

MINISTRY OF INFORMATION AND COMMUNICATIONS TECHNOLOGY

INFORMATION TECHNOLOGY POLICY FOR UGANDA

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Foreword

Uganda is a progressive and developing country known for its rich heritage, culture, resources and people. It has immense growth prospects for developing world-class Information Technology (IT) industry and services so as to contribute substantially to the economic growth of Uganda. Its purpose is to ensure that Uganda is strategically positioned to attract international IT companies through the development of a suitable IT infrastructure. Government recognizes IT as the enabling tool for development of the country and this policy will support, the promotion of IT in various sectors including Natural Resource Management (Petroleum, Minerals, water bodies, etc). It will above all facilitate widespread roll-out of e-government services so as to actualize good governance and bring in efficiency and effectiveness in service delivery.

In the transformation of the rural economy into an information society, knowledge economy and the Information age, a combination of sociological, political, economical and technological factors are important to bring about changes to the social system. The scope of this transformation is global. This indicates that the regional and global competitiveness will depend on intensity of information technology adoption.

Against this back ground, the information Technology Policy for Uganda has been developed in consultation with stakeholders in both the public and private sectors, with the aim of fostering the development of IT as an industry as well as spearhead development of IT Enabled Services (ITES). The Policy has the following objectives:

- 1. To develop a harmonized national IT infrastructure that provides equitable access to foreign and local markets.
- 2. To provide leadership direction and vision to guide IT industry development.
- 3. To develop a critical mass of educated IT human resource at all levels to meet the local and export requirements.
- 4. To stimulate and support research and development in IT.
- 5. To promote widespread use of IT applications in both public and private sectors to enhance efficiency and effectiveness in service delivery.
- 6. To develop national and adopt international standards and guidelines to support growth of IT industry in Uganda.
- 7. To develop an enabling legal and regulatory framework.
- 8. To establish incentives for both local and foreign investors to foster the development of the IT sector (hardware, software and service industry).
- 9. Promote use of IT systems in all government MDAs and LGs and businesses to usher in efficiency and effectiveness in-service delivery.

10. To mobilize and sensitize the communities on availability of IT services.

The IT policy will provide guidance to all stakeholders in the IT sector and create a necessary environment that will attract IT investments from all over the world. This will bring Uganda to the forefront of IT.

I urge all of you stakeholders, in both public and private sectors to embrace and implement the IT Policy for the good of our country.

Ruhakana Rugunda

Pularene Luft

MINISTER OF INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT)

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List of Abbreviations and Acronyms

