

In Re: DRAFT BROADBAND POLICY FOR SOUTH AFRICA

1. INTRODUCTION

- 1.1 On 18 September 2009, the Honorable Minister of Communications gazetted a General Notice (GN No. 1275 Government Gazette No. 32578) giving notice of intention to make a South African Broadband Policy in terms of section 3(1) of the Electronic Communications Act, 2005 (Act No. 36 of 2005) (hereinafter referred to as the “ECA”).
- 1.2 The Universal Service and Access Agency of South Africa (hereinafter referred to as the “Agency”) welcomes the opportunity to comment on the proposed Broadband Policy for South Africa, as gazetted in General Notice 1275 in Government Gazette 32578 of 18 September 2009 (hereinafter referred to as the “Notice”).
- 1.3 The Agency also supports the availability of and access to broadband services by all citizens of the Republic despite their socio-economic background as the availability of universal, affordable broadband brings with it a number of benefits and possibilities,
- 1.4 We hope to make a positive contribution towards the finalization of this very important process, and confirm our participation in any public process that the Ministry may undertake in this regard.

2. LEGISLATIVE MANDATE OF USAASA

- 2.1 The Agency is so-called “creature of statute” as it is established in terms of an Act of Parliament. The existence, functions, duties and mandate of the Agency are governed by sections 80 to 91 of the ECA which was promulgated in 19 July 2006.
- 2.2 In terms of the ECA the Agency is mandated to do the following :
 - 2.2.1 strive to promote the goal of universal access and universal service;
 - 2.2.2 encourage, facilitate and offer guidance in respect of any scheme to provide universal access, universal services or telecommunication services in terms of the Reconstruction and Development Programme (RDP).
 - 2.2.3 make recommendations to enable the Minister to determine what constitutes universal access, universal service and under-serviced areas;

- 2.2.4 conduct research into and keep abreast of developments in the Republic and elsewhere on information communication technology, electronic communications services and electronic communications facilities;
 - 2.2.5 continually survey and evaluate the extent to which universal access and universal service have been achieved;
 - 2.2.6 make recommendations to the Minister in relation to policy on any matter relating to universal access and universal service;
 - 2.2.7 advise the Authority (ICASA) on any matter relating to universal access and universal service;
 - 2.2.8 continually evaluate the effectiveness of the ECA and things done in terms thereof towards the achievement of the goal of universal access and universal service; and
 - 2.2.9 manage the Universal Service and Access Fund in accordance with the provisions of the Act.
- 2.3 Based on the requirement of making recommendations to enable the Minister to determine what constitutes universal access, universal service and under-served areas, the Agency has undertaken a public consultative process in order to fulfill its statutory obligations.
- 2.4 The public consultative process culminated into recommendations being made to the Minister and these recommendations have a direct impact on broadband deployment within the Republic.
- 2.5 The recommendations on definitions provide targets and parameters for the rapid deployment within the Republic and serve as a basic step towards the attainment of universal access and universal service within the Republic of South Africa.
- 2.6 The following recommendations were made to the Minister on proposed definition of universal access, universal service and under-served areas :

2.6.1 PROPOSED DEFINITION FOR UNIVERSAL ACCESS

2.6.1.1 *“Universal access is provided where all persons (regardless of disability, age or other vulnerability) in all areas and communities are able to obtain quality, affordable access, to a publicly available minimum set of services:*

- *electronic communications network service and electronic communications service (which includes voice, messaging and data electronic communications service and in the case of data, which includes an Internet connection), and access to emergency services using free calls and messaging; and*

2.6.1.2 For *data electronic communications service* the targets are:

- *at least one public broadband Internet access point in a geographically founded community of up to 10,000 persons, and if the population of the community is 10 000 or more, then at least one public broadband access point for every 10,000 persons in that community or part thereof and*
- *the distance to be travelled from home by persons residing in the community to access data electronic communications service at a public access point should be no more than two kilometres.*

2.6.2 PROPOSED DEFINITION FOR UNIVERSAL SERVICE

2.6.2.1 For *data electronic communications service*:

- *service is available to 90 percent of households on demand where such service include access to the Internet as a minimum.*
- *service is affordable to 60 percent of households, and in respect of affordability, for an outlay not exceeding five percent of the household's total expenditure.*
- *a household should be able to use the Internet in a month, for at least 20 hours (of which no less than 10 hours are within peak calling rate periods) OR*
- *the amount of data that may be consumed shall be at least 200MB*

