



Information Technology Policy
for the
Republic of Namibia
2008

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Foreword

The adoption and exploitation of ICT has been instrumental to the creation of sustainable growth and development by countries in the last fifty years. The global economy is currently dependent and shaped by the benefits arising from ICT. From the perspective of a developing country, ICT is both a prerequisite for economic progress and a major potential contributor to economic progress. It contributes to limitless possibilities – with few boundaries - for all sectors of society (public sector, civil society and industry). By embracing the development of ICT, Namibians will benefit through:

- a. The access and availability of information that will assist them in their daily lives
- b. Increased competitiveness of business and commerce in the global market place
- c. The establishment of an environment conducive to the development of Namibian-based ICT access- and service providers that are competitive players on international markets, and in so doing, create opportunities for employment and economic diversification.

Access to ICT and the development of ICT related skills in the younger population are therefore key national imperatives in enabling participation in an increasingly global economy.

This document provides an Information Technology Policy (the 'Policy') for Namibia. The Policy should be read in conjunction with two other policies, namely Telecommunications and Broadcasting. These three policies have also been combined into an overarching policy document that is in line with national, regional, continental and global developments in the Information and Communications Technology (ICT) sector.

In developing this Policy, the point of departure has been to facilitate the growth of ICT in Namibia. In so doing, the Policy has been developed after extensive consultation with stakeholders and in depth research into international trends.

The Namibian Government's Vision 2030 document stipulates that ICT must be the most important sector in the economic development of the country by 2030. Core to the achievement of this Vision is a demand driven need to transform Namibia into a knowledge based economy. This Policy supports Vision 2030 and National Development Plans. The aim of this Policy is to provide Namibia with a vision and policy direction for national development in the years ahead.

In addition, the transition to a liberalised telecommunications environment (with a commensurate increase in institutional capacity to develop, regulate and implement policy) is paramount if broader national development goals and the growth in the Namibian ICT industry is to be achieved. The recent

establishment of a single Ministry of Information and Communication Technology (in line with international trends) is an important first step on this journey, but much work remains.

This Policy builds on the previous Information, Communication and Technology Policy for the Republic of Namibia (2004). The proposed new Communications Bill and Electronic Transaction Bill give effect to major parts of this Policy.

Honourable Joel Kaapanda

Minister of I&CT

February 2009

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1 Introduction

This document provides an Information Technology Policy (the 'Policy') for Namibia. The Policy should be read in conjunction with two other policies, namely Telecommunications and Broadcasting. These three policies will be combined into an overarching policy document that is in line with national, regional, continental and global developments in the information technology and a wider, converged, sector.

The term Information Technology (IT) is increasingly seen as part of the converged Information and Communications Technology (ICT) sector. Information Technology comprises of hardware, software and services, but its sectoral lines with telecommunications have become blurred as society has moved to an increasingly global and networked world. Viewed from this perspective, IT is an important part of the ICT value chain.

The Namibian Government's *Vision 2030* stipulates that by 2030 Namibia should be a knowledge based economy. This Policy is framed in the context of Vision 2030 and National Development Plans. The aim of this Policy is to provide Namibia with clear policy guidelines for development in the years ahead.

2 Purpose of document

The purpose of this document is to set out the Information Technology Policy for the Republic of Namibia.

3 Definitions

Information Technology (IT) is the study, design, development, implementation, support or management of computer based information systems, particularly software applications and computer hardware. In a broad sense, IT describes any technology that uses electronic computers and computer software to convert, store, protect, process, communicate, and securely retrieve information. In Information Technology the main focus is on the following technologies:

- Computer hardware. These are microcomputers, midsize servers and large mainframe systems; and the input, output and storage devices required for support
- Computer software. These are operating system software, databases, web browsers, software productivity suits and software for business applications
- Networks. These are telecommunications media, processors and software needed to provide wire based and wireless access and support for communication networks.