BoU Bank of Uganda

BPO Business Process Outsourcing

CIS Community Information System

EFTS Electronic Funds Transfer System

GoU Government of Uganda

HMIS Health Management Information System

ICT Information and Communication Technology

IFMS Integrated Management Financial System

IG Inspectorate of Government

IHRMS Integrated Human Resource Management System

IPPS Integrated Personnel Payroll System

IPv6 Internet Protocol version 6

IT Information Technology

ITES Information Technology Enabled Services

ISP Internet Service Provider

JLOS Justice, Law and Order Sector

LDC Law Development Center

LG Local Government

LIMS Land Information Management System

LoGICS Local Government Information and Communication System

MDAs Ministries Departments and Agencies

MoD Ministry of Defence

MoES Ministry of Education and Sports

MoFPED Ministry of Finance, Planning and Economic Development

MoIA Ministry of Internal Affairs

MoICT Ministry of Information and Communications Technology

MoGLSD Ministry of Gender, Labour and Social Development

MoLG Ministry of Local Government

MoLHUD Ministry of Lands, Housing and Urban Development

MoPS Ministry of Public Service

MoWH&C Ministry of Works Housing and Communication

NPA National Planning Authority

NGOs Non-Governmental Organisation

NBI National Backbone Infrastructure

NEMA National Environment Management Authority

NITA-U National Information Technology Authority-Uganda

POP Point of Presence

SME Small to Medium Enterprises

SMS Short Messaging Service

UBOS Uganda Bureau of Statistics

UPE Universal Primary Education

UCC Uganda Communications Commission

URA Uganda Revenue Authority

URANet Uganda Revenue Authority Network

USE Universal Secondary Education

1 INTRODUCTION

1.1 Background

In its pursuit to enhance economic development, Government of Uganda recognized the use of IT as an enabler to facilitate access to public services by her populace through the use of e-Government. E-Government is about the use of information and communication technologies and the Internet to improve the delivery of services by government to its citizens and the business sector. The IT Policy will provide guidance on how the use of IT will facilitate interactions within government(s), between government and the citizens, business and citizens, government to business to simplify and enhance its internal and external communications.

1.2 Situational Analysis

Information Technology has emerged as the single most important enabler for improving efficiency and effectiveness of organizations. "Electronic Governance" is the term that is being used as a synonym to describe an IT driven system of governance that works better, costs less and is capable of serving the citizens" needs. However, the use of IT has not yet been appreciated by many sectors as a strategic unit of economic transformation by both the private and public sector.

Government is still the biggest consumer of IT services and user of related equipment. Recognizing the enormous potential of IT, major initiatives are being implemented by the Government of Uganda through her institutions, such as Integrated Financial Management System (IFMS), Ministry of Finance Planning and Economic Development (MoFPED); Integrated Human Resource Management System (IHRMS), Ministry of Defence (MoD); Local Government Information and Communication System (LoGICS) in Ministry of Local Government (MoLG); Uganda Revenue Authority countrywide Network (URANET) and e-Tax Payment, Uganda Revenue Authority (URA); Electronic Funds Transfer System (EFTS), Bank of Uganda (BoU)/MoFPED, Community Information System (CIS), Uganda Bureau of Statistics (UBOS)/National Planning Authority (NPA)/Ministry of Local Government (MoLG)/Ministry of Gender, Labour and Social Development (MoGLSD)/Local Governments (LG); Integrated Personnel Payroll System (IPPS), Ministry of Public Service (MoPS); Land Information Management System (LIMS), Ministry of Lands Housing and Urban Development (MoLHUD).

There is a high rate of IT illiteracy both in government and private sector. There is very low computer penetration, with the urban areas having over 80% of the computer penetration in the country. The computer penetration is higher in government than in the private sector.

Human Resource Development: Human Resource (HR) Development is imperative for the local IT industry to position as an important player in the international IT market. The IT human resource base in both public and private sector is still inadequate. Uganda is operating in a decentralized system; however, the LGs have not yet recruited IT professionals. The recruitment process is very slow in central government and Local Governments (LGs); this is due to the long bureaucratic processes of Government as well as the challenge of finding competent

professionals who can accept the low remuneration that government offers. Furthermore, the IT profession in government is not yet centralized. The Ministry of ICT has not yet taken position on guiding IT professionals in the various government institutions as a result in-service training for capacity building and skills enhancement for both IT and non IT professionals are still lacking.

The industry has got a big knowledge base of IT graduates although they lack specific professional skills. The government has in place Uganda Institute of Information and Communications Technology (UICT) to impart professional skills among the graduates but the school is inadequately funded and equipped to provide the required services to the population.

Legal Framework: The country still has a very weak legislation pertaining to this industry. Laws related to Intellectual Property Rights, Data Security, Privacy, Data Protection and cyber crimes are still in infancy and where they exist, enforcement is still low and others are outdated. The existing Acts need to be amended to address the gaps which have been identified in this IT Policy.

Infrastructure: The local IT industry requires a world class enabling infrastructure. The country is currently dependent on satellite connection to connect to the rest of the world which is slow and costly. This has led to high communications costs in both data and voice transmissions. The current bandwidth costs are exorbitantly high hence limiting the usage of Internet in the country. The private sector has led the race to connecting to the submarine cables at Mombasa.

