Republic of Namibia

Ministry of Information and Communication Technology

Universal Access and Service Policy for Information and Communications Technologies
Foreword

Namibia seeks to foster the existence of a society and economy where information and knowledge are an abundant resource for individuals and communities and businesses, in homes and offices, or via public access points, at schools and institutions of further education, at libraries, post offices, hospitals, clinics and government offices, for small entrepreneurs, for women, children and men, for those with disabilities and other marginalised groups, in towns, urban townships and rural settlements.

Namibia seeks to tackle the ‘digital divide’ and to promote a society in which the information and communications technology sector is a key enabler of social development and economic growth for individuals, households and businesses, regardless of economic status or geographic location, in a services sector-led economy.

This objective requires widespread availability, affordability and accessibility of a full range of information and communications technology networks and services- from fixed and mobile voice, through radio and television broadcasting, data and the Internet, to the full range of broadband-enabled services. It requires ongoing skills development to support and enable full utilisation and digital inclusion. Furthermore, it requires an environment in which both devices and services are affordable, where the necessary communications infrastructure is widespread, readily accessible and affordably priced, and thus where a wide-ranging choice of voice, data and broadcasting services is freely available, providing a range of content relevant to all the people of Namibia.

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1 Policy Vision

Namibia intends to achieve universal access and service in respect of the full range of information and communications technologies, from telephony and broadcasting to broadband Internet.

Universal access and service is a dynamic component of an emerging broadband-enabled economy and society, and a key to promoting Namibia's social development and economic growth, enabling infrastructure, content and services to reach all Namibians.

2 Purpose

The purpose of this policy document is to set out national policy specific to universal access and service to the full range of information and communications technology infrastructure, services and content, from fixed and mobile voice telephony, through radio and television broadcasting, data and the Internet, to the full range of broadband-enabled services.

It is adopted in the context of the 2009 Overarching Information Communications Technology (ICT) Policy for the Republic of Namibia, and related national policies specific to telecommunications, broadcasting and information technology.

The provisions, terms or statements made in this Policy which are not yet in line with or contrary to the Communications Act (No 8 of 2009) will become effective once the Act has been amended and aligned to the specific provisions set out in this Policy.

3 Factors Considered in this Policy

3.1 Namibia: The Context

Namibia's population of 2.1 million resides in 13 regions, including a few main cities and towns, a larger number of villages and settlements, and many rural and remote areas. Large areas of Namibia are very sparsely populated. In the rural regions, where the majority of the population lives, communities are highly dispersed, sometimes nomadic, often poverty-stricken, with limited access to the information and communications technology infrastructure, services and content so necessary for social development, cultural enrichment and economic growth.

While Namibia is a country rich in natural resources, employment and per capita GDP are low. Namibia is building a small, 21st century economy and over the next 30 – 50 years intends to move away from a factor-driven economy to a services-led economy.

The services-based economy will include both private sector and government services. As it moves into the services era, the Namibian government seeks to introduce electronic government services in a variety of areas, including information services, education and health. This intention requires Namibia's population to have access to information and communications technology infrastructure, in order to utilise e-government services, as well as to participate productively in the services components of the economy.
While mobile telecommunications access is relatively high, and includes many in low-income households, it is not yet universal. Most Namibians over the age of 15 now have access to mobile voice telephony, with the mobile network having achieved 98% population coverage; and most Namibian households are radio listeners with the level of radio population coverage at 96% - but there remains a substantial lack of access to fixed phones, television, the Internet and broadband.

Further, analysis of access to all information and communications technology services, from mobile telephony to broadband, reveals that there remains a substantial urban / rural access gap, with considerable disparities in levels of access between urban and rural communities. For example, in 2011, only 46% of Namibians aged 15 and upwards living in rural areas had a mobile phone, compared to 77% of Namibians in urban areas. Further only 3% of rural households had a fixed line phone, compared to 26% of urban households. With respect to broadcasting services, the picture is similar, with ownership of a working radio and television set reported by only 66% and 19% respectively of rural households, compared to 81% and 73% of their urban counterparts. Only 2% of rural households had Internet access, compared to 27% of urban households. This reflects an urban-rural divide in respect of access to ICTs, which is related to other urban-rural disparities. For example, only 22% of rural households have electricity - which is a key support infrastructure, enabling rollout of telecommunications, broadcasting, Internet and broadband networks - compared to 82% of urban households.