2.6.3 PROPOSED DEFINITION FOR UNDER-SERVICED AREAS

2.6.3.1“An ***under-serviced area for purposes of electronic communications service*** is any local municipality or smaller geographic area as defined by the Municipal Demarcation Board:

- *in which no electronic communications network has been constructed; or*
- *in which an electronic communications network has been constructed, but it does not as determined by the Authority, adequately cover the inhabited parts of the area; or*
- *in which an electronic communications network has been constructed, but over which no or, as determined by the Authority, limited electronic communications service are being provided.”*

2.6.3.2 For data electronic communications service –

- *for data electronic communications service the targets are at least one public broadband Internet access point in a geographically founded community of up to 10,000 persons, and if the population of the community is 10 000 or more, then at least one public broadband access point for every 10,000 persons in that community or part thereof and*
- *the distance to be travelled from home by persons residing in the community to access voice ECS at a public access point should be no more than two kilometres.*

2.7 The recommendations on definitions which frame national targets on broadband will necessitate the Department of Communications to consider including the broadband targets on draft broadband policy as the targets will inform the objectives of the broadband policy are met.

2.8 It is therefore equally important to have a clear definition of broadband in order to inform broadband targets. The definition of ‘broadband’ varies from country to country, but it is generally accepted as high speed, ‘always on’ Internet connection. Various organisations like the International Telecommunication Union (ITU), Organisation for Economic Co-Operation and Development (OECD) and international regulators specify the minimum download speed of broadband connection ranging 128 Kbps to 2 Mbps or higher. In OECD countries the term “broadband” is typically used to denote an Internet connection with download speeds faster than traditional dial-up connections (at 64 kbit/s). The OECD began collecting data on broadband subscribers in 2001 and set the minimum threshold for bit rates at 256kbit/s. The original OECD data collection included three categories: Digital Subscriber Line (DSL), cable and other. In 2007, the OECD began

separating out certain elements of the “other” category. Now fibre to the premises and apartment LAN connections are reported separately.

2.9 The ‘Always On’ facility as opposed to the ‘dial up’ (10s of Kbps) means that the user has access to the net as soon as he/she switches his/her internet browser on and does not need to dial the ISP number for a connection. In jurisdictions such as Pakistan, broadband is accordingly defined as “Always on Internet connection with a download speed of least 128kbps connectivity”. This download speed target will be subjected to an increase as the bandwidth prices decrease and local content becomes available, which then would lead to a general increase in awareness of broadband.

2.10 However, the definition contained in the draft document is drafted as follows:

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.

and does not conform to international best practices and standards on the definition of broadband.

2.11 Despite paragraph 1.3.1 which acknowledges that the ITU Standardisation sector defines Broadband as speeds of 1.5 to 2 Mbps while the development sector defines Broadband to be 256kbps, the proposed definition is not clear on the definition of broadband as it does not define the download speed target as it done with other jurisdictions such as Australia; Austria; Belgium; Canada; Czech Republic;

Denmark; Finland; France; Germany; Greece; Hungary; Iceland; Ireland; Italy; Japan; Korea; Luxembourg; Mexico; Netherlands; New Zealand; Norway; Poland; Portugal; Slovak Republic; Spain; Sweden; Switzerland; Turkey; United Kingdom and United States of America whom have all but included the download speed.

- 2.12 The wording on the definition with particular reference on paragraph 1.3.2 which dictates that ***for South Africa Broadband will be interpreted as an always available, multimedia capable connection.*** The definition is too broad to make a proper assessment and it will be subject to abuse of interpretation. The word multimedia is not defined anywhere in the body of the draft policy and even the ECA does not have any definition on the term.
- 2.13 The two proposed definitions of basic and commercial broadband as encapsulated under paragraphs 1.3.3 and 1.3.4 will create an unnecessary territorial divide regarding broadband access. This will perpetuate the urban-rural divide in terms of access to broadband and it will further create the two economies. The Agency support a single definition of broadband that will include a download speed target and this would ensure regulatory stability on rapid deployment of broadband services.
- 2.14 Furthermore, the definitions process have already set up targets on definition of universal access, universal service and under-serviced areas for data ECS and the exclusion of the download speed on the definition of broadband will hinder progress towards the attainment of universal access and universal service within the Republic.

