



**THE REPUBLIC OF UGANDA**

**MINISTRY OF INFORMATION AND COMMUNICATIONS TECHNOLOGY**

**National Electronic Government (e-Government)  
Framework**

**(Draft Final)**

**JUNE, 2010**

## **National Electronic Government Framework**

### **FOREWORD**

The way of carrying out business in the world today is changing at a very high speed with new technologies taking a center stage. Both government and the private sector have no alternative other than to move in that direction and adopt the emerging new technologies to modernize their service delivery. The advent of Information and Communication Technologies (ICT) is fundamentally changing the way we work, learn and interact. It is the belief of the Government of Uganda (GOU) that ICT should be utilized to move into the era of electronic Government (e-Government) aimed at demystifying the role of Government, simplifying procedures, bringing transparency, accountability, and making credible timely information available to all citizens and at the same time providing all services in an efficient and cost-effective manner.

The Government of Uganda has a strong belief that ICT has the potential not only to revolutionize the way government operates, but also to enhance the relationship between Government and Citizens (G2C), Government and Business community (G2B) and within Government to Government departments (G2G).

With this in mind, the GOU has drawn this document which clearly identifies the goal of e-Government and spells out its core pillars, critical success factors and a roadmap which will be adopted to achieve it.

The Government is aware that the path to achieving effective e-Government is a big challenge and as such, it will require focused political will, a change of mindsets at all levels of Government and entire citizenry, a strategic partnership with the Private Sector, Civil Society, Academia, Development Partners and participation of citizens as stakeholders. Inter-alia, it will involve thorough examination of existing government functions, simplification, and re-engineering of procedures. A requisite institutional framework and structure will be put in place to oversee and coordinate the implementation of the e-Government programme.

All in all, when Government works better, it works better for all of us. The Government is committed to services being delivered to citizens and business in a more effective and efficient manner. e-Government offers exciting potential for government agencies to communicate and deliver their services in a manner that better suits the needs of the citizenry. We must try and achieve clean and transparent administration through e-Government.

I appeal and encourage all government agencies to use this framework to further focus and inform their e-Government strategic plans as one of the facets to transform our country into a knowledge-based economy.

For God and My Country,

Hon. Aggrey Awori

**Minister of Information and Communications Technology**

# National Electronic Government Framework

## TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
<b>1.0 INTRODUCTION .....</b>	<b>4</b>
1.1 BACKGROUND.....	4
1.1.1 Understanding of the e-Government Concept.....	4
1.2 PURPOSE OF THE NATIONAL E-GOVERNMENT FRAMEWORK FOR UGANDA .....	6
1.2.1 e-Government Vision and Mission Statements .....	6
1.2.2 e-Government Objectives.....	6
1.3 E-GOVERNMENT BEST PRACTICE BENCHMARKING .....	7
1.3.1 Neighbouring Countries (Kenya, Rwanda) .....	7
1.3.2 Middle Level Developed Countries (Mauritius and Singapore).....	8
1.3.3 Highly Developed Countries (Japan and Canada).....	9
1.3.4 Regional Body Initiatives (COMESA and EAC).....	10
1.3.5 Crosscutting challenges and threats to e-Government implementation.....	11
<b>2.0 THE NATIONAL E-GOVERNMENT FRAMEWORK .....</b>	<b>12</b>
2.1 SITUATIONAL ANALYSIS.....	12
2.1.1 e-Government / Telecommunications Infrastructure.....	12
2.1.2 e-Government Applications and Investments .....	13
2.1.3 Legal and Regulatory Framework.....	14
2.1.4 ICT Education and Training.....	15
2.1.5 Planning, Monitoring and Evaluation of ICT initiatives .....	15
2.1.6 Institutional Framework .....	15
2.1.7 Usage of ICT Infrastructure in Public Service Delivery .....	15
2.1.8 SWOT Analysis .....	16
2.2 PREAMBLE .....	18
2.3 THE GOALS OF THE NATIONAL E-GOVERNMENT PROGRAMME.....	18
2.4 EMPLOYING THE PRINCIPLES OF E-GOVERNMENT.....	18
2.5 KEY PILLARS FOR THE NATIONAL E-GOVERNMENT FRAMEWORK.....	19
2.5.1 Institutional Framework .....	19
2.5.2 Common ICT Infrastructure and Shared Services.....	22
2.5.3 Legal and Regulatory Framework.....	22
2.5.4 Identified Priority e-Government Applications and Services.....	22
2.5.5 e-Government Skills Development .....	25
2.5.6 Communication and Advocacy .....	25
2.6 CRITICAL SUCCESS FACTORS FOR THE E-GOVERNMENT PROGRAMME IMPLEMENTATION .....	25
<b>3.0 ROADMAP FOR THE E-GOVERNMENT IMPLEMENTATION .....</b>	<b>26</b>
3.1 NEXT STEPS.....	26
3.1.1 Engage in Dialogue with Agencies .....	26
3.1.2 Set up appropriate institutional structure to spearhead e-Government projects .....	26
3.1.3 Encourage and Initiate e-Government Projects.....	26
3.2 PROPOSED NATIONAL E-GOVERNMENT FRAMEWORK ACTION PLAN AND FINANCING REQUIREMENTS .....	28
<b>ANNEX 1: LIST OF DOCUMENTS REVIEWED .....</b>	<b>29</b>
<b>ANNEX 2: LIST OF RESPONDENTS.....</b>	<b>30</b>

# National Electronic Government Framework

## EXECUTIVE SUMMARY

### Introduction

The way of carrying out business in the world today is changing at a very high speed with new technologies taking a center stage. Both government and the private sector have no alternative other than to move in that direction and adopt the emerging new technologies to modernize their service delivery. One of the major problems of developing countries today is the adaptation and adoption of these new technologies that will enable them utilize their information resources efficiently and effectively to propel them towards economic growth and development. Governments must position themselves to ensure investment in and application of new technologies to harness the benefits of these technologies.

The Government of Uganda (GOU) recognizes the role of Information and Communications Technology (ICT) in fostering economic development and is taking steps to adopt the emerging new technologies in order to modernize service delivery. It is also the belief of the GOU that ICT should be utilized to move into the era of electronic Government (e-Government) that is aimed at demystifying the role of Government, simplifying procedures, bringing transparency, accountability, and making credible timely information available to all citizens and at the same time providing all services in an efficient and cost-effective manner.

It is for this reason that the development of this national e-Government framework for Uganda became critical. The document highlights the goal of the national e-Government programme and spells out its core pillars, critical success factors and an implementation roadmap which will be adopted to achieve it. Similarly, a document review and situational analysis, on which this framework is premised was carefully undertaken. Summary findings are discussed in section 2.1 of this document.

### **KEY ASPECTS DOCUMENTED IN THIS FRAMEWORK INCLUDE;**

#### **The e-Government Concept**

Broadly defined, e-Government is the use of ICT to promote a more efficient and effective government, facilitates accessibility to government services, allows greater public access to information, and makes government more accountable to citizens. e-Government involves delivering services via the Internet, telephone, electronic media, community centers (self-service or facilitated by others), wireless devices or other communications systems.

#### **Purpose of the National e-Government Programme for Uganda**

To efficiently use ICT in public administration in order to improve public service delivery and democratic processes, enhance the attainment of the Millennium Development Goals (MDGs) and other international obligations.

#### **The Vision**

Ensure online accessibility of all government services and opportunities for community participation in a friendly, transparent and efficient manner for all sections of the society.

#### **The Mission**

Enhance and promote the efficiency and transparency in the functioning of government through the increased use of ICT for online service delivery to citizens and business.

## **National Electronic Government Framework**

### **The Strategic e-Government Objective**

The main strategic objective of this programme is to continuously improve the efficiency of, and access to government information and services.

### **Benchmarking and Best Practices**

Not to reinvent the wheel regarding the implementation of the e-Government programme, a number of countries' e-Government programmes were reviewed and their implementation experiences have been included in this framework. The countries benchmarked include Kenya, Rwanda, Mauritius, Singapore, Japan, and Canada. Regional body e-Government initiatives for the Common Market for East and Southern Africa (COMESA) and the East African Community (EAC) were also reviewed.

### **Situational Analysis**

A document review augmented by a qualitative survey on the current status of e-Government related initiatives in the country was undertaken. Both exercises formed the basis on which the framework is formulated. While the documents reviewed included policy and legal frameworks, the survey focused on interviewing officials from core government ministries, departments and agencies directly involved in the provision of public service to the citizens and business. Also, views and perceptions about e-Government were sought from the citizens and business community.

