply with the Applicable Laws and Provisions regarding health and safety at work, during the execution of the work, complying at least with the following:

* The delivery and replacement of personal protective equipment (PPE).
* The installation, maintenance and training of collective protection equipment (CPE).
* Preparation and response to health and safety emergencies during work, with the implementation of emergency equipment.
* The signage that the Work requires to avoid accidents and provide sufficient safety to the worker or third parties.
* Prior to the development of work standards and procedures, a work risk analysis must be carried out, with which the hazards associated with each of the activities will be identified and preventive measures will be proposed to eliminate or control said hazards. Then the risks that, due to their magnitude, are considered "Critical Risks" will be identified, which should be prioritized and addressed immediately.
* The work safety and health plan must be integrated into the construction process of the Work, from the conception of the budget, which must include a specific item called "Work Safety and Health Plan" in which the cost of implementing the technical and administrative mechanisms contained in the plan will be estimated.
* Any plan or requirement by the Competent Government Authority for the surveillance, prevention and control of COVID-19, if applicable

Handling of hazardous materials

* All harmful materials, such as asbestos and lead, should be identified and appropriate precautions taken.
* All containers of hazardous chemicals used on the Site must be properly labeled (labeled).
* Chemical safety data sheets should be available to obtain information about hazardous chemicals in use.
* The recommendations of the chemical safety data sheets must be followed according to what is established therein.
* Workers must be aware of the danger of the substances to be used and will be informed of the precautions to take, particularly when using cement.
* Workers must be trained in the handling and use of dangerous chemicals.

Fires

The aspects established in Standard G-050 of the National Building Regulations or standard that modifies or replaces it, as well as the Applicable Laws and Provisions, will be taken into account as a minimum.

Verification and Acceptance of Works Process

* The process of verification and acceptance of works will begin within the term and under the terms established in the Contract.
* The Committee for the Verification and Acceptance of Works and Equipment will appear at the site of the Works in accordance with the terms provided in the Contract.
* The Committee for the Verification and Acceptance of Works and Equipment will verify faithful compliance with what is established in the Technical File and will carry out the tests that are required to verify the operation of the facilities, supply, Equipment and others that are considered necessary for the subscription of the Verification and Acceptance of Works and Equipment Act.
* In the event that the Committee for the Verification and Acceptance of Works and Equipment finds observations, it is the CONCESSIONAIRE's responsibility to correct them and solve them at his own expense, cost and risk, within the terms provided in the Contract.
* Once the CONCESSIONAIRE corrects or solve the observations, he will record such fact in the Design and Work Notebook, restarting the verification procedure by the Design, Construction and Equipment Supervisor for communication to the GRANTOR within the terms provided in the Contract.
* The Committee for the Verification and Acceptance of Works and Equipment, once the correction of the observations has been verified, will proceed to sign the corresponding Works and Equipment Verification and Acceptance Act.

1. **TECHNICAL OBLIGATIONS OF THE CONCESSIONAIRE IN RELATION TO THE EQUIPMENT ENDOWMENT**
2. **Equipment definition and classification**

The CONCESSIONAIRE is responsible for the acquisition, transfer, installation and commissioning management of the Equipment, as well as for the continuous training in the use and handling of the equipment, the Hospital's personnel who are users of the equipment.

1. Quantity

The CONCESSIONAIRE shall comply with at least the quantity of Equipment indicated in the non-objected Technical File, respecting at least the list of this Annex. Any addition of Equipment to be made by the CONCESSIONAIRE in order to improve, maintain or facilitate the provision of the Services shall be at its own cost and risk.

1. Technical Specifications

The CONCESSIONAIRE shall fulfill at least with the technical specifications of the Equipment contained in the non-objected Technical File, and in no case shall they be of inferior technical or performance characteristics to those defined as regulatory characteristic by the GRANTOR.

1. **List of Equipment**

The CONCESSIONAIRE is responsible for implementing all the Equipment and distributing it by rooms, as set forth in the non-objected Technical File.

The list of Equipment by room shall be the primary tool for the elaboration of an inventory of assets for the Hospital, which shall be ready prior to the subscription of the Certificate of Verification and Acceptance of Works and Equipment, and shall be checked at the moment of the execution of the verification and labeling or computerized assignment (RFI) of assets by the GRANTOR.

1. **Official Approval**

The CONCESSIONAIRE, if applicable, shall submit, as appropriate, at least the following mandatory requirements, as follows:

1. Electrical safety certificate: UL, AAMI, NTP 60601-1-2010, NFPA, IEC, EN, FCC, CSA

Issued by a competent institution. Alternatively, copies of certifications fully demonstrated in catalogs, manuals, brochures, or other manufacturer's documents will be accepted. Instead of the copy of the manufacturer's certification, an affidavit signed by the manufacturer of the equipment to be offered or by the bidder may be submitted, certifying that the equipment offered complies with international electrical safety standards (Mandatory document to be submitted in the technical proposal of the Equipment prior to its acquisition).

Equipment using electrical energy must fulfill the regulations of the National Electrical Code in force in the country and must operate without an external transformer (unless they work with DC voltage). Equipment with external plug adapters, extensions or surge suppressors will not be accepted.

1. Simple copy of the sanitary registration or certificate of sanitary registration of the assets offered

They must be in force at the date of submission of proposals for the Equipment prior to its acquisition, issued by the General Directorate of Medicines, Supplies and Drugs (DIGEMID) in the name of the CONCESSIONAIRE or third parties, describing the product offered. In the event that the product is not included in the “List of Products of the Classification of Supplies, Instruments and Equipment for Medical, Surgical or Dental Use,” contained in the Applicable Laws and Provisions, the CONCESSIONAIRE shall submit a simple copy of the DIGEMID Certification made through the website, supporting that a sanitary registration is not required and where the product or device is described with a denomination that must not mislead as to the composition, indications or properties of the product or device, either on itself or with respect to other products or devices.

1. A simple copy of the ISO 9001 Quality Certificate or similar issued to the equipment manufacturer.
2. Other certifications as detailed in the non-objected Technical File.
3. **Requirements**

In order to provide the Equipment, the CONCESSIONAIRE shall fulfill all the requirements and scopes established in the non-objected Technical File, which shall be verified and validated by the Supervisor of Design, Construction and Equipment.

The CONCESSIONAIRE, at its own cost, may expand the requirements to be provided for the proper operation, functioning or quality in the provision of the contracted services.

1. **Access routes**

The CONCESSIONAIRE shall submit for the subscription of the Certificate of Verification and Acceptance of Works and Equipment the plan for the entry of bulky, heavy, difficult to maneuver equipment or others that due to their characteristics present risks of damaging their integrity or the Infrastructure and finishes of the Works, the entry routes shall be designed and planned from the unloading areas of the facility to the intermediate storage areas within the Works or final destination, if applicable.

The entry routes of the Equipment shall foresee all interferences or risk situations that may arise until the Equipment is positioned, if applicable.

The CONCESSIONAIRE shall develop the drawings corresponding to the entry routes of the Equipment, clearly indicating both horizontal and vertical routes, considering in the latter case the use of cranes or similar if necessary.

1. **Manufacturer's information**

The CONCESSIONAIRE shall submit to the Supervisor of Design, Construction and Equipment, once the proposals for the Equipment to be provided have been approved, the specific or general technical characteristics, if applicable, required for the proper functioning and operation of the Equipment, so that they may be taken into account in the development of the evaluation of the Pre-installation Works of the Equipment to be carried out in the Infrastructure Construction Activity.

The CONCESSIONAIRE shall submit to the Supervisor of Design, Construction and Equipment, with copy to the GRANTOR, the instructions or special indications given by the manufacturer to guarantee the proper operation of the equipment in the clinical application.

The CONCESSIONAIRE shall submit to the Supervisor of Design, Construction and Equipment, with copy to the GRANTOR, the manufacturer's indications for handling of high-tech equipment risk situations or potentially dangerous use; in order to be considered during the Operational Stage.

1. **Equipment Endowment Conditions**

The CONCESSIONAIRE shall fulfill the following scopes:

1. Technical proposals of equipment that fulfill with the technical specifications contained in the non-objected Technical File of the Equipment specialty must be submitted for review and validation.
2. Equipment Acquisition and Provision according to approved technical proposals.
3. Execution of pre-installations required according to approved equipment technical proposals.
4. Execution of Equipment installation according to approved technical proposal.
5. The state-of-the-art Equipment provided shall be new (unused), for the total assets required, as requested in the non-objected Technical File. The date of manufacture shall not exceed twelve (12) months prior to the date of submission of the proposal.
6. The Equipment shall be ready for perfect operation at the time of delivery, considering the height above sea level, humidity, temperature, including all necessary accessories for its operation.
7. Electric-powered equipment shall be capable of operating in accordance with the respective technical specifications.
8. The CONCESSIONAIRE must include in the delivery of each Equipment an operation and maintenance video, two (2) sets of operation, installation, maintenance and parts manuals. The manuals shall be original from the manufacturer in Spanish, English or another language. In the event that the manuals are in English or another language, the respective translation into Spanish shall be included, as indicated in Annex 21, the maintenance of the same is the responsibility of the CONCESSIONAIRE.
9. The CONCESSIONAIRE shall fulfill the delivery of annexes and documentary requirements for each item, as requested in the non-objected Technical File (guarantees, protocols, maintenance programs, maintenance procedures, etc.).
10. For the installation of the Equipment, the CONCESSIONAIRE shall deliver assets with all the necessary pieces and parts for its correct use.
11. The Equipment shall be positioned on site by the CONCESSIONAIRE in coordination with the Supervisor of Design, Construction and Equipment. The CONCESSIONAIRE shall be responsible for the reception, opening, packaging, storage and installation thereof.
12. The CONCESSIONAIRE is obliged to complete the process of elaboration and approval of the SIGI-NS in accordance with the guidelines and minimum contents requested for this system.
13. **Referential List of Hospital Equipment and Replenishments**

The CONCESSIONAIRE shall consider, for the purpose of acquiring the following list, at least the technical specifications indicated in the Project feasibility study[[12]](#footnote-12)