3. Specific Comments

3.1 Context

- 3.1.1 The context of the draft policy has dismally failed to recognise the contents of the Accelerated and Sustainable Growth Initiative South of Africa (ASGISA) policy goals of which broadband has a significant role to contribute in order to realize the policy goals of ASGISA initiative. The ASGISA programme is intended for economical growth and it has set out a two phase target. In the first phase, between 2005 and 2009 the policy seek an annual growth rate that averages 4.5% or higher. In the second phase, between 2010 and 2014, the policy seeks an average growth rate of at least 6% of GDP. The electronic communications infrastructure is a key both commercially and socially and is being acknowledged by the policy prescripts of ASGISA as a platform to grow the economy. As a result it has recognised the implementation of a strategy to rapidly grow South Africa's broadband network.

- 3.1.2 The ASGISA policy initiative also proposes the elimination of the second economy and therefore, the two proposed definitions on basic and commercial broadband will go against the noble intent of the ASGISA initiative.
- 3.1.3 Another critical programme that the draft broadband policy must be linked to is the Reconstruction and Development Programme (RDP). Broadband can play a pivotal role in the country's health, education, agricultural, informal sector, policing and safety programmes. Therefore broadband can enable the delivery of basic services and the reconstruction and development of deprived areas.
- 3.1.4 The RDP is aimed at providing universal affordable access for all as rapidly as possible within a sustainable and viable telecommunications system. The draft broadband policy must underpin the principles of RDP as broadband delivery technology is capable of enhancing, cheapening and facilitating education, health care, business information, public administration and rural development.
- 3.1.5 Broadband has become an important part of almost every aspect of the knowledge economy and is especially so in activities that relies on the provision of data and information, particularly in service sectors. Many aspects of producing, delivery, consuming, co-ordination and organisation are now taking place over broadband communications networks.
- 3.1.6 Broadband generates increased efficiency, productivity and welfare gains, and potentially contributes to job creation and occupational change.
- 3.1.7 Broadband is also increasingly becoming important as an enabler of technology for structural changes in the economy, most notably via its impact on productivity growth, but also by raising product market competition in many sectors, especially in services.
- 3.1.8 ICTs and broadband are facilitating the globalisation of many services, with broadband making feasible for producers and consumers of services to be in different geographic locations.
- 3.1.9 ICT-enabled globalisation of services is having a fundamental impact on the way economies work and on the global allocation of resources, contribution to productivity growth by expanding markets, increasing business efficiency and reinforcing competition pressure.
- 3.1.10 The broadband policy must be linked to ASGISA in order for it to be relevant to the national agenda given the above summary on economic spin-offs that would be created through broadband and ICTs.

- 3.1.11 Another critical policy programme that the draft Broadband policy has neglected to acknowledge is the Medium Term Strategic Framework (MTSF) (A Framework to Guide Government's Programme in the Electoral Mandate Period (2009 – 2014). The MTSF base document is meant to guide planning and resources allocation across all the spheres of government.
- 3.1.12 Under the strategic priorities and programmes of the MTSF, Strategic Priority 2 which deals with massive programme to build economic and social infrastructure, broadband can play a critical role in this regard and hence the draft Broadband policy needs to make a particular reference to MTSF.
- 3.1.13 The international broadband literature review have an overwhelming linkage of the broadband strategies to national programmes as this facilitates the rapid deployment of broadband infrastructure and services.
- 3.1.14 The Agency suggest that the context paragraph needs to be substituted by the word " Preamble" and the body of the context needs to be revised to be in line with the policies that are supporting national programmes.

3.2 To increase affordability

- 3.2.1 The Agency welcomes its role towards broadband deployment within the Republic as captured on the draft policy i.e. *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.*
- 3.2.2 However, the draft policy puts more emphasis on usage of the Universal Service and Access Fund (USAF) for subsidization of certain areas that have a prohibitive cost.
- 3.2.3 The Agency wishes to note that the fund is intended for the following particular purpose:

Section 88 enjoins the Agency to utilize the money in the USAF exclusively for the payment of subsidies as follows:

- a) for the assistance of needy persons towards the cost of the provision to, or the use by, them of broadcasting and electronic communications services;
- b) to any broadcasting service licensee and electronic communications network service licensee for the purpose of financing the construction or extension of electronic communications networks in under serviced areas as prescribed;

