
GENERAL NOTICE

NOTICE 350 OF 2013

DEPARTMENT OF COMMUNICATIONS

CONSULTATION ON THE PROPOSED NATIONAL BROADBAND POLICY FOR SOUTH AFRICA

I, Dina Pule, Minister of Communications, in terms of section 3(1) of the Electronic Communications Act, 2005, hereby publish the proposed National Broadband Policy for South Africa, contained in the schedule attached hereto.

Interested persons are invited to provide written comments on the proposed National Broadband Policy for South Africa, within 30 working days of the date of publication of this notice at any of the following addresses:


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

Please contact Mr. Norman Munzhelele at (012) 427 8274/8058 for any enquiries.


MS DINA PULE, MP
MINISTER OF COMMUNICATIONS
DATE: 18. 03. 2013



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Department:
Communications
REPUBLIC OF SOUTH AFRICA

NATIONAL BROADBAND POLICY
FOR
SOUTH AFRICA

APRIL 2013

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INTRODUCTION

1.1 Context

- 1.1.1 Broadband is generally defined as a high-speed, high capacity transmission medium that can carry signals from multiple independent network carriers. There is no general consensus on the precise speed at which a network connection is deemed to be broadband service both at local and at international level. For example, even within the International Telecommunications Union (ITU), the different sectors in alignment with their functions, define broadband differently. The standardisation sector defines broadband as a transmission capacity that is faster than primary rate Integrated Services Digital Network at 1,5 Megabits (Mbps) to 2 per second Mbps whilst the Development Sector defines it to be 256 Kilobits per second (Kbps). Comparative research has demonstrated that broadband speeds in different countries vary between 128 kbps and 10 mbps.
- 1.1.2 Broadband is an enabling infrastructure for building knowledge economy and information society; and for accelerating growth and development of the South African economy. International experience shows a positive correlation between broadband penetration, economic growth and employment. The World Bank estimates that every 10% broadband penetration results in 1.38% economic growth.
- 1.1.3 Globally broadband has been identified as an accelerator of economic and social development. It is regarded as a powerful transformative force that has improved how individuals work, conduct business, access government information and socialise. Broadband also provides businesses with a powerful tool that can increase productivity levels and access to markets.
- 1.1.4 The South African government has set a target to create five (5) million jobs by 2020. In this regard, Government has adopted the New Growth Path (NGP) in 2010. The NGP identifies areas where employment creation is possible both within the economic sectors and cross-cutting activities. Amongst others it identifies public investment in infrastructure as one of the key job drivers. Investment in modern infrastructure is a requisite for improving the competitiveness and increasing productivity levels of the South African economy. This will ensure that South Africa is able to participate in the knowledge economy. The ICT sector has a contribution to make in achieving this target.

- 1.1.5 Broadband will contribute in enhancing government policy objectives in the provision of education, health services, job creation, reducing the levels of crime and corruption and building sustainable rural communities. This will ultimately facilitate the sharing of information and knowledge and ensure greater connection amongst the people of South Africa and the rest of the World.
- 1.1.6 The future as defined in the National Development Plan (NDP) will require that by 2030, South Africa should have an e-literate society, which enables citizens to participate in the information society. Supporting the provision of these services through Broadband will lay a foundation for building an e-literate society by 2030.
- 1.1.7 Broadband will contribute in improving the competitiveness of the economy and increasing productivity levels through initiatives that support the achievement of the objectives of the National Industrial Policy Framework (NIPF) and ultimately the Industrial Policy Action Plan (IPAP). IPAP identifies sectors with growth potential that increase the productive capacity of the economy.
- 1.1.8 In addition, the Presidential Infrastructure Coordinating Commission (PICC) has prioritised broadband and connectivity as part of the national infrastructure programme. It is therefore important that a coordinated approach is adopted to ensure that there is 100% broadband coverage.
- 1.1.9 The National Broadband Policy for South Africa (hereafter referred to as the Policy), is informed by the need to fast track the deployment of high-speed broadband infrastructure such as fibre-optic backbones, wireless and international connectivity, achieving a holistic and coordinated national approach in the provision of broadband infrastructure and services; and the development of targeted policy interventions to encourage the uptake and usage of broadband services across the country particularly in rural areas.

