

TECHNICAL COOPERATION DOCUMENT (TC-DOCUMENT)

REGIONAL

I. BASIC INFORMATION

Region:	Latin America and the Caribbean (LAC)
TC Name:	Development of a broadband index ¹ and a balanced score card for LAC
TC Number:	RG-T2083
Team Leader/Members:	Antonio García Zaballos (IFD/CTI); Rafael Anta (IFD/CTI); Jiyoung Son (IFD/CTI); Bernardita Saez (LEG/SGO); and Cecilia Bernedo (IFD/CTI).
Date of TC Abstract authorization:	December 6, 2011
Donors providing funding:	Korea Fund for Technology and Innovation (KPK)
Beneficiary	Latin America and the Caribbean Region (LAC)
Executing Agency and contact name:	Inter-American Development Bank (US-IDB) Antonio García Zaballos
IDB Funding Requested:	US\$500,000.00
Local counterpart funding, if any:	N/A
Execution period:	18 months
Disbursement period:	24 months
Required start date:	March 23, 2012
Types of consultants:	Individuals and consulting firm
Prepared by Unit:	Competitiveness and Innovation Division (IFD/CTI)
Unit of Disbursement Responsibility:	IFD/CTI
TC Included in Country Strategy	No, it is a regional project
TC included in CPD	No, it is a regional project
GCI-9 Sector Priority:	IFD has been commissioned to design and implement a Broadband Platform to accelerate the penetration rate and usage of broadband services in the Region. The activities that are included in this technical cooperation will contribute to that goal.

II. DESCRIPTION OF THE ASSOCIATED LOAN/GUARANTEE

- 2.1 No loan or guarantee associated. Stand-alone operation

¹ The European Commission has launched a broadband index that benchmarks the overall performance of the Member States on a range of factors, which include speeds, rural coverage, affordability, innovation and other socio-economic dimensions. See the link in: http://ec.europa.eu/information_society/europe/i2010/bpi/index_en.htm.

III. OBJECTIVES AND JUSTIFICATION OF THE TC

- 3.1 **Justification.** According to the International Telecommunications Union, the average penetration rate of fixed broadband services in the Latin-American and the Caribbean Region (LAC) was below 5 percent in 2010. When we compare this to other countries such as Denmark or Korea where the penetration rate is around 40 percent, the disparity is clear. Moreover, substantial heterogeneity can also be 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 it only reaches to nearly 1 percent. Even within each country there is a gap between those with access to Internet by income level. For example, in Brazil 60 percent of households in the wealthiest income quintile report access to the Internet at home, whereas less than 3 percent of households in the poorest income quintile report such access. However, there is an increasing penetration of mobile broadband service in countries such as Venezuela, Brazil or Argentina which have penetration rates above 10 percent.
- 3.2 Therefore, different types of gaps can be identified: (i) between the LAC countries and other regions of the world; (ii) within the LAC countries; and (iii) between the geographic areas and economic status of households in any specific country. In addition, these gaps take different dimensions depending on whether we refer to access, quality, price, use and speed. In fact, the proactive policies that might be implemented at a public and/or private level might be different and should account for the maturity of the broadband market regarding the aforementioned dimensions.
- 3.3 To bridge these gaps the IDB is already working on a platform to accelerate broadband access and its use. The platform is vigorously pursuing progress in four strategic areas:
- a. The development of public policies, which entails the development of broadband plans and broadband strategies for digitalization.
 - b. The development of strategic regulations, which requires updating regulatory frameworks to incentivize lowering prices and evolving towards universal broadband access and use.
 - c. The deployment of infrastructure to increase penetration of services and applications through public-private partnerships and public investments.
 - d. Support capacity building efforts in the public and the private sector to develop innovative services and applications.
- 3.4 In Brazil, on November 29, 2011, the Union of South American Nations (UNASUR) announced that the 12 countries of the Southern Cone agreed upon a set of mandates that they will pursue to address the region's gaps in broadband penetration, so that the interconnection within the Latin American and Caribbean region will be improved and the cost of international Internet connectivity will be reduced. Similarly, at a broadband forum co-organized by the IDB on November 7, 2011, Caribbean Ministers of telecommunications requested an assessment of the broadband infrastructure and regulatory frameworks in the region and the