- c) to public schools and public further education and training institutions as defined in the South African Schools Acts, 1996 (Act No. 84 of 1996), and the Further Education and Training Act, 1998 (Act No. 98 of 1998), respectively, for the procurement of broadcasting and electronic communications services and access to electronic communications networks;
- d) to schools and further education and training institutions as defined in the South African Schools Acts, 1996 (Act No. 84 of 1996), and the Further Education and Training Act, 1998 (Act No. 98 of 1998), respectively, for the procurement of broadcasting and electronic communications services and access to electronic communications networks: Provided that—
 - i) in the case of public schools, they are recognised by their provincial Departments of Education as falling into the lowest three quintiles for socio-economic redress in terms of the National Norms and Standards for School Funding (1998); and
 - ii) in the case of independent schools and independent further education and training institutions—
 - aa) they are registered with the Commissioner for Inland Revenue as public benefit organisations in terms of section 10(1)(cN) of the Income Tax Act, 1962 (Act No. 58 of 1962); and
 - bb) they are registered with their provincial Departments of Education or the National Department of Education (as the case may be) for the receipt of state subsidies;
- e) for the establishment and operation of broadcasting services and for the establishment and operation, including training of and the payment of allowances to personnel of centres where access can be obtained to electronic communications networks.

Further the provisions of section 90 dictates the following:

- 1) The Agency must provide incentives to electronic communications network service licensees to construct operate and maintain electronic communications networks in under-serviced areas through the award of project grants.
- 2) The Agency must, in consultation with the Authority—
 - a) publish a notice in the Gazette stating its intention to award one or more project grants and invite interested electronic communications network service licensees to submit proposals;

- b) identify the targeted under-serviced area or under-serviced areas where project grants will be awarded and determine—
 - i) the time and place for submitting proposals;
 - ii) the scope of the projects which may vary according to the needs of the targeted under-serviced area or under-serviced areas;
 - iii) the criteria for evaluating proposals;
 - iv) the projected cost of the proposed project; and
 - v) such other matters as may be helpful in securing qualified proposals.
- 3) The criteria for evaluating proposals may take into consideration—
 - a) the objects of this Act set out in section 2;
 - b) the scope of the electronic communications network service licensee's proposal, including the electronic communications network proposed for construction in the under-serviced area and the technologies proposed;
 - c) any electronic communications services the electronic communications network service licensee proposes to offer in terms of its electronic communications network service licence and, as applicable, any electronic communications service licence or other licence held by the electronic communications network service licensee;
 - d) the terms and conditions relating to any proposed services, including wholesale and retail pricing, taking into account the lack of competitive electronic communications networks and services in the targeted under serviced area; and
 - e) such other matters as the Agency, in consultation with the Authority, finds appropriate for the targeted under-serviced area.
- 4) The subsidy for project grants must be paid out of the Universal Service and Access Fund.
- 5) The Agency must supervise the execution of projects awarded under subsection (1).

3.2.4 The Agency further acknowledges that the USAF can be used for broadband deployment in areas that have a prohibitive cost however the Department needs to consider other alternative strategies that would improve the market efficiency on broadband deployment. This would mitigate the heavy reliance on the USAF

and it would further enable the USAF to be used for true access gaps as intended from the ECA.

3.2.5 The Agency proposes that the following market interventions must be considered:

3.2.5.1 Competition and access to international connectivity and capacity - Competition in international connectivity (i.e., sub-marine cables) and access to facilities such as international gateways (for Internet or voice traffic), is key to lowering the cost of bandwidth and broadband prices for consumers. Effective interconnection, gateway liberalization, and regulatory frameworks that introduce new models of sharing and collocation and national peering, and which reduce barriers to existing private, government and international networks, are important in encouraging existing and new market entrants to expand into broadband services.

3.2.5.2 Market liberalization and incentives for network deployment - In countries with less developed networks, the strategy for infrastructure network development including in rural areas is typically market liberalization, lifting foreign ownership restrictions, simpler licensing and promoting alternative wireless broadband provision. More incentives to ensure evolution to broadband services can include the following:

Consideration of tax incentives for fibre installation over cheaper methods e.g, microwave for network deployment;

Determination of whether market conditions are conducive to establishing duplicate backbone networks or single networks in which competing operators utilize shared bandwidth; if the latter, create open access policies for backbone networks;

Establish licensing that allows for infrastructure sharing and open access to broadband networks; and

Promote site collocation (site sharing) of network infrastructure projects (fibre backbone) where they can be accessed by a variety of potential operators and promote open access policies.

