



Request for Expressions of Interest for Technical Consultancy

The terms and deadlines presented below are referential and approximate. This is because, in accordance with subparagraph 4.11 and 4.21 of Article 4 of PROINVERSIÓN's Regulations for the Hiring of Consultancy Services (approved by Agreement CD PROINVERSIÓN No. 49-3-2018-CD and its amendments), the Definitive Terms of Reference will be prepared with the participation of the companies that submit Expressions of Interest and that are qualified as the firms that have more experience and interest in doing consultancy. Consequently, the terms and deadlines expressed in this document have no binding effect or generate any kind of obligation for PROINVERSIÓN.

1. PROJECT DESCRIPTION

1.1. Overview

- a) PROINVERSIÓN is a public entity of the Republic of Peru in charge mainly of promoting private investment in the national territory as provided in its Organization and Functions Regulations (Supreme Decree No. 185-2017-EF).
- b) The Ministry of Transport and Communications (MTC) is the Peruvian State institution competent to design and apply the telecommunications policy that allows the development of the sector and to guide the actions of private telecommunications companies. Its main guidelines are:
 - Promoting the growth of the supply of public telecommunications services at the national level;
 - Encouraging the development of the fixed and mobile telephony and broadband Internet access markets;
 - Increasing the penetration rates of fixed and mobile telephony and broadband Internet access at the national level;
 - Bridging the digital divide;
 - Increasing competition in the telecommunications and Internet access markets in the country; and
 - Increasing private investment and enhancing the welfare of consumers of telecommunications services.
- c) The Ministry of Transport and Communications (MTC) is responsible for the administration, allocation, assignment and control of the radioelectric spectrum, a limited natural resource, whose use and granting of use to operators of public telecommunications services must be carried out under the conditions set forth in the Telecommunications Law and its Regulations.
- d) Likewise, the granting of concessions is required for the provision of public telecommunications services by natural or legal persons, an aspect that contributes to satisfying the communication needs of the Peruvian population.
- e) By Ministerial Resolution No. 157-2019-MTC/01.03 published in the official gazette El Peruano on March 7, 2019, the MTC:

- Arranged for a public bidding process to grant a single concession for the provision of public telecommunications services and to assign at the national level: (i) the frequency range 1,750 - 1,780 MHz and 2,150 - 2,180 MHz, and (ii) the frequency range 2,300 - 2,330 MHz; according to the channeling determined by the MTC and according to the conditions established in the bases of the mentioned bidding process.
 - Commissioned PROINVERSIÓN to conduct the public bidding and the awarding of the concession, in coordination with the Vice-Ministry of Communications.
- f) By means of Vice-Ministerial Resolution No. 183-2019-MTC/03 dated March 7, 2019, the channeling of the band 2,300 - 2,400 MHz was modified. Likewise, by Vice-Ministerial Resolution No. 641-2019-MTC-01.03 dated September 13, 2019, the channeling of the 1,710 – 1,780 MHz and 2.110 - 2.180 MHz band at national level was approved.
- g) Once the elaboration of the Project Evaluation Reports was completed by the MTC, through Agreement PROINVERSIÓN No. 96-2-2020-CD dated February 5, 2020, the Directive Council of PROINVERSIÓN approved the incorporation of the Projects to the private investment promotion process, as well as the corresponding promotion modality.
- h) By means of Resolution of the Executive Directorate No. 6-2020/DPP/TE.25 dated February 14, 2020, the Agreement of the Committee for Transport and Communications No. 56-1-2020-Telecomunicaciones was ratified, which approved the Plan for the Promotion of the Special Public Bidding corresponding to the promotion process indicated in the preceding paragraph.

1.2. Description of the Projects

In recent years, the demand for mobile data services in the world has been growing exponentially, due to the increase in mobile users, new profiles of mobile service use, the proliferation of smartphones, connections to the Internet of Things (IoT), improvements in the speed of networks and the consumption of mobile video (*streaming*). In other words, there is a global trend in the increase of mobile data traffic, which implies the need to use the latest generation of mobile networks that support high information transmission capacities: 4G networks and beyond; therefore, it highlights the need to ensure that companies have sufficient spectrum to enable them to implement the aforementioned networks.

