



**Overarching Information Communications
Technology (ICT) Policy
for the
Republic of Namibia
2009**

18 February 2009

Foreword

The adoption and exploitation of Information and Communications Technology (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. The rapid development and commensurate convergence of the technologies utilised by the Information Technology, Telecommunications, Broadcasting and Postal sectors of the economy has created opportunities for growth in a new competitive space.

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 ability to exploit the growing potential of electronic communications to originate and exchange as well as receive and consume information and services
- d. The establishment of an environment conducive to the development of Namibian-based content and service providers that are competitive players on international markets, and in so doing, create opportunities for employment and economic diversification
- e. The ability to collectively deliberate and participate in the democratic governance of their country through freedom of expression and access to information via a pluralistic range of media and media institutions of diverse ownership and control
- f. A universal postal service providing access to affordable, efficient and high quality services.

Access to ICT and the development of ICT related skills in the younger population are national imperatives in enabling Namibia's participation in an increasingly global economy. More specifically, the growth of ICT in Namibia can only succeed with increased broadband access and a reduction of the cost of telecommunications. Namibia's socio-economic development requires the maximum utilisation of existing and planned infrastructure.

This document provides an Overarching Policy for the ICT and Broadcasting sector (the 'Policy') for Namibia. The Policy should be read in conjunction with the following: the Telecommunications Policy, Broadcasting Policy, Information Technology Policy, Postal Policy and New Licensing Framework. This

Overarching ICT Policy is in line with national, regional, continental and global developments in the ICT sector.

In developing this Policy, the point of departure has been to facilitate the growth of ICT in Namibia, whilst striving towards universal services for all Namibians. 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 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, Access to Information Bill and Electronic Transaction Bill (amongst others) give effect to major parts of this Policy.

Honourable Joel Kaapanda

Minister of I&CT

February 2009

Table of Contents

Foreword	2
1 Introduction	6
2 Purpose of document.....	6
3 ICT in Namibia – a national imperative	6
4 Factors considered in this Policy	7
4.1 Content creation, connectivity and access to communications	7
4.2 ICT’s role in socio-economic development and poverty eradication.....	9
4.3 Namibia’s participation in international and regional initiatives	9
4.3.1 Regional initiatives.....	9
4.3.2 International initiatives	10
5 Need for reform: Liberalisation	10
6 Licensing regime	11
6.1 Telecommunications and Broadcasting services	11
6.2 Postal services	11
7 Proposed national ICT objectives for Namibia.....	12
7.1 Proposed vision.....	12
7.2 Proposed mission	12
7.3 Proposed objectives.....	12
8 Establishment of an enabling framework for ICT development in Namibia	13
8.1 Guiding principles	14
8.2 Roles and structures	14
8.2.1 Role and responsibilities of Government	14
8.2.2 Role of the Regulatory Authority.....	15
8.2.3 Roles of industry.....	17
8.2.4 Role of consumers.....	17
8.2.5 Market structure	18
9 Policies for the ICT industry	19
9.1 Competition	19
9.2 Consumer protection and standards	20
9.3 Small and medium enterprises	20
9.4 Government funding and incentives.....	20
10 Major Government Policy initiatives.....	21
10.1 Universal access.....	21
10.2 International bandwidth costs	21
10.3 Internet access	21

10.4	Education and training	22
10.4.1	Provision of formal education	22
10.4.2	Provision of informal education	22
10.5	Information security and privacy	22
10.6	Electronic Government (e-government).....	23
10.7	Electronic connectivity (e-connectivity)	23
10.8	Foreign ICT skills.....	23
11	Policies for ICT and the environment.....	23
11.1	Reduction of ICT emission levels.....	23
11.2	Control of ICT waste	24
12	Policy implementation.....	25
13	Review of this Policy.....	26
	Glossary of terms	27

1 Introduction

The Namibian Government recognises the value of Information and Communications Technology (ICT) as an industry providing the underlying productivity gains for the overall economy. Hence, 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.

Namibia has made good strides in developing the ICT sector. Although the ICT sector has developed in line with most global trends - new technologies and applications - there is still room for growth. The development of a national ICT Policy is one of the priorities aimed at strengthening Namibia's position in the dissemination and use of ICT.

The following documents are integral in the policy concepts discussed in this document:

- a. Telecommunications Policy
- b. Broadcasting Policy
- c. Information Technology (IT) Policy
- d. Postal Policy
- e. New licensing framework.

2 Purpose of document

The purpose of this document is to set out the Overarching Policy in the context of the convergence of Telecommunications, Broadcasting, Information Technology, and Postal sectors for the Republic of Namibia.

3 ICT in Namibia – a national imperative

ICT is an umbrella term that includes any communication device or application, encompassing radio, television, cellular phones, personal digital assistants, computer and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as video conferencing and distance learning. ICT refers to the technologies, including computers, telecommunications and audio-visual systems that enable the collection, processing, transportation and delivery of data, information and communications services between users. Postal services are increasingly part of the converged ICT sector. The postal service is the most basic and most common means by which messages can be communicated and goods delivered. The postal service is a basic necessity serving the entire public. It also serves as an important medium of communication for business and commerce.

