GOVERNMENT OF JAMAICA

Information and Communications Technology (ICT) Policy

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INFORMATION AND COMMUNICATIONS TECHNOLOGY POLICY 2009

1. INTRODUCTION

Information and Communications Technology (ICTs) have over the past two decades paved the way for economic and social development across the world. Its importance to growth in all sectors of the Jamaican economy was recognized by the Government and prompted the termination of the monopoly licence held by Cable and Wireless Jamaica Limited in favour of liberalization of the telecommunications sector in 1999.

The Government adopted a phased approach to the liberalization process to minimize dislocation and to ensure that the necessary legal and regulatory framework was in place to support investment and competition in existing, new and emerging services, and infrastructure. A new Telecommunications Act was promulgated in 2000 which made provision for, *inter alia*, the implementation of the liberalized framework; regulation of the sector by the Office of Utilities Regulation; the establishment of a Telecommunications Appeal Tribunal; the management of the radio frequency by the Spectrum Management Authority and the establishment of the Jamaica Telecommunications Advisory Council (JTAC) to provide advice to the Minister on the reform of the telecommunications sector.

As envisaged, having achieved full liberalization, there is need to create a new legal and regulatory framework to take advantage of the opportunities presented by the advancements in ICTs which have resulted in new methods of transmitting voice, data and video; driven by Internet Protocol (IP) based networks capable of providing a full range of products and services that are accessible via a wide range of devices from any location.

This policy takes account of the following principles in order to create an enabling environment to maximize opportunities for industry, investment, commerce, public institutions, consumers and citizens:

(i) ICTs as a developmental tool;

(ii) Universal Service & Access;

(iii) Efficient Spectrum Management;

(iv) Neutrality of Technology;

(v) Competition;

(vi) Access to and uptake of high capacity networks/ ICT infrastructure;

(vii) A modernized legal, regulatory, institutional and administrative framework;

(viii) e-Government;

(ix) Consumer Protection;

(x) Research and innovation in ICTs;

(xi) Treatment of ICT waste;

(xii) Development of local content and creativity/creative industries;

(xiii) Creation of a knowledge based society; and

(xiv) Convergence of telecommunications services on diverse media.

Consonant with the foregoing principles, the policy focuses on positioning ICTs as an instrument for national development for purposes of improving the global competitiveness of local industries through the creation of a governing framework which is transparent, responsive, cohesive and encouraging of self regulation among stakeholders in the sector. Moreover, Government's commitment to bridging the existing digital divide is underscored by the specific provisions for access for all Jamaicans to enabling elements in relation to ICTs. The policy encourages sharing of infrastructure resources. It will be important to pursue regional and international collaboration among regulators during the implementation of the policy.

The ICT Policy which takes account of international best practices will be supported by the National Information and Communications Technology Strategy 2007-2012; the ICT Sector Plan and Implementation Framework of the National Development Plan 2030 (Vision 2030 Jamaica); the National Energy Policy; an overarching Content Policy and a comprehensive Spectrum Management Policy (both of which are to be developed); the latter will take account of regional harmonization imperatives.

2. POLICY FRAMEWORK

2.1 Policy Goals

The main policy goals are:

(i) Improved Productivity of the National Economy

ICTs will be utilized to increase the overall efficiency and productivity of both the public and private sectors.

(ii) Local and International Investments

The establishment of world-class high capacity ICT infrastructure and services across the island will attract increased investments in the country, with particular focus on ICT related businesses and services.

(iii) Support for all sectors

The Government is committed to using ICT as a key enabler to develop all sectors including health, education, tourism, security and agriculture. Focus will be given to the creation of an educated and knowledge based society capable of leveraging the cumulative benefits of ICT to achieve competitiveness.

2.2 Policy Vision

The vision of the Government is to establish a knowledge based and educated society to increase Jamaica's global competitiveness and productivity and to utilize ICTs to attain developed country status by 2030.