Peru is not unaware of this global trend -which has been demonstrated by the greater national deployment of 3G and 4G networks, the substantial increase in users of new broadband technologies and the increase in data traffic-, and the MTC highlights the need to adopt measures that will allow this growth in demand to be supported. Among these measures is the identification and provision to the private sector of new radio spectrum bands for the provision of public telecommunications services, especially mobile broadband, which will benefit the population through greater connectivity and reduction of the digital divide, since operators will be able to offer better coverage characteristics, greater data capacity and will seek to massify the use of 4G technology and initiate the path towards the development of future technologies.

Through the private investment promotion process to be carried out by PROINVERSIÓN, operators will be selected to provide public telecommunication services using the following radio spectrum bands made available:

- a) 1,750 - 1,780 MHz and 2,150 - 2,180 MHz bands (hereinafter **Band AWS-3**).
- b) 2,300 - 2,330 MHz band (hereinafter **Band 2.3 GHz**).

The aforementioned radio spectrum bands are of national coverage and will have an operating period of 20 years from the date of signing the respective contracts.

It should be indicated that, given the importance identified by the Sector for the attention of priority zones at a national level, it has been established that the awardees of the Projects implement, as an offer, Mandatory Investment Commitments to be developed in specific zones of the national territory, among which are:

- Deployment of infrastructure (optical fiber and base stations) for the provision of 4G technology mobile services in the Regions of Cajamarca, Piura, Tumbes, Loreto and Puno.
- Connectivity to public entities, taking advantage of the installed capacity of optical fiber in favor of the State provided by a certain company in the energy sector. The beneficiary entities at national level would be: 494 educational institutions, 25 health facilities, 52 police departments, 27 offices of the Banco de la Nación and 01 Tambo, distributed in the regions of Ancash, Apurímac, Arequipa, Cusco, La Libertad, Lambayeque, Lima, Piura, Puno and Tumbes. Additionally, in each of the 18 interconnection nodes distributed in these regions, a Digital Access Center (DAC) will be implemented.
- Connectivity between 22 toll and weighing stations and their Control and Monitoring Center, located on the country's main roads, distributed in the regions of Ancash, Apurímac, Arequipa, Ayacucho, Huánuco, Junín, Madre de Dios, Pasco, San Martín and Ucayali.
- Connectivity to localities in the Apurímac, Ene and Mantaro River Valley (VRAEM) (Ayacucho, Cusco, Huancavelica and Junín regions) and Selva region of the country (Amazon, Loreto, Madre de Dios, San Martín and Ucayali regions), mainly for mobile access data service with 4G technology or higher.
- Others: provide facilities to Rural Mobile Infrastructure Operators (RMIO) and remuneration of supervision aspects.

2. PURPOSE OF THE CONSULTANCY

PROINVERSIÓN seeks to select, through a competitive mechanism, a company or consortium of specialized technical consulting companies (hereinafter, the **Technical Consultant**), which provides technical consultancy services to carry out the process of promoting private investment, in the modality of Projects in Assets, of the AWS-3 Band and 2.3 GHz Band Projects.

It should be noted that, in accordance with the provisions of Ministerial Resolution No. 157-2019-MTC/01.03, the promotion process and the granting of the concession must be carried out in coordination with the Vice-Ministry of Communications; therefore, PROINVERSIÓN, when appropriate, will submit the consultancy deliverables to the Vice-Ministry of Communications for its consideration before their approval, which will be granted by PROINVERSIÓN.

3. PHASES OF THE CONSULTANCY

The phases for the development of the consultancy are:

a) Structuring Phase

This phase includes the design of the Projects to be promoted as Projects in Assets, which includes, among others, their economic and financial structuring, risk analysis and the design of the contracts in charge of PROINVERSIÓN.

b) Transaction Phase

This phase includes the activities related to the process of promotion of the private investment of the Projects, from the Call for Tenders to its award.