Information and Communications Technology (ICT) entails all technologies that store, process and transmit information and that allow people or devices to communicate with each other. ICT is the result

the rapid evolution of new technologies and innovative new applications, and the convergence between computing, communications and broadcasting. Three major innovations, namely the move of electronic industries to digital technology, the large scale growth in computers and the launching of the Internet, interact to produce ICT convergence which has become an important pillar in the establishment of a knowledge driven economy and an information society. The Internet plays a pivotal part in the convergence of ICT: it transmits information via the digital highway, effectively combining information technology and communications technology.

The rapid development of the ICT industry has yielded many changes in technology and human interaction. Today, ICT plays an unparalleled important part in all aspects of the Namibian society and the economy.

4 ICT in Namibia – a national imperative

The Government of Namibia recognises the need to be part of the global information society. It further recognises the important role of ICT in economic growth. ICT in Namibia contributes to five important economic roles:

- a. Economic growth
- b. Industrial development
- c. Poverty eradication
- d. Equal opportunity
- e. Regional coordination.

The growth of the ICT sector in Namibia is a national imperative. Longer term growth can only be achieved through a demand driven approach based on education and training; supported by an environment conducive to the development and growth of the local industry.

5 Information technology literacy and skills development policy goals

The Government of Namibia will develop globally competitive, quality human capital in IT and related disciplines.

5.1 Provision of formal education

Through its Education Policy, Government strives to:

- Produce ICT literate citizens
- Produce people capable of working and participating in the new economies and societies arising from ICT and related developments

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- Leverage ICT to assist and facilitate learning for the benefit of all learners and teachers across the curriculum
 - Improve the efficiency of educational administration and management at every level from the classroom, school library, through the school and on to the sector as a whole
 - Broaden access to quality educational services for learners at all levels of the education system
 - Set specific criteria and targets to help classify and categorise the different development levels of using ICT in education.

5.2 Provision of access and informal education

Government creates opportunities for IT skills enhancement through a variety of facilities and programmes. Government funds facilities to access ICT through integrated Multi-Purpose Regional Community Parks, which include Multi-Purpose Community Centres (MPCCs), Community Learning Development Centres (CLDs), Youth Centres, Community Skills Development Centres (COSDECS), Vocational Training Centres (VTCs), Libraries and Teacher Resource Centres (TRCs). In addition, the Community Education for Youth programme also provide public access to ICTs.

6 Establishment of an enabling framework for IT development in Namibia

The establishment of an environment conducive to the growth of IT in Namibia is a national imperative.

6.1 Guiding principles

Namibia subscribes to a fully liberalised information technology sector. In fulfilling its role, IT in Namibia is characterised by:

- a. Increased access – particularly to the Internet
- b. Improved IT literacy and skills development
- c. Competition and open markets
- d. Transparency in decision making and development
- e. The promotion of user's influence in the development of the IT sector
- f. Protected rights of consumers
- g. Fair and transparent industry practices with the aim to grow the ICT sector.

6.2 Roles and structures within the IT sector

6.2.1 Role of Government

The roles and responsibilities of Government as far as the IT sector is concerned are as follows:

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- a. Government (via the Ministry of Information and Communication Technology) assumes responsibility for overall policy functions and establishes the legal framework for the ICT industry
 - b. The Ministry of I&CT may impose specific conditions on the IT sector
 - c. The Ministry of I&CT is responsible for all IT related legislation and provides inputs into other legislation that may affect the IT sector
 - d. The Ministry of I&CT is responsible for Government ICT policy development. This includes all e - government and other initiatives to provide citizen's access to Government. In so doing, the Ministry of I&CT facilitates and coordinates all e - governance policy and strategy development in the Namibian Government
 - e. The Ministry of I&CT is co - responsible with individual line Ministries for line Ministry specific ICT policy development
 - f. An Act of Parliament establishes an autonomous Regulatory Authority. The Minister of I&CT appoints the Board of the Regulatory Authority
 - g. The Minister of I&CT may appoint a Strategic ICT Advisory Council and / or Advisor on ICT Policy related matters
 - h. The Ministry of I&CT is responsible for Government ICT standards and prescribes Government's internal ICT procurement policy and practices.