**Equipment:**

|  |  |
| --- | --- |
| **Hospital** | |
|  |  |
| **Biomedical Equipment** | **Quantity** |
| Linear Accelerator | **2** |
| Blood Bag Shaker | **4** |
| Agglutinoscope | **1** |
| Amalgamator | **5** |
| Bioelectrical Impedance Analyzer | **2** |
| Universal Angiography machine | **1** |
| Anoscope | **1** |
| Operating Room Suction Aspirator | **3** |
| Portable Suction Aspirator | **61** |
| Suction Aspirator on Trolley | **51** |
| Ultrasonic Aspirator For Neurosurgery | **1** |
| Two-Channel Audiometer | **1** |
| Auto Kerato-refractometer | **8** |
| Analytical Balance (0 to 50 Gr) | **2** |
| Analytical Balance (100 to 210gr.) | **6** |
| Precision Balance | **14** |
| Intra-Aortic Balloon | **4** |
| Water Bath (10 to 15 Lt) | **10** |
| Water Bath (15 to 25 Lt) | **1** |
| Bronchofiberscope | **3** |
| Pediatric Bronchofiberscope | **2** |
| Recovery Stretcher Bed | **119** |
| Emergency Recovery Stretcher Bed | **2** |
| MRI Stretcher Bed, (Without Metal Parts) | **1** |
| Digital Angiographic Camera | **1** |
| Spect Gamma Camera - Dual-Head | **1** |
| Horizontal Laminar Flow Hood | **6** |
| Vertical Laminar Flow Hood (4 Feet Type A/B3) | **9** |
| Vertical Laminar Flow Hood (Type Ilb) | **2** |
| Material Handling Fume Hood -Nuclear Medicine | **1** |
| Computerized Campimeter | **4** |
| Cardiofetal Monitoring Center With 16 Monitors | **1** |
| Monitoring Center Equipped With 04 Vital Function Monitors (08 Parameters (Adult - Pediatric - Neonatal) | **2** |
| Monitoring Center Equipped With 05 Vital Function Monitors (06 Parameters) | **6** |
| Monitoring Center Equipped With 06 Vital Function Monitors (06 Parameters) | **7** |
| Monitoring Center Equipped With 09 Vital Function Monitors (06 Parameters) | **1** |
| Monitoring Center Equipped With 10 Vital Function Monitors (05 Parameters) | **4** |
| Monitoring Center Equipped With 15 Vital Function Monitors (05 Parameters) | **1** |
| Monitoring Center Equipped With 18 Vital Function Monitors (05 Parameters) | **2** |
| Monitoring Center Equipped With 5 Vital Function Monitors (08 Parameters) | **3** |
| Monitoring Center Equipped With 8 Vital Function Monitors of 06 Parameters (Adult - Pediatric - Neonatal) | **1** |
| Tabletop Centrifuge (400 To 750 Ml) | **8** |
| Tabletop Centrifuge (750 To 1100 Ml) | **3** |
| Fixed-Angle Tabletop Centrifuge | **1** |
| Refrigerated Floor-standing Centrifuge | **1** |
| Microhematocrit Centrifuge | **3** |
| Blood Bank Refrigerated Centrifuge | **2** |
| Adult Cystoscope | **2** |
| Pediatric Cystoscope | **1** |
| Cytocentrifuge | **2** |
| Culture medium coagulator Bk | **1** |
| Automatic Tissue Colouring Machine | **2** |
| Horizontal Freezer | **1** |
| -20 °C Vertical Freezer (9 To 16 Cubic Feet) | **5** |
| -70 °C Vertical Freezer (9 To 16 Cubic Feet) | **2** |
| -86° C Vertical Freezer | **1** |
| Dermatological Cryostat | **1** |
| Cryostat For Frozen Cuts | **1** |
| Stainless Steel Bucket For Colorations | **12** |
| Radiant Heat Cradle - Delivery Room | **2** |
| Radiant Heat Cradle - ICU | **6** |
| Densimeter | **1** |
| Bone Densitometer | **2** |
| Plasma Thawing Device | **1** |
| Defibrillator With Monitor And External Paddles | **28** |
| Defibrillator With Monitor And External And Internal Paddles | **2** |
| Ultrasonic Dental Scaler | **5** |
| 4 Lph Water Distiller | **4** |
| 12 Lph Water Distiller | **3** |
| Fetal Heartbeat Detector | **25** |
| Portable Transcranial Doppler | **4** |
| Vascular Doppler | **3** |
| Echocardiography machine | **3** |
| Color Doppler Ultrasound Scanner | **8** |
| General Purpose Ultrasound Scanner | **3** |
| Color Doppler Ultrasound Scanner With Transfontanelar Transducer | **1** |
| Gynecological-Obstetrical Ultrasound Scanner | **7** |
| Ophthalmological Ultrasound Scanner | **4** |
| Portable Ultrasound Scanner | **2** |
| Electric Scalpel for Radiofrequency | **1** |
| Mono/Bipolar High Power Electric Scalpel | **15** |
| Mono/Bipolar Medium Power Electric Scalpel | **1** |
| 01 Channel Electrocardiography machine | **43** |
| 03 Channel Electrocardiography machine | **6** |
| Mono/Bipolar Electrocautery | **11** |
| Argon Electrocoagulator | **2** |
| Electroencephalogram machine | **3** |
| Portable Electroencephalogram machine | **2** |
| Electromyography machine | **1** |
| Electromyography machine and Evoked Potentials | **3** |
| Electronystagmography machine | **1** |
| Electroretinography machine | **1** |
| General Purpose Laparoscopic Surgery Equipment | **1** |
| Craniotomy Equipment | **2** |
| Cryosurgery Equipment | **1** |
| Electroacupuncture Diagnostic and Treatment Equipment | **3** |
| Interferential Current Electrotherapy Equipment | **3** |
| Multiple Current Electrotherapy Equipment | **8** |
| Photopolymerization Equipment | **5** |
| Halogen Light Phototherapy Equipment | **27** |
| Cardiac Output Equipment | **6** |
| Magnetotherapy Equipment | **1** |
| Digital Mammography Equipment | **2** |
| Dental X-Ray Equipment | **2** |
| Dental Trolley X-Ray Equipment | **1** |
| Stationary X-Ray Equipment - X-Ray/Fluoroscopy (Ceiling Mount) | **1** |
| Stationary X-Ray Equipment - X-Ray (Medium Power) | **4** |
| Panoramic and Cephalometric X-Ray Equipment | **1** |
| Trolley X-Ray Equipment - Medium Power | **3** |
| Trolley C-Arm X-Ray Equipment - Vascular | **1** |
| Magnetic Resonance Imaging Equipment | **1** |
| Combination Therapy Equipment (Electrotherapy / Ultrasound) | **14** |
| Infrared Laser Therapy Equipment | **2** |
| Microwave Therapy Equipment | **2** |
| Urodynamics Equipment | **1** |
| Short Wave Therapy Equipment | **2** |
| Spectrophotometer | **3** |
| Portable Spirometer | **6** |
| Dry Heat Sterilizer (30 To 55lt) | **2** |
| Tabletop Steam Sterilizer (15 To 25 It) | **8** |
| Tabletop Steam Sterilizer (25 To 45 Lt) | **2** |
| Single Door Steam Sterilizer (100 To 150 Lt) | **1** |
| Sterilizer With Electric Steam Generator (50 To 85 Lt) | **4** |
| Fetal Stimulator | **1** |
| Drying Oven (35 To 55 Liters) | **4** |
| Phacoemulsifier | **2** |
| Medical Treadmill | **1** |
| Medical Treadmill With Screen | **1** |
| Diode Laser Photocoagulator | **1** |
| Laser Photocoagulator S32 Nanometers | **1** |
| Impedance Meter | **1** |
| CO2 Incubator | **2** |
| Cell Culture Incubator (35 To 60 Lt) | **6** |
| Transport Incubator - Standard | **5** |
| Transport Incubator - ICU | **2** |
| Neonatal Incubator - Standard | **46** |
| Slit Lamp With Applanation Tonometer | **5** |
| Portable Slit Lamp | **2** |
| High Intensity Ceiling-mounted Surgical Lamp | **11** |
| Medium Intensity Ceiling-mounted Surgical Lamp | **1** |
| Single Ceiling-mounted Surgical Lamp | **8** |
| Surgical Lamp on Trolley | **2** |
| Automatic Bedpan Washer | **16** |
| Ultrasonic Instrument Washer | **7** |
| Lensmeter | **5** |
| Extracorporeal Lithotripter | **1** |
| Extracorporeal Circulation Machine | **1** |
| Hemodialysis Machine | **56** |
| Hypo/Hyperthermia Machine | **3** |
| External Pacemaker | **9** |
| Bicameral External Pacemaker | **3** |
| Basic Electric Operating Table | **8** |
| Basic Electric Operating Table + Neurosurgery | **1** |
| Basic Electric Operating Table + Traumatology | **1** |
| Delivery Table | **9** |
| Microcentrifuge | **1** |
| Binocular Microscope | **22** |
| Dual Head Binocular Microscope | **4** |
| Microscope With Microphotography | **1** |
| Fluorescence Microscope | **3** |
| Neurosurgical Microscope With Neurosurgery Equipment | **1** |
| Corneal Specular Microscope | **2** |
| Stereoscopic Microscope | **3** |
| Otologic operating Microscope | **1** |
| Immunology and Phase Contrast Microscope | **4** |
| Ophthalmic Surgical Microscope | **2** |
| ENT Surgical Microscope | **1** |
| Simple Binocular Microscope With Digital Camera | **3** |
| Trinocular Microscope With Built-in Camera | **1** |
| Rotary Microtome | **4** |
| Hypnotic State Monitor | **7** |
| 06 Parameter Vital Functions Monitor | **3** |
| Monitor for Energy Expenditure | **3** |
| Intracranial Pressure Monitor | **6** |
| Fetal Monitor | **6** |
| Fetal Monitor for Twins | **1** |
| 04 Parameter Portable Monitor | **28** |
| Nebulizer | **73** |
| Neurostimulator and Peripheral Nerve Block | **3** |
| Wall-mounted Ophthalmic Retinoscope | **2** |
| Indirect Ophthalmoscope | **12** |
| Pachymeter | **3** |
| Battery-Powered Traumatology Drill | **3** |
| Cranial Manual Drill | **2** |
| Digital PH meter | **4** |
| Lung Plethysmography device | **2** |
| Polygraph for Intracavitary Electrophysiology | **1** |
| Auditory and Somatosensory Evoked Potentials | **1** |
| Automatic Tissue Processor | **2** |
| Proctosigmoidoscope | **1** |
| Optotype Projector | **5** |
| Pulse Oximeter | **107** |
| Pulse Oximeter With Plethysmographic Waveform | **2** |
| Pediatric/Neonatal Pulse Oximeter | **11** |
| 15 To 25 Cubic Feet Pharmacy Drug Refrigerator | **34** |
| Blood Bank Refrigerator (15 To 25 Cubic Feet) | **5** |
| Blood Bank Refrigerator (44 To 56 Cubic Feet) | **3** |
| Laboratory Refrigerator (15 To 25 Cubic Feet) | **15** |
| Automatic Flexible Endoscopes Reprocessor | **1** |
| Rhinolaryngofiberscope | **3** |
| Clinical Serology Rotator | **1** |
| Tempered Platelet Rotator | **3** |
| Orbital Rotator | **9** |
| Sterilization Bag Sealer | **4** |
| Pneumatic Oscillating Saw | **4** |
| Brachytherapy System - High Dose (Hdr) | **1** |
| Capsule Endoscopy System | **1** |
| Sequential Pneumatic Compression System of the Lower Limbs | **7** |
| Basic Neuroendoscopy System | **1** |
| Digital Holter System | **1** |
| Dual Laser Ophthalmology System | **2** |
| Paraffin Embedding System | **2** |
| Hubbard Tank | **2** |
| TENS | **22** |
| 128-Slice CT Scanner | **2** |
| Simulator CT Scanner | **1** |
| Anterior Segment-Optical Coherence Tomography | **2** |
| Intraoperative Portable CT Scanner (\*) | **1** |
| Schiotz Tonometer | **2** |
| Computerized Corneal Topographer | **2** |
| Electronic Pneumatic Tourniquet | **4** |
| Anesthesia Unit With Basic Monitoring System | **8** |
| Anesthesia Unit With Complete Monitoring System | **8** |
| Dental Unit With Built-In Chair | **5** |
| Transport Ventilator | **17** |
| Neonatal Ventilator | **8** |
| Neonatal Ventilator + High Frequency | **7** |
| Volumetric Ventilator | **13** |
| Volumetric Ventilator + Advanced Pcv | **16** |
| Video Arthroscope | **3** |
| Video Bronchoscope | **3** |
| General Purpose Video Cystoresectoscope | **3** |
| Specialized Video Colonoscope | **1** |
| Video Colposcope | **2** |
| Video Duodenoscope | **1** |
| Video Ultrasonographic Endoscope | **1** |
| Video Gastrofibroscope | **1** |
| Specialized Video Gastroscope | **2** |
| Video Hysteroscope | **3** |
| Video Nasolaryngofibroscope | **1** |
| Video Thoracoscope | **1** |
| Yag Laser For Ophthalmology | **1** |
|  |  |
| **Complementary Equipment** | **Quantity** |
| Vortex Stirrer | **2** |
| Breathalyzer | **2** |
| Amnioscope | **1** |
| Swinging arm | **1** |
| 2-Plate Scale | **6** |
| Platform Scale Strength 1000kg | **1** |
| Tabletop Scale 15 to 20kg Capacity | **2** |
| 1kg Digital Scale | **2** |
| Electronic Scale With Height Gauge - Adult | **71** |
| Electronic Scale With Height Gauge - Infants | **11** |
| Electronic Scale With Height Gauge - Pediatric | **15** |
| Electronic Platform Scale, For Disabled persons (200 Kg Apf) | **1** |
| Organ Weighing Scale | **1** |
| Clock Scale | **1** |
| Honan Balloon | **7** |
| Quadriceps Bench | **1** |
| Physical Therapy Wall Bars | **1** |
| Parallel Bars | **1** |
| Parallel Bars For Children | **1** |
| Ergometer Bike | **3** |
| Stationary Bike For Children | **1** |
| Audiometric Booth | **1** |
| Ultraviolet Light Therapy Cabinet | **3** |
| Glass Box and Optical Trial Frame | **5** |
| Vaccine Thermal Transport Box | **2** |
| Dose Calibrator | **1** |
| Multipurpose Bed Stretcher | **30** |
| Intraoral Camera | **5** |
| Non-Mydriatic Retinal Camera | **1** |
| 20 Slide Staining Rack (grid) | **1** |
| Sample Carrying Rack (grid) | **16** |
| Adult Bedpan | **51** |
| Plastic Measuring Tape For Anthropometric Measurements | **12** |
| Psychomotor Circuit | **1** |
| Resuscitation Trolley | **69** |
| Difficult Airway Trolley | **18** |
| Pneumatic Mattress | **38** |
| Neonatal and Pediatric Heated Mattresses | **1** |
| Exercise Mats | **46** |
| Digital Cell Counter | **2** |
| Shielded Waste Container | **1** |
| Blood Transport Cooler Bag | **1** |
| Dermatoscope | **3** |
| Hypodermic Needle Destructor | **133** |
| Tuning Fork | **6** |
| Pain Meter Or Algometer | **5** |
| Semi-automatic Encapsulator - Medium Capacity | **1** |
| Dental Prosthetics Equipment | **1** |
| Swedish Ladder | **1** |
| Tissue Float | **2** |
| Flowmeter With Humidifier | **716** |
| Medical Headlight | **24** |
| Surgical Magnifying Glasses (3.5 X) | **7** |
| Goniometer | **7** |
| Games for Spatial Orientation | **1** |
| Games for Motor Function | **1** |
| Elevation Kit | **2** |
| Elastic Band Kit | **3** |
| Radiotherapy Dosimetry Equipment Kit | **1** |
| Therapy Ball Kit | **2** |
| Examination and Healing Lamp | **155** |
| Light Curing Lamp | **5** |
| Goose Neck Exam Lamp | **15** |
| Ultraviolet Light Therapy Lamp | **3** |
| Infrared Therapy Lamp | **3** |
| Wood Lamp | **3** |
| Adult Fiber Optic Laryngoscope | **31** |
| Adult-Pediatric Fiber Optic Laryngoscope | **2** |
| Neonatal Fiber Optic Laryngoscope | **4** |
| Magnifying Glass With Halogen Light | **5** |
| Resuscitation Kit - Adult | **3** |
| Resuscitation Kit - Adult - Pediatric | **41** |
| Resuscitation Kit - Neonatal | **10** |
| Resuscitation Kit - Pediatric | **3** |
| Medication Case | **2** |
| Leaded Apron With Hanger | **17** |
| Denture Model | **10** |
| Stereotaxic Frame | **1** |
| Reflex Hammer | **67** |
| Bunsen Burner | **9** |
| Mixer For Pharmacotechnics | **1** |
| Psychomotricity Module For Children 1 To 3 Years Old | **1** |
| Psychomotricity Module For Children 3 Years And Over | **1** |
| Psychomotricity Module For Children Under 12 Months | **1** |
| Otoscope | **1** |
| Pantoscope | **74** |
| Pediatric Pantoscope | **9** |
| Hot and Cold Water Pressure Washer Gun - Wall Mounted | **2** |
| Digital Caliper | **2** |
| Wall Pulley | **2** |
| Tungsten Syringe Shield With Lead glass (1cc)\* | **1** |
| Tungsten Syringe Shield With Lead glass (3cc) \* | **1** |
| PET Syringe Shield (10cc) | **1** |
| PET Syringe Shield (5cc) | **1** |
| Lead Gonad Shield | **1** |
| Radiometer | **1** |
| Liquid Formula packing machine | **1** |
| Biometric Ruler | **1** |
| Adult Manual Resuscitator | **14** |
| Neonatal Manual Resuscitator | **40** |
| Pediatric Manual Resuscitator | **12** |
| Shoulder Wheel For Exercise | **1** |
| Slide Dryer | **3** |
| Blood Bag Sealer | **6** |
| Plasma Separator | **2** |
| Set For Higher Mental Function Assessment | **2** |
| Electric Plaster Saw | **6** |
| Electric Necropsy Saw | **1** |
| CPAP System | **4** |
| Pediatric Height Gauge | **1** |
| Hot Compress Tank | **2** |
| Cold Compress Tank | **2** |
| Paraffin Wax Bath | **5** |
| Stationary Whirlpool Bath for Lower Limbs | **4** |
| Rotating Whirlpool Bath for Limbs (100 Liters) | **4** |
| Clinical Aneroid Blood Pressure Monitor - Adult | **6** |
| Clinical Aneroid Blood Pressure Monitor - Neonatal | **1** |
| Clinical Aneroid Blood Pressure Monitor - Pediatric | **6** |
| Neonatal Aneroid Blood Pressure Monitor On Trolley | **1** |
| Blood Pressure Monitor On Trolley - Adult | **123** |
| Adult-Pediatric Blood Pressure Monitor On Trolley | **74** |
| Pediatric Blood Pressure Monitor On Trolley | **20** |
| Vaccine Storage device | **1** |
| Digital Thermometer | **5** |
| Digital Thermometer With Thermocouple | **1** |
| Vaccine Holder Thermometer | **2** |
| Peruvian Abbreviated Test (TAP) | **1** |
| Conaii Inr Test | **2** |
| Psychomotor Development Test (TEPSI) | **1** |
| Eedp Test (Psychomotor Development Evaluation Scale) | **1** |
| Blood Vessel Transilluminator | **16** |
| Suction Unit | **624** |
|  |  |
| **Electromechanical Equipment** | **Quantity** |
| Ambulance Type I (Equipped) | **3** |
| Ambulance Type II (Equipped) | **3** |
| 2 Body Cold Chamber | **4** |
| EPS Cutter (Nichrome) | **1** |
| High Density Foam Cutter | **1** |
| Portable Reverse Osmosis Equipment For Hemodialysis Machine | **2** |
| Radiotherapy Mold Room Tooling | **1** |
| Electric Water Kettle | **24** |
| Microwave Oven | **51** |
| Sensory Stimulation Kit | **1** |
| Early Stimulation Kit | **1** |
| Radiation Monitor | **1** |
| Portable External Radiation and Contamination Monitor | **1** |
| Foam Mat Floor | **1** |
| Hot Air Gun | **1** |
| Compressed Air Gun | **2** |
| Steam Gun for Car Wash | **2** |
| Pressurized Water Gun | **1** |
| Digital Caliper | **4** |
| 04 Cubic Feet Refrigerator | **36** |
| Electric Patient Transporter | **1** |
|  |  |
| **Clinical Furniture** | **Quantity** |
| Adult Walking Aids | **2** |
| Kardex Type (Pathology) Slide Storage Cabinet | **2** |
| 1- Body and Two Compartment Metal Clothing Storage Cabinet | **412** |
| Metal Storage Cabinet For Dental Instruments | **5** |
| Storage Cabinet For Endoscopes | **5** |
| Contaminated Material Tray | **7** |
| Two Section Metal Hospital Screen | **127** |
| Infant Bed cradle | **16** |
| Children's Bed cradle | **59** |
| Single Bed | **20** |
| Multipurpose Bed For Hospitalization | **313** |
| Metal Dead Body Transfer Trolley | **7** |
| Stainless Steel Stretcher Trolley with Side Rails | **47** |
| Stainless Steel Trolley For 20 Medical Record Holder | **14** |
| Waste Transport Trolley | **14** |
| Clean Linen Transport Trolley | **19** |
| Dirty Linen Transport Trolley | **7** |
| Multifunctional Transport Trolley | **9** |
| Heavy Duty Transport Trolley | **16** |
| Pediatric Bedpan | **6** |
| Lead-Lined Steel Drum With Lid | **2** |
| Metal Waste Drum | **2** |
| Plastic Drum with Swing Lid | **210** |
| Metal Drum Trolley, With Lid For Trash | **1** |
| Unit Dose Cart | **37** |
| Lead Collar | **1** |
| Lead-Lined Steel Solid Waste Container Trolley | **2** |
| Radioactive Waste Container | **1** |
| Biosafety Containers | **6** |
| Metal Waste Bin With Pedal Operated Lid | **1,027** |
| Acrylic Bassinet Trolley | **31** |
| Metal 2-Step Stool | **355** |
| Posture Mirror | **8** |
| Stainless Steel Closed Shelving | **1** |
| 01 Body 03 Shelves Stainless Steel Shelving | **16** |
| 01 Body 05 Divisions Stainless Steel Shelving | **22** |
| 01 Body 04 Shelves Slotted Angled Metal Shelving | **350** |
| 02 Bodies 04 Shelves Slotted Angled Metal Shelving | **58** |
| 03 Bodies 04 Shelves Slotted Angled Metal Shelving | **102** |
| Wall File Holder For 10 Medical Records | **1** |
| Patient Mobilization Crane | **13** |
| Gynecological Obstetric Examination Table (Divan) | **11** |
| Examination and Healing Table (Divan) | **101** |
| Rest Or Injectables Table (Divan) | **5** |
| Autopsy Table | **1** |
| Tild Table for Children | **1** |
| Proctology Examination Table | **1** |
| Work Table With Protective Barrier | **1** |
| 140 X 70cm Work Table | **37** |
| 140 X 70cm Stainless Steel Work Table | **50** |
| 200 X 90cm Stainless Steel Work Table | **13** |
| 90 X 45 Cm Stainless Steel Multi-Purpose Table | **2** |
| Wooden Divan Table | **5** |
| Special Triage Table | **46** |
| Special Table For Gynecological - Obstetrical Triage | **2** |
| Metal Angular Instruments Table | **15** |
| Metal Hospital Bedside Table | **361** |
| Metal Table for Examination and Diaper Changing | **25** |
| Metal Bed Food Table Trolley | **458** |
| Metal Anesthesia Table Trolley | **17** |
| Metal Healing Table Trolley | **24** |
| Mayo Type Metal Table | **60** |
| Dead Body Table | **1** |
| Diaper Changing Table With Infant Height Gauge | **8** |
| Massage Table | **29** |
| Stainless Steel Table Trolley For Healing | **98** |
| Stainless Steel Table Trolley for Multiple Uses | **364** |
| 11 Drawer Stainless Steel Cabinet For Storing Slides and Lugs (1m X 0.5m X 1.5 M) | **12** |
| Aluminum Crutch For Children | **1** |
| Urinal bottle | **36** |
| Pediatric Urinal bottle | **5** |
| Stainless Steel Cylindrical Litter Bin | **214** |
| Plastic Litter Bin With Swing Lid And Window | **797** |
| Metal Step | **418** |
| Metal Step For Operating Room | **19** |
| Podoscope | **2** |
| Metal Bucket Holder Trolley | **114** |
| Metal Bag Holder Trolley, For Dirty Clothes | **127** |
| Wall Mount Bedpan and Urinal Bottle Holders | **30** |
| Double Stainless Steel Wash Basin Trolley With Cabinets | **64** |
| Single Wash Basin Trolley | **11** |
| Metal Saline Stand Trolley | **318** |
| Mobile Rack For Boxes And Instruments | **5** |
| Mobile Rack For Baskets | **11** |
| Wall Rack For Baskets | **5** |
| Wheelchair | **79** |
| Special Sampling Chair | **18** |
| Metal Rolling Swivel Chair, (Without Metal Parts) | **2** |
| Treatment Chair | **7** |
| Blood Donation Chair | **10** |
| Ophthalmology Chair | **5** |
| Otorhinolaryngology Chair | **1** |
| Rotary Chair | **1** |
| Chemotherapy Chair | **20** |
| Hemodialysis Treatment Chair | **50** |
| Ophthalmology Treatment Chair | **1** |
| Stainless Steel Swivel Stool With Backrest | **67** |
| Plastic Bin With Half Moon Lid 30 Lt | **1** |
| Metal Bedside Table | **20** |
| Stainless Steel Instrument Cabinet 0 Sterile Material 104x45cm | **160** |
| Stainless Steel Instrument Cabinet 0 Sterile Material 68x45cm | **163** |
| Refrigerated Display Cabinet | **1** |
|  |  |
| **Administrative Furniture** | **Quantity** |
| 4 Drawer Metal Filing Cabinet | **506** |
| Two Door Metal Cabinet | **339** |
| Lectern For Exhibitor | **6** |
| Double Acrylic Desk Tray | **105** |
| Single Acrylic Desk Tray | **458** |
| 3-seater Metal Chair | **220** |
| Auditorium Armchair | **100** |
| Plastic Organizer Boxes | **50** |
| Wall Mounted Projector Screen | **37** |
| 06 Step Aluminum Scissor Stair | **44** |
| 4 Step Metal Scissor Stair | **1** |
| 3 Step Stainless Steel Stair | **4** |
| 2 Drawer Metal Desk | **227** |
| 4 Drawer Metal Desk | **129** |
| 7 Drawer Metal Desk | **295** |
| "L" shape Modular Desk | **10** |
| Office Side Table | **125** |
| Coffee Table | **77** |
| 4 Person Dining Table | **63** |
| Circular Wooden Meeting Table 140 Cm. | **11** |
| Wooden Multipurpose Table 90x45cm | **18** |
| Wooden Children's Table | **2** |
| 4 Person Wooden Meeting Table | **8** |
| 200 X 100 Cm Wooden Meeting Table | **29** |
| 200 X 110 Cm. Wooden Meeting Table | **8** |
| 90 X 180 Cm Meeting Table | **5** |
| Corner Table | **102** |
| Hexagonal Metal Children's Table | **2** |
| Tilting Furniture | **30** |
| Metal Trash Bin | **822** |
| Metal Wall Hanger With 4 Hooks | **878** |
| Standing Coat Rack | **121** |
| Acrylic Whiteboard With Metal Stand | **41** |
| Acrylic Wall-mounted Whiteboard | **69** |
| Metal Map Filing Cabinet With Base 8 Drawers Approx. | **2** |
| Flip Chart | **7** |
| Children's Play Set | **1** |
| Metal Stacking Chair | **1,826** |
| Metal Chair With Armrests For Children | **7** |
| Metal Comfortable Rolling Swivel Chair | **450** |
| Metal High Seat Rolling Swivel Chair | **212** |
| Metal Rolling Swivel Chair | **524** |
| Dining Table Chair | **129** |
| Dining Table Chair For Children | **8** |
| Recliner Armchair with Armrests | **439** |
| Metal Comfortable Rolling Swivel Armchair | **33** |
| Metal Semi-Comfortable Armchair Without Armrests 2 Seater With Armrests | **178** |
| Metal Semi-Comfortable Armchair Without Armrests 3 Seater With Armrests | **134** |
| Semi-Comfortable Armchair Without Armrests for One Person | **282** |
| Sofa Bed | **10** |
| Metal Stool With Wooden Seat | **14** |
| Metal Swivel Stool With Backrest | **2** |
| Metal Fixed Swivel Stool | **48** |
| Metal Rolling Swivel Stool | **155** |
| Aluminum Bulletin Board Cabinet | **120** |
| Metal Book Display Cabinet | **74** |
|  |  |
| **Instruments** | **Quantity** |
| Syringe Conveyor Boxes | **1** |
| Plaster Cutting Shears | **7** |
| Surgical Blade | **1** |
| Nasal Speculum Adult, Child | **1** |
| Plaster Opening Forceps | **3** |
| Osteosynthesis and Dorsal Spine Fixation Instrument Set | **1** |
| Pediatric Craniotomy Instrument Set | **1** |
| Transsphenoidal Surgery Instrument Set | **2** |
| Microsurgical Instrument Set | **2** |
| Cranial Neuroendoscopy Instrument Set | **1** |
| Lumbar Spine Fixation and Osteosynthesis Instrument Set | **1** |
| Minimally Invasive Spine Surgery Instrument Set | **2** |
| Minimally Invasive Cranial Surgery Instrument Set | **1** |
| Cervical Spine Fixation and Osteosynthesis Instrument Set | **1** |
| Necropsy Instrument Set | **2** |
| Surgical Steel Kidney Dish Set | **117** |
| Surgical Steel Drums Set | **110** |
| Neonatal Endoscopic Surgery Instrument Set | **1** |
| Endoscopic Surgery Instrument Set For Preschool - School Children | **2** |
| Laparoscopic Surgery Instrument Set | **2** |
| Pediatric Surgical Instrument Set For School Children | **2** |
| Adult Craniotomy Instrument Set | **1** |
| Cryotherapy and Conization and LEEP Instrument Set | **1** |
| Surgical Debridement And Cleansing Instrument Set | **2** |
| Laparotomy and Caesarean Instrument Set | **1** |
| Osteosynthesis Instrument Set For Small Fragments | **2** |
| Osteosynthesis Instrument Set AO System For Screws | **1** |
| Surgical Instrument Set For Bloodless Reduction Of Nasal Bone Fractures | **2** |
| Suture Instruments Set - Minor | **72** |
| Ophthalmic Basic Instrument Set | **6** |
| Adult Tonsillotomy Instrument Set | **2** |
| Appendectomy Instrument Set | **2** |
| Delivery Care Instrument Set | **12** |
| Basic Cardiovascular Coronary Care Instrument Set | **1** |
| Cataract Surgery Instrument Set | **2** |
| Head And Neck Surgery Instrument Set | **2** |
| Major Surgery Instrument Set | **2** |
| Minor Surgery Instrument Set | **53** |
| Traumatological Minor Surgery Instrument Set | **2** |
| Pediatric Infant Surgery Instrument Set | **1** |
| Neonatal Pediatric Surgery Instrument Set | **1** |
| Pediatric Pre-School Children's Surgery Instrument Set | **1** |
| Refractive Surgery Instrument Set | **2** |
| Conization and LEEP Instrument Set | **5** |
| Healing Instrument Set | **81** |
| Dental Curing Instrument Set | **5** |
| Dacryocystectomy Instrument Set | **2** |
| Dental Examination Instrument Set | **5** |
| Endodontic Instrument Set | **5** |
| Enucleation Instrument Set | **1** |
| Episiotomy Instrument Set | **1** |
| Strabismus Instrument Set | **2** |
| Gynecological Examination Instrument Set I | **14** |
| Gynecological Examination Instrument Set II | **6** |
| Exodontia Instrument Set | **5** |
| Foreign Body Removal Instrument Set | **8** |
| Gastrectomy Instrument Set | **1** |
| Glaucoma Instrument Set | **2** |
| Hysterectomy Instrument Set | **1** |
| IUD Insertion and Removal Instrument Set | **6** |
| Uterine Curettage Instrument Set | **2** |
| Mastectomy Instrument Set | **1** |
| Ear Microsurgery Instrument Set | **1** |
| Otorhinolaryngology Instrument Set | **1** |
| Small Surgical Interventions Instrument Set | **40** |
| Nasal Polyps Instrument Set | **2** |
| Lumbar Puncture Instrument Set | **30** |
| Retinoplasty Instrument Set | **2** |
| Stitch Removal Instrument Set | **53** |
| Stitch Removal Instrument Set for Anterior Chamber | **2** |
| Cervical Screening Instrument Set | **6** |
| Paranasal Sinus Instrument Set | **2** |
| Septoplasty and Rhinoplasty Instrument Set | **2** |
| Nasal Septum Instrument Set | **2** |
| Obstetrical and Gynecological Sampling Instrument Set | **3** |
| Chest Instrument Set | **1** |
| Tracheostomy Instrument Set | **8** |
| Urology Instrument Set | **1** |
| Vascular Instrument Set | **1** |
| Vasectomy Instrument Set | **2** |
| Vitrectomy Instrument Set | **2** |
| Parathyroidectomy Instrument Set | **1** |
| Dermatological Biopsy Set | **1** |
| **Computer and Communications Equipment** | **Quantity** |
| Professional Camera | **4** |
| Image Capturer - Double Sided Scanner | **2** |
| Computer With Special Software And Accessories For Language Problems | **2** |
| Personal Computer | **791** |
| Laptop Computer | **31** |
| Videoconferencing Equipment For Central Station | **1** |
| Networking & Acceleration Equipment For Central Station | **1** |
| Sound Equipment | **16** |
| Video Filming Equipment | **2** |
| Scanner | **5** |
| Workstation For Digitization, Storage, Management, Visualization And Transfer Of Macroscopic And Microscopic Images | **2** |
| Printer | **284** |
| Bar Code Printer | **1** |
| High Demand Laser Printer | **48** |
| Multifunctional Printer | **11** |
| Ticket Printer | **13** |
| Bar Code Reader | **2** |
| Computer Module | **6** |
| Digital Whiteboard | **16** |
| Laser Processor | **2** |
| Multimedia Projector | **34** |
| Multimedia Projector With Wireless Network Card | **3** |
| Wall Stopwatch | **18** |
| Laboratory Stopwatch | **11** |
| Wall Clock | **278** |
| Blu-Ray Player | **14** |
| Fire Alarm System | **1** |
| Audio System And High Resolution Video Cameras (For Gesell Camera) | **1** |
| Nurse Call System | **8** |
| Clock System | **1** |
| Biometric Time & Attendance Clock System | **1** |
| CCTV Security System | **2** |
| Teleconferencing System | **1** |
| Pacs/Ris System | **1** |
| Tablet | **270** |
| Desk Telephone | **290** |
| 32" LED Color TV With Wall Rack | **2** |
| 42" LED Color TV With Wall Rack | **318** |
| 29" Color TV | **45** |
| Approx. 50" LED Smart TV Including Rack | **1** |

|  |
| --- |
| **Replacement of Investments** |
| **Facilities** |
| Elevators/Lifts |
| Pneumatic conveying systems |
| Renewable energy systems |
| Electrical substation (connection, transformer, distribution, automatic transfer switchboard) |
| Electrical transformer stations |
| Stabilized power system, UPS/SAIS, stabilized and uninterruptible power supply linked to structural wiring (stand-alone) |
| Fire storage, treatment and pressure boosting system |
| Hard water system |
| Soft water system |
| Osmotic water system for hemodialysis |
| Air conditioning system (air conditioning, ventilation and heating) |
| Medical oxygen system |
| Medical compressed air system |
| Industrial compressed air plant |
| CO2 system |
| Vacuum system |
| Oil storage system |
| Sewage treatment and reuse of reclaimed water |
| Emergency electrical system |
| Header panels |
| **Civil Works** |
| Masonry |
| Interior walls |
| Brick Manufacturers |
| False ceilings |
| Roofs |
| Facade coatings |
| Specific paints and treatments |
| Windows |
| Floors |
| Doors |