Noting the global trend towards fixed-mobile substitution for voice telephony, the critical focus areas for policy intervention regarding universal access and service for information and communications technology services include mobile voice communications and television broadcasting, as well as mobile and fixed broadband Internet. Against the backdrop of the access gap set out above, the key focus priority is reducing the urban-rural divide.

3.2 The Policy Context

This Universal Access and Service Policy for Information and Communications Technologies is developed within the context of Namibia’s existing policies, specifically the nation’s overarching Vision 2030 adopted in 2004, and its National Development Plans. Further, it is intended to derive its legal strength and basis from and be consonant with a number of policies governing the information and communications technologies (ICT sector), specifically:

- Overarching Information Communications Technology (ICT) Policy for the Republic of Namibia 2009;
- Telecommunications Policy for the Republic of Namibia 2009;

Statements made in Vision 2030, the National Development Plan 3, and the relevant policies for broadcasting, telecommunications and ICT policies, reflect the national policy intention that all Namibians should have universal access and service with respect to information and communications technology infrastructure, services and content. This intention is further reflected and concretised in key sections of the 2009 Communications Act.

This Universal Access and Service Policy for Information and Communications Technologies is therefore adopted in the context of the need to promote these requirements in a more explicit way, strengthening the provision of universal access and service to voice telecommunications and broadcasting services, taking into consideration the global shift to broadband for access to high
bandwidth electronic services. Information and communications technology infrastructure and services must support Namibia’s businesses and mines, farms and nature reserves, hospitals and clinics, schools and libraries, households and individuals - the entire nation - for successive generations through universal access and service to telecommunications, broadcasting, Internet and broadband services.

4 Definitions: Universal Access and Universal Service

Universal access and universal service are closely related concepts and policy objectives, that are considered together for the purposes of this universal access and service policy, but which may nevertheless be distinguished.

Universal access aims to ensure shared ICT usage for all. Universal access for Namibia encompasses the near-ubiquitous availability, affordability and accessibility of information and communications technology infrastructure, services and content to the overwhelming majority of communities through public access points in communities, schools, libraries, clinics and the like.

Universal service aims to ensure individual ICT access and usage for all. Universal service for Namibia requires the near-ubiquitous provision of information and communications technology infrastructure, services and content to the overwhelming majority of individuals, households and businesses.

Universal access and service policy encompasses both universal access and universal service interventions as complementary, closely-related and mutually reinforcing, but occasionally distinct.

5 Policy Scenario for Universal Access and Service

5.1 Scenario: Namibia as an ICT-enabled, digitally-supported, services-oriented nation integrated into the Southern African region

In this next phase of development, the Namibian population requires access to information and communications technology services for purposes of social development, economic growth and cultural enrichment. Improved access to educational content, public health information and, agricultural and business support services are among the primary categories of information that all Namibians need, more particularly those living outside the main urban centres, in small villages and sometimes remote settlements. It is envisaged that information services may include public messaging on health and education matters, via bulk mobile phone messaging services available to government and community-focused organisations at low cost. In the near future, electronic government services will be offered to individuals, households and communities, thus requiring effective access to broadband Internet.

Access to a wide choice of radio and television broadcasting services, including public service, commercial and community broadcasting services, plays a crucial role in developing informed, culturally-enriched and empowered citizens and communities, able to contribute to democracy
and development in Namibia. This will in turn provide capacity for appreciating and leveraging the social and economic opportunities presented by ongoing developments and convergence within the broad ICT sector.

Social networking can be fostered through effective pricing of mobile voice and Internet services, presenting Namibians with opportunities to communicate more effectively with each other and to integrate more actively into the Southern African regional economy and society. This regional integration brings new opportunities for households and micro-businesses operating at the margins of the economy. An increased range of information and communications technology services at affordable prices, offers a significant opportunity for Namibians to push forward their development prospects: through improved access to knowledge for education, health and agriculture; through better information needed to form small and medium enterprises and to foster their participation in markets for small-scale trade and tourism; as well as increasing the socio-economic upward mobility of small firms and households, as envisaged in the National Development Plan.

