IDB Inter-American Development Bank

REQUEST FOR EXPRESSIONS OF INTEREST
CONSULTING SERVICES

Selection # as assigned by e-Tool: EC-T1447-P003
Selection Method: Full competition
Country: Ecuador
Sector: IFD/CMF
Funding – TC #: ATN/KK-18541-EC
Project #: EC-T1447
TC name: Digital infrastructure in Ecuador as a trigger to overcome the effects of COVID
Description of Services: The general objective of this Technical Cooperation (TC) is to identify possible uses related to meaningful digital infrastructure based on the socioeconomic and digital maturity level. As part of the consultancy services will be designed the steps for the implementation of a data center and will present the best practice of Korean governments' use of ICT.

Link to TC document: https://www.iadb.org/en/project/EC-T1447

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. Expressions of interest must be delivered using the IDB Portal for Bank Executed Operations (http://beo-procurement.iadb.org/home) by: August, 7th , 5:00 P.M. (Washington D.C. Time).

The consulting services ("the Services") include:

1. *Review of the Strategies to developed Digital Skills designed by OECD, European Union and present the different uses related to the provision of public services.*
2. *Analysis on the level of access to Internet, quality of access, affordability, devices, uses and abilities in Ecuador.*
3. *Definition of key relevant uses based on the level of socioeconomic and digital maturity development.*
4. *Financial model related to the investment requirements and based on the cost scheme and possible scenarios in the short, medium and long term.*
5. *Case study; Digital Transformation in Korea*
6. *Case study on the ICT infrastructure monitoring system.*
7. *Suggestion of datacenter model. Including the different type of uses, the institutional framework, cost and benefits related to the construction and the sustainability model.*
8. *Proposal of capacity training of relevant government employees and experts on specific skills related to use of meaningful infrastructure.*

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. If the Consulting Firm is presented in a Consortium, it will designate one of them as a representative, and the latter will be responsible for the communications, the registration in the portal and for submitting the corresponding documents.

The IDB now invites eligible consulting firms to indicate their interest in providing the services described

below in the draft summary of the intended Terms of Reference for the assignment. 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

Inter-American Development Bank
Division: Connectivity, Markets and Finance (IFD/CMF)
Attn: Antonio Garcia Zaballos (antoniogar@iadb.org)

1300 New York Ave, NW, Washington DC 20577, USA
Tel: +12026232980
E-mail: antoniogar@iadb.org
Web site: www.iadb.org

IDB Inter-American Development Bank

Selection process EC-T1447-P003

TERMS OF REFERENCE

FEASIBILITY STUDIES RELATED TO THE APPLICATION SERVICE: INSTITUTIONAL AND TECHNICAL STUDY

Regional
EC-T1447

ATN/KK-18541-EC

Digital infrastructure in Ecuador as a trigger to overcome the effects of COVID.

1 Background and Justification

1.1 The use of Information and Communication Technologies (ICTs) services and applications available over the Internet can reinforce sectors such as education, health, business, and government, with broad implications for economic development, competitiveness, and innovation. Yet, harnessing the benefits of this new digital economy increasingly relies on the availability of broadband Internet in a country as evolving services and applications require broadband speed and bandwidth.

1.2 Broadband infrastructure is an enabler of development. According to several studies, a 10% growth of broadband penetration is associated with a 1.21% increase in the Gross Domestic Product (GDP) of high-income countries and a 1.38% increase in the GDP of low-income countries (World Bank, 2009). It is estimated that in the case of the LAC region, for a 10% growth in the penetration rate of broadband services, the GDP can be increased by 3.19%; the productivity by 2.61% and more than 67,000 jobs can be created.

1.3 The Government of Ecuador has launched the agenda connected Ecuador which intends to increase coverage to 98% of the population, reduce the internet prices, install more than 100 Wi-Fi hotspots, and evolve the 2G/3G customer base to new technologies in such a way that the country gets ready for the introduction of 5G across different sectors of the economy. most important challenge was adopting and finding usability of services. More specifically, by 2021 the main indicators of the agenda consist of: (i) increasing the 4G coverage to 80%, (ii) increasing the smartphone penetration up to 65%, (iii) increasing the penetration of fixed broadband services to 59% of the total households and (iv) increasing the penetration of computer up to 62%. The required investment to achieve these goals will benefit over 12,000 schools, more than 4,2 million households and almost 2,000 health centers.

