Implementation of the Recommendation on the Promotion and Use of Multilingualism and the Universal Access to Cyberspace

32 C/Resolution 41

Country Report: Namibia[1]

31 January 2007

Introduction

Namibia has so far achieved mixed results with regard to the Recommendation on the Promotion and Use of Multilingualism and Universal Access to Cyberspace adopted in 2003. The country had already some legal and policy instruments in place that correspond to certain provisions of the Recommendation prior to the adoption of the recommendation in 2003. Moreover, some actions were implemented to meet the provisions of the Recommendation, while a host of others still need to be undertaken. This Report seeks to highlight some of the successes and shortcomings with regard to the Promotion and Use of Multilingualism and Universal Access to Cyberspace.

1. Development of multilingual content and systems

Namibia is committed to the promotion of multilingualism and the perseverance of indigenous languages. *Article 19* of *Chapter 3* (Fundamental Human Rights and Freedoms) of the Namibian Constitution promotes among others the use and promotion of the different languages spoken in the country. While English is the official language, almost all the indigenous languages are taught in schools and are used on the national broadcasting system. It has been the Government's long standing desire to promote the use of the different languages in the Cyberspace as well, although there has not been any measurable attempt to realise this goal.

A *Language Policy* was formulated soon after independence to promote the use of and teaching indigenous languages in schools. In 2003 this Policy was revised and a new *Language Policy Discussion Document* was circulated. This proposes that indigenous languages should be the medium of instruction during the first four school years. These languages are to be taught as subjects in schools from the fifth school year, in spite of English being the medium of instruction from that level of education.

What is lacking however are precise administrative measures and practical actions to promote the use of multilingualism in the cyberspace. So far very little effort has been made by both the State and Non-State actors.

Linked to the promotion of indigenous languages in the cyberspace is the development of local electronic content. Like other counterparts in the developing world, Namibia has adopted relevant policies and deployed the necessary communications infrastructure to promote access to the cyberspace, but as a nation in transition, Namibia has been

---

[1] This Report was compiled by Mr. William Heuva who is a Deputy Director in the Ministry of Information and Broadcasting and at the same time the UNESCO National Commissioner for Communication and Information. E-Mail: wheuva@yahoo.co.uk OR william.heuva@gmail.com

confronted with an enormous challenge to develop electronic content (e-content) for its ICTs, relevant to the citizens. The available content is predominantly in English with marginal domestic e-content in the vernaculars. The media have nevertheless, been making a significant contribution to the development of domestic e-content needed. Many newspapers have already launched electronic (on-line) versions, which have been an important source of content in local languages.

Nevertheless, most of the newspapers' e-content is also not in the vernaculars. In contrast, the electronic media, notably radio has been a source of domestic e-content in vernaculars. The public radio, more particularly the national service broadcast in English, can be accessed on the Internet, while public television is being carried on the *Digital Satellite Television* (DStv) a franchise of the South African-based *MultiChoice Africa*, which enables it to be accessed across the country and beyond; the only barrier being the limited access to the *DStv* service by the majority of the population due to economic factors.

2. Facilitating access to networks and services

A. Policy and legal instruments
Namibia has done fairly well in terms of adopting the relevant policy and legal instruments to facilitate access to networks and services, although there is still room for improvement.

For instance, the Namibian Constitution in *Article 95* (Promotion of the Welfare of the People) of *Chapter 11* (Principles of State Policy), obliges the State to "ensure that every citizen has a right to fair and reasonable access to public facilities and services in accordance with the law" (Republic of Namibia, 1990: 51, 52).[i] Among these services count the information and communication services seen as crucial to the improvement of the socio-economic situation of the majority of the people and for the democratisation of new society in transition. It should be added that information and communication services are not confined to the traditional ones, but encompass the new information and communications technologies (ICTs) as well.

The *Information Policy* adopted by the State soon after the independence of the country in 1990 to transform the media and communications sector strongly prescribes the expansion of communications infrastructure across the length and breadth of the country.

Also, both the *Namibian Broadcasting Act, 1991* (Act 9 of 1991) and the *Posts and Telecommunications Act, 1992* (Act 19 of 1992) emphasise the expansion of information and communication services to all the citizens and modernisation (automation and digitalization) of the telecommunications network.

