IDB Inter-American Development Bank

REQUEST FOR EXPRESSIONS OF INTEREST
CONSULTING SERVICES

Selection #: RG-T2785-P003
Selection Method: Full Competitive Selection
Country: Paraguay
Sector: IFD/CMF
Funding – TC #: ATN/KK-16057-RG
Project #: RG-T2785
TC name: Development of Digital Infrastructure in Paraguay
Description of Services: IFD/CMF seeks to hire an internationally experienced consultancy firm or consortium of firms to support the efforts of ANDE (Paraguayan Electricity Company) at designing a robust broadband action plan taking into account country specificities and global best practices, as a tool to accelerate infrastructure deployment with the involvement of the private sector (including Public Private Partnerships); It is understood that the above objective will be reached in (i) close cooperation with ANDE, CONATEL and DINAPI; and (ii) in tight consultations with relevant private, public, and other stakeholders.

Link to TC Document: http://www.iadb.org/en/projects/project-description-title,1303.html?id=RG%2DT2785

The Inter-American Development Bank (IDB) is executing the above mentioned operation. For this operation, the IDB intends to contract consulting services described in this Request for Expressions of Interest.

The consulting services ("the Services") include

Component 1: Socio-economic characterization of the population and estimation of the expected demand (hereinafter Demand Forecast Analysis). The objective of this sub-activity is to elaborate on the curves of socio-demographic characterization out of densification variables, which are key elements to estimate the expected demand for services and the subsequent return on investment. For all the aforementioned points, the analysis should have a geographic approach per municipality while focusing on the un- and underserved rural areas in the municipalities with poorest broadband coverage.

The study will focus on above objective and will include the following:

i. Socio-economic characterization of the population in terms of population density, age, gender, occupation, propensity to consume and purchasing power (measured as percentage of their monthly salary);

ii. Estimate of the current demand (traffic in Mbps) for broadband-enabled services specifying the service and the device used to access that service, including the demand coming from schools, health centers, and government institutions, including those mentioned in the Strategy;

iii. Forecast of the demand (estimate of the demand – traffic in Mbps – for broadband-enabled services after the improvement of infrastructure) should be carried out not only by carrying out surveys but also by benchmarking with other countries where such deployment has happened before, including the demand coming from schools, health centers, and government institutions, including those mentioned in the Strategy.

Component 2: Design and modeling of the different technologies of access (Technical study).

This activity will model the different technology alternatives under the following scenarios for the operations of ANDE:

i. Scenario 1: Carrier-of-carriers. Under this model, ANDE would only provide services to other ISPs and telecom companies but not to the end user.

ii. Scenario 2: Internet Service Provider. ANDE would develop capacities and infrastructure to provide internet service to end users.

iii. Scenario 3: Control Systems Provider. Under this model, ANDE would provide services of Control Systems for the operation and management of third-party infrastructure, taking advantage of its own SCADA system

iv. Scenario 4: Information Systems Provider. Under this model, ANDE would provide storage and data processing services to third parties, taking advantage of its own Tier 3 data center

The design and modelling of the technology required for each scenario should be based on the socio-demographic characterization performed in Sub-component 1, on the analysis of the projected demand, and on the analysis of the current supply of the described services.

Component 3: Operational Model, Financial analysis and corresponding sensitivity analysis.

This activity will assess the operational alternatives for each one of the 4 scenarios described above: Carrier-of-Carriers, Internet Service Provider, Control Systems Provider and Information Systems Provider. The analysis will consider these alternatives:

i. Maintaining existing staff and infrastructure. Provide recommended changes in the organization (structural and resources) to achieve the goal optimally.

ii. With a new structure (legal status, human and material resources, budget, etc.) where ANDE owns 100%.

iii. Through a commercial association (Join-Venture) with public companies (Example: ANDE - COPACO S.A.), including a recommendation of the distribution of the utilities corresponding to ANDE.

iv. Through a commercial association (Join-Venture) with private companies (Example: ANDE - Mobile Operator), including a recommendation of the distribution of the utilities corresponding to ANDE.

Based on the analysis conducted in the Components 2 and 3, a financial study should be conducted estimating the investments (CAPEX) and operating costs (OPEX) associated with each one of the projected scenarios: Carrier-of-Carriers, Internet Service Provider, Control Systems Provider and Information Systems Provider.. The financial analysis on the backbone should be a single one (CAPEX and OPEX). As for the backhaul and last-mile networks, there should be one financial analysis per city (CAPEX and OPEX). The analysis should clearly identify all unitary costs of the elements involved (e.g. cost of node, cost of kilometer of fiber optic, etc.). The model should also provide the functionality to switch between different technological alternatives in different areas, providing the specific financial analysis for each of them.