The use of ICT in Namibia is growing fast, and brings with it the opportunity to increase the rate of development in the country. In so doing, ICT potentially plays an important part to the modernisation of the Namibian economy. If this opportunity is to be realised, Namibia needs to increase its efforts to catch up with global trends in ICT technology and applications.

The Government of Namibia recognises the need to be part of the global information society. ICT has a pervasive impact on the Namibian economy, and contributes to economic growth, industrial development, poverty eradication and equal opportunity. The Namibian Government recognises that:

- a. The pace of innovation in the ICT sector has reduced the cost of access to ICTs. This has allowed democratisation of ICT use, including use by the disadvantaged citizens to support their livelihoods, and also to facilitate the adoption of ICT in poverty reduction programmes
- b. ICT has generated e-services, such as e-commerce and e-government, which contribute to greater economic efficiency.

The growth of the ICT sector in Namibia is a national imperative. The Government of Namibia recognises that long-term growth can only be achieved through a demand driven approach based on education and training, and supported by an enabling environment conducive to the development and growth of the local industry. In so doing, the increased access of quality ICT related services at affordable prices are an important focus area in Namibia's overall ICT policy.

4 Factors considered in this Policy

This Policy focuses on two major themes which characterise the current developments in the ICT sector. These are content creation and connectivity (including access to communications). This Policy also recognises ICT's role in socio-economic development and poverty eradication.

In developing this Policy, Namibia's participation in international and regional initiatives is recognised.

4.1 Content creation, connectivity and access to communications

Today, the world is increasingly moving towards value added services in the electronic communications market. Content is a key driver of market growth – so is connectivity between service providers and the access to electronic (and physical) communications in that part of the market previously excluded from its use.

Both the creation of content and gaining access to electronic communications are the result of major technological advancements. The convergence of previously discreet technologies has become a major industry driver. This entails the integration of industries that up to now have largely operated separately

from one another into a new, merged value chain. Convergence exists in different forms that also have different effects:

- a. Horizontal (industry) convergence. This is the integration of content, networks and devices. Examples are music downloads through the mobile phone, mobile e-mail, mobile TV, mobile news alerts and mobile mapping services
- b. Vertical (value chain) convergence. This is the integration along the value chain and the accompanying standardisation in respect of a specific product segment such as ringtones, music and event tickets
- c. Functional (applications and services) convergence. This is the convergence between the major categories of communications, information, entertainment and transactions.

The Government realises that ICT convergence has an impact on three key areas:

- a. Content. This includes text and image-based Internet services, language-based communication services and music and film-based broadcast media
- b. Networks. These are relevant networks that are used as transmission media; and include telephone lines, mobile communication networks, the Internet and transmission of the television signal via TV cable, satellite or terrestrial antennae
- c. Devices. These are end devices via which the user can receive services; and include telephones and mobile phones for speech, Internet capable personal computers for text as well as television sets, DVD or MP3 players for the area of television and music.

The Namibian Government recognises next generation networks (NGN) as the key innovation which will bring further significant changes in the communications market through the transformation from circuit-based public switched telecommunication networks to packet-based networks using the Internet Protocol. The present structure of vertically independent, although interconnected, networks may be transformed into a horizontal structure of networks based on Internet Protocol. Traditional boundaries between industry segments such as telephony, cable TV, broadcasting and wireless are getting increasingly blurred.

The Government of Namibia realises that convergence is not only that of technologies but also policy, regulation, legislation and institutions. Convergence has an impact on every sphere of society. Convergence is not only about developments in technology, but radically alters the way in which services are delivered and accessed, business is done and people interact (or network). The Government has developed policy and regulation that support convergence and are robust enough to cater for future technological changes in the telecommunications, broadcasting, information technology and postal sectors. The Government will implement a new institutional framework for all parts of the ICT sector in order to promote full competition as well as to facilitate the convergence of telecommunications, information and communications technology and media services associated with the evolution of these technologies.

4.2 ICT's role in socio-economic development and poverty eradication

ICTs are also the major means to move Namibia towards the information society and knowledge-based economy. The Namibian Government commits to harness and utilise the benefits of ICTs to achieve the objectives of socio-economic development through poverty alleviation, raised educational standards, boosting individual capabilities, improving health standards and replenishing environmental resources. The Government promotes gender equality, and the empowerment of women and disabled persons through access to ICTs.

The Government recognises ICTs as important developmental mechanisms that helps all Namibians to access, process and utilise information and knowledge to improve living standards by increasing productivity, stimulating growth, increasing job opportunities, advancing the welfare of society, and keeping businesses abreast of developments in world markets. The aim is to achieve universal access to telecommunications, the internet and postal services.

The Government promotes poverty reduction, and a healthy and productive life; and will facilitate a paradigm shift from unskilled to skilled work. The Government promotes the use of ICTs as a vehicle for imparting market driven skills through action learning.

