

## TECHNICAL COOPERATION ABSTRACT (TC-ABSTRACT)

### REGIONAL

#### I. BACKGROUND

**Country:** Regional

**TC Name:** Establishment of a Broadband Training Center

**TC Number:** RG-T2271 / RG-T2363

**Team Leader/Members:** Antonio Garcia Zaballos (Team Leader, IFD/CTI); Nathalia Foditsch (IFD/CTI); Jiyoun Son (IFD/CTI); Felix Gonzalez (IFD/CTI) and Cecilia Bernedo (IFD/CTI)

**TC Taxonomy:** Research and Development (RD)

**Authorization TC date:** May, 2013

**Donors providing funding:** To be determined (TBD)

**Beneficiary:** Central American Countries of: Nicaragua, Guatemala, Costa Rica, El Salvador, Panama, Honduras, and Dominican Republic

**Executing agency and contact name:** Inter-American Development Bank, Antonio García Zaballos (antoniogar@iadb.org)

**IDB Funding Requested:**

Special Broadband Fund (OC)	US\$ 400,000
Korea Fund for Technology and Innovation (KPK)	US\$ 300,000

**Local counterpart funding:**

Korea	US\$ 100,000
Hosting country	US\$ 400,000
<b>Total</b>	<b>US\$1,200,000</b>

**Execution period:** 12 months    **Disbursement period:** 15 months

**Required start date:** July, 2013

**Types of consultants:** Firm and individual consultants

**Prepared by Unit:** Division of Competitiveness, Technology and Innovation (IFD/CTI)

**Unit of disbursement responsibility:** IFD/CTI

**TC included in country strategy:** N/A    **TC included in CPD:** N/A

**GCI-9 sector priority** The current Sector Strategy: “Institutions for Growth and Social Welfare” identifies *improving innovation and productivity* as a major area where the Bank can help the region overcome the challenges that hinder growth and social welfare. To this end, the IDB will work towards strengthening institutions, and has specifically recognized the need to improve policies and governmental action in the ICT sector (par.5.21 of the referred to Sector Strategy). Consistent with the Strategy, the Bank has been working in the design and implementation of a Broadband Platform to accelerate the penetration rate and usage of broadband services in the Region.

## II. OBJECTIVES AND JUSTIFICATION OF THE TC

- 2.1 Broadband is well known as an enabler of development for countries in the pursuit of economic and social development since it drives economic growth by contributing to the enhancement of the national competitiveness, to the increase of productivity and efficiency, as well as to job creation. In recent years, the economic impacts of broadband, through its acceleration, penetration, adoption and effective use have brought clear social and economic benefits, which have been substantiated with concrete statistics. It has been estimated that 10% growth of broadband penetration would raise GDP of high-income countries by 1.21% and that of low-income countries by 1.38% (World Bank, 2009). In particular, in the Latin American and the Caribbean (LAC) Region, it is estimated that an increase of 10% in broadband penetration, on average, has been associated with the increase of 3.19% in GDP; 2.61% in productivity and a net generation of more than 67,000 jobs<sup>1</sup>.
- 2.2 According to the International Telecommunications Union, the average penetration rate of fixed broadband services in the Latin-American and the Caribbean Region (LAC) is below 5 percent. When we compare this figure with the penetration rate in other countries such as Denmark or Korea, where the penetration rate is around 40 percent, the disparity is clear. Moreover, substantial heterogeneity can be also observed when we compare penetration rates within the LAC region. Indeed there are wide differences between countries, for instance, whereas Barbados has a penetration rate above 20 percent, in Honduras or Guatemala reaches nearly a 1 percent. Even within each country there is a gap between those with and without internet access. In Brazil, for example, 60 percent of households in the wealthiest income quintile report access to the Internet whereas less than 3 percent of households in the poorest income quintile have access to the Internet.
- 2.3 There are various benefits that broadband might bring to the economy in terms of improvement in the delivery and accessibility of education and training, promotion of equality and inclusion of rural or disadvantaged communities, support to civil disaster relief, remote medical assistance (known as ‘telemedicine’), increasing competition and social cohesion and interaction, is leading the governments to announce significant broadband development programs in order to take advantage of the new and different technologies that are available.
- 2.4 Countries have been trying to develop a wide range of measures to foster the so called “information economy”, which is highly dependent on access to a fast and qualitative Internet. An example of these measures are the national broadband plans, a diverse set of initiatives of national governments in LAC developed in recent years, whose main objective is to accelerate the deployment and adoption of broadband services. Through these and other governmental initiatives, the demand for highly specialized experts is made clear.