For the purposes of this policy, information and communications technologies include voice and data telecommunications and radio and television broadcast infrastructure, services and content. The policy adopts a ‘broadband ecosystem’ logic, noting that key resources - such as undersea cables and landing stations, national backbone and backhaul infrastructure, last mile infrastructure, rights of way and radio-frequency spectrum - must all be regulated in ways that foster the evolution of that ecosystem. This includes promoting competition such that it encourages continual upgrading and innovation in technologies and services, while also fostering affordable pricing, high quality of service and effective consumer protection to increase access and usage. The Regulator must, inter alia, foster broadband deployment across Namibia for the benefit of all the segments of society as stated below, including through a range of mutually-supporting ex-ante and ex-post regulation, and through specific intervention as detailed elsewhere in this policy.

Universal access and service with respect to information and communications technology infrastructure, services and content is supported by the Namibian government for all sectors of society. The policy is primarily concerned with promoting access for those Namibians who continue to lack access and service for some years to come, particularly those in poor households and communities and those in remote rural locations.

5.2 The policy goals for access and service to information and communications technologies are envisaged as follows:

Schools, post-school institutions and libraries shall have Internet broadband service at the level of the institution, with widespread access from the classroom, as the highest priority amongst all segments of society, because these institutions are the foundations for Namibia’s future economy and society.

SMEs and informal businesses who operate in the main cities, in small towns, villages and settlements, and in rural and remote areas, shall have telephony and broadcasting service and Internet broadband access in order for them to easily and speedily access goods, services and markets to support their economic endeavours.
Hospitals, clinics and health services shall have universal telephony, broadcasting and Internet broadband service in order to ensure ubiquitous access to health information and support services, and to encourage the wide proliferation of health care messaging and health care services to the general population, particularly to those communities where public health needs are greatest.

The non-governmental sector is engaged in promoting democratic participation and social welfare, and is, therefore, entitled to universal access and service to enhance their capabilities in providing services to Namibians, including low-cost public service messaging over mobile and broadcast networks.

Mines, farms, nature reserves and conservancies: Workers and communities on mines, farms, nature reserves and conservancies face possibly the greatest limitations in terms of universal access and service with respect to information and communications technologies. Telephony and broadcast service will be actively promoted, and Internet access encouraged, to ensure that these workers and communities can access communications, information and knowledge, just like their fellow citizens.

Households in cities, towns, villages, settlements, and in rural and remote areas, especially those with the lowest household incomes, shall have universal service in respect of telephony and broadcasting, and access to Internet broadband, in order to promote their educational attainment levels, their economic participation, their social interaction and their access to a range of public information services, including those related to health care and electronic government.

6 Policy Rationale, Purpose, Goals and Objectives

6.1 Policy Rationale

Namibia requires a universal access and service policy for information and communications technology infrastructure, services and content in order to address its current access deficit with respect to telephony, broadcasting and broadband Internet communications.

6.2 Policy Purpose

This Universal Access and Service Policy for Information and Communications Technologies deals with infrastructure, services and content, and seeks to promote an enabling environment within which regulatory authorities and operators can interact to achieve telephony and broadcasting service and promote Internet and broadband access to the nation, driven by innovation in electronic services that addresses the everyday needs of individuals, households and businesses, whether urban, rural or in remote settlements, supported by governmental and non-governmental organisations alike.
6.3 Goals of Universal Access and Service

The goals of this policy are to:

6.3.1 Ensure the availability, affordability and accessibility for all Namibians in urban, peri-urban, rural and remote areas to the full range of information and communications technology infrastructure, services and content, from fixed or mobile voice communications, through radio and television broadcasting, fixed or mobile Internet and data communications, to full broadband service;

6.3.2 Promote utilisation of a broad range of information and communications technology services for all individuals, households and businesses; in schools, libraries, clinics and other public and community facilities; as well as for people living on mines, farms and nature reserves in Namibia;

6.3.3 Achieve a 98% level of universal access in respect of telephony, broadcasting and broadband services within a period of 10 years or less for individuals, households, businesses and marginalised groups in all cities, towns, villages, settlements and nomadic communities; clinics, schools, libraries and public facilities; small firms, mines, farms and nature reserves; and places where poor households are unable to afford access;

6.3.4 Achieve a 95% level of universal service in respect of telephony, broadcasting and broadband services within a period of 20 years or less for individuals, households, businesses and marginalised groups in all cities, towns, villages and settlements; clinics, schools, libraries and public facilities; small firms, mines, farms and nature reserves; and places where poor households are unable to afford access;

6.3.5 Provide for periodic review of the universal access and service objectives, principles, scope, targets and obligations, with public stakeholder participation, at least every three years, in order to accommodate ongoing change, innovation and convergence in technology, services and content.