The Government of Namibia acknowledges that if Namibia's ICT Policy is to make a desirable impact on the developmental process it must be related to the wider social and economic development agenda (Vision 2030, National Development Plan 3 and subsequent National and Information and Communications Initiatives Plans) of the Government.

4.3 Namibia's participation in international and regional initiatives

The Government of Namibia subscribes to various regional and international structures in order to improve the efficiency of its ICT sector. As a result, this Policy takes notice of the following documents:

4.3.1 Regional initiatives

- a. Declaration and Treaty of SADC of 1992, signed at Windhoek
- b. SADC Declaration on Information and Communications Technology (ICT) of 2001 (signed at Blantyre)
- c. SADC Protocol on Transport, Communications and Meteorology in SADC Region of 1996 (Chapter 10: Telecommunications, Chapter 11: Postal)
- d. Telecommunications Policies for SADC and the Model Telecommunications Bill for SADC (adopted June 1998 at Swaziland)

-
- e. SADC Protocol on Culture Information and Sport of 2000 (signed at Blantyre)
 - f. Pan African Postal Union (PAPU) directives and initiatives.

4.3.2 International initiatives

- a. NEPAD Declaration on Policy and Regulatory Framework for ICT Broadband Infrastructure Network for Eastern and Southern Africa (June 2006)
- b. From the UNESCO sponsored Windhoek Declaration on Promoting an Independent and Pluralistic African Press of 1991 (Windhoek)
- c. African Charter on Broadcasting of 2001 (adopted at Windhoek)
- d. African Commission on Human and Peoples' Rights - Declaration of Principles on Freedom of Expression in Africa of 2002 (The Gambia)
- e. International framework – World Summit on the Information Society 2003 Geneva 2 Tunis Pan of Action
- f. United Nations Millennium Declaration of September 2000 (New York)
- g. International Telecommunications Union (ITU) and Universal Postal Union (UPU) directives and initiatives.

5 Need for reform: Liberalisation

The Government of Namibia is aware of the benefits of reforming the ICT sector through deregulation, liberalisation and privatisation. The Government aims to reform the ICT sector, and will embark on an accelerated - yet managed - liberalisation journey. The liberalisation process will be tailored to suit Namibia's socio - economic and geopolitical situation.

Liberalisation of the ICT industry will allow market forces to shape the development, ownership and to some extent, structure of the sector. Liberalisation has three components: deregulation, competition and privatisation.

- a. Deregulation. The Government aims to change the legislation that governs the ICT sector, reduce Government intervention and / or involvement in the sector, and create and / or empower bodies to enforce the new legislation. A major component of deregulation is establishing an independent Regulatory Authority to enforce a fair, efficient, and thriving environment. Apart from an independent Regulatory Authority, other bodies which might be empowered include the Communications Ministry and a Competition Commission.
- b. Competition. The Government will lower barriers to the ICT market, to allow third parties to compete with established providers of ICT products or services.
- c. Privatisation. The Government aims to dilute its shareholding in certain commercially ICT orientated state owned enterprises, activities, or productive assets.

Government's initial aims of its liberalisation initiatives are reduced costs to users, improved quality of service, the establishment of a healthy telecommunications retail market, transparent price information and infrastructure expansion.

The Government and the private sector both have important roles in the development of a liberalised ICT. The Government's main role is to provide a sound policy framework, regulate markets where they do not work well enough on their own, and support additional service provision where markets do not achieve economic and social objectives. The Government is also an increasingly important user of ICT, particularly in the context of e-government, making it a major actor in fostering ICT uptake. The Government promotes universal access and service as some of its prime objectives and will ensure that the liberalisation process includes poor people in ICT resources. The Namibian private sector is responsible for providing ICT services and products that are widely available to the consuming public.

6 Licensing regime

6.1 Telecommunications and Broadcasting services

The Government of Namibia recognises the importance of technological convergence and the need to promote effective competition. In so doing, the Government of Namibia aims to establish a service and technology neutral licensing regime. Although this may not immediately facilitate the entry of new market entrants, it will allow increased competition among the incumbents which will be beneficial to the country.

An increasing amount of voice traffic is transmitted through IP networks and needs to be regulated. The Government of Namibia recognises IP telephony (e.g. Voice over Internet Protocol - VoIP) as a complementary service to other forms of public service telephony. Hence, the new licensing regime will include IP telephony. In a technology neutral regulatory environment, the Government will regard IP telephony as equivalent to fixed line or mobile and will regulate it as such. In so doing, a differentiation between private and public forms of IP telephony will be made.

6.2 Postal services

Namibia subscribes to development market model with liberalised postal and courier markets. Whilst both these markets are open for competition, only the postal market is regulated.

Incoming cross-border mail delivered through the UPU network is not liberalised. Incoming cross-border mail not delivered to post boxes, private bags and home letter boxes and is liberalised, while courier express documents and parcels will be an integral part of the liberalised courier and express mail services in the country. Postal parcels for business entities, which are part of an integrated logistics

supply chain, are not part of the reserved postal services and are liberalised. As the universal service obligations for the designated postal operator is based on delivery of mail into post boxes, private bags and home letter boxes, all mail transferred directly to addressees will be outside the scope of the universal postal services.