The *Telecommunications Policy and Regulatory Framework* adopted in 1999 seeks, among others, to promote the provision of universal and affordable telecommunication services which are the precondition for access to the cyberspace. The objectives of this framework are:
- the provision of broad, reliable and efficient supply of telecommunications services at the lowest cost for the nation;

- the creation of an environment for the development of the Information and Communication Society;
- the development of telecommunications infrastructure where it is needed;
- the provision of universal access for all citizens to basic telephone services at affordable prices;
- the development of the sector to reap its potential for national growth and to encourage public and private sector partnership; and
- the realisation of regional telecommunications cooperation to promote efficiency in economical and industrial affairs across the borders (Ministry of Information and Broadcasting, 1999: 12).[ii]

Most relevant to the cyberspace is the *Information and Communications* (ICT) *Policy* adopted in 2002 to promote the National Information and Communication Initiative (NICI) and thereby the transformation of the country into an 'information society'. It provides a framework for the development of Namibia's information and communication infrastructure, its human resources development and the legal requirements that would enable the country to transform itself into an information society. The *ICT Policy* focuses on the:

- enhancement of rural access to information;
- growth and stabilisation of the ICT professional community;
- facilitation of excellent ICT public education, especially in schools;
- fostering of e-commerce, e-business and e-government;
- strengthening of the existing ICT infrastructure; and
- growth of the ICT industry (Stork and Aochamub, 2003: 30, 31).[iii]

Last, but not least, is the 2002 *Communications Bill* that still needs to be enacted into a law. This *Bill* draws on and improves on all the above-mentioned policy and legal instruments and it provides for the creation of a vibrant telecommunications sector which addresses most of this sector's challenges in the 21st Century. Its broader objectives are to:

(a) establish the general framework governing the opening of the telecommunications sector in Namibia to competition;
(b) provide for the regulation and control of communications activities by an independent regulatory authority;
(c) promote the availability of a wide range of high-quality, reliable and efficient telecommunications services to all users in the country;
(d) promote technological innovation and the deployment of advanced facilities and services in order to respond to the diverse needs of commerce and industry and support the social and economic growth on Namibia;
(e) encourage local participation in the communication sector in Namibia;
(f) increase access to telecommunications and advanced information services to all regions of Namibia at just, reasonable and affordable prices;
(g) ensure that the costs to customers for telecommunications services are just, reasonable and affordable;

(h) stimulate the commercial development and use of the radio frequency spectrum in the best interests of Namibia;

(i) encourage private investment in the telecommunications sector;

(j) enhance regional and global integration and cooperation in the field of communications;

(k) ensure fair competition and consumer protection in the telecommunications sector;

(l) advance and protect the interests of the public in the providing of communications services and the allocation of radio frequencies to the public (*Communications Bill*, 2002, Chapter 1, Section 2: 6-7).[iv]

B. Infrastructure (networks)

Fair attempts have been made to roll out the necessary communications infrastructure since 1990. The national broadcaster, the *Namibian Broadcasting Corporation* (NBC), has been expanding its infrastructure since independence, with radio signals reaching about 90 percent of the population and television signals close to 45 percent. It thus, improved the penetration of radio and television signals from 65 percent and 20 percent respectively during the colonial era.

Telecommunications, being the platform on which the new ICTs are constructed, plays an important role with regard to the universal access to the cyberspace. The national telecommunications operator, *Telecom Namibia* has fairly rolled out the network to reach many parts of the country that were unreachable before, improving the teledensity from 4.0 percent in 1992 to 6, 9 percent per 100 inhabitants in 2005. *Telecom Namibia* has also provided public telephone connections in the form of coin and card phones, but these could only reach a mere 2,4 percent of the population by 2005 (*Telecom Namibia*, 2005: 10).[v]

The diffusion of mobile telephony in the Namibian society has been spectacular. Since its introduction to Namibia in 1995, it has experienced a meteoric growth, and by 2002 its teledensity surpassed that of the fixed line telephony, recording a penetration rate of 6.97 percent compared to 6.4 percent of the fixed-line telephony during the corresponding time. Towards the end of 2003 *MTC* outperformed *Telecom Namibia* in terms of the number of customers, as its subscriber base stood at 200 000, while those of *Telecom Namibia* were estimated at 120 000 (Stork and Aochamub, 2003: 83). By 2005 subscriber to *MTC* increased by 42 percent to 403 000, representing a 20 percent penetration of mobile telephony into the Namibian population (*Namibia Post and Telecommunications Holdings Limited*, 2005: 2).[vi] The introduction of the pre-paid service called "tango" in 2000 largely contributed to this phenomenal development, which repositioned the mobile telephony as a mainstream service, and no longer a substitute for the fixed-line telephony. This development has brought telephony within the reach of the working class; which has resulted in the emergence of what Mawaki Chango (2004)[vii] calls a "communication society."