6.4 Policy Objectives

The following policy objectives are set:

6.4.1 To provide the information and communications technology sector with policy guidelines for universal access and service on information and communications technology infrastructure, services and content for all Namibians;

6.4.2 To provide for institutional arrangements to ensure universal service in respect of information and communications technology infrastructure, services and content;

6.4.3 To support interventions designed to encourage universal broadband access for individuals and households where television and Internet access is not available;

6.4.4 To provide the regulatory authorities with an enabling framework for addressing matters pertinent to the regulation of the information and communications technology sector within the context of universal access and service, including but not limited to matters
related to the imposition of Universal Access and Service Obligations and the operation of a Universal Access and Service Fund;

6.4.5 To provide government, the private sector and non-governmental organisations with a broad frame for fostering ICT services provision to individuals and households living in poverty or remote areas, and with limited access to services and income opportunities.

7 Policy Actions for Universal Access and Service

7.1 General Principles

The effective implementation of universal access and service policy for information and communication technologies in Namibia requires an appropriate legal foundation and the establishment of specific and enforceable parameters dealing with accountability, governance and co-ordination.

7.1.1 Legal Mandate: The legal mandate for universal access and service derives from the Communications Act, 2009 (Act No. 8 of 2009) which establishes the Regulator, and assigns it both a broad regulatory mandate and one specific to universal access and service. This mandate covers mobile and fixed telephony, radio and television broadcasting, and Internet and broadband infrastructure, services and content, with respect to individuals, households, communities and businesses in urban, rural and remote areas. The mandate further envisages the promotion of competition within the context of a liberalised information and communications technology sector, subject to effective regulation, as an essential foundation for ongoing sector reform in order to enable sustainable universal access and service. The Act will be amended where necessary to align it with the specific provisions set out in this policy.

7.1.2 Accountability: The Ministry of Information and Communication Technology (MICT) is responsible for the formulation of this policy, and for ensuring that its goals and objectives are achieved, and is accountable to the nation. The Competition Authority addresses general competition matters, with due attention to the objectives of universal access and service, and consumer welfare. The Communications Regulatory Authority of Namibia (CRAN) is responsible for effective, independent regulation of universal access and service as set out in this policy, within the overall context and parameters of its broader mandate to regulate the ICT sector. The Minister for ICT reports to the National Assembly in respect of promoting and achieving the objectives of this policy. The Regulator reports to the Minister, who tables such reports to the National Assembly, and publishes annual reports on its progress in respect of universal access and service. Due process in respect of the implementation of these mandates requires regular public consultation and interaction with stakeholders and stakeholder groupings. These aspects of accountability will be reflected in the relevant sector-applicable laws.

7.1.3 Governance: This policy requires a high level of professional ethics, proper conduct and good governance in all interactions between government, regulatory agencies, the information and communications technologies industry and the non-governmental sector. It is acknowledged that each of these sectors can make a valuable contribution to universal access and service; hence all should be encouraged to make such contributions within their sphere of operation without
fear or favour. Legislation will therefore safeguard the independence of the Regulator, require transparency, good governance and due process in regulatory rule-making and decision-making, as well providing for public stakeholder consultation. It will further mandate periodic consultative review of universal access and service definitions, targets, obligations and achievements.

7.1.4 Policy Co-ordination: Universal service and access policy serves to support and strengthen other policies for socio-economic development, including rural electrification, ICT for development, ICT in education, national poverty reduction and economic growth strategies, and the achievement of Namibia’s Millennium Development Goals (MDGs). Thus, universal access and service with respect to information and communications technologies will be addressed in consultation with and taking into account related needs expressed by government with respect to education; electrification; health; agricultural development; mining; manufacturing, trade and tourism; and other economic and social sectors to ensure that the needs of these sectors are addressed.

