

BROADBAND INFRASTRUCTURE INVENTORY AND PUBLIC AWARENESS IN THE CARIBBEAN

TERMS OF REFERENCE

Please note that the items in red below represent proceedings from the July 14 & 16, 2013 SC meetings.

These terms of reference define the required background and expertise, as well as the objectives, activities and the products to be carried out and delivered by a Consulting Firm or Institution hired in the framework of the TC.

COMPONENT 1

CONSULTANCY OBJECTIVES

The main objective of this consultancy is to develop a broadband diagnosis per country and a series of broadband infrastructure maps for all Caribbean countries (component I of the TC RG-T2212). The objective of this component is to improve data availability and understanding of the current state of broadband infrastructure in the region, which will inform the design of public policy recommendations, which seek to support governments in identifying the level of intervention necessary to achieve universality in access and broadband services, and when and where public-private partnerships are needed.

ACTIVITIES AND PRODUCTS

The activities to be undertaken and the products to be delivered under component 1 of this project are as follows:

Component 1 - Broadband diagnostic and infrastructure maps. The objective of this component is to improve data availability and understanding of the current state of broadband infrastructure in the region. The following activities will be undertaken:

- a. Detailed broadband diagnosis and infrastructure maps. The mapped infrastructure should not be limited to broadband, and should also include current infrastructure from other utilities (i.e. telecom, gas, electricity, and water), in order to identify opportunities to facilitate further broadband deployment.
- b. Identification of country-specific socio-demographic variables, such as population distribution by age and income levels, as well as market variables such as the number of operators and prices, which have an effect on broadband deployment.
- c. Classification of geographic areas based on their penetration rates, specifically identifying those that are subject to broadband deployment through a mix of public-private investments, and where available infrastructure from other utilities may facilitate deployment.
- d. The conclusions and observations derived from the above will be included in a document containing public policy recommendations for each Government on

how to accelerate the penetration rate and usage of broadband services in the country, and how they may bridge the gap between areas with high penetration rates and those with low penetration rates.

- e. A workshop to present the results of this component will be held in one of the beneficiary countries.

The knowledge and tools developed under this component - specifically the diagnosis, the broadband maps and the final recommendation documents for each country - will facilitate the design of public policies, and allow governments to identify the level of intervention necessary to achieve universality in access and broadband services, and when and where public-private partnerships are needed. This component is a critical input for the design of broadband strategies contemplated under component 4 of this TC.

Products:

- a. Conduct due diligence exercise
- b. Broadband diagnosis of **planned and** available infrastructure and related maps for all participating Caribbean countries in the Regional Public Good, including broadband infrastructures and that of other utilities.
- c. An analysis of country-specific socio-demographic variables, and a classification of geographic areas based on their penetration rates.
- d. Development of a document for each country, explaining the conclusions and observations derived from the above activities. The document shall contain public policy recommendations for each Government on how to accelerate the penetration rate and usage of broadband services in the country.
- e. Production of appropriate communications materials to be presented by the firm in a workshop to be held at the end of the project, where the results of the research will be discussed and disseminated.

COMPONENT 2

CONSULTANCY OBJECTIVES

The main objective of this consultancy is to identify major obstacles in the regulatory and institutional frameworks and provide legal, operational and organizational recommendations to address them. The proposed amendments (regulatory and institutional) will support the drafting of new legislation in Region and assist the countries as they move towards a harmonized regulatory framework in key aspects related to access, interconnection, spectrum and affordability in prices. Additionally, an up-to-date regulation that responds to the changes observed in the sector will support governments' efforts to leverage private sector investment to accelerate broadband infrastructure deployment in the Caribbean.

ACTIVITIES AND PRODUCTS

The activities to be undertaken by the consulting firm contracted refer to one of four components to be developed in the framework of this project, which define the strategic approach of this technical cooperation. These terms of reference define the activities to be undertaken and the products to be delivered under component 2 of the project.

Component 2 - Review of legal and regulatory frameworks and current sector trends.