However, the teledensity on which most of the above-mentioned data is constructed does not truly reflect the equitable telephone distribution across the country and its penetration into households. Neither does it provide information about common distributional biases, especially rural-urban and class biases (Urey, 1995: 58).[viii] Emmanuel Forestier, Jeremy

Grace and Charles Kenny (2002: 627)[ix] make clearer the shortcoming of the concept teledensity when they argue that:

> National teledensity is not the best variable for measuring the poor's access to telecommunications. It is a measure of the number of telephones per capita, not the level of access to telephones. Telephone access is highly concentrated amongst the rich and urban populations.

Thus, in most cases, telephones are fairly accessible in the wealthy sections of the urban areas, while access in poor urban and rural areas tends to be limited. Taking results of the national census provides another perspective of telephone penetration in society. For instance, the 2004 Population and Housing Census on the penetration of telephones into Namibian households shows that only 33, 5 percent of the households in 2004 owned a telephone, of which 60, 4 percent were in urban areas and 15, 2 percent in the rural areas (see **Appendix A**). Moreover, 47, 1 percent of the households in rural areas did not have access to telephones, despite the fact that the majority of the Namibians live in rural areas as can be seen from **Appendix A**. There were 221 115 households in rural areas compared to 150 514 households in urban areas in 2004.

Drawing from this data it can be seen that while Namibia has relatively done well, it still needs to do more in terms of providing the fixed-line telephony to the majority of the people, in order to achieve a universal access to basic and affordable telecommunications services.

C. Services
Apart from the roll-out of basic (fixed-line) telephony infrastructure Namibia has made relative successes in modernising and digitalising its network. By 2000 the country manages to achieve a complete digitalized backbone, thereby preparing the ground for the development of a 'digital national superhighway'. With regard to service provision, the State-owned *Telecom Namibia* has made a significant progress in terms of the provision of new services and products on the network that are of relevance to the construction of an information society and thus crucial to the cyberspace. For instance as far back as 1995 it introduced the Integrated Service Digital Network (ISDN).[x] The service was only availed to the residential customers in 1998. In 2000 the country introduced the Very Small Aperture Terminal Satellite System (VSAT) to connect some of the unreachable remote areas. During the same year (2000) the country introduced the Internet Protocol (a voice carried over the Internet), but it was only in 2004 that the Always On Internet Protocol (AOIP) was introduced, initially to limited geographical areas of the country.

Other services introduced, that are of vital relevance to the cyberspace include the Wireless Local Area Network (WLAN), the upgrading of the IP to the level of Multi-Protocol Label Switching (MPLS) and the implementation of the Asymmetrical Digital Subscriber Line (ADSL) to support broadband, and the utilisation of the metropolitan Ethernet as high speed local area network technology. All these technologies are layered on the network. Other services rolled out and offered to the business sector include services such as tele-conferencing, toll-free, managed data network services and teledata.

The residential customers have been receiving a variety of value-added services such as call forwarding, itemised billing, telemail and free voicemail service.

Telecom Namibia's sister company, *Mobile Telecommunications Limited* (MTC) provides services such as voicemail, fax, data and short message services (SMS), in addition to the mobile telephony to the citizens.

D. PC-Density

Namibia has a very low computer penetration, as only 4.6 percent households had workable computers or laptops in 2004, while only 3.9 percent of the Namibians had an e-mail address in the same year (Stork, 2004: 16, 38).[xi] The low diffusion of computers in the Namibian society indicates the need to do more in order to reduce the digital divide.

E. Internet-Density

While Namibia has experienced a phenomenal growth in Internet connectivity, its diffusion in society has been dismal. In 2004 only 1, 66 percent of the Namibia households had working Internet connection, all of them in urban areas (Stork, 2004: 16). By the end of 2005 Namibia's 'Internet density' stood at 3, 7 per cent, or a total of 75 000 Internet users in the country (Internet World Stats, 2005: 2).[xii] Like most of the Namibian media with the exception of radio, the Internet has remained confined to the urban, upper income, literate users, because of costs related to computers, telephones and electricity. There is also the general low computer literacy, of the majority of the Namibian population. Its diffusion beyond the capital and major towns thus, remained dismal.

Public access points, such as the Internet Cafés, are concentrated in the capital city and major towns with no such activities in the rural areas. Undertaken primarily on commercial basis with no incentives to invest in the unprofitable poor and rural areas, the result has been the marginalisation of the non-profitable areas. Apart from the Cyber Cafés, the operations of the country's Internet Service Providers (ISPs) have also been confined to urban centres with no connectivity whatsoever, in the villages and rural settlements (Stork, 2004).[xiii]

F. Universal Service/Access

The 1999 *Telecommunications Policy and Regulatory Framework* underscores the provision of universal services. In order to achieve the universal of telecommunication services the Namibian government has proposed the establishment of a *Universal Service Fund* (USF) to which all the service providers, public or private, will contribute to finance the provision of universal services. The rationale behind committing private operators to contribute to the *USF* is necessitated by the fact that they interconnect with and draw on the network provided by *Telecom Namibia* that has a universal service obligation and they (private operators) should, therefore, contribute towards the expansion of the basic telecommunications infrastructure on which they interconnect.