development of a proposal to increase awareness and training in the Caribbean. The IFD/CTI Division has been commissioned by President Luis Alberto Moreno to work in the design and implementation of a broadband platform. The broadband platform will be focused on the following pillars: (i) Development of broadband plans and governance model, (ii) Review of the regulatory framework, (iii) Infrastructure deployment to widespread the usage and adoption of broadband, and finally (iv) Development of specific services and applications in sectors as health, SMEs, Education and Government. One important aspect to open the dialogue on these issues with the Government of the LAC Region is by making an assessment on where they are and which particular actions should be taken to improve the current situation. This TC will help on that.

- 3.5 **Objective.** This regional initiative aims to develop, in an interactive, user-friendly Web-based platform, key indicators to measure progress in broadband development for all the countries of the region. The identified indicators will have two dimensions: (i) ecosystem (regulatory frameworks, public policies, business climate); and (ii) infrastructure (access, capabilities, network availability).
- 3.6 Through the analysis of the identified indicators, recommendations will be provided on specific actions that could be taken by governments at a regional and country-by-country basis to accelerate the penetration and productive usage of broadband services.

IV. DESCRIPTION OF ACTIVITIES/COMPONENTS AND BUDGET

- 4.1 The activities to be developed are grouped under two major components: (i) development of a broadband index ranking broadband adoption within the region and on a country-by-country basis; and (ii) development of a balance scorecard. The specific the activities are as follows:

A. Component 1: Development of a broadband index

- 4.2 **Activity 1. Identification of key variables and information gathering.** In particular, identify which particular variables related to a country's ecosystem and infrastructure could be considered and the availability of information for each of them. Among others, the following variables should be considered:

Table 4.1. Variables to be considered in the development of a broadband index

Ecosystem dimension	Infrastructure dimension
<ul style="list-style-type: none"> • Laws relating to ICT • Burden of government regulation • Intellectual property protection • ICT competition • Intensity of local competition • Capacity of innovation • Procedures to start a business • Procedures to enforce a contract • Efficiency of legal framework 	<ul style="list-style-type: none"> • Households with a Personal Computer (PC) • Electricity production • International Internet Bandwidth • Mobile subscriptions with data access • Fixed telephone lines • Availability of scientists and engineers • Local availability of specialized research and training services • Government procurement of advanced technology

- 4.3 Notice that there are thousands of Key Performance Indicators (KPI), which could be used to have an understanding on which is the performance of every country in terms of the ecosystem and infrastructure dimension. The reason why we have selected the variables included in the above table is mainly because we are aware that these variables do exist and they are publicly available either through institutions like the International Telecommunications Union or through publications under the umbrella of the World Economic Forum (WEF). On top of that, the variables considered capture the aforementioned four pillars of the broadband platform in which the IDB is currently working on (see ¶3.4).
- 4.4 **Activity 2. Design of the index, taking into account the weights associated with each variable.** This activity will be related to the structure of the index, including the weights and methodology followed, and paying special attention to sub-indexes to group the information related to ecosystem and infrastructure.
- 4.5 **Activity 3. Scattering plot, showing the state of the art in the four regions: (i) Caribbean, (ii) Central America, (iii) Andean countries, and (iv) Southern Cone.** Once the index has been designed and run, the results will be presented for the aforementioned regions and particularly, the situation will be compared among peers with respect to different years.
- B. Component 2: Development of balanced scorecard**
- 4.6 **Activity 4. Identification of actions to be taken at regional and country levels and development of a Website tool.** With the qualitative and quantitative analysis done, a balanced scorecard model will be designed to show on a country-by-country basis which type of recommendation should be given on: public policy, strategic regulation, infrastructure deployment, services, applications and capacity building. That information will be published using a friendly Website tool.
- 4.7 **Activity 5. Organization of an event to present the results of the study and dialogue with the governments of the region.** This activity involves the presentation of the results achieved in an event to open a dialogue with the Governments of the countries.
- 4.8 **Activity 6. Publication of a report with the results and the methodology followed.** The methodology and the results will be documented in a paper and specific presentations will be given in two events.

