

TECHNICAL COOPERATION DOCUMENT (TC-DOCUMENT)

JAMAICA

I. BASIC INFORMATION

Country: Jamaica
TC Name: Enhancing the ICT Regulatory Environment in Jamaica
TC Number: JA-T1079
Team Leader/Members: Antonio García Zaballos (Team Leader, IFD/CTI); Jorge Luis von Horoch (IFD/ICS); Mauricio Bouskela (IFD/CTI); Nathalia Foditsch (IFD/CTI); Jiyouon Son (IFD/CTI); Claudia Salazar (IFD/CTI); Gregory Dunbar (CCB/CJA); Graham Williams (FMP/CJA); Guillermo Eschoyez (LEG/SGO); Lila Mallory (FMP/CJA); Mariel Fiat (ICS/CJA); and Cecilia Bernedo (IFD/CTI).

TC Taxonomy: Client Services
Reference to request: [IDBDocs#37044869](#)
Date of TC Abstract: August 14, 2012
Donors providing funding: Knowledge Economy Fund (KEF)
Beneficiary: Jamaica (Ministry of Science Technology, Energy and Mining-MSTEM, and Office of Utilities Regulation -OUR of Jamaica)
Executing Agency and contact name: Ministry of Science, Technology, Energy & Mining (MSTEM): Wahkeen Murray (wmurray@mstem.gov.jm)

Financing plan:
IDB: US\$315,000
Local: US\$100,000
Total: US\$415,000

Execution period: 18 months **Disbursement period:** 24 months
Required start date: March 7, 2013
Types of consultants: Individual Consultants, Consulting firm
Prepared by Unit: Competitiveness and Innovation Division (IFD/CTI)
Unit of Disbursement Responsibility: CJA
TC Included in Country Strategy: Yes **TC included in CPD:** No
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 **Justification:** Today, economies are increasingly dependent on the effective and widespread use of Information and Communication Technologies (ICTs), particularly services and applications that depend on high-speed Internet, or broadband. Through its impact on innovation, broadband is transforming all sectors of the economy—from education and health to the way business and government operate, and the way citizens communicate, with broad implications on productivity, competitiveness and growth. Yet, harnessing the benefits of this new digital economy depends on the availability of broadband Internet in a country, as evolving services and applications require broadband speed in connectivity. In line with these observations, a recent study conducted by the IDB on the impact of broadband in LAC countries, concluded that, on average, an increase of 10% in broadband penetration is correlated with increases of 3.19% in GDP, 2.61% in productivity, and to the generation of more than 67,000 new jobs.
- 2.2 Given the sector’s broad social and economic implications, governments all over the world are designing digital/broadband national strategies aimed at promoting higher national penetration, adoption and usage of broadband services. In this process, governments must consider evolving trends such as the convergence of services, devices, networks and sectors. At the same time that convergence generates disruptive changes across the global telecommunications, IT, broadcasting, media and content sectors, it also creates regulatory concerns as the current frameworks become rapidly obsolete¹.
- 2.3 Recent data and studies conducted on the telecommunications sector in Jamaica suggest that the country is lagging behind in penetration, adoption and usage of the Internet, particularly broadband. According to recent statistics published by the ITU², the average penetration rate of fixed broadband services in the LAC Region is 6.24% per 100 inhabitants, while in Jamaica it is only 3,87%. As for mobile broadband subscriptions, the penetration gap is wider, with a regional average of 6,42% per 100 inhabitants and only 1,53% in Jamaica³. In terms of overall adoption, only 15.6% of households in Jamaica had Internet access, which is less than half of the corresponding global figure of 31.50%⁴, and below the average 20% in developing countries. Finally, as for the use of Internet by the population, a study conducted in 2011 in Jamaica⁵ concluded that the country also presents low rates of computer and Internet adoption and usage, due mainly to the high price of computer and Internet access.

¹ Examples of convergence in the telecommunications sector include mobile phones with video, radio and Internet connection, and radio over TV platforms. Convergence & Broadband in Digital Era. Presentation, ITU: Rajkumar Upadhyay, Advisor, Telecom Regulatory Authority of India (TRAI). April 2, 2012: <http://www.itu.int/ITU-D/asp/CMS/Events/2012/>.

² ICT World Indicators 2011. International Telecommunication Union (ITU), 2012.

³ Despite this low penetration, it should be noted that the fact that the cellular mobile penetration rate is nearly 70% in Jamaica provides great potential to accelerate the penetration rate and usage of mobile broadband services in the country.

⁴ Percentage of Individuals using the Internet. ITU 2011. <http://www.itu.int/ITU-D/ict/statistics/material/>.

⁵ Telecommunications Policy and Management Programme (2011) Caribbean ICT Indicators and Broadband Survey.

- 2.4 The limited access to broadband connectivity and the low rates of computer and Internet adoption and usage in the country, prevents the government, businesses, communities and individuals from fully participating in the knowledge economy and the global information society. Cognizant of the need to harness the benefits of broadband connectivity, the Government of Jamaica (GOJ) has recognized the need to strengthen the telecommunications sector with strategic public policies and regulations.
- 2.5 In this regard, policy developments in the last three years closely link the island's economic development prospects to the development of the ICT sector. Jamaica's current National Development Plan (Vision 2030)⁶ highlights the need to promote a technology-enabled society and an internationally competitive ICT sector. In addition, ICTs have been identified as an enabling factor in the achievement other national development outcomes.
- 2.6 Furthermore, the ICT Policy approved in April 2011 has declared as its mandate the establishment of a modern island wide telecommunications network, universal service for all Jamaicans, and the wide deployment of broadband services. The Policy principles include the recognition of telecommunications as a development instrument, establishment of universal service and access, respect for technology neutrality, and fostering competition.
- 2.7 In terms of the legal and regulatory framework, the Government has identified the following key issues and need for reform:
- a. Fragmentation within the institutional⁷ and regulatory⁸ frameworks which result in lengthy processing of applications and other regulatory functions that ultimately impede business; and
 - b. Inadequate legislation and administrative processes to meet the needs of a liberalized and converged ICT environment (a disincentive to investors).
- 2.8 In light of the foregoing, the ICT Policy provides that the GOJ shall ensure that all existing laws relevant to ICT are harmonized and that new legislation is promulgated. The new legislation being contemplated will address the institutional fragmentation, adapt traditional regulatory systems to convergence in the sector and give effect to the ICT Policy.
- 2.9 With these challenging set of tasks ahead and in order to achieve the country's universal access objectives, policymakers, regulators and operators need to have an in-depth understanding of all the related supply and demand issues surrounding the broadband ecosystem in Jamaica. This understanding will support the development of a Broadband Plan/Strategy.