1.2 Status of Broadband in South Africa

- 1.2.1 In South Africa, broadband is delivered through fixed copper line, fibre, fixed wireless, satellite and mobile platforms.
- 1.2.2 In 2012, South Africa was connected to the rest of the world via six (6) international submarine cables with a combined capacity of 29, 5 terabits. The cost of international connectivity has declined significantly during the last four years. However, this has not translated into lower broadband costs to the consumers. The submarine cable systems that connects South Africa to the rest of the World include; the West Africa Submarine Cable / South Atlantic Far East 3(WACS/SAFE-3); Eastern Africa Submarine Cable System (EASSy); Southern Africa, East Africa, Europe, and South Asia (SEACOM); and South Africa Far East (SAFE). The majority of these submarine systems are already operational.
- 1.2.3 The total national optic fibre infrastructure is estimated at more than just below 160 000 kilometres of which one entity is estimated to owning more than 144,000km and the rest is shared amongst various operators. This national optic fibre footprint is concentrated in the so called "golden triangle", which consists of areas such as Johannesburg, Cape Town and Durban. Furthermore there are various planned optic fibre rollout initiatives currently being deployed in these areas, that are expected to continue in the short to medium term since these areas are attractive to private operators. These fibre routes do not cover villages, small towns and underserved areas.
- 1.2.4 There are a few players in the wireless infrastructure sector, which covers just a little over 80% of the South African population. This demonstrates that radio-based technologies are dominant in the provision of broadband services in South Africa. Advanced International Mobile Telecommunications (IMT) Systems as envisaged by the ITU will offer peak speeds of up to 100 Mbps for mobile use, but this speed decreases when the number of users accessing broadband at a particular site increases.
- 1.2.5 With regard to satellite, there are several satellites that provide 100% geographic coverage across the country. Hence satellite technologies form part of the national broadband rollout plan for the country.

- 1.2.6 According to a recent study in South Africa conducted by BMI-T fixed and fixed wireless broadband penetration is estimated at 2%. Furthermore, the 2011 Census results indicated that 64, 8% of households in the country had no access to Internet. Of those households that had access to the Internet 16, 3% accessed it via cell phones, 8, 6% from home, 4, 7% from work and 5, 6% from elsewhere. This can be ascribed to a lack of appropriate broadband infrastructure, particularly in rural areas.
- 1.2.7** With regard to the cost of broadband, the study further indicates that the price of broadband packages in South Africa varies considerably, with monthly charges ranging from under R100 to over R20 000 per month. The average cost per Gigabyte (GB) excluding satellite is R141 per month. These prices indicate that broadband costs are high therefore making it not affordable to the majority of the population.
- 1.2.8 Both public and private sectors have played a significant investment role in the provision of broadband infrastructure in its current form. However, the funding of broadband services in government is fragmented and uncoordinated. At national level, departments have budgets that are allocated to ICT roll-out. Furthermore some provincial and local governments are funding broadband initiatives.

1.3 Objectives of the Policy

The objectives of the Policy are to:

- 1.3.1 ensure universal service and access to reliable, affordable and secure broadband services by all citizens prioritising rural and under-serviced areas;
- 1.3.2 articulate the Government's commitment to providing appropriate support for digital inclusion, thus building an information society;
- 1.3.3 provide for an integrated approach in the deployment of broadband services;
- 1.3.4 ensure continued availability and expansion of broadband capacity to support economic and social goals of the country;
- 1.3.5 reduce the cost of broadband services; and
- 1.3.6 clarify the roles of the Government, State Owned Companies (SOCs) and the private sector in developing world-class broadband infrastructure in the country.

1.4 Legislative Framework

This policy is informed by inter alia the following legislations:

- 1.4.1 Electronic Communications Act (ECA) 36 of (2005), which provides the legal framework for the convergence of communication technologies in South Africa;
- 1.4.2 Independent Communications Authority of South Africa (ICASA) Act 13 of (2000) as amended, which enables the effective and independent regulation of the ICT sector in South Africa;
- 1.4.3 Inter-Governmental Relations Framework (IGRF) Act (2005), which sets the framework for the interaction and relationship between the three spheres of Government;
- 1.4.4 Electronic Communications and Transactions (ECT) Act (2002), which sets the framework for electronic transactions and the verification thereof;
- 1.4.5 Constitution of SA (1996): Chapter 3 which provides for the establishment of national, provincial and local spheres of government, which are distinctive, interdependent and interrelated;
- 1.4.6 Broadband Infraco Act of 2007, established Broadband Infraco SOC Limited to expand the availability and affordability of access to electronic communications including but not limited to under-developed and under-served areas through the provision of electronic communications network services and electronic communications services;
- 1.4.7 SITA Act of 1998 as amended, which provides for the establishment of a company that will provide Information Technology, information systems and related services to, or on behalf of participating departments and in regard to these services, act as an agent of the South African Government; and to provide for matters connected therewith;