1.4 Moreover, due to current ongoing unexpected pandemic situation (COVID-19), the deployment of broadband network to connect the hospitals and health centers has become the highest priorities. To respond to this highly contagious virus, real-time information sharing system through the Internet is necessary for the related organizations. Also, by deploying the broadband infrastructures to the rural areas and increasing the accessibility of public institutions like schools and government offices, ICT tools to overcome the pandemic crisis may be available.

1.5 ICT applications can play a vital role in fighting COVID-19. Korea was able to successfully flatten the curve on COVID-19 in only 20 days without enforcing extreme draconian measures that restrict freedom and movement of people.[1] Mobile devices and applications can be used to support early testing and contact tracing, government websites can share latest virus information and news, smart drones may be used to deliver medicine without face-to-face contact, and AI technology can be used to predict and prevent medical supplies and human resources.

2. Objectives

2.1. The general objective of this Technical Cooperation (TC) is to identify possible uses related to meaningful digital infrastructure based on the socioeconomic and digital maturity level. As part of the consultancy services will be designed the steps for the implementation of a data center and will present the best practice of Korean governments' use of ICT.

3. Scope of Services

3.1. **Type of consultancy:** Firm

3.2. **Start date and duration:** 9 months.

3.3. **Place of work /travel:** Place of residence. Travel required. During this period, the firm is expected to participate in a total of two (2) coordination meetings with IDB Specialists in Headquarters (Washington DC) and (2) presentation meeting with government of Ecuador.

3.4. **Qualifications:** The firm must have extensive experience in the Information and Communication Technologies sector, with Senior team members involved in projects in LAC or other developing regions. The firm must have an experience of implementing or operating the smart drone service infrastructure. The firm should be able to deliver detailed and accurate infrastructure model that meets the situation in the country.

4. Key Activities

4.1 Component 4: Identify the institutional strategy and the technical expertise in implementing a strategy to increase the use of meaningful infrastructure based on the development of the required skills related to cutting edge technologies**.** The objective for this component is to suggest cutting-edge ICT application which will support full utilization of the network to be provided.

[1] Flattening the curve on COVID-19, how Korea responded to a pandemic using ICT, The government of the Republic of Korea 2020

4.2 The activities to be included in the consultancy are:

- **a.** Review of the Strategies to developed Digital Skills designed by OECD, European Union and present the different uses related to the provision of public services.
- **b.** Analysis on the level of access to Internet, quality of access, affordability, devices, uses and abilities in Ecuador.
- **c.** Definition of key relevant uses based on the level of socioeconomic and digital maturity development.
- **d.** Financial model related to the investment requirements and based on the cost scheme and possible scenarios in the short, medium, and long term.
- **e.** Case study; Digital Transformation in Korea
- **f.** Case study on the ICT infrastructure monitoring system.
- **g.** Suggestion of datacenter model. Including the different type of uses the institutional framework, cost and benefits related to the construction and the sustainability model.
- **h.** Proposal of capacity training of relevant government employees and experts on specific skills related to use of meaningful infrastructure.

5. Expected Outcome and Deliverables

- **a.** Deliverable 1: An institutional and technical study on the ICT application and use of digital meaningful infrastructure across different sectors of the economy.
- **b.** Deliverable 2: Considering the current situation of Ecuador's infrastructure management system, and government officials and stakeholders' capabilities, should be able to provide the best way to implement the digital skills strategy that encourage the use of meaningful digital infrastructure.
- **c.** Deliverable 3: Phases in the implementation of a unique data center for the Government including, type of uses, institutional framework, cost and benefits, etc.
- **d.** Deliverable 4: Definition of a training program on digital skills that promotes the sustainability and use of the infrastructure that is identified.

6. Supervision and Reporting

6.1 Supervision and coordination of the consultant's work will be the responsibility of Antonio García Zaballos (IFD/CTI), Team Leader, antoniogar@iadb.org, telf. (202) 623-2980.

7. Schedule of Payments

7.1 Payment will be made as per the following schedule, upon approval by the Team Leader responsible for this TC.

7.2

Payment Schedule	
Deliverable	**%**
1. upon contract signature	20
2. upon approval of draft report related to deliverable 1	20
3. upon approval of draft report related to deliverable 2	20
4. upon approval of draft report related to deliverable 3	20
5. upon approval of draft report related to deliverable 4	20
TOTAL	100%

;