The designated postal operator has a universal service obligation. In order to ensure the provision of universal service, the Government will give the universal service provider exclusive (or monopoly) protection in reserved services of the postal markets. The distribution of mail not exceeding one hundred grams to post boxes, private bags and home letter boxes is therefore a reserved market for the public postal operator. The distribution of advertising material (e.g. pamphlets) and newspapers through post boxes, private bags and home letter boxes is excluded from this reserved service.

All other postal and courier services are deregulated and only subject to transport and related regulations.

7 National ICT objectives for Namibia

This section sets out the proposed vision, mission and objectives for ICT in Namibia.

7.1 Vision for ICT in Namibia

The Government's vision is to transform Namibia into a knowledge-based, highly competitive, industrialised and eco-friendly nation, with sustainable economic growth and high quality of life by 2030. In so doing, Government aims to establish ICT as the most important sector in the economic development of the country by 2030. By embracing the development of ICT, Namibians will benefit through:

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

7.2 Mission for ICT in Namibia

The Namibian Government aims to ensure that every citizen and resident shall have affordable access to high quality information and communication services.

7.3 Namibia's ICT objectives

To achieve Vision 2030, Namibia needs to accelerate the use of ICT in Namibia and grow the ICT sector, the specific objectives of this ICT Policy within the next five years are:

-
- a. To enhance the market and regulatory structures of ICT in Namibia, and to fully liberalise (open, competitive markets and private sector participation) all telecommunications services following a controlled process
 - b. To establish streamlined, efficient and effective regulation of the ICT industry on a fully transparent, technology neutral and competitively balanced basis
 - c. To provide universal access to information and communication facilities in Namibia for all communities (to telephone, Internet, and multi-media services). An access point in every community or village will be established
 - d. To enable affordable prices for telecommunications services, particularly low income groups
 - e. To enable profitable investment opportunities in all segments of the market
 - f. To successfully implement Government ICT initiatives in education and training
 - g. To successfully implement e-government initiatives by 2015
 - h. To establish Namibia as a first class regional ICT hub that will contribute towards job creation.

Namibia also aims to entrench universal broadcasting and media objectives in Namibia:

- a. Entrench freedom of expression, pluralism, diversity and competition
- b. Protect media users, and particularly the vulnerable (including children), against unwanted and involuntary exposure to offensive and harmful material
- c. Foster provision of services to all Namibians in appropriate languages
- d. Foster economic development of the electronic media and tradable information sectors.

The Government of Namibia considers the following main objectives for the postal sector:

- a. Ensure high quality postal services are offered at reasonable prices and a universal service, with uniform tariffs, is provided
- b. Sustain and further enhance postal services which satisfy the needs of business and individual consumers at affordable prices
- c. Create a postal service, which is able to succeed in increasingly demanding national and international markets
- d. Re-regulation and partial liberalisation of the postal market.

8 Establishment of an enabling framework for ICT development in Namibia

The establishment of an environment conducive to the development and growth of ICT and a successful transition to a converged environment of electronic delivery of content and services in Namibia are a national imperative.

8.1 Guiding principles

Namibia subscribes to a liberalised ICT sector. In fulfilling its role, ICT 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. The promotion of user's influence in the development of the ICT sector
- e. Protected rights of consumers
- f. Fair and transparent industry practices with the aim to grow the ICT sector
- g. Freedom of expression and access to information
- h. Pluralism and diversity in the provision of content and services
- i. Media independence
- j. Transparency, consistency and proportionality in decision making and regulation
- k. Government support for public service broadcasting and for provision of high quality Namibian content
- l. Guaranteed high quality and affordable postal services
- m. Universal postal services to all Namibians
- n. Good corporate and public governance for all stakeholders.

8.2 Roles and structures

8.2.1 Role and responsibilities of Government

Government (via the Ministry of Information and Communication Technology) assumes responsibility for overall policy functions and establishes the legal framework for the ICT industry. The roles and responsibilities of Government are as follows:

- a. Government (via the Ministry of Information and Communication Technology) assumes responsibility for overall policy functions and establishes the legal framework for the ICT and broadcasting sector
- b. The Minister of I&CT may impose specific conditions on the telecommunications, broadcasting and postal sectors
- c. The Minister of I&CT is responsible for all ICT, broadcasting and postal related legislation and provides inputs into other legislation that may affect these sectors
- 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. The Minister of I&CT may appoint a Strategic ICT Advisory Council and / or Advisor on ICT Policy related matters
- g. An Act of Parliament establishes an autonomous Regulatory Authority. The Minister of I&CT appoints the Board of the Regulatory Authority
- h. ICT Policy making is separated from regulatory and shareholding functions and responsibilities within the Ministry of I&CT. The ICT Policy Unit's responsibilities are as follows:
 - i. Participate in international ICT consultative forums
 - ii. Research policy development trends – global and regional
 - iii. Obtain stakeholder requirements
 - iv. Translate NDPs into ICT Policy requirements
 - v. Draft policy and regulations (Information, Media, IT, Telecommunications, Broadcasting, Postal, convergence)
 - vi. Consult all stakeholders
 - vii. Liaise with and brief the legal drafters
 - viii. Produce final draft / amendment for Minister's approval
- i. Monitor current policy, legislation and regulations (i.e. liaison with the Regulator and the operators)
- j. The Ministry of I&CT prescribes Government's internal ICT policy and practices.