Specifically, the survey collected views regarding the current situation on e-Government focusing on awareness about e-government, Information and Communications Technology (ICT) usage in public service delivery, existence of e-Government infrastructure and investments, ICT planning, implementation, monitoring and evaluation, institutional and legal frameworks, and ICT human resources. Other areas investigated included the benefits, opportunities, challenges and priorities of e-government for Uganda.

The exercises revealed that people are aware of the e-Government program and there is generally a substantial amount of investment in e-Government / Telecommunications Infrastructure owing to Uganda's liberation policy of the telecommunication sector. However, the application or usage of e-Government infrastructure is still limited.

Similarly, it was discovered that there is inadequate legal and regulatory framework to support the effective implementation of the e-Government program but even where the laws exist, the enforcement is very weak. More importantly, the planning, monitoring and evaluation of ICT activities was found to be weak with the institutional capacity equally weak demonstrated by low levels of qualified ICT staff and non-existence of ICT units in most government Ministries, Department and Agencies (MDAs)

### **The Principles to be followed during the implementation of the e-Government Programme**

There are six principles that will guide the e-Government programme implementation. These principles shall act as the 'critical questions' that will test all decisions made in relation to developing the e-Government initiatives. The principles include:

- Citizen-centric
- Accessibility and choice
- Trust, confidence and Security
- Better governance
- Collaboration and integrity, and
- Accountability

## **National Electronic Government Framework**

### **The Key Pillars for the National e-Government Framework for Uganda**

Six pillars have been earmarked for the successful implementation of the e-Government programme in Uganda. They include;

- i. Institutional Framework which stipulates the core ministries, departments and agencies, private sector, academia and NGOs specifying roles and responsibilities for each.
- ii. A Legal and Regulatory Framework meant to provide the requisite environment for the e-Government service delivery between government, citizens, business and non-citizens.
- iii. Identified priority e-Government applications and services
- iv. Common ICT infrastructure and Shared services
- v. A deliberate e-Government skills development programme for civil servants and other key actors
- vi. A deliberate communication and advocacy programme will need to be developed to popularize the benefits of the e-Government programme across the country.

### **Critical Success Factors for the e-Government programme implementation**

For the successful implementation of this programme, issues of leadership, culture change, governance mechanisms, citizen-centric approach, conducive policies, legal and regulatory frameworks, appropriate technology architecture, information management and security, infrastructure expansion, planning, monitoring and evaluations and lobbying aspects need to be addressed.

### **Roadmap for the e-Government implementation**

At the end of this document, a set of milestones and action areas for the operationalization of this framework have been identified and documented with indicative timeframe and global financial estimates which will need to be broken down during the detailed development of the National e-Government Master Plan for implementation.

### **Conclusion**

In a nutshell, it is important to underscore the fact that the goals of e-Government rest heavily upon the presence of political leadership and support at all levels of government, key infrastructure, requisite human resource, legal and regulatory framework, information resources and citizen-centric services.

## 1.0 INTRODUCTION

### 1.1 Background

#### 1.1.1 Understanding of the e-Government Concept

##### Electronic Government Defined

Electronic Government (e-Government) involves focusing on the use of Information and Communications Technology (ICT) to assist in the transformation of government structures and operations for cooperative and integrated service delivery. If the technology does not result in better outcomes for citizens and agencies it will mean nothing more than an added cost to government – a cost that government is increasingly being asked to account for by its citizens. e-Government is not just simply putting government forms on-line, creating static organizational websites or posting simple tax schedules on-line, but rather it is the integration of government operations in the delivery of services to her citizenry and the business sector.

Broadly defined, Electronic Government (e-Government) is the use of ICT to;

- Promote a more efficient and effective government;
- Facilitate accessibility to government services;
- Allow greater public access to information;
- Make government more accountable to citizens.

E-Government involves delivering services via the Internet, telephone, electronic media, community centers (self-service or facilitated by others), wireless devices or other communications systems.

##### The Need to pursue e-Government

If strategically employed, ICT can form the backbone of initiatives that will help government agencies achieve results against their strategic development interventions.

##### i) People and Communities

*To enhance the quality of life and well being of all people in Uganda through improved service delivery.*

##### ii) The Economy

*To develop a strong economy that delivers more jobs, more opportunities and greater wealth to Ugandans by creating the conditions required for investment and growth.*

e-Government provides the mechanisms for the Ugandan public sector to:

- Show leadership in its demand for new and efficient ICT products and services;
- Deliver business efficiencies through online channels for increased efficiency; and,

In addition, e-government can create conditions to assist in economic development. Already, some sectors are benefiting from harnessing online technologies by increased exposure and market share. Similarly, these principles can be applied to opening the market for development of the local small business sector.

## National Electronic Government Framework

### iii) The Environment

*To ensure that Uganda has an environment in which resources are managed, developed and used sustainably, biological diversity is preserved and habitats protected.*

e-Government calls for collaboration and a multi-agency approach in view of environmental and spatial data across government. Common infrastructure will allow such data to be quickly collected and shared.

### iv) Local Governments Administration

*To ensure that Local Governments are strong and vibrant as well as closely linked with other agencies particularly the central government.*

e-Government transformation within Uganda will entail meeting the need for rural and urban administrations to access public services, communicate and transact with government through mechanisms that are appropriate to their respective situations.

There is considerable potential for e-government initiatives to bring both economic and social benefits to the local governments. Improved ICT infrastructure can provide flow-on benefits to business and residential users, and improved access to government services that can enhance the viability of small rural communities.

### v) Governance

*To govern all Ugandans in an open, effective and efficient manner that also ensures a sustainable future.*

The use of common systems and the practice of aggregating data that e-government advocates, allows for significantly increased levels of transparency and accountability in decision-making, and an increased ability to apply governance more effectively.

The development of Shared Service Centres presents an opportunity to leverage the considerable investment the Government has made in ICT infrastructure to develop a range of whole-of-government service delivery platforms. Whole-of-government directory services, common email naming conventions and a whole-of-government information architecture are examples of projects that could build upon the concept of the Shared Service Centres.

Particularly, the e-Government programme will provide the following benefits:

- (a) improved services and convenience to citizens;
- (b) improved the productivity (and efficiency) of government agencies;
- (c) create a more accountable government;
- (d) increased transparency and fight corruption;
- (e) empower public access to information/records in possession of the state or public body, so as to effectively scrutinize and participate in government decisions that affect them;
- (f) improve the quality of life for disadvantaged communities, promote gender equality and minimize the national digital divide;
- (g) strengthen good governance;
- (h) broaden public participation and promote democracy;
- (i) strengthen the legal system and law enforcement;



## **National Electronic Government Framework**

- (j) facilitate commerce and services for businesses online; and
- (k) Make private sector more competitive by reducing the cost of transacting with the Government e.g. in tax collection and e-procurement.

### **1.2 Purpose of the National e-Government Framework for Uganda**

From the above understanding, the GOU recognizes the need for developing and implementing a national e-Government programme aimed at the efficient use of ICT in public administration in order to improve public service delivery and democratic processes and also to enhance the attainment of the Millennium Development Goals (MDGs).

#### **1.2.1 e-Government Vision and Mission Statements**

##### **Vision**

Ensure online accessibility of all government services and opportunities for community participation in a friendly, transparent and efficient manner for all sections of the society.

##### **Mission**

Enhance and promote the efficiency and transparency in the functioning of government through the increased use of ICT for online service delivery to citizens and business.

#### **1.2.2 e-Government Objectives**

The following objectives represent broad statements of the e-Government Framework:-

- Objective 1:** To continuously improve the efficiency of, and access to government information and services to meet citizen's expectations
- Objective 2:** To use the successful development of the e-Government initiative to promote Uganda, as an Information Technology centre for excellence in Africa.
- Objective 3:** To establish leadership and partnerships that advance e-Government services.
- Objective 4:** To develop and maintain a secure seamless and comprehensive e-Government interface (one-stop centre integrated service delivery mechanisms).
- Objective 5:** To manage the cost of e-Government implementation through effective use of technology.
- Objective 6:** To institutionalize the use of e-Government information and services through the adoption of appropriate organizational models.
- Objective 7:** To encourage the use of open source software in order to reduce the amount of money spent by Government on licensing proprietary software and encourage innovation in enterprise platform software development.