⁶ Planning Institute of Jamaica (2009), Vision 2030 Jamaica - National Development Plan, <http://www.vision2030.gov.jm/Portals/0/NDP/Vision%202030%20Jamaica.pdf>.

⁷ The Agencies involved in the regulation of the sector include: The Office of Utilities Regulation (OUR); The Spectrum Management Authority (SMA); The Broadcasting Commission (BC); The Fair Trading Commission (FTC), and The Consumer Affairs Commission (CAC).

⁸ The ICT sector is governed by several laws, including the: Telecommunications Act (2000); Cybercrimes Act (2010); Electronic Transactions Act (2006); Access to Information Act (2006); Consumer Protection Act (2005); Office of Utilities Regulations Act (1995); Fair Competition Act (1993); Radio and Telegraph Control Act (1973); Broadcasting and Radio Re Diffusion Act (1944), and Post Office Act (1941).

- 2.10 It should be noted that the Bank has recently approved the Caribbean Regional Project “Broadband Infrastructure Inventory and Public Awareness in the Caribbean” (RG-T2212), which, based on a diagnosis of the current situation of broadband supply and demand, seeks to support the design of national broadband strategies in benefiting countries—including Jamaica—and to identify the regional aspects that need to be incorporated into these strategies in order to promote regional coordination. The regional project includes the proposal of specific amendments and drafting of new legislation that will support the Region in moving towards a harmonized regulatory framework in key aspects related to access, interconnection and affordability in prices. While the data gathered through the diagnosis and the recommendations provided for a harmonized regulation will provide a broader scope for the GOJ and complement the present cooperation, there is no dependency between these projects.
- 2.11 **Objective.** This Technical Cooperation (TC) seeks to support the government of Jamaica in the process of updating and enhancing its ICT regulatory environment and its governance model through a detailed review of its current status and a set of proposed recommendations aimed at promoting a more efficient implementation, oversight and monitoring of the new ICT Policy. In addition, the project contemplates an assessment of the current capabilities in the GOJ to develop information tools on the current status of broadband in Jamaica, in an effort to contribute to improving policymakers’, regulators’ and operators’ understanding of the sector, thereby strengthening their capacity to implement and monitor public policies for increased broadband development.

III. DESCRIPTION OF ACTIVITIES/COMPONENTS AND BUDGET

- 3.1 This operation will have two main components: (i) review of the current regulatory framework and governance model; and (ii) assessment of existing GIS capabilities and additional requirements within the GOJ.
- 3.2 **Component 1 – Legal and Regulatory Environment.** The objective of this component is to review the current administrative and regulatory framework of the ICT sector. The activities are: (i) review the current regulatory framework for the ICT sector and provide specific recommendations for drafting appropriate strategic legislation for the establishment of a converged stand-alone ICT regulator; and (ii) review the governance model of the existing regulators and propose an organizational structure for the establishment and implementation of a converged stand-alone ICT regulator. The results of these reviews will be included in a report and presented in a workshop.
- 3.3 The report should:
- Propose an organizational structure for a single stand-alone ICT Regulator, and a road map to facilitate its establishment, identifying the particular functions in each of the existing regulatory bodies that must be transferred to facilitate such establishment;

- Estimate the cost of the establishment of the ICT Regulator and the mechanisms required to implement its mandate; and
- Include drafting instructions for the establishment of the converged stand-alone ICT regulator.

3.4 **Component 2 – Assessment of existing GIS capabilities⁹ within the GOJ:** This component has the objective to assess GIS capabilities already available within the GOJ. Such assessment will enable GOJ to prepare and plan for the development and hosting of an interactive broadband coverage map and dashboard which will be based on the data gathered from the broadband diagnosis undertaken in the framework of the Regional Caribbean project. The assessment will enable GOJ to identify any datasets and technical capabilities that may be required to implement, operationalize and maintain the system.

3.5 **Expected results of the operation.** The specific expected results are: (i) a regulatory framework proposal, adjusted to the reality of the sector and current sector trends; and (ii) a better understanding of the current GIS capabilities available within the GOJ that will be relevant to plan for the future design and launch of an interactive broadband coverage map and dashboard for assessing the broadband coverage in the country as a critical input for decision makers.

Table 4.1: Indicative Results Matrix

Results Statement	Suggested Indicator	Base Line	Target	Verification Method
Outcome: Prioritized national-level actions to streamline and/or improve regulations, governance model and procedures in telecommunications, especially related to broadband.	No. of proposed bills and regulations related to ICT and telecommunications	0	3	Relevant draft bills pending approval as well as regulatory tools related to ICT and telecommunications identified by the MSTEM.
Output 1. Completed review of regulatory and governance model and recommendations provided based on current sector trends.	No. of specific recommendations to review the regulatory and governance model, particularly to establish a stand-alone ICT Regulator.	0	1	Reports developed containing recommendations
Output 2. Improved understanding by relevant stakeholders of the challenges posed by the current regulatory and governance model and the need to revise it based on sector trends.	No. of participants at the workshop with stakeholders.	0	20	List of participants and workshop evaluation made by the MSTEM in coordination with IFD/CTI.
Output 3. Completed assessment of existing GIS capabilities within the GOJ to create and host an interactive broadband coverage map and dashboard.	No. of GIS capabilities found within the GOJ.	0	3	Report and analysis of the GIS capabilities by the MSTEM and IFD/CTI.