The government has laid the National Backbone Infrastructure (NBI) which now connects 27 Ministries and 2 Departments connected with video conferencing facilities. Currently, this only covers central government although expansion of the infrastructure to all government MDAs, Local Governments, and hard to reach areas is underway. This is in addition to the fibre cables already laid down by the private sector and cover the larger part of the nation but are strategically laid in the more profitable urban areas. Government efforts should be geared towards establishing evenly distributed infrastructure with in the country.

Software and Hardware Industry: Software development is a high growth industry and forms a major segment of the vast IT market. It will continue to do so in the future. The software development industry is still on a very low scale and majorly consumed by only the local market. There is hardly any assembling and development of hardware in the country; only hardware refurbishment is done on a very small scale and is private sector led. The hardware assembly and software development industries are still lacking in capacity.

Research and development: Research and development in this industry is currently very low. Activity in this area is mainly in institutions of higher learning which are doing it at a small

scale, with limited funds. Government has not prioritized IT research. Content development including translation of digital content to local languages is hardly done, and yet quite essential.

IT Promotion and Awareness: IT promotion and awareness creation has mainly been done in the public sector but only to a limited capacity. As far as the private sector is concerned both promotion and awareness creation are still lacking. Currently, information dissemination on market prices, health tips, and information on social services is done through the Google SMS initiative by Mobile Telephone Network (MTN) communications network and Grameen Foundation. Business transactions platforms including mobile money transfers and Short Messaging Service (SMS) banking are also being provided by telecommunications companies. However, local language content to stimulate usage of IT is insufficient/ lacking.

National IT Standards and Regulations: A regulatory framework is essential to avoid violating policy goals and direction. There is very little that has been done in regards to developing national standards and regulation pertaining to the IT subsector. Most standards are still in draft form and where they exist, they are not implemented.

The country does not have any comprehensive policy on managing e-waste as yet. However, in partnership with the private sector through the support of development partners it is encouraging retrieval of obsolete IT equipment for refurbishment.

IT Security: This is a lacking area in the county's IT industry. Many government MDAs and LGs are running websites as a tool to disseminate information to the public; others have taken on big IT projects as stated earlier. However, these have not been secured and a few cases of security breaches like website defacing, on Government websites have been reported. Complaints of e-mail scams, web-phishing have been very frequent from government entities and the general public.

The Government of Uganda has liberalised the ICT sector and this has encouraged public private partnership in fostering development. Most IT activities being carried out in Uganda are private led, although guidance is still inadequate.

1.3 Development Context

This policy has been developed in the context of the Millennium Development Goals (MDGs) bearing in mind that IT is an enabler in implementing all the 8 MDGs. Goal number 8 - "Develop a global partnership for development" with specific emphasis on Target 8F:" In co-operation with the private sector, make available the benefits of new technologies, especially information and communications".

Article 19 of the UN declaration of human rights outlines the human right principles regarding to the right to communicate. The African Unity, to which Uganda is a member, has also provided for the right to development in the African charter on human rights. This is further emphasized in

the constitution of the Republic of Uganda; Article 29 focuses on the freedom of expression, while article 41 talks of the right of access to information.

The policy is in context of Article99 of the Treaty for the establishment of the East African Community.

This policy has further been guided by the National Development Plan (2010-2015) with the theme of employment, income, and prosperity for all.

1.4 Rationale for the IT Policy

Recent technological advancements like the Internet have digitally broken the geographical, physical, political and even sociological divide, transforming the world into a "Global Village". As a result cyber crime is progressively increasing. This calls for regulated and guided interventions to address the IT related issues.

The utilisation of IT (hardware, software and e-applications) is on the rise in both public and the private sector. There is need for proper laws and guidelines to be developed to guide its utilisation.

The ICT sub sector was upgraded into a fully fledged sector in 2006 with responsibility of developing policies, standards and guidelines to drive the IT subsector. This led to the need to have sub sector policies to fully implement the overall national ICT Policy framework and hence the need to have an IT policy in place.

1.5 Information Technology Policy for Uganda

It is the intention of the Government of Uganda to consolidate its efforts and focus its energies to leverage the potential of IT for the benefit of its people. Therefore, this comprehensive "National IT Policy" will guide and direct IT development.