Aware that it is unrealistic, if not impossible, to provide a telephone connection in every home, the government has shifted emphasis from universal service to universal access. Thus, the realistic and implementable objective to provide a telephone connection within walking distance of every citizen rather than a telephone in every household. However, by January 2007 the USF has not been set up, due to the failure to enact the

Communications Bill that provides for the institutional framework for the realisation of this objective.

Apart from embracing the universal service, Namibia has also recognised the need to address the universal service beyond narrow and parochial traditional concerns with the basic telephony and its exclusive focus on the individual. The country has therefore, embraced the new and expansive usage of the concept which foregrounds the expansion of service provision to include the value-added services, such as fax, e-mail and the Internet.

Moreover, the re-defined version of the universal service concept further encompasses the provision of services beyond the individual and households in order to cover public spaces and societal institutions, such as schools, clinics, hospitals and community centres (Hudson, 1997: 399).[xiv] Namibia has planned to achieve these objectives through the establishment of Multi-Purpose Community Centres (MPCCs) across the country as set out in *ICT Policy*. The MPCCs provide a basket of affordable telecommunications services to the communities. Nevertheless, more MPCCs need to be set up to realise the expansive version of the universal service/access goal.

3. Development of and access to public domain content

Namibia's *Information Policy* formulated in 1991 provides for people's access to information which is a precondition for the establishment of an informed citizenry that would make informed decisions and relevant choices in a democracy. The Information Policy therefore foregrounds the free-flow-of- information and the people's right to know. However, the country presently lacks concrete legal and regulatory regimes to enforce these rights and freedoms. The country still needs to enact a *Freedom of Information Act*, which would compel the State and all public institutions to provide information in their possession on request the public.

Despite this shortcoming Namibia has relatively done well in the preparation for e-governance and e-democracy as can be seen from the information below.

3.1 Electronic government

Electronic governance is an important catalyst for the improvement of the citizens' access to government information and services. Since participation in the e-government in the digital age relates to the concept of citizenship, the lack of participation would prevent citizens from engaging in the activities of their government. The ICTs can expedite the citizens' access to adequate and reliable government information and thereby promote their participation in the government's decision-making process. Thus, electronic government enhances participatory democracy. Mark Warschauer (2003: 28[xv] cited in Murdock and Golding, 2004: 245)[xvi] makes this point clear when he notes that as more forms of communication, social networking, political debate and decision making gravitate to online media, those without access to the technology would be shut out of opportunities to practice their full citizenship. "To be disconnected is to be disenfranchised", he emphasises. Namibia has therefore, embraced e-governance to transform and support its activities. Its e-government is constructed on four main activities, notably:
(a) e-administration, the administrative and intergovernmental processes;
(b) e-service, the provision of public services to the citizens electronically;

(c) e-democracy, the participation of people in the activities of the government by using the ICTs; and

(d) e-governance, the coordination of co-operative relationships among public, private and civil society with the assistance of the ICTs (Stork and Aochamub, 2003: 36).

The Government established its presence on the WWW as far back as 1997, when it commissioned a French company, *Cablevision*, to develop a government website, *Namibia Online*. However, due to high costs involved, the government took over the responsibility of maintaining the site (Office of the Prime Minister, 2000: 107).[xvii] Today the Government operates a website, www.grnnet.gov.na under the Office of the Prime Minister that is accessible to all citizens and interested persons and institutions anywhere in the world, despite data being not regularly updated.

The legislature also introduced ICTs in 2000. Assisted by the United States of America-based National Democracy Institute (NDI), Parliament in 2001 launched an Internet-based Information Management System (IMS), consisting of four divisions: (a) the public website, which serves as a depository of parliamentary information such as Bills, Acts, committee reports and minutes that can be assessed by the public; (b) the public discussion forum, which allows the public to discuss matters of public interests with the Parliamentarians; (c) the member Intranet that linked members of Parliament among themselves and the staff and; (d) the Intranet that enables the administrative support staff to provide back-up support to the parliamentarians (Stork and Aochamub, 2003: 43, 44).

