GENERAL NOTICE

NOTICE 1276 OF 2009

DEPARTMENT OF COMMUNICATIONS

NOTICE OF INTENTION TO MAKE SOUTH AFRICAN BROADBAND POLICY

I, Gen (Ret) Siphiwe Nyanda, Minister of Communications, hereby give notice of intention to make South African Broadband Policy in the schedule in terms of section 3(1) of the Electronic Communications Act, 2005 (Act No. 36 of 2005).

Interested persons are hereby invited to furnish written submissions on the proposed South African Broadband Policy, within 30 calendar days of the date of publication of this notice at any of following addresses:

For attention:	Mr Petrus Khoza Deputy-Director: ICT infrastructure Department of Communications;
post to:	Private Bag X860 Pretoria 0001;
or deliver to:	First Floor, Block F iParioli Office Park 399 Duncan Street Hatfield, Pretoria;
or fax to:	(012) 427 8455;
or e-mail to:	Broadband@doc.gov.za

Please note that submissions received after the closing date may be disregarded.

Mr. Petrus Khoza can be reached at tel. (012) 427 8057 for any enquiries.

Gen (Ret) Siphiwe Nyanda
Minister of Communications

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Department:
Communications
REPUBLIC OF SOUTH AFRICA

DRAFT BROADBAND POLICY

FOR

SOUTH AFRICA

SEPTEMBER 2009

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1 INTRODUCTION

1.1 Context

1.1.1 In 2007, the South African Government approved the building of an information society. This decision was based on the outcome of the United Nations World Summit on the Information Society. This summit resolved that ICT (Information and Communication Technologies) infrastructure is the foundation to the development of an information society. (WSIS (World Summit on Information Society) Action Line C2: Information and Communications Infrastructure: an essential foundation for the Information Society.) The development of a Broadband policy is in line with world trends and is critical for South Africa to ensure the goal of an all inclusive information society that can enjoy the economic benefits associated with Broadband is realised in both urban and rural areas.

1.1.2 Broadband infrastructure is central in achieving the goal of digital inclusion, enabling universal, sustainable, ubiquitous and affordable access to ICT's by all, and providing sustainable connectivity and access to remote and marginalized areas at national, provincial and municipal levels.

1.1.3 Currently Broadband penetration in South Africa is low, due to the unavailability of telecommunications infrastructure and the high cost of Broadband services, which causes the information society growth to be stifled. The OECD stipulate in their December 2008 Broadband statistics report that the average penetration rate for Broadband is 22.4%, South Africa had just over 1 million Broadband connections which translate into a penetration rate of 2%. South Africa is clearly well below the average penetration rate with regards to Broadband. The ITU also confirms that South Africa has a Broadband penetration rate of 2% and just over a million Broadband connections.

1.1.4 This policy's focus is to increase the accessibility and affordability of Broadband throughout South Africa.

1.1.5 Broadband Services ("always available, high speed multimedia capable network services") have been identified globally as a powerful transformative force. Affordable access to these networks has become a key policy for governments internationally. Broadband empowers the individual through access to the "Information Superhighway" which provides access to value-added local and

international content. Broadband provides businesses with an extremely powerful resource which increases productivity, marketability and communication services.

1.1.6 This policy acknowledges the achievement of the private sector in establishing the Broadband infrastructure as it exists today. However this is mainly confined to urban areas and limited in affordability and accessibility. The policy also recognises that there are different initiatives at the different spheres of government already underway. It is for these reasons that a Broadband policy needs to be defined. The policy aims to:

- set the Broadband policy for South Africa;
- articulate the government's commitment to providing appropriate support for bridging the digital divide, thus building the information society;
- clarify the roles of the state, state owned entities, authorities and private sector in developing world-class Broadband infrastructure in the country.

1.2 Legislative framework

1.2.1 Broadband Development is governed within the following legislative framework;

- The Electronic Communications Act (2005), which provides the legal framework for the convergence of communication technologies in South Africa.
- The ICASA (Independent Communications Authority of South Africa) Act (2000) as amended, which enables the effective and independent regulation of the ICT sector in South Africa.
- IRF (Intergovernmental Relations Framework) Act (2005)
- ECT (Electronic Communications Transactions) Act (2002)

1.3 Definition of broadband

1.3.1 Broadband is a very broadly used term and the speed at which a network connection is deemed to be a Broadband connection has different viewpoints both locally and internationally. The ITU (International Telecommunication Union) Standardization sector defines Broadband as a speed of 1.5 to 2 Mbps while the development sector defines Broadband to be 256 kbps.

1.3.2 The definition of Broadband varies between 128kbps and 10Mbps in different countries, **but for South Africa Broadband will be interpreted as an always**

available, multimedia capable connection. Broadband access will be divided in two categories namely basic and commercial Broadband.