Table 4.2. Indicative Results Matrix

Suggested Indicator (Outcome)	Base Line	Target
The results of the study are quoted	0	3
The results are presented in regional events	0	2

Table 4.3. Indicative Budget

Activity/Component	Description	Total Funding US\$
Component 1: Development of a broadband index which ranks the broadband adoption within the region and in a country level.	Activity1: Identification of key variables and information gathering	15,000
	Activity 2: Design of the index	200,000
	Activity 3: Diagram, showing the state of the art in the four regions: (i) Caribbean, (ii) Central America, (iii) Andean countries, and (iv) Southern Cone.	50,000
Component 2: Development of a balanced scorecard	Activity 4: Identify actions to be taken at regional and country-by-country basis and website tool	35,000
	Activity 5: Dialogue with the Governments	50,000
	Activity 6: Publication of a report	25,000
Technical Support	Support in the execution and coordination of the aforementioned activities	80,000
Communications plan	Regional dialogue to present the results of the analysis	45,000
TOTAL		US\$500,000

V. EXECUTING AGENCY AND EXECUTION STRUCTURE

- 5.1 This Technical Cooperation will be executed by the Competitiveness and Innovation Division and it is part of a comprehensive set of documents being prepared as part of the design and implementation of the Bank's broadband platform.
- 5.2 The Competitiveness and Innovation Division has been commissioned to define the broadband strategy of the IDB to accelerate the penetration and usage within the LAC countries and it is taking a very active role to achieve this goal. The beneficiary countries are therefore the entire LAC region.

VI. MAJOR ISSUES

- 6.1 The major risk identified is the lack of reliable information to determine the best way in which the broadband infrastructure should be deployed to accelerate its penetration and usage in the region. To mitigate the risk, the project team will contact the respective governments agency of UNASUR countries and the private sector (telecom operators, vendors, associations, etc.) to identify alternative variables that better reflect the existing sociodemographic and technical conditions in the participating countries.

VII. EXCEPTIONS TO BANK POLICY

- 7.1 No exceptions to Bank policy are foreseen.

VIII. ENVIRONMENTAL AND SOCIAL STRATEGY

- 8.1 According to the toolkit, the classification of this project is C—no environmental or social risks expected (see electronic link: [IDBDOCS#36568896](#)).

Annexes:

- **Annex I: Terms of Reference**
- **Annex II: Procurement Plan**

REGIONAL

DEVELOPMENT OF A BROADBAND INDEX AND A BALANCED SCORECARD FOR LAC (RG-T2083)

CONSULTANCY TO SUPPORT THE COORDINATION, TECHNICAL MANAGEMENT AND IMPLEMENTATION OF ACTIVITIES

TERMS OF REFERENCE

I. BACKGROUND

- 1.1 **Justification.** According to the International Telecommunications Union, the average penetration rate of fixed broadband services in the Latin-American and the Caribbean Region (LAC) was below 5 percent in 2010. When we compare this to other countries such as Denmark or Korea where the penetration rate is around 40 percent, the disparity is evident. Moreover, substantial heterogeneity can also be 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 this rate reaches nearly a 1 percent. Even within each country there is a gap between those with access to Internet by income level; in Brazil, for example, 60 percent of households in the wealthiest income quintile report access to the Internet at home, whereas less than 3 percent of households in the poorest income quintile report access. However, there is an increasing penetration of mobile broadband service in countries as Venezuela, Brazil or Argentina who have penetration rates above 10 percent.
- 1.2 Therefore, different types of gaps could be identified: (i) between the LAC countries and other regions of the World, (ii) within the LAC countries, and (iii) between the geographic areas and economic status of households in any specific country. In addition, these gaps might take different dimensions depending whether we talk about access, quality, price, use, and speed. In fact, the proactive policies that might be implemented at a public and/or private level might be different and should account the maturity of the broadband market regarding the aforementioned dimensions.
- 1.3 The digital divide persists for the Latin American and Caribbean region at three levels. The first level is the global divide between Latin America and the Caribbean and OECD countries; the second level is the intraregional divide between different countries; and the third level is the internal divide within individual Latin American and Caribbean countries. These gaps are due to low broadband coverage levels and the high costs for connectivity. In addition, the