⁹ Geographic information system (GIS) is a system designed to capture, store, manipulate, analyze, manage, and present all types of geographical data in web-based formats.

Table 4.2: Indicative budget

Activities	IDB Funding	Local Funding	Total Funding
Component 1	285,000	80,000	365,000
Review of the current regulatory framework and governance model	270,000	60,000	330,000
	-	10,000 (in-kind)	10,000
Workshop with stakeholders	15,000	10,000	25,000
Component 2	10,000	5,000	15,000
Assessment of existing GIS capabilities to facilitate the development and maintenance of an interactive Broadband coverage map and Dashboard	10,000	5,000 (in-kind)	15,000
Others	20,000	15,000	35,000
External audit and other miscellaneous costs	20,000	-	20,000
Administration costs ¹⁰	-	15,000 (in-kind)	15,000
Total cash contribution	315,000	70,000	385,000
Total in-kind contribution	-	30,000	30,000
Total	315,000	100,000	415,000

IV. EXECUTING AGENCY AND EXECUTION STRUCTURE

- 4.1 This Technical Cooperation will be executed by the Ministry of Science, Technology, Energy & Mining (MSTEM) in conjunction with the Office of Utilities Regulation (OUR), and with the support of the Competitiveness and Innovation Division (IFD/CTI), which is currently leading the Bank's Broadband Platform.
- 4.2 With respect to Component 1 MSTEM through its Information and Communications Technology (ICT) Division will be tasked with the oversight and management of the project. One (1) officer in particular will be assigned to work with the Consultant hired to perform the activity and the ICT Division in general will, inter alia, provide:
- Guidance and advice to the consultants, particularly with respect to the Governmental and parliamentary approval processes;
 - Access to key officials within the relevant Ministries, Agencies and Departments and other relevant entities, including operator companies as applicable;
 - Access to information within the context of the work to be provided;
 - Office space and facilities for the Consultant; and
 - Feedback to the Consultant on draft reports within agreed timeframes.
- 4.3 With respect to Component 2 MSTEM would execute the activities with the support of the Office of Utilities Regulation (OUR). MSTEM will enter into a

¹⁰ Estimated local in-kind counterpart funding corresponds to office space and man-hours of two GOJ officers to supervise the work to be undertaken by the consultants.

Memorandum of Understanding with the OUR in which the roles and responsibilities of the entities will be clearly identified.

- 4.4 The OUR will also provide technical assistance to the project and all related premises, communications facilities and stationery needs.

V. MAJOR ISSUES

- 5.1 The major risks associated to the project are those related to its execution, particularly as achieving the expected results depends on the actual use of the information and recommendations provided to the GOJ. Common difficulties in approving specific modifications to the existing law, the publication of amendments in the existing decrees are examples of the risks associated to the actual future implementation by the government. This risk is mitigated by the fact that this TC responds to a direct request made by the Government to the Bank, who has designed a structure for execution and appointed specific agencies to provide oversight and management of each component. The stated level of engagement reflects the interest and commitment of the GOJ to its National Development Strategy and the ICT Policy as it relates to broadband development.
- 5.2 Another risk relates to the need to coordinate with other projects, such as the “Broadband Infrastructure and Public Awareness in the Caribbean” regional project (RG-T2212) as to avoid duplication of efforts and ensure that the government receives coherent recommendations. This potential issue is expected to be mitigated by the fact that both TCs are being led by the CTI/IFD Division, and are an integral part of the Bank’s broadband platform.

VI. EXCEPTIONS TO BANK POLICY

- 6.1 No exceptions to Bank policy are foreseen.

VII. ENVIRONMENTAL AND SOCIAL STRATEGY

- 7.1 Due to the nature of this TC which involves a research study, there are no expected environmental and social risks associated with it, only those standards of any study project. The operation was classified as Category “C”, according to the Bank’s classification toolkit (see link: [IDBDocs#37044859](#)).

Annexes:

- **Annex I: Request Letter**
- **Annex II: Terms of Reference**
- **Annex III: Procurement Plan**



MINISTRY OF SCIENCE, TECHNOLOGY, ENERGY AND MINING

PCJ Building, 36 Trafalgar Road, Kingston 10, Jamaica W.I.
 Tel. (876) 929-8990-9 Fax: (876) 960-1623
 E-mail: info@mem.gov.jm Website: <http://www.mem.gov.jm>

June 12, 2012

Mr. Ancile Brewster
 Country Representative
 Inter-American Development Bank
 6th Floor, Dyoll Building
 40-46 Knutsford Boulevard
 Kingston 5



Dear Mr. Brewster,

Re: Request for Technical Assistance for Drafting of Information and Communications Technology Legislation for Jamaica

Recent advances and developments in Information and Communications Technology (ICT) (and in particular telecommunications) have necessitated the revision of the ICT policy framework with a view to directing necessary reforms to the legal and regulatory framework which govern Jamaica's ICT sector.

In April 2011 the Government of Jamaica (GoJ) adopted an ICT Policy which, among other things, provides that the Government ensure that all existing laws relevant to ICT are harmonized and that new legislation is promulgated to take account of current trends and realities.

Recognising that:

- the present framework results in overlapping jurisdiction in the sector which impedes its efficient regulation and increases the regulatory cost; and
- convergence is pointing to the need for a single point of entry into the sector to engender certainty and eliminate unnecessary delays thereby enabling a regulatory environment that facilitates investment and competition

the ICT Policy also provides for the establishment of a converged stand-alone ICT Regulator.

The GoJ is aware of the Inter-American Development Bank's (IDB) past and current initiatives to facilitate the development of appropriate legal and regulatory frameworks for the ICT sector which support the developmental needs of beneficiary countries.

In light of the foregoing the GoJ requests the support of the IDB to engage the services of a consultant to develop ICT legislation for Jamaica.