2.3 Policy Mission

The mission is to achieve greater social and economic development for the people of Jamaica, through increased application of ICT in all sectors facilitated by affordable ICT services, and effective management of the national radio frequency spectrum as well as other ICT assets.

POLICY ISSUES, OBJECTIVES AND STATEMENTS

The above considerations inform the issues, objectives and statements outlined below.

3. LEGAL, REGULATORY, INSTITUTIONAL & ADMINISTRATIVE FRAMEWORK

3.1 Policy Element – Legal Framework

a. Policy Issue

Appropriate legislation is needed to address existing fragmentation, and current and future developments in a liberalized and converged environment.

The e-Transactions Act came into effect in April 2007. Legislative provisions to address data protection and the criminal misuse of data are under consideration.

b. Policy Objective

To harmonize, rationalize and strengthen the existing legislative framework, taking into account international best practices, to adequately address current trends and emerging technologies, promote and support competitiveness and the long term development of the ICT sector.

c. Policy Statements

(i) All existing laws relevant to ICT will be harmonized and new legislation will be promulgated to give effect to this policy.

(ii) Provision will be made for appropriate sanctions and penalties to address breaches.

(iii) Provision will be made for periodic review of the legislative framework will be made to address developments in the sector.

(iv) Provision will be made for protocols to govern interconnection and optimal utilization of ICT infrastructure (e.g. infrastructure facility sharing and co-location).

(v) Provision will be made for establishing, monitoring, enforcing, and reporting on performance standards.

3.2 Policy Element – Regulatory and Institutional Framework

a. Policy Issue

The ICT sector requires an enabling, cohesive regulatory environment to attract investments and facilitate competition.

b. Policy Objective

To establish a converged ICT regulatory framework through:

- Drafting new legislation and establishing cross agency protocols to minimize fragmentation and jurisdictional overlap.
- Rationalizing the various regulatory functions and re-engineering processes.
- Establishing/operationalizing a converged institutional and regulatory framework inclusive of determining the governance structure.

c. Policy Statement

It is imperative that an appropriate institutional and regulatory framework be established for the effective administration of a converged ICT environment. The separation of content regulation, treatment for specific areas of competition, minimization of fragmentation and jurisdictional gaps and overlap, and strategic management of ICT related issues are seen as necessary components for the transformation of the institutional and regulatory environment. The legislation will make provision for an Advisory body and an appellate system.

Focus will be on the following initiatives:

(i) Competition and Content Regulators will remain separate in the converged ICT framework;

(ii) Provision will be made for an Inter Regulators Forum between the Content Regulator, the Competition Regulator and the ICT Regulator;

(iii) Encouragement of self regulation within the ICT sector;

(iv) Provision for the sharing of information among regulators;

(v) The establishment of a National ICT Advisory body to provide ongoing advice to the Minister with responsibility for ICT related issues;

(vi) Provision will be made for an appropriately constituted independent ICT Appellate body capable of responding to the range of issues under the jurisdiction of the Regulator. The functions of, and funding for the appellate body will be elaborated in the legislation;

(vii) The legislation will also make provision for the grounds for appeal, as well as the process and period for addressing appeal;

(viii) Provision will be made for the establishment of an appropriate governance structure for the ICT Regulator;

(ix) Provision will be made for the establishment of a system for early detection of cyber threats and appropriate responses; and

(x) Provision will be made for an organized framework to focus e-Government strategies.

3.3 Policy Element - Administrative Framework

a. Policy Issue

The ICT sector needs an efficient and responsive administrative system.

b. Policy Objectives

(i) To promote a high standard of performance and responsiveness in administration in order to increase efficiency and enhance competitiveness within the ICT sector.

(ii) To ensure that the administration of the regulatory mandate is effected through policies and procedures which are transparent and effective.

(iii) To simplify the licensing processes to promote growth and encourage investment.

c. Policy Statement

Provision will be made for administering the licensing regime to facilitate procedural efficiency, transparency and responsiveness to technological changes.