- Region is characterized by low levels of adoption due, among other factors, to lack of skills and complimentary applications.
- 1.4 To bridge these gaps the IDB is already working on a platform to accelerate broadband access and its use. The platform is vigorously pursuing progress in four strategic areas:
- a. The development of public policies, which entails the development of broadband plans and broadband strategies for digitalization.
 - b. The development of strategic regulations, which requires updating regulatory frameworks to incentivize lowering prices and evolving towards universal broadband access and use.
 - c. The deployment of infrastructure, which will increase penetration of services and applications through public private partnerships and public investments; and
 - d. Capacity building in the public and the private sector that will develop innovative services and applications and support capacity building efforts.
- 1.5 In Brazil, on November 29, 2011, UNASUR announced that the 12 countries of the Southern Cone in South America agreed upon a set of mandates that they will pursue to address the Region's gap in broadband penetration, so that the interconnection within the Latin American and Caribbean region will be improved and the cost of international Internet connectivity will be reduced, similarly at a broadband forum co-organized by the IDB on November 7, 2011—Caribbean Ministers requested an assessment of the broadband infrastructure and regulatory frameworks in the region and the development of a proposal to increase awareness and training in the Caribbean. In this regard, it is expected to have an increasing demand for these services and the development of the balance scorecard will be highly useful for opening regional dialogues.
- 1.6 **RG-T2083.** The Bank has approved a technical regional cooperation related to this important topic, which is being supported by the Korea Fund for Technology and Innovation. The TC provides resources to develop, in an interactive, user friendly web-based platform, key indicators to measure progress in broadband development for all the countries of the Region. Through the analysis of the identified indicators, recommendations will be provided on specific actions to be taken by Governments at a regional and country-by-country basis to accelerate the penetration and productive usage of broadband services.
- 1.7 These terms of reference define the required background and expertise, as well as the objectives and activities to be carried out by a consultant to support the execution of this TC.

II. CONSULTANCY OBJECTIVES

- 2.1 The main objective of this consultancy is to support the Bank, specifically IFD/CTI, in the execution of RG-T2083.

III. CONSULTANCY CHARACTERISTICS

- 3.1 **Consultancy type:** Individual - International
- 3.2 **Beginning date and duration:** X month period, from April 9th, 2012 to X.
- 3.3 **Place of work:** Inter-American Development Bank – Headquarters, Washington DC.
- 3.4 **Consultant's qualifications:** International consultant with a master's degree in Economics, Political Science, Business, Public Administration or related fields. The consultant should have at least 5 years of relevant experience in regional project design, coordination and technical management. The consultant should have high-quality communication skills and be fluent in both Spanish and English. In addition, the consultant must have at least one year of experience on Information and Communication Technology.
- 3.5 **Source of funding:** RG-T2083.

IV. ACTIVITIES

- 4.1 The activities to be developed under the TC are grouped in two major components: (i) development of a broadband index which ranks the broadband adoption within the region and on a country-by-country basis; and (ii) development of a balanced scorecard. The Consultant will provide technical, management and logistical support to facilitate the implementation of the activities required under each component:
- 4.2 **COMPONENT 1.** To support the DEVELOPMENT OF A BROADBAND INDEX, specifically undertaking tasks to facilitate the implementation of activities identified under this component
- 4.3 **Activity 1.** Identification of key variables and information gathering. Specific tasks:
- Undertake research and creating a repository of available publications and knowledge related to broadband indexes worldwide.
 - Analyze and identify current indexes which the broadband initiative can build upon.
 - Contact and engage other international organizations that are actively working in broadband in the region to explore potential areas of collaboration.
 - Contact and engage experts, academics and practitioners, as required.
- 4.4 **Activity 2.** Design of the index, taking into account of the weights associated with each variable. Specific tasks:

- Identify recognized firms, experts and institutions with experience in this field and create a short list of recommendations based on previous experience, competence and cost.
 - Support and coordinate the hiring of consulting firms or institutions related to the development of the broadband index and its different variables. This task includes conducting appropriate follow-up and providing support, as required, to ensure a timely and adequate delivery of the product.
- 4.5 **Activity 3.** Scattering plot, showing the state of the art in the four regions: (i) Caribbean; (ii) Central America; (iii) Andean countries; and (iv) Southern Cone. Specific tasks:
- Support the gathering of the required data to elaborate the index for the different countries of the region.
- 4.6 **COMPONENT 2.** To support the DEVELOPMENT OF A BALANCED SCORECARD (BSC) model, specifically undertaking tasks to facilitate the implementation of activities identified under this component:
- 4.7 **Activity 4.** Develop a balance scorecard, giving specific recommendations on the variables included within the ecosystem dimension (ICT Policies/Regulations, Market Dynamism, Business Climate) and the infrastructure dimension (Network infrastructure, access and capabilities). Specific tasks:
- Identify recognized firms, experts and institutions with experience in this field and create a short list of recommendations based on previous experience, competence and cost.
 - Support and coordinate the hiring of international experts or consulting firms to develop a broadband BSC model, based on the results of the index. This task includes conducting appropriate follow-up and providing support, as required, to ensure a timely and adequate delivery of the product.
 - Support the hiring of a service provider to develop the main IT aspects of the initiative (including applications for the Index and the BSC model per country, back-office, Web design, graphic design and presentation).
- 4.8 **Activity 5.** Dialogues with the governments of the region to present the results of the study and organization of an event. Specific tasks:
- Support the organization of a dialogue with the governments of the region to present the results of the broadband development index and the BSC model, and receive their comments and feedback. This activity includes providing technical and logistical support, and preparing the final report of the meeting, highlighting the main conclusions of the dialogue to be taken into consideration in the final publication
- 4.9 **Activity 6.** Publish a report with the results and the methodology followed:
- Coordinate the elaboration of the final publication of the Technical Cooperation, presenting and analyzing the results of the broadband index and BSC for Latin America. Includes conducting the appropriate follow-up to ensure compliance with the Bank's Protocol for VPS/VPC Publications.

V. REPORTS / PRODUCTS

- 5.1 The consultant must submit progress reports to be approved by team leader.

VI. METHOD OF PAYMENT

- 6.1 Payment will be made twice monthly upon approval by the Team Leader responsible for this TC (See item VII below).

VII. COORDINATION

- 7.1 Supervision and coordination of the Consultant's work will be the responsibility of Antonio García Zaballos (IFD/CTI), Tem Leader, antoniogar@iadb.org, tel. (202) 623-2980.

REGIONAL

DEVELOPMENT OF A BROADBAND INDEX AND A BALANCED SCORECARD FOR LAC (RG-T2083)

CONSULTANCY FOR THE DESIGN, DEVELOPMENT AND PRODUCTION OF A COUNTRY ICT BALANCED SCORECARDS

I. BACKGROUND

- 1.1. **Justification.** According to the International Telecommunications Union, the average penetration rate of fixed broadband services in the Latin-American and the Caribbean Region (LAC) was below 5 percent in 2010. When we compare this to other countries such as Denmark or Korea where the penetration rate is around 40 percent, the disparity is clear. Moreover, substantial heterogeneity can also be 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 access to internet by income level; in Brazil, for example, 60 percent of households in the wealthiest income quintile report access to the internet at home and less than 3 percent of households in the poorest income quintile report access to Internet. However, there is an increasing penetration of mobile broadband service in countries as Venezuela, Brazil or Argentina who have penetration rates above 10 percent.
- 1.2. Therefore, different types of gaps could be identified: (i) between the LAC countries and other regions of the World, (ii) within the LAC countries, and (iii) between the geographic areas and economic status of households in any specific country. In addition, these gaps might take different dimensions depending whether we talk about access, quality, price, use, and speed. In fact, the proactive policies that might be implemented at a public and/or private level might be different and should account the maturity of the broadband market regarding the aforementioned dimensions.
- 1.3. The digital divide persists for the Latin American and Caribbean region at three levels. The first level is the global divide between Latin America and the Caribbean and OECD countries; the second level is the intraregional divide between different countries and the third level is the internal divide within individual Latin American and Caribbean countries. These gaps are due to low broadband coverage levels and the high costs for connectivity. In addition the Region is characterized by low levels of adoption due, among other factors, to lack of skills and complimentary applications. To bridge these gaps the IDB is already working on a platform to accelerate broadband access and its use. The platform is vigorously pursuing progress in four strategic areas:

- a. The Development of Public Policies which entails the development of broadband plans and broadband strategies for digitalization;
 - b. The Development of Strategic Regulations which requires updating regulatory frameworks to incentivize lowering prices and evolving towards universal broadband access and use;
 - c. The Deployment of Infrastructure which will increase penetration of services and applications through Public Private Partnerships and public investments; and
 - d. Capacity Building in the Public and the Private Sector that will develop innovative services and applications and support capacity building efforts.
- 1.4. In Brazil, on November 29, 2011 - UNASUR announced that the 12 countries of the Southern Cone in South America agreed upon a set of mandates that they will pursue to address the region's gap in broadband penetration, so that the interconnection within the Latin American and Caribbean region will be improved and the cost of international internet connectivity will be reduced, similarly at a broadband forum co-organized by the IDB on November 7, 2011, Caribbean Ministers requested an assessment of the broadband infrastructure and regulatory frameworks in the region and the development of a proposal to increase awareness and training in the Caribbean. In this regard, it is expected to have an increasing demand for these services and the development of the balance scorecard will be highly useful for opening regional dialogues.
- 1.5. **RG-T2083.** The Bank has approved a Technical Regional Cooperation project related to this important topic, which is being supported by the Korea Fund for Technology and Innovation. The TC provides resources to develop, in an interactive, user friendly web-based platform, key indicators to measure progress in broadband development for all the countries of the Region. Through the analysis of the identified indicators, recommendations will be provided on specific actions to be taken by Governments at a regional and country by country basis to accelerate the penetration and productive use of broadband services by individuals, businesses and governments.
- 1.6. These terms of reference define the required background and expertise, as well as the objectives, activities and deliverables to be carried out by a Consulting Consultant or Institution hired to design, develop, produce and present a Country ICT Balanced Scorecard. This product corresponds to Component 2 of the Regional Technical Cooperation in reference.

II. CONSULTANCY OBJECTIVES

- 2.1. The main objective of this consultancy is to support the Bank, specifically IFD/CTI, in the execution of Component 2 of RG-T2083. The Consultant or institution hired under these TORs, is responsible for the overall design,

development and final production of the *Country ICT Balanced Scorecard*, a key component of the IDB's thought leadership on the state of adoption of Information and Communications Technologies (ICTs) in the Latin America region.

- 2.2. The *Country ICT Balance Scorecard* will provide, across countries and within countries, a quantitative and qualitative assessment, measuring and comparing the level of sophistication of key components of the ICT environment. The Country ICT Balanced Scorecard will offer policy makers a comprehensive view and narratives on the strengths and weaknesses of ICT environments in each country, providing an informed basis for policy and regulatory discussions for promoting greater adoption of ICTs in the region.
- 2.3. The scope of the *Country ICT Balanced Scorecard* will cover Latin America IDB country members, subject to available ICT related indicators.

III. CHARACTERISTICS OF THIS CONSULTANCY

- 3.1. **Consultancy type:** Individual consultant
- 3.2. **Start date and duration:** from X, to X, 2012.
- 3.3. **Place of work /travel:** Place of residence. No travel required. During this period, the consultant is expected to participate in a total of two (2) coordination meetings with IDB Specialists in Headquarters (Washington DC) and (1) presentation meeting with government representatives. Additional funding will be provided by the IDB to cover all travel related expenses. Travel related expenses will be covered by the consultant, under the terms of this contract. No additional funding will be provided by the IDB.
- 3.4. **Qualifications:** The consultant will have experience in designing BSC models for non-corporate actors, preferably focused on qualitative and quantitative analysis related to ICT use.
- 3.5. **Source of funding:** RG-T2083

IV. ACTIVITIES AND PRODUCTS

- 4.1. The consultant will be responsible for the overall design, development and final production of the *Country ICT Balanced Scorecard* and will produce a comprehensive final report (50+ pages) of the current state of the ICT environment in Latin American countries, including text, charts, diagrams and statistical appendixes:

4.2. Project Implementation and Management Duties:

- Build on the work being done in the framework of the Latin America ICT Diagnostic Map, specifically by utilizing the key indexes identified and including a specific index on ICT adoption.
- Develop a theoretical explanation on why the ICT environment elements (of infrastructure and ecosystem) need a third component (ICT adoption) to provide a comprehensive view in the Scorecard.
- Develop a logically and theoretically sound methodology for the scorecard (indexed views) on the current state of the ICT environment in Latin American countries.
- Develop a methodology to present the Scorecard model in traffic lights and “Harvey Balls” Diagrams.
- Measure all key sub-index components.
- Develop a Latin America aggregate view (presenting all countries).
- Develop a deep dive into at least five key priority countries.
- For each country, highlight key variables at the sub-index level, identifying potential action areas.
- For each country, for each sub-index, prepare a comparison to relevant country groups to allow for identification of outperformance / average / underperformance

V. PAYMENT

5.1. Payment will be made as per the following schedule, upon approval by the Team Leader responsible for this TC (See item VI below).

5.2. **Schedule of payments:**

- a. 30% upon contract signature;
- b. 30% upon approval of draft report, and
- c. 40% upon approval of final report

VI. COORDINATION

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

REGIONAL

DEVELOPMENT OF A BROADBAND INDEX AND A BALANCED SCORECARD FOR LAC (RG-T2083)

CONSULTANCY FOR THE DESIGN, DEVELOPMENT AND PRODUCTION OF A LATIN AMERICA ICT DIAGNOSTIC MAP

I. BACKGROUND

- 1.1 **Justification. ustification:** According to the International Telecommunications Union, the average penetration rate of fixed broadband services in the Latin-American and the Caribbean Region (LAC) was below 5 percent in 2010. When we compare this to other countries such as Denmark or Korea where the penetration rate is around 40 percent, the disparity is clear. Moreover, substantial heterogeneity can also be 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 access to internet by income level; in Brazil, for example, 60 percent of households in the wealthiest income quintile report access to the internet at home and less than 3 percent of households in the poorest income quintile report access to Internet. However, there is an increasing penetration of mobile broadband service in countries as Venezuela, Brazil or Argentina who have penetration rates above 10 percent.
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- Region is characterized by low levels of adoption due, among other factors, to lack of skills and complimentary applications.
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 - f. The Development of Strategic Regulations which requires updating regulatory frameworks to incentivize lowering prices and evolving towards universal broadband access and use;
 - g. The Deployment of Infrastructure which will increase penetration of services and applications through Public Private Partnerships and public investments; and
 - h. Capacity Building in the Public and the Private Sector that will develop innovative services and applications and support capacity building efforts.
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- 1.8 These terms of reference define the required background and expertise, as well as the objectives, activities and deliverables to be carried out by a Consulting Firm or Institution hired to design, develop, produce and present a Latin America ICT Diagnostic Map. This product corresponds to Component 1 of the Regional

Technical Cooperation in reference, which calls for the “development of a broadband index which ranks the broadband adoption within the region and on a country by country basis”.

II. CONSULTANCY OBJECTIVES

- 2.1 The main objective of this consultancy is to support the Bank, specifically IFD/CTI, in the execution of Component 1 of RG-T2083. The firm or institution hired under these TORs, is responsible for the overall design, development and final production of the Latin America ICT Diagnostic Map, a key component of the IDB’s thought leadership on the state of adoption of Information and Communications Technologies (ICTs) in the Latin America region.
- 2.2 The *ICT Diagnostic Map* will measure key components contributing to ICT adoption at the country level, providing a statistical and graphical representation that will serve to inform policy makers and help identify critical constraints to wider ICT use in the region.

III. CHARACTERISTICS OF THIS CONSULTANCY

- 3.1 **Type of consultancy:** Firm, international
- 3.2 **Start date and duration:** from X, to X, 2012.
- 3.3 **Place of work /travel:** Place of residence. No travel required.
OR During this period, a firm representative is expected to participate in a total of two (2) coordination meetings with IDB Specialists in Headquarters (Washington DC) and (1) presentation meeting with government representatives. Additional funding will be provided by the IDB to cover all travel related expenses. **OR** Travel related expenses will be covered by the firm, under the terms of this contract. No additional funding will be provided by the IDB.
- 3.4 **Qualifications:** The firm will have experience in quantitative and statistical analysis related to ICT use.
- 3.5 **Source of funding:** RG-T2083