3.2.5.3 Planning for converged services: Regulatory approaches in support of broadband network development should take into consideration the convergence of multiple services (e.g., telephony, data and broadband) over IP networks. Approaches for co-existence of pre-existing services such as telephony and newer competing services such as VoIP or BWA services need to be considered and integrated in regulatory strategies, as well as the evolution from non-IP networks

to Next-Generation Networks (NGN). Drivers of the increasing demand for broadband include: high demand for new services such as VoIP; cost effectiveness of utilizing multiple network topologies, and spectrum bands in service delivery of existing services (e.g., international calls). Effective regulatory mechanisms need to be put in place to manage issues such as interconnection, use of spectrum, and co-existence of traditional and new services.

3.2.5.4 Increasing public awareness and stimulating demand : Given the high costs of deployment of rural and remote broadband networks, the government needs to assist development by increasing public awareness and stimulating demand, for example by buying connectivity services in bulk. For example, regulatory agencies could work in partnership with other ministries in promoting the development and extension of e-government services, which in turn stimulate demand for broadband services.

Other approaches to promote broadband development include:

Supporting local, relevant Internet content in local languages;
Lowering the cost of end-user terminals through reductions of import duty and other taxes, national PC programmes helping lower income households to purchase PCs at discounts or with loans, and possibly subsidizing broadband equipment in schools;
Educating citizens about the benefits of broadband while further developing Internet skills;
Providing a legal framework for e-commerce and other applications; and
Ensuring that consumers have enough information on providers and pricing options as well as on available technologies.

3.3 Broadband Penetration Rate

3.3.1 The Agency in 2008 has conducted a Universal Access and Service Review within the Republic and the following statistics as indicates a very low usage of internet services per district municipality. Given the poor penetration of internet within the republic, the draft broadband strategy needs to create an enabling environment for broadband which would attract investment.

3.3.2 Demand for Broadband is primarily conditioned and driven by Internet and PC penetration and hence the Agency proposes that the draft broadband policy must provide an enabling environment for demand of broadband services as in the Republic we have already the presence of broadband services which are based on supply of broadband services. Therefore, it will be critical that the broadband band policy to encourage the demand of services rather than the supply of broadband services.

Table: 1
SA Household ICT penetration district municipality

	Cellphone	Television	Telephone	Computer	Internet	Average of all five indicators	Under serviced ranking
DC44: Alfred Nzo	58%	32%	1%	2%	0%	26%	1
DC24: Umzinyathi	65%	32%	6%	4%	2%	28%	2
DC27: Umkhanyakude	72%	36%	2%	2%	1%	29%	3
DC15: O.R.Tambo	60%	32%	2%	2%	1%	29%	4
DC43: Sisonke	61%	36%	4%	4%	2%	31%	5
DC14: Ukhahlamba	59%	37%	5%	5%	1%	33%	6
DC13: Chris Hani	59%	46%	6%	3%	1%	35%	7
DC26: Zululand	73%	42%	4%	3%	2%	36%	8
DC29: iLembe	64%	48%	11%	5%	3%	38%	9
DC28: Uthungulu	68%	49%	8%	8%	4%	40%	10
DC12: Amatole	63%	54%	9%	7%	3%	40%	11
DC47: Greater Sekhukhune	69%	48%	3%	5%	1%	41%	12
DC23: Uthukela	73%	53%	9%	6%	2%	41%	13
DC21: Ugu	65%	55%	13%	7%	5%	42%	14
DC33: Mopani	68%	52%	4%	6%	2%	42%	15
DC39: Bophirima	66%	57%	7%	6%	2%	43%	16
DC34: Vhembe	71%	58%	3%	7%	1%	44%	17
DC38: Central	67%	65%	6%	7%	3%	45%	18
DC16: Xhariep	57%	59%	17%	9%	3%	45%	19
DC35: Capricorn	72%	60%	5%	7%	2%	45%	20
DC19: Thabo Mofutsanyane	67%	64%	11%	9%	3%	46%	21
DC37: Bojanala	74%	62%	6%	9%	2%	47%	22
DC32: Ehlanzeni	76%	61%	6%	9%	3%	47%	23
DC36: Waterberg	73%	59%	10%	10%	4%	47%	24
DC45: Kgalagadi	70%	58%	10%	8%	3%	47%	25
DC40: Southern	71%	59%	13%	12%	5%	47%	26
DC18: Lejweleputswa	66%	64%	11%	8%	3%	48%	27
DC8: Siyanda	58%	63%	20%	13%	4%	48%	28
DC25: Amajuba	75%	66%	14%	9%	3%	49%	29
DC7: Pixley ka Seme	56%	69%	22%	11%	5%	49%	30
DC30: Gert Sibande	75%	65%	11%	12%	5%	49%	31
DC10: Cacadu	56%	72%	22%	14%	8%	50%	32
DC20: Fezile Dabi	69%	63%	15%	11%	5%	50%	33
DC31: Nkangala	81%	67%	11%	12%	4%	51%	34
DC48: West Rand	74%	66%	21%	17%	7%	51%	35
DC22: UMgungundlovu	69%	67%	23%	16%	7%	52%	36
DC17: Motheo	72%	70%	15%	16%	6%	52%	37
DC46: Metsweding	82%	68%	15%	20%	7%	53%	38
DC6: Namakwa	57%	72%	31%	14%	5%	53%	39
DC9: Frances Baard	66%	77%	26%	17%	8%	54%	40
DC5: Central Karoo	55%	78%	33%	13%	7%	55%	41
EKU: Ekurhuleni	80%	72%	22%	22%	10%	55%	42
DC42: Sedibeng	73%	78%	16%	16%	5%	55%	43