## National Electronic Government Framework

### 1.3 Case studies on e-government initiatives

#### 1.3.1 Neighbouring Countries (Kenya, Rwanda)

##### Kenya

- i. A National e-Government Framework was developed in March 2004
- ii. A Directorate of e-Government was set up under the Cabinet Office within the Office of the President to coordinate and spearhead the implementation of the e-Government programme in Kenya.
- iii. A change management programme is undergoing through training and awareness of public servants
- iv. Business process re-engineering is ongoing in some government departments to simplify procedures for computerization
- v. Village information centres are being set up in rural areas to promote public information access within rural communities
- vi. Strong public private partnership in implementation of e-Government projects
- vii. Government Website standards have been developed
- viii. Inter Ministerial Local and Wide Area Networks have been installed to promote seamless communication and information sharing
- ix. Broadband infrastructure development is ongoing
- x. Various management information systems in Health, Financial, Human Resource, and Integrated Personnel amongst others have been developed.

##### Rwanda

- i. A comprehensive integrated ICT-led socio-economic development policy and plan (NICI-2005) set within the wider context of the developmental objectives of the country is in place.
- ii. A blue print known as the Rwandan Electronic Government and Governance Initiative (REGGI) is in place for rolling-out the e-government and governance strategy and action plans within the context of the implementation of the four NICI Plans (NICI-2005, NICI-2010, NICI-2015 and NICI-2020) over the envisaged 20 years life-span of the Vision for Rwanda (VfR).
- iii. An e-government Action Plan identifying specific programmes and initiatives to be implemented mainly as part of the NICI-2005 Plan is also in place.
- iv. A clear framework within the context of the proposed e-government implementation strategy for the development and implementation of relevant e-government programmes within the subsequent NICIs (NICI-2010, NICI-2015 and NICI-2020) as part of the REGGI initiative.
- v. An institutional reform initiative aimed at the re-engineering of organizational processes, procedures and structures of civil and public sector institutions and establishments is on going

## National Electronic Government Framework

### 1.3.2 Middle Level Developed Countries (Mauritius and Singapore)

#### Mauritius

In the year 2000, the Government of Mauritius announced that it would bring its services closer to the citizens by implementing an ambitious e-Government programme. Key developments that have taken place include:

- i. Development of a vision for e-Government to develop the country into a Cyber Island and create an information based society.
- ii. Setting up of a high level Ministerial Committee under the Chairmanship of the Minister of Information Technology & Telecommunications to spearhead the development of e-Government.
- iii. Awareness campaign to shift the mindset and culture within the Civil Service.
- iv. Setting up of the Government Online Centre (GOC) infrastructure at the Ebene Cyber city
- v. Elaboration of an e-Government Master Plan for the Civil service
- vi. Setting up of the Government Web Portal
- vii. Introduction of e-Business Plan for Ministries and Departments
- viii. Setting up of a Central IT Committee (CITC) at the Prime Minister's Office under the Chairmanship of the Head of the Civil Service
- ix. Designation of Chief Information Officers (CIO) within each Ministry (Setting up of a CIO Council.
- x. Introduction of new legislations to consolidate the legal framework to create a conducive environment for the deployment and use of ICT.
- xi. Civil service computerization.
- xii. A training programme introduced to provide ICT-related training to some over 7,000 public officers.
- xiii. A National ICT Strategic Plan (NICTP) 2007 – 2011

#### Singapore

The e-Government Vision of the Singapore Government is “To be a leading e-Government to better serve Singapore and Singaporeans in the new Knowledge-based economy”.

Singapore e-Government initiative originated from a Government decision to computerize the Civil Service in 1981 under the Civil Service Computerization Programme (CSCP). It aimed at manpower savings, operational efficiency improvement, better information support for decision making and certain pioneer services for the public. The early strategies that CSCP adopted was called SS-SF -- Start Small, Scale Fast.

The Singapore e-Government Strategic Framework was centred on three critical relationships – Government to Citizens (G2C), Government to Businesses (G2B) and Government to Employees (G2E). Based on this framework, an e-Government Action Plan was launched in June 2000, with five key thrusts:

- i. Re-inventing Government through continuous rethinking of all aspects of governance to explore the nature and quality of government interactions with its citizens, businesses and employees.

## National Electronic Government Framework

- ii. Delivering integrated electronic services centred on customers' needs.
- iii. Being proactive and responsive by adopting a 'sense and respond' approach.
- iv. Using ICT to build new capabilities and capacities for achieving quantum leaps in service delivery.
- v. e. Innovating with ICT by embracing enterprise and experimentation.

To cater for the wide-ranging needs of the citizen, the Singapore Government established an e-Citizen Centre portal that provides one-stop online information and services covering Arts and Heritage, Business, Education, Elections, Health, Library, Safety and Security, Transport, Defense, Employment, Family, Housing, Recreation, Sports and Travel. The e-Citizen Centre is currently a home to more than 1,700 services of the 2,600 services identified that can be delivered electronically.

The Infocomm Development Authority (IDA) of Singapore champions the implementation of the e-Government initiative.

### 1.3.3 Highly Developed Countries (Japan and Canada)

#### Japan

In February 1995, the Government of Japan developed and adopted a "Policy for the Promotion of the use of Information Technology (IT) in the whole society. Administrative reforms were implemented through the use of IT. In November 1998, the policy was revised as "Basic Policy for the Promotion of Advanced Information and Communication Society". Accordingly, a Master plan was developed that led to the development of local and wide area networks (LAN and WAN) and provision of administrative information between government ministries and local governments by the internet.

In 2000/2001, Japan Government developed its e-Japan Strategy enacted into an IT Basic Law on the Formation of an Advanced Information and Telecommunications Network Society. The Law empowered the Prime Minister as the Chair of the Strategic Steering Committee. Emphasis was put on the development of the key IT infrastructure (backbone broadband infrastructure across the country). In 2002/2003, e-Japan Strategy II was put in place emphasizing IT usage and applications development. The Government portal site (e-Gov), online acceptance systems for Ministries, and Public Key Infrastructure (PKI) was developed.

In June 2004, an e-Japan Priority Policy Program was put in place to enhance and further promotion of e-Government through the provision of one-stop services; optimization plans business processes and systems, and appointment of Ministry and Government Departments Chief Information Officers (CIOs) and their Assistants to champion the initiative. In January 2006, Japan put in place a New IT Reform Strategy in pursuit of IT structural reform capabilities to be a front-runner leading the global IT revolution in the realization of an autonomous IT ubiquitous society (U-Society).

#### Canada

The Canada portal has services ranging from;

- (a) **Governance Aspects** (The Governor General, the Prime Minister, Parliament, Supreme Court, Government News and about the Government, Educational and Training).

## National Electronic Government Framework

- (b) **Services** (Service Canada, Canada Business and Canada International)
- (c) Information Resource Centre
- (d) **Popular Services** (Weather, Jobs, Taxes, Social Insurance Number, Starting a Business, Replacing new documents, Financial Benefits, Passport, Immigration, Old Age Security, Canada Pension Plan)

Canada is rated highest in the provision of e-Government Services due to the fact that it periodically consults its citizens on what kind of e-services they want. Unlike many countries, Canada's e-Government action plan is built on a foundation of facts based on known information from its customer base. Canada regularly surveys citizens and businesses about their attitudes and needs--more than any other country. Canada also actively markets its e-Government services to the citizens, business and non-citizens. It advertises on TV and radio, in airline magazines and newspapers to get citizens to use the portal, [www.canada.gc.ca](http://www.canada.gc.ca).

One of the most interesting e-Government initiatives in Canada is its wireless portal that gives citizens mobile access to information, e-mail, and personal services. The wireless portal provides Canadians access to information on border wait times, government news, and economic indicators. Also the government portal lets the users to create their own customized page and offers alternate versions of its main site, such as for use on a mobile phone or through Blackberry devices. Canada, like many nations, has a national Chief Information Officer (CIO), who has been given the muscle to drive standards and promote e-Government across the government.

