

Technical Cooperation Document

I. Basic Information for TC

▪ Country/Region:	JAMAICA
▪ TC Name:	Support the design of Jamaica National Broadband Connectivity Plan
▪ TC Number:	JA-T1184
▪ Team Leader/Members:	Garcia Zaballos, Antonio (IFD/CMF) Team Leader; Anganu, Jaiwattie (IFD/CMF) Alternate Team Leader; Acevedo Calle, Daniela (LEG/SGO); Fonseca, Daniel Fernando (IFD/CMF); Foronda Nogales, Shirley Mabel (VPC/FMP); Ho Lung, Jodi (CCB/CJA); Marquez, Claudia (IFD/CMF); Martinez Lopez, Cynthia Guadalupe (IFD/CMF); Samuels, Rochelle Kaye (CCB/CJA)
▪ Taxonomy:	Client Support
▪ Operation Supported by the TC:	.
▪ Date of TC Abstract authorization:	03 Mar 2022.
▪ Beneficiary:	Government of Jamaica
▪ Executing Agency and contact name:	Inter-American Development Bank
▪ Donors providing funding:	Knowledge Partnership Korea Fund for Technology and Innovation(KPK)
▪ IDB Funding Requested:	US\$400,000.00
▪ Local counterpart funding, if any:	US\$0
▪ Disbursement period (which includes Execution period):	24 months (24 months for execution)
▪ Required start date:	June 1 st , 2022
▪ Types of consultants:	Firms
▪ Prepared by Unit:	IFD/CMF-Connectivity Markets and Finance Division
▪ Unit of Disbursement Responsibility:	IFD/CMF-Connectivity Markets and Finance Division
▪ TC included in Country Strategy (y/n):	y
▪ TC included in CPD (y/n):	y
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Social inclusion and equality; Productivity and innovation

II. Objectives and Justification of the TC

- 2.1 The digital sector in Jamaica is underdeveloped. The Broadband Development Index, published periodically by the IDB, places the level of digital development of Jamaica in the 52nd position among the 65 countries analyzed. The main cause of these low levels is the lack of digital infrastructure. The coverage of 4G networks (the main technology that is bringing people online) is very limited in the country. Barely 9% of the population is covered by these networks, much lower than the data for the Caribbean (16%), the IDB countries (67%), and the Organization for Economic Cooperation and Development (OECD) countries (98%).
- 2.2 The lack of digital infrastructure in Jamaica is due to: (i) lack of investment, partly motivated by a very low level of competition in both the fixed and mobile markets; (ii) outdated regulatory framework; and (iii) lack of a visionary broadband policy

resulted in broadband investments largely left up to the local telecommunications providers.

- 2.3 To overcome these problems and head for a bright future, a National Broadband Plan, as the ultimate roadmap to the digitalization of Jamaica, should be developed and put into action. It should start with a holistic diagnosis of the current situation and with the definition of clear, ambitious, and achievable objectives (whats, wheres and whens). The plan is expected to foster economic growth by contributing to the enhancement of national competitiveness,¹ and also to show visions to protecting the relevant infrastructures to offer safe and stable services to the different users (public and private).
- 2.4 As South Korea emerged from the Korean War in the mid-1950s, they were one of the world's poorest economies. But through decades of government interventions and investments in modern technology, the country has soared to become one of the most developed countries in the region. South Korea's transformation is the result of the government's ambition to speed transformation to the digital economy, and one of the most important factors which realized this was the "Government's vision for Information and Communication Technology (ICT)". This is a great implication to Jamaica who is in preparation of the national broadband connectivity plan to overcome the pandemic crisis and supply the citizens with equal public services they deserve.
- 2.5 **Objectives.** The general objective of this non-reimbursable Technical Cooperation (TC) is to support the development of a national broadband plan for Jamaica. Particularly, these studies aim to support the planning by studying the best practice of Korean governments' policies, strategies, and technologies. With the in-depth study of the current existing network environment (policies, technologies, market) and the lessons learned from Korea, TC will propose a tailor-made suggestion to the Jamaica broadband and ICT national plan.
- 2.6 **Beneficiaries.** The beneficiaries of this TC will be Government of Jamaica through the Ministry of Science, Energy and Technology as well as the different Ministries and Institutions involved in the coordination of a national connectivity plan (Ministry of Health, Education, Agency of Spectrum, Universal Service Fund, etc).
- 2.7 **Strategic alignment.** The TC is consistent with the priorities identified in the Second Update to the Institutional Strategy (AB-3190-2) and is aligned with the development challenge of: (i) Social inclusion and equality, by providing inclusive infrastructure services that will allow the continuity of the public services and the equality between urban and rural areas; and (ii) Productivity and Innovation, as it is aimed at allowing Jamaica to be able to innovate and use ICT to enhance productivity and service provisions in the new age of IT. The TC also is aligned with the following strategic policy objectives: (i) strengthen the capacity of the state; (ii) provide inclusive infrastructure services; (iii) establish smart institutional frameworks; and (iv) improve regional infrastructure. Additionally, this TC is expected to contribute to the following IDB Group Corporate Results Framework 2020-2023 (GN-2727-1) indicators: (i) telecommunications infrastructure, contributions directed to develop extension and quality of telecoms infrastructure, including infrastructure; and (ii) public policy in