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<sup>1</sup> García-Zaballos, A. / López-Rivas, R.: Governmental control on socio-economic impact of broadband in LAC countries. IDB, 2012.

- 2.5 Despite of the recent efforts, the challenge to accelerate the access, adoption and use of broadband through a government-lead approach remains in LAC. While many government officers in telecommunications government agencies in the Region are aware of the significance of broadband for the development of countries, their capability to diagnose problems and to provide appropriate solutions related to the various obstacles in the field is something that is many times insufficient. This technical cooperation focuses, thus, in how to build capacity within LAC countries in regards to broadband and its most prominent challenges.
- 2.6 **Objectives of the project.** Through the establishment of a Broadband Training Center, there is the aim to increase the capacity of government officials to identify regulatory and competition problems and train them in specific issues that foster investment and promote a sustainable level of competition. These training courses will be conducted both, online and onsite. The Center will be a hub for the regional dialogue on topics related to Broadband Internet where specific worldwide experiences and lessons learned will be presented and discussed in onsite sessions.

### III. DESCRIPTION OF ACTIVITIES

- 3.1 The activities to be implemented within this component correspond to the conceptualization, planning and legal formalization of the Broadband Training Center Project, which will entail:
- A thorough assessment of specific needs and interests of the LAC Governments in regards to training related to Broadband, which will serve as the basis for the development of training material for the Center.
- a. The establishment of partnerships with private and public institutions working on issues of relevance to the Center.
  - b. The development of governance framework for the Center, encompassing:  
(i) the assignation of responsibilities and rights for each member involved;  
and (ii) an assessment of possible funding mechanisms aiming at the sustainability of the Center.
  - c. The legal formalization of the institution, which will have the status of non-profit organization.
- 3.2 Further details on these activities are described below:

**Activity 1 – Development of training courses and partnership building** Under this activity, a thorough assessment of specific needs and interests of the LAC Governments in regards to training related to Broadband will be undertaken. Topics will range from regulatory and policy matters through technical aspects of networks and deployment of new technologies. In order to assess the specific needs of the countries, National Schools of Public Administration, Telecommunication agencies and Ministries, and other governmental institutions will be consulted. This activity comprises, moreover, the development of courses and educational material related to them. Not only new content will be developed,

but also existing content will be licensed. Priority will be given to content with free-of-charge licenses. Courses will be tailor-made depending on the target audience, which might vary depending on the course and country to which the courses are going to be provided. One of the strategic approaches of the Center is to make experts worldwide available as lecturers, as well as developers of the materials by effectively using the convening power of the Center. For this reason, the establishment of partnerships with private and public institutions specialized in the topics of relevance for the Center is a must. Countries with successful experiences on broadband issues, such as Korea, international agencies such as the United Nations, as well as private companies are some of the possible partners that will be approached.

