

NATIONAL E-GOVERNMENT STRATEGY & WORK PLAN

2015-2018



E-Government Vision of Belize 2014

**" An Integrated, Collaborative Government
Delivering Secure, Quality Public Services
that Connect and Empower People."**

Central Information Technology Office
Ministry of Finance
Government of Belize

ACKNOWLEDGEMENTS

This e-Government Policy is the result of extensive national consultations with stakeholders representing a majority of sectors, interests, demographics and perspectives. A list of consultant activities, meetings and consultations may be found at Appendix I of this document. The CTU is particularly grateful for the contributions and valuable comments of colleagues in the project team, notably Dr. Annalee Babb, Mr. Rodney Taylor, Mr. Gary Kalloo and Professor Thomas Andersson.

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LIST OF ACRONYMS

C2C	Citizen-to-Citizen
C2G	Citizen-to-Government
CAC	Community Access Centres
CARICOM	Caribbean Community
CIO	Chief Information Officer
CITO	Central Information Technology Office
CSIRT	Computer Security Incident Response Team
CTU	Caribbean Telecommunications Union
G2B	Government-to-Business
G2C	Government-to-Citizen
G2G	Government- to-Government
GoB	Government of Belize
GOVNET/GWAN	Government Network/Government Wide Area Network
ICT	Information and Communication Technology
NOC	Network Operation Centre
NRI	Networked Readiness Index
PMS	Performance Management System
R&D	Research and Development
SLA	Service Level Agreement
SMS	Short Message Service
SoW	Scope of Work
ToR	Terms of Reference
VOIP	Voice over Internet Protocol
WAN	Wide Area Network
WEF	World Economic Forum

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EXECUTIVE SUMMARY

The National e-Government Policy Framework on which this Strategy is based is designed to create the environment necessary for the public service of Belize to eliminate existing bureaucratic silos. This, in turn, is expected to build a collaborative working environment where the public and private sectors and citizens connect in productive partnerships enabled by the transformative power of information and communication technologies (ICT).

Yet, these frameworks will deliver value to the Government and people of Belize only if there is a new approach in the way the public sector currently functions, including Cabinet as a body, the Caucus of CEOs, individual Ministries, departments, and statutory corporations.

To this end, this Strategy and Plan of Action are fashioned to give life to the policy framework for e-Government. Together, they constitute the roadmap required to manage change, monitor results and hold individuals accountable. Without this roadmap and the accompanying political will to implement agreed policy decisions, the power of culture and entrenched unproductive behaviours is likely to overshadow technology's ability to bring about positive transformation.

As such, this document articulates concrete initiatives to move Belize forward, including modernising Government's ICT frameworks and infrastructure; upgrading the digital skills of public servants; improving the way Government conducts its business; upgrading the national security apparatus; enhancing delivery and diffusion of education and health care; managing change in a digital environment; and guiding evolution of legislative and regulatory models that support robust e-Government, innovation, and entrepreneurship.

Specifically, the National e-Government Policy identifies the following seven strategic themes that are to guide the sector over the next three to five years:

1. **Public Sector Infrastructure Development:** Building out a world-class Government Wide-Area Network (GWAN) for the Belize public sector using common and shared platforms that enable delivery of robust, seamless, user-friendly, end-to-end E-Government and ICT services internally and to external clients.
2. **Creative Regulatory Reform:** Designing and implementing pioneering policy and regulatory approaches to ICT adoption and usage in the public service that allow e-Government to flourish in a secure environment.
3. **Targeted Human Capacity Development:** Shaping public sector frameworks for training, education and career-long learning that bridge significant existing deficiencies in individual and overall human capacity.
4. **Improved Government Efficiency:** Enhancing public sector responsiveness and the diffusion and use of ICT by upgrading existing delivery channels, creating new channels for delivery, designing compelling new content and services, changing the culture of bureaucracy and developing appropriate governance models.
5. **Effective Cross-Functional Collaboration:** Developing programmes and initiatives to build capacity for e-Government-related research and innovation, dissolve existing unproductive silos, improve collaboration, increase knowledge exchange, and support the sharing of experiences across Government.

6. **Enhanced National Security:** Applying ICT frameworks uniformly across all national security-related public service entities in ways that remove existing silos, promote close collaboration, encourage active exchange of information, and contribute to a national sense that law and order is being appropriately maintained.
7. **Quality Social Services:** Transforming the way Government engages with key clients and stakeholders such that they are placed at the centre of national development through the efficient sharing of information and the fast, seamless, secure, cost-effective delivery of Government services via modern ICT platforms.

These seven strategic themes are intended to move Belize along the path to an **Integrative System** of e-Government. Such a model links local systems, systems with similar functionality, and systems across Government agencies horizontally (internally) and vertically (externally) such that more seamless communication, collaboration and exchange of information are possible.

In this vein, key initiatives under each of the seven themes include ICT-related training for public servants, and a Government network designed to consolidate core public service IT infrastructure. Once that IT infrastructure has been integrated, Government will use it to deliver several appealing e-services designed to allow it to meet people's needs in a more efficient and engaging manner, including with respect to delivery of mobile services to rural and more isolated communities, bringing Government closer to the people.

Government will also create and deploy a Mobile Broadband Public Safety Network and a Computer Security Incident Response Team (CSIRT) as a means of enhancing Belize's national security. In support of improved integration and greater collaboration within Government, the strategies also include a pilot project involving sharing Cabinet Papers in a digital environment with key policy makers across Ministries.

The sections that follow introduce the Strategy, and present the proposed vision, mission and guiding principles for the development of e-Government in Belize. They are supported by core policy objectives and corresponding policy statements that are to guide roll-out of the roadmap strategies and action plans with respect to infrastructure development, regulatory reform, human capacity development, Government efficiency, cross-functional collaboration, national security, delivery of quality social services, management of the e-Government framework itself, and change management.

1.0 INTRODUCTION

Advances in digital technologies and the transformation of traditional business models and frameworks for social engagement are having an impact on governance at every level of human interaction. As old models fail, their continued use by governments in the Caribbean is contributing to rising levels of frustration and lethargy in the public service, resulting in inefficiency and a lack of national competitiveness. This, in turn, is proving to be a prolonged drag on economic growth, social innovation and national development.

In more advanced economies, however, contemporary e-Government models are minimising bureaucracy and increasing responsiveness in the delivery of government services. When correctly implemented, these models result in genuine cultural change, motivating public service providers to see people as clients and shareholders in a national mission to create lasting value.

Not only are these new approaches to public service delivery improving efficiencies in government, they are also having a positive impact on the private sector, providing new opportunities to increase productivity, foster innovation, and fuel enterprise development. Indeed, a strong, creative, well-managed, empowered public service is widely seen as a stimulus to entrepreneurship, private sector growth, foreign investment, and national development.

However, the processes currently used by most Caribbean governments are incapable of capitalising on these inviting possibilities. If governments fail to unlock the potential of new technologies and digital frameworks to reconfigure the way in which they do business and engage with their various constituencies, they will continue to see revenues shrink and costs balloon as they deliver substandard services to frustrated citizens, businesses and foreign investors who will eventually seek other avenues through which to realise their objectives.

Even so, it remains critical for governments to understand that the acquisition of new technologies is less than half the equation to be solved in finding ways to stay ahead of and even lead the drive towards economic and social transformation using evolving digital configurations. According to respected social scientist Ithiel de Sola Pool, “technology... shapes the battle, but not every outcome (Chandler 1995).”

There are, in this regard, more critical impediments to change embedded in the archaic cultural models pervasive throughout public sectors in the region. These models were built in a post-colonial post-war era where the focus was on the ability of a government to control its environment and dictate the course of economic development. These “command-and-control” approaches to governance were based on ascending hierarchies of power in which information and communications protocols were designed to grant access according to an employee’s official position or employment grade rather than the function he or she was expected to fulfil as a critical part of an efficient public service ecosystem.

For the most part, these vertical management frameworks restricted the flow of information and knowledge, circumscribed individual autonomy, prohibited creative problem solving, discouraged employee collaboration, encouraged public servants to be seen and not heard, and required them to do as they were told, without room for discussion. In such a context, paper documentation and the movement of physical files from person to person drove administrative processes within the public sector.