7.1.5 Policy Implementation: This policy provides guidelines for concrete implementation and specific interventions on the part of the responsible authorities and other stakeholders in support of universal access and service. It is expected that implementation will take place both in respect of the specific mandate and the overall policy direction. This policy recognises that the evolution of technology, the manifestation of ongoing sector phenomena such as convergence, and the development of new implementation strategies, together require that the specific content of the policy be revised and updated from time to time in accordance with changing conditions.

7.2 Strategic Universal Access and Service Interventions

Achieving universal access and service in respect of information and communications technology infrastructure, services and content requires a number of specific and targeted regulatory interventions, including but not limited to the imposition of universal access and service obligations upon licensees and the establishment of a universal access and service fund sourced from the ICT sector to provide funding support for universal access and service.

7.2.1 Targets and Definitions

7.2.1.1 Notwithstanding the definitions of universal access and service contained in this policy, and the universal access and service targets set out herein, it is the responsibility of the Regulator to further specify the necessary definitions and targets in respect of universal access and service in accordance with its mandate and in the light of changing conditions.

7.2.1.2 Such definitions and targets shall be specified by means of a public, consultative process, and shall be updated regularly as necessary.

7.2.1.3 Such definitions and targets shall be officially published and readily publicly available, including on the website of the Regulator.
7.2.2 Universal Access and Service Obligations

7.2.2.1 All telecommunications and broadcasting licensees will be subject to universal access and service obligations, as determined by the Regulator from time to time.

7.2.2.2 Such universal access and service obligations may be included in the licence as agreed with the respective licensee (with due consideration of the licensee’s business plan where applicable) and issued following the formal licensing procedure, or may be imposed by regulation following a formal rule-making procedure including public consultation, or both.

7.2.2.3 Universal access and service obligations will normally be specific to the category of licensee, and may include requirements to extend signal coverage or network infrastructure or to ensure the provision of specified services and facilities to designated areas, towns, villages, settlements, schools or other public facilities, or a class or category thereof, as determined by the Regulator, following public consultation. The provision of certain services (such as free emergency calling and directory enquiries) to all customers will also be considered to fall within the ambit of universal access and service obligations. Universal access and service obligations should prioritise areas and populations unlikely to be served by the market, and may accordingly be determined on a geographical basis, and be asymmetrical.

7.2.2.4 The criteria to be considered in the imposition of such asymmetrical or geographically-based universal access and service obligations shall be fair, transparent and competitively neutral, and shall be clearly specified either in the law or through regulation.

7.2.2.5 The Regulator shall publish details of universal access and service obligations, and make them readily and publicly available, including on its website.

7.2.2.6 Licensees shall be required to report to the Regulator on a regular basis, at least annually, on their progress in fulfilling their universal access and service obligations. The Regulator shall ensure the publication of such progress reporting, with due regard to competitively sensitive information, including on its website.

7.2.2.7 The imposition of universal access and service obligations shall include the specification of appropriate sanctions for failure to comply, along with a fair but expeditious process for imposing them. Compliance may be monitored or audited by the Regulator at its discretion. Where licensees fail to meet their obligations, they shall report the reasons therefore, and the process for the imposition of the appropriate sanctions may be invoked.

7.2.2.8 The criteria and parameters of universal access and service obligations, together with their implementation, shall be subject to periodic review through a public consultation process involving stakeholders.
7.2.3 **Universal Access and Service Fund**

7.2.3.1 A Universal Access and Service Fund will be established in order to support interventions in pursuance of the national goal of achieving universal access and service in respect of information and communications technology infrastructure, services and content.

7.2.3.2 The management and operation of the Universal Access and Service Fund will be undertaken by the Regulator in accordance with the principles of good governance as set forth in this policy, and elsewhere in the relevant legislation, and subject to detailed provisions as specified in legislation.

7.2.3.3 All telecommunications and broadcasting licensees will be required to contribute to the fund in accordance with a formula to be determined by the Regulator from time to time, following a consultative rule-making and market review process. Contributions will be based on specified auditable percentage of revenue, and are payable annually. Contributions may not be unduly onerous. The formula governing contributions will be reviewed periodically, at three to five year intervals.