8.2.2 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).

The responsibilities of the Regulatory Authority to the Ministry of I&CT are:

- a. The implementation of Government Policy notified by the Minister of I&CT
- b. Provide advice and report to the Minister of I&CT in the formulation of national policies
- c. Advise the Minister of I&CT on telecommunications, broadcasting and postal matters
- d. Assist the Ministry in negotiations with international bodies and operators
- e. Represent Government at international meetings
- f. Report to Parliament through the Minister of I&CT on all activities in the sector, including charges paid by consumers

-
- g. Report to Parliament on operators' audited accounts.

The specific responsibilities of the Regulatory Authority are:

- a. Regulate and direct the ICT, broadcasting and postal sectors
- b. Ensure compliance with legislation and regulations directives
- c. Grant, renew, amend, transfer and suspend or revoke licences
- d. Ensure operators are technically, financially and managerially capable of carrying out services specified in their licences
- e. Protect consumers and purchasers in respect of prices, quality, variety of services and telecommunications apparatus supplied
- f. Promote efficient competition amongst service providers and operators
- g. Attract foreign direct investment (FDI)
- h. Manage all spectrum in Namibia
- i. Administer the radio frequency spectrum (management and allocation)
- j. Ensure telecommunications and postal services are operated in a manner best suited to the economic and social development of the country
- k. Ensure provision of quality universal postal service. This includes setting targets for universal services and ensuring equitable remuneration of the provider of universal postal services by various means, when the tariffs charged for the universal services is lower than the actual costs
- l. Lay down procedures for ensuring safety and quality of services
- m. Review and respond to consumer complaints
- n. Promote equitable access to and use of the extensive public postal network; benchmark and monitor tariffs (including interconnection) and reports to the Minister. Act as arbitrator in cases of deadlock or dispute on tariffs
- o. Appoint an independent monitor to assess the standards and performance of the public postal operator
- p. Promote sub-regional, regional, and global integration of postal regulatory practices
- q. Facilitate improvement of the quality of service in the postal production chain
- r. Encourage the sharing of networks between operators (interconnection) at fair and equitable rates
- s. Initiate and participate in the establishment of a comprehensive national address system and postal code system
- t. Manage the entire telephone numbering regime
- u. Ensure compliance to regulatory measures

-
- v. Govern interconnection arrangements between operators upon application by either operator upon failure of the operators to agree an interconnection agreement
 - w. Implement a transparent and fair pricing regime that facilitates competition in the market (during the initial stages of market liberalisation or to control / prevent anti – competitive actions or omissions by an operator)
 - x. Establish advisory bodies
 - y. Manage the telecommunications Universal Service Fund (USF) and broadcasting Content Support Fund
 - z. Monitor sector performance and supervises compliance with rules, regulations and other conditions imposed on players in the industry.

The Regulatory Authority is primarily funded through licence fees. Fees from other sources comprise spectrum auctions and fines.

8.2.3 Roles of industry

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

The ICT industry assists the Regulatory Authority by participating in regulatory processes and the fulfilment of the objectives of the Regulatory Authority.

Competing public and private broadcasters and content providers provide a wide range of independent, high quality and affordable broadcasting and content services to Namibians. Broadcasters are categorised as public, commercial and community broadcasters.

Postal operators are responsible for providing efficient, affordable and quality postal services to Namibians. The public postal operator is tasked to build and maintain postal infrastructure in Namibia and to provide a universal postal service.

8.2.4 Role of consumers

Consumers are users of the services and decide which products and services are required. Customers are however protected as follows:

- a. Right to access to postal services if the commercial conditions are met
- b. Non-discrimination
- c. Right to access to details of billing information
- d. Right to complain about quality, delay, quantity, tariff of postal service provided

-
- e. Right to fair terms of services
 - f. Privacy
 - g. Right to be protected from misleading advertising and harmful contents.

8.2.5 Market structure

The four (increasingly converged) market structures are characterised as follows:

- a. The Namibian IT market structure is subject to market and competitive forces
 - i. The Namibian IT market is fully deregulated. Government may issue Policy guidelines and regulations (where required) to assist with broader industry growth
- b. The Namibian telecommunications market structure is subject to market and competitive forces
 - i. The telecommunications market is moving towards liberalisation
 - ii. The liberalisation process for the telecommunications industry is managed by the Ministry of I&CT
 - iii. Government may issue Policy guidelines where required to assist with broader industry growth
 - iv. Protection from dominant service providers and operators will be provided
 - v. A stable regulatory environment that is conducive to investment will be created
 - vi. Operators are incentivised toward infrastructure development in under serviced areas
 - vii. The dominant fixed line operator's wholesale business is distinguishable from retail
 - viii. Public postal and dominant operator's non-competitive operations are regulated in a performance contract
 - ix. A mandatory and mutual interconnection obligation is introduced
 - x. All telecommunications and broadcasting industry participants contribute to the newly established Universal Service Fund (USF) and Content Support Fund respectively.
- c. The Namibian broadcasting market structure is subject to market and competitive forces; with proportionate Government intervention where markets are not realising public policy objectives.
 - i. The Namibian broadcasting market is open to new entrants
 - ii. Private and community interests are encouraged to assume greater responsibility for the development of the sector and meeting public policy objectives
 - iii. Foreign interests are encouraged to enter and assist in building and developing broadcasting and content services in Namibia. Broadcasting is subject to foreign shareholding and cross-media ownership limitations
 - iv. Spectrum is a finite resource. Access to radio frequency spectrum requires public management. Where allocation and re-allocation of the radio frequency spectrum is required, it will be allocated in accordance with the high level principles of: pluralism and

diversity, competition and open markets, transparency, consistency and proportionality in decision making and regulation

- v. The Government will issue guidelines on public policy objectives where intervention is required
 - vi. All industry participants contribute to the newly established Content Support Fund.
- d. The Namibian postal market is partially liberalised
- i. The public postal operator is tasked with a universal service obligation
 - ii. Incoming cross-border mail delivered through the UPU network is not liberalised. Incoming cross-border mail not delivered to post boxes, private bags and home letter boxes is liberalised, while the priority mail will be an integral part of the liberalised courier and express mail services in the country
 - iii. Postal parcels for business entities, which are part of an integrated logistics supply chain, are not part of the reserved postal services and are liberalised
 - iv. As the universal service obligations for the public postal operator is based on delivery of mail into post boxes, private bags and home letter boxes, all mail transferred directly to addressees will be outside the scope of the universal postal services.

9 Policies for the ICT industry

9.1 Competition

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. Competition instils a spirit of innovation and excellence in service. Competition is further harnessed by diluting Government shareholding in ICT State Owned Enterprises (SOEs). The Government recognises that dilution of Government's shareholding in ICT SOEs will benefit Namibia through increased market efficiency and the ability to attract international investors and technology partners. So long as Government continues with shareholding participation in ICT SOEs, Government will separate its policy development and regulatory roles from its role to maximise shareholder value. Commercialised state owned enterprises in the ICT sector are managed separately from its Policy and Regulatory responsibilities.

Government recognises that the growth in electronic telecommunications has expanded the communications market, reducing the postal services' percentage of market share drastically and threatening the volumes of the current postal services. If the postal sector is to protect its mail volumes or maintain its share of the communications market relative to its competitors, a fundamental rethinking of the entire role, strategy, and operational systems of the postal service is imperative.

9.2 Consumer protection and standards

The Government promotes efficient and reliable services that conform to international technical and quality standards. The Government aims to prescribe quality of service and technical standards in keeping with global best practices which shall be met by all service providers.

The Government promotes professional standards and ethical practices in the Namibian ICT industry through self-regulation. A single, self-regulating mechanism is preferred above Government intervention.

- a. The establishment of a self-regulatory ICT Industry Standards Body is promoted. Membership should take full responsibility for the development, monitoring and compliance of an industry code of ethics. The ICT Industry Standards Body should have an independent Chairperson and non industry representatives and should be self funding to carry out its responsibilities.
- b. Similarly, the Broadcasting and Media sectors should be self-regulating through a Media Council and an Ombudsman structure to address issues that may arise. The Media Council should be constituted on the same basis as above.

9.3 Small and medium enterprises

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.

9.4 Government funding and incentives

The development of the ICT industry is a national imperative. The Government will assist with the funding of ICT projects and programmes that will contribute to ICT access, skills development, international bandwidth and local content development.

The Government will stimulate the development of the ICT industry to establish ICT Centres of Excellence at centres of further learning. Where possible, Government will form partnerships with industry to develop ICT skills in Namibia.

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

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 under-served community projects, Multi-Purpose Community Centres, schools, Community Learning Development Centres and similar institutions or access points (and not to individuals personally).

10 Major Government Policy initiatives

10.1 Universal access

An important aim of Government is to ensure universal access and services (as far as possible) to the Namibian population. This includes access to all forms of ICT – in particular, telephony, the Internet, radio and television and postal services. The Government will institute a variety of mechanisms to achieve this socio-development aim. These include minimum service obligations for all ICT licensees as well as the establishment of a Universal Service Fund for the telecommunications sector. In addition, the Government will introduce ensure that the national telecommunications and postal networks will be maintained and enhanced. To achieve this, reserved services for the public postal operator are introduced, whilst Government plans to facilitate increased access to international bandwidth to assist with access to content.

10.2 International bandwidth costs

The Government creates a market structure that facilitates reduction of international bandwidth prices through the establishment of competition in the telecommunications sector.

Increased international bandwidth and reduced rates are national imperatives. Emerging technologies which offer end users access to a variety of networks, rely on much cheaper bandwidth and make available a wide range of services.