The referred phases of the Consultancy will be developed under the framework of Legislative Decree No. 1362, Legislative Decree that regulates the promotion of private investment through Public-Private Partnerships and Projects in Assets, its Regulations, approved by Supreme Decree No. 240-2018-EF and its amendments or rules that replace them, and other applicable regulations.

4. SCOPE OF SERVICE

The Technical Consultant must be a company or consortium of companies of international prestige, with specialized and accredited technical knowledge in the telecommunications sector and in accordance with new mobile access technologies and high *compliance* standards, with experience in the implementation and design of fourth generation 4G mobile networks for the provision of telecommunications services using radio spectrum bands; that provides technical consultancy services to PROINVERSIÓN within the Special Public Bidding process for the promotion of private investment in the AWS-3 Band and 2.3 GHz Band for:

- (i) Review, analysis and recommendation of technical alternatives and elaboration of technical specifications of the Mandatory Investment Commitment "Connectivity to VRAEM and Selva region locations of the country".
- (ii) Technical advice during the process of promoting private investment.

It must have, at least, a Team Leader and a Technical Specialist, however, must consider and have the necessary staff to provide advice and fully comply with all requirements indicated in the scope of service.

The Technical Consultant's team must have the possibility to access the knowledge and positions assumed by the International Telecommunication Union - ITU, as well as offer

availability for the elaboration of deliverables and coordination within the established deadlines and according to the strategies and needs for the development of all phases of the Consultancy.

The scope of the service will mainly include the following:

Structuring Phase

4.1. Review, analysis and evaluation of technical and/or technological alternatives for the mandatory investment commitment "Connectivity to VRAEM and Selva Zone locations of the country"

The Technical Consultant, among other aspects, on the content and scope of the Project Evaluation Reports, formulated by the MTC and provided by PROINVERSIÓN, shall carry out a technical, economic, social, environmental and regulatory (in this last case, at international level) diagnosis, for the implementation of the referred Mandatory Investment Commitment and/or applicable disruptive technology. Such diagnosis shall take into consideration international experiences.

To the extent that the country's health, legal, environmental and regulatory conditions allow, the Technical Consultant will make diagnostic visits to the area of influence¹. The priority regions to visit are: Amazonas, Loreto, San Martín, Ayacucho and Junín. In case the visits are not carried out, in the respective terms of reference the form of discount will be established with respect to the total payment.

Subsequently, and having the diagnosis referred to in the previous paragraph, the Technical Consultant must evaluate the different technical and/or technological alternatives of telecommunications existing in the world for the deployment of the required services considering the geographical, environmental and other aspects of the area of influence, raising the advantages and disadvantages of each one of them, which must include a valuation of each alternative (with a complete list of the components of CAPEX and OPEX, if this is the case), and emitting the respective recommendations. The technology proposed by the consultant may also not have been developed in Latin America.

The Technical Consultant may propose that the investor use the frequencies it owns or other frequencies determined by the MTC to be available, provided that these have been duly allocated and identified for public telecommunications services.

It should be considered that the requirement of the Sector, expressed in the respective Evaluation Reports, is that the service of mobile data transmission and mobile telephony over IP be provided through the implementation of disruptive technologies. Therefore, the following technologies may be used: HAPS, HIBS, TV WHITE SPACES or other disruptive technologies as long as they are in accordance with the ITU recommendations; in such a way that coverage of final telecommunications services is provided to rural or difficult to access locations. For this purpose, a technological solution for the Mandatory Investment Commitment

¹ Valley of the Rivers Apurímac, Ene and Mantaro (VRAEM): regions of Ayacucho, Cusco, Huancavelica and Junín; and Selva region of the country: regions of Amazonas, Loreto, Madre de Dios, San Martín and Ucayali.

should be proposed, taking into account the standards of LTE and LTE Advanced access network technologies, from now on. The implementation of these technologies should avoid affecting the environment.