- 3.3 **Activity 2– Development of governance and funding frameworks.** Under this activity, the governance and the funding framework for the Center will be developed. The governance framework will address the assignation of responsibilities and rights for each member involved; as well as the creation of governing bodies and the selection of members. Furthermore, the funding framework will be developed after an assessment of funding sources and mechanisms as well as the possible business models aiming at the sustainability of the Center.
- 3.4 **Activity 3 – Legal formalization.** In order to start its activities, the Center will have to be legally formalized. This formalization comprises the development of the articles of incorporation of the Center registered under an appropriate legal status. Due to its nature, whatever the legal status with the obligation of reinvesting any profits into advancing its nonprofit mission.
- 3.5 **Activity 4 – Design and construction of the Center.** A high level design shall be offered to the hosting country to set up the Center. The Center, according to the design, shall purchase and install hardware and software, and provide telecommunication connectivity. The hosting country shall be responsible for creating facilities suitable for learning of the trainees.
- 3.6 **Immediate results.** Upon the completion of the activities aforementioned, the Center will have been conceptualized and legally formalized. Through the completion of the activities presented on this document, the Center will have all the necessary conditions to start being implemented.
- 3.7 **Intermediate results.** While detailed and quantifiable data on the impact of the Center will have to be gathered in the future, a significant impact is expected in regards to capacity of governments in addressing the many challenges of dealing with the public policies and regulations related to the access, adoption and use of the Broadband. With a better understanding of such issues, countries will be more capable of fostering competitive broadband markets, which will ultimately allow for the universal access to the Internet. Lastly, economic and social gains are expected, such as jobs generation, the increased productivity in both public and private sectors, and the growth in the accessibility to government services.

**Table 3.1: Indicative matrix of the results**

Results Statement	Indicator	Baseline	Year 1
1. Academic framework is developed	Number of syllabi of training courses developed	0	4
2. Training material on the topics chosen as a priority by the beneficiary countries is developed	Number of course books developed	0	4
3. Partnerships with public and private institutions with expertise in the topics related to the Center are formed	Number of memorandums of understanding signed	0	3
4. Funding sources and business models are defined	Business model plan approved by the IFD/CTI	0	1
5. Governance framework of the Center is developed	Articles of incorporation developed	0	1
6. Center legally formalized	Articles of incorporation of the Center registered under an appropriate legal status	0	1

**Table 3.2: Budget of reference (USD)**

Activities	Description	IDB	Korea	Hosting country	Total
1. Course development and partnership building	Selection of topics, development of course books and syllabi and establishment of partnership with private and public institutions, as well as with individuals knowledgeable on the topics of interest of the Center	550,000	100,000		650,000
2. Development of governance and funding frameworks	Development of a governance framework as well as a business plan for the Center	75,000			75,000
3. Legal formalization	Development of the articles of incorporation and legal personality of the Center conferred	75,000			75,000
4. Design and construction of the Center	Development of the design for facilities and construction and installation of hardware and			400,000	400,000
<b>Total</b>		<b>700,000</b>	<b>100,000</b>	<b>400,000</b>	<b>1,200,000</b>

#### IV. EXECUTING AGENCY AND EXECUTING STRUCTURE

4.1 Considering the project is regional and needs extensive partnership with international organizations, academies and private firms, the executing agency will be the IFD/CTI Division, which will operate in coordination with the Korean government, and the government of the hosting country.

## **V. PROJECT RISKS**

- 5.1 This project entails two risks that could potentially affect the impact and quality of the training and the stability of the Center: (i) how to effectively collect and address each country's demands and interests, and accurately reflect them into the training courses; and (ii) how to sustain the Center after the three-year commitment from the IDB and Korean government has elapsed.
- 5.2 The first risk will be mitigated by utilizing a top-down approach in developing and designing the courses and contents, meaning that the content is going to be developed in accordance to the needs of the clients. The second risk will be mitigated by gradually building consensus among stakeholders in the process of operating the Center in regards to the operation of the Center as well as possible funding opportunities and partnerships that would provide for its sustainability. With countries' willingness to continue to operate the Center based upon positive results and impact from the initial three-years operation, there are several options for the funding model, such as the following: (i) co-commitment and funding by participating countries; (ii) combination of funding by both participating countries and other public and private institutions; and (iii) formalization of the Center as a part of the IDB. .

## **VI. EXCEPTIONS TO THE POLICY OF THE BANK**

- 6.1 There are no exceptions to the policy of the Bank.

## **VII. ENVIRONMENTAL STRATEGY**

- 7.1 Given that the current TC revolves around a study, there are no social or environmental risks associated with it. This operation is classified as a Category "C" according to the classification toolkit of the Bank (see the link: [IDBDocs#37657368](#)).