7.2.3.4 Funds in the Universal Access and Service Fund will be utilised primarily to support a range of interventions designed to increase the level of universal access and service to information and communications technology infrastructure, services and content in Namibia. A small but reasonable proportion of the Fund may also be used to offset expenditures necessary to defray the costs of its operation, as well as to support ancillary research into universal access and service.

7.2.3.5 The Universal Access and Service Fund shall be subject to an independent audit on an annual basis, and the audit report shall be published.

7.2.3.6 The Universal Access and Service Fund shall report annually to the Minister, who will table the report to the National Assembly. Such reports shall be published and made readily and publicly available, including on the website of the Regulator.

7.2.3.7 The Regulator will be required to conduct a formal quantitative access gap analysis on a regular basis in order to quantify the access gap and estimate the level of subsidies and support necessary in relation to voice and data telecommunications, radio and television broadcasting, and the Internet and broadband, as a basis for determining the revenue requirement of the Fund. Such an analysis should be disaggregated as much as possible, along the relevant axes of the digital divide, and provide at least a regional breakdown of the access gap.

7.2.3.8 Expenditure from the Universal Access and Service Fund will be subject to a detailed, carefully-researched needs analysis and supported by ongoing research into needs and priorities, implementation, effectiveness and impact, with a focus on areas, communities and individuals where competition alone is insufficient to provide universal access and service. Such expenditure should prioritise public access models, telecentres, access for schools and further education institutions,
libraries, hospitals and clinics, SMEs, co-operatives or other projects identified in the needs analysis. The Fund should also address the need for appropriate supporting interventions such as consumer-oriented education, ICT literacy and e-skills development to promote effective Internet usage at individual and community level, and integration with complementary or support services from community-focused organisations. The Fund may also be used on a limited basis to finance ancillary infrastructure, services and content - such as contributions towards the provision of electricity or energy supply.

7.2.3.9 Expenditure from the Universal Access and Service Fund should be undertaken in accordance with implementation plans developed by the Regulator from time to time via a public consultative process.

7.2.3.10 The Regulator will determine the process to be followed for application of the funds, which shall not be limited to subsidies to licensees. Major grants from the fund will be awarded on a competitive basis, with tenders available to all bidders. The details of such process will be published in advance and will be fair and transparent. The outcomes of the process will also be made publicly available.

7.2.3.11 Competitive, least-subsidy bidding should be used as a key, but not necessarily exclusive, criterion for evaluating, selecting and supporting individual project bids, with preference given to interventions where a ‘smart’ or limited subsidy, aimed at encouraging licensees to enter the market or users to acquire a service, rather than to create an unending dependency on the Fund, is most effective.

7.2.3.12 In respect of the Universal Access and Service Fund, the Regulator will enjoy revenue raising and fund distribution powers, along with governance and financial accountability, in accordance with the provisions of the 2009 Communications Act and other applicable legislation. It will not itself directly undertake project implementation.

7.2.4 Infrastructure Development Financing

The Ministry and the Regulator will investigate a range of additional funding options to finance the access gap, including an infrastructure development financing approach, with consideration given to borrowing funds from development financing institutions such as the Development Bank of Southern Africa or the African Development Bank, noting that the latter institution is currently engaged in a major infrastructure financing programme for Namibia. This will enable infrastructure to be paid for in advance and repaid over a concessionary period, allowing the multiplier benefits of the information and communications technology infrastructure development to be reaped over the shorter term.

7.3 Interventions Supporting Universal Access and Service

This policy recognises that achieving universal access and service in respect of information and communications technology infrastructure, services and content exists within and is supported by the entire ICT policy and regulatory environment. There are, therefore, a number of interventions where the primary objective may not be universal access and service, but where the
overall impact serves to increase universal access and service. These include, but are not limited to, the promotion of competition to increase the range of innovative services available to users, and price regulation to promote affordability.

The Regulator is accordingly required to give attention to the future processes required for ongoing broad ICT sector reform, including: consideration of determinations that may be required for effective competition in identified market segments which may be bottlenecks to sector development and more affordable pricing; matters related to affordability and access to international bandwidth via undersea cable; the provision of wholesale and retail terrestrial fibre, including cross-border connectivity; spectrum allocation and assignment; interconnection, facilities leasing and infrastructure sharing; rights of way and numbering; as well as matters pertaining to quality of service and consumer protection.