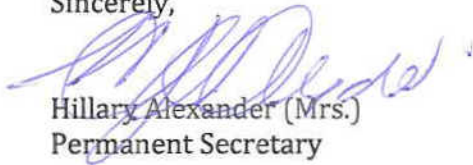
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June 12, 2012

Mr. Ancile Brewster

To aid your consideration of this matter please see enclosed proposed Terms of Reference for technical assistance. We look forward to your favourable consideration of this request and further discussions with a view to developing details of an appropriate assistance programme to achieve the stated objectives.

Sincerely,



Hillary Alexander (Mrs.)
Permanent Secretary

Encl.

Copy: Honourable Phillip Paulwell, Minister of Science, Technology, Energy and Mining

MINISTRY OF SCIENCE, TECHNOLOGY, ENERGY AND MINING

TERMS OF REFERENCE FOR TECHNICAL ASSISTANCE FOR DRAFTING OF INFORMATION AND COMMUNICATIONS TECHNOLOGY LEGISLATION

JAMAICA

1. INTRODUCTION

- 1.1. The Ministry of Science, Technology, Energy and Mining (MSTEM) has portfolio responsibility for the Information and Communication Technology (ICT) sector of Jamaica. Recent advances and developments in telecommunications and ICT have necessitated the revision of the policy framework for the sector to direct necessary reforms to the legal and regulatory framework. In particular the advent of convergence between telecommunications and broadcasting services have resulted in the development and provision of new products and services and their related product and service delivery modalities. As such many countries have been modifying their telecommunications regulations to support the development of convergent services and the expansion of markets and competition with the objective of promoting the provision of new and innovative services, increasing the variety of offerings for subscribers, reducing prices, as well as, increasing the efficiency in the provision of services.
- 1.2. In April 2011 the Government of Jamaica (GoJ) adopted an ICT Policy in keeping with the national and international trends. The Policy identified, *inter alia*, the following key issues:
 - i. fragmentation within the institutional and regulatory frameworks which result in lengthy processing of applications and other regulatory functions which ultimately impede business; and
 - ii. inadequate legislation and administrative processes to meet the needs of a liberalized and converged ICT environment (a disincentive to investors).
- 1.3. In light of the foregoing the ICT Policy provides that the Government shall ensure that all existing laws relevant to ICT are harmonized and that new legislation is promulgated. The new legislation being contemplated will be directed at adapting traditional regulatory systems to convergence and giving effect to the ICT Policy.

2. BACKGROUND

- 2.1. Competition in the ICT sector in Jamaica has increased significantly since the liberalization of the telecommunications and broadcast media regimes. This is evidenced by the large increase in the number of providers, a decrease in the cost of international telephone calls, and a strong increase in Jamaica's teledensity.
- 2.2. The ICT sector is among the sectors in which liberalization has advanced the fastest in recent years. Expansion and investment in the subgroup, telecommunications, has been

among the highest in the Jamaican economy, particularly since 1999 when the monopoly on the provision of telephone services by Cable and Wireless Jamaica Limited (C&W) was lifted.

- 2.3. Under the liberalized telecommunications regime there was a significant increase in the number of telecommunications licences granted in Jamaica, from 2 in 2000 to 446 in 2011. As at 2011 the total number of telephone subscribers was approximately 3.3 million representing a teledensity of 122.3/100 persons. Jamaica has an advanced telecommunications infrastructure which includes a 100% digital telecommunications network, a submarine fibre optic transmission ring around the island and several international submarine cable links connecting Jamaica to the rest of the world. Up until 2011 Jamaica had four major telecommunications providers, each with its own network. Notwithstanding the foregoing, broadband penetration remains relatively low. In 2010 the total number of subscribers was estimated to be approximately 120,000.
- 2.4. MSTEM has responsibility for providing the overall policy framework to guide the development of the ICT sector. However, matters pertaining to broadcasting are under the policy direction of the Office of the Prime Minister which has responsibility for the Information portfolio.
- 2.5. The ICT policy has declared as its mandate the establishment of a modern island wide telecommunications network, universal service for all Jamaicans, and the wide deployment of broadband services. The Policy principles include the recognition of telecommunications as a development instrument, establishment of universal service and access, respect for technology neutrality, and fostering competition.
- 2.6. The ICT sector is governed by several laws, including the:
 - Telecommunications Act (2000);
 - Cybercrimes Act (2010);
 - Electronic Transactions Act (2006);
 - Access to Information Act (2006);
 - Consumer Protection Act (2005);
 - Office of Utilities Regulations Act (1995);
 - Fair Competition Act (1993);
 - Radio and Telegraph Control Act (1973);
 - Broadcasting and Radio Re Diffusion Act (1944); and
 - Post Office Act (1941).
- 2.7. The Agencies involved in the regulation of the sector include:
 - The Office of Utilities Regulation (OUR): the OUR, *inter alia*, receives and processes applications for a licence to provide telecommunications services. The OUR is the major regulator for the sector under the Telecommunications Act.
 - The Spectrum Management Authority (SMA): the SMA's main functions are to license and/or authorize users of the spectrum; collect the relevant fees for use of the

- spectrum; preserve the spectrum rights of all legitimate users; ensure the maintenance of frequency bands that are free from interference and unauthorized use.
- The Broadcasting Commission (BC): the role of the BC is to monitor and regulate the electronic media, broadcast radio and television, as well as, subscriber television industries. It is a statutory body established by the Broadcasting and Radio Re Diffusion (Amendment) Act of 1986;
 - The Fair Trading Commission (FTC): the FTC's role is to monitor and regulate competition matters in conjunction with the OUR; and
 - The Consumer Affairs Commission (CAC): the CAC's role is to, *inter alia*, protect the rights of consumers, in conjunction with the OUR and the FTC.
- 2.9 The present situation results in overlapping jurisdiction in the sector which impedes its efficient regulation and increases the regulatory cost. Furthermore, convergence is pointing to the need for a single point of entry into the sector to engender certainty and eliminate unnecessary delays thereby enabling a regulatory environment that facilitates investment and competition. In light of the foregoing the ICT Policy proposes the establishment of a converged stand-alone ICT Regulator.