### 1.3.4 Regional Body Initiatives (COMESA and EAC)

#### COMESA Regional e-Government Initiative

- COMESA Secretariat has developed Information Technology (IT) Strategy Guidelines to guide full utilization and harness IT benefits during service delivery to member states
- Enabling laws and procedures on aspects of Telecoms, e-Commerce, Intellectual Property rights, Information and Communication, have been put in place
- Supportive tax regime on computers
- Automation of most of the back office operations at the COMESA Secretariat is ongoing
- Cross border ICT infrastructure like the EASSY project is under implementation
- Public Private Sector Partnership promotion
- COMESA Secretariat has established a number of websites that are providing member states with access to information facilitating implementation of regional initiatives. These include main COMESA website ([www.comesa.int](http://www.comesa.int)), COMESA Public Procurement (<http://cpis.comesa.int>), COMESA trade statistics ([comstat.comesa.int](http://comstat.comesa.int)), Food and Agriculture management information system ([www.famis.comesa.int](http://www.famis.comesa.int)), Regional custom transit guarantee ([www.rctg-mis.comesa.int](http://www.rctg-mis.comesa.int)) and [www.ariceaonline.org](http://www.ariceaonline.org). for the Telecommunications Regulatory Authorities.
- COMESA is drawing up e-legislation guidelines to maximize on the opportunities provided by ICT to trade more efficiently and securely on a global scale

## **National Electronic Government Framework**

- Installation of a COMESA Closed User Group Very Small Aperture Terminal (VSAT) communications network used for Video Conferencing, Voice over Internet Protocol, and Internet and data exchange
- COMESA has established a Regional Customs Transit Guarantee Management Information System ((RCTG-MIS) to effectively manage the operations of the Regional Customs Transit Guarantee Scheme. The RCTG-MIS has four modules including; Information Dissemination module, Carnet Tracking module to monitor issuance of COMESA Carnets, Claims Management module to manage the registration, payment and reimbursement of claims and Reports and Statistics module for monthly and quarterly report generation and submission by various stakeholders
- RICTP at COMESA is providing opportunities to harmonize ICT policies and strategies, promoting information access (sharing and dissemination through websites and portals) both at the COMESA Secretariat and the Regional Implementing Organizations/RECs (EAC, OIC, IGAD).

### **EAC Regional e-Government Initiative**

The EAC Regional e-Government Programme was born at a stakeholder's e-Government Strategy Forum/Workshop that was held in Dar es Salaam in November 2004. Priority areas for the implementation of e-Government flagship applications were identified, prioritized and agreed upon by the stakeholders. The areas identified included; Customs and Immigration Control, e-Parliament, e-Health, e-Banking, e-Procurement, e-Commerce, e-Tourism, and Meteorological and Tidal Information.

Immediately, a study to develop an EAC regional e-Government Framework was commissioned. The Study Report identified Harmonized Policies and Strategies, Legal and Regulatory Framework, Crosscutting Issues (Education, Infrastructure, Poverty Reduction and Gender, Coordination, Monitoring and Benchmarking as the major critical enabling factors for the effective implementation of the EAC Regional e-Government Strategy both at the regional and national levels. The Framework developed emphasized the need for a strong back-up support of legislations on data security, network security, cyber crime, information systems and electronic transactions.

The EAC Regional e-Government initiative aims at using Information and Communications Technology (ICT) to transform the delivery of government services to the betterment of the people of the East African partner states.

#### **1.4.5 Crosscutting challenges and threats to e-Government implementation**

- i. Cyber crime and cyber terrorism
- ii. Undefined cross-border jurisdiction for cyber litigation
- iii. Reliance on imported hardware and software
- iv. Reliance on foreign funding
- v. Unharmonised ICT Policies and Strategies
- vi. Inadequate Infrastructure
- vii. Adverse cultural beliefs and languages
- viii. Inadequate funding
- ix. Inadequate human resources
- x. Inadequate Public Private Partnerships (PPPs) frameworks

## **2.0 THE NATIONAL e-GOVERNMENT FRAMEWORK**

### **2.1 Situational Analysis**

A document review augmented by a qualitative survey on the current status of e-Government related initiatives in the country is presented in this chapter.

Among the core documents reviewed included previous studies and strategy documents which were being championed by various agencies all geared towards the implementation of e-Government initiatives in Uganda. These include; the final feasibility study report for the National ICT Action Plan and e-Government Network, 2006 by MEGA – TECH, Inc. in collaboration with Techno Brain Uganda Limited, a draft Uganda e-Government Strategy Framework, January 2007 championed by National Planning Authority (NPA), Uganda National ICT Policy Framework, 2003, and the National Information Technology Policy, 2009. It is important to note that the e-Government feasibility study report recommendations were utilized as key input into the draft Uganda e-Government strategy framework, January 2007 that was initiated by NPA then in bid to adhere to the EAC e-Government regional initiative recommendation that each of the member states of the community had to develop their national level e-Government strategies. Information from this draft document has provided an immense input into the National e-Government Framework for Uganda, July 2009, which has additional specific sections addressing concept of e-Government, a detailed situational analysis on current e-Government implementation in Uganda, e-Government best practice benchmarking, key pillars for the national e-Government programme implementation and roadmap for the implementation of the framework. Other documents reviewed include the e-Government Strategy for the Republic of Kenya, March 2004, EAC and COMESA regional e-Government frameworks, amongst others.

The survey was conducted focusing on the core government ministries, departments and agencies directly involved in the provision of public service to the citizens and business. Also, views and perceptions about e-Government were sought from the citizens and business community. Specifically, the survey collected views regarding the current situation on e-Government focusing on awareness about e-government, Information and Communications Technology (ICT) usage in public service delivery, existence of e-Government infrastructure and investments, ICT planning, implementation, monitoring and evaluation, institutional and legal frameworks, and ICT human resources. Other areas investigated included the benefits, opportunities, challenges and priorities of e-government for Uganda. Detailed findings are documented in the development of the National e-Government Framework for Uganda report appended at the end of this framework document.

#### **2.1.1 e-Government / Telecommunications Infrastructure**

It was established that the Uganda's liberalization policy of the telecommunication sector has resulted into a non discriminatory access and nationwide availability of telecommunications services. The communications infrastructure network has attracted major communications services providers of MTN, Uganda Telecom, ZAIN, Warid, Orange, Foris, i-Tel, Broadband Company and others. Today, almost all the districts in the country are covered by the telecommunications infrastructure. To ensure good quality service delivery, more than 80% of all the Public Switching Telephone Network (PSTN) switching systems in the country are digital. Liberalization of the telecom sector has led

## **National Electronic Government Framework**

to its phenomenal growth. There are currently 21 telecommunications operators and slightly over 8 million subscribers. Broadband penetration, ICT usage and provision of basic communications facilities is being promoted by the Uganda Communications Commission (UCC) through the Rural Communications Development Programme (RCDP). This initiative has covered most of the rural areas considered commercially unviable by incumbent telecommunications operators.

In addition, a National data transmission and e-Government backbone infrastructure (NBI/EGI) is being installed by the Government and expected to be completed by 2010. The National Data Transmission Backbone is to span through 28 districts while the e-Government infrastructure is to connect all Government Ministries and Departments. Under Phase 1, Kampala, Entebbe, Mukono, Jinja and Bombo have been connected to the National backbone while 27 Ministries have been connected to the e-Government network.

### **2.1.2 e-Government Applications and Investments**

Currently, there are a number of e-Government applications and investments already or being implemented as presented below;

- (i) In 2007, the Ministry of ICT spearheaded the introduction of Blackberry communications services, which have made access to information e.g. through e-mail easy and quicker. This service is aimed at making government more efficient and effective. It has been embraced by various agencies in the public and private sector.
- (ii) All district local governments in the country have websites developed under the Rural Communication Development Program (RCDP). Public, investment and other business information opportunities are published on the websites despite the challenges of periodic updating and payment of web hosting and internet fees by the districts.
- (iii) Government of Uganda web portal to act as a gateway to government services with linkages to the business sector is under development.
- (iv) Establishment of pilot District Business Information Centers in six districts of Mityana, Iganga, Lira, Rukungiri, Kamwenge and Busia to enhance access to ICT services to the citizens are being set up by the Ministry of ICT in collaboration with UNIDO.
- (v) A National Data Centre to facilitate government wide data storage, usage, sharing and security has been built.
- (vi) A number of government institutions have taken on computerization projects. Some of these include:
  - a. Integrated Financial Management System (IFMS) by Ministry of Finance Planning and Economic Development (MoFPED);
  - b. Integrated Resource Management System by Ministry of Defense;
  - c. Local Governments Information Communication System (LoGICS) by Ministry of Local Government;
  - d. Uganda Revenue Authority Countrywide Network (URANET) and Electronic Tax (e-Tax) by Uganda Revenue Authority;
  - e. Electronic Funds Transfer System, Bank of Uganda/MoFPED;