Findings of the financial model should be summarized in the financial study. The Financial study should additionally include / develop:

i. business model and an implementation model for the network;

ii. estimation of the revenues associated per scenario according to the projected demand; and

iii. estimation of the Net Present Value (NPV), Internal Rate of Return (IRR) associated with each of the proposed investments, including the break-even point given the estimated cash flows for each of the alternatives identified;

iv. estimations should be accompanied by the corresponding conclusions specifically with regard to the recommendations on the technology alternatives chosen for each of the scenarios, networks and geographies, indicating the PROS and CONS of each technology beyond the mere cost-efficient approach.

Component 4: Recommendations

Taking into account the analysis performed under the above sub-components, Recommendations should summarize key findings per sub-component and formulate a set of comprehensive recommendations aimed to inform preparation of the Action plan for implementation of the new ANDE business model/s. Recommendations should as well facilitate the identification of the PPPs that can provide the needed investment.

The Recommendations should be discussed and consulted in a public workshop organized in Paraguay.

IV. PROJECT MANAGEMENT

4.1 Prospective Consulting Firm should define and implement appropriate management mechanisms, sound planning, and resource allocation, according to the proven expertise and prior knowledge of the subject;

4.2 As part of this task, the Consulting Firm should also provide justification for subcontracting, if required, interact with ANDE, CONATEL and DINAPI staff, and provide regular management reporting. This will ensure the punctual delivery of high quality results of the work within the budget allocated;

4.3 The prospective Consulting Firm is expected to submit to ANDE, CONATEL and DINAPI detailed Gantt Charts and accompanying documentation with sufficient details including:

- Scheduling of all Objectives, Outputs, and Activities within the Outputs;
- Identification of milestones and critical activities;
- Assignment of experts and man-days v. outputs and activities;
- Identification of possible risks and suggestions to mitigate them;
- Quality assurance and peer review measures to ensure high quality results;
- Detailed information on the expertise of the contractors on the tasks and topics of this tender including references to previous, relevant projects;
- Detailed CVs of the experts proposed to be involved in all activities of the project.

4.4 Based on the Gantt chart the contractor is expected to deliver the following documents regularly:

- A brief monthly progress report on the current activities (as they are defined in the Gantt chart), information on the progress achieved, next steps, possible risks affecting project, risk mitigation measures;
- Early warning reports, at any time, if emerging risks threaten key milestones of the project and when ANDE, CONATEL and DINAPI need to either be informed or take a decision;
- Prior to the kick-off meeting, the prospective contractor is expected to submit detailed Gantt charts and relevant documentation. These will be negotiated with ANDE, CONATEL and DINAPI and will be confirmed by the Inter-American Development Bank (IDB) as final.

V. DURATION, DELIVERABLES AND ADMINISTRATIVE ARRANGEMENTS

5.1 Objectives, Outputs, and Deliverables of this technical assistance project are summarized and graphically presented in the Table 1.

The contractor is required to outline in the technical proposal the timeline needed to carry out the project in high quality (e.g. including a Gantt chart). In the offer, the bidder should indicate the estimated amount of man-days required to accomplish all the tasks associated with this procurement.

The estimated timeframe for completion is 9 months.

Eligible consulting firms will be selected in accordance with the procedures set out in the Inter-American Development Bank: *Policy for the Selection and Contracting of Consulting firms for Bank-executed Operational Work* - GN-2765-1. All eligible consulting firms, as defined in the Policy may express an interest.

The IDB now invites eligible consulting firms to indicate their interest in providing the services. Interested consulting firms must provide information establishing that they are qualified to perform the Services (brochures, description of similar assignments, experience in similar conditions, availability of appropriate skills among staff, etc.). Eligible consulting firms may associate in a form of a Joint Venture or a sub-consultancy agreement to enhance their qualifications. Such association or Joint Venture shall appoint one of the firms as the representative.

Interested eligible consulting firms may obtain further information during office hours, 09:00 AM to 05:00 PM, (Washington D.C. Time) by sending an email to: Antonio Garcia Zaballos (antoniogar@iadb.org) and Enrique Iglesias Rodriguez (enriqueig@iadb.org)

Expressions of interest must be delivered by September, 29th, 2017 5pm (Washington D.C. Time) using the IDB Portal for Bank Executed Operations (http://beo-procurement.iadb.org/home)

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