4. SPECTRUM: A National Resource

a. Policy Issue

The Radio Frequency Spectrum is a valuable national resource and must be managed efficiently on principles of equity and flexibility, taking account of international protocols, innovation and market dynamics. Existing anomalies in the licence fee regime will need to be addressed.

b. Policy Objectives

To have efficient spectrum planning, allocation and assignment in accordance with international best practices, protocols and standards, taking account of the need to:

(i) Facilitate the deployment of existing and emerging wireless technologies;
(ii) Derive maximum economic benefit and promote development;
(iii) Attract investments; and
(iv) Establish a protocol for the declaration and treatment of licence exempt spectrum.

c. Policy Statements

(i) Provision will be made in the legislation for the licensing and management of the radio frequency spectrum.
(ii) Provision will be made in the legislation for the suspension and revocation of the right to use the spectrum allocated, in the interest of national security or defence upon a directive from the Minister with portfolio responsibility for spectrum issues.
(iii) Government will reserve the right to determine the framework by which Spectrum is assigned and the Regulator will administer the process.

(iv) Provision will be made in the legislation for the Regulator to have enforcement powers to deal with the illegal use of spectrum. The relevant section of the Post and Telegraph Act will be repealed.

(v) Provision will be made in the legislation for recovery and "refarming" of previously assigned spectrum that is underutilized and/or used inefficiently, taking account of licensing terms and conditions and international best practices.

(vi) Provision will be made for the 'use or lose' principle.

(vii) Provision will be made in the legislation for the declaration of licence exempt spectrum bands.

(viii) The legislation will make provision requiring that all users of non exempt spectrum bands be licensed.

(ix) Licence fees will be computed taking account of the nature of the use or change in the use of assigned bands.

(x) Provision will be made in the legislation for the Regulator to waive licence fees for certain specified services in accordance with government policy.

(xi) Provision will be made to require all licensees to contribute to the cost of regulation unless otherwise exempted in keeping with domestic imperatives and taking account of international best practices.

(xii) Provision will be made in the legislation for allocation of radio spectrum to accommodate law enforcement, public safety, emergency and other services of national interest.

(xiii) Provision will be made in the legislation for continued use of regulatory mechanisms that empower the Regulator to ensure the most efficient use of the spectrum and to enhance and facilitate competition.

(xiv) Provision will be made for the promulgation of a new Spectrum Management Policy to include regional harmonization and technological evolution.

5. COMPETITION

Competition attracts investment, facilitates innovation and benefits consumers. Provision must therefore be made to promote competition and diversity through appropriate legislation on mergers and acquisitions.

Under the current arrangement sector-specific ex-ante regulation is treated in the Telecommunications Act and coexists with ex-post enforcement of general competition law. Moving forward, the ex-post approach is expected to be the dominant means by which competition is regulated. In the short to medium term however, provision has to be made for ex-ante regulation to deal with issues such as call termination, interconnection, and to safeguard against (*inter alia*) the misuse of shared information.

5.1 Policy Element – Competition Regulation

a. Policy Issue

(i) The fair competition legislation does not make provision for the regulation of mergers and acquisitions. However, it is necessary to prevent the concentration of market power that can result in the manipulation of prices or stifling competition.

(ii) The existing regulatory arrangements do not clearly delineate the responsibilities of the Competition Regulator and ICT sector regulator(s). As a consequence there is uncertainty in the ICT sector as to the authority responsible for resolving critical competition issues.

b. Policy Objective

To advance Jamaica's vision of regional leadership in ICTs by enabling multiple and diverse platforms for connectivity and providing an adequate and efficient regulatory regime to resolve competition issues in the ICT sector, having particular regard to the dynamic and peculiar nature of the services, the need for speedy and equitable resolution of issues and to promote competition without duplicating specialist resources.

c. Policy Statements

(i) Legislative provision will be made for Sector specific definitions and clearly signal the intention to promote competition in ICTs.