10.3 Internet access

The Government recognises that increased access and consequent use of the Internet is imperative if Namibia is to realise its vision to become a knowledge based society. Hence the Government will use universal service principles (access and funding) to provide internet access through the establishment of information kiosks, multi-purpose regional community centres and other community projects.

Increased broadband penetration and Internet access support the Namibian Government's initiatives in e-government, e-learning, e-commerce and other electronic services.

10.4 Education and training

Namibia faces a challenge in that the skills necessary to carry out managed liberalisation and ICT dissemination are in short supply. The Government of Namibia provides appropriate incentives to the private sector to encourage local technology development and develop ICT skills. The Government is committed to providing adequate funding for ICT skills development and / or education in Namibia.

10.4.1 Provision of formal education

Through its Education Policy, Government strives to:

- a. Produce ICT literate citizens
- b. Produce people capable of working and participating in the new economies and societies arising from ICT and related developments
- c. Leverage ICT to assist and facilitate learning for the benefit of all learners and teachers across the curriculum
- d. 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
- e. Broaden access to quality educational services for learners at all levels of the education system
- f. Set specific criteria and targets to help classify and categorise the different development levels of using ICT in education.

10.4.2 Provision of informal education

Government creates opportunities for ICT skills enhancement through its a variety of facilities and programmes. Government funds facilities to access ICT through integrated Multi-Purpose Regional Community Parks, which include Multi-Purpose Regional Community Centres, Community Learning Development Centres, Youth Centres, Community Skills Development Centres, Vocational Training Centres, Post Offices, Libraries and Teacher Resource Centres. In addition, the Community Education for Youth programme also provides public access to ICTs.

10.5 Information security and privacy

The Government of Namibia recognises that building confidence in the security of online transactions is vital to promoting the growth of the global digital economy. The Government promotes legislation for information security, data protection and the protection of privacy. The Government will guard information privacy; and only intercept and monitor information of national importance.

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

The Government will develop and adopt specific postal laws, regulations and measures to ensure the security and integrity of the postal system.

10.6 Electronic Government (e-government)

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

The Government aims to realise the e-government initiatives as set out in the E-Governance Policy for the Public Service of Namibia (2005).

10.7 Electronic connectivity (e-connectivity)

The Government subscribes to the provision of a reliable, real-time, secure two way interactive connection with its constituents. Through proper use of technology, the Namibian Government can increase access to Government information, improve the quality and safety of information and reduce access and use costs.

10.8 Foreign ICT skills

The Government actively seeks to facilitate the acquisition of ICT skills from outside Namibia. ICT is a global industry, characterised by a skills scarcity. ICT skills are further mobile. Namibia aims to reduce any barriers to its ability to attract foreign skills to assist with the development of the ICT market; this includes the relaxation of work permit restrictions for foreign ICT specialists.

11 Policies for ICT and the environment

11.1 Reduction of ICT emission levels

The Government of Namibia realises that ICT equipment and materials have the potential to emit harmful radiation. The Government will therefore determine safe levels for emission and ensures that emissions do not exceed a limit beyond which exposure becomes harmful to the population. The 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.

11.2 Control of ICT waste

The Government promotes recycling programmes and 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.

The Government will further introduce recycling programmes, introducing environment friendly products, using recycled material and participating in various environment awareness programmes. Non-polluting resources such as energy conservation measures in buildings will be introduced.

12 Policy implementation

The Government recognises the need for the establishment of adequate institutional capacity to assist with the implementation of this Policy.

The Namibian ICT Policy implementation process will be guided, among others by the following considerations, which are essential for success:

- a. Implementation of this Policy shall be guided by principles of good governance such as transparency, accountability, indigenous knowledge, service delivery to the underserved, rule of law, right to information as enshrined in the Constitution.
- b. The Government will harmonise all legal frameworks in Namibia to effect this Policy and strengthen the organs of State to execute this Policy.
- c. The Government aims to utilise Non-Governmental Organisations (NGOs) and Public Private Partnerships (PPPs) in the implementation of the ICT Policy, especially in matters and projects of national character and importance. It is particularly important for PPP initiatives to provide, support and use the information infrastructure, to encourage the deployment and use of ICTs within the economy and society.
- d. Government will take leadership in facilitating the development and mobilising investment required for the national ICT infrastructure as well as the implementation of the ICT Policy.
- e. The ICT Policy will be accompanied by legislation passed to support effective separation of powers for policy formulation and guidance, ensure transparent and effective regulatory functions based on convergence principles and establish institutional mechanisms for policy implementation.
- f. The implementation of the ICT and Broadcasting Policy will be closely aligned with other initiatives as set out in National Development Plan 3.
- g. Government will ensure the existence of effective competition legislation and the establishment of a Competition Commission in Namibia.
- h. Provision should be made for the development and upgrading of supporting infrastructure such as roads, electric power and water / sanitation as complimentary services to the successful ICT penetration in Namibia.
- i. Establishment of coordination mechanisms at different levels to allow integration and ensure sustainability of ICT programmes and projects.
- j. All communities should work with Government and the private sector to ensure the universal access and telecommunications skills development and / or transfer.