3. OBJECTIVES

- 3.1. The main objectives of this project are to:-
- 3.1.1. develop the legal and regulatory framework for Jamaica's ICT Sector.
 - 3.1.2. provide Drafting Instructions to the Chief Parliamentary Counsel (CPC) to enable the drafting of an ICT Bill and review the legislation drafted by the CPC.
 - 3.1.3. provide technical support/assistance that may be required to develop the necessary institutional capacity to analyse, regulate and inform constituents of the policy, legal and regulatory framework for the ICT sector.

4. SCOPE OF WORK

- 4.1. The work to be performed shall include, but not be limited to:
- 4.1.1. reviewing the present ICT policy;
 - 4.1.2. reviewing the existing legal and regulatory framework for the ICT sector, including the provisions of existing legislation that may impinge on a new ICT legislation, and assess its adequacy and/or shortcomings;
 - 4.1.3. reviewing the structure and function of the OUR, SMA, BC with a view to proposing a organisational structure for the establishment of a single stand-alone ICT regulator;
 - 4.1.4. reviewing relevant instruments, policies and agreements currently applicable to the ICT sector, as well as, other relevant legal instruments in Jamaica (including, for example, related legislation concerning companies, competition, real and intellectual property, interception of communication, foreign investment, tax, to name a few) and identify aspects which are inconsistent with global trends and best practices in the area of ICT regulation;
 - 4.1.5. facilitating a workshop involving key sector stakeholders to clarify key policy issues and identify and discuss those to be addressed in legislation;

- 4.1.6. developing, an appropriate legal and regulatory framework for the ICT Sector;
- 4.1.7. developing/drafting regulations/rules which should enable the ICT regulator to provide efficient, effective, fair and transparent regulation to the ICT sector. These regulations/rules will enable the Regulator to *inter alia*:
- encourage widespread availability of services;
 - ensure reliability and quality of services;
 - ensure fair treatment of consumers;
 - achieve certain social or economic goals (e.g. resource conservation, economic development);
 - maintain financial integrity of firms to ensure stable provision of service;
 - provide alternate mechanism for competitive pressure;
 - limit exercise of market power;
 - encourage utility, cost control and efficiency; and
 - encourage technical progress and innovation.
- 4.1.8. based upon the ICT policy and existing related legislation, producing a final report which, *inter alia*,:
- identifies global trends and best practices in the area of ICT regulation and the impact of convergence;
 - identifies practical steps to be taken to ensure the implementation of the draft legislation;
 - draws up a list of further legal issues that will need to be addressed;
 - establishes an organisational structure for a single stand-alone ICT Regulator, and a road map to facilitate its establishment, including the identification of the particular functions in each of the existing regulatory bodies that must be transferred to facilitate such establishment; and
 - estimates the cost of the establishment of the ICT Regulator and the systems required to deliver its mandate.
- 4.1.7 developing draft drafting instructions for the ICT Act for submission to the CPC.
- 4.1.8 facilitating a one-day workshop for senior Government officials, and possibly Parliamentarians, to explain the proposed legislation and specific factors of that legislation which are designed to:
- safeguard the public interest; and
 - provide a conducive and stable legal and regulatory environment for investment;
- 4.1.9 being available, as necessary, during the assignment to advise GoJ officials on an ad-hoc basis to ensure successful adoption of the necessary legislation; and
- 4.1.10 making presentations, as necessary, to government officials explaining the proposed changes, discuss any modifications, and make changes accordingly.

5 EXECUTION OF THE WORK

- 5.1 The consultants shall work in Jamaica directly with MSTEM, and any agency the Ministry may appoint as appropriate. In seeking to attain the objectives stated, they shall:
- carry out the work as specified under the scope of work and any additional work the Ministry deems necessary to meet the objectives; and

- ensure that knowledge of the process and methodology of the work are, whenever possible, transferred to suitable representatives of the Ministry.
- 5.2 The consultants shall provide a detailed plan of work, including milestones required by the Ministry for progress monitoring. The assignment shall be completed within six (6) calendar months from commencement of the work; follow on inputs may be necessary.
- 5.3 Local specialists and advisers shall be hired by the consultants (subject to prior approval of the Ministry) to provide the required knowledge of local law and conditions.

6 DELIVERABLES

- 6.1 **Inception Report:** Ten (10) business days after the signing of the contract, the consultants are required to submit an inception report to the Ministry outlining how the assignment will be executed and containing the proposed plan.
- 6.2 **Interim Report:** Twenty (20) business days after the acceptance of the **Inception Report**, the consultants shall submit an Interim Report to include the result of initial stakeholder consultations and specific observations concerning matters that may affect the successful completion of the project.
- 6.3 **Draft Final Report, draft Regulations/Rules and draft Drafting Instructions:** Draft final report, draft regulations/rules and draft Drafting Instructions for the enactment of an ICT Act becomes due forty (40) business days after the Interim Report is accepted by the MSTEM.
- 6.4 **Final Report, final Regulations/Rules and final Drafting Instructions:** Subject to the comments on the draft Final Report, draft Regulations/Rules and draft Drafting Instructions, the consultants shall be required to finalise the documents prepared twenty (20) business days after comments on same are provided by the MSTEM.

7 REPORTING REQUIREMENTS

As per the above schedule:

- 7.1 All reports shall be provided to MSTEM in English.
- 7.2 Final Report, Regulations/Rules and Drafting Instructions: Electronic copies and three (3) hard copies of the Final Report, the Regulations/Rules and the Drafting Instructions shall be provided to the MSTEM. The Final Report shall contain a summary of work done, results obtained and any outstanding matters or additional work required to satisfy the objectives.