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

telecommunications; contributions directed to increase the level playing-field competition and the transparency of the regulatory policy and reforms within the telecom sector. The TC is also aligned with the IDBG Country Strategy with Jamaica (GN-2868) since it will contribute to increasing the efficiency of public sector as well as the improvement of the regulatory framework for doing business. Finally, the TC is also aligned with the "Vision 2025" agenda by the promotion of the digital economy in Jamaica. Finally, the TC is also aligned with the KPK Fund and the corresponding Operational Guidelines (CC-6015-1) since it is expected to support the implementation of a National Connectivity Plan in Jamaica by studying the best practice of Korean Governments' policies, strategies, and technologies.

III. Description of activities/components and budget

- 3.1 The activities that are proposed in this project are divided into three main components, which define the strategic approach of this technical cooperation: Component 1 will include activities to analyze and identify the demands and forecast of the connectivity issues. Component 2 will support the case study Korean Government's strategies and policies. And component 3 will provide a proposal for the Jamaica National broadband connectivity plan considering the result of Components 1 and 2.
- 3.2 **Component 1. Analysis (US\$145,000).** The objective of this component is to identify and analyze the situation and the surroundings of the current Jamaica national broadband.
- 3.3 **Activity 1.1. Demand forecast:** The scope to be implemented within this analysis will be: (i) study of the supply: identify the current supply of telecommunications services in the beneficiary country (households, hospitals, health centers, and public institutions like schools and education centers); and (ii) study of the demand: estimate the current demand for those services and forecast, considered political, economic, sociodemographic and cultural circumstances, especially considering the demands from the health organizations.
- 3.4 **Activity 1.2. Identification of sites:** This activity will identify the existing infrastructure (telecom, electricity, water, road, railway, etc.) and identification of the infrastructure gap to improve the connectivity of the different parishes. Also, suggest the mapping of prioritized public locations to be connected through the design of prioritization criteria. The sites will be proposed in consideration of the budget, technical environment, and the opinions of the government.
- 3.5 **Activity 1.3. Technical specification:** This technical analysis includes, among others: (i) assessment of the existing available infrastructure; (ii) study of the current status of Jamaica's broadband network (formation, design, equipment, bandwidth); and (iii) define technical specifications to provide nationwide connectivity.
- 3.6 **Component 2. Study case of Korea (US\$105,000).** The objective of this component is to study the best practices, policies, and strategies of Korea.
- 3.7 **Activity 2.1. Strategy:** This activity will support the case study of Korean experience on national broadband planning, legal frameworks, and related policies to compare with existing legislation for a later proposal.
- 3.8 **Activity 2.2. Technology:** This activity will support the technical case study of Korean experience on connecting rural areas and supporting the operation. It will review alternative technologies like wireless GHz, MHz alternative technologies to offer high

capacity and long-distance communication, and the model of data center to be proposed in the latter suggestion.