| **Equipment Replacement - Hospital** | **Year 01** | **Year 02** | **Year 03** | **Year 04** | **Year 05** | **Year 06** | **Year 07** | **Year 08** | **Year 09** | **Year 10** | **Year 11** | **Year 12** | **Year 13** | **Year 14** | **Year 15** | **Year 16** | **Year 17** | **Year 18** | **Year 19** | **Year 20** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Biomedical Equipment** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Linear Accelerator | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Blood Bag Shaker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Agglutinoscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Amalgamator | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Bioelectrical Impedance Analyzer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Universal Angiography machine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Anoscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Operating Room Suction Aspirator | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Portable Suction Aspirator | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Suction Aspirator on Trolley | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Ultrasonic Aspirator For Neurosurgery | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Two Channel Audiometer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Auto kerato-refractometer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Analytical Balance (0 to 50 Gr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Analytical Balance (100 to 210gr.) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Precision Balance | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Intra-Aortic Balloon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Water Bath (10 To 15 Lt) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** |
| Water Bath (15 To 25 Lt) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** |
| Bronchofibroscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Pediatric Bronchofibroscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Recovery Stretcher Bed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Emergency Recovery Stretcher Bed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| MRI Stretcher Bed, (Without Metal Parts) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Digital Angiographic Camera | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Spect Gamma Camera - Dual-Head | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Horizontal Laminar Flow Hood | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Vertical Laminar Flow Hood (4 Feet Type A/B3) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Vertical Laminar Flow Hood (Type Ilb) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Material Handling Fume Hood -Nuclear Medicine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Computerized Campimeter | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Cardiofetal Monitoring Center With 16 Monitors | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Monitoring Center Equipped With 04 Vital Function Monitors (08 Parameters (Adult - Pediatric - Neonatal) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Monitoring Center Equipped With 05 Vital Function Monitors (06 Parameters) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Monitoring Center Equipped With 06 Vital Function Monitors (06 Parameters) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Monitoring Center Equipped With 09 Vital Function Monitors (06 Parameters) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Monitoring Center Equipped With 10 Vital Function Monitors (05 Parameters) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Monitoring Center Equipped With 15 Vital Function Monitors (05 Parameters) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Monitoring Center Equipped With 18 Vital Function Monitors (05 Parameters) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Monitoring Center Equipped With 5 Vital Function Monitors (08 Parameters) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Monitoring Center Equipped With 8 Vital Function Monitors (06 Parameters) (Adult - Pediatric - Neonatal) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Tabletop Centrifuge (400 To 750 Ml) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Tabletop Centrifuge (750 To 1100 Ml) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Fixed Angled Tabletop Centrifuge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Refrigerated Floor-standing Centrifuge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Microhematocrit Centrifuge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Blood Bank Refrigerated Centrifuge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Adult Cystoscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Pediatric Cystoscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Cytocentrifuge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Culture medium coagulator Bk | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Automatic Tissue Colouring Machine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Horizontal Freezer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| -20 °C Vertical Freezer (9 To 16 Cubic Feet) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| -70 °C Vertical Freezer (9 To 16 Cubic Feet) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| -86° C Vertical Freezer (-86° C). | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Dermatological Cryostat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Cryostat For Frozen Cuts | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Stainless Steel Bucket For Colorations | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Radiant Heat Cradle - Delivery Room | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Radiant Heat Cradle - ICU | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Densimeter | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Bone Densitometer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Plasma Thawing Device | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | X | 0 |
| Defibrillator With Monitor And External Paddles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Defibrillator With Monitor And External And Internal Paddles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Ultrasonic Dental Scaler | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| 4 Lph Water Distiller | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 Lph Water Distiller | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Fetal Heartbeat Detector | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Portable Transcranial Doppler | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Vascular Doppler | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Echocardiography machine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Color Doppler Ultrasound Scanner | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| General Purpose Ultrasound Scanner | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Color Doppler Ultrasound Scanner With Transfontanelar Transducer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Gynecological - Obstetrical Ultrasound scanner | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Ophthalmological Ultrasound Scanner | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Portable Ultrasound Scanner | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Electric Scalpel for Radiofrequency | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Mono/Bipolar High Power Electric Scalpel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Mono/Bipolar Medium Power Electric Scalpel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| 01 Channel Electrocardiography machine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| 03 Channel Electrocardiography machine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Mono/Bipolar Electrocautery | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Argon Electrocoagulator | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Electroencephalogram machine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Portable Electroencephalogram machine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Electromyography machine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Electromyography machine And Evoked Potentials | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Electronystagmography machine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Electroretinography machine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| General Purpose Laparoscopic Surgery Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | X | 0 | 0 | 0 | 0 | **X** | 0 |
| Craniotomy Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Cryosurgery Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Electroacupuncture Diagnostic And Treatment Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Interferential Current Electrotherapy Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Multiple Current Electrotherapy Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Photopolymerization Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Halogen Light Phototherapy Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Cardiac Output Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Magnetotherapy Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Digital Mammography Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Dental X-Ray Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** |
| Dental Trolley X-Ray Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** |
| Stationary X-Ray Equipment - X-Ray/Fluoroscopy (Ceiling Mount) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Stationary X-Ray Equipment - X-Ray (Medium Power) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Panoramic and Cephalometric X-Ray Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Trolley X-Ray Equipment - Medium Power | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Trolley C-Arm X-Ray Equipment - Vascular | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Magnetic Resonance Imaging Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Combination Therapy Equipment (Electrotherapy / Ultrasound) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Infrared Laser Therapy Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Microwave Therapy Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Urodynamics Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Short Wave Therapy Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Spectrophotometer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Portable Spirometer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Dry Heat Sterilizer (30 To 55lt) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Tabletop Steam Sterilizer (15 To 25 It) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Tabletop Steam Sterilizer (25 To 45 Li) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Single Door Steam Sterilizer (100 To 150 Lt) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 |
| Sterilizer With Electric Steam Generator (50 To 85 Lt) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Fetal Stimulator | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Drying Oven (35 To 55 Liters) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Phacoemulsifier | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Medical Treadmill | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Medical Treadmill With Screen | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Diode Laser Photocoagulator | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Laser Photocoagulator S32 Nanometers | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Impedance Meter | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| CO2 Incubator | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** |
| Cell Culture Incubator (35 To 60 Lt) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** |
| Transport Incubator - Standard | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Transport Incubator - ICU | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Neonatal Incubator - Standard | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Slit Lamp With Applanation Tonometer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Portable Slit Lamp | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| High Intensity Ceiling-mounted Surgical Lamp | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Medium Intensity Ceiling-mounted Surgical Lamp | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Single Ceiling-mounted Surgical Light | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Surgical Lamp on Trolley | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Automatic Bedpan Washer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Ultrasonic Instrument Washer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Lensmeter | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Extracorporeal Lithotripter | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Extracorporeal Circulation Machine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Hemodialysis Machine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Hypo/Hyperthermia Machine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| External Pacemaker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Bicameral External Pacemaker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Basic Electric Operating Table | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Basic Electric Operating Table + Neurosurgery | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Basic Electric Operation Table + Traumatology | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Delivery Table | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Microcentrifuge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Binocular Microscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Dual Head Binocular Microscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Microscope With Microphotography | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Fluorescence Microscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** |
| Neurosurgical Microscope With Neurosurgery Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** |
| Corneal Specular Microscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** |
| Stereoscopic Microscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Otologic operating Microscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** |
| Immunology and Phase Contrast Microscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Ophthalmic Surgical Microscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** |
| Otorhinolaryngology Surgical Microscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** |
| Simple Binocular Microscope With Digital Camera | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** |
| Trinocular Microscope With Built-in Camera | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Rotary Microtome | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Hypnotic State Monitor | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| 06 Parameter Vital Functions Monitor | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Monitor for Energy Expenditure | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Intracranial Pressure Monitor | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Fetal Monitor | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Fetal Monitor for Twins | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| 04 Parameter Portable Monitor | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Nebulizer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Neurostimulator And Peripheral Nerve Blocker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Wall-mounted Ophthalmic Retinoscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Indirect Ophthalmoscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Pachymeter | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Battery-Powered Traumatology Drill | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Cranial Manual Drill | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Digital PH meter | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Lung Plethysmography device | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Polygraph For Intracavitary Electrophysiology | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Auditory and Somatosensory Evoked Potentials | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Automatic Tissue Processor | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Proctosigmoidoscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Optotype Projector | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Pulse Oximeter | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Pulse Oximeter With Plethysmographic Waveform | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Pediatric/Neonatal Pulse Oximeter | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| 15 To 25 Cubic Feet Pharmacy Refrigerator | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Blood Bank Refrigerator (15 To 25 Cubic Feet) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Blood Bank Refrigerator (44 To 56 Cubic Feet) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Laboratory Refrigerator (15 To 25 Cubic Feet) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Automatic Flexible Endoscopes Reprocessor | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Rhinolaryngofiberscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Clinical Serology Rotator | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Tempered Platelet Rotator | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Orbital Rotator | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Sterilization Bag Sealer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Pneumatic Oscillating Saw | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Brachytherapy System - High Dose (Hdr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Capsule Endoscopy System | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Sequential Pneumatic Compression System of the Lower Limbs | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Basic Neuroendoscopy System | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Digital Holter System | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Dual Laser Ophthalmology System | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Paraffin Embedding System | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Hubbard Tank | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Tens | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 |
| 128-Slice CT Scanner | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Simulator CT Scanner | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Anterior Segment-Optical Coherence Tomography | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Intraoperative Portable CT Scanner (\*) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Schiotz Tonometer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Computerized Corneal Topographer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Electronic Pneumatic Tourniquet | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Anesthesia Unit With Basic Monitoring System | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Anesthesia Unit With Complete Monitoring System | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Dental Unit With Built-In Chair | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Transport Ventilator | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Neonatal Ventilator | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Neonatal Ventilator + High Frequency | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Volumetric Ventilator | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Volumetric Ventilator + Advanced Pcv | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Video Arthroscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Video Bronchoscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| General Purpose Video Cystoresectoscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Specialized Video Colonoscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Video Colposcope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Video Duodenoscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Video Ultrasonographic Endoscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Video Gastrofibroscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Specialized Video Gastroscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Video Hysteroscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Video Nasolaryngofibroscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Video Thoracoscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Yag Laser For Ophthalmology | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| **Complementary Equipment** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vortex Stirrer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Breathalyzer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Amnioscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Swinging arm | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| 2-Plate Scale | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Platform Scale Strength 1000kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Tabletop Scale 15 to 20kg Capacity | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| 1kg Digital Scale | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Electronic Scale With Height Gauge - Adult | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Electronic Scale With Height Gauge - Infants | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Electronic Scale With Height Gauge - Pediatric | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Electronic Platform Scale, For Disabled persons (200 Kg Apf) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Organ Weighing Scale | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Clock Scale | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Honan Balloon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Quadriceps Bench | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Physical Therapy Wall Bars | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Parallel Bars | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Parallel Bars For Children | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Ergometer Bike | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Stationary Bike For Children | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Audiometric Booth | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Ultraviolet Light Therapy Cabinet | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Glass Box And Optical Trial Frame | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Vaccine Thermal Transport Box | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Dose Calibrator | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Multipurpose Bed Stretcher | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 |
| Intraoral Camera | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Non-Mydriatic Retinal Chamber | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| 20 Slide Staining Tray (grid) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Sample Carrying Tray (grid) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Adult Bedpan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Plastic Measuring Tape For Anthropometric Measurements | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Psychomotor Circuit | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Resuscitation Trolley | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Difficult Airway Trolley | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Pneumatic Mattress | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Neonatal and Pediatric Heating Mattresses | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Exercise Mats | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Digital Cell Counter | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Shielded Waste Container | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Blood Transport Cooler Bag | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Dermatoscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Hypodermic Needle Destroyer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Tuning Fork | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Pain Meter Or Algometer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Semi-automatic Encapsulator - Medium Capacity | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Dental Prosthetics Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Swedish Ladder | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Diagnostic Station And Monitor Medium Grade | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tissue Float | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Flowmeter With Humidifier | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Medical Headlight | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Surgical Magnifying Glasses (3.5 X) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Goniometer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Games for Spatial Orientation | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Games for Motor Function | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Elevation Kit | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Elastic Band Kit | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Radiotherapy Dosimetry Equipment Kit | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Therapy Ball Kit | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Examination and Healing Lamp | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Light Curing Lamp | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Goose Neck Exam Lamp | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Ultraviolet Light Therapy Lamp | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Infrared Therapy Lamp | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Wood Lamp | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Adult Fiber Optic Laryngoscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Adult-Pediatric Fiber Optic Laryngoscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Neonatal Fiber Optic Laryngoscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Magnifying Glass With Halogen Light | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Resuscitation Kit - Adult | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Resuscitation Kit - Adult - Pediatric | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Resuscitation Kit - Neonatal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Resuscitation Kit - Pediatric | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Medication Case | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Leaded Apron With Hanger | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Denture Model | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Stereotaxic Frame | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Reflex Hammer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Bunsen Burner | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Mixer For Pharmacotechnics | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Psychomotricity Module For Children 1 To 3 Years Old | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Psychomotricity Module For Children 3 Years And Up | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Psychomotricity Module for Children Under 12 Months | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Otoscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Pantoscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Pediatric Pantoscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Hot and Cold Water Pressure Washer Gun - Wall Mounted | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Digital Caliper | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Wall Pulley | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Tungsten Syringe Shield With Lead glass (1cc)\* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Tungsten Syringe Shield With Lead glass (3cc) \*) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Pet Syringe Shield (10cc) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Pet Syringe Shield (5cc) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Lead Gonad Shield | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Radiometer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** |
| Liquid Formula packing machine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Biometric Ruler | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Adult Manual Resuscitator | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Neonatal Manual Resuscitator | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Pediatric Manual Resuscitator | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Shoulder Wheel for Exercise | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Slide Dryer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Blood Bag Sealer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Plasma Separator | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Set For Higher Mental Function Assessment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Electric Plaster Saw | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Electric Necropsy Saw | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Cpap System | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Pediatric Height Gauge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Hot Compress Tank | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Cold Compress Tank | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Paraffin Wax Bath | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Stationary Whirlpool Bath for Lower Limbs | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Rotating Whirlpool Bath for Limbs (100 Liters) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Clinical Aneroid Blood Pressure Monitor - Adult | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 |
| Clinical Aneroid Blood Pressure Monitor - Neonatal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 |
| Clinical Aneroid Blood Pressure Monitor - Pediatric | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 |
| Neonatal Aneroid Blood Pressure Monitor On Trolley | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 |
| Blood Pressure Monitor On Trolley - Adult | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 |
| Adult-Pediatrics Blood Pressure Monitor On Trolley | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 |
| Pediatric Blood Pressure Monitor On Trolley | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 |
| Vaccine Storage device | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Digital Thermometer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Digital Thermometer With Thermocouple | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Vaccine Holder Thermometer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Peruvian Abbreviated Test (Tap) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Conaii Inr Test | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Psychomotor Development Test (Tepsi) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Eedp Test (Psychomotor Development Evaluation Scale) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Blood Vessels Transilluminator | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Suction Unit | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Electromechanical Equipment** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ambulance Type I (Equipped) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Ambulance Type II (Equipped) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| 2 Body Cold Chamber | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| EPS Cutter (Nichrome) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| High Density Foam Cutter | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Portable Reverse Osmosis Equipment For Hemodialysis Machine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Radiotherapy Mold Room Tooling | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Electric Water Kettle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Microwave Oven | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Sensory Stimulation Kit | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Early Stimulation Kit | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Radiation Monitor | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Portable External Radiation and Contamination Monitor | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** |
| Foam Mat Floor | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| Hot Air Gun | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Compressed Air Gun | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Steam Gun for Car Wash | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Pressurized Water Gun | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Digital Caliper | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 |
| 04 Cubic Feet Refrigerator | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Electric Patient Transporter | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Clinical Furniture** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Adult Walking Aids | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Kardex Type (Pathology) Slide Storage Cabinet | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| 1- Body and Two Compartment Metal Clothing Storage Cabinet | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Storage Cabinet For Dental Instruments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Storage Cabinet for Endoscopes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Contaminated Material Tray | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Two Section Metal Hospital Screen | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Infant Bed cradle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Children's Bed cradle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Single Bed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Multipurpose Bed For Hospitalization | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 |
| Metal Dead Body Transfer Trolley | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Stretcher Trolly With Side Rails | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Stainless Steel Trolley For 20 Medical Record Holder | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Waste Transport Trolley | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Clean Linen Transport Trolley | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Dirty Linen Transport Trolley | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Multifunctional Transport Trolley | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Heavy Duty Transport Trolley | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Pediatric Bedpan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Lead-Lined Steel Drum With Lid | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Waste Drum | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Plastic Drum With Swing Lid | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Metal Drum Trolley With Lid For Trash | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Unit Dose Car | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Lead Collar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Lead-Lined Steel Solid Waste Container Trolley | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Radioactive Waste Container | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Biosafety Containers | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Waste Bin with Pedal Operated Lid | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Acrylic Bassinet Trolley | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal 2-Step Stool | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Posture Mirror | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Stainless Steel Closed Shelving | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| 01 Body 03 Shelves Stainless Steel Shelving | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| 01 Body 05 Divisions Stainless Steel Shelving | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| 01 Body 04 Shelves Slotted Angled Metal Shelving | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| 02 Bodies 04 Shelves Slotted Angled Metal Shelving | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| 03 Bodies 04 Shelves Slotted Angled Metal Shelving | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Wall File Holder For 10 Medical Records | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Patient Mobilization Crane | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Gynecological Obstetric Examination Table (Divan) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Examination and Healing Table (Divan) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Rest Or Injectables Table (Divan) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Autopsy Table | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tild Table for Children | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Proctology Examination Table | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Work Table With Protective Barrier | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| 140 X 70cm Work Table | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| 140 X 70cm Stainless Steel Work Table | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| 200 X 90cm Stainless Steel Work Table | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| 90 X 45cm Stainless Steel Multi-Purpose Table | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Wooden Divan Table | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Special Triage Table | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Special Table For Gynecological - Obstetrical Triage | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Angular Instruments Table | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Hospital Bedside Table | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Table for Examination and Diaper Changing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Bed Food Table Trolley | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Anesthesia Table Trolley | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Healing Table Trolley | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Mayo Type Metal Table | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Dead Body Table | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Diaper Changing Table With Infant Height Gauge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Massage Table | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Stainless Steel Table Trolley for Healing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Stainless Steel Table Trolley for Multiple Uses | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| 11 Drawer Stainless Steel Cabinet For Storing Slides and Lugs (1m X 0.5m X 1.5 M) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Aluminum Crutch For Children | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 |
| Urinal bottle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Pediatric Urinal bottle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Stainless Steel Cylindrical Litter Bin | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Plastic Litter Bin With Swing Lid And Window | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Metal Step | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Step For Operating Room | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Podoscope | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Bucket Holder Trolley | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Bag Holder Trolley, For Dirty Clothes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Wall Mount Bedpan and Urinal Bottle Holders | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Double Stainless Steel Wash Basin Trolley With Cabinets | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Single Wash Basin Trolley | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Saline Stand Trolley | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Mobile Rack For Boxes And Instruments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Mobile Rack For Baskets | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Wall Rack For Baskets | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Wheelchair | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Special Sampling Chair | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Rolling Swivel Chair, (Without Metal Parts) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Treatment Chair | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Blood Donation Chair | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Ophthalmology Chair | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Otorhinolaryngology Chair | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Rotary Chair | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Chemotherapy Chair | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Hemodialysis Treatment Chair | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Ophthalmology Treatment Chair | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Stainless Steel Swivel Stool With Backrest | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Plastic Bin With Half Moon Lid 30 Lt | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Metal Bedside Table | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Stainless Steel Instrument Cabinet 0 Sterile Material 104x45cm | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Stainless Steel Instrument Cabinet 0 Sterile Material 68x45cm | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Refrigerated Display Cabinet | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| **Administrative Furniture** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 Drawer Metal Filing Cabinet | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Two Door Metal Cabinet | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Lectern For Exhibitor | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Double Acrylic Desk Tray | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Single Acrylic Desk Tray | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| 3-Seater Metal Armchair | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Auditorium Armchair | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Plastic Organizer Boxes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Wall Mounted Projector Screen | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| 06 Step Aluminum Scissor Stair | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| 4 Step Metal Scissor Stair | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| 3 Step Stainless Steel Stair | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| 2 Drawer Metal Desk | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 Drawer Metal Desk | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 Drawer Metal Desk | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| "L" shape Modular Desk | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Office Side Table | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Coffee Table | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| 4 People Dining Table | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Circular Wooden Meeting Table 140 Cm. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Wooden Multipurpose Table 90x45cm | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Wooden Children's Table | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| 4 Person Wooden Meeting Table | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| 200 X 100 Cm Wooden Meeting Table | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| 200 X 110 Cm. Wooden Meeting Table | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| 90 X 180 Cm Meeting Table | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Corner Table | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Hexagonal Metal Children's Table | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Tilting Furniture | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Metal Trash Bin | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Wall Hanger With 4 Hooks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Standing Coat Rack | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Acrylic Whiteboard With Metal Stand | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Acrylic Wall-mounted Whiteboard | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Map Filing Cabinet With Base 8 Drawers Approx.. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Flip Chart | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Children's Play Set | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Metal Stacking Chair | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Chair With Armrests For Children | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Comfortable Rolling Swivel Chair | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal High Seat Rolling Swivel Chair | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Rolling Swivel Chair | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Dining Table Chair | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Dining Table Chair For Children | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Recliner Armchair With Armrests | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Comfortable Rolling Swivel Armchair | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Semi-Comfortable Armchair Without Armrests 2-Seater With Armrests | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Semi-Comfortable Armchair Without Armrests 3-Seater With Armrests | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Semi-Comfortable Armchair Without Armrests for One Person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Sofa Bed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 |
| Metal Stool With Wooden Seat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Swivel Stool With Backrest | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Fixed Swivel Stool | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Rolling Swivel Stool | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Aluminum Bulletin Board Cabinet | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Metal Book Display Cabinet | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Computer and Communications Equipment** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Professional Camera | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Image Capturer - Double Sided Scanner | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 |
| Computer With Special Software And Accessories For Language Problems | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Personal Computer | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 |
| Laptop Computer | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 |
| Videoconferencing Equipment For Central Station | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Networking and Acceleration Equipment for Central Station | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 |
| Sound Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Video Filming Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Scanner | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 |
| Workstation For Digitization, Storage, Management, Visualization And Transfer Of Macroscopic And Microscopic Images | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Printer | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 |
| Bar Code Printer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| High Demand Laser Printer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Multifunctional Printer | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 |
| Ticket Printer | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 |
| Bar Code Reader | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Computer Module | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 |
| Digital Whiteboard | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Laser Processor | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 |
| Multimedia Projector | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Multimedia Projector With Wireless Network Card | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Wall Stopwatch | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Laboratory Stopwatch | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Wall Clock | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Blu Ray Player | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 |
| Fire Alarm System | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Audio System And High Resolution Video Cameras (For Gesell Camera) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nurse Call System | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Clock System | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Biometric Time & Attendance Clock System | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| CCTV Security System | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Teleconferencing System | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pacs/Ris System | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| Tablet | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 | 0 | **X** | 0 |
| Table Phone | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | 0 | 0 |
| 32" LED Color TV With Wall Rack | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| 42" LED Color TV With Wall Rack | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| 29" Color TV | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Approx. 50" LED Smart TV Including Rack | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 | 0 | 0 | 0 | **X** | 0 |
| Computer and Communications Equipment | 0 | 0 | 0 | 0 | 0 | 0 | **X** | 0 | **X** | **X** | 0 | 0 | **X** | **X** | 0 | **X** | 0 | 0 | **X** | 0 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Replenishment of Investments**  **Piura** | | | | | | | | | | | | | | | | | | | | |
| **Hospital** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Replacement of Investments** | Year 01 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 | Year 11 | Year 12 | Year 13 | Year 14 | Year 15 | Year 16 | Year 17 | Year 18 | Year 19 | Year 20 |
| **Facilities** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Elevators/Lifts | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X | 0 | 0 |
| Pneumatic conveying systems | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Renewable energy systems | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Electrical substation (connection, transformer, distribution, automatic transfer switchboard) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Electrical transformer stations | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Stabilized power system, UPS/SAIS, stabilized and uninterruptible power supply linked to structural wiring (stand-alone) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X | 0 | 0 |
| Fire storage, treatment and pressure boosting system | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hard water system | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X | 0 | 0 |
| Soft water system | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X | 0 | 0 |
| Osmotic water system for hemodialysis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X | 0 | 0 |
| Air conditioning system (air conditioning, ventilation and heating) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X | 0 | 0 | 0 | 0 | 0 | 0 | X | 0 | 0 | 0 |
| Medical oxygen system | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Medical compressed air system | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Industrial compressed air plant | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Co2 system | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vacuum system | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Oil storage system | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sewage treatment and reuse of reclaimed water | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X | 0 | 0 |
| Emergency electrical system | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X | 0 | 0 |
| Header panels | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civil Works |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Masonry | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Interior walls | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X |
| Brick Manufacturers | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| False ceilings | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X |
| Roofs | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Facade coatings | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Specific paints and treatments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Windows | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X | 0 | 0 |
| Floors | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X | 0 | 0 |
| Doors | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X | 0 | 0 |

**Annex No. 18 TECHNICAL OBLIGATIONS OF THE CONCESSIONAIRE RELATED TO THE COMMISSIONING**

1. Prior and supplementary conditions for the Commissioning:

To start the Commissioning process, the CONCESSIONAIRE shall comply with the prior and supplementary conditions established in the Contract as detailed below:

1. Compliance of the Equipment’s guarantee, maintenance, and delivery period requirements as per the established in the non-objected Technical File.
2. Compliance of the technical specifications in the non-objected Technical File, as minimum.
3. The compliance of the following provisions shall be an essential requirement for the installation of supplies:

* The Equipment shall be supplied with all the interconnection devices or elements, the necessary inputs, and accessories for a complete and correct operation and with all the corresponding support, anchorage, fastening and termination systems, in accordance with the non-objected Technical File.

The opening of packings and the installation of the Equipment shall be performed by the CONCESSIONAIRE in presence of the Design, Construction and Equipment Supervisor who will supervise the installation of the supply.

1. To have complied with the scopes mentioned for the Endowment of Equipment (Exhibit 17), when necessary.
2. Verification of Supplies

The CONCESSIONAIRE shall be responsible for providing all the Supplies required for the Equipment’s proper operation in the Infrastructure.

The Supplies to be provided shall have the corresponding certification to be verified by the Design, Construction and Equipment Supervisor ensuring the quality and availability of quantities. Thus, its quality and availability should be ensured as required by the Equipment for the execution of operation preliminary tests for and tests protocols, according to the non-objected Technical File.