## **National Electronic Government Framework**

- f. Salary and Wage Processing System by MOFPED;
- g. Community Information System (CIS) by National Planning Authority and Uganda Bureau of Statistics;
- h. Integrated Personnel Payroll System (IPPS) by Ministry of Public Service;
- i. Court Case Management System by the Judiciary;
- j. Land Information Management System by Ministry of Lands Housing and Urban Development
- k. e-Government Intercom (central government VOIP phones & Video Conferencing facilities) by Ministry of ICT
- l. Health Management Information System (HMIS)
- m. Education Management Information System (EMIS)
- n. Rural Information System to provide market information to farmers and other agriculture value chain stakeholders (Ministry of Trade, Tourism and Industry)

### **2.1.3 Legal and Regulatory Framework**

The Ministry of ICT in collaboration with the Uganda Law Reform Commission and Ministry of Justice and Constitutional Affairs have developed and drafted ICT related laws (Cyber Laws) i.e. the Electronic Transactions Bill, the Digital Signatures Bill and the Computer Misuse Bill. These bills have already been passed by Cabinet and are now under the floor of Parliament for the last mention to be enacted into Laws. These bills have been based on international standards and norms as set-out in the:

- United Nations Commission on International Trade Law (UNCITRAL) Model law on electronic Commerce
- World Intellectual Property Organization (WIPO) Copyright Treaty(WCT)
- WTO Basic Telecommunications Agreement.

Other regulatory issues addressed in these laws include;

- Intellectual Property for software development, etc
- Privacy and Integrity laws
- Policy issues for usage of Internet resources
- Regulation and standards of Computer hardware equipment and accessories
- Capacity building and
- Software standards

In addition to the above laws, the following other ICT sector policies, laws do exist;

- National ICT Policy Framework (2003)
- Communications Act, 1998
- Draft Postal Policy, July 2008
- Revised Telecommunications Policy, 2006
- National Information Technology Policy, 2009

## **National Electronic Government Framework**

### **2.1.4 ICT Education and Training**

Currently, ICT usage and penetration is fairly superficial and weak in the Government establishments mainly because of low levels of technology awareness and inadequate ICT training of the manpower. Uganda's 27 Universities and numerous tertiary institutions are churning out many ICT graduates. Deliberate strategies aimed at building a capital of trained ICT human resources for effective implementation of ICT related initiatives like e-Government have been developed and are being implemented.

### **2.1.5 Planning, Monitoring and Evaluation of ICT initiatives**

From the survey carried out, ninety three (93%) percent of respondents rated the current planning, monitoring and evaluation efforts as not good while only seven (7%) percent rated the efforts as fair. No respondent thought the efforts were good. Majority of respondents (86%) also believed that there is high level of duplication in government investments towards e-Government implementation. However, the respondents enumerated a number of opportunities to improve the current situation.

### **2.1.6 Institutional Framework**

Weak institutional framework was identified as one of the major challenges as far as the implementation of e-Government projects is concerned. The recent creation of a fully fledged Ministry for ICT by the government to create the necessary policy coordination and harmonization is applauded. The ongoing process of enactment of the NITA-U Bill to handle the implementation of e-Government projects is appreciated as a right step to address this challenge.

### **2.1.7 Usage of ICT Infrastructure in Public Service Delivery**

The survey revealed that there is a big challenge in usage and application of ICT investments. As one respondent remarked, "the relevance of ICT is in its application". Respondents noted that, while the e-Government intercom infrastructure (VOIP phones and video conferencing facilities) was installed in nearly all the government ministries, their usage is still minimal. Generally, the application of most ICT investment is still basic with most computers being used as word processors.

Despite the minimal usage, however, there was high appreciation for the benefits of these investments. Efficiency (43%) was identified as the most common benefit among respondents. This was closely followed by easy information access and sharing (38%), simplified communication (38%), and mapping of land (21%). Other significant benefits identified include reduced cost of doing business (17%), accountability and transparency (17%), planning, monitoring and evaluation (14%), ICT access (14%) and data processing and storage (12%). Others also mentioned include enhanced participation (7%) and decision making (10%), information security (5%) and procurement (2%).

## National Electronic Government Framework

### 2.1.8 SWOT Analysis

#### Strengths

- (a) There is political will in support of e-Government and ICT in general.
- (b) Installation of the Nation wide Data Transmission Backbone (NBI) and e-Government Infrastructures (EGI) is ongoing
- (c) National ICT Strategy Framework was adopted by Government in 2003.
- (d) All government ministries were directed by Cabinet to create budget lines for ICT.
- (e) Uganda has one of the most deregulated Telecom markets in Africa with a highly rated regulator (UCC).
- (f) There is a supportive tax regime on computers.
- (g) Mobile tele-density is improving at a very impressive rate and a wider spectrum of Internet service options is available to citizens.
- (h) There are several initiatives that are promoting ICT in education, health, security, procurement, financial management and other sectors.
- (i) Most universities and other tertiary institutions in the country now offer ICT related courses.
- (j) Legal reforms are under way that could provide a conducive legal framework for electronic transactions.
- (k) The National Information Technology Authority – Uganda is soon becoming operation to harmonize and coordinate all IT related systems
- (l) Approval process of the National IT Policy in ongoing

#### Weaknesses

- (a) Difficulty in attracting, recruiting and retaining skilled ICT personnel
- (b) Inadequate budgetary allocations and poor prioritization.
- (c) Erratic and unstable power supply. Most of rural communities do not have electricity.
- (d) Most of the offices are not networked and interconnected through LAN/WAN
- (e) Insufficient number of ICT equipments including computers. Some Ministries do not have PABXs.
- (f) Most computers are underutilized, mainly used as word processors
- (g) Limited usage of Internet and email facilities, with only few computers connected.
- (h) ICT implementation in key functional areas such as health, banking, procurement, education, commerce, etc are still minimal or lacking.
- (i) Connectivity is concentrated in the capital city and a few major towns
- (j) Limited and expensive bandwidth.
- (k) There is duplication of efforts in some ICT projects
- (l) Illiteracy and language barriers for most rural communities.
- (m) Lack of local content development that is readily available and relevant to the needs of the majority of Ugandans

## **National Electronic Government Framework**

- (n) Lack of awareness about ICT and the benefits of e-government in both urban and rural areas
- (o) Lack of supportive legal framework such as for the protection of intellectual property rights, database protection, informational privacy and electronic transactions.
- (p) The mainly static web sites available in government ministries are seldom updated.
- (q) There are inadequate standards and guidelines for ICT in general including training, career development, information security and devices.

### **Opportunities**

- (a) Uganda should optimally utilize the regional initiatives on e-Government under the auspices of the EAC and COMESA
- (b) Utilisation of backbone projects such as East African Marine cable. EAC digital transmission and Comtel (for COMESA), Uganda's NBI/EGI, etc.
- (c) Abundant hydro electricity potential
- (d) Operationalisation and implementation of the NITA-U Act is set to commence
- (e) Increased critical mass of ICT literate graduates
- (f) Improvement in the planning, monitoring and evaluation of the ICT sector
- (g) Continued improvement in funding for ICT sector
- (h) High level political support for use of ICT in service delivery
- (i) Availability of website standards
- (j) Development of the government web portal
- (k) Existing legal and regulatory frameworks e.g. the enactment of the Cyber Laws
- (l) Existence of the Ministry of ICT, Parliamentary Session Committee
- (m) National Data Centre Infrastructure
- (n) Training and Capacity building programmes
- (o) Research and Development in ICT

### **Threats**

- (a) Cyber crime and cyber terrorism.
- (b) Undefined cross-border jurisdiction for cyber litigation.
- (c) Reliance on imported hardware and software.
- (d) Too much Reliance on foreign funding.
- (e) Reliance on foreign expertise to undertake studies and implement strategies.
- (f) Indifference of Uganda ICT experts learning in the Diaspora.
- (g) Fast changing technology
- (h) Resistance to ICT usage by some public servants

## National Electronic Government Framework

### 2.2 Preamble

Countries worldwide are embracing e-Government in order to improve citizen service delivery on a 24x7 self-service basis.

The GOU believes that ICT should be utilized in this era of e-Government aimed at;

- providing greater access to government information;
- promoting civic engagement by enabling the public to interact with government officials;
- making government more accountable by ensuring its operations are more transparent and thus reducing the opportunities for corruption;
- providing development opportunities which are beneficial to rural and traditionally underserved communities; and
- ensuring better delivery of Government services to citizens, business and non-citizens.