	Cellphone	Television	Telephone	Computer	Internet	Average of all five parameters	Under serviced ranking
ETH: eThekweni	78%	74%	32%	19%	9%	58%	46
DC4: Eden	71%	78%	31%	23%	13%	59%	47
DC2: Cape Winelands	69%	81%	31%	22%	10%	59%	48
City of Johannesburg	82%	78%	29%	26%	14%	61%	49
DC3: Overberg	69%	82%	37%	23%	13%	61%	50
DC1: West Coast	72%	83%	35%	22%	10%	61%	51
CPT: City of Cape Town	77%	86%	47%	34%	19%	68%	52
Total	73%	66%	19%	16%	7%	50%	

Source: Community Survey, February 2007

The recent studies by Wide World indicates that broadband users within the Republic have not grown significantly despite the licensing of mobile operators and private sector to provide broadband services within the country.

Internet Usage and Population Statistics:

YEAR	Users	Population	% Pen.	Usage Source
2000	2,400,000	43,690,000	5.5 %	ITU
2001	2,750,000	44,409,700	6.2 %	IWS
2002	3,100,000	45,129,400	6.8 %	ITU
2003	3,283,000	45,919,200	7.1 %	Wide World Worx
2004	3,523,000	47,556,900	7.4 %	Wide World Worx
2005	3,600,000	48,861,805	7.4 %	Wide World Worx
2008	4,590,000	43,786,115	10.5 %	W.W.W

Source: Wide World Worx 2008

3.4 Broadband Policy Objective

3.4.1 The Agency supports the overall objectives of the draft broadband policy in principle although we strongly suggest that the broadband policy must be designed to achieve the following objectives:

- a) Spreading of an affordable, 'always on', broadband high speed internet service in corporate/commercial, government and residential sectors across South Africa;
- b) Encourage the entry and growth of new service providers while at the same time stimulating the growth of the existing ones; and

- c) Encourage private sector investment in local content generation and broadband service provision.

3.4.2 The draft Broadband policy must also propose strategies for attainment of the above objectives which must include the following:

- a) Removing of the existing technical, commercial, operational and legal barriers to the growth of broadband within the Republic of South Africa;
- b) Increasing the choice of broadband technologies available to the consumer at affordable prices. This would provide an enabling environment for broadband uptake and usage and it would further serve as a catalyst for broadband uptake;
- c) Encourage the development and hosting of local content so as to reduce reliance on the expensive international bandwidth;
- d) The Regulator i.e. ICASA has to prescribe Quality of Service (QoS) parameters as QoS parameters are equally important and have an impact on investment and roll-out obligations of operators;
- e) The holders of individual licenses in terms of Chapter 3 of the ECA as granted and issued by the Authority needs to be obligated for growth of Broadband;
- f) Encourage investment in local innovation and research and development of broadband technology applications in order to foster rapid deployment and affordable broadband access and usage in under-serviced areas;
- g) Provide an incentive for the private sector to invest on backbone infrastructure in under-serviced areas in order to ensure availability of bandwidth that will facilitate rapid deployment of broadband services.