Today’s digital frameworks, driven as they are by the relentless speed of communication and the mass of information constantly moving through ever-expanding telecommunications networks, require new methodologies for intelligent and timely decision-making. Indeed, attempting to apply existing old-world models of governance to new digital technologies and frameworks is likely to result in systemic failure.

Paradoxically, however, successful application of the new models necessitates a certain degree of institutional “maturity” to handle the extremely disruptive challenges associated with issues related to individual privacy, security, data privacy and protection, and authentication, to name just a few.

Certainly, it is of paramount importance that Belize pays as much attention to developing the right policy, legislative, regulatory and/or enforcement mix as it does to designing and deploying the new technologies themselves. If it fails to do so, the Government is likely to create a scenario in which there is no legal counterbalance to the invasive power of these technologies to disrupt the lives of citizens and other stakeholders.

Therefore, in order to guide the Central Information Technology Office (CITO) of Belize, Government’s technology arm, in developing appropriate e-government frameworks that support achievement of the goals set out in various national development plans and strategies, including *Horizon 2030* and Government’s *Medium Term Development Strategy 2010-2013*, the Caribbean Telecommunications Union (CTU) has designed this e-Government Strategy and Plan of Action. It represents the second and third components in a holistic national programme to leverage information and communication technology (ICT) as a means of helping to catapult Belize to its next dimension of development. The five components of this holistic national programme are:

1. An e-Government Policy that outlines the wider vision, mission, guiding principles and core objectives that are to shape the delivery of government services in Belize during the next three to five years;
2. A set of roadmap strategies for the design of effective e-Government platforms based on the agreed e-Government Policy framework;
3. An e-Government action plan that gives direction to the roadmap, detailing the steps, timelines, potential partners and/or resources to implement the strategies and achieve the vision for e-Government in Belize;
4. An ICT Innovation Policy that outlines the wider vision, mission, guiding principles and core objectives that are to shape the development of ICT and innovation in Belize during the next three to five years;
5. A set of high-level projects and roadmap strategies for the design of effective ICT Innovation platforms based on the agreed ICT Innovation Policy framework.

These five components are intended to be complementary, with delivery of e-Government services being a driver for ICT innovation in Belize even as local advances in the ICT sector support innovation in e-Government. To this end, the e-Government Policy identifies the following seven (7) strategic themes that will guide e-Government development and implementation in Belize over the course of the next three to five years.

1. **Public Sector Infrastructure Development:** Building out a world-class Government Wide-Area Network (GWAN) for the Belize public sector using common and shared platforms that enable delivery of robust, seamless, user-friendly, end-to-end ICT services internally and to external clients.
2. **Creative Regulatory Reform:** Designing and implementing pioneering policy and regulatory approaches to ICT adoption and usage in the public service that allow e-Government to flourish in a secure environment.
3. **Targeted Human Capacity Development:** Shaping public sector frameworks for training, education and career-long learning that bridge significant existing deficiencies in individual and overall human capacity.

4. **Improved Government Efficiency:** Enhancing public sector responsiveness and the diffusion and use of ICT by upgrading existing delivery channels, creating new channels for delivery, designing compelling new content and services, changing the culture of bureaucracy and developing appropriate governance models.
5. **Effective Cross-Functional Collaboration:** Developing programmes and initiatives to build capacity for e-Government-related research and innovation, dissolve existing unproductive silos, improve collaboration, increase knowledge exchange, and support the sharing of experiences across Government.
6. **Enhanced National Security:** Applying ICT frameworks uniformly across all national security-related public service entities in ways that remove existing silos, promote close collaboration, encourage active exchange of information, and contribute to a national sense that law and order is being appropriately maintained.
7. **Quality Social Services:** Transforming the way Government engages with key clients and stakeholders such that they are placed at the centre of national development through the efficient sharing of information and the fast, seamless, secure, cost-effective delivery of Government services via modern ICT platforms.

2.0 STRATEGIC FRAMEWORK

2.1 VISION AND MISSION

Vision for e-Government in Belize

*“An Integrated, Collaborative Government Delivering Secure, Quality Public Services that
Connect and Empower People”*

This e-Government Policy is designed to eliminate existing bureaucratic silos to build a collaborative working environment where Government, the private sector and people connect in productive partnerships enabled by the transformative power of ICT. This vision for *Integrated Government* will be achieved by focusing on the following strategic mission tracks:

Mission for e-Government in Belize

Integrating For Greater Collaboration ... “Many Agencies, One Government”

Collaborating For Better Service ... “Working Together Works”

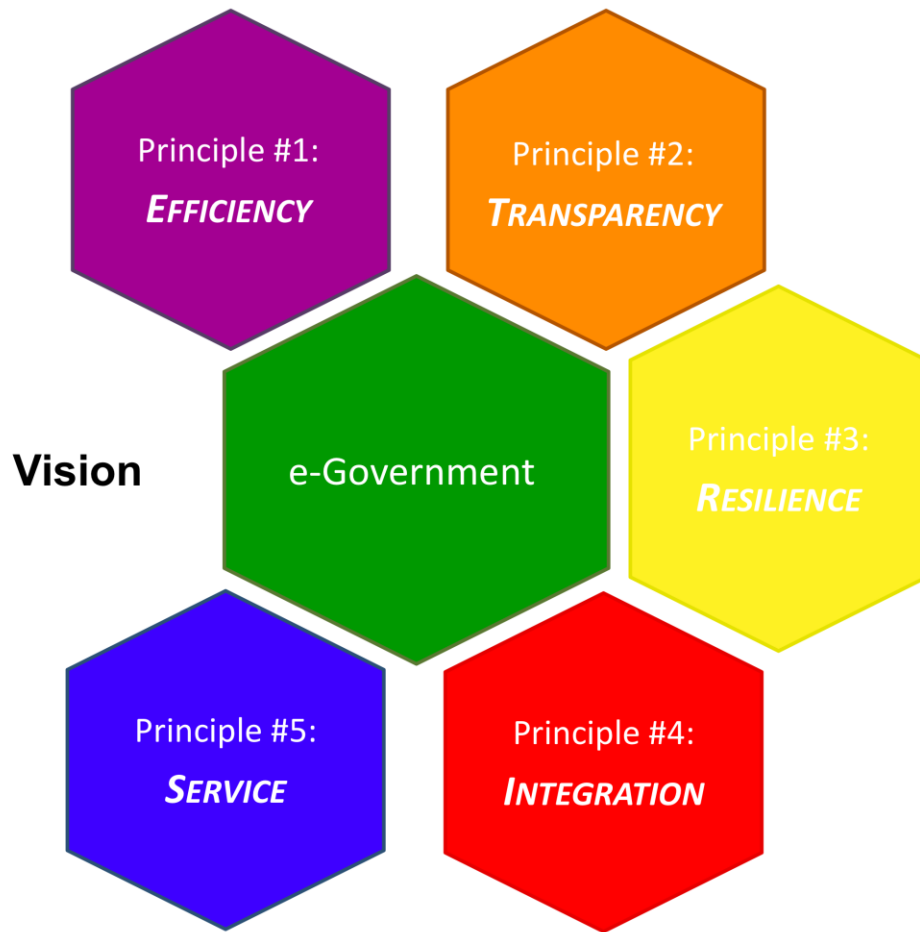
Serving People Through Quality Connections ... “Government At Your Service”

2.2 GUIDING PRINCIPLES

In support of the above, the following ***Guiding Principles*** should inform all e-Government Policy interventions:

1. **Efficiency:** development and effective delivery of state-of-the-art e-services via reliable infrastructure;
2. **Transparency:** Design of standardised services that are ethical, equitable and protect individual privacy;
3. **Resilience:** Delivery of robust, dynamic, modern solutions that empower citizens, residents and visitors;
4. **Integration:** Interconnected, harmonised e-Government services based on universal service delivery;
5. **Service:** Shaping of policies, systems, frameworks and attitudes that facilitate and empower people.