1.3.3 Basic Broadband is the minimum service a citizen should have access to, but is likely to be slower than the top end of services available in the market place. The minimum service will be defined in the national strategy on Broadband and will be amended as required.

1.3.4 Commercial Broadband includes all Broadband services available in the market place and will in general include several premium offerings that will far exceed the performance of basic Broadband services.

2 BROADBAND POLICY OBJECTIVE

The objective of this policy is:

To facilitate the provisioning of affordable access to Broadband infrastructure to citizens, business and government and also stimulate the usage of Broadband services at national, provincial and municipal levels.

As part of the objective to facilitate the provisioning of affordable access to Broadband infrastructure, focus is also placed on the building of the information society, increasing affordability and uptake and usage of Broadband.

In line with national imperatives this policy also considers the following key objectives:

- To build the information society
- To Increase Affordability
- To Increase Uptake and Usage

2.1 To build the information society

2.1.1 In 2007 Government took a policy decision to take a lead in the formation of a "*people-centred, inclusive and development-oriented Information Society, where everyone can create, access, utilise and share information and knowledge, enabling individuals, communities and people to achieve their full potential in promoting their sustainable development and improving the quality of their life*". This has led the country's vision as "*To establish South Africa as an advanced Information Society in*

which Information and ICT tools are key drivers of economic and societal development."

2.1.2 However the vision can only be attained if the country has reliable, robust and secure infrastructure that is available, accessible and affordable to all. Experience across the world has shown that a well-developed Information and Communication network infrastructure as well as applications, adapted to national and local conditions, easily-accessible and affordable, can accelerate the social and economic progress of a country, and the well-being of individuals and communities.

2.2 To increase affordability

2.2.1 It is evident in the South African market that the provision of Broadband services in certain areas has a prohibitive cost. The government will intervene to expand networks into these marginal areas. Various options for the provision and sustained operation of networks that are currently not economically viable will be developed in co-operation with USAASA (Universal Service and Access Agency of South Africa) and the private sector. This step will ensure that access to Broadband become affordable and available for all citizens, businesses and government.

2.3 Increase uptake and usage

2.3.1 In the government sphere development of content to increase the uptake and usage of Broadband is especially important in the areas of education, health and e-government.

2.3.2 ICTs have to form part of the basic need priorities in order to effectually increase uptake and usage and need to be promoted at household level, to form part of socialisation within the family structure. In order to reach a knowledge economy, which drives the development and usage of ICT's, households and businesses should continuously be exposed to the use and benefits of ICT's.

2.3.3 In order to increase uptake and usage government need to develop its own local content to ensure that government services are available to citizens. The content will be used by citizens to interact with government and this will stimulate the demand for Broadband further. Content should be relevant in order to cater for citizens requirements else uptake and usage will be slow.

3 BENEFITS OF BROADBAND

Broadband is recognised as a major industrial resource for the modern country. The benefits of investing in Broadband technology have been studied internationally many times. On each occasion Broadband has been shown to deliver substantial economic growth, increased employment and vast societal benefits. Some of the benefits foreseen in South Africa are listed below:

- Drive economic development and GDP growth
  - Stimulate the growth of SMME's and cooperatives
  - Increase employment
  - Reduce the cost to communicate
  - Improve the marketability of regions and encourage investment
- Socio economic
  - Improved quality of education
  - Improved quality of health services
  - Improved quality of government services

3.1 Drive economic development and GDP growth

Broadband creates an environment that stimulates economic activity which translates directly into economic development and growth. Provinces and municipalities can stimulate their economic environments and increase their GDP by implementing Broadband, which would lower the telecommunication costs and attract business into their respective domains. Broadband is an enabler for economic growth and only provide a means to an end, thus Broadband itself does not grow the economy directly.

It should be understood that Broadband has an indirect impact into growing the economy. Broadband will have a direct impact on improving the ease of communications and the distribution of products and services to a wider market. Further direct implications will be evident in the development of communities and individuals.

3.1.1 Stimulate growth of SMME's and cooperatives

3.1.1.1 Growth of SMME's and cooperatives will be stimulated via Broadband, as small and medium enterprises gains access to the global village, enabling them to trade their products and services to the global market.

3.1.1.2 SMME's and cooperatives can gain competitive advantage by using Broadband, as this technology would expose them to a broader market where they can offset their products and services.

3.1.2 Increase employment

3.1.2.1 Broadband networks have been shown to have a direct effect on employment. It is however the valuable use of these networks, growing economic activity and enhancing social development that unlocks the potential increase in employment. Provincial and municipal networks have as a primary driver the creation of economic growth which indirectly creates substantial growth in employment.