The TECHNICAL CONSULTANT must propose a viable technical and economic solution to provide coverage and connectivity to locations in the VRAEM and Selva region of the country, so that the services of mobile data transmission and mobile telephony over IP are provided in the bands that are allocated for public telecommunications services using wireless access systems and that are identified for use for International Mobile Telecommunications (IMT) of the ITU².

The different alternatives proposed by the Technical Consultant will be made available to the Sector for its evaluation and selection.

4.2. Preparation of the Technical Specifications of the mandatory investment commitment "Connectivity to VRAEM and Selva region locations in the country"

Having the opinion of the Sector regarding the different alternatives proposed, the TECHNICAL CONSULTANT must prepare the Technical Specifications of the Mandatory Investment Commitment from the point of view of the service to be required (mobile data transmission and mobile calls over IP).

These Technical Specifications shall include without limitation, the following:

- To be established in a clear, precise and organized manner, taking into account the features of the beneficiary localities that are in the areas of influence where the telecommunications service will be provided.
- To contain the activities that are necessary for the execution of the service provision, such as maintenance, repair, technical support, training and/or coaching, or related activities.
- To indicate or specify the types of portable terminals (tablets, cell phones, laptops, etc.) that will allow users to access the service, as well as detail the minimum technical characteristics of each type of terminal; considering that in certain locations there is no electric power service.
- To specify for each region the normal or standard environmental conditions, such as: temperature, relative humidity, altitude, climate conditions, etc.; in which each type of terminal will be able to operate or to work, in order to guarantee the access to the service by the users who require it.
- Depending on the nature of the service to be provided, the applicable technical standards shall be stated, and the version and, if necessary, the field of application or object and description of the required technical standard shall be stated.
- Depending on the nature of the service to be provided, the levels of availability, latency, service interruptions, uplink and downlink speed, packet loss, or other aspects related to the quality of the service to be provided must be indicated or specified. These must contain the units of measurement (% , msec, etc.), the form of measurement, the period of time during which it is to be evaluated (measured on an annual, monthly or daily basis, etc.), and other aspects that may be

² International Telecommunication Union.

necessary for each parameter relating to the quality of the service. The conditions of use, quality regulations, minimum speeds, among others, established by the regulatory body and the MTC must be reviewed.

- To detail the criteria to guarantee environmental sustainability during the execution of the Mandatory Investment Commitment, as well as during the operation and maintenance of the service; in order to avoid negative environmental impacts.
- To take into account technological progress, the minimum number of authorized dealers or workshops with spare parts supply capacity should be indicated, taking into account the place where the asset will be used and its local or national scope, among others.

The TECHNICAL CONSULTANT must indicate the minimum aspects related to a training and/or coaching, for the provision of mobile phone service by IP and mobile data transmission in the VRAEM and Selva region locations of the country. Among the aspects to be considered are the specific issues of disruptive technology

The TECHNICAL CONSULTANT shall establish the minimum and maximum term for the Investor who provides the service of mobile data transmission and mobile telephony by IP, to carry out the execution of the Mandatory Investment Commitment, in order to provide the mentioned service; taking into account the market information, such as the term of import of products, customs clearance and preparation for delivery, etc.

The TECHNICAL CONSULTANT must establish the minimum requirements for the execution of commissioning tests, specifying which entities will perform or participate in the tests and which will be the parameters for their acceptance. Likewise, the manufacturer's recommendations shall be taken into account, as the case may be.

The TECHNICAL CONSULTANT will prepare the Technical Specifications to ensure service coverage in the localities of the Valley of the Rivers Apurímac, Ene and Mantaro (VRAEM) and Selva region of the country, and will also establish the criteria that will determine what will be considered a location with coverage.