Figure 1: Vision Guiding Principles



2.3 CORE POLICY OBJECTIVES AND CORRESPONDING POLICY STATEMENTS

What follows are the **7 Strategic Themes** on which the **Core Policy Objectives** and **Corresponding Policy Statements** of the e-Government Policy are based.

1. **Public Sector Infrastructure Development:** Building out a world-class Government Wide-Area Network (GWAN) for the Belize public sector using common and shared platforms that enable delivery of robust, seamless, user-friendly, end-to-end ICT services internally and to external clients.
2. **Creative Regulatory Reform:** Designing and implementing pioneering policy and regulatory approaches to ICT adoption and usage in the public service that allow e-Government to flourish in a secure environment.
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7. **Quality Social Services:** Transforming the way Government engages with key clients and stakeholders such that they are placed at the centre of national development through the efficient sharing of information and the fast, seamless, secure, cost-effective delivery of Government services via modern ICT platforms.

2.3.1 POLICY STATEMENTS

STRATEGIC THEME	STRATEGIC OBJECTIVES
<p>Public Sector Infrastructure Development</p>	<ul style="list-style-type: none"> • To enhance the ICT environment for the public and private sectors so as to make broadband access pervasive • To enable robust, end-to-end, seamless, user-friendly ICT services • To build out a world-class GWAN via common and shared platforms
<p>Creative Regulatory Reform</p>	<ul style="list-style-type: none"> • To pioneer the generation and implementation of policy and regulatory frameworks that enable <i>Enlightened Access as a subset of the overarching national regulatory reform agenda</i> (including electronic transactions, e-signatures, authentication, data privacy, e-payments, etc.) • To streamline ICT governance for improved collaboration/service delivery • To designate/create a central implementation and oversight agency to manage national e-Government initiatives
<p>Targeted Human Capacity Development</p>	<ul style="list-style-type: none"> • To enable a new culture across the E-Government workforce using performance and achievement-based human capital management • To develop superb skills, shared standards and key performance targets
<p>Improved Government Efficiency</p>	<ul style="list-style-type: none"> • To make Government a model ICT user and leader • To optimise already existing delivery channels • To increase the number of delivery channels • To reform backend support processes and operations
<p>Effective Cross-Functional Collaboration</p>	<ul style="list-style-type: none"> • To improve collaboration and increase knowledge exchange and sharing of experience across Government Ministries, Agencies and Departments • To build the capacity for e-Government Research and Innovation
<p>Enhanced National Security</p>	<ul style="list-style-type: none"> • To improve government capability to respond to natural/man-made disasters affecting government's assets, infrastructure and citizens' data security and privacy • To instil confidence by creating an environment that is safe to conduct business with, and within government and to carry out day-to-day activities. • To build technical and legislative capacity to respond to, mitigate and protect against cybercrime and offences within the public sector

STRATEGIC THEME	STRATEGIC OBJECTIVES
Quality Social Services	<ul style="list-style-type: none"> • To create and enhance service delivery channels that embody "Government At Your Service", "Working Together Works", and "Many Agencies, One Government" • To raise awareness of ICT initiatives in Government via an E-Government communication plan • To support the most vulnerable groups in society • To support equitable service delivery across various ethnicities and socio-economic classes

3.0 E-GOVERNMENT STRATEGIC FRAMEWORK

3.1 PUBLIC SECTOR INFRASTRUCTURE DEVELOPMENT

The Government of Belize will build out a world-class Government Wide-Area Network (GOVNET) for the Belize public sector using common and shared platforms that enable delivery of robust, seamless, user-friendly, end-to-end E-Government and ICT services internally and to external clients.

It will take the steps necessary to design and deploy a central enterprise infrastructure and platforms for Government-related ICT services to simplify and standardise infrastructure and management, reduce costs and complexity, and improve security. It will establish a network connecting all ministries, departments and agencies and a fully redundant data centre to house its critical systems. Every effort will be taken to standardise and share core services such as email and voice communications. A common e-services platform will be developed so that there is a standard methodology for deploying e-services across all ministries as these services become available.

PROGRAMMES AND PROJECTS

Following are four projects which have been identified to give effect to this strategic objective:

1. Network Consolidation – Multi-tiered GOVNET

The Government will implement a wide area network (GovNet) building upon existing network infrastructure to develop a robust, resilient, secure, high speed, fully redundant backbone to seamlessly connect all Ministries, Departments and Agencies. The network will be designed to enable Government to consolidate core services such as voice and data access, email and shared e-services platforms

2. Systems Consolidation - Data Centres

The Government will establish a Data Centre to house computer systems and associated components for all Ministries, Agencies and Departments. The data centre will be fully redundant, secure and facilitate the sharing of core e-government applications, providing storage and backup facilities. It will also serve as a network operations centre (NOC) for the GovNet and will be equipped to provide network monitoring and first level technical support services for all of Government.

As part of its business continuity planning the Government will establish backup site which will enable it to continue to function and operate in the event of a failure of its main data centre.

Additionally, the Government will utilise renewable energy systems and green solutions in the implementation of its data centres.

3. VOIP and Email Migration

VOIP - In support of recommendations 1 and 2 above, the Government will consolidate its voice communications into one fully integrated Voice Over Internet Protocol (VOIP) system providing “free” and seamless communications across all ministries/agencies. CITO has embarked on a project with BTL for the latter to provide a hosted VOIP solution. An assessment will be conducted to determine a migration strategy once the Government has its fully functional GOVNET and data centres, adequately equipped and staffed.

Email - The Government will also implement and enforce centralized email services. This will be achieved by hosting all government mailboxes on a shared system located within the proposed data centre and ensuring that there is compliance by all Ministries and Departments.

4. Development and Standardisation of E-Services Platform

The Government will develop a standardized platform for the delivery of services electronically to its citizens. It will promote the functional integration and networking of public officers, processes and ICT infrastructure into a best-in-class model for the handling of service processes. It will provide, for citizens, residents, businesses and “internal” customers, a common approach to service delivery.

OUTCOMES AND BENEFITS

The four projects outlined above, have major implications for the success of the overall ICT policy implementation. Both the network consolidation and data centre projects will give effect, at a technical level, to a seamless and connected government. They will reduce costs and improve the security of the network. The Government can achieve greater efficiency in use of resources without sacrificing core functionality at the ministry level.

The consolidation of the ministries systems under a data centre will reduce the government’s energy costs and its overall IT expenditure. Additionally the use of renewable energy will further reduce Government’s energy bill.

The implementation of a robust business continuity plan will greatly enhance Ministries uptime and availability as more services are moved online.

3.2 CREATIVE REGULATORY REFORM

The Government of Belize will design and implement pioneering policy and regulatory approaches to ICT adoption and usage in the public service that allow e-Government to flourish in a secure environment.

The legal and regulatory framework will consider and incorporate internal standards and best practices benchmarked from leading countries in e-Government. The basic legal infrastructure will be developed to cover the following entities:

PROGRAMMES AND PROJECTS

1. E-Government Regulatory Framework

Create a regulatory framework to cover Administrative Procedures for day-to-day functions and processing of digital information within Government. This will ensure that Government entities are authorized to conduct certain administrative functions. CITO will have oversight of the regulatory framework, IT Policies and Procedures. It will work closely with other agencies and authorities with responsibility for the overarching national legislative and regulatory agenda.

2. Data Privacy and Electronic Transaction Legislation

Data Privacy - Create a legal framework describing rules and procedures which will control access, security and protection of data held within Government repositories. This framework will establish the principles by which data held by Government can be collected, stored and used. It will include principles for reasonable access to information and define boundaries for authorised access to certain types of data, including private citizens' data. While this initiative will form part of the wider overarching national legislative reform agenda, CITO will take responsibility for initiating its development and having oversight of its implementation and monitoring its adherence within Government.

E-Transaction – Create the legal framework for the acceptance and enforcement of electronic transactions for the purposes of E-Government and government electronic services.

OUTCOMES AND BENEFITS

These initiatives will establish an enabling environment in which electronic transactions can flourish within the public sector and will engender confidence as citizens and businesses interact with Government in an online environment.

3.3 TARGETED HUMAN CAPACITY DEVELOPMENT

The Government of Belize will shape public sector frameworks for training, education and career-long learning that bridge significant existing deficiencies in individual and overall human capacity.