IV. ACTIVITIES AND PRODUCTS

- 4.1 The firm will be responsible for the overall design, development and final production of the Latin America ICT Diagnostic Map and will produce a comprehensive final report (50+ pages) of the current state of the ICT

environment in Latin American countries, including text, charts, diagrams and statistical appendixes:

4.2 Project Implementation and Management Duties:

- Develop a theoretical justification behind the need to conduct a diagnostic of the ICT environment
- Explain why the ICT environment can be viewed in a granular fashion (individual data points) as well as in aggregated components (e.g. Infrastructure, or Policy Environment)
- Develop a logically and theoretically sound methodology for diagnosing the current state of the ICT environment in Latin American countries.
- Allow for both, a snapshot view into the current state (current year) as well time series view.
- Acquire, clean and manipulate internationally recognized best practice data.
- Present detailed descriptions, and data files, on the processes of:
 - Data gathering
 - Data identification
 - Data cleaning
 - Statistical checks for robustness (removing series with uniform covariance)
 - Data normalization
- Calculate the relevant metrics for the Diagnostic Maps:
 - Each Axis will be an index of the most relevant categories and metrics
- Develop diagnostic maps and charts by:
 - Worldwide views (all countries)
 - Country by country highlights (i.e. each individual IDB member country)
 - Country groupings (four sub-groups in the IDB)
- Provided a detailed text narrative on the Maps and Findings that explain:
 - Country placement
 - Trends, relationships and observations of countries in different zones.

V. PAYMENT

5.1 Payment will be made as per the following schedule, upon approval by the Team Leader responsible for this TC (See item VI below).

5.2 **Schedule of payments:**

- d. 30% upon contract signature;
- e. 30% upon approval of draft report, and
- f. 40% upon approval of final report

VI. COORDINATION

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

DEVELOPMENT OF A BROADBAND INDEX AND A BALANCE SCORE CARD FOR LAC (RG-T2083)

PROCUREMENT PLAN

No. Ref.	Description and type of the procurement contract	Estimated contract Cost US\$000	Procurement method ¹	Review (ex-ante or ex-post)	Source of financing and percentage		Prequalificación (Yes/No)	Estimated dates		Status (pending, in progress, awarded, cancelled)	Comments
					IDB %	Local / other %		Publication of specific procurement notice	Completion of contract		
1	GOODS										
	N/A										
2	WORKS										
	N/A										
3	NON-CONSULTING SERVICES										
	N/A										
4	CONSULTING SERVICES (Individual)										
4.1	Consultancy to provide technical support to the operations and TC implementation	80	IICC	n/a	100%	0%	No	N/A	2nd y 3rd trimester 2012	Pending	Component 1 & 2
4.2	Communications plan	45	CQS	n/a	100%	0%	No	N/A	4th trimester 2012	Pending	Component 1 & 2
5	CONSULTING SERVICES (Firms)										
5.1	Consultancy for the design and development of Latin American ICT Diagnostic Map (Broadband Index)	265	CQS						2nd y 3rd trimester 2012	Pending	Component 1
5.2	Consultancy for the design and the development of a Balanced Scorecard.	110	CQS	n/a	100%	0%	No	N/A	4th trimester 2012	Pending	Component 2

¹ **Goods and Works:** ICB: International competitive bidding; LIB: limited international bidding; NCB: national competitive bidding; PC: price comparison; DC: direct contracting; FA: force account; PSA: Procurement through Specialized Agencies; PA: Procurement Agents; IA: Inspection Agents; PLFI: Procurement in Loans to Financial Intermediaries; BOO/BOT/BOOT: Build, Own, Operate/Build, Operate, Transfer/Build, Own, Operate, Transfer; PBP: Performance-Based Procurement; PLGB: Procurement under Loans Guaranteed by the Bank; PCP: Community participation procurement. **Consulting Firms:** QCBS: Quality- and Cost-Based Selection QBS: Quality-Based Selection FBS: Selection under a Fixed Budget; LCS: Least-Cost Selection; CQS: Selection based on the Consultants' Qualifications; SSS: Single-Source Selection. **Individual Consultants:** NICQ: National Individual Consultant selection based on Qualifications; IICC: International Individual Consultant selection based on Qualifications.