The objective of this component is to review the existing regulatory and institutional frameworks of the telecommunications sector in each country. The following activities will be undertaken:

- a. Review the current regulatory framework for the telecom sector in each country, particularly the Telecommunications Law and the associated decrees on access, pricing, interconnection, tariffs, spectrum and universal service, in close consideration of current sector trends.
- a. Proposed revisions to the regulation should be made considering the major challenges faced by the Region in light of current trends in the telecommunications sector, such as: (i) convergence of services, applications and devices; and (ii) the need to deploy new infrastructure to address the growing demand for speed (quality) of broadband services and applications. In addition, recommendations will seek to increase the level playing field for sector competition in the Region.
- b. Review the institutional framework in each country, highlighting the way in which the different institutions involved in the sector may work together to support the future implementation of a broadband strategy. The role of the regulator(s), appropriate Ministries and other pertinent Government Offices will be analyzed in each country, identifying possible gaps and overlaps and providing a proposed organizational structure to serve as a guideline to Governments in an effort to strengthen their institutional framework and capacity to accomplish broadband connectivity goals.
- c. A workshop to present the results of this component will be held in one of the beneficiary countries.

Overall, a stronger regulatory and institutional framework will reinforce the development of the sector and will be critical for the future effective implementation of the broadband strategy to be designed in each country.

Products:

- a. Conduct due diligence exercise
- b. Review of current regulatory framework in each participating country.
- c. Review of current legal framework with regard to Telecommunications in each participating country
- d. Proposal to amend or draft specific new model legislation, regulations, guidelines and technical briefs on: (i) **Interconnection**, (ii) **Access**, (iii) Tariffs, (iv) **Number portability**, (v) Cost accounting, (vi) Quality standards, (vii) Universal service/access, (viii) Spectrum management, and other recommendations and amendments that may be deemed appropriate for each country. All recommendations should be made in light of current sector trends. Please note that insight from HIPCAR will be instrumental to the completion of this item.
- e. Review of the existing institutional framework of the Telecommunications sector in each participating country;
- f. Proposed organizational structure for each country to serve as a guideline to Governments in an effort to strengthen their institutional framework. Note that this is not intended to be an in-depth analysis in order to respect the time and financial restraints of the project. This should result in a top-level model for all, which may be customized by each country.
- g. Production of appropriate communications materials to be presented by the firm in a workshop to be held at the end of the project, where the results of the research will be discussed and disseminated.

Ayanna Samuels 8/9/13 3:25 PM

Comment [1]: Please note that the highlighted topics represent areas within which the Caribbean has made some headway due to HIPCAR.

COMPONENT 3

CONSULTANCY OBJECTIVES

The main objective of this Technical Cooperation (TC) of this consultancy is to support the promotion of ICT awareness and capacity building in each participating country, through the design of programs that address the needs of different target audiences (public officers, business persons and citizens).

ACTIVITIES AND PRODUCTS

The activities to be undertaken by the consulting firm contracted refer to one of four components to be developed in the framework of this project, which define the strategic approach of this technical cooperation. These terms of reference define the activities to be undertaken and the products to be delivered under component 3 of the project.

Component 3 - ICT awareness and capacity building programs. The objective of this component is to create awareness and build capacity of a diverse group of audiences, including individuals, business persons and public officials, on how ICTs in general, and broadband services and applications in particular, may contribute to economic growth and social inclusion in the Region. The following activities will be undertaken:

- a. Seminar and Community of Practice: a Seminar for regulators and policy makers will be organized during the regional workshop for component 2 of this TC. Training materials developed under the framework of IDB's Broadband Platform on the impact of ICTs in different strategic sectors will be used and leveraged in the training. In addition, practitioners will be invited to present international best practices, in an effort to create a Community of Practice in the Caribbean.
- b. Design a capacity building program for different actors in each country: Specific sectorial capacity building programs will be designed, targeted to individuals, business persons and public officials. The objective of these programs is to highlight the benefits of using ICTs in strategic sectors such as health, education, trade/SMEs, government and finance. Particularities of each country should be considered in the design of the program, such as the availability of shared access points such as tele-centers, libraries, business associations and schools. In addition, possible partners or service providers such as universities and training centers should also be identified, along with suggestions for the improvement of broadband delivery within same.