PROGRAMMES AND PROJECTS

1. Future Skills Audit

Government will undertake an assessment of the existing and future skills required to effectively design, implement and operate world-class e-government delivery systems. This exercise should be undertaken in three year cycles.

2. ICT Based HR Development Platform

Government will implement a comprehensive HR development system to monitor and assess the knowledge based capabilities of all public servants.

3. Institutionalised Training

CITO in association with key partners in government, academia and business will institutionalise targeted training programmes based on the future skills audit and the ICT based assessments above.

OUTCOMES AND BENEFITS

These projects will seek to identify deficiencies and strengths within the public sector workforce and address the strategic areas for capacity development. This will allow the government to effectively plan for and meet the requirements of a knowledge based society.

3.4 IMPROVED GOVERNMENT EFFICIENCY

The Government of Belize will enhance public sector responsiveness and the diffusion and use of ICT by upgrading existing delivery channels, creating new channels for delivery, designing compelling new content and services, changing the culture of bureaucracy and developing appropriate governance models that support e-Government development.

PROGRAMMES AND PROJECTS

1. Development of government portal

The government will develop an online portal which aims to provide citizens, businesses, public servants, visitors and global audience with easy, convenient, and comprehensive access to important government information and services from anywhere, at any time, online, or through a mobile device. Each government Ministry, department and agency will have a presence on the portal.

The Government will progressively connect the back office systems of each ministry, department and/or agency to provide a common interface to core services.¹

¹ This activity proves challenging for many governments because solutions are usually not just technology driven but dependent on internal cultures with regards to willingness to collaborate and share information.

2. Documents Management – Cabinet Pilot

The Government will implement a pilot project for the management of electronic documents starting with key government officials. This documents management system will be piloted at the level of Cabinet and will facilitate the secure and easy exchange of Cabinet Papers.

Electronic Document Records Management (EDRM) aims to:

- provide guidelines for the inclusion of electronic records as part of the business process
- provide a framework and milestones for the implementation of new ERM facilities
- provide guidelines to support:
 - standardization and inter-departmental working in ERMs
 - sharing, exchange and interoperability of electronic documents and records between Government organizations

The Government will also focus on ensuring appropriate policies and legislation are in place to govern and support the pilot project. These will include:

- Access to the data and information management
- Authorization to record specific information
- Information policy revisions where applicable in Government (e.g. Freedom of Information Act)
- Authenticity and Integrity of records
- Legal admissibility
- Data protection

3. Single Electronic Window

This service facilitates online interaction between the businesses and Government agencies responsible for trade. This facility will allow companies and individuals to apply for various permits and licenses, register businesses, and conduct other trade related activities via a single online channel. Applications and submissions are automatically routed to the relevant Government Agencies. A phased approach should be adopted for this project, progressively making online services available to the business community.

OUTCOMES AND BENEFITS

The overall impact of these initiatives will be to improve Government efficiency and facilitate users in their utilisation of government services, eliminating the unnecessary overheads of travelling to various agencies to submit applications or documents for review and approval.

Within the public sector, ICT will be leveraged to a) facilitate business process re-engineering and implementation of backend systems; b) develop shared systems for common lines of business across

agencies; and c) facilitate collaboration amongst public servants. Initiatives in this area contribute toward Public Sector Reform.

For the private sector, the Government will serve commercial entities that consume government services through improved service delivery methods. These e-Services would facilitate the ease of doing business, both in starting and operating a business in the country.

For the constituents that it serves, the Government will leverage ICT to better share information in order to improve transparency and demonstrate accountability.

3.5 EFFECTIVE CROSS-FUNCTIONAL COLLABORATION

The Government of Belize will develop programmes and initiatives to build capacity for e-Government-related research and innovation, dissolve existing unproductive silos, improve collaboration, increase knowledge exchange, and support the sharing of experiences across Government.

PROGRAMMES AND PROJECTS

1. IT Networking Forum

The Government will establish an IT Networking Forum as outlined in the e-Government Policy. Its core mandate will be to ensure at a technical and operational level that there is collaboration in the implementation and management of ICT systems in Government. This Forum will form one of the core working groups under the Governance Structure that will give rise to ongoing cross functional collaboration.

2. Online Forum

The Government will establish an online forum to disseminate information, facilitate discussions and receive recommendations from internal stakeholders. This forum will be open to all stakeholders, technical and non-technical, and will provide an avenue through which innovative suggestions might be communicated, analysed and implemented where feasible.

3. E-Government ICT Collaboration Award

The Government in collaboration with the private sector will establish an annual award in recognition of innovative solutions with a focus on cross functional collaboration across whole of government, particularly for those solutions that bring about dramatic improvements in service delivery.

OUTCOMES AND BENEFITS

These initiatives are designed to improve the efficiency of government processes and the effectiveness of government policies, ensuring sound ICT investment, usage and cross functional efficiency.

3.6 ENHANCED NATIONAL SECURITY

The Government of Belize will apply ICT frameworks uniformly across all national security-related public service entities in ways that remove existing silos, promote close collaboration, encourage active exchange of information, and contribute to a national sense that law and order is being appropriately maintained. It will also ensure that its IT infrastructure and systems are deployed securely and that security policies are implemented and adhered to in all ministries.

PROGRAMMES AND PROJECTS

1. Mobile Broadband Public Safety Network

The Government will establish a network dedicated to public safety community use to ensure network capacity and capabilities are always available when required. Data carried over the network will be secured using the advanced encryption techniques specified by international standards bodies appropriate for public safety network use. It will enable such services as real time mobile video, vehicular traffic management and training of law enforcement and public safety officials. It will serve as a platform for real-time inter-agency communications to enable new types of integrated planning.

2. Computer Security Incident Response Team (CSIRT)

The Government will establish a Computer Security Incident Response Team (CSIRT) which will be responsible for the dissemination of cyber security information; technical guidance and support in the event of a cyber-incident; collaboration between and among government entities at the national level, the private sector, academia, and the international CSIRT community.

The establishment of a CSIRT will be one key element in a wider national policy and strategy on cybersecurity which will be developed to facilitate and address key cyber issues, including:

- To create a secure digital environment;
- To provide a governance framework for all cyber security matters;
- To protect the physical, virtual and intellectual assets of citizens, organizations and the State;
- To ensure the safety of all citizens by promoting awareness and mitigation of cyber risks;
- To protect critical infrastructure and secure information networks;
- To minimize damage and recovery times ; and
- To create the appropriate legal and regulatory framework

CITO will work alongside the National Authorised Ministry/Agency responsible for Cybercrime and Cybersecurity in formulating a National Policy, Strategy and Action Plan on Cybersecurity, and assist in addressing its strategic mandate.

CITO will therefore assist in the establishment of the CSIRT and provide support in the protection of Government's critical infrastructure, virtual and intellectual assets of citizens, and in securing information networks.

The CSIRT will possess the capabilities to:

- Provide warning of potential threats, incidents, and attacks;
- Facilitate information-sharing among the CSIRT constituency relating to best practices, investigative information, coordination of incident response, and incident management procedures and processes;
- Analyse cyber vulnerabilities, incidents, and attack methodologies;
- Provide technical assistance to the Government and other stakeholders within the national framework;
- Conduct investigations, and forensics analysis;
- Defend against attacks with special focus on critical information infrastructure; and
- Lead national-level recovery efforts in the event of a cyber-incident.

OUTCOMES AND BENEFITS

In order to secure and strengthen the country's critical information infrastructure, coordinated efforts should be made to mitigate, and/or control incidents in the quickest and most efficient manner. There is therefore a requirement for an organization which can serve as the national focal point for incident reporting, incident management and incident response.

The proposed safety network will give the Belize safety community the advanced tools to enable them to be proactive with regard to public safety issues. It will also bring together disparate networks currently used by public safety institutions into one robust network which will significantly reduce costs and improve operational efficient.

3.7 *QUALITY SOCIAL SERVICES*

The Government of Belize will transform the way in which the public service engages with key clients and stakeholders such that they are placed at the centre of national development through the efficient sharing of information and the fast, seamless, secure, cost-effective delivery of Government services via modern ICT platforms.