(ii) Provision will be made for the Sector Regulator to have jurisdiction for:

- Non-access anti-competitive issues inclusive of matters pertaining to change of ownership and control, and ex-ante competitive safeguards;
- Discriminatory access to inputs, including essential facilities networks; and
- Interconnection.

The Competition Regulator however will retain jurisdiction for other matters which affect competition in the ICT sector.

(iii) There will be legislative provisions to empower the Regulator to intervene where there is discriminatory conduct on the part of the carriers and service providers.

(iv) The new legislation will make provision for licensing 'terms and conditions' for discontinuance of specified services between parties.

(v) Access obligations will be grounded in the 'equality of access' principle.

5.2 Policy Element – Number Administration

a. Policy Issue

Telephone numbers constitute a finite national resource which must be administered in the public interest. There is the need to expand the authority of the Regulator to effectively manage this resource.

b. Policy Objective

The optimal allocation and management of telephone numbers and codes to all existing and new service providers and to allow for the application of new numbering schemes as deemed suitable.

c. Policy Statements

(i) The Regulator will, consistent with international best practices, have responsibility for:

- Managing a numbering system to meet current and future demands for telephone numbers and codes;
- The allocation of numbers and codes on an equitable and commercially reasonable basis;
- Cost effective management of the numbering plan;
- Developing and promulgating standards for the utilization of numbering; and
- Ongoing interaction with the appropriate international bodies engaged in telephony management and switching to ensure that local numbering plans are known to the international telecommunications sector.

(ii) The legislation will make provision for an efficient method of administering the numbering system, inclusive of:

- The recall and reallocation of number resources to promote efficient management of the numbering system, as required;
- Number portability; and
- New numbering options.

(iii) Provision will be made for recovery of administrative costs.

5.3 Policy Element – .jm ccTLD Domain Administration

a. Policy Issue

The .jm ccTLD (country code Top Level Domain) is an integral component of the ICT infrastructure. It must be developed taking account of the need for adequate security measures and management protocols in order to usher in a new wave of innovative technologies and products to increase economic development and further encourage an open competitive environment.

b. Policy Objective

The Government will facilitate management of the ccTLD registry to ensure that this economic resource reaps the maximum benefits for all Jamaicans.

c. Policy Statements

The Government will make provision for:

(i) Administrative and technical management of ccTLD;
(ii) Policies and procedures for the registration of the ccTLD Domain Name;
(iii) The .jm ccTLD to be administered by an entity with the requisite capacity;
(iv) Promotion of the .jm ccTLD as a unique branding opportunity for Jamaican entities and individuals;
(v) Automated and shared registration systems to allow registrars and designated entities to register .jm names and facilitate local and global distribution of registrations; and
(vi) Development of a Dispute Resolution Policy to resolve cyber squatting.

6. UNIVERSAL SERVICE

6.1 Policy Element – Universal Service

a. Policy Issue

The existing definition of universal service is restrictive and needs to be expanded beyond physical access to networks. Universal service must encompass enabling elements such as information literacy and financing, bearing in mind that ultimately Jamaicans will be empowered and enriched not simply by technology but by the capacity and opportunity to create and use content and applications.

b. Policy Objective

To achieve a thriving, digital economy and knowledge-based society with opportunities for accelerated growth and which includes every Jamaican.

c. Policy Statements

Government will redefine universal service in the relevant legislation, as inclusive of the following elements:

(i) Physical Access through connectivity to local/regional and international networks;

(ii) Resource Access (financial and human) which takes account of the need for financial support to enable small and medium enterprises (SMEs) to acquire ICTs for entrepreneurial and business development, particularly SMEs' involved in innovation and creation of ICT products and services; and the need to support technical training and education to develop a cadre of knowledge workers capable of supporting local and international investments in the ICT sector and the wider economy; and

(iii) Basic Access which requires that, at minimum, opportunities be made available for all Jamaicans to become computer literate.

6.2 Policy Element – Universal Service Obligations

a. Policy Issue

Reliance on market forces is not a guarantee that the entire population will have access to the ICTs within the time frames set out in Jamaica's ICT Strategic Plan. The Government will need to intervene as required to promote universal service through the provision of the necessary funding or access facilities.