4. Additional Comment

4.1 Process followed for draft Broadband Policy

4.1.1 Given the regulatory complexities and the importance of broadband towards socio-economic development, the Agency strongly believe that the Department of Communications should have conducted a holistic broadband service provisioning within the Republic based on international best practices, on the study review outcome and develop a consultative framework in order to solicit a public opinion. The conclusion and findings document based on written responses and oral representations should have influenced the content text of the Draft Broadband Policy. The process would then provide an opportunity to public institutions, private sector and public at large to make comments enabling

them to also have confidence on policies of the Department as they relate to current challenges our economy which the public is always confronted with. And further a consultative process on developing the basis of the proposed policy forms part of public bodies being accountable to the general public.

4.2 Broadband Enabling Policy

- 4.2.1 The current draft policy does not adequately address the enabling environment for broadband. A policy that is aimed at setting goals for broadband services in the Republic. This policy must be informed by economic micro policies and national programmes and it must include investment in urban, domestic and international backhaul, content delivery mechanism, content and application development, and rural build out. The content and applications must include full menu of services including the following programmes:
- 4.2.2 *Telemedicine and eHealth*: The delivery of telemedicine and eHealth applications bridges time and distance and allows services to reach individuals in their own communities. Rural hospitals may exploit broadband to enjoy the same medical expertise available in urban centres. Purchase of medical supplies, prescriptions and electronic record keeping are enabled online. Electronic monitoring is made possible, with important benefits for assisted living.
- 4.2.3 *eGovernment*: Broadband improves the capability of eGovernment services and allows a better interaction between governments, easing access to government for citizens and businesses. It facilitates the development of high-quality services and may increase organisational performance resulting in efficiency gains for the public administrations.
- 4.2.4 *Education*: Broadband strengthens the life-long learning process and enables students to obtain real-time education from qualified teachers in areas where that instruction may not be available. Students can access alternative educational resources and be exposed to new forms of educational content. It enables video-conferencing and facilitates inter-institutional collaboration.
- 4.2.5 *Rural Development*: In rural areas, broadband plays an important role in connecting farms and businesses to national and international markets. It helps the development of the rural economy by facilitating e-business, particularly in the farm and food sectors. It can encourage diversification by making rural areas more attractive and improving marketing opportunities for products and services such a tourism and rural amenities. Village ICT initiatives built around broadband hubs can provide a cost-effective approach to provision of services to businesses and local communities.

4.2.6 For this magnitude of investment to occur, the appropriate regulatory environment and policies need to be established and once this has been addressed and only then there will be successful growth and business models for broadband services.

4.3 Broadband Value Chain

4.3.1 One of the primary goals of the draft broadband policy is to increase the accessibility and affordability of broadband throughout South Africa. South Africa is being confronted with the issue of being one of the most expensive countries in the world on cost of provisions communications services which include broadband and for the government to achieve the goal of accessibility and affordability, it needs to include the Broadband Value Chain in the proposed Broadband Policy.

4.3.2 The Agency proposes that the draft policy must separate the broadband value chain into four components and create growth enablers in each component. The four links of broadband value chain must cover all the enabling aspects of broadband services. The four links must be:

a) Content facilitation

The content which include web, video and data which is made available for use over internet has very important role in enhancing the utility of internet for local population both in the way of local availability and availability in local languages(s). The draft policy must aim to enhance both the areas in tandem by ensuring that the content industry will flourish based on the incentives provided on all the platforms where data related services are delivered to the public including data over cellular phone and over fixed line Consumer Premise Equipments (CPEs) apart from the availability on the internet.