6.2.2 Role of the Regulatory Authority

The Regulatory Authority is juristic person and operates independently from the Ministry of I&CT and is governed by a Board of Commissioners. The Board is appointed in accordance with the State Owned Enterprises Governance Act (2006).

Beyond the Regulatory Authority's jurisdiction on licensed IT providers such as Internet Service Providers (ISPs) and data network operators, the Regulatory authority also provides for regulation of content and abuse (e.g. spamming) and the creation and deliberate distribution of viruses, worms, Trojans and other forms of information exposure.

6.2.3 Roles of industry

Information Technology firms are responsible for building and maintaining IT systems and infrastructure, and providing efficient and affordable IT services to Namibians.

6.2.4 Role of consumers

Consumers are users of the services and decide which products and services are required.

6.2.5 Market structure

The Namibian IT market structure is subject to market and competitive forces.

- a. The Namibian IT market is fully deregulated. Government may issue Policy guidelines where required to assist with broader industry growth

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- b. Private interests are encouraged to assume responsibility for the development of the industry.

6.3 Policies for the information technology industry

6.3.1 Competition

Policy statement:

The Government will create an equitable, fair, just and competitive environment based on the principles of the free market and open unfettered access to products and services.

Justification:

Competition instils a sprit of innovation and excellence in service.

6.3.2 Consumer protection and standards

Policy statement - 1:

The Government promotes efficient and reliable services that conform to international technical and quality standards.

Justification:

The Government should prescribe quality of service and technical standards in keeping with global best practices which shall be met by all service providers.

Policy statement - 2:

The Government promotes professional standards and ethical practices in the Namibian ICT industry through self regulation. The establishment of a self regulatory IT Industry Standards Body by the ICT industry is promoted. Membership should take full responsibility for the development, monitoring and compliance of an industry code of ethics. The IT Industry Standards Body should have an independent Chairperson and non - industry representatives and should be self funding to carry out its responsibilities. The Regulator is tasked to oversee the establishment of a self regulatory IT Industry Standards Body by the ICT industry.

Justification:

A single, self regulating mechanism is preferred above Government intervention.

6.3.3 Foreign participation and skills

Policy statement -1:

Foreign investors are encouraged to enter and assist in building and developing the Namibian ICT industry. The Government promotes the growth of alliances and partnerships among local and foreign firms through the establishment of joint ventures and strategic alliances.

Justification:

Namibia is very dependent on foreign technology and skills in its ICT sector. However, an environment should be created where the cooperation of foreign and local firms assists with the development of the local industry.

Policy statement -2:

The Government actively seeks to facilitate the acquisition of ICT skills from outside Namibia. The Government will relax work permit restrictions for foreign ICT specialists.

Justification:

ICT is a global industry, characterised by a skills scarcity. ICT skills are further mobile. Namibia needs to reduce any barriers to its ability to attract foreign skills into this market if the ICT industry is to develop.

6.3.4 Small and medium enterprises

Policy statement:

The Government recognises entrepreneurship and Small and Medium Enterprises (SMEs) as important contributors to economic growth and job creation. The Government will therefore support new ventures and SMEs.

The Government will channel social responsibility projects to SMEs, where possible.

Justification:

The SME sector is both an important contributor to economic growth and job creation.

7 Policies for the use of information technology

7.1 Electronic transactions and electronic commerce

Policy statement:

Namibia embraces electronic transactions and electronic commerce (e - commerce) as mechanisms to participate in the increasingly global information society. Namibia will have an appropriate legal framework to deal with the challenges of electronic communications and transactions to provide the public in general, and commerce in particular, with legal certainty on, and trust in, everyday electronic transactions in all areas of the activity.

Justification:

Electronic transactions open up a new world of interaction between individuals and commercial enterprises. This requires a specific legal framework to inter alia address issues such as cyber crime (unauthorised access / interception / interference; electronic fraud / extortion and penalties), privacy laws (data protection, data interference and data monitoring), laws for electronic government services, recognition of secure electronic signatures, intellectual property protection, digital contracting, formation and validity of contracts, retention of records, access through passwords and electronic data interchange (EDI).