While voice telephony, through wire line and wireless transport, penetrates extensive areas of the island, the availability and access to high capacity networks for Internet access remains a major challenge. This has adversely impacted ICT based education, access to information, deployment of electronic services (e-Services) and entrepreneurial opportunities beyond urban and other

densely populated geographical regions. There is, therefore, a need to deploy high capacity networks to unserved and underserved areas as also to enhance efficiency and stimulate economic development.

b. Policy Objective

The policy seeks to promote accelerated deployment of affordable and accessible high capacity networks and facilities islandwide.

c. Policy Statements

The Government will:

(i) Keep under review unserved and underserved areas of the country and pursue strategies to increase access to high capacity services;

(ii) Support programmes that specifically target vulnerable groups including low-income households, the elderly, youth and the disabled;

(iii) Establish a micro-financing fund which will provide loans, grants and/or equity investments in ICT projects operated by small local entrepreneurs, local authorities and non-profit organizations to stimulate the expansion of ICT access;

(iv) Incentivize deployment of ICT services to unserved and underserved areas and the provision of Access Points and multi-function telecentres;

(v) Continue to fund connectivity services and supporting infrastructure to educational institutions, libraries, post offices;

(vi) Provide Internet access devices and applications for the training of students in the use of the Internet and other ICT services, to support the Government's vision of creating an information and knowledge based society;

(vii) Facilitate the achievement of lifelong learning and a knowledge based society by providing ubiquitous access to information which supports improved education, skills acquisition and innovations; and

(viii) Promote information literacy programmes and the development of local content.

6.3 Policy Element – Funding of Universal Service Obligations

a. Policy Issue

It is important to protect the reliability of and augment the revenues for universal service programmes.

b. Policy Objective

To extend the obligation for payment of the Universal Service Obligation levy to all ICT service providers.

c. Policy Statements

(i) The legislation will contain express provision for the Universal Access Fund Company Limited (UAFCL) to collect and monitor the inflows of funds to the Universal Service Fund (the Fund) and manage the protocols governing use of the Fund. The UAFCL will be held responsible for reporting on the use of the Fund which shall have succession until it is dissolved.

(ii) The legislation will make express provisions for a project approval process to enable the UAFCL to fund approved programmes and projects.

(iii) The legislation will make provision for the Universal Service Obligation levy to be derived from a charge on inbound international voice, data and all other forms of traffic and/or a percentage of gross revenue from ICT licensees.

(iv) All licensees will be under an obligation to pay the levy to enable the discharge of all Universal Service Obligations.

(v) The legislation will make provision for sanctions for non-compliance with the payment of Universal Service Obligation levy.

(vi) The Fund will (among other initiatives) support connectivity access, the provision of hardware, software and supporting infrastructure to schools, provision of hardware and software to libraries and post offices; support content, information literacy, educational and technical training in ICTs.

7. E-GOVERNMENT

a. Policy Issue

ICTs must be optimally utilized to facilitate transparency and accountability in government, citizen engagement with government, and to integrate fragmented systems to enhance delivery of public services.

b. Policy Objective

To create a transformational state bureaucracy; 'on demand' government through integrated 'end to end' processes across the government service and with stakeholders; effective communication; stimulation of public involvement; empowerment of citizens; minimization of social exclusion, and realization of the knowledge based society.

c. Policy Statement

Government will advance its e-Government agenda for the delivery of public services in an integrated fashion, facilitated by ICTs and consistent with the 2030 Development Plan; WSIS Declaration of Principles, WSIS Plan of Action and the Millennium Development Goals.

8. CONSUMER PROTECTION

8.1 Policy Element – Quality of Service

a. Policy Issue

The deployment of ICT networks to seamlessly deliver a range of services poses challenges with respect to Quality of Service (QoS).

b. Policy Objective

To have an ICT environment in which consumers enjoy efficient and reliable communications services that conform to international QoS standards.

c. Policy Statements

(i) Encourage the industry to establish and operate voluntary industry codes (to be registered with the Regulator) and provide consumers with up-to-date QoS information.