7.3.1 Liberalisation and ICT Sector Reform: This policy recognises that the success of universal access and service policy is critically dependent upon the ongoing implementation of ICT sector reform, including further market liberalisation. Accordingly, the Regulator, with the support of the Ministry, will seek on an ongoing basis to strengthen competition across the sector, with further liberalisation of appropriate market segments, such as customer premises equipment (CPE), Internet service providers (ISPs), voice and data communications, radio and television broadcasting, value-added network services (VANS), international gateways and undersea cables, and terrestrial and cross-border fibre.

7.3.2 Strong Regulatory Framework: This policy further recognises the importance of a strong and independent regulator, and an effective regulatory framework, to enhance universal access and service and to promote effective competition. Such a regulatory framework will, inter alia: support a flexible spectrum policy to ensure availability and affordability of spectrum in support of universal access and service; ensure effective application of the principles of fair competition to prevent abuse of dominance and other anti-competitive practices; provide for cost-based open network access, facilities leasing and interconnection, including local loop unbundling and asymmetric interconnection; promote co-location and infrastructure sharing to reduce the costs of infrastructure rollout; enforce effective regulation of prices at both wholesale and retail levels to ensure affordability for consumers; and stimulate the development of innovative services.

7.3.3 Supply-side Innovation: This policy recognises that effective universal access and service policy requires that the supply of ICT infrastructure, services and content needs to be developed and stimulated. Both the Ministry and the Regulator will support an appropriate combination of complementary supply-side strategies to extend ICT networks and increase funding for access interventions in order to meet universal access and service objectives and targets. These may include ‘pay or play’ mechanisms, tax incentives, the introduction of public-private partnerships (PPPs), limited support for the rollout of infrastructure ancillary to information and communications technology infrastructure, support for the development of local content and applications across all platforms, and measures to facilitate community participation.

7.3.4 Demand-side Innovation: This policy further recognises that stimulating the demand for ICT infrastructure, services and content, serves to support universal access and service. Both the Ministry and the Regulator will support an appropriate mix of complementary strategies to stimulate demand for access to and uptake of ICT networks, services and content.
These include but are not limited to: the provision of public access points and the provision of access to ICT in public facilities and anchor institutions such as universities, schools, libraries, health and community centres; the development of school connectivity, content and teaching (ICT4E) projects; the implementation of ICT for development (ICT4D) interventions; the promotion of e-health, e-government, e-procurement and e-tax-filing; the development of local content and applications across all platforms; and the provision of subsidies to needy individuals, households and communities.

7.3.5 Quality of Service: Regulation to ensure quality of service (QoS) is likewise an essential area of regulation that impacts directly on universal access and service interventions, ensuring that consumers in remote regions and poor communities are not disadvantaged in terms of the quality of service that they enjoy. Quality of service requirements will be specified by the Regulator, in licences or by regulation. Such requirements need to include clearly defined components, including those related to supply of services, customer complaints and redress, faults and repairs, voice or data quality, billing requirements, and provision of designated universal access and service obligations, including free emergency calls. Quality of service benchmarks need to be laid down by the Regulator in respect of all relevant services, including fixed and mobile voice, radio and television broadcasting, Internet and data services, and fixed and mobile broadband. The compliance with such benchmarks and standards needs to be regularly and independently assessed and the results made publicly available, including on the website of the Regulator. The parameters, components and benchmarks in respect of quality of service need to be regularly reviewed through a process of public, stakeholder consultation.

7.3.6 Consumer Protection: Universal access and service policy is also closely supported by consumer protection regulation. The requirements and parameters for consumer protection need to be clearly specified by the Regulator and made binding upon all licensees. Such requirements may differ in respect of classes of service, but should be specified for all relevant services, including fixed and mobile voice, radio and television broadcasting, data and Internet, and broadband, and should be publicly available, including on the website of the Regulator. Similarly, channels for complaints from customers need to be clearly specified, and should include escalation procedures, with complaints lodged with the licensee in the first instance, and the Regulator acting as the referee of last resort. Further, licensees must be required to inform their customers of the rights as customers and consumers, and of the channels and escalation procedures available to them for complaints. Consumers need to be surveyed independently on a regular basis in relation to quality of service, complaints issues, level of satisfaction with licensees and their services, and their view of the effectiveness of the Regulator. The results of such consumer satisfaction surveys should be made publicly available, including on the website of the Regulator. Finally, the parameters, criteria and requirements relating to consumer protection should be periodically reviewed and updated via a public process with stakeholder participation.