7.2 Information security and privacy

Policy statement -1:

The Government promotes legislation for information security, data protection and the protection of privacy. Government will guard information privacy and only intercept and monitor information when lawfully authorised in the interest of national security or the detection and prevention of serious offences.

Justification:

The government recognises and fosters a balance between the privacy of information and the requirements of national security as well as the prevention and detection of serious crime; and considers this as a shared responsibility between Government and the individual and corporate citizen.

Furthermore, to ensure that the interface between information security and rights to privacy are well regulated, the protection of data, information security and lawful interception should comply with international standards.

Policy statement -2:

ICT and telecommunications licensees have an obligation to protect subscriber privacy and comply with international standards.

Justification:

To ensure the interface between technology and rights to privacy are well regulated, collection and protection of data should comply with international standards.

7.3 Fair Use and Creative Commons licensing

Policy statement:

The Namibian law will be investigated to create more fair use in copyright laws. Creative Commons licenses by non profit and public sector bodies grant baseline rights such as the right to distributed copyrighted work.

Justification:

Fair Use allows reproduction and other uses of copyrighted works under certain condition for purposes such as criticism, comment, news reporting, teaching and research. Creative Commons licenses expand the range of creative work available for others to legally build upon and share. Namibia will benefit through a consistent and transparent treatment of digital resources and the promotion of open content whilst protecting individual rights. Furthermore, it creates a system where the transaction costs for accessing information is very low and promote media pluralisation. The Creative Commons also provide the necessary legal framework for new forms of content to emerge, and be disseminated through old and new media.

8 Policies for Government use of information technology

8.1 Electronic Government (e-government)

Policy statement -1:

The Government promotes the use of electronic means to facilitate interaction between Government and public (citizens and business), as well as to improve the Government's own internal operations to enhance service delivery and democratic participation.

Policy statement -2:

Government services will be accessed free of charge through established Information Kiosks within integrated Multi - Purpose Regional Community Parks.

Justification:

The Government recognises the need for improved information provision and service delivery to its constituents. This spans beyond the improvement of efficiencies and web presences, and translates into a new approach for transacting externally and internally.

8.2 Electronic connectivity (e-connectivity)

Policy statement:

The Government subscribes to the provision of a reliable, real-time, secure two way interactive connection with its constituents – and within Government internally.

Justification:

Through proper use of technology, the Namibian Government can increase access to Government information, improve the quality and safety of information and reduce costs.

8.3 Information and infrastructure sharing

Policy statement:

The Government promotes the sharing of information and infrastructure between Government Ministries, Regional and Local Authorities for the purposes of national planning, coordination and development.

Justification -1:

Islands of information do not serve national planning and development interests.

Justification -2:

Duplicated infrastructure inhibits internal communications within Government and increases cost of service delivery.

8.4 Open Source software

Policy statement -1:

The Namibian Government supports all operating system platforms. The Government supports Free / Libre Open Source Software (FLOSS) in Government where analysis shows it to be the appropriate option. The criteria for selecting software solutions will remain the improvement of efficiency, effectiveness and economy of service delivery by Government to its citizens. Whenever the advantages of FLOSS and proprietary software are comparable, FLOSS will be implemented when choosing a

software solution for a new project. Whenever FLOSS is not implemented, then reasons must be provided in order to justify the implementation of proprietary software.

Policy statement -2:

The Government promotes access to Open Source (FLOSS) and proprietary operating systems in schools in Namibia.

Justification:

The Namibian Government acknowledges that FLOSS is often a viable choice, both on the desktop and in the back-end. The benefits of FLOSS are skills development and lower costs.

9 .na Top Level Domain (ccTLD)

Policy statement - 1:

Top level domain administration (.na) must be administered by a central institution established or recognised by an Act of Parliament. The administration of the .na domain should be undertaken by the .na Domain Name Association as an organisation not for gain. Top level domain administration (.na) should allow multi-party stakeholder participation with representation from the ICT industry and Government. The Minister will issue Regulations for .na domain dispute resolution.