(ii) Provision will be made in the legislation for minimum service level standards to cover the fundamental precepts of ICTs in keeping with international best practices, to be met as a condition of operating licences, and for appropriate sanctions to be applied where breaches occur.

(iii) Provision will be made in legislation for the Regulator to obtain and publish with regularity, information on industry performance.

(iv) Provision will be made in the new legislation to empower the Regulator to intervene where carriers and service providers are not sufficiently responsive to customer complaints. The law will also provide for redress.

8.2 Policy Element – Privacy and Security

a. Policy Issues

Privacy of customer information can be compromised by virtue of unauthorized access. It is, however, recognized that in certain specific circumstances (national security and defence) provision may be made for access to personal information.

b. Policy Objective

To minimize the risks of the unauthorized access and the disclosure of customer information.

c. Policy Statements

(i) A requirement for custodians of web-based databases to maintain system integrity through physical and logical security on the technology deployed.

(ii) Provision will be made in companion legislation for sanctions related to invasion of privacy, unauthorized access and unauthorized use of customer information.

(iii) Provision will made to establish protocols to treat with requests for access to personal information.

9. ICT INFRASTRUCTURE

9.1 Policy Element – Accelerating Access and Uptake of High Capacity Networks

a. Policy Issue

The ICT infrastructure is a strategic resource; the efficient deployment of high capacity networks and international connectivity are important to stimulate entrepreneurship and accelerate the provision of public and private e-services and m-banking and provide access to worldwide markets.

b. Policy Objective

To have islandwide ICT infrastructure which facilitates greater access to high capacity networks with interconnection to international networks.

c. Policy Statements

(i) Provision will be made to facilitate the establishment of islandwide high capacity networks that will efficiently convey traffic which originates from all access technologies.

(ii) Provision will be made in companion legislation for appropriate treatment of access to public right-of-way.

(iii) Provision will be made to encourage an environment conducive to the continued development and enhancement of the ICT infrastructure, including international connectivity.

(iv) Provision will be made to encourage an interoperable ICT infrastructure with appropriate levels of redundancy and resilience.

(v) Provision will be made to facilitate the establishment of a National Internet exchange point.

9.2 Policy Element – Physical Infrastructure

a. Policy Issue

There is need to have in place the appropriate physical infrastructure to attract investments in the ICT Sector.

b. Policy Objective

To have available the necessary physical infrastructure which will facilitate the establishment of ICT related businesses, to include SMEs, in ventures such as business process outsourcing (BPO), software development and hardware manufacturing and repair.

c. Policy Statement

The Government will support the ongoing development of office and factory space and industry incubators, through a public-private partnership framework, to be established by the Ministry with portfolio responsibility for industry and investment.

10. TECHNOLOGY, RESEARCH AND INNOVATION

10.1 Policy Element – Technology Neutrality

a. Policy Issue

In an environment of rapid evolution and growth in the range of technological options for delivering ICT solutions, technology neutrality fosters innovation and simplifies the approach to regulation by focusing attention on services and not the means of delivery.

b. Policy Objective

A robust, responsive and appropriately regulated environment in which technologies compete and innovation is stimulated.

c. Policy Statements

(i) Foster an environment in which a range of technologies are used to offer various services.

(ii) Make provision for the Regulator to operate consistent with the principle of technology neutrality.

(iii) Encourage new investments and support innovation to stimulate the introduction of new technologies and services.

10.2 Policy Element – Research and Innovation

a. Policy Issue

In order for Jamaica to become more competitive there is an urgent need for focused attention on ICT research, innovation and development.

b. Policy Objective

Establishment of a framework to support ICT research and innovation geared towards national priorities.

c. Policy Statements

(i) Promote an increase in observing copyright and the registration of patent and trade mark for ICT innovations.