- 1.4.8 National Environmental Management Act, 1998, which provides for co-operative environmental governance by establishing principles for decision-making on matters affecting the environment, institutions that will promote co-operative governance and procedures for co-coordinating environmental functions exercised by organs of state; to provide for certain aspects of the administration and enforcement of other environmental management laws; and to provide for matters connected therewith;
- 1.4.9 Municipal Systems Act of 2000, which provides for the core principles, mechanisms and processes that are necessary to enable municipalities to move progressively towards the social and economic upliftment of local communities, and ensure universal access to essential services that are affordable to all.

2 THE NATIONAL BROADBAND POLICY FOR SOUTH AFRICA

2.1 Vision

To ensure universal access to reliable, affordable and secure broadband infrastructure and services by 2020 and stimulate sustainable uptake and usage.

2.2 Definition of Broadband for South Africa

In South Africa broadband is defined as an always available, multimedia capable interactive network connection with characteristics, as determined by Ministerial Policy and published in Regulations by the Authority from time to time.

2.3 Key policy areas

The Policy prioritises the need to implement interventions aimed at strategic positioning of broadband infrastructure as a catalyst for social and economic growth and enhance universal access. To this end, government will encourage and support investment in broadband backbone network infrastructure thereby increasing the uptake and usage of broadband services.

2.3.1 Access to international backbone networks

2.3.1.1 The availability of reliable, affordable and secure international backbone infrastructure is critical for supporting the growth of the South African economy and providing international connectivity. As the economy of the country grows, it is envisaged that its international bandwidth requirements will also grow.

2.3.1.2 Investment in submarine cable systems will also contribute to further strengthen integration within the Southern African Development Community (SADC) region. It will increase the frequency and quality of communications among countries in the region, thus increasing trade in services and allowing the region to form a sizeable market for digital products and services.

2.3.1.3 Whilst the ECA has made it easier to land and operate submarine cables in South Africa, further interventions are required to bring about further competition in the provision of international bandwidth. Government's target is to ensure that there is sufficient international bandwidth capacity by 2020 and beyond, to meet the growing demand as more individuals and enterprises would be connected to the broadband grid.

2.3.1.4 It is not government's intention to crowd out private investment in submarine cable, but rather to bring about equitable access to international bandwidth capacity by all operators. In this regard, the policy seeks to;

- a) Encourage and promote private sector investment in international backbone networks.**
- b) In the event of market failure, government will intervene to ensure competitively priced international bandwidth availability.**
- c) All submarine cable landing stations are declared essential facilities and shall be accessible transparent fair and non-discriminatory.**

2.3.2 Access to National Backbone Networks

2.3.2.1 Experience elsewhere in the world¹ has shown that Governments and the private sector have made significant investments in the rollout of national broadband backbone networks. **In terms of this policy, Government shall play a critical role in the deployment of broadband backbone networks especially in rural and underserved areas, which are regarded as not being commercially viable by operators.**

2.3.2.2 Furthermore, this policy advocates for the deployment of wholesale backbone networks by the public and private sector players. The wholesale networks will be operated on open access and non-discriminatory principles to allow innovation and competition by service providers in the provision of services to consumers. The Authority will develop requisite wholesale regulations to support service-based competition.

2.3.2.3 Telkom will provide the bulk of the core backbone infrastructure. Telkom will be supported by other state-owned companies and the private sector.

¹ Malaysia, Australia, South Korea, etc

2.3.3 Local Access Networks

2.3.3.1 Broadband should be seen as a utility that should be made available to all parts of the country. It has to form part of basic infrastructure like water, roads, sanitation and electricity to be made available to all on a non-discriminatory basis. **There is therefore a need to promote the expansion of the last mile access technologies on the premises and homes of all South Africans.**

2.3.3.2 Even though the rapid deployment of wireless and mobile access networks has contributed to the increasing penetration of communication services into the poor rural areas, in the long term, the delivery of fixed line services to households and businesses still remains a key element in delivering true broadband speeds that are necessary for quadruple-play and multi-play applications.