Also, the government is aware that the path to achieving effective e-Government is a big challenge and as such, it will require focused political will, a change of mindsets at all levels of Government, a strategic partnership with the Private Sector, Civil Society, Academia, Development Partners and participation of citizens as stakeholders. Inter-alia, it will involve thorough examination of existing government functions, simplification, and re-engineering of procedures.

### 2.3 The Goals of the National e-Government Programme

Amidst this framework, there are three core goals, all of which support the overarching vision for the e-government programme implementation in Uganda:

#### **Vision**

Ensure online accessibility of all government services and opportunities for community participation in a friendly, transparent and efficient manner for all sections of the society.

#### **Goals**

To transform the operations of government using ICT as a tool to improve internal efficiency, service delivery to citizens, business and community participation

#### **Service Delivery**

More personalized and accessible services that are easy for the community to use.

#### **Internal Efficiency**

Improved processes within and between agencies leading to lower costs and improved services.

#### **Community Participation**

Easier interaction so that people can understand and contribute to policy making and other governance issues.

The achievement of these three goals will require a genuine commitment by agencies to work in ways that will challenge existing structures and processes.

### 2.4 Employing the Principles of e-Government

The principles underpin the three goals of e-government. There will be six principles to guide the way in which the e-government transformation will be approached. These

## National Electronic Government Framework

principles shall act as the ‘critical questions’ that will test all decisions made in relation to developing the e-government initiatives. Under each principle are examples of the sorts of questions government agencies shall ask of their projects and strategic initiatives.

<b>Citizen-centric</b>	Services and information will be designed and focused on the needs of Ugandans. <i>Q: Has the project’s potential customer base been fully realized?</i>
<b>Accessibility and Choice</b>	The service delivery model will enable Ugandans’ accessibility and choice of services to meet their individual needs and circumstances. <i>Q: Does this project or initiative improve the choice of service delivery channels for its customer base?</i>
<b>Trust, Confidence and Security</b>	The Ugandan Public Sector must earn the trust and confidence of citizens that government is collecting, using and disclosing their information in a manner which is consistent, secure and ethical and which respects privacy, and that online transactions with government are secure. <i>Q: What measures have been taken to ensure that the project effectively manages the security of personal information provided by its customer base?</i>
<b>Better Governance</b>	e-Government is an integral component in enabling government to improve its structures, governance frameworks and processes to better serve the citizens of Uganda. <i>Q: Does this project encourage community participation in the decision-making process of government?</i>
<b>Collaboration and Integration</b>	Agencies will work in a more collaborative manner, prioritizing the need for integration of government services. <i>Q: Has the potential for cross-agency collaboration and benefit maximization in this project been thoroughly investigated?</i>
<b>Accountability</b>	The tenets of transparency, accountability and ethically responsible governance will underpin e-government initiatives to transform the operations of government. <i>Q: Does this project improve the transparency of government decision-making and/or service provision within and across the agencies involved?</i>

## 2.5 Key Pillars for the National e-Government Framework

### 2.5.1 Institutional Framework

The new paradigm shift of Information Technology (IT), Communications Technology (CT), Information Management (IM) and Broadcasting technology convergence at the technology and service delivery fronts have led to Government establishing a unified coordination and supervision arrangement at policy, legal and regulatory levels. Due to this phenomenon, the GOU set up a Ministry of Information and Communications Technology and Parliamentary Session Committee on ICT.

## **National Electronic Government Framework**

In light of the above critical issues, while adhering to individual Government Ministries, Agencies and Local Governments mandate in implementing their respective ICT initiatives to realize e-Government and other e-Strategies and action plans, Government has set up a unified coordination and harmonization mechanism under one political and technical leadership to avoid further duplication that currently exist in the Central and Local Government institutions. This arrangement will eliminate the continued wastage of meager financial resources due to duplication of efforts and also facilitate the integration of e-Government initiatives into the national development framework of the country.

The institutional framework comprises the following:

### **(A) Ministry of Information and Communications Technology (ICT)**

- (i) Championing and presenting policy matters to Government machinery in the areas of Information Technology (IT), Communications Technology (CT) Broadcasting Infrastructure and Information Management (IM) services.
- (ii) In collaboration with the National Planning Authority (NPA), spearhead activities for developing Sectoral e-Government Plans for integration into the National Development Plan (NDP) elaborated in long, medium and short term plans.
- (iii) Oversee policy development and periodic policy reviews for the Information Technology (IT) and Information Management (IM) sub-sectors for the growth of the e-Government programme
- (iv) Develop a public-private partnership framework to promote and drive e-Government initiative opportunities.
- (v) Monitor the implementation of the National e-Government Framework by various Government Ministries and Agencies.
- (vi) Spearhead the creation of an enabling legal, commercial, and regulatory framework conducive for the e-Government adoption as a catalyst towards the socio-economic development of Uganda.
- (vii) Promote awareness and adoption of e-Government by all Sectors and segments of the population in the country.
- (viii) In collaboration with the Ministry of Public Service (MOPS), fully operationalize the national ICT/e-Government institutional arrangements
- (ix) In collaboration with the MOPS, Ministry of Education and Sports (MoES) and NPA spearhead the development of a National ICT and e-Government Human Resource Development Strategic Plan for the country.
- (x) Ensure that the available ICT resources (financial, material and human) are fully exploited by Government agencies in the most efficient and cost effective manner consistent with government procedures and regulations to realize the e-Government programme.
- (xi) Develop and implement a prudent monitoring and evaluation system for the e-Government Framework.

### **B- National Information Technology Authority – Uganda (NITA-U)**

- (i) Initiating and leading the development of the national e-Government strategies and implementation plans;

## **National Electronic Government Framework**

- (ii) Identifying and advising Government on all matters of e-Government development, utilization and deployment.
- (iii) Providing first-level technical support and advice for critical Government IT systems including managing the utilization of the resources and infrastructure for centralized data center facilities for large systems through the provision of the specialized technical skills
- (iv) Enforcing and regulating standards for e-Government planning, acquisition, implementation, delivery, support, organization, sustenance, risk management, data protection, security, and contingency planning;
- (v) Regulating the electronic signature infrastructure and related matters as used in electronic transactions in the country;
- (vi) Recruiting, training, posting and managing all e-Government staff in the various government ministries, departments and agencies
- (vii) Providing IT capacity building and awareness facilities; and

### **C- Ministry of Public Service**

- (i) Leading the public services process review and computerization studies
- (ii) Taking of the business process reengineering activities for the effective and efficient service delivery
- (iii) Taking charge of Civil servants capacity building for the implementation of e-Government initiatives

### **D- Government Ministries, Agencies and Local Governments**

To mainstream e-Government services within the national development initiatives of Government, fully fledged Departments of ICT/e-Government will need to be created in each of the Ministries headed by a Commissioner of ICT with at least four professional ICT staff. In other Central Government autonomous Agencies and Local Governments, fully fledged Divisions of ICT need to be created with an Assistant Commissioner of ICT and at least three professional ICT staff in the division.

The ICT Departments in Government Ministries and Divisions in Government Agencies and Local Governments will develop and implement respective institutional ICT strategies and action plans in harmony with the overall national ICT Policy and e-Government Master Plan.

### **E- Private Sector**

Through Public-Private Partnerships, the Private sector will fully participate in the e-Government framework, strategy, action plan development and implementation in all sectors of government.

### **F- Civil Society**

The Civil Society will fully participate in the e-Government framework, strategy, action plan development and implementation especially in the area of advocacy and monitoring of sectors of government.



## National Electronic Government Framework

### G- Academia

The academic institutions will be very instrumental in building the requisite ICT and e-Government human resource critical mass across the country. Research in e-Government will also be critical and the Academia should play a very key role in this area.

#### 2.5.2 Common ICT Infrastructure and Shared Services

Uganda has gained considerable recognition in the region and worldwide owing to considerable growth in the telecommunications industry. Government agencies are establishing Local Area Networks (LANs) to be interlinked to form the Government Wide Area Network (WAN) in order to facilitate the sharing of equipment, systems and human resources. The NBI/EGI installation across the country is ongoing for this purpose.

#### 2.5.3 Legal and Regulatory Framework

For the Legal and Regulatory framework which is not yet fully developed, there is need for quick and speedy enactment of the regional level laws to create a conducive environment for the regional e-Government services.