(ii) Facilitate funding of facilities for ICT research, innovation and development.

(iii) Create a fund to support deployment of local ICT innovations.

(iv) Encourage collaboration among local and regional experts and research institutions.

(v) Systematically develop education and skills capacity to support advanced research and innovation in ICT.

(vi) Establish centres of excellence and encourage the development of knowledge networks and communities of practice.

11. ICT ANDTHE ENVIRONMENT

11.1 Policy Element – Disposal of ICT Waste

a. Policy Issue

The material components of ICT hardware vary in nature and may require specific treatment in disposal.

b. Policy Objective

To facilitate the framework for appropriate disposal of ICT waste.

c. Policy Statements

(i) Provision will be made for the Standards Organization to do type testing and/or verification of manufacturer standards of ICT equipment that will be widely deployed.

(ii) Encourage the recycling/re-use of ICT equipment to extend its life and extract maximum utility.

(iii) Encourage the development of a service sector to repair/rehabilitate/upgrade ICT equipment.

(iv) Provision will be made to mandate the relevant Authority to develop a comprehensive policy for the appropriate disposal of ICT waste and the use of fiscal and regulatory instruments to encourage compliance.

11.2 Policy Element – Levels of Emission

a. Policy Issue

ICT equipment and installations may emit radiation.

b. Policy Objective

To establish standards for emission levels consistent with international guidelines.

c. Policy Statements

(i) Provision will be made in the legislation requiring importers/suppliers of ICT equipment to obtain quality verification and certification by the Standards Organization, where required.

(ii) Provision will be made for suppliers of equipment to have facilities for measuring radiation levels.

(iii) Provision will be made to require suppliers to provide information to the public regarding radiation output and increased risk of damaged instruments.

(iv) Provision will be made for the relevant Authority to develop a policy for levels of emission in accordance with recognized international standards or best practices.

(v) Provision will be made for the relevant Authority to enforce compliance with the prescribed emission standards.

Glossary of Terms

In this document, where the context allows, the following terms will have the meanings specified below:

Terms	Definitions
Access	The making available of ICT facilities and/or services under defined conditions, on either an exclusive or non-exclusive basis.
Business Process Outsourcing	A form of outsourcing that is characterised as an information technology enabled service which involves the contracting of operations to a third party service provider.
Co-location	The process by which ICT operators locate equipment in the same space/facility. Co-location allows operators to easily interconnect equipment and/or networks.
Connectivity	The capability to provide, to end users, connections to other communication networks. E.g. the Internet
Convergence	A term used to describe a variety of technological and market trends involving the blurring of previously distinct lines between market segments such as cable television, telephony and Internet access, all of which can now be provided through a variety of different network platforms.
Country Code Top Level Domain (cc TLD)	A top-level domain (TLD) name on the Internet that is reserved for a country or territory, for example, (.jm) for Jamaica.
Cyber Squatting	This is the registering, trafficking in, or using a domain name with bad faith intent to profit from the goodwill of a trademark belonging to another individual or entity.
Digital Divide	The gap between people with effective access to digital and information technology and those with very limited or no access at all. It includes the imbalances in physical access to technology as well as the imbalances in resources and skills needed to effectively participate as a digital citizen.
Digital Economy	The global network of economic and social activities that are enabled by information and communications technology, such as the Internet, mobile and sensor networks.
e-Government	The use of information and communication technology to provide and improve government services, transactions and interactions with citizens, businesses, and other arms of government.
e-Services	The provision of services via the Internet. e-Services includes e-commerce transactions.