2.3.3.3 **In this regard, this policy requires the deployment of optic fibre to the premises and homes in the long term. To complement this, requisite radio frequency spectrum will be made available for mobile broadband applications and to support other last mile access technologies in the short term.**

2.3.3.4 **Despite the Policy pronouncements in 2.3.3 above, it is recognized that there will always be certain areas where radio-based technologies will be the only viable means of providing broadband access, even in the long term.**

2.3.3.5 **In economically viable areas this policy provides for infrastructure and service based competition.**

2.3.3.6 **The policy further provides that there will be infrastructure sharing in non-economically viable areas by way of a wholesale open access network competition will be confined to the provision of services.**

2.3.4 Availability of Radio Frequency Spectrum for broadband

2.3.4.1 Radio Frequency spectrum is a key and critical input in the provision of broadband services. Radio frequency spectrum, in its nature, is a scarce and finite national resource – like land it cannot be increased or decreased. Therefore implementation of innovative interventions aimed at driving efficiencies in radio frequency spectrum allocation and its use is critical.

2.3.4.2 The kind of technology chosen determines the efficiencies to be driven in the use of the radio frequency spectrum. **In order to promote the availability of broadband services in the rural and underserved areas, the allocation and assignment of radio frequency spectrum bands, which are generally suited to low-capacity large coverage areas will be prioritised.**

2.3.4.3 The future allocation of this scarce national resource shall be guided by the need to balance the country's developmental needs and commercial imperatives.

2.3.4.4 **Therefore, in support of this policy, sufficient allocation and appropriate licensing of radio frequency spectrum in order to promote universal access to broadband services and stimulate the economy will be prioritized. In this regard, all future allocation of the radio frequency spectrum for broadband shall be done in a manner that advances competition, black economic empowerment, the quality of service, universal service and access principles.**

2.3.5 Minimise infrastructure rollout costs

2.3.5.1 Deploying broadband backbone infrastructure is capital intensive and investment decisions are based on return on investments. It is generally understood that underserved and rural areas are unattractive to private investors. Therefore interventions aimed at encouraging investments in these areas are being developed.

- 2.3.5.2** Firstly, the cost of deploying a broadband network depends on the costs that electronic communications network service providers incur to access publicly and privately-owned servitudes. These costs are a significant contributor to the final retail prices of broadband products and services charged to the consumers and can act as barriers to entry by new service providers and also limit the existing operators from extending their networks. Hence the need to ensure that these costs are addressed in order to encourage the existing and new electronic communications network services providers to deploy broadband infrastructure. **Accordingly, the policy advocates for the implementation of regulatory measures to promote the availability of both publicly and privately-owned servitudes to facilitate rapid broadband rollout in the urban, rural and underserved areas.**
- 2.3.5.3** Secondly, there is a need to ensure coordination of broadband rollout projects with other civil works to be undertaken when utility infrastructure such as roads, water, sanitation and electricity are undertaken in the county. **It is therefore a matter of policy that ducts will be installed in all major publicly funded utility infrastructures, at construction phase, to facilitate the extension of existing networks and the rollout of planned broadband networks.**
- 2.3.5.4** Thirdly, the construction of electronic communications facilities requires that approvals for rights of way, land acquisition and environmental impact assessments are obtained. In this regard, the ECA enjoins the Ministers of Communications, Provincial and Local Government, Land Affairs, Environmental Affairs to develop guidelines on rapid deployment of electronic communications facilities in the country. Lowering these costs and expediting approval processes involves all three spheres (national, provincial and local) of government. Consultations between and amongst these spheres of government and service providers is very critical to facilitate the rapid deployment of electronic communications facilities. **Therefore there is a need to fast track the development of the rapid deployment guidelines on electronic communications facilities and establish a one-stop shop to facilitate approval of way leaves.**

2.3.6 Increase uptake and usage of broadband services

2.3.6.1 The availability of end-user equipments, content and applications as well as providing support to consumers will stimulate the demand for broadband services in South Africa. **Therefore this policy provides for the relevant Executive Authority, in consultation with the relevant Cabinet Ministers, to develop strategies to address the following:**

2.3.6.2 Access to end-user equipments

2.3.6.2.1 The deployment of broadband infrastructure will require affordable end-user equipments such as mobile devices, computing devices and digital set-top-boxes that connect to the broadband service provider networks thereby enabling online transactions.