1. Commissioning Schedule Model

A reference model is detailed below with the minimum contents that should be included in the Commissioning Schedule. The Schedule shall be submitted by the CONCESSIONAIRE to the Design, Construction and Equipment Supervisor.

|  |  |  |  |
| --- | --- | --- | --- |
| **ACTIVITIES** | **START** | **END** | **TIME** |
| Commissioning Period |  |  |  |
| Operational Tests |  |  |  |
| SIGI-NS Training |  |  |  |
| Detail of the SIGI-NS Training Modules (To be developed) |  |  |  |
| Submission and approval of documentation, forms, exhibits, manuals, and videos according to the technical file. |  |  |  |
| Detail of the submission and approval process of documentation, forms, exhibits, manuals, and videos according to the technical file. |  |  |  |
| Preliminary Tests of Equipment and Infrastructure. |  |  |  |
| Detail of the Preliminary Tests process of Equipment and Infrastructure. |  |  |  |
| Systems Tests – no-load operation of equipment and infrastructure. |  |  |  |
| Detail of the systems tests – no-load operation of equipment and infrastructure. |  |  |  |
| Use and Maintenance Training of Equipment and Infrastructure. |  |  |  |
| Detail of Use and Maintenance Training modules of Equipment and Infrastructure (Detail per item and/or system) |  |  |  |
| Registration and validation per Equipment item. |  |  |  |
| Detail of the Registration and Validation per Equipment item (Detail per item and/or system) |  |  |  |
| Works and Equipment Validation |  |  |  |
| Detail of Works and Equipment Validation process |  |  |  |
| Others, when necessary |  |  |  |

1. Activities to be developed during Commissioning

The following activities and others shall be executed during the Commissioning:

1. Verification and operational tests of Infrastructure Building activities:

This verification shall be performed by the Approval Committee of Work and Equipment Verification (VOE Committee) considering the periods and procedures established in the Contract.

1. Verification and operation tests of the Equipment activity:

This verification shall be performed by the Design, Construction and Equipment Supervisor considering the periods established in the Contract.

1. Verification of Equipment Technical Requirements (EETT) Compliance.
2. The CONCESSIONAIRE is responsible for the full compliance of the Technical Specifications associated to the bid Equipment. The equipment shall have prior approval for its implementation. Additionally, each item requested in the non-objected Technical File shall be proved.
3. If the equipment does not comply with the requested during the Equipment verification, it shall be returned to the CONCESSIONAIRE who shall replace it in a period no longer than three (3) days, except for a force majeure which may extend this period. The new Equipment shall completely comply with the technical requirements established in the non-objected Technical File.
4. The Equipment to be installed or placed shall be new, unused, technologically valid and with a service life no longer than one (1) year.
5. Verification of components, accessories, and spare parts
6. Components, accessories, reagents, supplies, or others required for the execution of preliminary tests, tests protocols and use and service training shall be provided without additional cost by the CONCESSIONAIRE whether they have been or not detailed in the technical specifications of the non-objected Technical File.
7. During the Commissioning, the CONCESSIONAIRE shall provide the necessary supplies for the initial operation of the Equipment.
8. Verification of exhibits and technical information related to each item
9. The CONCESSIONAIRE is responsible for the development and proper anticipated submission of all exhibits and technical information required in the non-objected Technical File per Equipment item.
10. If the presented proposal adapts to the requested, the Design, Construction and Equipment Supervisor shall approve the submitted technical documentation.
11. The Commissioning process shall not be considered completed if there are not technical information, complete exhibits and, when applicable, executed exhibits.
12. Systems Pre-Test Period – Preliminary Tests
13. The CONCESSIONAIRE shall unilaterally perform preliminary tests of the systems and Equipment on its final location in order to evidence potential problems, lack of calibration, necessary adjustments or others that may affect the operation, provision, integrity, or the effective quality of the Equipment.
14. If problems, failures, or deviations are detected, the CONCESSIONAIRE is responsible for the correction or immediate solution of the problem. If it is not feasible, the CONCESSIONAIRE shall replace the Equipment by one equal or of better features, prior the Design, Construction and Equipment Supervisor’s opinion.
15. Systems Tests Period – no-load operation
16. For the formal beginning of systems and Equipment tests, it is necessary that the CONCESSIONAIRE previously informs the Design, Construction and Equipment Supervisor that the Equipment is in proper operation conditions to start its activity.
17. Considering the foregoing, the Design, Construction and Equipment Supervisor shall perform a preliminary verification. If it is appropriate, the Supervisor shall not object the execution of the systems and equipment operation test process.
18. Execution of the Information System for the Integral Management of Service Levels (SIGI-NS) operational tests.
19. Preparation of Registration and Validation Sheets for each Equipment item.

Registration and Validation Sheets shall be prepared for each equipment where the compliance of operational tests and the establishments in the non-objected Technical File and in Exhibit 17 shall be recorded.

1. Training

The CONCESSIONAIRE is obliged to conduct the following trainings:

* Training on the correct handling, functional operation, care, and basic preservation of the Equipment: addressed to health professionals and other users.

It shall be conducted once the Equipment is installed, and it will be mandatorily limited to the established in the non-objected Technical File.

* Upon the delivery and installation of equipment, the CONCESSIONAIRE shall execute the training program on the proper handling, functional operation, care, and basic preservation of the equipment in accordance with the established in the non-objected Technical File.
* Prior coordination with the Design, Construction and Equipment Supervisor, the CONCESSIONAIRE may improve said program in accordance with the operational conditions of the acquired equipment.
* The CONCESSIONAIRE shall periodically, on an annual basis or on a greater frequency, conduct reinforcing trainings addressed to users to keep an optimal handling and care of the equipment.
* The CONCESSIONAIRE shall conduct trainings to all new users in order that they have knowledge on keeping optimal handling and care of equipment.
* Only trained and certified users may handle the Equipment. The CONCESSIONAIRE shall be responsible for the compliance of this condition. The CONCESSIONAIRE shall assign five (5) members of their personnel, as minimum, to handle the Equipment.
* The CONCESSIONAIRE shall issue a “Training Certificate” to each person who approves the training (considering the minimum passing grade).

* Training on Equipment technical service addressed to engineering and maintenance professionals.
* If the CONCESSIONAIRE requires to perform the training or maintenance service by an outsourcing (natural or legal person), the CONCESSIONAIRE shall request the Design, Construction and Equipment Supervisor for its approval at least five (5) days prior the conduct of the training or the start of the maintenance program. The CONCESSIONAIRE shall attach the concerning information of the natural or legal person to be subcontracted.
* Training for users previously assigned by the GRANTOR on the use and maintenance of the Information System for the Integral Management of Service Levels (SIGI-NS).

1. Works and Equipment Verification and Acceptance Procedure

The GRANTOR, through the VAOE Committee, shall execute the Verification of the Work, facilities, Equipment and Equipment associated with Civil Works in coordination with the CONCESSIONAIRE and the Design, Construction and Equipment Supervisor. At the end of it, all the parties shall sign the Works and Equipment Verification and Acceptance Certificate.

To start said procedure, the CONCESSIONAIRE shall previously submit a completion report of Works and Equipment and the inventory of Works.

1. Verification of Protocols to be implemented in the Trial Period

These assistance protocols shall be prepared by the GRANTOR for their implementation in the Trial Period, two (2) months before the beginning of the Operational Phase.

1. Considerations for the execution of the Commissioning Schedule
2. None of the milestones related to the Commissioning Schedule shall be considered completed up to, as per the Design, Construction and Equipment Supervisor’s judgement, all the required activities have been finished, all the documents related to the corresponding milestone have been submitted and the successful result associated to the establishments in the Commissioning Schedule and in the Contract has been verified.
3. The Parties understand that each milestone of the Commissioning Schedule is a phase subject to an essential period; therefore, the delay on the compliance of the milestones means a serious damage. Thus, the Parties are committed to act with the greatest diligence to avoid any delay.
4. In case any of the documents within a determined milestone of the Commissioning Schedule is subject to the non-objection of the Design, Construction and Equipment Supervisor, the Supervisor shall communicate any objection to the CONCESSIONAIRE in a maximum period of five (5) days counting from its receipt.
5. If a delay in the compliance of any milestone is occurred due to a cause attributable to the CONCESSIONAIRE, the Design, Construction and Equipment Supervisor may order the CONCESSIONAIRE to execute, at his own cost and risk, the activities related to the Commissioning using additional resources and to continue supplying said resources until the CONCESSIONAIRE resumes the progress regular calendar in accordance with the Commissioning Schedule.
6. The Commissioning Process shall conclude with the signing of the Works and Equipment Verification and Acceptance Certificate.

### **APPENDIX 1 OF ANNEX 18**[[13]](#footnote-13)

**MINIMUM LICENSES RELATED TO THE SERVICES TO BE PROVIDED BY THE CONCESSIONAIRE, TO BE MANAGED AT THE START-UP STAGE**

| **Entity** | **Type of Certification / License** |
| --- | --- |
| IPEN | For Densitometry and X-Ray equipment. |
| MINAM | For solid waste treatment |
| RENEEIL | Labor mediation |
| SUCAMEC | For authorization of security and surveillance services |
| MINSA | Categorization as UPS Hemodialysis Service (medical support service). |

**MINIMUM LICENSES LINKED TO THE ASSISTANCE SERVICES TO BE PROVIDED BY THE GRANTOR, TO BE MANAGED DURING THE START-UP STAGE**

| **Entity** | **Type of Certification / License** |
| --- | --- |
| PRONAHEBAS | For use of Blood Bank services. |
| MTC | Authorization for patient transport and courier service |

**Annex No. 19 OBLIGATIONS OF TECHNICAL NATURE OF THE CONCESSIONAIRE IN RELATION TO OPERATION AND MAINTENANCE**

1. **Description of the Hospital’s Operation and Maintenance system:**
2. The CONCESSIONAIRE is responsible for the comprehensive execution of the Services, complying at least with what is indicated in Exhibit 8.
3. The CONCESSIONAIRE is responsible for the timely, efficient and effective delivery of the Services in order to ensure the provision of care.
4. The CONCESSIONAIRE shall carry out the Equipment and Infrastructure Maintenance works necessary to achieve and maintain the Service Indicators set forth in Exhibit 8, including the maintenance of the building, facilities and Equipment Linked to Civil Works.
5. The CONCESSIONAIRE shall carry out the Equipment and Infrastructure Maintenance, keeping them in good condition for their correct operation, by means of the necessary measures and repairs.
6. The Maintenance and Operation Service of the Building, Facilities, Equipment linked to the Civil Works shall be carried out on the physical assets: buildings, technical and technological facilities, Equipment, Equipment linked to Civil Works and work spaces of the Hospital, complying with the minimum standards and requirements and as set forth in the Annual Operation Plan.
7. Upon the occurrence of flaws in the Infrastructure or in the operation of the Equipment, the CONCESSIONAIRE shall carry out the necessary works for the normal reestablishment of the Services in the Hospital in the shortest possible term, the response times are indicated in the technical specifications defined in the Service Levels of the Infrastructure and Equipment Maintenance. If there are not enough goods or equipment to reestablish the Hospital’s Infrastructure or Equipment operation due to higher costs, the GRANTOR may resort to the insurance on the Concession Assets to the extent that it has been contracted by the CONCESSIONAIRE.
8. The CONCESSIONAIRE shall provide the Contract and Operations Supervisor, with a copy to the GRANTOR, with reports related to the Maintenance works for their evaluation. The cost or expense of the necessary resources for the elaboration of the reports shall be borne by the CONCESSIONAIRE.
9. In general terms, the CONCESSIONAIRE shall:
   1. To achieve the best state of conservation of the elements that make up the Infrastructure.
   2. To ensure the continuous and efficient operation of the facilities, minimizing possible interruptions as a result of breakdowns and therefore the disruption of the Hospital’s operations.
10. The provision of an efficient and effective comprehensive service of Equipment and Infrastructure Maintenance, with an effective cost and based on requirements and technical standards and stable operations.
11. Compliance with the regulations concerning the facilities of the Infrastructure in order to ensure that all buildings, equipment, systems and energy services do not cause or provoke any danger to the environment or to any person in the Hospital.

1. **Operational Stage:**
2. The Operational Stage begins with the Trial Period.
3. The CONCESSIONAIRE shall provide the Services continuously and without interruption, every day of the year, guaranteeing the management, availability, operability and safety of the Equipment.
4. The CONCESSIONAIRE shall provide permanent staff at the Hospital during the business hours of each health facility, as well as the necessary resources to respond to any need or request that may arise outside these hours.
5. The CONCESSIONAIRE shall be responsible for the safety and protection of all employees working in the Infrastructure. In this regard, it shall develop occupational health and safety policies and identify hazards and risks, mitigating adverse situations through prevention and training actions, complying with the Applicable Laws and Provisions.

During the Operational Stage, the following actions should be considered as a minimum:

1. Development of the Hazard Identification, Risk and Control Assessment (IPERC) for Operation and Maintenance.
   1. Planning to start IPERC
   * All the staff working in the Infrastructure have the obligation and the right to participate in the activities of hazard identification and risk assessment of their respective activities and work areas.
   * The CONCESSIONAIRE shall establish a methodology to identify hazards, assess the acceptability of such risks and identify measures to be taken to reduce or eliminate all unacceptable risks.
   1. Hazard identification
   * For each routine or non-routine activity, the risks related to occupational health and safety are identified. The identification must be carried out by the work teams and collaborators involved in each activity, led by the coordinators or persons in charge, accompanied by the preventionist or occupational health and safety staff.
   * In accordance with the process approach, the identification of risks must be carried out from the beginning, during and until the end of each activity.
   * Hazard identification should consider the analysis of:

* The activities of all the staff who have access to the workplace, including third party activities and visitors.
* Behavior, capacity and other factors associated with individuals.
* Hazards whose origin is outside the workplace but which may affect the safety or health of persons under the Hospital’s control within the workplace.
* Hazards generated in the vicinity of the workplace by related activities or work under the control of the Hospital.
* Infrastructure, Equipment, Equipment Linked to Civil Works and materials at the workplace, provided for the Hospital, third parties or other suppliers.
* Design of the workplace, processes, facilities, equipment, operational procedures and work organization, including their adaptation to human capacity.
* New and modified services.
* Potential problems not foreseen during design or task analysis.
* Changes or proposed changes to the organization, its activities or materials.
* Modifications to processes, including temporary changes and their impact on operations and activities.
* Any applicable legal requirements related to hazard identification and risk assessment, including the implementation of necessary controls.
* Consider all possible hazards, however unlikely they may seem, including those generated in emergency situations.
* Consider incident and accident reports, occupational health monitoring, recurrent medical leaves of absence, among others.
* Sanctions, lawsuits and case law on occupational health and safety cases.
  1. Risk assessment

For each identified hazard, its associated risks must be assessed. This assessment must be carried out by the work teams involved in each activity (coordinators or managers and collaborators of each area) accompanied by the Contract and Operations Supervisor or occupational health and safety staff at the Hospital.

1. Development of training plan in Personal Protective Equipment (PPEs)
2. The CONCESSIONAIRE is responsible for the development and execution of training plans in the use of PPE, as well as in prevention and protection in the work area.
3. These training activities must be given at least once a month. If a specific position requires special training, it may be provided through an external means or institution certified for such work.
4. A written record of the execution of training in the use of PPE and occupational health and safety should be kept. As a reference, a tentative model of a record is shown below:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PPEs TRAINING PLAN** | | | | | | | | |
| **Target** | **Time Intensity** | **Target Population** | **Trainer** | **Supporting Document** | **Scheduled Date** | **Executed** | | **Remarks** |
| **Yes** | **No** |
|  |  | Service 1 |  | Attendance Record, Study Material |  |  |  |  |
|  |  | Service 2 |  | Attendance Record, Study Material |  |  |  |  |
|  |  | etc. |  | Attendance Record, Study Material |  |  |  |  |

1. Handling of hazardous materials
2. The CONCESSIONAIRE is responsible for the safe and properly regulated handling of any material that constitutes a risk or hazard to operating staff, patients, and infrastructure.
3. The CONCESSIONAIRE shall train its staff on the handling of hazardous materials, and shall give briefings to the assistance staff and users on a regular basis in order to raise awareness and prevent potential hazards that may be generated by hazardous materials.
4. The CONCESSIONAIRE shall design and implement the hazardous materials management plan, which shall be part of the AOP.
5. In the case of hazardous materials whose handling is regulated by Applicable Laws and Provisions (radioactive materials, controlled chemicals, flammable products, etc.), the guidelines established by the Relevant Governmental Authority must also be complied with.
6. Accidents on access roads to the Hospital

The CONCESSIONAIRE shall assume the unfavorable effects that cause an impact on the Hospital as a result of accidents on access roads to the Hospital, according to the scope established in the IPERC, or in works executed during this stage and in general during Operation and Maintenance; that fall on employees, subcontractors, third parties and the environment, provided that they are caused by the employees of the CONCESSIONAIRE, by its subcontractors or by any other natural or legal person that may make the CONCESSIONAIRE liable extracontractually for its acts, deeds or omissions.

1. Control measures plan of accidents and contingencies for the Operation of the Infrastructure
2. Accidents at work
   * The CONCESSIONAIRE shall prepare an emergency/contingency plan that includes individualized plans for the Services requiring it. The emergency/contingency plan shall be duly updated every year in accordance with the Applicable Laws and Provisions.
   * The CONCESSIONAIRE shall have technicians responsible for occupational risk prevention, who shall provide the necessary guidelines for compliance with the Applicable Laws and Provisions, as well as the implementation of prevention policies.
   * The staff of the CONCESSIONAIRE shall carry out medical examinations of its staff in accordance with the Applicable Laws and Provisions. Such check-ups shall be at the CONCESSIONAIRE’s expense.
   * The CONCESSIONAIRE shall draw up an occupational health and safety manual to serve as the basis for drawing up the occupational risk prevention policy in accordance with the OHSAS 18001 specification or that which replaces, updates or complements it.
   * The CONCESSIONAIRE shall comply with all Applicable Laws and Provisions relating to occupational risk prevention and occupational health that affect the staff providing services, according to the OHSAS 18001 assessment specification, from the third year of commencement of the Operational Stage.
3. Contingencies for the operation of the Equipment
   * Those interventions that involve Equipment stoppages or risk of stoppage on other components in operation shall be previously authorized by the GRANTOR, with the favorable opinion of the Contract and Operations Supervisor, and carried out on the dates and times established in accordance with the CONCESSIONAIRE.
   * When the amount of the spare parts or repair of a corrective maintenance event, duly accredited by the technical responsible of the Hospital, exceeds fifty percent (50%) of the average sale value of the Equipment with the minimum characteristics approved for its acquisition, duly supported with at least two (2) quotations, it may propose the removal of the Equipment.
4. Contingencies for the operation of Services
   * In those cases in which defects in the provision of the Services have effects on operability or use, correction factors shall be applied depending on the area where this effect has occurred. In this sense, the same fault committed in a very critical area shall entail a higher deduction percentage than if it were committed in a less critical area.
5. Spillage of hazardous substances
6. The CONCESSIONAIRE shall develop protocols for action in cases of accidental spills and containment of environmental contamination or by the staff.
7. The staff in charge of the collection and transportation of solid waste should have PPE and should have received training on the types and risks of the waste they handle, in addition to knowing the procedures for dealing with incidents (fires, spills, etc.).
8. Epidemiological Contingencies

The CONCESSIONAIRE shall draw up a contingency plan for epidemics or health emergencies, and shall mainly plan for the care of the healthcare support services directly or indirectly involved in the resolution or control of the epidemic or health emergency. Likewise, it shall ensure the care of the largest possible number of patients through the redistribution of environments, infrastructure and resources in order to maximize the care response capacity.

1. Massive accidents
2. The CONCESSIONAIRE shall prepare a contingency plan for events that may be considered mass accidents, prioritizing the Maintenance of essential Services, and shall also plan for the emergency care of the largest possible number of patients through the redistribution of environments, Infrastructure and resources in order to maximize the care response capacity.
3. The CONCESSIONAIRE shall organize and implement the response to deal with the damage that may be caused to the health of patients, the Hospital’s infrastructure, facilities and Equipment, thus guaranteeing the continuity of services at the times when they are most needed, ensuring staff trained in the management of mass casualties, storage of medicines and medical supplies, alternative energy and drinking water systems, processes for pre- and in-hospital care of victims, protection and evacuation at the Hospital, among others.
4. Response actions are shown in two fields:
   * The internal disaster: understood as significant damage to the Hospital’s Infrastructure, Equipment, Services and patients. To a large extent, this affectation is determined by the pre-existing vulnerability of the Hospital in one or more of its three (3) components: structural (elements that support the weight of the building and keep it standing), non-structural (elements that are attached to the structural component and complete the building) and functional organizational (elements that determine its functionality in normal times and in emergencies). In these cases, the CONCESSIONAIRE is responsible for minimizing the damage through internal protection actions, evacuation, control of the destructive event, attention to the damage to patients and damage assessment.
   * The external disaster: defined as the massive influx of victims to ensure their care, the response to which is conditioned by the functional organizational capacity or the hospital’s internal disaster. The health response to these disasters requires the intervention of different institutional and sectoral areas and levels in order to guarantee the care of mass casualties (physical and mental), environmental health, epidemiological surveillance, food and nutritional surveillance, etc. Emergency medical care is especially critical and requires an immediate response in order to save the greatest number of patients and provide the best treatment. In this regard, it is necessary to integrate pre-hospital care that articulates and complements institutional capacities and makes it possible to expand coverage to social sectors located in areas far from large cities and with fewer economic resources.
5. **Maintenance Plan - general considerations**
6. The CONCESSIONAIRE shall prepare an annual Maintenance Plan, which shall be approved by the GRANTOR with the prior favorable opinion of the Contract and Operations Supervisor, as part of the AOP. This plan shall define the techniques, procedures and timing of the Maintenance works.
7. The Maintenance Plan shall include the description and justification of the policies used, the schedule of operations to be carried out, the index measurements which it is based on and its general technical justification.
8. The Maintenance Plan may be modified upon request of the CONCESSIONAIRE, and any modification shall be approved by the GRANTOR with the prior favorable opinion of the Contract and Operations Supervisor.
9. The obligation of the CONCESSIONAIRE to maintain the Equipment, as well as the Infrastructure, facilities and Equipment Linked to Civil Works shall commence from the moment of its installation and shall conclude at the expiration of the term of the Contract.
10. **Maintenance Plan - Maintenance program by coverage of outsourced or in-house service providers (Equipment and Infrastructure)**
11. Scheduled Infrastructure Maintenance
    1. The CONCESSIONAIRE shall carry out the Maintenance works of the Infrastructure, facilities and Equipment Linked to Civil Works in the manner and with the personal and technical means committed, in accordance with the provisions of the Maintenance Plan and in accordance with the manuals and requirements of the Builder or manufacturer, as applicable, complying at all times with the provisions of the Contract and the Applicable Laws and Provisions.

* 1. The CONCESSIONAIRE shall implement the controls and plans to guarantee the energy efficiency and eco-efficiency of the building, including audits of electrical quality, air conditioning of the building, medicinal gas lines, fuel lines, drinking water systems, sewage and others that may have a negative impact on the environment or produce inefficient use of energy resources. These audits shall be carried out no less frequently than once a year, based on the data obtained from the intelligent and energy management systems, and shall be in accordance with the Applicable Laws and Provisions. The results of the energy efficiency and eco-efficiency assessments shall be reported to the GRANTOR, indicating the measures to be implemented in the following period to improve the results obtained.

1. Unscheduled Infrastructure Maintenance

The obligation of the CONCESSIONAIRE is to attend and solve any contingency, problem or deficiency in the Infrastructure, facilities and Equipment Linked to Civil Works, within the times defined in the technical specifications of the Service Levels, in order to maintain the Service provision, safety and patrimonial conservation capacities thereof.

1. Equipment Maintenance

The CONCESSIONAIRE shall carry out the Equipment Maintenance works in the manner and with the personal and technical means, in accordance with the provisions of the Maintenance Plan and in accordance with the manuals and requirements of the equipment manufacturers, complying at all times with the provisions of the Contract and the Applicable Laws and Provisions.

1. Maintenance of the new infrastructure due to Additional Investments in Complementary Works or Voluntary Works

The CONCESSIONAIRE shall be responsible for the Maintenance of the new infrastructure due to Additional Investments in Complementary Works or Voluntary Works as from their execution or reception, in case they are executed by third parties.

1. **Annual procurement plan for goods and services for Maintenance**

The CONCESSIONAIRE is responsible for planning the acquisition of goods and services necessary to carry out the Equipment and Infrastructure Maintenance works, such planning shall be carried out on an annual basis and shall be included in the Maintenance Plan.