4.3. Technical advice during the structuring stage

In coordination with the Project Director, the TECHNICAL CONSULTANT will advise during the stage of structuring the Special Public Bidding in the elaboration of the aspects of the initial Bases and project of Contract, referred to the Mandatory Commitment of Investment "Connectivity to localities of the Valley of the Rivers Apurímac, Ene and Mantaro (VRAEM) and Selva region of the country".

Transaction Phase

4.4. Advice during the Transaction Stage

Subsequently, the TECHNICAL CONSULTANT will advise during the Transaction stage of the Special Public Bidding in (i) the elaboration of the answers to the consultations that the bidders make regarding the Technical Specifications of the Mandatory

Commitment "Connectivity to localities in the Valley of the Rivers Apurímac, Ene and Mantaro (VRAEM) and Selva region of the country" and (ii) the evaluation of the suggestions of the bidders to the project of Contract, the intermediate versions of Contract, the final version of Contract; including the formulation of the Technical Reports that are necessary to develop.

Reference Deadlines and Deliverables of the Consultancy

The approximate duration of the service is twelve (12) months, and the deliverables are:

Phase	Deliverables	Estimated time
Structuring	Report No. 1: Work Plan and Schedule	Twelve (12) months
	Report N° 2: Diagnosis and evaluation of technical and/or technological alternatives for Connectivity to the VRAEM and Selva region localities of the country	
	Report N° 3: Technical Specifications of Connectivity to the VRAEM and Selva region locations of the country	
Transaction	Report N° 4: Technical advice during the Structuring and Transaction phases	

5. QUALIFICATIONS AND EXPERIENCE REQUIRED OF THE CONSULTANT

Companies with experience as detailed in this section may submit Expressions of Interest. Such experiences may be accredited through the interested company, or by one or more of the members in the case of a consortium, or by a subsidiary company over which it has effective control. For purposes of accrediting said compliance, in case the experience has been carried out as part of a consortium, the company must have had a minimum participation of 20% in said consortium.

The required experience will be as follows:

- a) A minimum of **three experiences**^{1/} in advice for the design and implementation of fourth generation mobile networks onwards (preparation or formulation of pre-investment studies at the feasibility level, preliminary project or definitive studies), using radio-electric spectrum bands, for the provision of public telecommunications services, in Peru or abroad, in the last ten (10) years; the amount of investment must be **no less than US\$ 50,000,000** (Fifty Million US Dollars) for each of the experiences.
- b) A minimum of one **experience**^{1/} in the design of mobile networks (studies) that have used unconventional or disruptive technologies (with any of the following technologies: HAPS, HIBS, TV WHITE SPACES or other disruptive technologies) provided they are in accordance with ITU recommendations, or have had publications in the standards organizations (FCC or ETSI or 3GPP) concerning unconventional or disruptive technologies, for the provision of public telecommunication services, in the last five (05) years.

Notes:

- 1/ Consultancies carried out for both the public sector (government) and the private sector, concluded with the agreement of the contractor.



PERÚ

Ministerio
de Economía
y Finanzas

Agencia
de Promoción de la
Inversión Privada

Dirección
de Portafolio de
Proyectos

- 2/ The Technical Consultant shall not maintain links with operators in the sector who might be interested in the award of the Projects. The independence of the consultant with respect to the companies of the telecommunications sector in our country will be taken into consideration.

6. FORMALITY FOR THE SUBMISSION OF THE EXPRESSION OF INTEREST

The expressions of interest shall consist of the following documents:

- a) **Format N° 1:** Letter of Expression of Interest in Technical Consultancy, signed by the company's legal representative or proxy³.
- b) **Format N° 2:** Company experiences, duly completed and signed by the company's legal representative or proxy.