8 COUNTERPART CONTRIBUTIONS

- 8.1 The Ministry will provide at least the following contributions:

- experienced and qualified counterparts in major field of the project activities, including legal, technical and financial experts;
- facilitate access to key officials within the relevant Ministries and other relevant official entities, including ICT companies as necessary;
- access to information held by the MSTEM within the context of work;
- office space and facilities for the consultant and the local counterparts. (Note that the Consultant will be expected to provide their own computing and translation facilities);
- access to telecommunications services for purpose of performance of assignment; and
- other logistical support.

9 GENERAL

- 9.1 The Ministry will supervise the performance of the work and will give guidance and advice to the consultants, particularly with respect to the governmental and parliamentary approval processes.
- 9.2 The work must be compatible with general local laws and general local legislation that may influence the ICT Sector.
- 9.3 The Consultants should have the following qualifications and experience:
- Minimum Masters Degree in Law;
 - Proven experience in policy analysis and legislative drafting;
 - Working knowledge of ICT related laws, policies, guidelines and ICT/Telecoms regulations;
 - Knowledge of local laws and conditions of the local ICT sector.

JAMAICA

ENHANCING THE ICT REGULATORY ENVIRONMENT IN JAMAICA (JA-T1079)

TERMS OF REFERENCE

I. BACKGROUND

- 1.1. **Justification.** Today, economies are increasingly dependent on the effective and widespread use of Information and Communication Technologies (ICTs), particularly services and applications that depend on high-speed Internet, or broadband. Through its impact on innovation, broadband is transforming all sectors of the economy—from education and health to the way business and government operate, and the way citizens communicate, with broad implications on productivity, competitiveness and growth. Yet, harnessing the benefits of this new digital economy depends on the availability of broadband Internet in a country, as evolving services and applications require broadband speed in connectivity. In line with these observations, a recent study conducted by the IDB on the impact of broadband in LAC countries, concluded that, on average, an increase of 10% in broadband penetration is correlated with increases of 3.19% in GDP, 2.61% in productivity, and to the generation of more than 67,000 new jobs.
- 1.2. Given the sector's broad social and economic implications, governments all over the world are designing digital/broadband national strategies aimed at promoting higher national penetration, adoption and usage of broadband services. In this process, governments must consider evolving trends such as the convergence of services, devices, networks and sectors. At the same time that convergence generates disruptive changes across the global telecommunications, IT, broadcasting, media and content sectors, it also creates regulatory concerns as the current frameworks become rapidly obsolete¹.
- 1.3. Recent data and studies conducted on the telecommunications sector in Jamaica suggest that the country is lagging behind in penetration, adoption and usage of broadband Internet. The International Telecommunications Union (ITU) reported that in 2011, only 15.6% of households in Jamaica had Internet access, which is less than half of the corresponding global figure of 31.50%², and below the average 20% in developing countries. In addition, the country's fixed broadband penetration rate was just over 4% by the end of 2011, while

¹ Examples of convergence in the telecommunications sector include mobile phones with video, radio and Internet connection, and radio over TV platforms. Convergence & Broadband in Digital Era. Presentation, ITU: Rajkumar Upadhyay, Advisor, Telecom Regulatory Authority of India (TRAI). April 2, 2012: <http://www.itu.int/ITU-D/asp/CMS/Events/2012/>.

² Percentage of Individuals using the Internet. ITU 2011. <http://www.itu.int/ITU-D/ict/statistics/material/>.

top performers—such as France, Denmark, the Netherlands, Norway, the Republic of Korea and Switzerland—had average fixed-broadband penetrations above 35%.³ In addition, a study conducted in 2011 in Jamaica⁴ concluded that the country also presents low rates of computer and Internet adoption and usage, due mainly to the high price of computer and Internet access.

- 1.4. The limited access to broadband connectivity and the low rates of computer and Internet adoption and usage in the country, prevents the government, businesses, communities and individuals from fully participating in the knowledge economy and the global information society. Cognizant of the need to harness the benefits of broadband connectivity, the Government of Jamaica (GOJ) has recognized the need to strengthen the telecommunications sector with strategic public policies and regulations.
- 1.5. The ICT Policy approved in April 2011 has declared as its mandate the establishment of a modern island wide telecommunications network, universal service for all Jamaicans, and the wide deployment of broadband services. The Policy principles include the recognition of telecommunications as a development instrument, establishment of universal service and access, respect for technology neutrality, and fostering competition.
- 1.6. In response, this Technical Cooperation (TC) seeks to support the GOJ in the process of updating and enhancing its ICT regulatory environment and its governance model through a detailed review of its current status and to submit relevant recommendations. In addition, the project contemplates the development of information tools on the current status of broadband in Jamaica, in an effort to contribute to improving policymakers', regulators' and operators' understanding of the sector, thereby strengthening their capacity to implement and monitor public policies for increased broadband development. Finally, it is expected that a better understanding of sector dynamics will enable the GOJ to facilitate future broadband deployment and adoption while tailoring its market interventions to complement rather than substitute private sector investments.

This operation will have two main components: (i) review of the current regulatory framework and governance model; and (ii) an assessment of the Geographic Information System (GIS) capabilities already available within the GOJ.

- 1.7. 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 Consultant hired to perform the first Component in the framework of the TC.

³ ICT Indicators Database, International Telecommunication Union (2011).

⁴ Telecommunications Policy and Management Programme (2011) Caribbean ICT Indicators and Broadband Survey.

II. CONSULTANCY OBJECTIVES

- 1.1 The objective of this component is to review the current administrative and regulatory framework of the ICT sector. The activities are: (i) review the current regulatory framework for the ICT sector and provide specific recommendations for drafting appropriate strategic legislation for the establishment of a converged stand-alone ICT regulator; and (ii) review the governance model of the existing regulators and propose an organizational structure for the establishment and implementation of a converged stand-alone ICT regulator. The results of these reviews will be included in a report and presented in a workshop.