- 3.9 **Component 3. Proposal to the national broadband plan (US\$150,000).** The objective of this component is to propose a plan to be adopted in the national plan reflecting the result of Components 1 and 2.
- 3.10 **Activity 3.1. Planning of network:** With the result of component 1 and 2, this activity will support the national broadband planning of Jamaica by suggesting policy reform, and governance model, developing technical data centers, etc.
- 3.11 **Activity 3.2. Technical suggestion:** As a practical and technical suggestion measure, propose a model of data center which will work as an information analyzing facility to technically support the sustainable operation of the related infrastructures in Jamaica.
- 3.12 **Expected results.** This project will provide technical and policy assistance and investment strategy for the national broadband plan of Jamaica. Specifically, the expected results of the project are: (i) study the existing network, identify technical specifications, support design the expanding network by fully utilizing the existing infrastructure for Jamaica; and (ii) study case of South Korea to learn and customize the best practice on broadband connectivity.
- 3.13 **Budget.** The total cost of this TC will be US\$400,000 which will be financed by the Knowledge Partnership Korea Fund for Technology and Innovation (KPK). The contribution will finance the hiring of consulting services (firms) for the development of the activities. Table 1 details this budget:

Table 1. Indicative Budget in (US\$)

Activity/Component	Description	IDB Funding/ KPK	Total Funding
Component 1	Analysis <ul style="list-style-type: none"> • Demand forecast • Identification of sites • Analysis on existing planning of network 	145,000	145,000
Component 2	Study case of Korea <ul style="list-style-type: none"> • Review of strategies and technologies of Korea 	105,000	105,000
Component 3	Proposal to the national broadband plan <ul style="list-style-type: none"> • Planning of network • Technical suggestion 	150,000	150,000
TOTAL		400,000	400,000

IV. Executing agency and execution structure

- 4.1 The executing agency will be the Bank through the Connectivity, Markets, and Finance Division (IFD/CMF). The justification for this execution structure is: (i) the Bank has the technical experience to coordinate and execute the different activities included in the TC; (ii) TC will need an extensive coordination partnership with international different institutions organizations within Jamaica including, academic institutions, and private sector firms; and (iii) the beneficiaries requested the Bank to be the executor given the technical difficulties related to the project. Furthermore, the Bank is

considered to have the adequate systems to guarantee the proper execution of the operation and ensure the sustainability of the implementation of the project in line with the “Operational Guidelines for Technical Cooperation Products” (GN-2629-1) and Procedures for the Processing of Technical Cooperation Operations and Related Matters (OP-619-4 Annex II, C 2.2). Likewise, the TC team has the necessary experience to ensure compliance with the relevant procurement policies and procedures.

- 4.2 The supervision and coordination of the consultant’s work will be the responsibility of Antonio García Zaballos (IFD/CMF) Team Leader and will follow bank’s procurement policies.
- 4.3 **Procurement.** The Bank will be responsible for the selection and hire of the consulting services. All activities to be executed under this TC have been included in the Procurement Plan (see Annex II) and will be contracted in accordance with Bank policies as follows: (i) AM-650 for Individual consultants; (ii) GN-2765-4 and Guidelines OP-1155-4 for Consulting Firms for services of an intellectual nature; and (iii) GN-2303-28 for logistics and other related services. These activities are scheduled for completion within 24 months of approval of the TC. All products from this TC will be the intellectual property of the Bank.

V. Major issues

- 5.1 This project entails two risks that could potentially affect the project: (i) the lack of coordination across different institutions within the beneficiary country; and (ii) the lack of technical expertise to deal with the large business like the deployment of infrastructure beyond national borders. The first risk will be mitigated by utilizing the task forces that the Ministry of Science, Energy and Technology leads. The second risk will be reduced through the cooperation between the Bank, and renowned international institutions which could provide specific support, knowledge, and training throughout the execution of the project, for instance Korean Institutions.

VI. Exceptions to Bank policy

- 6.1 None.

VII. Environmental and Social Strategy

- 7.1 This TC will not finance feasibility or pre-feasibility studies of investment projects nor associated environmental and social studies; therefore, it does not have applicable requirements from the Bank’s Environmental and Social Policy Framework (ESPF)”.

Required Annexes:

[Request from the Client - JA-T1184](#)

[Results Matrix - JA-T1184](#)

[Terms of Reference - JA-T1184](#)

[Procurement Plan - JA-T1184](#)