Expressions of Interest should be sent via e-mail or by PROINVERSIÓN's Reception Desk, with a deadline of June 19th until 5:00 p.m., Lima time (Peru):

- a) **Via email:** to the mail of the PROINVERSIÓN's Virtual Reception Desk, mesadepartesvirtual@proinversion.gob.pe, with copy to Mr. Aldo Laderas, Project Manager, aladeras@proinversion.gob.pe.
- b) **By Reception Desk:** with attention to Mr. Aldo Laderas, Project Manager, at PROINVERSIÓN offices, Av. Enrique Canaval Moreyra N° 150, San Isidro.

7. CRITERIA FOR DETERMINING THE SHORT LIST OF QUALIFIED BIDDERS

The following criteria, in order of importance, will be used to determine the Short List:

- a) Number and amounts of investment of those experiences in advising for the design and implementation of fourth generation mobile networks onwards, which comply with the requirement of PROINVERSIÓN.
- b) Number of experiences in the design of mobile networks (studies) that have used non-conventional or disruptive technologies or publications in the standardization organizations referring to non-conventional or disruptive technologies that meet the requirement of PROINVERSIÓN.

Criteria (a) and (b) will have the same weighting (50% each). Likewise, the sub-criteria amount and investment amounts within criterion a), will also have the same weighting (25% each).

³ In the case of a Consortium, each member must submit the respective Format No. 1.



Format N° 1: Letter of Expression of Interest in Technical Consultancy⁴

_____(City)_____, _____(date)_____, 2020

Sir
Aldo Laderas Parra
Project Manager
PROINVERSIÓN
Av. Enrique Canaval Moreyra N° 150, Piso 10, San Isidro
Lima, Perú

I, _____(*Legal Representative's name*)_____, identified with ID card No. _____, acting on behalf of _____(*the name of the Company or the name of each of the Companies in the case of common representation of a joint venture or consortium*)_____, express my interest in participating in the selection process for the hiring of a specialized technical consultant to advise PROINVERSIÓN in the "1,750 - 1,780 MHz and 2,150 - 2,180 MHz Bands" and "2,300 - 2,330 MHz Band" Projects.

Likewise, I declare to know and accept that in case of being awarded, the consultancy contract to be signed with PROINVERSIÓN will contain an anti-corruption clause in accordance with the requirements of the last paragraph of Article 5° of the Regulations for the Hiring of Consultancy Services by PROINVERSIÓN, approved by Agreement CD PROINVERSIÓN N° 49-3-2018-CD, published on 05.01.18, as amended. In this sense, I declare under oath that we comply with the requirements set forth in Paragraph 6.1 of Article 6 of such Regulations to become a Bidder or Consultant.

Sincerely,

(Signature of Legal Representative or Proxy)

Name : _____
City and country : _____
Address : _____
Phones : _____
Email address : _____

Enclosure : Information on the company (ies) responding to the first paragraph of Section 4 of the Request for Expressions of Interest.

⁴ In the case of a Consortium, each member must submit the respective Format No. 1.



Format N° 2: Company Experiences in Projects

Company name:

Experience in advising on the design and implementation of fourth generation mobile networks and beyond, which comply with the PROINVERSIÓN requirement (reference: subparagraph (a) of paragraph 5):

Experience No. 1:

- Project name:
- Customer and country where the service was provided:
- Service description:
- Start date of service:
- Completion date of service5:
- Project investment amount (US\$):
- Customer Contact Persons:

(...)

Experience No. [n]:

- Project name:
- Customer and country where the service was provided:
- Service description:
- Start date of service:
- Completion date of service5:
- Project investment amount (US\$):
- Customer Contact Persons:

Experiences in the design of mobile networks (studies) that have used non-conventional or disruptive technologies, or from publications in standardization organizations concerning non-conventional or disruptive technologies (reference: subparagraph (a) of paragraph 5):

Experience No. 1:

- Name of the study/ publication:
- Customer and country for whom the study was conducted/ Organization where the publication was made:
- Description of the study/ publication:
- Start date of the study / Date of publication:
- Completion date of the study6 (if applicable):
- Customer / Organization contact persons:

5 Service concluded with the agreement of the contracting party.

6 Service concluded with the agreement of the contracting party.