1.5.1 Vision

A knowledge-based economy where national development and governance are effectively enhanced by harnessing and adopting Information Technology to achieve fundamental economic transformation.

1.5.2 Mission

To promote the efficient utilisation of Information Technology in transforming Uganda's economy

1.5.3 Policy Goal

To guide the optimal development and utilisation of IT in the country

1.5.4 Policy Guiding Principles

The policy is guided under the following principles:

- Universal Access: The government shall ensure access to IT services to men and women in both rural and urban areas. .
- The policy recognizes the importance of e-services.
- The policy implementation shall take into consideration the trend of Globalisation.
- Community mobilization: Government shall encourage citizen participation.
- Public Private Partnership: The Government shall recognize the contribution of the private sector.

1.5.5 Policy Objectives

The National IT policy shall have the following objectives:

- 1. To develop a harmonized national IT infrastructure that provides equitable access to foreign and local markets.
- 2. To provide leadership direction and vision to guide IT industry development.
- 3. To develop a critical mass of educated IT human resource at all levels to meet the local and export requirements.
- 4. To stimulate and support research and design in IT.
- 5. To promote widespread use of IT applications in both public and private sectors to enhance efficiency and effectiveness in service delivery.
- 6. To develop national and adopt international standards and guidelines to support growth of IT industry in Uganda.
- 7. To develop an enabling legal and regulatory framework.
- 8. To establish incentives for both local and foreign investors to foster the development of the IT sector (hardware, software and service industry).
- 9. Promote use of IT systems in all government MDAs and LGs and businesses to usher I efficiency and effectiveness in-service delivery.
- 10. To mobilize and sensitize the communities on availability of IT services.

2 POLICY PRIORITY AREAS

2.1 Legal Framework

Given the globalization drive and increased use of IT services; electronic Commerce/Business is on the increase and offers great new opportunities for economic growth. On the negative side, IT related crime is also on the increase. The existing legal framework is inadequate to address emerging complexities and where available enforcement is low. To this end government shall:

Policy Strategies

- 1. Review and amend the relevant Laws and Acts to address the gaps in the existing legal framework for e-Commerce and cyber crime.
- 2. Advocate for curriculum review at Law Development Centre (LDC) to include basic IT, contemporary IT issues, law and IT, during professional legal training.
- 3. Advocate for training and re-training of all personnel in the Justice, Law and Order Sector (JLOS) in applying and using IT to improve the delivery of justice.
- 4. Review and ensure enforcement of cyber laws (Electronic Signature, Electronic Transactions and Computer Misuse).

2.2 IT Infrastructure

The national infrastructure network still has a low coverage to enable universal access and hence bandwidth is extremely slow and costly. There is heavy reliance on satellite connection to connect to the Internet. This has hampered the usage of IT in the country. To this end government shall:

- 1. Scale up the National Backbone Infrastructure (NBI) to cover the whole country to simplify the mode and speed of service delivery to the public. This will help to reduce duplication of effort by various arms of Government.
- 2. Expedite the process of connecting to the submarine cables.
- 3. Encourage participation of the private sector in IT infrastructure development.
- 4. Put in place mechanisms for quality assurance in infrastructure development

- 5. Encourage Internet Service Providers (ISPs) to provide access to the network based services from even the most remote locations in the country.
- 6. Automate Government processes and procedures to bring about transparency, reduce constraining controls, increase efficiency and productivity and reduce cost of service delivery.
- 7. Establish a national web-portal through which all MDA services and citizen charters will be available to citizens over the Internet.
- 8. Establish a multi stakeholder approach for the Management of the dot UG (.ug) country code top level domain (ccTLD) name for Uganda.
- 9. Ensure that the country is ready for the transition to the next generation global Internet delivery mechanisms like Internet Protocol Version 6 (IPv6) address space

2.3 IT Human Resource Development

Manpower development is imperative for the local IT industry to take root on a large scale in Uganda. For the country to achieve and maintain the position of an important player in the international IT market. A large pool of skilled manpower is required for all components of the IT industry and it has to be geared to meet both local and export needs. However, currently the professional IT human resource in both public and private sectors is inadequate lacks relevant professional skills. There is a high rate of IT illiteracy in both public and private sectors which is characterized by a digital divide between urban and rural areas, as well as between men and women.