2.3.6.2.2 South Africa is not a major player in the manufacturing of these equipment types and has to rely on imports from overseas. These products attract custom duties when they reach South African shores. The duties contribute to high access cost of the equipment, making them unaffordable to the majority of people. **In this regard strategies to promote the availability of affordable end-user equipments will be developed and implemented.**

2.3.6.3 Development of content and applications

2.3.6.3.1 The availability of relevant digital content is critical to the adoption of broadband services. The development, availability and use of local digital content will lead to increased adoption of broadband services thereby building a competitive local content industry. The content providers and citizens should be encouraged to develop local content in local languages so as to promote uptake of local content.

2.3.6.3.2 The policy advocates for the implementation of strategies to provide amongst others, e-health, e-education and e-government services to all citizens.

2.3.6.3.3 In the education sector, the provision of the broadband services should assist in strengthening the teaching and learning processes, creating equitable access to online educational resources and strengthening administrative processes with the aim of improving the quality of education in the country.

- 2.3.6.3.4 In the health sector, the provision of the broadband services should create more online access to quality health services, improve health data capturing and use as well as the dissemination of such data.
- 2.3.6.3.5 In the government sectors such as municipalities, the citizens should be able to use the broadband services to improve their interaction with government so as to increase access to government services.
- 2.3.6.3.6 Furthermore, government agencies and departments at national, provincial and local level will serve as broadband anchor tenants for rural and underserved communities. Having government agencies act as anchor tenants can sufficiently reduce the risk of infrastructure rollout making it commercially viable.
- 2.3.6.3.7 With the advent of broadband technologies - applications become possible or are enhanced beyond their current capabilities. **Therefore a Research and Development programme to support the development of local applications by the public and private sectors will be implemented. Research institutions, universities and centres of excellence should be used to develop these broadband applications. The development of innovative and local applications should also be encouraged.**

2.3.6.4 Provision of support to consumers

- 2.3.6.4.1 Access to affordable broadband services by consumers is critical to increase uptake and usage, thus guaranteeing demand. Consumers require affordable end-user equipments, applications and content to take up broadband services. Thus this policy provides for the implementation of interventions aimed at supporting consumers to afford broadband services and end-user devices. Such interventions prioritise supporting needy persons as defined by the Universal Service and Access Agency of South Africa.
- 2.3.6.4.2 Incentives need to be provided to encourage uptake of Broadband in all sectors of society by Government and Private operators for example by implementing subsidised premises, equipment, low cost computers etc.

2.3.6.4.3 Furthermore the policy provides for the implementation of campaigns to educate and create awareness with regard to the benefits of broadband. This will build confidence in the use of broadband services thereby increasing uptake and usage of such services. Digital literacy and e-skilling are also critical to the increase of uptake and usage of Broadband services.

3 ROLE CLARIFICATION

3.1 The South African Constitution does not provide for concurrent jurisdiction with regard to the management of the communications sector. It has placed the communications sector as a national competence. In the recent past, provinces and municipalities have announced initiatives aimed at building broadband networks. This has led to duplication of activities amongst the three spheres of government. It is therefore necessary to distinguish between the roles of the three spheres of Government (i.e. national, provincial and local) as well as SOCs with regard to the provision of broadband services.

3.2 The rollout of broadband initiatives by national, provincial and local governments is fragmented due to the fact that there is no national broadband rollout plan. **In this regard, all broadband initiatives by national, provinces and municipalities will be done in accordance with the National Broadband Policy and coordinated at a central point in order to streamline and maximize government investment.** This will ensure that a uniform, integrated homogenous and coordinated government approach is developed in the provision of broadband services within the country and ensuring that all provinces and municipalities receives equitable attention irrespective of their economic and financial status.

3.2.1 National Government

3.2.1.1 Department of Communications (DoC)

- a) The Department of Communications, as the custodian of ICT policy in South Africa, will be ultimately responsible for facilitating the implementation of this policy as a whole.
- b) National Government will from time to time, by means of policy, direct the Independent Communications Authority of South Africa (ICASA) to create an enabling regulatory environment for the private and public sector to develop infrastructure, services and applications towards the increase of access to and affordability of Broadband services.

3.2.1.2 National Treasury (NT)

The role of the NT is to provide the necessary funding for broadband initiatives in line with the provisions of the National Broadband Strategy implementation.