Parliament in April 2003 launched a "constituency outreach" programme, to assist citizens to easily access information on Namibian legislation and the legislative process. Attached to this programme was a mobile training unit that expanded these services to the far-flung areas not connected to the Internet, and thereby exposed people to civic education. Parliament furthermore has set up a computer laboratory accessible to parliamentarians and the public to ensure Namibians, both the lawmakers the public, have access to public documents and information.

Since the Namibian government set in motion the decentralisation process of its functions to regional and local authorities it has employed new ICTs to strengthen its efforts in this regard. The ICTs would arguably enable the people in the regions to break years of isolation and thereby participate in the activities of their government at the regional and local levels, since these 'governments' are closest to them. In this regard the Ministry of Regional, Local Government and Housing and Rural Development, which is tasked with the process of decentralisation, in partnership with the NDI and the Universities of Namibia and Tampere (Finland) in 2002 established a project called CABLE aimed at strengthening the decentralisation process through the implementation of a number of e-government projects (Stork and Aochamub, 2003: 45).

3.2 Local Government
The local authorities (municipalities) with the exception of the Windhoek City Council have been very slow in embracing the ICTs. This is the trend in southern Africa according to a study on the e-preparedness of the local authorities in the region conducted by Bernard David and Vonk Tjalling in 2003. Shortcomings that inhibit the ICT

penetration at local government level, are the high access costs, the lack of maintenance as well as the lack of computer literacy among staff and the public (David and Tjalling, 2003. 15, 16).[xviii]

The majority of Namibian local authorities according to these researchers do not have fax lines, while where computer connectivity exists it is unstable and used mainly for administrative purposes such as report writing, financial presentations and access to and use of data bases. In contrast, the Windhoek City Council had fully incorporated the ICT in most of its activities because of its better financial resources compared to the rest of the municipalities. Being the capital and the major industrial centre of the country the City of Windhoek had to be promoted in terms of provision of services to the business sector and to this effect it has enjoyed enormous support from the government and its agencies, including *Telecom Namibia*. This company has invested heavily in the City of Windhoek in terms of network and the provision of services including the latest state-of-the-art technologies. This is understandable because most of the profitable customers, the business sector and multinational companies are based in the capital.

In 2001/2002, *Telecom Namibia* allocated N$ 18 million for cable expansion in the capital to facilitate a speedy provision of telecommunications services, and a further N$ 2 million for fibre optic. At the beginning of 2003 *Telecom Namibia* commissioned *Alcatel* to develop a broadband wireless service for the City, at the cost of N$ 26 million (*The Namibian*, April 10, 2003).[xix] This service would enable business customers to connect their computers to the Internet at high speed without the use of a telephone line. *Telecom Namibia* was the first in the southern African region to introduce this service.

On its own the City Council has acquired various new technologies to facilitate speedy service delivery to its customers, as well as providing technological solutions to its operations. Generally, the City Council uses ICT for its services and its employees have access to computers with Internet connectivity. It has deployed the Virtual Private Network (VPN) to provide mobile solutions to its customers and to enable them pay their accounts on-line and thereby avoid long queues at counters. The City Council's mobile staff working outside can dial into the VPN line to access necessary information from the head office.

4. Reaffirm the adequate balance between the interests of the right-holders and the public interests
Namibia has already enacted the Copyright and Neighbouring Rights legislation during the early 1990s. This legislation is currently being revised to address the critical challenge of intellectual property rights in cyberspace.

5. Development of ICT-skilled Personnel
Despite Namibia's relative improvement in the roll out of the information communication infrastructure during the first sixteen years of independence, Namibia has experienced a major shortage of skilled and experienced information technology personnel. Skilled IT personnel are concentrated in the private sector rather than in the public sector, due to better remuneration and other incentives offered by the private sector. However, State-owned enterprises compete fairly well with the private sector for skilled IT personnel

and, combined, they were able to attract the best skilled IT personnel in the country. These pulling factors have led to a high rate of staff turnover in the ICT industry, marked by the movement of skilled IT personnel from the public sector to the private sector and state-owned enterprises.

Namibia, as early as 1993, addressed the training needs in the IT sector. It set up a Directorate in the Office of the Prime Minister to coordinate IT activities within the public sector. This was followed by the establishment of the Public Service Committee on Information Technology, also in the Office of the Prime Minister. The objective of the Committee was to "coordinate the acquisition and use of computer resources in the government, and to create an environment where government offices, ministries and agencies can exploit the benefits of Information Technology to the fullest" (Republic of Namibia, 1993: 16).[2] This Committee drafted the first-ever policy on IT, which included the following objectives in relation to training:

- the introduction of Information and Technology Education at junior secondary school level, for the purpose of preparing future IT experts as well as preparing a future workforce in the information age.
- the identification of secondary school teachers who can be trained in computer education in order to implement the IT curriculum.
- the assurance, as far as possible, that every junior secondary school acquires at least one computer. This might be impossible for rural schools due to lack of funds and electricity, but the curriculum should be designed such that a great part can be taught without necessarily having "hands on" experience. This would at least be a step forward.
- the encouragement of the university and polytechnic to develop degree and diploma courses relevant to the public service needs.
- the establishment of a system of short courses, and co-operative education, vocational and part-time in-service-training courses that will enable individuals in the computer profession to improve and gradually attain various levels of competence while at work.
- the commitment by the government to train a specific number of candidates every year (Public Service Committee on Information Technology, 1993: 17).[3]

However, the responsibility of developing skilled personnel in IT has increasingly been diverted to where it belongs, notably in the education sector. In the discussion below the successes and shortcomings of the education sector with regard to the development of skilled IT personnel are highlighted.

ICT in the educational sector
Education can be singled out as the most important sector if a sustainable computer literacy and the penetration of the ICTs in society are to be achieved. It is the key sector in the development of a participatory form of access to cyberspace. This is in line with

---

[2] Republic of Namibia (1993). Information Technology Policy for the Public Service, Volume II, October 1993. Public Service Committee on Information Technology
[3] Public Service Committee on Information Technology, 1993. Information Technology Policy for the Public Service, Volume 1, October 1993.

the recognition by the international community that "young people are the future workforce and leading creators and early adopters of ICT", who should be "empowered as learners, developers, contributors, entrepreneurs and decision-makers" (World Summit on Information Society, 2003a: 2).

The *ICT Policy* recognises the need for the Internet in study, research and communication purposes. It also emphasises the need to train teachers and learners in computer literacy in order to contribute to the development of a knowledge-rich society. Despite these lofty ideals the education sector has been relatively slow in responding to the challenges of the cyberspace, in terms of adopting concrete strategies to achieve these objectives, safe for the policy initiatives. In general, the country has much more to do in terms of promoting computer education, because as there are only a handful of schools presently offering ICT-related courses, while most of them do not have computers or lack Internet connectivity.

At policy level, Namibia appears to have gained some grounds. For instance, the Ministry Education through its agency, the National Institute for Educational Development (NIED) in 1995 formulated the *Policy on Information Technology in Education*, which recognises the need for IT training in schools. The *Policy* sets both short term and long term goals for the computer education in schools. The short-term goals were to impart computer literacy and to expose learners, students and teachers to IT technology. The emphasis was on the introduction of ICT-related subjects in schools. On the long-term basis the policy sought to connect all the secondary schools to the Internet and to ensure that all learners completing secondary schools were computer literate. Internet connectivity had to be established at all schools by 2005, while various ICT projects had to be initiated in all the schools. The ultimate objective was to produce an adequate number of ICT professionals in the country, in order to realise the government's broader objectives as set out in its first *IT Policy*, discussed above.

Very little achievements have resulted from the 1995 Policy. The State in 2005 had to formulate another one, called the *IT Policy in Education* that seeks to develop: "ICT literate citizens" and to "produce people capable of working and participating in the new economies and societies arising from ICT and related development" (Ministry of Education, 2005: 4).[xx] Most remarkable in terms of the new policy is its paradigm shift away from emphasis on the predominantly technological oriented information society towards an emphasis on the more social and cultural oriented "knowledge-based society".[xxi]

Despite many shortcomings such as the lack of computers and electricity in many schools, IT-education has none- the- less, been taking place in very few schools and at a very limited degree. Most of the few schools offering IT-related courses are those in the capital and in major towns. By the end of 2005, less than 300 of the 1 545 schools had ICT facilities, while a mere 130 000 out of a total of 600 000 learners in the Namibian school were connected to the Internet (Office of the Prime Minister, 2005: 20).[xxii] Popular courses on offer include Basic Information Science, Computer Literacy, Computer Practice and Computer Studies as part of the Cambridge curriculum. The University of Namibia and the Polytechnic of Namibia have been offering Diploma and Degree

programmes in IT, while a host of private institutions have been conducting computer 'short courses', as well.

In its attempt to provide more schools with computers, the Namibian government in 2005 acquired about 4 000 old computers from Microsoft, shipped them in the country, repaired, updated and distributed to schools in all the 13 political regions. Also during the second round of the World Summit on Information Society held in Tunis in 2005, Namibia, along with Botswana, South Africa, Brazil and China, became the first countries earmarked to benefit from the US$100 Laptops developed by the Massachusetts Institute of Technology under the Nicholas Negroponte.