1. **Inventory Management**

Hospital Asset Management (Inventory of Equipment and Equipment Linked to Civil Works)

1. The CONCESSIONAIRE shall generate and keep updated the inventory of Equipment and Equipment Linked to Civil Works, which shall be called (IEEOC) including that which has been incorporated on loan or otherwise by the Hospital’s management, in accordance with the provisions of Directive No. 001-2015/SBN, called “Procedure for the Management of State Personal Property” approved by Resolution No. 046-2015/SBN, or rule amending or substituting it. Notwithstanding the foregoing, the CONCESSIONAIRE must keep an inventory of Electromechanical Equipment. To this end, it shall coordinate access to the information with the Hospital’s management through the Contract and Operations Supervisor. Likewise, the CONCESSIONAIRE shall comply with the Applicable Laws and Provisions.
2. The assets acquired by the CONCESSIONAIRE shall be included in the SIGI-NS database and shall correspond to the inventory of Equipment and Equipment Linked to Civil Works, which is part of the Hospital’s General Inventory (IGH for its acronym in Spanish).
3. The Contract and Operations Supervisor, at any time, may generate through SIGI-NS an “Information Request of Inventory Record” (SIRI for its acronym in Spanish), which must be updated with respect to the State Personal Property Management Procedure Record (PGBME for its acronym in Spanish).
4. The inventory of the Hospital’s Equipment shall be permanently verified and updated by the CONCESSIONAIRE, and it shall be the CONCESSIONAIRE’s responsibility to maintain a real and current level of information.
5. It is the CONCESSIONAIRE’s responsibility to carry out, on an annual basis, an inventory of assets, with each one of the assets having an individual code that allows its quick and efficient identification, by means of readers through RFID technology, bar code or similar.
6. **Considerations of human and physical resources**
7. The CONCESSIONAIRE is responsible for providing the Services and all the means for the administrative management (material and human resources) by means of duly qualified external staff or services, who have the relevant authorization, permits and authorizations for performing their duties, as well as the appropriate training and expertise in the activity to be carried out, in accordance with the provisions set forth in Exhibit 8.
8. The CONCESSIONAIRE shall only employ professional staff with qualifications appropriate to the job to be performed in the execution of the Services, and the GRANTOR may at any time request the accreditation of these points.
9. The CONCESSIONAIRE shall have the adequate means, tools and instruments for the performance and quality control of the Services, being that they shall have, when applicable, the annual calibration certification, good state of conservation and operation; and taking into account the following conditions:
10. The CONCESSIONAIRE shall have available the basic and commonly used tools (tools, instruments, materials) to perform the Service.
11. The CONCESSIONAIRE shall supply all the necessary original spare parts, parts, pieces, accessories and supplies indicated by the manufacturer in the procedure manuals, as well as all the parts, pieces, accessories and supplies not detailed in said procedures, but necessary for the correct operation of the Equipment.
12. The CONCESSIONAIRE shall provide all the checking, analysis and control equipment necessary for the Maintenance and revision of the Equipment, which shall be certified by a relevant company.
13. The CONCESSIONAIRE guarantees that the measuring, calibration equipment and instrumentation, which its staff shall use for the execution of the Maintenance Program, shall have a valid calibration certificate issued by the manufacturer or recognized international entity and that they shall be adequate and sufficient to achieve an efficient and quality service, without causing partial or total damage to the Equipment. In this sense, the CONCESSIONAIRE shall submit a list of calibration and quality control equipment, being at least the following: human physiological parameter simulator, biomedical standards in general, equipment for electrical safety certification, electromechanical installation test equipment, sanitary installation test equipment, pneumatic system test equipment, electrical network analyzers, flow meters of various kinds, measuring instruments in general (multimeters, oscilloscopes, wattmeters, thermometers, sound level meters, tachometers, amperometric clamps, lux meters, etc.).
14. The CONCESSIONAIRE guarantees the physical resources and transportation at no additional cost, when it is required to move the Equipment out of the Hospital area, for the solution of any major breakdown or related work, being under its responsibility the integrity of the Equipment.
15. The GRANTOR shall not be liable for the loss or misuse of the physical resources of the technical staff assigned by the CONCESSIONAIRE.
16. The CONCESSIONAIRE shall provide the computerized maintenance management system, with the respective computer equipment necessary for the tasks within its scope.

Such system shall be compatible with the information systems of the GRANTOR for the control of the Contract, and the CONCESSIONAIRE shall be responsible for the integration of both information systems without interference.

1. The CONCESSIONAIRE shall have a computerized database for the management of suppliers and materials, which shall be suitably updated, where the following shall be available:

* Database of national and international suppliers.
* Ability to search for new suppliers.
* Database of materials and spare parts.
* Information on the order data of the corresponding suppliers.

**Annex No. 20 ANNUAL OPERATION PLAN - AOP**

The AOP is the document that the CONCESSIONAIRE shall prepare as a precedent condition for the Start of the Operational Phase and then, on an annual basis during all the validity of the Contract, shall be prepared for each Service.

The AOP of the Service shall contain the methods, procedures, and measures that the CONCESSIONAIRE shall adopt to ensure the compliance of the Service Indicators in accordance with the established in the Contract. Also, it shall specify the corresponding specifications and procedures for the Operation in the Contract and Applicable Law and Provisions framework.

This plan shall be prepared independently for each Service and submitted each time for the GRANTOR’s approval. There shall be a total of thirteen (13) AOPs.

The first version of the AOP shall be submitted, with a minimum of one hundred eighty (180) days before the start of the Operational Phase, for the GRANTOR’s approval and with the favorable opinion of the Contract and Operations Supervisor. Said approval shall be a requirement to start the Operational Phase. If the Operational Phase starts on the same date or after the last day of September of the current year, the AOP shall be prepared with a validity from the start of the Operational Phase and December 31 of the next year.

During the Operational Phase for each Calendar Year, the CONCESSIONAIRE shall submit a AOP on the last day of September, as maximum. It shall have the Contract and Operations Supervisor’s opinion and the GRANTOR’s approval on December 1 of the present Calendar Year, as maximum, in order to go into effect on January 1 of the next Calendar Year.

During the review period in any of the phases, the GRANTOR may observe and issue comments which shall be corrected and solved by the CONCESSIONAIRE in the period established by the GRANTOR to get its approval.

If the AOP is not approved by December 1 of the current Calendar Year during the Operational Phase, penalties corresponding to the establishments in Exhibit 11 shall be applied to the CONCESSIONAIRE.

The AOP of each Service shall have an annual validity in the Operational Phase. The validity shall be between January 1 and December 31 of the same year.

The AOP shall have at least the following aspects for each Service. Note that the below points are referential and not restrictive or limited.

1. **SERVICE GENERAL BACKGROUND**

The CONCESSIONAIRE shall inform the Service general backgrounds for the application period, as well as all the documentation that its planning, scheduling and supervision are based on. The CONCESSIONAIRE shall mention the following aspects as minimum:

* 1. AOP’s General objective for the Service.
  2. AOP’s validity, understood as the application date.
  3. Related documents and regulations. The CONCESSIONAIRE shall indicate the specific, technical, and legal documents applicable for the provision of the Service during the AOP validity.
  4. Description of policies on what the CONCESSIONAIRE is based for the provision of the Service.

1. **PLANNING AND SUPERVISION**

The CONCESSIONAIRE shall plan the delivery of the Service for all the Operational year specifying the details of its characteristics, human resources, among others, and anything to be consistent with the establishments in the Contract.

The CONCESSIONAIRE shall mention the following aspects as minimum:

* 1. Description and main characteristics of the Service. The CONCESSIONAIRE shall detail the description of all the Service aspects, as well as its main and distinctive characteristics.
  2. Method for the Service operation per each Hospital unit or area. If it is applicable to the Service, quantities (grams of food rations, number of clothes, etc.) shall be specified.
  3. Organization and Functions: The CONCESSIONAIRE shall specify the organizational chart for the Service provision and the roles description within said organization.
  4. Scheduling of Activities. The CONCESSIONAIRE shall specify the flowcharts or diagrams that graphically represent all the steps that compose the activities sequencing of each process of the Service, all consistent with the Contract. Also, it shall include all the necessary information for a better understanding and follow-up of the processes by using symbols as per its nature.
     1. Schedules and scopes of the Services, in accordance with the requirements specified in the Contract.
     2. Flowchart of each process associated with the Service. Flows and periods related to each activity, personnel, distances shall be considered to comply with the Service requirements.
     3. Procedures
  + Administrative procedures to provide the Service.
  + Operational procedures to provide the Service.
  + Contingency procedures of the service. (Description of the implementation modality of a contingency plan associated with non-scheduled events with the corresponding training system for the CONCESSIONAIRE’s personnel to guarantee the continuity of the Service).
  + Required forms.
  + Maximum response times for scheduled and non-scheduled activities.
  + Maximum solution (execution) times for scheduled and non-scheduled activities.
  + Correction or tolerance times, if considered by the Service.
  + Other schedules of the Service.
    1. Coordination with other Services to be provided by the CONCESSIONAIRE. The CONCESSIONAIRE shall identify the relation of a Service with other services and the coordination to be made, if necessary.
  1. Supervision. The CONCESSIONAIRE shall specify the type of supervision to measure and follow-up the planned activities and that are executed in quality and time, as well as the measures to be taken to ensure the continuity of the Service.

1. **HUMAN RESOURCES**
   1. List of staffing. The CONCESSIONAIRE shall specify the number of personnel to provide the Service, as well as the list of staff and the compliance of the requirements established in the Contract.

* 1. Personnel Distribution Plan. The CONCESSIONAIRE shall specify how its personnel shall be distributed in the different Hospital units and areas.
  2. Health certification. The CONCESSIONAIRE shall specify how the health certificate for the required services will be guaranteed according to the provision of the Service, complying with the requirements established in the Contract.
  3. Definition of working hours and shift systems. The CONCESSIONAIRE shall specify, in coordination with the GRANTOR, the working hours and shifts of the personnel assigned for the provision of the Service, as well as each of the responsible people or heads of areas.
  4. Protection and Safety measures at work. Description of risk prevention measures and health protection for the CONCESSIONAIRE’s personnel.
  5. Continuous Training Program for the CONCESSIONAIRE’s personnel. It shall include the contents, levels, duration, and professionals in charge, as well as the induction process and orientation of the job positions.
  6. HR Supervision to be performed by the CONCESSIONAIRE
     1. Description of the supervision responsible people
     2. Supervision dates for the scheduled supervision.
     3. Random supervision.
     4. Outcome Reports.

1. **EQUIPMENT, MATERIALS AND SUPPLIES**

The CONCESSIONAIRE shall specify each equipment, materials, information systems and supplies to be used to provide the Service, for example:

* 1. List of equipment, information, and registration systems, supplies to be used, description of technical characteristics, useful life, and efficiencies, as applicable.
  2. Operational Instruction Guides of clinical and non-clinical equipment.

1. **OPERATION OF THE SERVICE WITH SIGI-NS**

The CONCESSIONAIRE shall specify how the Service may be reviewed and analyzed online in the SIGI-NS.

* 1. Complaints Management of SIGI-NS users.
  2. Traceability and follow-up of the Service.
  3. Document Management of the Service (documentation of personnel, reports, documentation of equipment, and others).

1. **QUALITY ASSURANCE PLAN TO COMPLY WITH THE SERVICE AND CONTINUOUS IMPROVEMENT**
   1. Control, certification, and inspection system of all the processes that involve the Service.
   2. Assurance system and quality and opportunity certification in the provision of the Service.
2. **EMERGENCIES AND DISASTERS PLAN**

The CONCESSIONAIRE shall submit a plan against emergencies or disasters such as fires, earthquakes, and others. This plan shall contain the following, as minimum:

* Objective and scope.
* Definitions.
* Risks associated to the Service management: General risks and specific risks subject to the delivery of the Service.
* Mode execution of the plan.
* Control measures and mitigation of risks.
* Implementation measures.
* Emergency stock for the Service, if applicable.
* Identification and availability of personnel to attend Service emergencies.
* Communication. Specification of the type of communications in emergencies or disasters.

1. **PLANIMETRY**

The CONCESSIONAIRE shall graphically present the planimetry and flows for the provision of the Service.

1. **OTHERS FOR EACH SERVICE**
   1. **FOOD SERVICE**
   * Procedure for the certification of suppliers and food products.
   * Dietary Plan according to the guidelines emanating from the nutrition unit.
   * Standards and procedures based on hazard analysis and critical control point principles.
   * Certification mechanisms for suppliers and food products.
   * Manual and program of good food handling practices (GHP), containing the hygienic measures to be applied in the chain or process of elaboration and distribution of food to ensure its sanitary quality and safety, according to the Applicable Laws and Provisions.
   * Hygiene and Sanitation Program (HSP), which includes cleaning and disinfection procedures for facilities, environments, equipment, kitchen furniture, utensils, work surfaces, among others, in order to minimize the risks of cross contamination to food, according to the Applicable Laws and Provisions.
   1. **LAUNDRY AND CLOTHING MANAGEMENT SERVICE**
   * Instructional guides for machine operation and use of inputs.
   * Rules on washing and changing over clothes, special circuit for contaminated clothes.
   * Hygiene manual.
   * Certificates of total and available production and transport capacity for performing the Service.
   1. **CLEANING, HOUSEKEEPING AND VECTOR MANAGEMENT SERVICES**
   * Instructional guides for machine operation and use of inputs.
   * Cleaning and disinfection standards,
   * Cleaning circuit by type of housekeeping
   * Vector control and management standards
   * Vector management control and prevention activities.
   * Hygiene manual.
   * Certificates of the total and available production and transport capacity for performing the service if required.
   1. **INTEGRAL MANAGEMENT AND SOLID WASTE MANAGEMENT SERVICE**
   * Cleaning techniques, disinfection, and sterilization techniques according to the Applicable Laws and Provisions.
   * Biosafety and occupational health actions,
   1. **STERILIZATION SERVICE**
   * Cleaning techniques, disinfection, and sterilization techniques according to the Applicable Laws and Provisions.
   * Biosafety and occupational health actions, cleaning, inspection, sterile barrier system, monitoring of sterilization cycles, storage, distribution and transport, validation, among others.
   1. **INFORMATION AND COMMUNICATIONS TECHNOLOGY AND PROVISION AND AVAILABILITY OF TECHNOLOGICAL INFRASTRUCTURE SERVICES**
   * Manual of technical standards and procedures, with the corresponding details of activities, tasks, people in charge, flows, schedules, and other relevant elements of the service.
   * Description of permanent staff with indication of the organizational system, profiles, shift systems, positions, tasks, and protocols for user assistance.
   * Continuous training program for the staff in charge of the Service and the users, in order to guarantee the continuity of the Service.
   * Instructional guidelines to ensure security and reliability of the computer systems implemented by the Service.
   * Scheduling of maintenance activities and protocols for network installations and computer equipment considered by the Service.
   * Data migration protocols, data backup and other computer security procedures.
   * Emergency action protocols and contingency procedures of the service that describe how to implement a contingency plan associated with unscheduled events.
   * Quality certifications of the operating systems installed in the Hospital.
   * Periodic registration of equipment, software, and corresponding licenses.
   * Interactive user registration, enrollment system, attribute assignment, access keys, differentiated privileges and other relevant associated information.
   * Replacement program of equipment, networks and software considered in the service for the contract period.
   * Quality assurance plan for service compliance and continuous improvement.
   1. **SECURITY AND SURVEILLANCE SERVICE**
   * Table describing the timetable of surveillance posts, indicating shifts, number of agents per shift, number of supervisors per shift, number and characteristics of each agent’s equipment and any other additional information considered relevant.
   * Rules on emergency exit signs.
   * Plan for periodic drills.
   * Emergency and contingency plan.
   * Evacuation plan with staff training.
   1. **MAINTENANCE AND OPERATION SERVICE OF BUILDING, FACILITIES, EQUIPMENT AND FURNITURE ASSOCIATED WITH THE INFRASTRUCTURE**
   * Technical standards and procedures manual.
   * Management tools for the maintenance standards for electrical, mechanical, sanitary, and other Hospital installations.
   * Management tools for maintenance standards for critical areas.
   * Management tools for maintenance standards for boilers, steam networks, heating, air conditioning.
   * Management tools for preventive, corrective, and predictive maintenance standards.
   * Scheduled preventive maintenance plan.
   * Corrective maintenance plan.
   * Adaptive maintenance plan for improvement actions.
   * Continuous training program for service staff.
   * Conditions of the facilities and equipment associated with the infrastructure.
   * Risk analysis of buildings, facilities, industrial equipment, and equipment associated with infrastructure.
   * Disaster contingency plan.
   * Building regulations.

* Abbreviated report of the building, facilities, industrial equipment, and equipment associated with the infrastructure, in accordance with the format and contents established by the Contract and Operations Supervisor.
* Modifications that have been introduced in the building, facilities, industrial equipment, and equipment associated with the infrastructure and that may in any way modify its service conditions.
* General operating data, such as temperatures, combustion analysis, electrical currents, energy consumption, etc.
* Maintenance program for the building and each one of the facilities, industrial equipment and equipment associated with the infrastructure, which shall include the actions or tasks to be carried out in relation to each one of them, indicating their content, methodology and periodicity, which shall respond at least to the requirements and recommendations of the applicable laws and provisions and the manufacturer.
* Control of equipment operation. Data obtained from the operation that shall determine in due time when partial or total replacement is necessary.
* Computerized program. List of the program of maintenance activities, with dates and times of execution.
* Protocols for action in the event of technical emergencies that must be contained in the corresponding emergency contingency plan.
  1. **ADMINISTRATION, ACQUISITION, MAINTENANCE AND AVAILABILITY SERVICE OF THE EQUIPMENT**
  + Computer systems to be made available for the service.
  + Scheduling of activities for the period (annual maintenance program).
  + Technical Data Sheets of the equipment.
  + User and service manuals, with their corresponding Spanish translation.
  + Maintenance programs according to manufacturer’s manuals and in accordance with applicable laws and provisions.
  + User training programs.
  + Technical data sheets of the equipment, materials and supplies to be used.
  + Period replenishment schedule.
  + Initial detailed inventory of assets under their responsibility and associated technical information.
  1. **HEMODIALYSIS SERVICE**
  + Operations manual describing chronic and acute hemodialysis processes from the users’ perspective.
  + Quality manual.
  + Code of Ethics.
  + Manual of analytical techniques and procedures.
  + Biosafety manual.
  + Manuals of use and preventive and corrective maintenance of biomedical equipment.
  + Internal security plan (INDECI).
  + Updated distribution plans (electrical, water).
  + Biosafety Manual for Dialysis Units in the Social Health Insurance (ESSALUD).
  + Nursing Procedures Manual for the care of patients with Chronic Kidney Disease in Hemodialysis Treatment.
  + Clinical Practice Guidelines for the Management of Anemia; Management of Alterations in Bone and Mineral Metabolism in Dialysis Patients; Hemodialysis Dosage; Management of Arterial Hypertension in Dialysis Patients.
  + Clinical Practice Guidelines for the Management of Chronic Kidney Disease in ESSALUD.
  + Clinical Practice Guidelines: for the Diagnosis and Treatment of Protein Energy Wasting (PEW) and Management of Infectious Complications Associated with Dialysis Access.
  + It must have Medical History according to the Applicable Laws and Provisions. It is specified in Exhibit No. 7, of the General Management Resolution No. 1094-GG-ESSALUD-2015 or the regulation substituting it.
  + It must have a Hemodialysis Sessions Prescription and Evolution Card. It is specified in Exhibit No. 8 of the General Management Resolution No. 1094-GG-ESSAUD-2015 or the regulation substituting it.
  + Other information considered relevant to guarantee the quality of the service and whose inclusion in the Annual Operational Plan of the Service shall be agreed between the GRANTOR and the CONCESSIONAIRE.
  1. **CLINICAL PATHOLOGY SERVICE: LABORATORY**
  + Quality manual.
  + Code of Ethics.
  + Manual of analytical techniques and procedures.
  + Biosafety manual.
  + Preventive and corrective equipment maintenance manual.
  + BI development proposals to optimize clinical or operational processes related to the laboratory service, e.g., development of analytical scaling algorithms or repetition time or request profiles.
  + Protocol, emergency procedures, shifts and responsibilities for the use of the Laboratory Service equipment and rooms shared between the CONCESSIONAIRE and the GRANTOR, which may not affect or modify the compliance with the CONCESSIONAIRE’s Service Levels set forth in the Contract.
  1. **IMAGING SERVICE**
  + Quality manual.
  + Code of Ethics.
  + Biosafety manual.
  + Preventive and corrective equipment maintenance manual.
  + Protocol, emergency procedures, shifts and responsibilities for the use of the Imaging Service equipment and rooms shared between the CONCESSIONAIRE and the GRANTOR, which shall not affect or modify the compliance with the CONCESSIONAIRE’s Service Levels set forth in the Contract.
  1. **LOGISTICS SERVICE**
  + Technical standards and procedures manual.
  + Description of permanent staff with description of shifts, positions, and tasks.
  + Description of equipment and means of transport and storage to be used in the service.
  + Flow charts or diagrams that graphically represent all the steps making up the sequences of activities, within each of the processes that make up the service, with symbology graphing assigned staff, distances traveled, enclosures which the service is provided at, Strategic Materials and equipment, supervisions and inspections, schedules and times required in the activities.
  + Circuit and protocols for the receipt, storage and transport of orders and daily dispatches to the different areas of the Hospital.
  + Emergency action protocols and contingency procedures - of the service describing the modality of implementation of a contingency plan associated with unscheduled events.
  + Training system for the CONCESSIONAIRE’s staff, in order to guarantee the continuity of the service.
  + Complete electronic report format regarding stock, general periodic status (daily, monthly, other) of the inventory,
  + Electronic report format detailing daily orders and dispatches, projection of products that shall be sold out in successive fortnightly periods and report of products about to expire, according to expiration date policies.
  + Communications system and protocols to be used to execute a return or change of units to suppliers.
  + Quality and timeliness assurance system in service delivery.

1. Other information that the CONCESSIONAIRE considers relevant to guarantee the quality of the Service, as well as the required exhibits.

Annex No. 21 GUIDELINES FOR OPERATION AND MAINTENANCE MANUALS

The CONCESSIONAIRE must provide the corresponding technical information for the Hospital in printed format; alternatively, a computer system can be delivered containing all the digitized information, with management software for this database capable of connecting with the Hospital's centralized storage computer system. The minimum characteristics of the required information are mentioned below:

FOR INFRASTRUCTURE AND FACILITIES

The contents of the established programs and procedures will be collected for the Hospital in Preventive and Corrective Maintenance manuals. These manuals will collect at least the following information

1. Abbreviated report of the building, facilities, electromechanical equipment and Equipment Linked to Civil Works, in accordance with the format and contents established by the Design, Construction and Equipment Supervisor or the Contract and Operations Supervisor, as appropriate.
2. Modifications that have been introduced in the building, facilities and Equipment Linked to Civil Works and that in some way may modify the conditions of service.
3. General operating data, such as temperatures, combustion analysis, electrical intensities, energy consumption, etc.
4. Maintenance program for the building, outdoor areas and each of the facilities and Equipment Linked to Civil Works, where the actions or tasks to be carried out in relation to each of them will be collected, indicating the content, methodology and periodicity, which will be at least as required and recommended by Applicable Laws and Provisions and the manufacturer.
5. Control of the operation of the Equipment and the Equipment Linked to Civil Works. Data obtained from the operation that will be determined in advance when is necessary its partial or total replacement.
6. Computerized program. List of the Maintenance activities program, stating the dates and schedules of execution.
7. Action protocols for technical emergencies that must be contained in the corresponding contingency plan for emergencies.

FOR THE EQUIPMENT:

1. For each item, must be included in the delivery of two (2) operation and maintenance videos, and two (2) sets of operation, installation, maintenance and parts manuals.
2. The manuals and videos will be delivered for the items that correspond as indicated in the Technical File not objected.
3. The manuals must be original from the manufacturer in Spanish, English or another language. If the manuals are in English or another language, the respective translation into Spanish must be included.
4. The operating manual should include all instructions for storage, handling and basic care.
5. The technical service manual must contain specialized information with details of:

* Diagrams of mechanical parts, operation and calibration, etc. Including a list and catalog of parts, spare parts and accessories duly identified with manufacturer codes and illustrative catalogs.
* Assembly / installation drawings and procedures (if required by equipment).
* Preventive Maintenance Program, which must contain the activities to be carried out for a period not less than the guarantee period, indicating the frequency and duration.
* Indicate the probability of breakdowns and their solutions.