7.4 Facilitating Agencies, Institutions and Communities

It is recognised that universal access and service with respect to information and communications technology infrastructure, services and content can best be realised through encouraging a wide range of contributions from facilitating agencies such as licensees, the Regulator and government entities, including schools, libraries, hospitals and clinics. Similarly, non-governmental
organisations in the education, health, agricultural and services sectors can foster universal access at the community level and universal service at the household and SME level by providing services that are in demand, including ICT literacy training and community services. The identification by impoverished communities of their particular needs with respect to information and communications technology access and service can assist in the correct identification of regulatory measures and other interventions necessary to achieve the goals of the policy.

7.5  Realising the Value from UAS: Promoting the Electronic Content Sector

Social and economic value can only be realised through effective provision of content-based services, using ICT networks and devices. Hence, government will encourage the emergence of electronic content services, with due attention to electronic government services aimed at low-income, poor and remote households.

Regulatory action should consider the measures required to promote the electronic content sector, with attention to local, regional (African) and international content. In particular, attention must be given to strengthening competition in the broadcast market and, promoting IPTV and mobile TV.

8  Promoting Policy Effectiveness: Implementation, Monitoring and Review

8.1 The goals and objectives of this Universal Access and Service Policy for Information and Communications Technologies with respect to Information and communications technologies are subject to annual reporting to Parliament.

8.2 MICT is responsible for the adoption and promulgation via Government Gazette of this policy, for issuing the necessary policy guidelines to the Regulator in respect of its implementation, and for ensuring that this policy is given concrete effect in legislation and for adopting the necessary amendments to legislation to do so. 8.3 The Regulator is responsible for developing a strategic implementation plan to ensure that the goals, targets and deliverables set forth in this policy and as reflected in the appropriate legislation, are effected.

8.4 The Regulator is responsible for introducing a simple yet effective monitoring and evaluation framework, including regulatory impact assessment, to assess progress with respect to universal access and service, as regards fulfilment of Universal Access and Service Obligations, the implementation of the Universal Access and Service Fund, and other matters set out in this policy.

8.5 The requirements set out for the Regulator in this policy are subject to annual reporting to the National Assembly.
8.6 The content and parameters of this Universal Access and Service Policy for Information and Communications Technologies are subject to periodic review and updating via a public process with stakeholder participation.
## List of Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>ACE</td>
<td>Africa Coast to Europe (undersea cable)</td>
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<tr>
<td>AfDB</td>
<td>African Development Bank</td>
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<tr>
<td>CPE</td>
<td>Customer premises equipment</td>
</tr>
<tr>
<td>CRAN</td>
<td>Communications Regulatory Authority of Namibia</td>
</tr>
<tr>
<td>DBN</td>
<td>Development Bank of Namibia</td>
</tr>
<tr>
<td>DBSA</td>
<td>Development Bank of Southern Africa</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<tr>
<td>ICT</td>
<td>Information and Communications Technologies</td>
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<tr>
<td>ICT4D</td>
<td>Information and Communications Technologies for Development</td>
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<tr>
<td>ICT4E</td>
<td>Information and Communications Technologies for Education</td>
</tr>
<tr>
<td>IPTV</td>
<td>Internet Protocol Television</td>
</tr>
<tr>
<td>NDP</td>
<td>National Development Plan</td>
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<tr>
<td>NRA</td>
<td>National Regulatory Authority</td>
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<td>MICT</td>
<td>Ministry of Information and Communications</td>
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<td>QoS</td>
<td>Quality of Service</td>
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<td>SME</td>
<td>Small and medium enterprises</td>
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<td>UASF</td>
<td>Universal Access and Service Fund</td>
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<td>UASO</td>
<td>Universal Access and Service Obligations</td>
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<tr>
<td>VANS</td>
<td>Value-added Network Services</td>
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<td>WACS</td>
<td>West Africa Cable System</td>
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