Policy statement - 2:

No person may update a repository or administer a second level domain unless such a person is licensed to do so by the Association.

Justification:

The .na domain is an important local component of the ICT industry and must be administered with the involvement of all stakeholders in the ICT sector, i.e. the Government of Namibia, the ICT industry and users.

10 Education

Policy statement -1:

The Government will stimulate the development of the ICT skills through the establishment of ICT Centres of Excellence at centres of further learning. Government will allocate funds toward the development of the centres (study centres and laboratories) at tertiary level. Where possible, Government will form partnerships with industry to develop ICT skills in Namibia.

Policy statement -2:

The Government will include IT training as part of the educational curricula, starting from primary school level.

Policy statement -3:

The Government aims to facilitate the establishment of institutions of ICT learning in smaller towns.

Justification:

Major emphasis on ICT education at all levels of education is a prerequisite for the future competitiveness of Namibia as a country and the reduction of the digital divide.

11 Skills development

Policy statement:

The Government will provide tax incentives for ICT skills development by the private sector.

Justification:

The development of ICT related skills to contribute to the development of the ICT industry is a national imperative in building this sector.

12 Policies for information technology and the environment

12.1 Reduction of ICT emission levels

Policy statement:

The Government determines safe levels for emission and ensures that emissions do not exceed a limit beyond which exposure becomes harmful to the population. Government will mandate that the Regulatory Authority develops a comprehensive policy for safe levels of emission in accordance with recognised international standards or best practices. Provisions will be made for the Regulatory Authority to enforce compliance with the prescribed emission standards and allow for redress for persons affected by breaches.

Justification:

ICT equipment and materials have the potential to emit harmful radiation.

12.2 Control of ICT waste

Policy statement -1:

The Government promotes the safe disposal of hazardous materials. The Government will mandate that the Regulatory Authority develops a comprehensive policy for the disposal of wastes that adequately covers the telecommunications and ICT sector. Retailers and suppliers are to advise consumers of the manufacturers' safety recommendations and provide instruction and facilities for the safe disposal of ICT waste.

Policy statement -2:

The Government appreciates foreign assistance in developing the use of ICT in Namibia. However, the Government will scrutinise the donation or subsidisation of dated ICT technologies to avoid dumping of old technologies which have a short life cycle.

Justification:

The disposal of ICT equipment may cause potential environmental and health risk to the population.

13 Government funding and incentives

The Government is committed to providing adequate funding for ICT skills development in Namibia. The Government also provides appropriate incentives to the private sector to encourage local technology development and develop ICT skills. The Government will assist with the funding of ICT projects and programmes that will contribute to ICT access and skills development.

The Government aims to exempt Personal Computer (PC) equipment from import duties. The Government aims to stimulate the market for bundled personal computer and telecommunications services to increase uptake through access to funds from the USF. The aim of this Policy is to provide these services to underserved community projects, Multi – Purpose Community Centres, schools, Community Learning Development Centres and similar institutions or access points (and not to individuals personally).

14 Government procurement of ICT

The procurement of ICT goods and services by the Namibian Government is based on the following principles:

- a. Policy, strategy and demand driven
- b. Fair and transparent processes
- c. Emphasis on standardisation and total cost of ownership.

Policy statement -1:

Government procurement of ICT to be based on defined standards and a philosophy of total cost of ownership.

Justification:

Decisions based on lowest price do not necessarily translate to lower cost over the lifespan of the equipment since the cost of maintenance and repairs are considerable. The cost of equipment over its lifespan is further increased by a lack of standardisation.

Policy statement -2:

The Government supports open standards in all facets of the use of ICT within Government. Open standards in Government are defined in a process where all relevant views are considered.

Justification:

Open standards of any communication, interconnection or interchange protocol and inter operable data formats, with public specifications and without any restrictions in its access or implementation, provide increased availability, maximised end user choice and lower cost. Open standards are essential in ensuring that all systems are able to seamlessly integrate.