To this end government shall:

- 1. Develop a comprehensive plan for human resource development in IT to meet present and future manpower needs.
- 2. Devise and implement a scheme for distributing affordable computers and Internet access to all academic institutions.
- 3. Encourage educational institutions to automate their management systems
- 4. Establish a national educational network to enable sharing among educational institutions of e-libraries, teaching and tutorial systems.

- 5. Strengthen existing IT training institutions and setup new IT centers of excellence in all districts in Uganda to develop the requisite skills in various IT aspects including software and hardware development, network management and security through inservice training.
- 6. Encourage academic institutions to embrace e-learning so as to enable equitable regional access to IT training in all parts of the country
- 7. Ensure inclusion of a comprehensive and regularly updated computer literacy module in the curriculum at all levels of education using international benchmarks as reference.
- 8. Establish an accreditation council to ensure quality IT education and training
- 9. Promote "Training of Trainers" scheme to boost capacity building in IT.
- 10. Encourage IT companies to play a significant role in IT education through internship and industrial training schemes
- 11. Ensure equal opportunity in basic IT training at all levels taking into consideration special interest groups namely; Women, Youth and PWDs.

2.4 Research and Development

Research and development in the IT industry is currently almost non-existent. Activity in this area is mainly in institutions of higher learning which are doing it at small scale with limited funds. Government policy in this area will be to prioritize IT research. Content development including translation of digital content to local languages is hardly done, yet quite essential. To this end government shall:

- 1. Setup a high level institutional framework to coordinate and focus R&D efforts in the country
- 2. Mobilize funds for R & D in identified Universities and encourage joint R&D efforts between the private sector and the universities.
- 3. Encourage industries to set up R & D centers at tertiary level through matching grants and focused joint projects.

- 4. Set up electronic libraries with on-line linkages to reputed scientific information repositories, accessible to all major towns in the country to ensure economical and equitable access to world class information and publications
- 5. Establish IT parks and incubators equipped with modern facilities to provide one stop shops for researchers and investors in the IT industry.
- 6. Introduce "Innovative ideas" competitions countrywide covering all levels (from primary schools to tertiary institutions) and R & D centres to instill the spirit of innovation and excellence in young professionals.
- 7. Encourage operational research within organistaions.
- 8. Promote self reliance in planning, implementation usage and maintenance of IT systems and equipment.
- 9. Stimulate growth of local IT industries through provision of government incentives.
- 10. Build close links between academia, R&D organizations and Ugandan IT industry, to encourage collaborative activities.
- 11. Keep watch on global IT trends vis-a-vis Uganda"s competitiveness in the field

2.5 IT Promotion and Awareness

IT promotion and awareness creation has mainly been done in the public sector but to a limited capacity. As far as the private sector is concerned both promotion and awareness creation is still lacking. To this end the Government of Uganda shall:

- 1. Put in place mechanisms to promote IT awareness and reduce the digital divide between urban and rural, urban and urban, men and women.
- 2. Promote IT usage in government by ensuring that all top leaders in government make transform the institutions under their control by automating their work as a priority.
- 3. Encourage production of local content in local languages over the Internet
- 4. Establishing interactive for a for all government offices to share information on new technologies and their benefits.
- 5. Encourage utilization and expansion of start-up activities set up by the government.

- 6. Mobilize and sensitise communities about the importance of usage of IT in their day-to-day economic activities
- 7. Facilitate and encourage the use of IT by special interest groups to make them more productive in the society and utilize this largely untapped human resource. (Special interest groups include: women, youth and PWDs).
- 8. Encourage use of open source software and low cost commercial versions of software for normal operations
- 9. Encourage the setting up of a "content industry", comprising of local content and translation to local languages.
- 10. Organise annual special events to show case the development, application and benefits of embracing and using IT.
- 11. Encourage the use of Internet and Intranet for inter-office communication within government.