Terms	Definitions
Ex-ante regulation	Ex-ante regulation involves setting specific rules and restrictions to prevent anti-competitive or otherwise undesirable market activity by carriers before it occurs. Ex -ante regulation is mainly concerned with market structure, that is, the number of firms and level of market concentration, entry conditions, and the degree of product differentiation.
Ex-post Regulation	Ex-post regulation calls for setting few or no specific rules in advance, but aims to address proven anti-competitive behaviour or market abuse through a range of enforcement options including fines, injunctions, or bans. Ex-post regulation is mainly concerned with market conduct — the behaviour of a firm with respect to both its competitors and its customers.
Facility	Any apparatus, infrastructure, building, including switching equipment locations, mast sites, towers, poles, trunk lines, user access lines, ducts, submarine optical fibre cables and other tangible resources used or capable of being used for ICT or ICT related services and operations.
High Capacity Networks	A high-speed medium that is able to transmit signals from multiple independent network carriers. This may be done on a single coaxial cable, fibre-optic cable or wireless signals by establishing different bandwidth channels to transmit data, voice and video over long distances simultaneously.
Industry Incubator	A programme designed to accelerate the successful development of entrepreneurial companies through an array of business support resources and services.
Interconnection	The physical and logical connection of separate telecommunications networks to allow users of those networks to communicate with each other. Interconnection ensures interoperability of services and increases end users' choice of network operators and service providers.
Internet Exchange Point (IXP)	A central location where multiple Internet Service Providers can interconnect their networks and exchange IP traffic.
Interoperability	The ability of two or more facilities or networks to be connected to exchange information, and to use the information that has been exchanged.
Knowledge Networks	Is designed to enhance competitiveness by using ICTs to connect Jamaica to the global pool of knowledge, develop human resources, facilitate greater integration and foster continuous learning and improvement among practitioners.
Knowledge-based Society	A society that is able to access, share, produce and adapt all available information in order to inform decision making, facilitate innovation and provide for life long learning.
License Exempt	Radio frequency bands determined to be exempt in keeping with

Terms	Definitions
Spectrum	national imperatives and international best practices. Licence exempt spectrum usually includes bands which allow for the operation of short range and low output devices.
Logical Security	Logical security consist of software safeguards including user ID and password access to ensure only authorized users are able to perform actions and access information.
m-Banking (Mobile Banking)	Financial transaction undertaken using a mobile phone against a bank account accessible from that phone.
Number Portability	The ability of a consumer to change service location; subscribe to a new form of service or transfer from one service provider to another without requiring a change in number and without impairment of quality, reliability, or convenience when switching.
Quality of Service (QoS)	The collective effect of service performance which determines the degree of satisfaction of a user of the service. The level of quality required by the users of a service may be expressed technically or non-technically as per international best practices.
Radio Frequency Spectrum or Spectrum	The radio-frequency spectrum refers to electromagnetic radio frequencies used in the transmission of sound and data.
Redundancy	To allocate additional resources to critical ICT assets for disaster recovery.
Refarming	The process by which the allocation of radio frequency bands are revised by reducing the width of each channel (bandwidth) and also, reducing the channel spacing between each channel assignment.
Right-of-way	A privilege granting public access to an area of land such as a street, road, highway, side walk/ foot path over which ICT infrastructures, railroads, power lines, gas, oil, water and other pipelines and sewers are built.
Telecentre	A public place where citizens can access computers, the Internet and other ICT services.
Universal Service	Refers to a policy of the Government to make ICTs equally accessible throughout Jamaica through promotion and support of physical, resource and basic access.
Universal Service Obligation	An obligation which can be imposed upon the designated ICT operators. This obligation includes a demand by the Government to meet any request for the provision of universal access. The purpose of having such an obligation is to ensure national coverage of ICT service(s) in unserved and underserved areas, where provision of ICT service may be less profitable.
World Summit on Information Society	The UN General Assembly Resolution 56/183 (21 December 2001) endorsed the holding of the World Summit on the Information Society

Terms	Definitions
(WSIS)	(WSIS) in two phases. The first phase took place in Geneva in 2003 and the second phase took place in Tunis, in 2005.The purpose of the WSIS is to ensure that ICT benefits are accessible to all while promoting specific advantages in areas such as e-strategies, e-commerce, e-government, e-health, education, literacy, cultural diversity, gender equality, sustainable development and environmental protection.