One of the key objectives of this E-Government Policy is to create the enabling infrastructure to facilitate the provision of a multichannel platform for the delivery of quality services to the citizens and business community of Belize. To achieve this end, the Government will provision services through electronic means to allow customers to access them conveniently, easily, quickly and at a time and location of their choice.

PROGRAMMES AND PROJECTS

1. Community Service Centres

The Government will establish physical access points to facilitate the provision of all relevant and necessary E-Government services in rural and isolated communities. These centres will be outfitted with the infrastructure and support framework required to deliver these services efficiently to the communities. These might be housed in existing government offices or facilities such as post offices, schools or community centres, so as to offset establishment costs.

2. Mobile Government (Belize IT Express)

The Government will establish a mobile service centre (bus) dedicated to providing the rural and isolated communities of Belize with access to government information and services. The mobile unit will be outfitted with computer systems and broadband connectivity that will provide access to all government e-enabled services. Service specialists stationed on-board will assist citizens who require Government services and will interact in real time with central government agencies in completing transactions.

3. Mobile Communications Platform (SMS)

Government in partnership with the private sector will implement a short messaging service (SMS) platform to interact with and disseminate information to its citizens, particularly those without access to sophisticated smartphones or high-end devices. It will allow citizens to subscribe to various information services offered by Government.

OUTCOMES AND BENEFITS

These initiatives will enhance Citizens' interaction with Government making it more convenient, particularly for those in rural and under-served communities.

They will also increase Governments' points of presence and service delivery channels in the community. Government programmes will also be given greater visibility and increased public awareness.

3.8 EFFECTIVE GOVERNANCE FRAMEWORK

The Government of Belize will develop and empower appropriate mechanisms beginning at the level of the Cabinet to support the effective implementation and monitoring of the e-Government Policy, Strategy and Plan of Action.

The Government will establish a centralised department to have oversight of all E-Government initiatives. Additionally various working groups will be established to support this central department in executing its mandate.

The Governance Structure will focus on synergising and driving the successful planning and execution of nation-wide, government-wide or major ICT initiatives that affect more than one government agency.

The Structure will involve the key public-facing government agencies and business organisations, and provide platforms for decision makers to discuss and make decisions to drive ICT initiatives that ultimately bring benefits to the nation as a whole.

Additionally the central department must have the support of Cabinet and the entire Government and must be empowered by Cabinet to carry out its mandate.

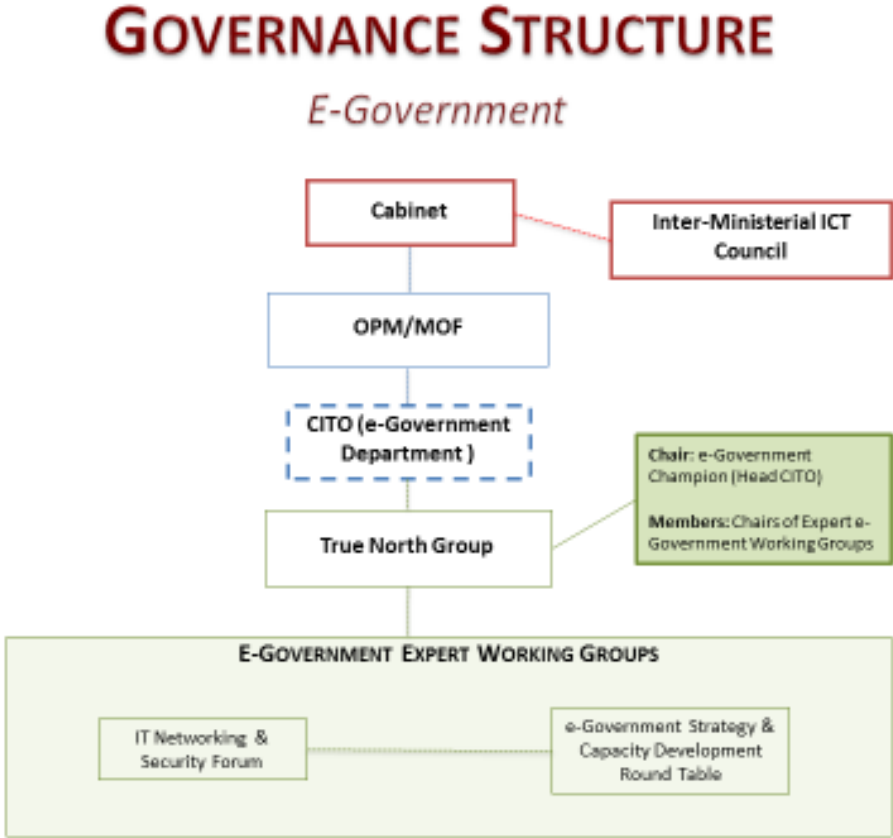


Figure 2: Governance Structure

PROGRAMMES AND PROJECTS

1. Creation of a Central Information Technology Department

The Government will create a central implementation and oversight department to manage the national E-Government agenda. The Department will have responsibility for the provision of ICT consulting and support services to Government Ministries, Divisions and Agencies with the aim of ensuring effective alignment, co-ordination, security, interoperability and cost effectiveness of ICT related projects and initiatives across Government.

This Department will be set up to be the ICT implementation arm for whole of Government initiatives with a focus on the optimal deployment and use of ICTs within Government and the effective delivery of Government e-services.

The Department will be strategically focused on utilizing ICT to allow the provision of services in five main areas:

- a. ICT Consulting and Project Management across the Public Sector including Ministries, Departments, Divisions and Agencies;
- b. Establishment and maintenance of public sector wide ICT infrastructure;
- c. Negotiation and execution of enterprise wide ICT contracts that ensure cost-effective interoperability across Government;
- d. Delivery of e-Government services; and
- e. Business Transformation within Public Service.

Currently there exists a Central Information Technology Office (CITO) that performs, to a limited extent, some of these functions. The Government will expand the mandate given to CITO and empower it to perform these additional functions under this new governance structure. CITO will be rebranded, giving consideration to its new mandate, as the Central Information Technology Department.

2. Establishment of Key Support Expert Working Groups

The Government will establish the following working groups to support CITO:

a. IT Networking & Security Forum

The IT Network & Security Forum will comprise of Senior IT technical and network security experts from the various Ministries and private sector. Their main function is to coordinate the technical aspects of the Government's integrated infrastructure, exchanging information and experiences related to the management operation and ongoing development of the GovNet. This group will ensure the interoperability and integration of core systems and applications within Government. Additionally the group will be tasked with identifying areas of risk and mitigating actions, conducting periodic security audits, and ensuring the resiliency of the network.

b. E-Government Strategy & Capacity Development Round Table

This group will comprise of senior ICT Government Officials, senior private sector ICT leaders and academia to function as a pool of expertise available to provide advice on the development, advancement and implementation of new and existing e-Government initiatives.

The group will also make recommendations on the process of enterprise-wide architecture and its continued deployment, usage and upgrade and identify areas within individual Ministries and State. The group will also be tasked with promoting human capital development in the field of ICT within Ministries and State Agencies by making recommendations for the acquisition of identified and agreed to skills which will be required to support the Government's increased levels of ICT-adoption and demand.

In cases where additional expert advice is required, the Roundtable will engage external parties or stakeholders including but not limited to private sector organisations/ individuals, NGO's and so on.

3. Inter-Ministerial Council

The Inter-Ministerial Council (IMC) on ICT will be the highest approving and decision-making committee that oversees and drives the suite of major and enterprise-wide ICT projects and e-Services, under the National ICT Agenda. The IMC will also provide the strategic direction towards realizing the National ICT and E-Government vision. It will constitute Ministers of Government particularly with responsibility for ICT, Finance and National Planning.

4. True North Group

The True North Group will comprise the Chairs of the various expert working groups and will be led by the Head of CITO and the E-Government Champion. This group will provide support to CITO in order to ensure more effective alignment, co-ordination, integration, consistency, security, interoperability and cost effectiveness across Government for ICT related projects and initiatives. The key areas of support will also include the deployment of e-services, development of enterprise wide operations (HR, payroll, e-procurement), strategic and advisory services, institutionalisation of public private partnerships, establishment training and awareness programmes and ICT capacity building within Government.