2.6 National IT Standards

There is very little that has been done in regards to developing national standards and regulation pertaining to the IT subsector. Most standards are still in draft form and where they exist, they are not implemented. In devising a useful regulatory framework, the focus would be on creating a fair, equitable and competitive environment, based on the principles of free market and open access. To this end the Government of Uganda shall:

- 1. Develop guidelines and set standards for software and hardware development, through public and private partnerships.
- 2. Develop and set standards for IT equipment importation
- 3. Provide technical guidance to MDAs, including standards for software and hardware usage
- 4. Monitor compliance to set standards.

2.7 E-Waste Management

The country does not have a comprehensive policy on managing e-waste as yet. However, the private sector, through the support of development partners is encouraging retrieval of obsolete computer equipment. To this end, the government of Uganda shall:

Policy Strategies

- 1. Develop, implement and enforce an e-watse policy.
- 2. Collaborate with relevant institutions to establish recycling centres and educate the public through the media on how to ensure that the environment is protected.
- 3. Setup an e-watse management fund to which all importers of electronic equipment shall contribute.

2.8 Hardware and Software Industry

Software development is a high growth industry and forms a major segment of the vast IT market. It will continue to do so in the future. The software development industry is still on a very low scale and majorly consumed by only the local market. There is hardly any assembling and development of hardware in the country; only hardware refurbishment is done on a very small scale and is private sector led. The hardware assembly and software development industries are still lacking in capacity. To this end government shall:

- 1. Promote "Made in Uganda" brand of software and hardware
- 2. Initiate Public Private sector Partnerships in the hardware and software development industry with a view to accessing the export market
- 3. Encourage investment in the software and hardware development industry through incentives such as setting up a Hardware Development Fund.
- 4. Encourage local businesses to consume locally developed hardware and software
- 5. Encourage developing market-oriented software for local market and export.
- 6. Encourage manufacturers to indicate bar codes on all items sold in the country
- 7. Promote export of IT services and products

2.9 IT Security

In an increasingly knowledge-driven and networked world where a considerable degree of anonymity is associated with activities, systems are prone to external interceptions that are in breach of lawful online conduct, misuse and abuse of IT systems; such activities can lead to an erosion of trust and confidence-this will affect the growth of e-Government and e-Commerce. It is important therefore, that measures are undertaken towards creating an awareness of IT security and building capacities for the same. To this effect Government shall:

Policy Strategies

- 1. Develop a National Information security Strategy
- 2. Setup a National Information Security Working Group which will serve as a forum for setting, monitoring and sharing information security best practices.
- 3. Build capacity for technical officers to enable them acquire IT security skills
- 4. Establish a National Computer Emergency Response Team to handle reported cases and carry out research on the various trends
- 5. Build a culture of security in enterprises, public sector and the civil society through creating awareness within its populace on how to avoid and handle security risks.

2.10 Resource Mobilization

The IT sub sector is grossly underfunded to meet the critical requirements that would enable it to take off. To this end government shall:

- 1. Increase the budgetary allocation to the IT sub-sector
- 2. Put in place mechanism for resource mobilization from development partners

3 INSTITUTIONAL FRAMEWORK & POLICY IMPLEMENTATION

3.1 IT Policy Institutional Framework

3.1.1 Ministry of ICT

The Ministry of ICT shall be responsible for policy, regulation, standards, guidelines and quality assurance of the IT sector. It will provide technical support, supervision and guidance, as well as undertake monitoring and evaluation. This will be through various activities which include but not limited to the following:

- Provide technical support in development of institutional IT policy guidelines
- Develop a PPP policy to guide policy implementation within the private sector
- Be the responsible Ministry for all IT Officers in government
- Ensure quality in IT infrastructure and applications development
- Setup IT skills development schemes for government (LGs and central)
- Take lead in IT promotion and awareness