III. CHARACTERISTICS OF THIS CONSULTANCY

3.1. **Type of consultancy:** Consulting Firm / Consultant

3.2. **Start date and duration:** from XX to XX

3.3. **Place of work/travel:** Place of residence. Travel required. During this period, the firm or consultant is expected to participate in at least one (1) coordination meeting with the GOJ and (1) presentation meeting with government representatives.

3.4. **Qualifications:** The firm or consultant will have extensive experience in the telecommunications sector, with senior team members involved in projects in LAC and other developing regions. Experience in Jamaica is preferred. Specific domain of domestic and international ICT regulation, especially concerning broadband, is required. The firm must have a proven capability to deliver detailed and accurate recommendations to government agencies and a solid understanding of current telecommunications sector trends.

3.5. **Source of funding:** JA-T1079 / ATN-XX

IV. ACTIVITIES AND PRODUCTS

4.1. The activities to be undertaken by the consulting firm or consultant contracted refers to Component 1 of the of this technical cooperation project. The activities and the products to be delivered under this component are as follows:

4.2. **Component 1 – Legal and Regulatory Environment.** Review the current regulatory framework and governance model. The following activities will be undertaken:

- a. Review of the regulatory framework, such as Telecommunications Law and associated decrees on pricing, interconnection, spectrum and universal service, in close consideration of the changing and convergent environment of services, applications and devices and identify aspects which impede an adequate development of the sector.
- b. Recommend an effective harmonization of the existing ICT legislation, congruent with the ICT Policy of Jamaica approved in April 2011.

- c. Propose drafting instructions for the new ICT legislation, consistent with global trends and best practices in the area of telecommunications regulations.
- d. Review the governance model and propose an organizational structure in which the different institutions involved in the sector may work together under the umbrella of a single stand-alone ICT regulator.
- e. Propose an organizational structure for a single stand-alone ICT Regulator and develop a roadmap to establish the new ICT regulator, identifying the particular functions in each of the existing regulatory bodies that must be transferred to facilitate the process. An estimation of the cost of the establishment the ICT regulator and the mechanisms required to implement its mandate will also be included.
- f. Prepare a final report with the findings and recommendations and present them in a workshop to the GOJ.

4.3. A harmonized and updated legal framework that is adapted to current sector trends, coupled with an improved and more efficient governance model are both critical for the development of the sector and the implementation of Jamaica's ICT Policy and upcoming Broadband Strategy.

4.4. **Products:**

- a. A report containing the following:
 - i. A review of the existing ICT legislation and drafting instructions for its improvement and modernization, based on international best practices and current sector trends.
 - ii. A proposal of the organizational structure required to support and establish a single stand-alone ICT regulator with its functions, mandate and costs of its establishment;
 - iii. A roadmap to establish the new ICT regulator
- b. Production of corresponding presentations and other communication materials to be presented in the final workshop.

V. **METHOD OF 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 and presentation.

VI. COORDINATION

Supervision and coordination of the consultant's work will be the responsibility of the Ministry of Science, Technology, Energy & Mining (MSTEM) as Executing Agency and will be approved by Antonio García Zaballos (IFD/CTI), Telecommunications Lead Specialist, antoniogar@iadb.org, phone (202) 623-2980.

JAMAICA

ENHANCING THE ICT REGULATORY ENVIRONMENT IN JAMAICA (JA-T1079)

TERMS OF REFERENCE

I. BACKGROUND

- 1.1. **Justification.** Today, economies are increasingly dependent on the effective and widespread use of Information and Communication Technologies (ICTs), particularly services and applications that depend on high-speed Internet, or broadband. Through its impact on innovation, broadband is transforming all sectors of the economy—from education and health to the way business and government operate, and the way citizens communicate, with broad implications on productivity, competitiveness and growth. Yet, harnessing the benefits of this new digital economy depends on the availability of broadband Internet in a country, as evolving services and applications require broadband speed in connectivity. In line with these observations, a recent study conducted by the IDB on the impact of broadband in LAC countries, concluded that, on average, an increase of 10% in broadband penetration is correlated with increases of 3.19% in GDP, 2.61% in productivity, and to the generation of more than 67,000 new jobs.
- 1.2. Given the sector's broad social and economic implications, governments all over the world are designing digital/broadband national strategies aimed at promoting higher national penetration, adoption and usage of broadband services. In this process, governments must consider evolving trends such as the convergence of services, devices, networks and sectors. At the same time that convergence generates disruptive changes across the global telecommunications, IT, broadcasting, media and content sectors, it also creates regulatory concerns as the current frameworks become rapidly obsolete⁵.
- 1.3. Recent data and studies conducted on the telecommunications sector in Jamaica suggest that the country is lagging behind in penetration, adoption and usage of broadband Internet. The International Telecommunications Union (ITU) reported that in 2011, only 15.6% of households in Jamaica had Internet access, which is less than half of the corresponding

⁵ Examples of convergence in the telecommunications sector include mobile phones with video, radio and Internet connection, and radio over TV platforms. Convergence & Broadband in Digital Era. Presentation, ITU: Rajkumar Upadhyay, Advisor, Telecom Regulatory Authority of India (TRAI). April 2, 2012: <http://www.itu.int/ITU-D/asp/CMS/Events/2012/>.

global figure of 31.50%⁶, and below the average 20% in developing countries. In addition, the country's fixed broadband penetration rate was just over 4% by the end of 2011, while top performers—such as France, Denmark, the Netherlands, Norway, the Republic of Korea and Switzerland—had average fixed-broadband penetrations above 35%.⁷ In addition, a study conducted in 2011 in Jamaica⁸ concluded that the country also presents low rates of computer and Internet adoption and usage, due mainly to the high price of computer and Internet access.