5. Head of CITO (E-Government Champion)

One of the critical factors responsible for the slow uptake and implementation of E-Government in many countries is the lack of a government champion who has the right skills, knowledge, attitude and leadership qualities, to take responsibility and ownership for the implementation and roll out of government strategies for improving quality of services to the citizens and businesses.

In recognition of this the Government of Belize will identify an E-Government Champion with the mandate of executing on the E-Government Policy, Strategy and Plan of Action. This position will also head the Central Information Technology Department, a unit being proposed for oversight of the E-Government agenda.

The E-Government Champion will take leadership role in such areas as:

1. Implementing of Government's ICT related infrastructural development projects;
2. Developing consensus on a common set of minimum quality and interoperability standards for all of Government;
3. Engaging academics and industry professionals on market needs for government and ICT sector capacity development;
4. Overseeing e-service product development and delivery through the various delivery channels;
5. Facilitating linkages to department systems to engender greater systems integration and interoperability;
6. Conducting assessments of all major Government Agencies to identify areas of functional commonality which are also ready for increased automation;
7. Developing the National Communications Plan that aligns with the National E-Government Policy, Strategy and Plan of Action;
8. Assuring value for money for Government by providing single deployment/multiple use, enterprise infrastructure.

OUTCOMES AND BENEFITS

It is anticipated that the reclassification of CITO as a Department to provide greater oversight of the E-Government Agenda would have the following social and economic impact:

- a. Revolutionise government services to citizens and businesses (anywhere, anytime, anyhow);
- b. Harness the use of ICT as an enabler for digital inclusion and empowerment of socially and economically disadvantaged groups;
- c. Use ICT as an engine of growth for Belize, and a leading GDP contributor for the country;
- d. Improve International ICT Rankings.

3.9 PROMOTE CHANGE MANAGEMENT

The Government of Belize will undertake change management activities to manage the organisational, process and business strategy that are likely to occur due to the introduction of this E-Government Policy, Strategy and Plan of Action. The government will seek to ensure that these changes are carried out in a planned, coordinated and structured manner to ensure successful acceptance and adoption of by all stakeholders.

PROGRAMMES AND PROJECTS

1. Establishment of Programme Office

The Government will establish a programme office under CITO to plan, coordinate and manage the delivery of projects identified under the E-Government Plan of Action. One focal point for the delivery of whole of government services will assist in the streamlining of process, eliminate duplication of effort and bring greater efficiency in the delivery of services process.

2. Establishment of Business Transformation Office

The Government will establish a Business Transformation Office under CITO comprising of business and technical analysts and change management specialist. The office will work with business owners within government to identify areas of change, perform business process re-engineering, feasibility studies and cost benefit analysis for process change and efficiency.

The Team will also perform training for associated change management activities to familiarise reformed ministries, agencies and departments with new delivery systems and process. Additionally the Unit will conduct impact assessment of new processes and propose suitable programmes to assist in the change process.

The Business Transformation Office will work closely with the ongoing Public Sector transformation initiative under the ministry responsible for public administrative services.

3. Communications Plan

The Government will develop a communications plan to inform all stakeholders of key information of the National E-Government Policy, Strategy and Plan of Action ICT Plan i.e. the rationale, benefits, impact, approach, timeline, and assistance plans. Communications is required at different levels:

- a. For communicating to and getting buy-in from the various stakeholder groups whose support is required for the successful implementation of the plan;
- b. For communicating the impact to the various stakeholder groups who will benefit from the deliverables of the National E-Government Agenda; and
- c. For communicating the E-Government plans internationally for E-Government benchmarking purposes.

The communications plan will detail the delivery and execution of a communications calendar, and the development of necessary communication kits. The communications plan will also instil a high level of awareness of the E-Government Agenda within Belize and internationally.

Marketing and awareness campaigns will also be used to target all stakeholder groups – community, businesses and the Government, and feature engagement events, promotions and awards prominently. In the initial roll-out period of the Plan of Action when there is a need to ramp up the adoption of E-Government, the TV and other forms of media will be used for mass ICT education and reach for E-Government. The use of this communications media should then be slowly reduced to an optimal mix between TV, radio and Internet. The aim is to portray the E-Government as one that is progressive, collaborative and engaging.

3.10 E- GOVERNMENT STRATEGIC FRAMEWORK SUMMARY TABLE

Strategic Theme	Key Objectives	Programmes	Programme Outputs/Outcomes	Key Performance Indicators / Measures
Public Sector Infrastructure Development	<ol style="list-style-type: none"> 1. To enhance the ICT - broadband access pervasive 2. To enable robust, end-to-end, seamless, user-friendly ICT services 3. To build out a world-class GWAN via common and shared platforms 	Network Consolidation – Multi-tiered GOVNET	<ol style="list-style-type: none"> 1. Create a seamless and connected government. 2. Reduce costs and improve the security of the network. 3. Achieve greater efficiency 	<ol style="list-style-type: none"> 1. Number of Ministries connected on GWAN. 2. Level of integration and connectivity
		Systems Consolidation - Data Centres	<ol style="list-style-type: none"> 1. Reduce Government’s energy costs 2. Reduce overall IT expenditure 3. Facilitate shared/ 	<ol style="list-style-type: none"> 1. Number of shared services deployed

Strategic Theme	Key Objectives	Programmes	Programme Outputs/Outcomes	Key Performance Indicators / Measures
			managed services provisioning	
		VOIP and Email Migration	<ol style="list-style-type: none"> 1. Reduce Government cost 2. Create WOG services 	<ol style="list-style-type: none"> 1. Number of Ministries connected by VOIP and using common email platform
		Development and Standardisation of e-services Platform	<ol style="list-style-type: none"> 1. Government standardization of e-services delivery 2. Build once, use many concept 3. Reduce service provisioning cost 4. Provide 'single face' of Government 	<ol style="list-style-type: none"> 1. Common platform deployed. 2. Number of Ministries using common/shared platforms for e-services
Creative Regulatory Reform	<ol style="list-style-type: none"> 1. To implement policy and regulatory frameworks that enable <i>Enlightened Access</i> 2. To streamline ICT governance for improved collaboration/service delivery 3. To designate/create a central implementation and oversight agency to manage national e-Government initiatives 	Regulatory Framework	<ol style="list-style-type: none"> 1. Increase accountability with Government 2. Improve Government's performance, efficiency through structured systems and frameworks 	<ol style="list-style-type: none"> 1. Number of processes/procedures developed institutionalized
		Data Privacy and Electronic Transaction Legislation	<ol style="list-style-type: none"> 1. Create enabling environment for electronic transactions 2. Engender confidence as citizens and businesses interact with Government in an online environment. 3. Increase online transaction/interaction 	<ol style="list-style-type: none"> 1. Number of users transacting online 2. Laws enacted
Targeted Human Capacity Development	<ol style="list-style-type: none"> 1. To enable a new culture across the e-Government workforce using performance- and achievement-based human capital management 2. To develop superb skills, shared standards and key performance targets 	<ol style="list-style-type: none"> 1. Future Skills Audit 2. ICT Based HR Development Platform 3. Institutionalised Training 	<ol style="list-style-type: none"> 1. Build capacity in public sector workforce 2. Effectively plan for and meet the requirements of a knowledge based workforce. 	<ol style="list-style-type: none"> 1. Percentage of public service trained in ICT 2. Number of programmes to train, attract and retain ICT professionals