13 Review of this Policy

Given the dynamic nature of the ICT and Broadcasting 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

Broadband - High-speed data transmission, such as cable, ISDN (Integrated Services Digital Network), and DSL (Digital Subscriber Line). It is generally taken to mean bandwidth higher than 2 Mbps.

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.

Courier service - An individualised and time sensitive service for collection / acceptance, conveying and delivery of documents, parcels and packages on a door to door basis.

Deregulation - Process by which Governments remove, reduce, or simplify restrictions on business and individuals with the intent of encouraging the efficient operation of markets.

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 Connectivity (e-connectivity) - Remote connectivity and the provision of the capability of a real-time, secure, two way interactive connection between enabled systems.

Electronic Data Interchange (EDI) - The use of Information Communications Technology (ICT) and information processing to conduct business transactions, often in an integrated network combining different media, such as voice, text and data processing.

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.

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

Information and Communications Technology (ICT) - Any communication device or application, encompassing radio, television, cellular phones, personal digital assistants, computer and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as video conferencing and distance learning. ICT refers to the technologies, including computers, telecommunications and audio-visual systems that enable the collection, processing, transportation and delivery of data, information and communications services between users.

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

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.

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

Interconnection - Technical, organisational and financial systems which allow the interconnection of two or more distinct networks, for instance the public postal network and the private postal operator(s) within and outside the country.

Internet - A 'network of networks' linking millions of computers worldwide for communications purposes. It is a regulatory mechanism to ensure financial viability and sustainability of the universal service by preventing market creaming by other licensed postal operators without the mandate of providing universal service.

Letter - Any form of written communication in the nature of current and personal correspondence which includes postcards and aerogrammes. A letter contains a message, but due to the physical format needs to be distributed. A letter may also contain non-messaged items such as a piece of clothing, which places it purely within the distribution market. As the size of the item to be distributed grows, so the letter becomes a parcel.

Liberalisation - The removal of full ownership of the industry from the hands of Government; redrawing the regulations; and allowing market forces to shape the development, ownership and to some extent, structure of the sector.

Licence - An authorisation granted by a regulatory authority to an operator for the provision of postal services.

Licensing - An administrative procedure for selecting operators and awarding authorisations for the operation of a particular segment of postal services, for instance courier, express and others.

Mail - Bags of letters and packages that are transported by the postal service.

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.

Open Source software - Software for which the original program instructions, the source code, is made available so that users can access, modify, and redistribute it.

Post - A system for the collection, dispatch, conveying and delivery of postal articles.

Post office - Any building, house, room, equipment or place where postal articles are received, processed, dispatched or delivered by a postal operator.

Postal operator - An operator licensed to provide postal services.

Postal services - The services performed and facilities provided in connection with:

- The collection, transmission, and delivery by land, water, or air transportation of postal articles
- The production of postage stamps, philatelic products and the use of franking meter machines for prepaid postage charges
- The acceptance, transmission and payment of money from one place to another place - commonly referred to as money ordering or money transfer.

Private letter box - A small container installed on the public postal operator's or private premises as a point of mail delivery.

Private mail bag - A special form of postal delivery for an organisation which receives large volumes of mail.

Private postal operator - Any company which is owned privately with official permission (license) to operate services which are not reserved to the public postal operator on commercial terms.

Privatisation - The transfer of ownership of equipment providers, service provider / s, and infrastructure from Government (full or partial).

Public postal operator - A national postal operator in which the majority shares are owned by the Government and which is legally obliged to provide universal postal service.

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.

Regulatory Authority - A public institution established by legislation to control by using rules and regulations on the provision of postal services.

Reserved postal services - A defined range of services within specified limits reserved to a public postal operator mandated to provide postal service, i.e. postal products and services which are legally controlled or under the monopoly of the public postal operator with the objective of enabling it to generate the funds needed to cover the additional costs of providing the universal postal service.

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 access (telecommunications) - Accessibility of a telephone, not necessarily in one's home, but some means such as a public pay telephone or community resource centre providing telephone facilities. The objectives underlying the concepts are the similar, to make available and maintain affordable communications services.

Universal access (postal) - Acceptable criteria used for defining postal service access standards which include among others: frequency of mail collection and delivery, post office opening times, distance between post offices (average area covered) and number of inhabitants served by a post office.

Universal postal service - A defined set of postal products and services of general public interest to which customers are entitled to use without discrimination in terms of accessibility, price and quality throughout the country. Universal services include but are not limited to the basic postal services. The scope of the postal services offered under universal postal service would be defined by legislation or by other customary means taking into account of the needs of the public and other national social and economic conditions.

Universal service - Service available, as far as possible, to all the people without discrimination on any basis with adequate facilities at reasonable cost. A Universal Service Provider (USP) provides these services.

Universal Service Obligation (USO) - Specific obligation imposed by postal law or license on the postal operator to provide a defined set of postal services to a specified community and locality usually under a regulated pricing system. In the event that such obligation results in financial loss of the postal operator a transparent compensation mechanism has to be put in place.