3.1.3 Reduce the cost to communicate

3.1.3.1 Increased competition is a mechanism to be used to drive down the cost of telecommunications prices. Better availability of Broadband will increase competition in the market place, which will effectively bring down the cost to communicate. A reduction in telecommunication costs benefits each citizen, because more products and services become available at a more affordable price.

3.1.4 Improve the marketability of regions and encourage investment

3.1.4.1 Provinces by way of Broadband will be in a position to increase their marketability, which will attract investment. This will have a direct positive effect on a province's growth and will enable a province to become more competitive. Broadband provides access to a province and municipality, but it also allows business and citizens within the province and municipality access to the rest of the world. Companies now have the choice to set up head quarters closer to the source of their businesses because Broadband provides the ability for offices to connect anywhere anytime, which help to reduce urbanization into the metros. This communications' ability increases the value of a province and municipality, which makes it more attractive for businesses to directly invest into the area. Other benefits are that pressure is relieved from highly dense cities and that urbanization is slowed down.

3.2 Socio economic

3.2.1 Improved quality of education

3.2.1.1 Broadband access creates an opportunity for citizens to increase their knowledge through research and collaborative team work. It also provides an opportunity for

citizens to become ICT literate, which increases their value and employability. Broadband can ensure that communication between different educational institutions is made more efficient. Delivery of educational content becomes faster with Broadband, because electronic textbooks become a reality. The environment will benefit from Broadband because less paper is used and this translates into lower costs as well.

3.2.2 Improved quality of health services

3.2.2.1 Healthcare is a priority for government and access to health care services is very important to ensure disease spreads are controlled effectively. Telemedicine becomes a reality via Broadband, because the diagnosis of patients could be performed in remote areas, thus relieving pressure on urban hospitals. Electronic ordering of medicine is possible and better control systems could be put into place to ensure theft is reduced. Electronic patient records can also be accessed anywhere anytime in hospitals and clinics in South Africa should the proper systems be in place and should a nationwide interconnected Broadband system exist. The benefit of this is, patient records are always up to date and cannot get lost.

3.2.3 Improved quality of government services

3.2.3.1 Government needs to communicate to citizens its services and benefits, access to these would become easier for citizens should a Broadband network for government be established. Services in government would need to be updated to incorporate online accessible systems that citizens could use for not only information purposes but also transactional purposes. This would reduce the cost of governance and would enhance service delivery, because turnaround times would be faster.

4 KEY PRIORITY AREAS

4.1 Access

4.1.1 Universal access to basic broadband

4.1.1.1 Each citizen in South Africa has a right to have access to basic Broadband. Access is defined as per the definition on universal access by USAASA.

4.1.2 Access to broadband by needy persons

4.1.2.1 Broadband networks allow many opportunities for social development and access to job-opportunities for needy persons. People can with the support of Broadband communicate and work from anywhere, which provides a way for needy persons to contribute their skills and time towards achieving their own goals and thereby benefiting from social upliftment and economic growth. Needy persons are defined as per the definition of needy persons by USAASA. The needy persons will be assisted to access Broadband services through appropriate means.

4.1.3 Government institutions must have access to affordable broadband

4.1.3.1 All government institutions and NGO (Non Government Organizations) must have access to Broadband. This will ensure demand stimulation and uptake of ICT's by departments especially in education and health. Content from departments will be used for both information purposes as well as e-government service delivery to citizens. This will ensure that education and health facilities have access to Broadband.

4.1.4 Spectrum for broadband

4.1.4.1 This Policy recognises that the radio frequency spectrum is a scarce national resource and that Government has a responsibility to use such a resource in the public interest, prioritising it for developmental objectives. In particular appropriate frequency spectrum will be identified and set aside for Broadband applications.

4.2 Affordability

4.2.1 Create an enabling environment for broadband growth

4.2.1.1 Competition will be promoted in the market. Where market forces fail, government will intervene to increase the availability of infrastructure and services. The different categories of competition are listed below and will be applied as relevant to the particular market failure.

4.2.2 Telecommunications infrastructure based competition

4.2.2.1 Infrastructure based competition is between operators (Electronic Communications Network Service Licensees) where each compete based on providing its own telecommunications network infrastructure.

4.2.2.2 More infrastructure translates into the increased access and availability of networks, which effectively means more choice, this would aid in the reduction of the cost to communicate, as subscribers have a choice of networks.

4.2.2.3 Where telecommunications network infrastructure exists, government supports services based competition and discourages the duplication of telecommunications network infrastructure in such areas.

4.2.3 Services based competition

4.2.3.1 Services based competition exists between operators (Electronic Communication Service Licensees) where each compete based on the services provided.

4.2.3.2 More services translate into more choice, which aids to reduce telecommunication costs for consumers.

4.2.4 Physical infrastructure sharing

4.2.4.1 Physical infrastructure can be shared between different operators where a single network is utilised.

4.2.4.2 Shared infrastructure can be used to help offset some of the capital expenditure that is incurred when building a network, which would aid in the reduction of telecommunication costs. The sharing of physical infrastructure will reduce the impact on the environment.