The regional e-Government frameworks i.e. EAC and COMESA recommend that Partner states must ensure that national laws are updated to recognize electronic documents and transactions. Issues such as facilitation of e-commerce, protection of intellectual property rights, and open source solutions should be addressed.

The Ministry of ICT in collaboration with the Uganda Law Reform Commission (ULRC) has led the process of coming out with laws vital for e-Commerce and spread of use of ICT in business. Some of the bills in place include:

- *The Electronic Transactions Bill* to facilitate the development of e-commerce in Uganda by broadly removing existing legal impediments that may prevent a person from transacting electronically. It makes equivalence for paper transactions electronic transactions.
- *The Electronic Signatures Bill* to make provision for the use of electronic signatures in secure transactions. It makes provisions for the establishment of the Public Key Infrastructure for authenticity and security of documents.
- *The Computer Misuse Bill* to legislate on computer crimes.

#### 2.5.4 Identified Priority e-Government Applications and Services

Priority e-Government applications and services have been identified through the survey and consultation with government agencies, citizens and the private sector. Some of them are already under implementation.

The identified e-Government priority applications and services are grouped under three categories as stipulated below.

## National Electronic Government Framework

### 2.5.4.1 Government to Government (G2G)

Initiative Ranking	Description	Category	Implementing Agency
1. National Identification System / Population Databank	This is to capture citizen's bio-data including the biometric features to be stored into a central national database accessible by all MDAs for their specific bio-data requirements.	Application	National Information Technology Authority-Uganda (NITA-U) closely with Ministry of Internal Affairs in collaboration with other MDAs
2. Electronic Document Flow System	Automate all documents into electronic information formats for easy flow and tracking within MDAs during processing of service requests and other decision making functions.	Application	All Ministries, Departments and Agencies(MDAs)
3. Birth and Death Registration	Registration of Birth and Death	Application and Service	Ministry of Justice and Constitutional Affairs, Registrar General's Office
4. Public Electronic Recruitment System	Online advertisement and recruitment services for all public service jobs	Service	Ministry of Public Service
5. Personnel Records Management Information System	Management of personnel records including salaries and wages	Application	Ministry of Public Service
6. Financial Management Information System	A computerized system to manage all public finance management transactions.	Application and service	Ministry of Finance, Planning and Economic Development
7. Electronic Cabinet (e-Cabinet)	Transaction of Cabinet business in a paperless environment using ICT to quicken the processes for the approvals required of the cabinet,		Office of the President/Cabinet Secretariat
8. Government Web Portal	Facility for displaying available government information and services via the World Wide Web on the Internet.	Service	MOICT, NITA-U
9. Local Government Websites	Facility for displaying and disseminating information about each of the Local governments operations and opportunities available	Service	Local Governments, Ministry of Local Government (MOLG), MOICT, and NITA - U

## National Electronic Government Framework

### 2.5.4.2 Government to Citizens (G2C)

Initiative Ranking	Description	Category	Implementing Agency
1. Social Services Public Information	A system to provide general information on social services in communities on aspects of health, education, community services etc.	Service	MOGLSD, NITA-U, MOLG, MOICT
2. Production (agricultural) and Market Information Services	Provision of agricultural and market related information to farmers and the general public	Service	MAAIF, MTTI, Uganda Export Promotion Board, etc.
3. Passport	Computerization of the application, processing and issuance of passports	Application and Service	MOIA
4. . Integrated e-Justice System	Inter-linkages and sharing of justice information between the JLOS sector agencies, other MDAs and the general public	Application and Service	The Judiciary and other JLOS sector agencies
5. Land Information System	Computerization of land records across the country	Application and service	Ministry of Lands Housing and Urban Development
6. Electronic Voting (e-Voting)	Computerization of voter registration and updating, vote counting and voting online	Application and service	Electoral Commission
7. Electronic Tax (e-Tax)	Computerization of tax operations including assessment, filing, processing and payment procedures	Application and Service	Uganda Revenue Authority
8. Utility Bills	Computerization of utility (water, electricity, etc.) billing and payment system	Application and Service	Bank of Uganda, Utility Service Providers
9. e-Immigration	Computerization of immigration procedures and operations	Application and Service	Min of Internal Affairs
10. Driving Permits	Computerization of application and issuance of national driving permits	Application and Service	Ministry of Works and Transport
11. Transport Information	Dissemination of transport related information like traffic jam, road diversions, accident black spots, amongst others (Radio, TV, Billboards, Websites, Print Media, sign posts etc.)	Service	Ministry of Works and Transport, Uganda National Roads Authority
12. e-Local Government Information	Collection, processing, storage and dissemination of information on service delivery and compliance to Local Government standards and procedures	Service	Ministry of Local Government, Local Governments
13. e-Parliament	Computerization of the Parliament of Uganda operations	Application and Service	Parliament of Uganda
14. Meteorology and Tidal Information	Collection, processing, storage and dissemination of meteorology and tidal information	Service	Department of Meteorology
15. Environmental Management Information System	Provision of information/ data to the citizens on such critical subjects as wetland management, forestry, land use including soil erosion, environmental pollution (air, water and soil)	Service	National Environment Management Authority, National Forest Authority

## National Electronic Government Framework

### 2.5.4.3 Government to Business (G2B)

Initiative Ranking	Description	Category	Implementing Agency
1. Electronic Procurement (e-Procurement)	Putting public procurement of services and goods online, submission of expression of interest and request for proposals online, and computerization of bid evaluation processes	Application and Service	Public Procurement and Disposal Authority (PPDA)
2. Electronic Commerce (e-Commerce)	Development of an electronic platform to facilitate online commercial transactions using ICT.	Application and Service	MTTI, Uganda Investment Authority, Private sector
3. Electronic Banking (e-Banking)	Development of an electronic platform to facilitate online banking transactions using ICT.	Service	Bank of Uganda, MOFPED, other financial Institutions
4. Electronic Customs (e-Customs)	Computerization of customs processes and procedures	Application and Service	Uganda Revenue Authority and MOIA
5. Smart (e-purse) card	Facilitate use of payments cards (debit and credit) to improve payment efficiency and safety	Service	Bank of Uganda

**Note:** It is important to acknowledge that the above identified priority e-Government applications and services are in line and harmony with the East African Community (EAC) and COMESA regional e-Government initiatives.

### 2.5.5 e-Government Skills Development

A national training strategy for e-Government should be developed to include:

- i. Basic level ICT and e-Government skills training for all civil servants;
- ii. Technical level training for staff such as systems analysts, programmers responsible for designing, developing, implementing and supporting e-Government systems; and
- iii. Training on the monitoring and evaluation of e-Government projects.

As part of a strategy to have a pool of e-Government knowledge workers in the country, all skills or on-job training programmes by government need to incorporate a section on e-Government service provision.

### 2.5.6 Communication and Advocacy

A deliberate communication and advocacy programme will need to be developed to popularize the benefits of the e-Government programme across the country.

## 2.6 Critical Success Factors for the e-Government programme implementation

- i. Leadership: a need for both high level political and technical support and leadership is a prerequisite.
- ii. Culture change through sensitization – Thinking ‘Corporate Ugandan’: Awareness about the benefits of e-Government is going to be critical.
- iii. Governance Mechanisms: Setting up the necessary institutional framework

## **National Electronic Government Framework**

- for e-Government implementation will be important.
- iv. Citizen-Centric Approach: Designing and implementing e-Government applications focusing on citizen requirements.
  - v. Collaborative Relationships: Creating synergies to share resources and optimize the economies of scale.
  - vi. Policy, Legal and Regulatory Frameworks are critical in order to create an enabling environment for e-Government implementation.
  - vii. Technology Architecture, Interoperability and Standardization will require harmonization and coordination.
  - viii. Information Management and Security aspects should be adequately addressed.
  - ix. Government ICT infrastructure should be effectively improved and expanded to adequately support e-government implementation.
  - x. Planning, Budgeting, Monitoring and Evaluation should be strengthened
  - xi. Lobbying and Advocacy program is necessary.

### **3.0 ROADMAP FOR THE e-GOVERNMENT IMPLEMENTATION**

#### **3.1 Next Steps**

The finalization and approval of the National e-Government Framework for Uganda's responsible government institutions form the first step in implementing this framework. The Ministry of ICT, Public Service and NITA-U in collaboration with other government ministries and agencies will have to work closely to provide leadership and direction to develop standards-based frameworks, policies and guidelines that support e-government, facilitate agency collaboration, raise awareness and promote the benefits of e-government across the entire sections of society in Uganda.