Efforts to improve Internet connectivity at schools was championed by *SchoolNet* Project launched as a non-profit organisation with an initial funding from the Swedish International Development Co-operation Agency (Sida). The Project seeks to train learners in computer usage and technology. It acquires old computers through donations and refurbishes them into servers and workstations. This work is done by the leaners, who are the main driving force behind the dissemination of computer skills. Thus, learners are the volunteers who receive on-the-job-training

In addition to efforts by *SchoolNet*, the United States Agency for International Development (USAID) in 2001 established a project called *LearnLink*, at the National Institute for Education Development (NIED) to assist the Ministry of Education in the use of IT and the training of IT professionals and thereby enable teachers and learners to acquire IT skills. The project's website facilitates online learning among teachers and learners.

Microsoft Namibia has been supporting schools throughout the country with computer hard- and software in order to enable them to link to the information age, since July 2003. The United States' National Democratic Institute for International Affairs (NDI), which supports the Namibian Parliament with a number of ICT related projects, also established a project called *Civic Information and Communications Technology* at the Namibian schools, which enable learners to research aspects related to the civic education, more particularly local government, and to share their findings with their counterparts in the rest of the world, using the cyberspace.

Another project set to boost Internet connectivity at schools is the *XNet* Development Alliance Trust. Established in 2004 the objective of the Trust was to accelerate Internet connectivity in education, health and development sectors of the country to facilitate the development and integration of ICTs in Namibia.

The University of Namibia and the Polytechnic of Namibia, together with the distance education institution, NAMCOL, the National Institute for Education Development (NIED) and the Ministry in 2000 launched the *Namibian Open Learning Network* (NolNet) with the financial backing of the European Union. The *NolNet* Project seeks to utilise the joint ICT resources and facilities of these organisation to create an e-learning environment in the distance education mode. Towards the end of 2005 about 36 000 Namibians were studying through the open and distance learning mode with *NolNet*'s partner organisations (Kakololo, 2005: 6).[xxiii]

In addition to the above-mentioned efforts the State in 2005 launched the *National ICT Skills Scheme* (NISS) aimed at widening ICTs skills among the youth in Namibia. Targeting mainly, but not exclusively, unemployed youth *NISS* set out to assist the youth acquire basic ICT skills and thereby enable them to find employment or to create employment for themselves in the burgeoning Small and Medium Enterprises (SMEs) ICT sector. Funded with the Social Security Development Fund of the Social Security Commission the scheme sets out to train about 300 unemployed youth annually until five percent of them acquire some form of recognised ICT qualifications.

Participants are trained in internationally certified qualifications, more specifically the following: (a) the International Computer Drivers Licence (ICDL), which provide basic ICT skills; (b) The A+ that gives ICT technician level hardware and software skills: and (c) The Java programmer Certificate that provides advanced programming skills (Ministry of Education, 2005: iii and 3).[xxiv]

Summary and conclusion

As can be seen from the assessment above, Namibia has managed to establish the necessary enabling environment for the implementation of the Recommendation on the Promotion and Use of Multilingualism and the Universal Access to the Cyberspace. For instance, the country has formulated some of the policies and enacted some of the legal instruments to realise the objective of the Recommendation, but much still needs to be done to practically implement most of the provisions these policy and legal instruments. As could be seen from the analysis Namibia has fared relatively well in terms of the roll out of networks and the provision of some of the services, but the challenge remains access to these networks and services by ordinary citizens. A number of reasons can be attributed to these shortcomings. Firstly, few resources, including financial resources have so far been availed to the IT sector and this has undermined efforts to diffuse ICTs services into society. It must be remembered that the need to deploy ICTs in order to reduce the 'digital divide' has been a goal that competes with many other priorities, such as the quest to provide 'basic services' like as education and health facilities and services to all the citizens. Thus, the deployment of ICTs has yet to make it to the top of the State's priority list.

Linked to the above is the economic situation of the beneficiaries of these networks and services. Many are poor and lack disposable income to spend on ICTs. The exorbitant costs of telecommunications services have been another obstacle. Summary it can be concluded that the successful access to networks and services is linked to the structure and performance of the national economy and the standards of living of the citizens. Thus, the economic position of the country and its citizens continues to determine, in the first instance, the penetration of the ICTs in society.

Another drawback as can be seen from the analysis above is the failure to implement policies already adopted. As noted above Namibia adopted well-meant ICT policies, but failed to realise most of them, due to a lack of implementation strategies, apart from the lack of resources, both human and material.

The country still needs to do more in order to realise the Recommendation of the use of multilingualism and the concomitant use of indigenous languages in the cyberspace. There is much to be done in this regard. Equally much effort has to be made to promote a vibrant domestic e-content on the Internet. Linked to this is the development of strata of skilled human resource well versed in the development of content as well as IT technicians.