4.2.4.3 World trends reveal that the sharing of infrastructure is a powerful mechanism for cost reduction, as this reduces the cost base of the infrastructure and translates into wider choice and lower prices. The benefit of following such a model is that citizens gain access to Broadband at lower prices than would have been the case if operators had to construct their own physical infrastructure.

4.3 Usage

4.3.1 Uptake and usage

4.3.1.1 Government to take a lead in the uptake and usage of Broadband and the promotion thereof in both urban and rural areas. Government need to adopt ICT's in everyday business practices and also develop interactive online capabilities. This step would enable citizens to transact with government electronically and would enhance service delivery especially in areas of education and health. Government also need to promote awareness of ICT's and the benefits thereof as

well as ensure departments are connected to ensure communication between them.

4.3.2 Security

4.3.2.1 Increased and continual commitment to improve security of users of Broadband services must be made by both the State and the private sector.

4.3.2.2 Government will establish the necessary regulatory framework to ensure networks and users are secure.

4.3.3 Awareness

4.3.3.1 Government should increase public awareness on Broadband in partnership with civil society. Focus should be on the content, applications, communications ability and opportunities that Broadband can offer to all citizens in both urban and rural areas. This will support the usage and uptake of Broadband. SOE's should play a significant role in raising awareness among citizens as to the use and benefits of Broadband.

4.4 Roles

It is necessary to distinguish between the roles of the State, SOE's, the private sector, and civil society.

4.4.1 Role of the state

4.4.1.1 Involvement by the State will be focused on investment where instances of market failure are prevalent, but also with emphasis on the following goals:

- Connecting the arms of government at all levels and enabling the distribution of e-government services, to improve the effectiveness and efficiency with which it meets the needs of citizens and residents of South Africa.
- Developing national, provincial and municipal Broadband strategies and co-ordinating implementation on a continuous dynamic basis.
- Creating an enabling environment for the private sector to develop infrastructure, services and applications.
- Conversely, government should not operate directly in retail services provision but leave these markets to the private sector players. The state needs to enable competition and assist with services to uneconomical and underserviced areas.

- Government need to invest into the development of local content to support usage and take up of Broadband.
- The state may consider investment through various schemes.
- Awareness - promoting Broadband which will drive uptake and usage.

4.4.2 Provincial and local government

4.4.2.1 This policy recognises the different ICT initiatives in provincial and local government as well as the unique requirements of the different regions.

4.4.2.2 Increased uptake and usage of ICT's within provincial and local government as an enabler for enhancing government service delivery is strongly encouraged.

4.4.2.3 The policy leaves the decision to buy from a network services provider or to construct their own network to provincial or local government. Should the provincial or local government choose to construct and operate their own network, it should be financially sustainable. Personnel selected to construct and maintain the network for a provincial or local government, should be experienced in telecommunications to ensure government service delivery is not compromised.

4.4.2.4 The use of open standards is encouraged to ensure seamless interconnection between different networks..

4.4.3 State owned enterprises

4.4.3.1 Government may use SOE's to achieve certain objectives but this would be determined on a case by case basis. SOE's could be used in instances of market failure to adhere to governments' objective of achieving digital inclusion.

4.4.3.2 SOE's could be used to participate in building of Broadband infrastructure and content development.

4.4.4 Role of the private sector

4.4.4.1 Market forces will determine the role of the private sector and where there is market failure the state will intervene to create an environment that is conducive to private sector investment and participation.

4.5 Implementation

4.5.1 Establishment of an institutional mechanism

4.5.1.1 A Broadband steering committee will be established and will report to the Minister of Communications. This body will be an integrated government body on Broadband related issues.

4.5.1.2 Due to the fragmentation of current Broadband initiatives, uncoordinated implementation of Broadband projects and programmes, the loss in money, focus and strategy, the requirement of a Broadband steering committee is crucial. The steering committee will address these issues, which hampers government service delivery and the roll out of e-government services.

4.5.2 Monitoring and evaluation

4.5.2.1 Broadband penetration will be used as the measure to determine the success of this policy. If Broadband remains inaccessible and unaffordable to citizens in South Africa, this policy and its implementation will be reviewed.

5 CONCLUSION

5.1 Government's objectives include social upliftment and to grow the economy and one of the methods to achieve these goals are to increase the access and availability of Broadband. Broadband opens the global village to South Africa and its citizens by providing a telecommunications highway and enabling its people to communicate and transact anywhere, anytime in both urban and rural areas. South Africa's economy is in a transition phase like many other economies around the world and investment into Broadband is crucial should South Africa want to progress into a knowledge based economy.