Strategic Theme	Key Objectives	Programmes	Programme Outputs/Outcomes	Key Performance Indicators / Measures
Improved Government Efficiency	<ol style="list-style-type: none"> To make Government a model ICT user and leader To optimise already existing delivery channels To increase the number of delivery channels To reform backend support processes and operations 	<ol style="list-style-type: none"> Development of government portal Documents Management – Cabinet Pilot Single Electronic Window (SEW) 	<ol style="list-style-type: none"> Enhance public sector responsiveness Enhance diffusion and use of ICT in Government Facilitate cross functional collaborate and improve Government efficiency Improve service delivery, transparency and accountability 	<ol style="list-style-type: none"> Ranking in World Economic Forum’s Global Competitiveness Report. Ranking in World Bank’s Ease of Doing Business Survey. Number of business conducting online transactions. Number of Gov. documents in electronic format
Effective Cross-Functional Collaboration	<ol style="list-style-type: none"> To improve collaboration and increase knowledge exchange and sharing of experience across Government Ministries, Agencies and Departments To build the capacity for e-Government Research and Innovation 	<ol style="list-style-type: none"> IT Networking Forum Online Forum E-Government ICT Collaboration Award 	<ol style="list-style-type: none"> Build capacity for E-Government-related research and innovation. Dissolve existing unproductive silos, improve collaboration, increase knowledge exchange, and support the sharing of experiences across Government. Improve efficiency of government processes and the effectiveness of government policies. Ensure sound ICT investment, usage and cross functional efficiency. 	<ol style="list-style-type: none"> Percentage efficiency gains in government processes Cost savings accrued due to process efficiency/ cross functional efficiency gains
Enhanced National Security	<ol style="list-style-type: none"> To improve national capability to respond to natural/man-made disasters To create an environment that is safe to conduct business and to carry out day-to-day activities 	<ol style="list-style-type: none"> Mobile Broadband Public Safety Network Computer Security Incident Response Team (CSIRT) 	<ol style="list-style-type: none"> Secure and strengthen the country’s critical information infrastructure Instil confidence in systems for business and citizens Develop national capability to respond to cyber threats Create one robust network which will significantly reduce costs and improve operational efficient. 	<ol style="list-style-type: none"> Number of government security agencies on Network Number of threats intercepted and averted Cost savings






Strategic Theme	Key Objectives	Programmes	Programme Outputs/Outcomes	Key Performance Indicators / Measures
Quality Social Services	<ol style="list-style-type: none"> To create and enhance service delivery channels To raise awareness of ICT initiatives in Government via an E-Government communication plan To support the most vulnerable groups in society To support equitable service delivery across various socio-economic classes 	<ol style="list-style-type: none"> Community Service Centres Mobile Government (Belize IT Express) Mobile Communications Platform (SMS) 	<ol style="list-style-type: none"> Cost-effective delivery of Government services to citizens Enabling infrastructure to facilitate the provision of a multichannel platform for the delivery of quality services Enhance Citizens' interaction with Government Reduce digital divide Increase universal access 	<ol style="list-style-type: none"> Number of centres deployed Number of transactions completed via access points per year Number of rural communities served/Rural site visits per year Number of services and subscribers on SMS platform Percentage reduction in service delivery cost
Effective Governance Framework	<ol style="list-style-type: none"> To develop and empower appropriate mechanisms to support the effective implementation and monitoring of the E-Government Policy, Strategy and Plan of Action. To focus on synergising and driving the successful planning and execution of nationwide, government-wide or major ICT initiatives that affect WOG initiatives 	<ol style="list-style-type: none"> Creation of a Central Information Technology Department (CITO) Establishment of Key Support Expert Working Groups Establishment of Inter-Ministerial Council Appointment of True North Group Appointment of E-Government Champion 	<ol style="list-style-type: none"> Efficiency gains and cost savings Greater accountability Collaborative and structured approach to E-Government ICT development 	<ol style="list-style-type: none"> Cost savings in whole of government service delivery Movement in WEF E-Government Ranking % Implementation of E-Government Strategy & Plan of Action
Strategic Theme	Key Objectives	Programmes	Programme Outputs/Outcomes	Key Performance Indicators / Measures
Promote Change Management	<ol style="list-style-type: none"> To manage the organisational, process and business strategy for government efficiency and greater productivity To ensure changes are carried out in a 	<ol style="list-style-type: none"> Establishment of Programme Office Establishment of Business Transformation Office Communications Plan 	<ol style="list-style-type: none"> Streamlined process, eliminate duplication of effort and greater efficiency in the services delivery process Timely, cost effective delivery of WOG projects 	<ol style="list-style-type: none"> Number of WOG Projects completed on time, within budget and with assigned resources Number of government processes reviewed / re-engineered Number of Promotion

Strategic Theme	Key Objectives	Programmes	Programme Outputs/Outcomes	Key Performance Indicators / Measures
	<p>planned, coordinated and structured manner to ensure successful acceptance and adoption by all stakeholders</p> <p>3. To identify areas for change, perform business process re-engineering, feasibility studies and cost benefit analysis for process change and efficiency</p> <p>4. To develop marketing and communications campaign to inform all stakeholders of key information of the National E-Government Policy, Strategy and Plan of Action</p>		<p>3. Cost savings and greater process efficiency</p> <p>4. Transformed public sector</p> <p>5. E-Government Plan promoted as one that is progressive, collaborative and engaging.</p>	<p>and awareness programmes developed /implemented</p> <p>4. Impact on International Benchmarking Organisations for informing E-Government Rankings</p>

failure at the main site. Possibilities include San Ignacio – Central Farm or Belize City (Central Bank).																				
d. Establish a Network Operations Centre (NOC) – this centre will monitor every operational aspect of the GOVNET and data centre. It should be equipped with a fully functional and adequately staffed Technical Support Desk providing service to all of Government.																				
3. VOIP and Email Migration																				
a. VOIP Deployment																				
b. Email Migration																				
4. Development and Standardisation of E-Services Platform																				

Key	1.		Each section of the table represents a Strategic Theme
	2.		Colours are used to delineate each theme
	3.		
	4.		Different shades of colour represent each project
	5.		Represent sub-stages of projects

STRATEGIC THEME	YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5				2020			
	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct
Creative Regulatory Framework																								
1. Regulatory Framework																								
2. Data Privacy and Electronic Transaction Legislation																								
a. Data Privacy																								
b. Electronic Transaction																								
STRATEGIC THEME	YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5				2020			
	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct
Targeted Human Capital Development																								
1. Future Skills Audit																								
2. ICT Based HR Development Platform																								
3. Institutionalised Training																								

Key	1.		Each section of the table represents a Strategic Theme
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	3.		The darkest shade (represented next to the section title) shows the combined timeline of all projects under that section
	4.		Different shades of colour represent each project
	5.		Represent sub-stages of projects

STRATEGIC THEME	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	2020
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	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct				
Improved Government Efficiency													■	■	■	■	■	■	■									
1. Development of government portal													■	■	■	■												
2. Documents Management – Cabinet Pilot															■	■	■											
3. Single Electronic Window																■	■	■	■									
STRATEGIC THEME	YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5				2020							
	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct
Effective Cross Functional Collaboration						■	■	■																				
1. IT Networking Forum						■	■																					
2. Online Forum						■	■																					
3. E-Government ICT Collaboration Award							■	■																				
STRATEGIC THEME	YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5				2020							
	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct
Enhanced National Security					■	■	■	■	■	■	■	■																
1. Mobile Broadband Public Safety Network										■	■	■																
2. Computer Security Incident Response Team (CSIRT)					■	■	■	■	■	■																		
STRATEGIC THEME	YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5				2020							
	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct

Quality Social Services																							
1. Community Service Centres																							
2. Mobile Government (Belize IT Express)																							
3. Mobile Communications Platform (SMS)																							

STRATEGIC THEME	YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5				2020			
	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct
Effective Governance Framework																								
1. Creation of a Central Information Technology Department																								
2. Establishment of Key Support Expert Working Groups																								
a. IT Networking & Security Forum																								
b. E-Government Strategy & Capacity Development Round Table																								

STRATEGIC THEME	YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5				2020			
	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct

Effective Governance Framework																								
3. Inter-Ministerial Council																								
4. True North Group																								
5. E-Government Champion																								
STRATEGIC THEME	YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5				2020			
	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct
Promote Change Management																								
1. Establishment of Programme Office																								
2. Establishment of Business Transformation Office																								
3. Communications Plan																								

- Key
1.  Each section of the table represents a Strategic Theme
 2.  Colours are used to delineate each theme
 3.  The darkest shade (represented next to the section title) shows the combined timeline of all projects under that section
 4.  Different shades of colour represent each project
 5.  Represent sub-stages of projects