Policy statement -3:

The Government of Namibia promotes the use of Namibian owned Small and Medium Enterprises (SMEs) by larger bidders for Government tenders.

Policy statement -4:

The Government of Namibia promotes the transfer of skills to Namibian citizens when awarding tenders.

Policy statement -5:

The Government of Namibia promotes a minimum of twenty percent (20%) of contract value to local ICT firms with a minimum of fifty one percent (51%) privately owned Namibian shareholding (with commensurate control) in tenders for IT software and hardware. The transfer of skills to citizens should be an integral part in the delivery of such contracts.

15 Information technology policy implementation

The Government recognises the need for the establishment of adequate institutional capacity to assist with the implementation of this Policy and aims to establish adequate capacity to do so. The contribution

of Non-Governmental Organisations (NGOs) and Public Private Partnerships (PPPs) in the implementation of this Policy is recognised.

16 Review of this IT Policy

Given the dynamic nature of the IT sector, it is important to ensure that the Policy framework remains relevant and adequately addresses all issues. The Ministry of I&CT will establish mechanisms for the collection of relevant information from operators and the comprehensive research to identify relevant issues, trends and other matters that may affect the sector. In addition, the Ministry will establish a formal mechanism for the periodic reviews of this Policy, taking into consideration the information collected, the research done and feedback from key stakeholders.

Glossary of terms

Convergence – The integration of industries that up to now have largely operated separately from one another, but meshing along a specific value chain or bundling from different services at the applications end. Convergence is driven by the digitisation of the presentation, transmission, storage, processing and creation of information.

Information highway – All the changes in computing, new information technologies and systems, and related products affecting society and the economy.

Electronic Business (e - business) - The exchange of information within or among enterprises by electronic means for the purpose of conducting business transactions or other relative activities.

Electronic Commerce (e - commerce) - The conduct of commerce in goods and services, with the assistance of telecommunications and telecommunications-based tools.

Electronic Communications – Any emission, transmission or reception of sound, pictures, text or any other information by wire, radio waves, optical media, electro – magnetic system or other means of a like nature.

Electronic Connectivity (e - connectivity) - A term which describes remote connectivity and the provision of the capability of a real-time, secure, two way interactive connection between enabled systems.

Electronic Government (e - government) - Government's use of technology , particularly web-based applications, to enhance the access to and delivery of Government information and services to citizens, business partners, employees, other agencies, and government entities.

Information and Communications Technology (ICT) - Any communication device or application, encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as videoconferencing and distance learning.

Industry – A segment of the economy concerned with the production of goods and services.

Information kiosk – Dispenses free information in various forms; and also offers users a PC based terminal for Internet access. Information kiosks form part of Multi-Purpose Regional Community Centres.

Information Society – A term used to describe a modern population that is conversant with – and actively using – information and communications technology. A society where the creation and exchange of information is a predominant social and economic activity.

Internet – A “network of networks” linking millions of computers worldwide for communications purposes.

Information Technology (IT) - The study, design, development, implementation, support or management of computer-based information systems, particularly software applications and computer hardware.

Non-Government Organisation (NGO) – NGOs strive to achieve public objectives and derive their sources of funding through donors. NGOs are both a source of funding and a delivery mechanism.

Free / Libre Open Source Software (FLOSS) – Software for which the original program instructions, the source code, is made available so that users can access, modify, and redistribute it.

Public Private Partnerships (PPP) – An approach to facilitate cooperation between the public and private sectors in delivering important Government policy initiatives. PPPs can take various forms.

Sector – A distinct part of a market that can be described, categorised and targeted according to its own criteria and characteristics.

Small and Medium Enterprises (SMEs) - Smaller enterprises with an annual turnover of not exceeding N\$10 million. These enterprises are fully owned by Namibian citizens.

Universal Service – Service available, as far as possible, to all the people without discrimination on any basis with adequate facilities at reasonable cost.