3.2.1.3 Department of Cooperative Governance and Traditional Affairs (CoGTA)

The role of CoGTA is to provide a cooperative governance framework in support of broadband initiatives in various provinces and municipalities.

3.2.1.4 Economic Development Department (EDD)

The role of EDD is to ensure that the broadband built programme contributes to job creation and inclusive economic growth through supporting local value addition in broadband technologies.

3.2.1.5 Department of Public Enterprises (DPE)

To ensure that SOCs deploy networks in accordance with the National Broadband Strategy and Implementation Plan.

3.2.1.6 Department of Trade and Industry (DTI)

To provide incentives in support of building excellence in the manufacturing of affordable end-user equipments.

3.2.1.7 Department of Science and Technology (DST)

DST administers a national research and development programme. Its role in this project is to support R&D initiatives aimed at supporting various broadband initiatives including the development of applications.

3.2.1.8 Department of Arts and Culture (DAC)

In line with the objective of nation building and promoting social cohesion in the country, DAC has identified local content as a golden economy. DAC's role will be to ensure that heritage and cultural content is made available online.

3.2.1.9 Department of Basic Education (DBE)

DBE's role will be to ensure the availability of educational content online in line with the national e-Education Policy of the country.

3.2.1.10 Department of Health (DoH)

DoH's role will be ensure the availability of health content online in line with the national e-Health Policy of the country.

3.2.1.11 Department of Rural Development and Land Reform (DRD&LR)

DRD&LR's role will be to identify rural sites for connectivity.

3.2.1.12 Department of Public Service and Administration (DPSA)

As the custodian of ensuring that government information is made available online, DPSA's role is to ensure the availability of government information online.

3.2.2 Provincial Governments

The role of the provincial government is to:

- a) define the provincial broadband requirements to enable connectivity and access;
- b) establish Broadband Implementation focal points within established Intergovernmental Relations Fora;
- c) collaborate with DoC in connecting provincial governments and their entities with Broadband services and enabling the distribution of e-government services to drive the demand for Broadband and promote uptake and usage;
- d) invest in the development of local content and Broadband awareness to support uptake and usage of Broadband services; and
- e) align and implement existing and new broadband policies and strategies with the National Broadband Policy;

3.2.3 Local Governments

The role of local government is to:

- a) define municipal broadband requirements to enable connectivity of municipal offices
- b) ensure the provision of electronic communication network services in cooperation with the provincial and national government

- c) facilitate approval processes with regard to rights of way
- d) collaborate with provinces and DoC in connecting local government offices and their entities with Broadband services and enabling the distribution of e-government services to drive the demand for Broadband and promote uptake and usage
- e) invest in the development of local content and Broadband awareness to support uptake and usage of Broadband services; and
- f) align and implement existing and new municipal policies and strategies with provincial policies and strategies.

3.2.4 State Owned Companies (SOCs)

Government will use SOCs for the provisioning of electronic communications networks services in line with the national broadband infrastructure rollout plan.

4 INSTITUTIONAL ARRANGEMENTS

4.1.1 The deployment of broadband infrastructure is a complex exercise since it requires that various key role players work together to deliver a winning broadband solution. Thus coordination of the various activities between and amongst key role players is vital to the success of the national broadband programme.

4.1.2 It is therefore recommended that a dedicated Inter-Ministerial Committee is established. Its role will be to set strategic direction for ICTs for government use, set ICT investment priorities, provide oversight and understanding with regard to Broadband Rollout in the Republic. It will also act as a committee of the Presidential Infrastructure Coordinating Commission (PICC).

4.1.3 The Inter-Ministerial Committee will comprise the Ministers of;

- Communications
- Finance
- Public Enterprises
- Trade & Industry
- Higher Education
- Basic Education
- Health

Public Service and Administration
Economic Development
Environmental Affairs; and
Science and Technology

- 4.1.4 The work of the Inter-Ministerial Committee will be supported by the Department of Communications.
- 4.2 Recognising the important role that the private sector plays in the establishment of broadband infrastructure and services, a joint Government/Private Sector Liaison Committee will be established to co-ordinate broadband activities.