##### **3.1.1 Engage in Dialogue with Agencies and Private Sector**

Government agencies and the private sector should be encouraged to engage in open dialogue with the coordinating institutions to be able to understand and appreciate the key challenges in implementing e-Government projects, relate previous experiences and increase cross-government and public awareness of the planned ICT projects with the potential for cross or whole-of-government application. Such dialogues may occur as informal discussions, the initiation of specific reference or working groups, surveys or some combination of formal and informal channels. NITA-U and the Ministry of ICT will need to champion this dialogue.

##### **3.1.2 Set up appropriate institutional structure to spearhead e-Government projects**

NITA-U, Ministry of ICT, Ministry of Public Service and the Office of the Prime Minister should put in place appropriate institutional structure for the e-Government programme and develop decision-making tools to address the challenges faced when attempting to initiate and implement cross-institutional e-government projects. This will make it easier for institutions to work collaboratively and also provide an environment that encourages the move towards the e-government era.

##### **3.1.3 Encourage and Initiate e-Government Projects**

Lastly, NITA-U needs to initiate and champion the implementation of the identified e-government projects. NITA-U should work with agencies to support and assist the development of cross-institutional projects. Where appropriate, NITA-U will also independently identify key cross cutting e-government projects and initiate their development in collaboration with other agencies.

## **National Electronic Government Framework**

### **3.1.4 Monitoring and Evaluation**

Realisation of the outputs of this policy will require consistent monitoring and evaluation of the outcome indicators. The Government and any other relevant stakeholders will carry out monitoring and evaluation at different levels.

A monitoring and evaluation framework shall be developed to ensure midterm review of the policy. The policy shall receive a mid-term review every five (5) years and a full review every ten (10) years. The analysis of annual e-government needs and usage survey shall be used as a basis for review on availability of new needs or information. This framework shall be adopted as soon as it is approved by Cabinet.

In a nutshell, it is important to underscore the fact that the goals of e-government rest heavily upon the presence of key infrastructure like networks and telecommunications systems, shared corporate services and common service delivery mechanisms e.g. the national population databank, payment gateways, etc. NITA-U will have to work closely with various government agencies to develop a “shared corporate services infrastructure” to map out its architecture for the country’s e-government infrastructure in the fore mentioned areas.

### 3.2 Proposed National e-Government Framework Action Plan and Financing Requirements

Objective	Action/ Activity	Expected Output	Indicators	Implementing Agencies	Financial Requirements (UGX)			Timeframe	Status/ Remarks
					2010/2011	2011/2012	2012/2013		
<b>1. To have a National e-Government Framework for Uganda in place</b>	Finalization and approval of the framework	National e-Government Framework approved by government	Final Document in place	Ministry of ICT (MOICT)	10,000,000	-	-	July 2010 – August 2010	
<b>2. To raise awareness and promote benefits of e-government across the entire sections of society</b>	Awareness and promotion of e-Government	National e-Government Programme awareness created and promoted	- No of people using e-Government services - No of e-Government applications established	NITA-U, MoICT MDAs, Private firms, Civil Society, etc.	100,000,000	100,000,000	100,000,000	Aug 2010 – Onwards	
<b>3. To have an appropriate institutional structure to spearhead e-Government implementation</b>	Setting up of an e-Government institutional staffing structure	Operational national e-Government institutional structure	Operational national e-Government institutional structure	NITA-U, MoICT and Ministry of Public Service	600,000,000	800,000,000	900,000,000	August 2010 - Onwards	Operational expenses and salary for highly qualified ICT professionals
<b>4. To have a shared corporate e-Government services infrastructure and Standards</b>	Mapping and drawing out a national architecture for the e-government infrastructure and standards	National e-Government architecture and standards developed	National e-Government architecture and standards in place	NITA-U in collaboration with other key stakeholders	800,000,000	500,000,000	200,000,000	Sept 2010-	To use consultancy services
<b>5. To enhance e-Government infrastructure across government institutions</b>	Installation of local and wide area networks across all government institutions	LANs and WANs across all government institutions	Timely and efficient flow and sharing of information across government institutions	NITA-U and the respective government institutions	800,000,000	500,000,000	-	August 2010– June 2012	To link to the NBI/EGI
<b>6. To ensure security of information infrastructure</b>	Develop a national e-Security Strategy and master plan	National e-Security Strategy and Master Plan	Approved National e-Security Strategy and Master Plan	NITA-U	300,000,000	200,000,000	100,000,000	July 2010	To use consultancy services
<b>7. To develop e-Government skills across the civil service</b>	Training of civil servants on fundamentals of ICT and e-Government applications	Civil servants trained	No. of civil servants trained on e-Government	NITA-U, MOES, and Ministry of Public Service	100,000,000	100,000,000	100,000,000	July 2010 - onwards	To use consultancy services
<b>8. To implement identified priority e-Government applications</b>	Planning, designing and implementing the identified priority e-Government applications	Priority e-Government applications planned, designed and implemented	No. of operational priority e-Government applications in place	NITA-U and the respective government institutions	5,000,000,000	8,000,000,000	8,000,000,000	August 2010 - onwards	To use consultancy services
<b>9. To have a comprehensive monitoring and evaluation system</b>	Developing a monitoring and evaluation system	An M&E system developed	An M&E system for e-Government in place	NITA-U	200,000,000	100,000,000	100,000,000	Sept 2010 - onwards	

## **ANNEX 1: List of Documents Reviewed**

- (i) The National Information Technology Authority –Uganda (NITA-U) Bill, 2008
- (ii) The Cyber Bills, namely;
  - The Electronic Transaction Bill, 2008
  - The Electronic Signatures Bill, 2008
  - The Computer Misuse Bill, 2008
- (iii) The National ICT Master Plan and e-Government feasibility study for Uganda, 2006;
- (iv) The Draft Final Uganda e-Government Strategy Framework, January 2007 championed by the National Planning Authority (NPA)
- (v) Regional e-Government Framework for East African Community (EAC), 2005;
- (vi) Common Market for Eastern and Southern Africa (COMESA) Regional e-Government Framework, April 2008;
- (vii) National Strategy Paper for the Integration of ICTs into the PEAP, 2006;
- (viii) The National ICT Policy Framework , 2003 identifying the areas that specifically relate to E-Governance implementation;
- (ix) The Draft National Development Plan (ICT) thematic paper on ICT, 2008;
- (x) The Draft Information Technology Policy for Uganda, 2008; and
- (xi) Governance Model for the NBI/EGI, 2008.
- (xii) Uganda National ICT Policy Framework, 2003
- (xiii) Rwanda e-Government and Governance Initiative (REGGI)
- (xiv) Kenya e-Government Strategy



## **ANNEX 2: List of Respondents**

- 1) Office of the President (Directorate of Economic Monitoring and Research)
- 2) State House (ICT Unit)
- 3) Office of the Prime Minister (Coordination, Monitoring and Evaluation Unit)
- 4) Office of the Head of Public Service/Secretary to Cabinet
- 5) Ministry of ICT
- 6) Ministry of Finance, Planning and Economic Development
- 7) Ministry of Internal Affairs
- 8) Ministry of Justice and Constitutional Affairs
- 9) Ministry of Information and National Guidance
- 10) Ministry of Defence
- 11) Ministry of Local Government
- 12) The Judiciary
- 13) National Libraries of Uganda
- 14) Uganda Revenue Authority
- 15) Uganda Investment Authority
- 16) National Planning Authority
- 17) Uganda Communications Commission
- 18) Public Procurement and Disposal of Public Assets Authority
- 19) Electoral Commission
- 20) Uganda Police
- 21) Mukono District Local Government
- 22) Uganda Christian University
- 23) Entebbe Municipality
- 24) Ministry of Lands, Housing and Urban Development
- 25) Ministry of Foreign Affairs
- 26) Uganda National Chamber of Commerce and Industry
- 27) Ministry of Trade, Tourism and Industry
- 28) Warid Telecom Uganda
- 29) Parliament of Uganda (Office of the Chair ICT Sessional Committee)
- 30) Ministry of Public Service
- 31) Ministry for Security (ICT Unit)
- 32) NBI/EGI Program Management Unit {Acting NITA-U}
- 33) Citizens
- 34) Business Community