5.0 PERFORMANCE MONITORING & EVALUATION

Strategic Theme	Programme	Key Performance Indicator	Baseline	Source / Year	Targets				
					YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Public Sector Infrastructural Development	Network Consolidation – Multi-tiered GOVNET	Integration and Connectivity of Ministries on a common backbone. Fibre deployment and connectivity				30%	50%	75%	90%
	Systems Consolidation - Data Centres	Number of Ministries/agencies using - core applications, email, web hosting, communications (voice and data), intranet services from shared/common hosted facility					25%	50%	90%
	VOIP and Email Migration	Ministries migrated to VOIP and common email platform					30%	75%	95%
	Development and Standardisation of E-Services Platform	Number of Ministries using common platform for e-services development/ deployment Number of e-services deployed Common platform deployed	New Initiative					30% 3	50% 5
Strategic Theme	Programme	Key Performance Indicator	Baseline	Source / Year	Targets				
					YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Creative Regulatory Framework	Regulatory Framework	Number of processes/ procedures developed institutionalized Access levels /authorisation implemented				20% Low	50 Med	75% High	100%
	Data Privacy Laws	Data Privacy Legislation developed / implemented				100%			

Strategic Theme	Programme	Key Performance Indicator	Baseline	Source / Year	Targets				
					YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
	Electronic Transaction Laws	Electronic Transaction Legislation developed /implemented				100%			
Strategic Theme	Programme	Key Performance Indicator	Baseline	Source / Year	Targets				
					YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Targeted Human Capital Development	Future Skills Audit	Future skills assessed	New Initiative	-		50%	100%		
		Future skills determined				50%	100%		
	ICT Based HR Development Platform	Number of employees assessed				30%	60%	100%	
		Skills bank developed				30%	60%	100%	
	Institutionalised Training	Number of programmes to train, attract and retain ICT professionals					5	10	>15
		Number of ICT professionals trained					25%	50%	> 75%

Strategic Theme	Programme	Key Performance Indicator	Baseline	Source / Year	Targets				
					YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Improved Government Efficiency	Development of government portal	Establishment of government portal	New Initiative				50%	100%	
		Number of ministries accessed via portal						50%	100%
		Number of Government Services Accessed via portal						Forms/Informational	Transactional
	Single Electronic Window	Establishment of SEW	New Initiative				25%	100%	
		Number of trade/business transactions that can be conducted online						Minor	Major - permits licenses, register businesses
		Number of businesses conducting online transactions						25%	60%
Effective Cross Functional	IT Networking Forum	Establishment of IT Networking Forum	New Initiative	-	-	100%			
		Number of cross functional projects		-	-		>2	>4	>5

Strategic Theme	Programme	Key Performance Indicator	Baseline	Source / Year	Targets					
					YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	
		Forum input into whole of government projects					Low	Mid	High	
	Online Forum	Establishment of online forum	New Initiative	-	-	100%				
		Number of participants					> 50	> 100	> 150	
		No of major issues raised / resolved					> 5	> 10	> 25	
	E-Government ICT Collaboration Award	Establishment of Award Programme	New Initiative	-	-	100%				
		Number of award nominees					>5	> 10	> 20	
		Number of innovation solutions					> 2	> 5	> 7	
	Strategic Theme	Programme	Key Performance Indicator	Baseline	Source / Year	Targets				
						YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Enhanced National Security	Mobile Broadband Public Safety Network	Establishment of MBPSN					100%			
		Number of public agencies on network					Few	Some	Most	
		Number of officers trained					>25%	>40%	>75%	
		Impact on traffic management					Mid	High	High	
		Number of offences intercepted					Mid	High	High	
	Computer Security Incident Response Team (CSIRT)	Establishment of CSIRT					100%			
		Number of warnings of potential threats						Low	High	High
		Number of Incidents captured						Low	High	High
		Number of threats avoided						Low	High	High
	Quality Social Services	Community Service Centres	Establishment of CSCs – Rural Coverage				40%	75%	100%	
Number of centres deployed						>10	>20	30		
Number of transactions completed via access points per year						500K	>1 Million	> 2 Million		
Percentage of reduction in service delivery cost						10%	15%	20%		
Mobile Government (Belize IT Express)		Establishment of Belize IT Express					1 bus	3 buses	4 buses	
		Number of transactions completed via Belize					100K	500K	>1 Million	

Strategic Theme	Programme	Key Performance Indicator	Baseline	Source / Year	Targets					
					YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	
		Express per year								
		Number of rural communities served/Rural site visits per year				100	300	500		
		Percentage of reduction in service delivery cost				5%	10%	15%		
	Mobile Communications Platform (SMS)	Establishment of Mobile Communications Platform				100%				
		Number of services				10	25	40		
		Number of Subscribers				25K	40K	50K	75K	
		Number of SMS broadcast				100	300	500	700	
	Effective Governance Framework	Creation of a Central Information Technology Department	Establishment of Dept.			Programme initiated	100%			
			Efficiency gains in governance					5%	8%	10%
Increase effectiveness, alignment and coordination, collaboration							10%	25%	40%	
Number of WOG Projects initiated under Dept.							5	10	15	
Cost savings in whole of government service delivery						3%	7%	12%	15%	
Establishment of Key Support Expert Working Groups		Establishment of EWGs				100%				
		Increase effectiveness, alignment and coordination, collaboration					10%	25%	40%	
Inter-Ministerial Council		Increased / coordinated ICT Expenditure (Government Expenditure on ICT) ²					10%	20%	30%	
True North Group		Establishment of TNG				100%				
		Increase effectiveness, alignment and					10%	25%	40%	

² ICT expenditures are shown to have a strong positive impact on future levels of foreign direct investment, as well as on future levels of institutionalized democracy in developing countries.

Strategic Theme	Programme	Key Performance Indicator	Baseline	Source / Year	Targets				
					YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
		coordination, collaboration							
	E-Governme nt Champion	WEF E-Gov Ranking						+10	+15
		Implementation of E-Government Strategy & Plan of Action			10%	25%	50%	75%	100%
Promoting Change Management	Establishment of Programme Office	Delivery time for WOG projects				Minimal delays	Minimal delays	On Time	On Time
		Resource allocation Efficiency				Med	High	High	High
		Optimised Budget utilization				Med	High	High	High
		Number of WOG Projects completed on time, within budget and with assigned resources				Most	all	all	all
	Establishment of Business Transformation Office	Process efficiency improvements across government					High	High	High
		Number of government processes reviewed / re-engineered					20%	40%	50%
		Improvement cost savings to government					2%	4%	5%
	Communication Plan	Develop Communication Plan			50%	100%			
		Stakeholder Buy in for E-Government Policy Strategy and Plan of Action				50%	75%	90%	
		Number of Promotion and awareness programmes developed /implemented				Few	Many		
		Impact on International Benchmarking Organisations for informing E-Government Rankings					Med	High	High

APPENDIX I

Consultation Visits

Government	Private Sector
Ministry of Finance and Economic Development	Belize Trade and Investment Development Service
Ministry of Foreign Affairs	Belize Telemedia Ltd.
Police Department, Ministry of National Security	Speednet Communication Ltd.
Ministry of Education, Youth and Sports	Karl Heusner Memorial Hospital
Ministry of Natural Resources and Agriculture	Central Bank of Belize
Ministry of Labour, Local Government, Rural Development, NEMO and Immigration and Nationality	Public Utilities Commission
Ministry of Health	Belize Coalition of Service Providers
Ministry of Forestry, Fisheries and Sustainable Development	University of Belize
Ministry of Energy, Science & Technology and Public Utilities	Belize Chamber of Commerce and Industry
Belize Archives and Record Service, Ministry of Tourism and Culture	National Institute of Culture and History
Customs and Excise, Ministry of Finance and Economic Development	
Income Tax, Ministry of Finance and Economic Development	
General Sales Tax, Ministry of Finance and Economic Development	
Ministry of Human Development, Social Transformation and Poverty Alleviation	
Ministry of Trade, Investment, Promotion, Private Sector Development and Consumer Protection	

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