5 IMPLEMENTATION OF THE POLICY

- 5.1 A broadband mapping exercise will provide guidance in identifying broadband infrastructure gaps in all nine provinces.
- 5.2 A National Broadband Strategy will be developed in collaboration with all key stakeholders. The strategy will include the implementation of programmes aimed at advancing penetration such as schools connectivity, health facilities connectivity, rural connectivity, and connectivity of government institutions at national, provincial and local level; and the provision of public access points.
- 5.3 A Broadband Implementation Plan which details how various initiatives will be supported and implemented will also be developed.
- 5.4 An impact assessment on the effectiveness of the policy should be conducted on annual basis.

6 BENEFITS OF BROADBAND

Broadband is recognised as a strategic tool in the building of knowledge based economy. Numerous studies have confirmed that increased broadband penetration has a positive impact on economic growth, bridging the digital divide, and improving access and delivery of social services resulting in improved quality of life of citizens and competitiveness of the country. The following are regarded as essential and identifiable benefits of broadband:

6.1 Supporting economic development and growth

- 6.1.1 Broadband can promote economic development and revitalization through electronic commerce by creating new jobs and attracting and developing new industries and providing access to local, provincial, national, and global markets. For example 10% broadband penetration results in 1% increase in the gross domestic product of a country.

6.1.2 Broadband also has the potential to indirectly reduce carbon emissions. The International Telecommunications Union – Telecommunication (ITU-T) is focusing on the role that ICTs can fulfill in order to reduce green house gases. As an example video conferencing and SOHO telecommuting has the potential to reduce travelling which in turn supports the reduction of green house gases.

6.2 Increase access and improve delivery of essential social services

6.2.1 Education

Broadband provides access to a wide range of educational opportunities and resources. It encourages e-learning experience in the country. It has the ability to provide an educational platform which transcends geographical and financial challenges often experienced in South Africa.

6.2.2 Health

Broadband can facilitate provision of medical care to unserved and underserved populations through remote diagnosis, treatment, monitoring, and consultations with medical-specialists thereby encouraging tele-health and telemedicine. It also has the potential to reduce the distance between medical institutions because the data is readily available as and when needed.

6.2.3 Electronic Government

Electronic government can help streamline people's interaction with government agencies, and provide information about government policies, procedures, benefits, and programs.

6.2.4 Public safety security

Broadband can help protect the public by facilitating and promoting public safety information and procedures, including, but not limited to early warning/public alert systems and disaster preparation programs, remote security monitoring and real time security background checks, and backup systems for public safety communications networks.

6.3 Minimise the digital divide

Investment in broadband especially in rural and underserved areas of the country helps to reduce the digital divide between these areas and the more developed areas such as urban areas. Digital divide can be reduced by ensuring that all these regions enjoy similar levels of broadband connectivity and information.

Glossary and abbreviations

Access network	the portion of the telecommunications network between the central office and end-user premises.
ADSL	Asymmetric Digital Subscriber Line. A technology that enables high speed data services to be delivered over twisted pair of copper cable.
Backbone	A high capacity line dedicated to the transport of aggregate communication signals from base stations to the core network.
Broadband coverage	An area where a subscriber can reasonably expect to be able to access broadband service from a service provider.
Digital divide	a socio economic effect whereby one area of the country falls behind another area in the availability of digital services.
Duct	Tube or passage that confines and conducts cables of physical network.
ECA	Electronic Communications Act of 2005 as amended.
ECNS	Electronic Communications Network Service.
ECS	Electronic Communications Service.
ECTA	Electronic Communications and Transactions Act.
Fibre	A type of cable whereby information is transmitted as light waves through a thin filament of glass.
FTTP	Fibre to the premises (building). A high speed optical fibre internet connection that terminates at a commercial premise
FTTH	Fibre to the home. A high speed optical fibre internet connection that terminates at a residence.
GDP	Gross Domestic Product. The total market value of final goods and services produced within a nation in a given period of time
ICASA	Independent Communications Authority of South Africa.
ITU	International Telecommunications Union.
Kbps	Kilobits per second.
Mbps	Mega bits per second.
Needy persons	As determined by the Universal Service and Access Agency of South Africa.
Passive infrastructure	collocation or other forms of facility sharing including duct, building or mast sharing.

SADC	Southern African Development Community.
SOC	State Owned Company established in terms of an Act of Parliament.
Universal access	means universal access to electronic communications network services, electronic services and broadcasting services as determined from time to time in terms of Chapter 14 of the ECA.
Universal service	means the universal provision of electronic communications services and broadcasting services as determined from time to time in terms of chapter 14.
USAF	Universal Service and Access Fund as established in terms of section 87 of the ECA.