Annex No. 22 QUALITY CERTIFICATIONS

The ISO certifications that the CONCESSIONAIRE for the Hospital must obtain as a minimum are the following:

* ISO 45001: 2018 Occupational Health & Safety Management System certification.
* ISO 31001 Risk Management System Certification.
* ISO 9001: 2015 Hospital's quality management processes certification for the Services in which it is applicable. In those where the ISO 9001 requirement is not applicable, Hospital suppliers will be required to comply with ISO standards.
* ISO 15189: 2014 Certification for Quality Management in Clinical Laboratories and Imaging.
* ISO 14001: 2015 Environmental Management System Certification.
* ISO 27001 Certification of Information Security Management System
* Leed Certification - Silver Category.
* ISO 5001 Efficient Energy Management System Certification.

Said certifications must be obtained in accordance with the rules, conditions and terms established for each of the aforementioned certifications, with a maximum term of the third year of the Operational Stage and must be kept updated throughout the term of the Contract. The costs for obtaining said accreditations will be assumed by the CONCESSIONAIRE.

**Exhibit No. 23: RESOLUTION FOR ENVIRONMENTAL CLASSIFICATION AND APPROVAL OF THE TERMS OF REFERENCE IN ORDER TO PREPARE THE ENVIRONMENTAL MANAGEMENT INSTRUMENT OF THE HOSPITAL**

MINISTRY OF HEALTH No 1292-2016/DSA/DIGESA/SA

ESSALUD

General Management Office

RECEIVED

AUG 12 2016

Time: \_\_\_\_\_\_\_ Signature: \_\_\_[SIGNATURE]\_\_\_

General Management Office

Investment – GCPI

AUG 15 2016

RECEIVED

By: \_\_\_\_\_\_

Time: \_\_\_[SIGNATURE]\_\_\_

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MINISTRY OF HEALTH

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PUBLIC NOTARY

ESSALUD

Central Management Office of Investment Projects

AUG 15 2016

RECEIVED

Signature: \_\_\_[SIGNATURE]\_\_\_

Time: \_\_\_\_\_\_\_\_\_

Directorial Resolution

Lima, August 11, 2016

Having reviewed the **case file 25900-2016-EIAC** containing the request submitted by the **SOCIAL HEALTH INSURANCE – ESSALUD**, identified by Taxpayers’ ID (RUC) 20131257750 domiciled at Av. Domingo Cueto 120, District of Jesus Maria, Province and Department of Lima to grant the Classification and Approval of the Terms of Reference of Environmental Assessments, Category II (EIA-sd) and Report 3857-2016/DSA/DIGESA;

**WHEREAS:**

On May 25, 2016, File 25900-2016-EIAC was received by the General Department of Environmental Health (DIGESA). Through this file, the **SOCIAL HEALTH INSURANCE - ESSALUD** requested the Classification and Approval of the Terms of Reference of Environmental Assessments, Category II (EIA-sd) of the project entitled “Building of the High Complexity Hospital of ESSALUD in the district of Piura, province and department of Piura¨;

On June 9, 2016, DIGESA issued the Directorial Order 170/2016/DSA/DIGESA, received by the entity subject to control on June 10, 2016 through which a 10-working day term was provided to amend the comments stated in Report 2408-2016/DSA/DIGESA;

On June 22, 2016, by means of Official Letter 192-GG-ESSALUD-2016, the **SOCIAL HEALTH INSURANCE - ESSALUD** submitted information on the correction of raised objections;

On July 18, 2016, by means of Official Letter 2011-GG-ESSALUD-2016, the **SOCIAL HEALTH INSURANCE - ESSALUD** submitted information on the correction of raised objections;

Article 18, paragraph 2, Law 27446, National System Act on Environmental Impact Assessment states that competent authorities for each type of project included in the Listing referred to in article 4º of the above-mentioned Act, is the Ministry of the sector corresponding to the activity developed by the bidder company or Project owner.

Accordingly, Article 4, paragraph 1 of the above-mentioned Act states that “any action included in the Listing establishing the Regulation as set forth in Article 2º of this Act through which environmental certification will be requested, shall be classified within one of the following categories¨:

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MINISTRY OF HEALTH

NELIDA MARIBEL PUCHURI MEDINA

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1. Category I- Environmental Impact Assessment- It includes executed projects that do not lead to significant negative environmental impacts.
2. Category II- Semi detailed Environmental Impact Assessment.- It includes the executed projects that can lead to moderate environmental impact which negative effects can be eliminated or minimized by adopting easily implemented measures. Projects under this category will require a detailed Environmental Impact Assessment (EIA-d).
3. Category III- Detailed Environmental Impact Assessment.- It includes the characteristics, importance and/or traceability of projects that can cause significant negative environmental impacts, either quantitative or qualitative, that require a deep analysis to review impacts and propose the corresponding environmental management strategy.

Projects under this category will require a detailed Environmental Impact Assessment (EIA-d);

Article 45º of Supreme Decree 019-2009-MINAM, Regulation of the National System Act on Environmental Impact Assessment states that the Competent Authority will issue a Resolution through which it grants the Environmental Certification under Category I (DIA), disapproves the request, assigns Category II or III to the project and approves the terms of reference. Besides, the Resolution shall indicate the authorities who will issue a technical opinion during the evaluation of the environmental assessment. The Resolution of Classification does not imply granting the Environmental Certification and will be effective provided that material and technical conditions of the project, traceability or environmental and social impacts are not amended.

In that sense, procedure No. 48 of the Single Revised Text of Administrative Procedures (TUPA) of the Ministry of Health establishes the requirements to be complied by the entities subject to control to obtain the Classification and Approval of the Terms of Reference of Environmental Studies, Category II (EIA-sd) or Environmental Certification for Category I (DIA) for public or private investment projects of Health Centers and Private and Public Supporting Medical Services, veterinary care facilities and related, cemeteries and crematorium, which are detailed below:

**In the case of proposing Category I (DIA), submit;**

1. Application addressed to the Director/Executive of the Environmental Health Management Office of DIGESA as an affidavit containing the Taxpayers’ ID and legal address signed by the legal representative of the project owner.
2. One (1) printed copy and in electronic format of the corresponding environmental classification signed by the professionals responsible for the preparation, being necessary to include the following:
3. Executive Summary.
4. Project description.
5. Physical, biological, social, cultural and economic baseline.
6. Citizen participation plan.
7. Description of potential Environmental Assessments.
8. Prevention, mitigation or amendment of environmental impacts.
9. Monitoring and Control Plan.
10. Contingencies Plan.
11. Closure Plan.
12. Execution and investment schedule.
13. When the Project is located within a natural area protected by the State or in its buffer zone, it shall be necessary to submit the favorable technical opinion of SERNANP.
14. Certificate of Non-Existence of Archaeological Remains granted by the Director of Archeology of the Ministry of Culture or Regional Director of Culture, as appropriate.
15. Results of the baseline environmental monitoring (air, water and soil, as appropriate) aged no more than one (1) year conducted by a duly verified laboratory.
16. Processing fee payment.

**In the case of proposing Category II, submit:**

1. Application as per requirement 1.

Submitting requirement 2.

1. Proposal on the Classification of the Environmental Impact Assessment
2. Terms of Reference Proposal.

In view of the above, the Environmental Certification Area of the Environmental Health Bureau of DIGESA through Report 3857-2016/DSA/DIGESA, dated August 3, 2016 concludes that based on the evaluation of the information submitted by the **SOCIAL HEALTH INSURANCE - ESSALUD**, for the classification of the Environmental Assessment of the Project, it has been **APPROVED** to grant the environmental classification to the project entitled ¨Building of a High Complexity Hospital of ESSALUD in the district of Piura, province and department of Piura¨, for the Category II Semi detailed Environmental Impact Assessment. Also, taking into account the Terms of Reference Proposal submitted by the **SOCIAL HEALTH INSURANCE - ESSALUD** and the Regulation of the System Act on Environmental Impact Assessment (S.D. N°019-2009-MINAM), therefore, it is appropriate to **APPROVE** the Terms of Reference to develop the Semi-detailed Environmental Impact Assessment of the above-mentioned project as per the content indicated in item 4.0 of such Report;

The Project entitled ¨Building of a High Complexity Hospital of ESSALUD in the district of Piura, province and department of Piura¨, under code SNIP N°220048, is located at Sub lote 02, Mz. D, Parcela J, Industrial Area adjacent to Av. Sánchez Cerro, North-west sector of the district, province and department of Piura, has a total of 50,000 m2 and comprises 04 corner points under UTM coordinates (DATUM WGS 84);

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|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| TECHNICAL DATA TABLE OF THE SYSTEM WGS-84 17 SOUTH | | | | | |
| VERTEX | SIDE | DISTANCE | ANGLE | EAST | NORTH |
| A | A-B | 230.31 | 89°59´60¨ | 535106.350 | 9428633.983 |
| B | B-C | 217.10 | 90°0´00¨ | 535325.598 | 9428557.530 |
| C | C-D | 230.31 | 89°59´60¨ | 535253.530 | 9428352.743 |
| D | D-A | 217.10 | 90°0´00¨ | 535036.282 | 9428429.196 |

Source: Consorcio Salud Perú

Image N° 1: Location of the Health Care Facility



MINISTRY OF HEALTH

NELIDA MARIBEL PUCHURI MEDINA

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Regarding the location of the project, it should be noted that it is close to an establishment (gas station) in operation. In this respect, the entity subject to control attached Report No. 110-2016-MGS-UE-DI-DGIEM/MINSA, whereby the General Bureau of Infrastructure, Equipment and Maintenance (DGIEM) of the Ministry of Health (MINSA), indicated that “bearing in mind the assertion that the effective use of the land and the boundaries of the building allow complying with the provisions set forth in Technical Standard No. 110-MINSA-DGIEM-V.01, it is possible to use the land with the analysis and justification that support the proposal”*¨;*

The entity subject to control attaches a copy of Zoning and Road Certificate No. 148-2016, issued by the Urban and Rural Planning Office and the Urban Development and Expansion Division of the Municipality of Piura, which certifies that the land of 50,000 m2 is within the urban area and it will be intended for health purposes (H);

Similarly, it should be noted that Report No. 3857-2016/DSA/DIGESA dated August 3, 2016, referred to in the preceding paragraphs, is an integral part of this Directorial Resolution. Accordingly, it is pertinent to GRANT the Environmental Classification to the project entitled ¨Building of a High-Complexity Hospital of the Social Health Insurance (ESSALUD) in the district of Piura, Province and Department of Piura¨, for Category II: Semi-detailed Environmental Impact Assessment, and APPROVE the terms of reference for the development of the Semi-detailed Environmental Impact Assessment of the aforementioned project, according to the contents indicated in item 4.0 of the Report in question, entered through File No. 25900-2016-EIAC, dated May 25, 2016;

Thus, based on the information provided by the Environmental Certification Area of the Environmental Health Bureau of DIGESA, by means of Report No. 3857-2016/DSA/DIGESA, and;

As provided for by Act 27657 – the Ministry of Health Act; Legislative DecreeNo. 1161 - Internal Organizational Act of the Ministry of Health; Supreme Decree007-2016-SA, Regulations on the Organization and Duties of the Ministry of Health; Act 27444 – the General Administrative Procedure Act; Act 27446 – Act on the National Environmental Impact Assessment System;

Legislative Decree 1078 – Amendment to the Act on the National Environmental Assessment System; Act 29968 – Act on the Creation of the National Environmental Certification Service for Sustainable Investments; and Executive Order No. 001-2016-SA – Consolidated Text of Administrative Procedures of the Ministry of Health, as amended;

**IT IS HEREBY DETERMINED:**

**Article 1°. –** **TO GRANT** to the Project entitled ¨Building of a High Complexity Hospital of ESSALUD in the district of Piura, province and department of Piura¨, submitted by the **SOCIAL HEALTH INSURANCE - ESSALUD**, the environmental classification under Category II – Semi-detailed Environmental Impact Assessment as a result of the technical foundations presented in Report 3857-2016/DSA/DIGESA, and in conformity with this Resolution.

**Article 2°. –** **To APPROVE** the terms of reference for the development of the Semi-detailed Environmental Impact Assessment of the Project entitled ¨Building of a High Complexity Hospital of ESSALUD in the district of Piura, province and department of Piura ¨, based on the contents of item 4.0 of Report N°3857-2016/DSA/DIGESA, as set forth in article 45.2° of the Regulation of the National System Act on Environmental Impact Assessment (SD N°019-2009-MINAM).

**Article 3°. –** This granting and approval of the Terms of Reference are subject to monitoring and control actions of the General Bureau of Environmental Health and Food Safety and it could also be revoked.

**Article 4°.-** Environmental Commitments indicated in Report N°3857-2016/DSA/DIGESA, dated August 3, 2016, which takes integral part of this Resolution, shall be complied by the **SOCIAL HEALTH INSURANCE - ESSALUD**, without prejudice of the full enforceability of all obligations, terms and conditions established in the plans of the EIA, as set forth in articles 28° and 29° of the Regulation of the National System Act on Environmental Impact Assessment approved by Supreme Decree N°019-2009-MINAM.

**Article 5°. –** To give notice to the **SOCIAL HEALTH INSURANCE – ESSALUD,** of this Directorial Resolution, and send a copy of the Report N°3857-2016/DSA/DIGESA, when the above-mentioned Report is an integral part of this Directorial Resolution.

Be it recorded and informed.

MINISTRY OF HEALTH

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ENVIRONMENTAL HEALTH BUREAU

DIGESA

MINISTRY OF HEALTH

General Bureau of Environmental Health and Food Safety

¨DIGESA¨

\_\_\_[SIGNATURE]\_\_\_

Lic. Susalan María Tang Flores

Executive Director

Bureau of Environmental Health

MINISTRY OF HEALTH

This is a true and exact copy of the original

which has been produced before me

\_\_\_[SIGNATURE]\_\_\_

NELIDA MARIBEL PUCHURI MEDINA

NOTARY PUBLIC

Date: 11-08-16 N° Reg 124-2016

To be used only in the institution or within the scope of the sector

SOCIAL HEALTH INSURANCE SYSTEM

Central Management Office of Investment Projects

Bureau for Investment Assessments

ASSISTANT MANAGEMENT OFFICE OF PRE-INVESTMENT ASSESSMENTS

AUG 16 2016

RECEIVED

Time: 09-03 Received by: \_\_\_[SIGNATURE]\_\_\_

GENERAL MANAGEMENT OFFICE

ESSALUD

Provision N° 6232 AUG 12 2016

Lima: \_\_\_\_\_\_\_\_\_

Send to: GCPI

For the pertinent actions

\_\_\_[STAMP]\_\_\_

ESSALUD

BUREAU FOR INVESTMENT ASSESSMENTS -GCP

N°1646 GEI-GCPI-ESSALUD-201

AUG 15 2016

SGEPI

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GEI BUREAU

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ESSALUD

Central Management Office of Investment Projects

Prev. N3723 GCPI-ESSALUD-201

Date: AUG 15 2016

Send to: \_\_\_\_\_\_\_\_\_

For the pertinent actions

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ESSALUD

CENTRAL MANAGEMENT OFFICE OF INVESTMENT PROJECTS

MANAGEMENT OFFICE OF INVESTMENT PROJECTS

ASSISTANT MANAGEMENT OFFICE OF PRE-INVESTMENT ASSESSMENTS

Prov. N°\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: 08/16/16

Send to: \_\_\_\_\_\_\_\_\_\_\_\_\_

to: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

BUREAU

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**Annex No. 24 ACTION PLAN FOR COMPLIANCE WITH INTERNATIONAL STANDARDS**

During the structure of this Contract, the Project was assessed in order to identify the gaps to be closed to meet the international standards required by financial institutions. The assessment carried out is equivalent to a due diligence in environmental, social, labor, safety and occupational health matters. The assessment concluded that if the Project is aligned with the International Finance Corporation’s Performance Standards, it shall be able to easily comply with any standard and regulation. To ensure such compliance, the following Action Plan was established, which must be fully complied with by the Concessionaire:

| **Environmental and Social Action Plan for Compliance with International Standards** | | |
| --- | --- | --- |
| **ND CFI** | **Topic** | **Strategy** |
| 1 | Environmental and Social Impact and Risk Assessment | Consider the minimum contents of Exhibit 25 for elaborating the Environmental Management Instruments, in addition to other requirements and terms of reference demanded by the Relevant Governmental Authorities during the environmental impact assessment process. |
| Environmental and Social Management System (ESMS) | Implement a certifiable Environmental and Social Management System (ESMS) and Occupational Safety and Health Management System (OSH), which takes into account the guidelines of the International Finance Corporation, and is aligned with the contents of the Environmental Management Instrument and is adaptable. |
| Support ESSALUD in the implementation of co-management programs, where appropriate. |
| Organizational capacity and competence | Set up a corporate team for the implementation of the Management Plans derived from the Environmental Management Instrument, the ESMS-OSH and the communication strategy of the hospitals, including experts in environmental management, social management, occupational health and safety management, emergency response and communications. |
| Design differentiated Training Plans for both Construction and Operation, detailing training needs by job position and with mechanisms to evaluate their effectiveness. Compliance with these plans should be contractually required of contractors. |
| The Supervisor shall have staff specialized in environmental, occupational and community health and safety, emergency management, working conditions, etc. |
| Emergency Preparedness and Response | Both the Technical File and the corresponding Environmental Management Instrument shall include a Risk Analysis Assessment and a Contingency Plan. The Environmental Management Instrument shall contain a fire and explosion scenario modeling, applying internationally recognized methodologies.  The Contingency Plan should include as a minimum:  • Identification of emergency scenarios;  • Specific emergency response procedures;  • The list of trained emergency response staff;  • Emergency communication contacts, systems and protocols, including community liaison mechanisms;  • Procedures and protocols for interacting with governmental health, environmental, disaster and emergency management authorities, etc.  • Emergency equipment and facilities (e.g., first aid stations, firefighting equipment, spill response equipment, personal protective equipment for emergency squad);  • Protocols for the use of emergency equipment and facilities;  • Clear identification of evacuation routes and meeting points;  • Information on emergency drills, their frequency and evaluation mechanisms, according to emergency levels and scenarios. |
| Monitoring and assessment | The Environmental Management Instrument shall detail the mechanisms for follow-up, monitoring, auditing, reporting to Senior Management and continuous improvement of the ESMS. These mechanisms shall be aligned with the recommendations of the ISO standards and IFC guidelines for the implementation of the ESMS-OSH. |
| Participation of social stakeholders | Elaborate a stakeholder mapping from the signing of the Contract, keep it updated with the corresponding characterization and prioritization during the entire Project horizon and establish strategies for interacting with each Stakeholder. |
| Guarantee the correct execution of the Citizen Participation Plan during the elaboration and assessment of the Environmental Management Instruments, in order to receive feedback from the Stakeholders. |
| Provide affected communities with access to relevant information on: i) the purpose, nature and scale of the Project; (ii) the duration of the proposed Project activities; (iii) the potential risks and impacts on those communities and the relevant mitigation measures; (iv) the intended participation process; and (v) the grievance mechanism. |
| Include in the Environmental and Social Management Strategy of the Environmental Management Instruments, a Community Relations Program aligned with the best practices manual recommended by the IFC for companies doing business in emerging markets. |
| 2 | External communications and grievance mechanisms | Ensure that the complaints and grievance mechanism is detailed in the Community Relations Program of the corresponding Environmental Management Instrument and is designed to: i) receive and record external communications from the public; ii) analyze and evaluate the issues raised in such communications and determine how to address them; iii) provide responses, follow up and document them; and iv) adjust management programs in accordance with the responses provided as appropriate. |
| Human Resources Policy | Establish a Human Resources Policy and procedures that formalize the mechanisms to comply with ILO Conventions on equal remuneration, elimination of labor discrimination, elimination of forced and child labor, freedom of association, etc. Likewise, detailing the mechanisms for dealing with queries and complaints from direct workers and third parties. |
| Establish and disseminate a Code of Conduct applicable to direct workers, contractors, subcontractors and suppliers. |
| Ensure that all workers receive Internal Regulations detailing their rights and duties. |
| Ensure that all workers have employment contracts that are in accordance with Applicable Laws and Provisions, and that describe working conditions. |
| Working conditions and labour relations management | Include minimum working conditions in contracts with third parties, setting requirements on access to sanitary facilities, working hours, treatment, lunch facilities, accommodation, etc. |
| Occupational health and safety | Develop Occupational Health and Safety Plans aligned to the Applicable Laws and Provisions and taking as a reference the IFC guidelines and the requirements of ISO 31001 and ISO 45001 standards. |
| Minimize the risks of occupational exposure to hazardous agents (chemical, biological, radioactive, etc.) taking into consideration the exposure limits established in the Applicable Laws and Provisions, or otherwise, the values published by specialized entities of recognized international prestige such as ACGIH, NIOSH, OSHA, the European Union, etc. |
| Inform each worker of the occupational risks during the hiring process, and explain the protocols and safe work procedures during induction and specialized training, which shall be conducted in a timely manner. Require the same practice for contractors and subcontractors. |
| Establish mechanisms to record and analyze incidents and suggestions, and to minimize and investigate accidents by establishing measures to mitigate damage and control immediate and root causes. |
| 3 | Conformity with Environmental Quality Standards - Emission Sources | Monitor compliance with National Environmental Quality Standards for noise, as well as Maximum Permissible Limits for emissions and Maximum Allowable Values for effluents established in Applicable Laws and Provisions. In case there are no applicable national regulations for any environmental quality parameter that is relevant to measure, IFC guidelines shall be complied with. |
| Handling of hazardous substances | Minimize the risks of accidents and spills associated with the supply, storage and use of hazardous materials, prioritizing the preventive approach and the incorporation of engineering measures. For example: in the case of fuel storage, prefer the installation of surface tanks rather than underground tanks and/or incorporate reinforced containment elements. |
| Comply with World Health Organization guidelines for the elimination of Mercury in the Health Sector. |
| Waste Management | The Waste Management Plan should be incorporated into the EIA and the ESMS-OSH, so that it is periodically updated and monitored. |
| 4 | Contingency Plans | The Contingency Plan shall detail that assistance shall be provided to and collaboration with the population affected by the Project and local public agencies (firefighters, civil defense, municipal patrol guards, etc.), in their preparations to effectively respond to emergency situations. |
| Security Staff | In the case of armed security staff, take into account the IFC guidelines in order to ensure that the management of property security is carried out within a framework of respect for human rights and that there are guidelines for the proportional use of force and respect for Human Rights. |
| 5 | Protection of cultural heritage | Have the Certificate of Non-Existence of Archaeological Remains (CIRA for its acronym in Spanish) prior to commencement of work and establish a procedure in case of fortuitous finds, which should be aligned with IFC Performance Standard 8 and Applicable Laws and Provisions. |

**Annex No. 25 MINIMUM CONTENT OF THE SEMI DETAILED ENVIRONMENTAL IMPACT ASSESSMENT**

ESSALUD requested the General Directorate of Environmental Health (DIGESA) the environmental classification of the project and the approval of the corresponding Terms of Reference (ToR), which were approved based on the Applicable Laws and Provisions through Directorial Resolution No. 1292- 2016- / DSA / DIGESA / SA.

For the preparation of the Semi-detailed Environmental Impact Assessment (EIA-sd) of the Project, the CONCESSIONAIRE must take into account the ToR approved by the Competent Environmental Authority, the Basic Terms of Reference for EIA-sd established in the Regulation of the Environmental Assessment System , and what is established in the guidelines and criteria of the Social and Environmental Performance Standards of the International Finance Corporation (IFC) and the General and Sector Guidelines on environment, health and safety of the World Bank[[14]](#footnote-14). In this sense, the Environmental Management Instruments must contain at least:

**INTRODUCTION**

The introduction must indicate the scope, objectives and methodology for preparing the EIA-sd in a manner compatible with what is determined by the ToR issued by DIGESA and the best international practices in matters of impact assessment.

It must be clearly specified which is the Project whose development requires the preparation of the EIA-sd, which will include not only the final work, but also the temporary activities that will be required for its development and that also have to be subject to the environmental assessment process.

**EXECUTIVE SUMMARY**

In the Executive Summary of the EIA-sd, a brief description of the following points should be indicated:

1. Introduction: general information, department information, the purpose of the project; point out previous studies carried out, among others.
2. Complete index of the EIA.
3. Objective of the Study.
4. Legal and Institutional Framework.
5. Project Description:

* Project location (indicating the UTM *Datum* WGS84 coordinates and specifying if they are in ANP and/or buffer zone, areas where the presence of archaeological remains, etc. has been verified);
* Stages of the Project;
* Project Components (Infrastructures);
* Auxiliary facilities;

1. Environmental and Social Baseline: Specify and clearly describe the environmental and social context of the areas to be intervened.
2. Identification and Characterization of Environmental and Social Impacts: Incorporate a synthesis of the main environmental impacts of the activity.
3. Environmental and Social Management Strategy: brief summary of environmental management measures and monitoring actions.
4. Citizen Participation Plan and Communication with Social Actors.
5. Environmental and Social Management System.
6. Schedule of execution and useful life of the project.
7. Investment budget and implementation of socio-environmental management strategy.
8. Conclusions.