3.1.2 National Information Technology Authority Uganda (NITA-U)

NITA-U"s role in the implementation of the IT policy is enshrined in the NITA-U Act (2009). This includes but is not limited to:-

- Regulate and enforce IT standards
- Co-ordinate, supervise and monitor the utilization of IT in public and private sector
- Provide technical support and advice for IT systems in public and private sector
- Act as an authentication center for IT training in Uganda

3.1.3 Training Institutions

The Ministry of Education and its organs will ensure that training institutions contribute to IT policy implementation by administering the IT curriculum at all levels of Education. Individual institutions will also

- Conduct and encourage IT related research and innovation
- Provide vocational IT training

3.14 Local Governments

The LGS shall be the link with the communities and shall carry out sensitization about IT services as well as promotion and awareness campaigns in the communities.

3.1.5 Private sector

Since the IT subsector is to a large extent private sector driven, the private sector shall operationalize the policy through planning and establishing IT businesses and firms. Private sector will also partner with government through PPPs to implement the policy.

3.1.6 Other Stakeholders

Stakeholder sectors to the IT sector include but are not limited to Agriculture, Health, Education, Tourism, Finance, Trade and commerce, JLOS, Ministry of Internal Affairs, Ministry of Gender, Development partners, Ethics and Integrity.

Roles of other stakeholders

- Develop institutional IT policy guidelines and implementation plans
- Develop IT skills development schemes in their respective areas
- Participate in IT promotion and awareness campaigns
- Automate business processes to create transparency, increase service delivery, and reduce operational cost and duplication
- Conduct research and capacity development within their institutions

3.2 Implementation Arrangement

The Ministry of ICT shall develop a strategic plan for implementing the IT policy detailing the time frame, baseline, targets, outputs and outcomes of the policy. This policy shall be implemented through collaboration with other stakeholders as highlighted in the institutional framework.

3.3 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 IT needs and usage survey shall be used as a basis for review on availability of new needs or information. This policy shall be adopted as soon as it is approved by Cabinet.

GLOSSARY

Backbone A bulk data communication network

Best Practice Practice that is available for use by other projects or for incorporation into the

standard engineering process in order to improve development productivity or

product quality.

Database A collection of related data stored in one or more computerised files in a

manner that can be accessed by users or computer programs via a database

management system

E-Governance The term used as a synonym to describe an IT driven system of

governance that works better, costs less and is capable of serving the

citizens" næds

E-Government Use of information and communication technologies and the Internet to

improve the delivery of services by government to its citizens and the

business sector

IT The term information technology includes computers, ancillary

equipment, software and firmware (Hardware) and procedures, services and includes any equipment or Interconnected system or subsystem of equipment, which is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching,

interchange, transmission or reception of data or information.

IT Infrastructure Sum of IT related hardware, software, data telecommunication facilities,

procedures and documentation.

Plan A document that outlines how a requirements project's objectives will be

accomplished and what is needed to accomplish it.

Policy A document that provides guiding principle that sets an expectation of

behaviour, actions, and deliverables.

Requirement A measurable statement of intent or expression of need about something

that the product or system must do, or a property that the product must

have, or a constraint on the system

Requirements Characteristics that identify the accomplishment levels needed to achieve

specific objectives for a given set of conditions

Stakeholder(s) Consists of all parties (people or systems) who will have a legitimate

interest in the outcome of the project or is affected by its outcome

Standard Mandatory requirements employed and enforced to prescribe a disciplined

uniform approach to software development, that is, mandatory

conventions and practices are in fact standards.

U ser groups The organization (s) or persons within those organization (s) who will

operate and/or use the system for its intended purpose.

Suppliers The term 'suppliers' includes contractors, sub-contractors, vendors,

developers, sellers or any other term used to identify the source from

which products or services are obtained.

Subcontractor An individual partnership, corporation or an association that contracts with

an organisation (i.e., the prime contractor) to design, develop and/or

manufacture one or more products