In conclusion, Namibia has yet to establish a coordinating committee that will look into the implementation of the recommendations of the two World Summits on Information Society.

[i] Republic of Namibia (1990). *Constitution of the Republic of Namibia.*

[ii] Ministry of Information and Broadcasting (1999). Telecommunications Policy and Regulatory Framework for the Republic of Namibia.

[iii] Stork, C. and Aochamub, A. (2003). Namibia in the Information Age. Nepru Research Report, No. 25. Windhoek: Nepru.

[iv] Ministry of Information and Broadcasting (2002). Draft Communications Bill.

[v] *Telecom Namibia* (2005) *Annual Report* 2004/2005.

[vi] Namibia Post and Telecommunications Holdings Limited (2005) *Annual Report,* 2004/2005.

[vii] Chango, M. (2004). "Creating an Information Culture". In *City Press,* August 2004.

[viii] Urey, G. (1995). "Telecommunications and Global Capitalism". In B. Mody, M. Bauer and J.D. Straubhaar (Eds.). Telecommunications Politics: Ownership and Control of the Information Highway in Developing Countries. New Jersey: Lawrence Erlbaum Associates Publishers.

[ix] Forestier, E., Grace, J. and Kenny, C. (2002). "Can information and communication technologies be pro-poor?". *Telecommunications Policy.* Volume 26, Issue 11, December 2002, Pages 623-646.

[x] The ISDN service allows for the simultaneous provision of a combination of voice, data, and visual in one single line and thereby minimising the use of lines that provide separate voice and data.

[xi] Stork, C. (2004). Namibia E-Access & Usage Index Survey 2004. Nepru Research Report N0. 35. Windhoek: Nepru.

[xii] Internet World Stats (2005). Internet usage Statistics for Africa: Namibia. December 31, 2005.

[xiii] Stork, C. (2004). Namibia E-Access & Usage Index Survey 2004. Nepru Research Report N0. 35. Windhoek: Nepru.

[xiv] Hudson, H.E. (1997). "Converging Technologies and Changing Realities: Toward universal Access to Telecom in the Developing World". In W.H. Melody (Ed.). *Telecom Reform: Principles, Policies and Regulatory Practices.* Langby: Centre for Tele-Information: Technical university of Denmark.

[xv] Warschauer, M. (2003). *Technology and Social Inclusions: Rethinking the Digital Divide.* Cambridge: MIT Press.

[xvi] Murdock, G. (1999). "Rights and Representations: Public Discourse and Cultural Citizenship". In Jostein Gripsrud (Ed.). *Television and Common Knowledge,* 7-17. London: Routledge.

[xvii] Office of the Prime Minister (2000). *Namibia: A Decade of Peace, Democracy and Prosperity: 1990 – 2000.* Windhoek: Government of the Republic of Namibia.

[xviii] Bernard, D. and Vonk, T. (2003). "Information and Communications Technologies in African Local Governments". In EDITOSHA: ICLEIE European Secretariat GmbH, Freiburg, Germany

[xix] The Namibian (2003). "Telecom Namibia gears up for wireless communications". Thursday, April 10, 2003. At http://www.namibian.com.na/2003/march/marketplace/03C49A80D0.html. Downloaded on 25 April 2003.

[xx] Ministry of Education (2005). *ICT Policy for Education.*

[xxi] Servaes, J. and Carpentier, N. (eds.) (2006). Towards a Sustainable Information Society: Deconstructing WSIS. European Consortium for Communication Research (ECCR).

[xxii] Office of the Prime Minister (2005). *The Government of Namibia goes Digital: e-Governance inn Namibia.* Windhoek: John Meinert Printing.

[xxiii] Kakololo, E. (2005). "Distance Learning can Reach All". In *New Era,* Wednesday, August 31, 2005.

[xxiv] Ministry of Education (2005). "Towards empowering youth with internationally recognised ICT qualifications". A Project on the National Information and Communications Technology Skills Scheme. Windhoek: Republic of Namibia.

Appendix A

Penetration of Telephones into Namibian Households

Number of Households	Owns/Access/ No Access	Penetration in percentage
Urban 150 514	Owns Access No Access	60, 4 26, 7 12, 8
Rural 221 115	Owns Access No Access	15, 2 37, 7 47, 1
Namibia 371 629	Owns Access No Access	33, 5 33, 3 33, 2

Adopted from the Preliminary Report of the Namibia Household Income and Expenditure Survey, 2003/2004 (National Planning Commission, 2006: 19).