In accordance with the terms of reference granted by the Environmental Authority, the Executive Summary must be written in simple, clear and easy-to-understand language, so that it can be read and interpreted by the community, or by any citizen who has interest in knowing it. It will be this summary that will be disseminated through the different media.

1. **INTRODUCTION**
2. **TABLE OF CONTENTS**

**GENERAL DATA**

Present information about the project Promoter, including:

* Name of the Responsible Institution
* Unique Taxpayer Registry Number (RUC)
* Legal address
* District
* Province
* Department
* Telephone
* E-mail

Present information about the Holder or Legal Representative, including:

* Business name of the company or name of the public entity
* Complete names
* National Identity Document (DNI)
* Address
* Telephone
* E-mail

Also present basic information about the company responsible for preparing the EIA-sd, including:

* Business name
* RUC
* Legal representative
* Registration number in DIGESA
* Address
* Telephone
* E-mails
* Legal representative
* (Name and surname) (Signature and stamp)

Present a table with the list of professionals responsible for its preparation (both those who formulate the Environmental Impact Assessment and those who carry out the baseline studies). The responsibilities and their signatures must be mentioned in original according to the following format:

**Table   
Multidisciplinary Professional Team**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name and surnames** | **Professional License N°** | **Participation or responsibility** | **Signature** |
| Team Leader or Professional 1 |  |  |  |
| Professional 2 |  |  |  |
| Professional 3 |  |  |  |

1. **OBJECTIVES OF THE ASSESSMENT**

**Objective, Scope and Justification**

Characterize the situation of the municipalities in the area of influence in relation to the current health system to be covered by the project. Make an analysis of the conditions of the health system, considering the current demand of the insured to EsSalud, in order to justify the implementation of the project. Relate the objectives of the project with the socio-environmental and public health problems in the area of influence.

Include an analysis of alternatives that characterizes the different options that were considered to determine the location of the Project, explaining the advantages and disadvantages of each option, in order to justify its final location.

**Project Background**

Present the relevant background of the project until the preparation of the EIA-sd. Include the previous permits and/or authorizations related to the development of the EIA-sd before the competent authorities, as appropriate.

1. **LEGAL AND INSTITUTIONAL FRAMEWORK**

This chapter must include a list of the Laws and Provisions Applicable to the project in relation to environmental and social issues, including technical standards, as well as the international standards applicable to the Project. In all cases, it must describe how each standard is applied to the project and identify which entity (s) or institution (s) is responsible for its application.

This inventory of regulations should be structured thematically, minimally addressing the following:

1. General national legislation
2. General legislation on environmental matters

* National Environmental Policy
* Standards related to the preparation and approval of the EIA-sd
* Norms related to citizen participation mechanisms in the preparation and approval of the EIA-sd

1. Sectorial legislation on environmental matters and citizen participation in the assessment and approval processes of the EIA-sd
2. Legislation on Environmental Quality Standards and Maximum Permissible Limits

* Soil use and protection
* Contaminated Sites
* Air protection
* Use and protection of surface and underground water.

1. Legislation on integral management and solid waste management

* General legislation.
* Sectoral legislation on waste from health facilities.
* Technical note 144 Protection of surface and underground water resources

1. Legislation on climate change
2. Legislation on hazardous materials and controlled chemical inputs
3. Legislation on hydrocarbon storage
4. Legislation on disaster risk management
5. Legislation on emergency response plans
6. Legislation on environmental enforcement
7. Legislation on protection and management of Fauna and Flora
8. Legislation on land use and occupation
9. Legislation on historical, cultural and archaeological heritage
10. Legislation on expropriation and resettlement processes
11. Labor Legislation
12. Legislation on Occupational Safety and Health (OSH)

Complementarily and in a specific subsection of this chapter, the EIA-sd must specify the principles, standards and requirements of the International Financial Institutions that apply to the project and that exceed the Applicable Laws and Provisions, specifying the commitment to meet these requirements, whether voluntarily or due to contractual obligations and commitments to achieve bankability.

In a specific and non-limiting manner, the IFC's Social and Environmental Performance Standards and the Equator Principles must be included, and they must be followed by the concession holder, with a view to enabling the financing of the Project.

1. **DESCRIPTION OF THE PROJECT**

The project description chapter must include, on the one hand, the description and main technical specifications of the components of the permanent work, and on the other hand, the logistical planning of the works, including the description of the construction support infrastructure and operation.

Initially, information on the official name of the Project and its location must be presented, including a Location Map on an appropriate scale, in UTM *Datum* WGS 84 coordinates. The geographical and political location of the Project must be shown, highlighting all the jurisdictional units involved (Province, Department, Districts, others).

It must be indicated if the project will be developed in an urban or rural area, specifying the location of the ANP or its buffer zone, if applicable.

**Actions in the Preliminary Phase**

Describe the stage of gathering information on the characteristics of the terrain, including the actions used to collect data used for the engineering design of the Project.

**Components of the Works**

A physical and engineering description of the project of the temporary works and hospital buildings must be presented, focusing on the components and/or actions that are most likely to generate environmental and socioeconomic impacts.

Include details of the infrastructure, discharge system and location of the effluent andwaste discharge points of the Project, attaching the drawings at an appropriate scale. Include diagram of the main components of the Project, referenced in UTM WGS 84 coordinates.

**Description of the Construction Logistics Plan**

1. General aspects:

* Construction schedule in each of the stages;
* Numbers of work fronts;
* Histogram of labor by category (direct, indirect, skilled, unskilled);
* Work shifts;
* Main quantities of work (earthwork, concrete, etc.);
* Critical services to be provided by third parties (concrete, transport of personnel, transport and destination of waste, etc.);
* Solid waste to be generated (types and quantities);
* Use of fuels for vehicles and construction equipment and resulting atmospheric emissions;
* Use of water for construction;
* Sanitary effluents to be generated;
* Energy consumption for the works;
* Dangerous products to use;
* Other construction materials and supplies;
* Machinery and equipment to be used in construction;
* Traffic diversion plans and partial/total street closures.

In addition to this information and as a by-product thereof, a calculation of the amount of greenhouse gas (GHG) emissions during construction must be presented, considering only direct emissions (in accordance with Applicable Laws and Provisions and international standards applicable to the Project) and supporting the scope of the calculation.

1. Description of the accesses:

* Indication of urban roads to be used as accesses during construction works;
* Description of the road conditions (pavements and signaling) and the current flow of vehicles on them;
* Indication of the need to improve the existing roads to be used;
* Indication of the roads to be used in the traffic diversion plans and partial/total street closures;
* Mapping of critical receptors to impacts from increased traffic (accidents, dust, noise, vibrations).

1. Description of the camps, material storage yards and other support areas (collectively defined as temporary infrastructures):

* Location of the main camps and storage yards (including indication of boundaries, description of current uses, type of agreement with the owners);
* Description of the facilities in the camps (dining rooms, rest areas, crushing and concrete plants, mechanical workshops, fuel tanks, temporary waste storage areas, other material deposits, including dangerous products). In the event that such services are provided by third parties, the concessionaire must guarantee the legal compliance of the suppliers within the framework of the construction management system;
* Presentation of the flow diagram of water use and supplies for temporary installations, and generation of effluents (from each process or activity), indicating annual volumes and maximum hourly flows;
* Indication of the existence of public water supply, effluent collection and energy supply networks in the premises of the temporary facilities;
* Description of wastewater management from temporary facilities.
* Indication of the final disposal of wastewater, specifying the maximum permissible limits (MPL) that must be met;
* Indication of the need and capacity of the surplus material disposal areas and borrow material areas, indicating their location, current situation (vegetation, topography, uses) and type of agreement with the owners;
* Indication of the forms of disposal and places of destination of the solid waste generated during the works;
* Logistics plan for the collection and handling of construction material and equipment;
* General arrangement (lay-out).

1. Other support facilities:

Some support facilities for the works can only be defined after the start of the construction phase. This is the case of dumps, quarries or areas of borrow material that were not previously identified and included as an object of licensing in the EIA-sd. For these cases, the Project Description chapter must include a generic characterization of the type of installation that may be necessary and/or of the estimated capacities. It must also propose a procedure for communication and/or obtaining authorization to be agreed with DIGESA.

**Specification of the Main Construction Procedures**

For the main construction activities, it will be necessary to describe the construction procedures at the appropriate level of detail to understand the impacts and risks that would be generated by them. This should include at least the following procedures:

**Specification of the Main Construction Procedures**

1. Topographic surveys;
2. Intervention in green spaces;
3. Demolition;
4. Earthwork;
5. Excavations;
6. Construction;
7. Electrical and hydraulic installations and critical equipment;
8. Use of surplus material disposal areas and borrow pits;
9. Execution of foundations;
10. Streets closure.

**Description of Hospital Operating Activities**

Describe the operating regime of the Project, minimally considering the following aspects:

1. Description of the main operating components and their impacts and risks;
2. Indication of the amount of operating labor by type and qualification;
3. Description of the main maintenance activities planned in the project's operation phase, including those carried out by subcontractors;
4. Description of the operating regime of the environmental control equipment installations;
5. Description of the types and quantities of chemical products, raw materials and natural resources to be used;
6. Description of the types of waste, emissions and effluents to be generated in the operation and the way they are managed;
7. Forecast of noise generation in the operation of the Hospital;

**Description of Abandonment or Closure Activities**

Describe the Abandonment or Closure stage, detailing the strategies to be used for the environmental recovery of the Project area, in accordance with the legal requirements of the Applicable Laws and Provisions and other requirements of the International Financial Entities.

1. **ENVIRONMENTAL AND SOCIAL BASELINE**

The diagnosis must translate the social and environmental dynamics of the Project's areas of influence. It must present the description of the initial condition or social and environmental baseline, in a way that allows the identification and assessment of the social and environmental impacts to be expected during the planning, construction and operation phases, based on an integrated multi and interdisciplinary analysis.

The information must be generated by collecting secondary data from official sources and by conducting field samplings (primary data), in order to obtain current data on the socio-environmental conditions of the area of influence.

**Delimitation of areas of influence**

The areas of direct and indirect influence of the project to varying degrees should be established as study areas. The diagnosis must translate the environmental dynamics of these areas, in order to provide the means to assess the impacts and enable good social and environmental management of the Project.

According to Applicable Laws and Provisions and international standards, the technical criteria used to determine the areas of influence must be explained, l the Area of ​​Direct Influence (ADI), made up of the portion of the territory where potentially positive or negative changes originate directly from environmental aspects (it is preliminarily estimated as an initial reference to study a strip of 300 m. of the perimeter of the building), and the Area of ​​Indirect Influence (AII), made up of the portion of the territory where potentially there are positive or negative changes caused by indirect environmental impacts, during the construction and operation of the project.

The criteria adopted for the definition of the areas of influence must be clearly presented and technically justified. The areas of influence must be mapped with their determining elements identified, characterized and georeferenced. The geographical demarcation must be precise and clear, indicating the areas of influence identified for the study, on a recommended scale, visible and legible. All the main and auxiliary components of the project within the ADI.

The boundaries of the areas of influence (ADI and AII) are generally different for the physical, biotic and socioeconomic environments. In the case of the Project, the delimitation of the areas of influence should enable the identification and assessment of potential social and environmental impacts of the project.

**Description of the Physical Environment**

In accordance with the applicable Laws and Provisions, the information on the Physical Environment must include:

1. Base map

Provide a base map, showing the location of the Project activities and their limits, and that includes the topographic characteristics and the main environmental and social receptors. (Attach Photographic Panel).

1. Climate

The climate and meteorological conditions of the ADI and the AII will be characterized, according to the following parameters: precipitation regime, air temperature, relative air humidity, evaporation, atmospheric pressure, insolation (solar radiation), nebulosity, wind regime (direction and speed, reporting predominance, influence of air masses and seasonal), occurrence of severe climatic conditions and other data considered appropriate required for the environmental impact assessment.

The data must be obtained in climatological stations present in the ADI and the AII, indicating the methodology and acquisition parameters in the responsible institutions. In the historical series, mean, maximum and minimum values ​​must be considered, as well as data related to extreme meteorological phenomena.

The main operating atmospheric systems will be identified and characterized and the climatic classification of the ADI and AII will be presented. Climate maps will be presented on a uniform scale, using secondary sources.

1. Geology

The geological conditions of the ADI and the AII should be characterized considering the main stratigraphic, lithological and structural aspects. At the ADI level, more detailed mapping should be carried out on an adequate scale, which will be based on information collected in the field. Specific aspects of relevance for the evaluation of environmental impacts or risks will be observed, including, for example, rocky outcrops, occurrence of hydromorphic soils or other similar aspects.

1. Soil characterization

Make a description of the edaphology and physiography, greater land use capacity and current land use in the ADI and the AII.

1. Soil Quality Baseline

Perform the baseline sampling using the Environmental Quality Standards for Soil (DS N ° 011-2017-MINAM) or standard that modifies or replaces it, for the description of the characteristics of the existing soil quality in the properties chosen for the Project, characterizing eventual risks of erosion in the bordering areas.

1. Geomorphology and geotechnical characterization

The main geomorphological units of the ADI and the AII must be described and mapped based on secondary sources, satellite images and other tools. At the ADI level, a field survey should be carried out to delimit the various relief patterns, including the limits of flood plains and other humid areas. The Geomorphological Map must be presented at an adequate scale.

1. Water resources

Present an inventory of water sources within the ADI and the AII.

The water intake points and areas of primary use in the natural bodies of water within the Project area must be identified and georeferenced.

Include descriptions of the water resources, both surface and underground, within the Project area, according to the type of activity and/or when appropriate. Information must be developed to adequately characterize the uses and impacts of water resources.

1. Hydrogeology

At the IIA level, aquifer systems should be characterized.

Describe the water table in the area of direct influence of the Project, its main characteristics, its depth, among other relevant aspects.

The potential and sensitivity to contamination of existing aquifers in the Project's area of influence should be discussed based on secondary information.

1. Air quality

At the ADI and AII level, information from available secondary sources should be analyzed, including data from eventually existing monitoring stations. The main stationary sources of contamination that exist in said area and that have the potential to affect air quality in the Project's ADI must also be identified and located.

For the construction phase, the population likely to be influenced by this impact will be identified. Regarding particulate matter, measurements of total suspended PM10 and PM2.5 particles will be carried out in a representative sample of inhabited areas that are subject to this impact. Likewise, the population that may be affected by impacts on air quality during the operation of the Project will be identified.

The parameters for air quality are those established in the Environmental Quality Standards (EQS) for air established in the D.S. N ° 003-2017-MINAM, or norm that modifies or replaces them, and if applicable, as a reference those considered by the WHO.

It will be indicated which laboratory has been in charge of the environmental analyzes, which must be registered with the National Institute of Quality (INACAL) of Peru.

In relation to emissions from the burning of fossil fuels, maintenance measures for vehicles and equipment and measurement of particulate matter (black smoke) will be planned.

1. Noise

A noise baseline will be developed from the identification of all susceptible receptors ("critical receptors"). This baseline will consider both the noise receptors of the construction phase and those potentially affected during operation. The baseline will include measurements in daytime and nighttime hours using sound pressure level measuring equipment and will perform measurements on a representative sample of the receivers that are identified within the ADI.

The values will be compared with the levels established in the Environmental Quality Standards (EQS) for noise established in the S.D. N ° 085-2003-PCM, or regulation that modifies or replaces them, and with the levels established in the IFC's Environmental, Health and Safety Guidelines, whichever is more restrictive.

1. Seismicity

The occurrence (geographical distribution, magnitude and intensity) of seismic movements will be characterized, including the history of the events in the ADI and the AII.

1. Floods

The vulnerability of the building to Extreme Weather Events will be assessed.

**Description of the Biological Environment**

Desk studies should be carried out with a review of the bibliography and consultations with specialists and interested parties. The information gaps, on specific topics of the biological environment such as life zones, flora, fauna, landscape units, etc. they should be completed with field work, as appropriate. The result of this stage should detect, identify and qualify important biodiversity values (species and habitats) for the area under study, as well as rule out the impact on natural habitats.

**Description of the Socioeconomic Environment**

1. Base map

The study of the socioeconomic environment should use primary and secondary data, contemplating a methodology that covers the historical aspect of the relationships between man and the environment, to establish a diagnosis that makes it possible to know trends and scenarios in order to measure the impacts on populations and their livelihoods.

The social, economic and cultural aspects of the population located in the Project's areas of influence must be described and characterized.

The EIA-sd should describe the methodology used in the information gathering, which should consider a participatory approach. In field surveys, the application of qualitative techniques (interviews, focus groups, workshops, etc.) and quantitative techniques (specifically surveys) can be used to collect primary information. The field work must be adapted to the characteristics of the population in which the Project intervenes.

The use of secondary data will predominantly be used to characterize the Area of Indirect Influence (AII). For the characterization of the Area of Direct Influence (ADI), primary data collected in field work should be used, in addition to updated secondary data.

Surveys must be complemented by the production of thematic maps, inclusion of statistical data, use of schematic drawings, sketches and photographs. All data presented must indicate their respective sources.

The actions to be developed in relation to the study of the socioeconomic environment, according to the different topics, are listed below.

1. Current land use and occupation

The main land uses in the ADI should be identified, characterized and mapped, identifying residential areas; industrial, commercial and agricultural activities (seasonal, permanent and subsistence crops); agricultural areas already abandoned; native vegetation areas; other categories. A Land Use and Occupation Map will be presented.

The trends of urban and peri-urban expansion, and industrial expansion in the ADI and AII areas close to the Project will be analyzed.

The uses potentially most vulnerable to the impacts of the Project will be delimited. The following maps will be developed

* Mapping of occupations located in the ADI to be affected by the Project components.
* Preliminary mapping of interference with utility networks (gas, electricity, sewage)

1. Territorial zoning

The urban zoning drawings of the districts that make up the ADI will be integrated into a single map (scale 1: 25,000). The applicable regulations in each jurisdictional unit will be described in the section on the Legal and Institutional Framework (Section 2.2.3 of these ToR). The zoning map should make it possible to understand the size and spatial distribution of the land areas still available, for occupation or urban development.

1. Demographic and social aspects

The population of the ADI and the AII will be characterized, based on their composition and geometric rate of population growth or decline, taking as a reference the INEI 2017 census or the most recent updated information (if any). The demographic analysis should allow a detailed understanding of the following aspects of the IIA population:

* Demographic profile
* Whether or not there is an indigenous population or a descendant of an indigenous people
* Economically active population, by quintiles and by sex
* School-age population (according to educational levels)
* Senior population
* Human Development Index - HDI poverty levels
* Population densities
* Urbanization rates
* Service infrastructure: electricity, water, sewage. The location of sanitary landfills (or garbage dumps) and sewage treatment stations will also be indicated. The coverage areas of sewage networks that are released into the environment without treatment will be indicated with a different legend from the one used for sewage networks that receive treatment.
* Characteristics of the home (materials, overcrowding, access to services)
* Existing transportation infrastructure. Characterize, progress, problems and challenges
* Used media

At the ADI level, the number of families and individuals should be estimated, based on data collected in the field. To obtain this result, it will also be necessary to apply surveys on representative samples of the population and carry out semi-structured interviews with local authorities and community leaders. The information to be collected in the ADI must include at least:

* Demographics: how many are they; distribution by gender and by age; family structure in the home (nuclear or extended family, number of members, vulnerable or disabled people, other aspects).
* Migration (immigration and emigration): permanence in place, seasonal migrations, reasons for migration, changes in the composition of the population that this has brought, impacts that migration has had on the population.
* Existing transportation infrastructure. Means of transport used and travel times (to work, school and health centers).
* Most used media.
* Main characteristics of the dwellings (ceilings, floors, walls, levels of overcrowding, access to services). Availability of public services (water, sanitation, solid waste collection and energy) for each locality. For those that are not served by public services, describe the ways of obtaining water, and the destination of effluents and solid waste.
* Aspects of vulnerability and hazards of natural or anthropogenic origin associated with the area of ​​influence of the Project (occupation of areas of high geotechnical fragility subject to mudslide; areas subject to flooding; etc.).
* Social programs present in the area, quality of operation, sectors of the population that are benefited.

1. Economic aspects

The main economic activities of the ADI and the AII will be characterized, adding data from the primary, secondary and tertiary sectors. The statistics available on the GDP of the ADI department and the AII should be used to project the socioeconomic impact of the Project on the community.

Other relevant economic indicators to be worked on at the ADI and AII level will include, as available:

* Economically Active Population. Population of working age. Information regarding employment: unemployment, employment, underemployment. Information regarding informal employment.
* Areas or sectors of economic development.

The work and income structure of the economically active population and of the employed population in the areas of influence (unemployment rate) must be characterized, including analysis of the availability of qualified and unskilled labor in the ADI and AII of the Project, in a way that allows evaluating the potential of local contracting during construction. At the level of the IIA, the following will be analyzed:

* Economic activities to which the population is engaged. Characterization of the workforce, income generation, problems and challenges they face, projects and social programs to which the IIA population has access (whether they are financed with state or private funds).
* Distribution of economic activities according to gender and age, shown by quintiles.

1. Education

The educational levels of the population in the AII will be presented from secondary sources.

Existing educational institutions will be identified, classifying them according to whether they are public or private; levels of education (initial, primary, secondary and higher technical or university), identifying those that are important reference places for the population surrounding the Project.

Secondary technical courses, schools and higher-level training areas (university and technical) will be identified, as well as the offer of training courses for the workforce, describing the training areas, the number of places offered and students that conclude.

At the AII level, information will be provided on the level of education of the general population. Data will be presented on the number of students enrolled and the capacity of reception of students from the educational centers that serve the local population will be indicated. This information should be used to evaluate, roughly, the deficits in educational infrastructure.

Information will be collected on infrastructure conditions in educational centers (classrooms, basic services, etc.), number of teachers, whether they are multigrade or not, access to educational materials. In addition to this, it will be analyzed whether there are problems of delayed entry, dropout or school dropout, and in general the problems and challenges they face will be characterized from the perspective of service providers and the population.

1. Health

The infrastructure and health services in the areas of influence will be characterized, indicating their level, infrastructure, services provided and location, in order to assess the sufficiency of the current existing health structure, to meet current and future demand, identifying their vulnerabilities considering the implementation of the Project. A map of the IIA (1: 100,000) will be presented indicating the location of all health centers (according to the type of sector). To collect this information, the providers of this service will be interviewed.

The main public health statistics at the level of the areas of influence will be consolidated, analyzing their historical evolution. Aspects to consider will include:

* Hospitalization rates, number of visits.
* Mortality and morbidity rates: Incidence of endemic diseases.
* Incidences of acute diarrheal diseases (ADD) and acute respiratory diseases (ARI).
* Incidence of sexually transmitted diseases (STDs).

Information will be collected, through surveys and interviews with the population and its leaders, on:

* Health centers they attend
* Morbidity and mortality problems. Causes, consequences. Link of health problems with environmental issues and with services in the home (water, sewage). Situation of maternal and infant mortality, chronic malnutrition, anemia.
* Impact of Covid 19 on the care of the insured.

It is important to describe the methodology used to collect the information.

1. Transportation

The infrastructure and means of transportation existing in the IIA will be mapped on a scale of 1: 100,000 for the entire AII.

All accesses currently existing in the ADI must be identified and their current passability conditions and their capacity to withstand the demands related to the Project must be characterized.

1. Public Safety

Existing public security problems, infrastructure and existing public security services will be characterized.

1. Communication and information

The operation of the communication and information networks of the ADI and the AII will be characterized, indicating their main channels and supports. This will include mapping the areas served by fixed and mobile telephony and internet. The analysis will also include the identification of radio stations, television, newspapers or magazines of regional interest, and social media, specifying which media are the most used.

The information and perception of the population surrounding the project will be characterized.

1. Cultural Characterization

The following will be identified:

* Language: if a native language is used, who uses it, in which spaces, if its use has decreased, and its causes (if applicable).
* Stories about the origin of the community. Legends, traditional tales. Ancestral link with the territory.
* Cultural expressions: music, songs, instruments, typical festivals, food, crafts and other cultural expressions. Who cultivates them, at what times, if they have been lost or if they are maintaining them.
* Forms of social organization: level of community presence in decisions about resources, collective activities, group organization (who is accepted, who is not, if punishments are carried out); administration of justice and conflict resolution (if they pass through the community, work only in the private sphere or through public institutions); traditional medicine (or traditional health interpretations); gender relations (if there are distinctive roles). Forms of mutual aid that remain (minka or communal tasks; huáyaq, huáquete or ayni) according to the socio-cultural context. Who practices them, why, if they have diminished or disappeared, why have they been replaced.
* Others.