- 1.4. The limited access to broadband connectivity and the low rates of computer and Internet adoption and usage in the country, prevents the government, businesses, communities and individuals from fully participating in the knowledge economy and the global information society. Cognizant of the need to harness the benefits of broadband connectivity, the Government of Jamaica (GOJ) has recognized the need to strengthen the telecommunications sector with strategic public policies and regulations.
- 1.5. In response, this Technical Cooperation (TC) seeks to support the GOJ in the process of updating and enhancing its ICT regulatory environment and its governance model through a detailed review of its current status and to submit relevant recommendations. In addition, the project contemplates the development of information tools on the current status of broadband in Jamaica, in an effort to contribute to improving policymakers', regulators' and operators' understanding of the sector, thereby strengthening their capacity to implement and monitor public policies for increased broadband development. Finally, it is expected that a better understanding of sector dynamics will enable the GOJ to facilitate future broadband deployment and adoption while tailoring its market interventions to complement rather than substitute private sector investments.
- 1.6. This operation will have two main components: (i) review of the current regulatory framework and governance model; and (ii) an assessment of the Geographic Information System (GIS) capabilities already available within the GOJ.
- 2.1. 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 Consultant hired to perform the first Component in the framework of the TC.

II. CONSULTANCY OBJECTIVES

- 1.1. The main objective of this consultancy is to assess Geographic information system (GIS) capabilities already available within the GOJ.

⁶ Percentage of Individuals using the Internet. ITU 2011. <http://www.itu.int/ITU-D/ict/statistics/material/>.

⁷ ICT Indicators Database, International Telecommunication Union (2011).

⁸ Telecommunications Policy and Management Program (2011) Caribbean ICT Indicators and Broadband Survey.

III. CHARACTERISTICS OF THIS CONSULTANCY

3.1. Type of consultancy: Consulting Firm / Consultant

3.2. Start date and duration: from XX to XX

3.3. Place of work/travel: Place of residence. Travel required. During this period, the firm or consultant is expected to participate in at least one (1) coordination meeting with the GOJ and (1) presentation meeting with government representatives.

3.4. **Qualifications:** The firm or consultant will have extensive experience in the telecommunications sector, with senior team members involved in projects in LAC and other developing regions. Experience in Jamaica is preferred. Specific domain developing web accessible interactive broadband coverage maps and dashboards in GIS format is required, as well as providing relevant training to users.

3.5. **Source of funding:** JA-T1079 / ATN-XX

IV. ACTIVITIES AND PRODUCTS

4.1. The activities to be undertaken by the consulting firm or consultant contracted refers to Component 2 of the of this technical cooperation project. The activities and the products to be delivered under this component are as follows:

4.2. **Component 2 – Assessment of existing GIS capabilities⁹ within the GOJ:** This component has the objective to assess GIS capabilities already available within the GOJ. Such assessment will enable GOJ to prepare and plan for the development and hosting of an interactive broadband coverage map and dashboard which will be based on the data gathered from the broadband diagnosis undertaken in the framework of the Regional Caribbean project. The assessment will enable GOJ to identify any datasets and technical capabilities that may be required to implement, operationalize and maintain the system.

4.4. **Products:**

- a. An assessment of GIS capabilities already available within the GOJ;
- b. A quantitative and qualitative report with the description of current GIS capabilities available within the GOJ and how they could be used for the future design and launch of an interactive broadband coverage map and dashboard for assessing the broadband coverage in the country as a critical input for decision makers.

⁹ Geographic information system (GIS) is a system designed to capture, store, manipulate, analyze, manage, and present all types of geographical data in web-based formats.

V. METHOD OF 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 beta version of the applications, and
- c. 40% upon approval of final version of the applications and provision of training.

VI. COORDINATION

Supervision and coordination of the consultant's work will be the responsibility of the Ministry of Science, Technology, Energy & Mining (MSTEM) as Executing Agency and will be approved by Antonio García Zaballos (IFD/CTI), Telecommunications Lead Specialist, antoniogar@iadb.org, phone (202) 623-2980.

ENHANCING THE ICT REGULATORY ENVIRONMENT IN JAMAICA (JA-T1079)

PROCUREMENT PLAN

No. Ref.	Description and type of the procurement contract	Estimated contract Cost US\$000	Procurement method ¹	Re-view (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)										
	N/A										
5	CONSULTING SERVICES (Firms)										
5.1	Component 1: Review of the current regulatory framework and governance model	365,000	LIB	n/a	78%	22%	No	N/A	2013	Pending	12.5% of the local counterpart is an in-kind contribution.
5.2	Component 2: Develop an interactive Broadband coverage map and Dashboard, and provision of related training	15,000	CQS	n/a	67%	33%	No	N/A	2013	Pending	Local counterpart is an in-kind contribution.
5.3	Others	35,000	CQS	n/a	57%	43%	No	N/A	2013	Pending	Funding for external audit, administration, and other miscellaneous costs

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.


ENHANCING THE ICT REGULATORY ENVIRONMENT IN JAMAICA

JA-T1079

CERTIFICATION

I hereby certify that this operation was approved for financing under the Knowledge Economy Multidonor Fund (KEF) through a communication dated November 6, 2012, subscribed by Sergio Zwi, ORP/GCM. Also, I certify that resources from the Knowledge Economy Multidonor Fund (KEF) are available for up to US\$315,000 in order to finance the activities described and budgeted in this document. These certification reserves resources for the referenced project for a period of four (4) calendar months counted from the date of eligibility from the funding source. If the project is not approved by the IDB within that period, the reserve of resources will be cancelled, except in the case a new certification is granted. The commitment and disbursement of these resources shall be made only by the Bank in US dollars. The same currency shall be used to stipulate the remuneration and payments to consultants, except in the case of local consultants working in their own borrowing member country who shall have their remuneration defined and paid in the currency of such country. No resources of the Fund shall be made available to cover amounts greater than the amount certified herein above for the implementation of this operation. Amounts greater than the certified amount may arise from commitments on contracts denominated in a currency other than the Fund currency, resulting in currency exchange rate differences, for which the Fund is not at risk.

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Sonia M. Rivera
Chief a.i.
Grants and Co-Financing Management Unit
ORP/GCM

03/07/2013
Date

APPROVAL

Approved:



Flora Montealegre Painter
Division Chief
Competitiveness and Innovation Division
IFD/CTI

03/07/2013
Date