The following sector specific recommendations are provided as a guideline for the development of the program. Other sectors of particular interest or relevance in a country may also be explored:

Health: the development of services and applications on health is part of the digital agendas of most Governments considering ICTs as the basis for development. Aspects

such as telemedicine, tele-assistance, monitoring and control of patients are examples of such applications. Medical professionals and assistants, as well as government officials will be the target audience of this capacity building program.

Education: This is another sector where the use of ICTs is key for amplifying the impact of local interventions. In particular, aspects related to the development of connectivity solutions and technological platforms, together with innovative applications for e-Learning have proved to be relevant not only for the academic community but also for governments. Professors, teachers and teaching assistants, as well as government officials will be the target audience of this capacity building program.

SMEs: This is an area where ICTs have proven to have many different applications that may contribute to increasing the productivity, competitiveness and quality of life of citizens in a region. Specifically, applications for the business sector, particularly SMEs, will support innovative business models, expand markets and provide consumers with a wide range of goods and services. Moreover, several services and applications may expand access to financial services such as banking and micro payments. Business persons and entrepreneurs, as well as government officials will be the target audience of this capacity building program.

Government: In addition to the issues described above, specific analysis on the application of ICTs in the area of public administration (e-government) shall be provided, highlighting the importance of the digitalization of information as well as of a friendly and secure web interface for citizens, which facilitates electronic transactions, service delivery and citizen participation in policy making. Additionally, concrete analysis of ICT legislation and its key role in broadband adoption and use will be provided. Government officials and regulators will be the target audience of this capacity building program.

Finance: Finally, specific training on the application of ICTs in financial transactions, including m-banking, should be provided. Government officials, municipalities and citizens living in rural areas will be the target audience of this capacity building program.

The Seminar, the Community of Practice and the designed program per country will ultimately contribute to increasing the use of and the demand for broadband services in the Caribbean and may therefore be considered an integral part of national broadband strategies.

Products:

- a. [Conduct due diligence exercise](#)
- b. Delivery of a Seminar and creation of a Community of Practice.
- c. Design a capacity building program for different actors in each country, defining the requirements and resources needed for the delivery of each program. LEADERS NEEDED

COMPONENT 4

CONSULTANCY OBJECTIVES

The main objective of this consultancy is to define a regional broadband plan that takes into consideration the existing broadband status of each Caribbean country.

ACTIVITIES AND PRODUCTS

The activities to be undertaken by the consulting firm contracted refer to one of four components to be developed in the framework of this project, which define the strategic approach of this technical cooperation. These terms of reference define the activities to be undertaken and the products to be delivered under component 4 of the project.

Component 4. Public Policy recommendations for the design of national broadband strategies. The objective of this component is to provide public policy recommendations and practical guidelines for governments in the region to accelerate the penetration rate and usage of broadband services among the different stakeholders. The following activities will be undertaken:

- a. Recommendations for the design of national broadband strategies: based on the results and findings of previous components, recommendations for the design of national broadband strategies will be provided for each government. Specific recommendations and actions from the supply side (regulatory framework and infrastructure requirements) and the demand side (services and applications and capacity building (including knowledge sharing for the general populace) should be included. In the design of national broadband strategies, a regional perspective should be a guiding principle for all countries.
- b. Considerations to work towards a regional broadband strategy: as mentioned, national strategies will acknowledge potential synergies in terms of developing harmonized regulations, common infrastructures, and joint contents and capacity building programs that, while considering the needs and priorities of each particular country, share common elements to the region. These considerations will be highlighted in a document produced as a result of this consultancy.
- c. Governance model: In an effort to facilitate the future implementation of the national broadband strategies and foster regional cooperation and coordination, recommendations of a governance model will be provided for each country.

Products:

- a. Conduct due diligence exercise

- b. A document containing public policy recommendations for the design of national broadband strategies for each participating country.
- c. Specific recommendations will be made to ensure regional considerations are taken into account in each national strategy, in order to work towards a regional broadband strategy.
- d.** Recommendations of a governance model for each country to facilitate the future implementation of the national broadband strategies.

General Notes:

Include implementation guidelines in write-up, inclusive of immediate next steps.