1. Declared historical, archaeological and cultural sites

The areas and elements of historical, archaeological, and cultural value in the ADI will be identified and mapped based on a review of bibliographic sources.

For this, specialized texts and publications, reports of other research or evaluation projects developed in related areas, and topographic and archaeological surveys of the study area must be compiled and studied.

In the case of archaeological sites, the archaeological potential of the area must be estimated.

The results of the development of the Archaeological Assessment Project will be mentioned if it had been required. Otherwise, the details of the CIRA obtained will be mentioned.

In the ADI, tours and surface verifications should be carried out in the field, in previously defined areas to be directly affected, to verify the presence of archaeological sites or vestiges.

Archaeological prospecting will also be carried out in areas where there is a recurring possibility of finding archaeological elements and in places where some type of ceremonial or religious human occupation could be recognized, typical of the environment where the works are projected.

Likewise, the affectation and potential impacts on the components of the Archaeological Heritage registered in the ADI will be determined, compared to the works planned for the project. Propose the necessary mitigation measures to make the preservation and protection of registered archaeological assets compatible with the planned works.

1. Vulnerabilities to risks of the construction and operation of the Project

Identify areas sensitive to accidents caused by construction and operation traffic.

Identify houses whose structure could potentially be affected by vibrations induced by excavations or by heavy vehicle traffic during construction.

1. **IDENTIFICATION AND CHARACTERIZATION OF ENVIRONMENTAL AND SOCIAL IMPACTS**

This chapter should include a description of the methodologies used for the identification and evaluation of the possible environmental and social impacts associated with the Project, based on: a) the nature of the action undertaken, b) the environmental or social variables affected, and c) the environmental and social characteristics of the area of ​​influence involved.

Emphasis should be placed on quantifying significant impacts. When quantification is not possible, a detailed qualitative description can be accepted.

The environmental and social impacts resulting from the planning, construction (implementation and demobilization) and operation stages of the Project must be identified.

The relationships between impacts will be analyzed, clearly identifying the main interaction networks or interdependent clusters, so that the inducing impacts can be differentiated from those that are induced, and allow the subsequent design of prevention or mitigation strategies focused more on causes than in consequences.

The impacts and the impact risks that may occur as a consequence of the Project must be clearly differentiated. In these cases, the risks must be evaluated according to their probability of occurrence and the severity of their consequences. It is advisable to show the methodology for determining the impact risks.

**Identification of Impacts**

The potential negative and positive impacts of the Project will be identified by evaluating the correlation between the Project activities (impactful actions) and the environmental (components of the physical and biological environment) and social (socio-economic environment) aspects that may be impacted.

Promote the use of a participatory approach based on the information from the Environmental and Social Diagnosis and using participatory tools to identify environmental and social impacts. Likewise, the population's expectations about the Project, their perception about the expected environmental impacts, use and management of resources, identification of critical or vulnerable areas, among others, will be collected. Some of this information will have to be collected in the participatory evaluation workshops and in the technical validation workshops.

Present an **Impact Matrix**, showing the correlation between the Project activities (impactful actions) and the environmental (components of the physical and biological environment) and social (socio-economic environment) aspects that may be impacted.

**Impact Assessment**

The assessment will be carried out through quantitative and/or qualitative methods, which must be clearly defined. These methods must be applied by the interdisciplinary team participating in the development of the baseline for the EIA-sd.

Each identified environmental or social impact must be characterized, considering:

1. The project phase and related activity;

2. The environmental or social aspects related;

3. The characterization of each impact, according to, as a minimum, the following attributes:

* vector or nature (positive or negative)
* location
* geographical extension of the area of influence
* estimate of affected population, identification by quintiles
* form of incidence (direct or indirect)
* seasonality (immediate, medium or long term)
* duration (temporary, cyclical or permanent)
* reversibility
* degree of disturbance
* importance
* intensity
* accumulation
* synergy

4. The degree of mitigation or prevention that should be expected from the application of the proposed measures;

Other specificities considered pertinent.

The information necessary to allow the correct evaluation of all the expected impacts and risks must be included in the baseline.

The environmental evaluation of the impacts identified for each component of the physical, biotic and anthropic environments is based on the consideration of the expected effects of all potential impacts, after the application of preventive, mitigating and compensatory measures proposed in the strategy of environmental management.

Present an Impact Assessment Matrix, in which the qualification of each impact in relation to its attributes listed above is presented, after the application of the measures and programs proposed in the environmental management strategy.

In the analysis, it must be ensured that:

1. The environmental situation determined in the baseline is analyzed, comparing it with the expected changes in the environment as a result of the implementation of the project.
2. Direct, cumulative and synergistic[[15]](#footnote-15) impacts are prevented and the risks that could be generated and presented on environmental, social and cultural components, as well as people's health, are evaluated.
3. Representative variables are used to identify the environmental impacts justifying the scale, the level of resolution and the volume of the data, the replicability of the information through the use of mathematical modeling for the determination of negative and positive impacts and the definition of thresholds of these impacts.
4. The Environmental Quality Standards (ECA), the Maximum Permissible Limits (LMP) and the Maximum Admissible Values (VMA) in force are considered. In the absence of national regulation on the matter, use international standards.

The following conditions should be considered:

1. Location of the discharge points (UTM WGS84 coordinates, corresponding zone), monthly volumes, and the maximum and minimum flows of discharged treated wastewater, effect of the eventual discharge in the receiving bodies during construction.
2. The operational capacity of the treatment systems projected for hospital buildings, which will allow compliance with the Maximum Admissible Values indicated in the Regulation of Supreme Decree No. 021-2009-VIVIENDA, or regulation that modifies or replaces it.
3. The operational conditions of the existing municipal treatment plants (projected situation for the moment the hospitals are put into operation) and the assessment of the capacity to meet the projected demand for the hospital.
4. The characterization of raw and treated wastewater will be presented, considering the recommended parameters for the different activities.
5. **ENVIRONMENTAL AND SOCIAL MANAGEMENT STRATEGY**

The Environmental Management Strategy must consider the mechanisms and actions for the implementation of the activities and commitments to which the owner of the Project is obliged to fulfill during its period of duration in accordance with the Law of the Environmental Impact Assessment System, its regulations and other applicable complementary standards.

Specific prevention, correction, mitigation, control, contingencies, restoration and compensation measures must be presented and described for each environmental or social impact identified in the previous chapter. An Impacts x Measures Matrix must also be presented, with the correlation between the identified environmental impacts and the measures and programs proposed in the relevant Environmental Impact Studies. This matrix will serve as a tool to demonstrate that all the expected impacts or risks have an adequate mitigation or compensation strategy, that is, it must guarantee that the set of programs and measures is comprehensive and that it guarantees that all the direct and indirect impacts of the project will be avoided, mitigated and/or compensated. In addition, the necessary monitoring actions must be detailed to verify the characteristics and intensity of the impacts and the effectiveness of the measures, to guide pertinent corrective actions.

The universe of measures to be proposed must be organized into a limited set of Plans or Programs, based on technical, chronological and/or organizational criteria, in order to facilitate the management of their application and the attribution of responsibility for them. These Plans and Programs must be detailed at the executive level and must indicate the potential negative impacts to which they are directed, those responsible for their implementation and for supervising the correct application of the measures proposed in the Environmental and Social Management Plan (PMAS). The environmental goals to be achieved with the measures and indicators must also be indicated to verify the effectiveness of the program. In addition, the respective schedule and budget for each of the proposed plans or programs must be attached according to the project stages (planning, construction and operation).

The Environmental Management Strategy, without prejudice to additional requirements established in the Applicable Laws and Provisions, will include at least the following plans:

**Environmental and Social Management Plan (PMAS)**

It includes all the pertinent measures to prevent, control and mitigate the impacts of the construction of the Project and also the operational impacts. As part of this plan, the following measures should be detailed:

1. *Construction Operational Control Procedures*, for key construction processes that require specific mitigation strategies. These construction processes include minimally: (i) Scarification of the land, as applicable; (ii) Earthworks; (iii) Shallow excavations; (iv) Deep excavations; (v) Concrete and cement works; (vi) release of interference, if applicable, etc.
2. *General Environmental Management and Control Guidelines* applicable to all construction and operation processes. These requirements seek to protect social and environmental resources within the project footprint and ensure compliance with applicable environmental regulations and IFC standards. They include: (i) Order and cleanliness of the Project areas and prevention of contamination; (ii) Management of hazardous chemicals and materials, including specific measures for the prevention and management of spills; (iii) Solid waste management; (iv) Water and effluent management; (v) Erosion control and stormwater management; (vi) Monitoring of critical areas subject to landslides/mudslide; (vii) Air quality management; (viii) Noise management; (ix) Closure, deactivation and recovery of intervened areas; (x) Procedure in case of fortuitous discovery of archaeological remains, etc.

*3. Air Quality Control Measures, Noise and Vibrations*

*4. Specific Operational Control Procedures for the construction and operation of the Construction Support infrastructure and equipment.* They contain guidelines that must be analyzed during the operation of temporary facilities. They include: (i) Construction camps; (ii) storage area; (iii) Concrete plants; (iv) Equipment and vehicles.

*5. Hazardous Materials Management Measures*

*6. Construction Traffic Control Measures*

**Environmental Quality Monitoring Program**

Environmental quality parameters affected by construction and operation (water quality, quality of the treated effluent, air quality, noise, as appropriate) will be monitored. Indicate the monitoring actions for compliance with the ECAs and LMP and others established in the current national regulations or the IFC, whichever is more restrictive. Determine the frequency and duration, monitoring points or places (location in UTM WGS 84 coordinates), specifying the sampling method, parameters to monitor related to the nature and scope of the project, environmental standard of comparison for compliance and responsible for monitoring, as well as trend analysis. For the location of the monitoring points or stations, the following criteria must be taken as a minimum: location of Project components, points of emissions and/or discharge, place of development of activities that generate previously identified main impacts. Provide for analyzes carried out in a laboratory accredited by INACAL and the inclusion of an environmental monitoring map.

Periodic monitoring of the effluent from the wastewater treatment systems and atmospheric emissions must be carried out (when applicable and in accordance with international reference standards).

**Occupational Health and Safety Management Plan**

The Plan will have the following characteristics:

1. It will be applicable to both the owner's workers and his contractors and subcontractors.
2. It will be controlled by the SGAS-SST.
3. The design of the Occupational Health and Safety Management Plans must be preceded by a robust risk identification and evaluation process conducted in accordance with the Applicable Laws and Provisions and with the ISO 31001 and ISO 45001 Standards.
4. For risks considered unacceptable (when there is a probable risk of serious or fatal accidents) appropriate engineering control measures must be established to lower these risks to acceptable levels, complying with the mitigation hierarchy established by Performance Standard No. 1 of the IFC.
5. Appropriate operational control procedures must be in place to properly manage all activities that involve significant risks to occupational health and safety.
6. It will include the procedure for notifying workers about the risks to which they will be exposed and about the correct implementation of safe work procedures and other occupational health and safety protocols.
7. The procedure will include accident reporting in accordance with IFC Performance Standard No. 1.
8. It will include the investigation procedure in accordance with IFC Performance Standard No. 1, which will be carried out through appropriate methodologies and will be the subject of appropriate corrective action plans, which must be managed through the ESMS.
9. Incidents that do not qualify as accidents must also be documented and investigated.
10. It will contemplate the installation of mailboxes to collect suggestions from workers.

**Monitoring Program for Exposure to Occupational Risk Factors**

To measure the exposure of workers and users to occupational risk factors, it will be applied the exposure limits established in:

1. Guidelines on Occupational Exposure Limit Value (TLV®) and Biological Exposure Indices (BEIs®) published by the American Conference of Governmental Industrial Hygienists (ACGIH).
2. The Pocket Guide to Chemical Hazards published by the United States National Institute for Occupational Safety and Hygiene (NIOSH).
3. The permissible exposure limits published by the United States Occupational Safety and Health Administration (OSHA).
4. The indicative occupational exposure limit values published by the Member States of the European Union.
5. Other similar sources.

The standard that corresponds to each activity of the Project will be monitored, applying the one that is most demanding to preserve the health and safety of the workers.

**Solid Waste Management Plan**

It will describe the measures for the proper management of the solid waste generated in each of the stages of the Project, in accordance with the Applicable Laws and Provisions and in line with the best international practices[[16]](#footnote-16) using techniques of minimization, reuse and segregation. Define the actions for the storage, collection, transport and final disposal of it. Indicate the institutions and/or companies in charge of each of the stages and their respective sanitary authorizations, as well as the name of the sanitary landfill where the waste will be disposed of, in compliance with the provisions of current regulations.

**Contingency Plan**

It will define the measures for risk management and response to contingencies that may affect people's health, the environment, and the Project's infrastructure. Emergency situations can occur as a result of natural phenomena, operational/technological problems, equipment and infrastructure failures, as well as those related to industrial accidents (boiler explosion, for example). It will define the responsibilities, lines of communication and technical/administrative procedures to respond quickly and efficiently to emergency situations in the Project.

**Closure and/or Abandonment Plan**

It will contain the actions to be carried out when the project is completed in each of its stages, so that the scope of the Project and its area of influence remain in conditions similar to those that were had before its start, not generating environmental liabilities. For this, this Plan will consist of two programs, according to the following detail:

1. *Abandonment Plan for the Construction Phase*, containing the measures related to the deactivation of the support facilities for the Project's construction works, such as the camps, borrow quarries and surplus material deposits, that is, each of the areas used during the works. It will include the conditioning or restoration of these areas.

2. *Abandonment Plan for the Operation Phase,* including the activities of dismantling and total demolition of the Project facilities, after it has reached its useful life.

**Environmental Surveillance, Control and Monitoring Plan**

It should foresee the implementation of an Environmental Surveillance System and the assignment of specific responsibilities to ensure compliance with the measures contained in the Environmental Management Strategy, considering the evaluation of its efficiency and effectiveness through performance indicators. A follow-up schedule for compliance with environmental commitments will be attached. A Participatory Monitoring Plan must be presented in line with Applicable Laws and Provisions, and IFC guidelines.

1. **CITIZEN PARTICIPATION PLAN (CPP) AND COMMUNICATION WITH SOCIAL ACTORS**

A CPP must be prepared, taking into consideration the provisions established in Supreme Decree No. 002-2009-MINAM, or regulations that complement or replace it, on transparency, access to public environmental information and citizen participation and consultation on environmental matters. Include in the Citizen Participation Plan the identification of the main actors or stakeholders (due to their relationship with the object of consultation or their place of execution), and the strategies, actions and mechanisms of involvement and participation of the authorities, population and representative entities of civil society during the stages of preparation and approval of the EIA-sd, in the construction, operation and maintenance phases of the Project.

The CPP must contain details of the following activities:

1. Procedure for conducting a public consultation which will be required in application of Performance Standard No. 1 of the IFC. To serve as support during the public consultation presentations, a synthesis document of the EIA-sd should be prepared to be distributed among the general population. This document should be prepared in simple language with little use of technical terms and with plenty of graphic elements, such as schematic maps, sketches, and illustrative photos of similar projects. It should include at least:
   * An explanation of the justification for the Project and its importance for the country and the region.
   * An explanation of what the EIA-sd is and what its function is in the context of the environmental certification process.
   * An explanation of who are the institutional actors with the responsibility of conducting the environmental assessment process and the role of the other public entities involved.
   * A description (illustrated) of the components and characteristics of the Project.
   * A summary of the main environmental and social characteristics in the Area of Direct Influence (ADI).
   * An annotated list of expected environmental and social impacts (with a focus on those of greatest importance).
   * An annotated list of the plans and programs proposed for the management of the Project.

This document will have cross references to the text of the Executive Summary.

1. Mapping and Stakeholders Analysis
2. Communication and Consultation Plan with Stakeholders During the Construction Stage

* Continuous disclosure of information to local stakeholders
* Complementary disclosure of the environmental and social commitments of the construction stage of the Project
* Consultation with stakeholders during construction
* Perception survey of interested social actors
* Communication with the main contractor and subcontractors
* Communication between contractor and workers

1. Communication and Consultation Plan with stakeholders During the Operation Stage

* Continuous consultation with local stakeholders (insured, EsSalud officials, among others)
* Community newsletter

1. Continuous Disclosure of the Project

* Continuous disclosure of project activities
* Implementation and maintenance of the project website

1. Grievance Mechanism (compatible with international reference standards)

* Grievance Mechanism to Serve External Stakeholders
* Specific Mechanism for Population Complaints Directed to the Main Contractor During the Construction Stage
* Grievance Mechanism to Serve Internal Stakeholders
* Contractor's Specific Mechanism for Workers' Complaints During the Construction Stage.

The set of proposed programs and measures must be integrated into the Environmental and Social Management System (ESMS).

1. **ENVIRONMENTAL AND SOCIAL MANAGEMENT SYSTEM (SGAS)**

In addition to the Environmental Management Strategy (EMA), the EIA-sd must include, in a manner compatible with international best practices (IFC standards4), the ESMS and the SST designed to ensure the project's compliance with all the requirements contained in the Plans and Programs that make up the EMA, as well as with the legal requirements, requirements of the PPP Contract (Public Private Partnership) to be signed, or requirements of the International Financial Entities and other interested parties with specific attributions in the management and/or supervision of the Project.

The ESMS must be developed in accordance with applicable standards such as ISO 14001, OHSAS 18001, SA 8000 or other internationally recognized standards.

The detail of the SGAS-SST in the EIA-sd must include at least the System Manual, the organizational structure to be implemented for its operationalization in each stage (including indication of the distribution of responsibilities of the Concessionaire, the construction companies and other actors), and the rules and procedures that control the system, including, as appropriate, the following:

1. Management System Policy (SG)
2. Objectives and Goals of the SG
3. Organizational structure
4. Procedure for identification and continuous evaluation of impacts and risks
5. Conformity Assurance Procedure (by the nomenclature of the legal framework it is named “Environmental Surveillance, Control and Monitoring Plan”)
6. Internal and External Audits
7. Non-Conformity and Corrective Action Procedure
8. Procedure for Measurement, Monitoring, Review and Critical Analysis of SG Performance
9. Change management procedure (*Management of Change*)
10. Code of Conduct
11. **EXECUTION SCHEDULE AND LIFETIME OF THE PROJECT**

It must include a schedule with the execution of activities of the construction and operation stage during the useful life of the Project.

1. **INVESTMENT BUDGET AND IMPLEMENTATION OF THE SOCIO-ENVIRONMENTAL MANAGEMENT STRATEGY**

It should include a table specifying the environmental and social management measures to be carried out, the stage to which it corresponds and the costs associated with said measures.

1. **LINKED COMPLEMENTARY STUDIES AND / OR PLANS**

The explosion modeling (fireball event) for the tap located near the Hospital, using internationally recognized modeling tools (DNV GL PHAST ™, for example).

1. **SUMMARY TABLE OF COMMITMENTS**

Include a summary table containing the environmental commitments indicated in this document, as well as the identification of the person responsible, the periodicity of the obligation and the associated costs.

1. **CONCLUSIONS**

The conclusions drawn from the analyzes and studies that made up the EIA-sd will be presented.

The evaluation of the overall impact of the proposed Project, considering the perspective of cumulative and synergistic effects of its implementation, must be conclusive in terms of its environmental viability or not.

**BIBLIOGRAPHY**

The EIA-sd must contain the bibliography cited and consulted, specified by area of scope of knowledge. All bibliographic references used must be mentioned in the text and referenced in its own chapter, according to the norms for the publication of scientific works.

**EXHIBITS**

The following documents will be attached to the EIA-sd, among others:

1. Project location drawing, georeferenced and with UTM *Datum* WGS 84 coordinates, include graphic scale.
2. Map of the area directly affected, and the area of ​​direct and indirect influence of the project, at a visible, appropriate, legible and workable scale.
3. Document that certifies the non-presence of native or indigenous peoples in the project's area of ​​influence.
4. Thematic drawings, specifying the evaluation and/or sampling points carried out in the baseline, considering the main characteristics of each subject and indicating the components of the project, in the ANP or ZA when appropriate.
5. Within the thematic maps it must has: i) soil and current use, ii) geology, iii) geomorphology, iv) topography, v) vulnerability, vi) environmental and social conflicts, vii) capacity for greater land use, viii) main components and water resources (rivers, among others); indicating its ECA-Water category on an appropriate and visible scale, ix) vegetation units indicating flora and fauna sampling points, x) hydrographic network of the project area, xi) access roads, among others.
6. Map of areas where the possible presence of archaeological remains has been verified.
7. Process flow diagram.
8. Location drawings for the quality control points of the treated wastewater (generated during construction activities), on an appropriate and visible scale.
9. Groundwater source location map showing the location of existing wells on a visible, appropriate and legible scale (if applicable).
10. Map of economic activities in the area of influence that includes population, recreational, aquaculture, fishing, agricultural, livestock and industrial resources, of existing water resources identified in the baseline on a visible, appropriate and legible scale.
11. Drawing of the environmental monitoring points or stations, established in the environmental management strategy.
12. Field reports of the sampling of the biotic environment.
13. Hydrological and hydrogeological study (if necessary). Hydrogeological map of the project's area of influence on a scale of 1: 25,000 or on an adequate scale that allows the components to be clearly visualized (if applicable).
14. Field sheets, surveys, interviews with authorities, citizen participation workshops, among others, as well as secondary information used.
15. Attach authorization related to the water resource issued by the competent authority.
16. Attach the laboratory analysis or evaluation results of the water, soil, air, flora or fauna samples, as appropriate.
17. Other (s) that the owner considers.

1. It excludes the patient unit (bed) which is performed by the nursing technician, according to the Applicable Laws and Provisions (Ministerial Resolution N° 372-2011/MINSA). [↑](#footnote-ref-1)
2. Refers to the code of ethics indicated in the Quality Manual proposed by the CONCESSIONAIRE, in accordance with the ethical guidelines of the hospital establishment. (include it as a reference in the other services where it is mentioned). [↑](#footnote-ref-2)
3. Minutes Bioquím Clín Latinoam 2017; 51 (1): 115-22. [↑](#footnote-ref-3)
4. Refers to the code of ethics indicated in the Quality Manual proposed by the CONCESSIONAIRE, in accordance with the terms of the Contract and the Grantor's code of ethics. [↑](#footnote-ref-4)
5. Refers to the code of ethics indicated in the Quality Manual proposed by the CONCESSIONAIRE, in accordance with the terms of the Contract and the Grantor's code of ethics. [↑](#footnote-ref-5)
6. The supervisions must include at least the typology of microbiological tests approved by Ministerial Resolution Nº 591-2008/MINSA, and Ministerial Resolution Nº 461-2007/MINSA or regulations that modify or replace them. [↑](#footnote-ref-6)
7. Supervision shall include at least the measurement of surface cleaning quality based on the quantity of microorganisms permissible per Luminometer in accordance with the provisions of Ministerial Resolution 461-2007/MINSA and other regulations that may modify or replace it, and other measurements established by the Supervisor of Contract and Operations, which must be established in the POA. [↑](#footnote-ref-7)
8. This variable will be defined in the Transaction Phase [↑](#footnote-ref-8)
9. Form 01: General Information of Health Facilities and Form 2: Safe Hospitals Checklist [↑](#footnote-ref-9)
10. Criteria Approval for the Preparation of Energy Audits in Public Institutions – Ministerial Resolution No. 186-2016-MEM/DM dated May 16, 2016. [↑](#footnote-ref-10)
11. Property documents may be coordinated and requested from the GRANTOR, through the Hospital and PCC management. [↑](#footnote-ref-11)
12. The technical specifications found from sheets 3221 to 3489 of the feasibility study, approved by ESSALUD, must be considered. [↑](#footnote-ref-12)
13. This Appendix has a referential character considering that the Concessionaire, as established in the Contract, must manage, process or obtain the licenses or authorizations that are required according to the Applicable Laws and Provisions. [↑](#footnote-ref-13)
14. In particular, reference is made to the Environmental, Health and Safety Guidelines for healthcare facilities and the General Environmental, Health and Safety Guidelines [↑](#footnote-ref-14)
15. *The methodology proposed by the IFC in the “Good Practice Manual of Cumulative Impact Assessment and Management: Guide for the Private Sector in Emerging Markets” should be adopted.* [↑](#footnote-ref-15)
16. reference is made to the EHS Guidelines for Healthcare Facilities and the World Bank and IFC General EHS Guidelines [↑](#footnote-ref-16)