Hosting of websites within a country is one of the main drivers for the promotion of broadband growth. It is therefore important to encourage both domestic and foreign operators to host their websites within South Africa. This will address one of the key dimensions of accelerating broadband penetration, i.e. local content availability. By providing locally located content, this facility will reduce the reliance on the International IP bandwidth as high proportion of the internet traffic will remain in South Africa

b) Backhaul facilitation

Most of the content in South Africa is located on Internet servers outside the country. This obligates ISPs and consumers to pay for expensive International IP bandwidth to access that content. However the ISPs also need the domestic bandwidth to access and connect their individual PoPs located within the country.

It is equally important for the draft broadband policy to include mechanisms to reduce the International IP Bandwidth Prices and Domestic Bandwidth Prices and further establish a National and Regional peering points that connect and switch the domestic traffic between all the ISPs and thereby promoting the creation of a national Intranet that provides domestic IP network services. The International IP bandwidth price is the biggest factor in an ISP cost hence a need to device mechanisms that would reduce it.

c) Broadband Delivery facilitation

The policy needs to identify primary mechanisms for broadband delivery. The common primary mechanisms for broadband delivery in the country are Copper Telephone lines - Digital Subscriber Line (DSL), Wireless - Broadband Wireless Access and Satellite – VSAT and DTH. A regulatory framework for licensing of these broadband delivery technologies needs to be revised in order to support the overall objectives of the draft policy.

d) User Terminal equipment facilitation

The availability of in low cost access devices is a catalyst for broadband penetration. The draft policy must provide an enabling environment for availability of low cost access devices such as Personal Computers, Consumer Premise Equipment Modem in order to foster uptake and usage. The Department can follow examples of Korea, Malaysia and Thailand where they have taken significant steps with government funding in this area by providing low cost and free PC's to low income families and to all schools. The Korean and Malaysian government provided heavy subsidization and low interest loans to help families with children to obtain a PC to further their education utilising ICT's.

4.4 Broadband as a human right

4.4.1 The Bill of Rights under the Constitution of the Republic of South Africa recognises the right to communicate as a fundamental right. The Constitution, passed in 1996, establishes the right to freedom of expression, including the “freedom to receive and impart information or ideas”. The freedom of expression has been

interpreted to mean not only the right to speak and to be heard, but also the right to access the means to speak and to be heard.

4.4.2 The nation's broadband infrastructure will not be complete until it reaches all locations and people throughout the country, provides reasonable and affordable access to the full range of traditional and emerging ICTs and services such as broadband, taking into account the different needs among the user populations, including considerations of gender, age, ethnic, linguistic distinctions and disabilities.

4.4.3 It will be equality important for the draft broadband policy to underscore the right to communicate principle as it will help to elevate the status of the policy.

4.5 Establishment of an institutional mechanism

4.5.1 The Agency welcomes the establishment of such institutional mechanisms although the legal status proposed thereof of such an institutional mechanism is in question. Noting from Chapter 2 of the Electronic Communications Act which delineates powers for the Minister in terms of implementation of the Act, this chapter does not provide the Minister with any power to establish such a committee.

4.5.2 For the committee to be effective and responsive to the objectives of the draft broadband policy, it needs to have a *locus standi in judicio* and be established through law.

4.5.3 The functions of this committee must not undermine the powers and functions of statutory Agencies such as ICASA and USAASA pertaining to their respective role to broadband technology deployment and it must be a complementary body to these statutory entities.

4.5.4 The committee must be responsible for central coordination of several broadband initiatives within the Republic.

4.5.5 Coordination of the various broadband initiatives within different spheres of government, private sector and non profit organisations is one of the critical aspects that need to be clearly encapsulated in the draft broadband policy as it will facilitate rapid deployment of broadband services and eliminate the unnecessary duplication of broadband service in same areas.

4.6 Monitoring and evaluation

4.6.1 The usage of broadband penetration statistics as contemplated on the draft broadband policy would not be sufficient to evaluate uptake and usage. The Agency proposed that the Department must consider including the following indicators as means to assess the impact of the broadband policy:

- a) ICT Access Indicators relating to broadband service provisioning
- b) Indicators of Usage
- c) Impact Indicators

4.7 Financing of the Broadband policy

4.7.1 The Agency has noted with grave concern the fact that the draft Broadband Policy does not provide any funding mechanisms for rapid broadband deployment. Government needs to priorities national fiscals in order to finance broadband hence the proposal by the Agency that the Broadband needs to be declared as an essential service and it must be elevated to the status of national programmes.

4.7.2 The Agency proposes that the Department of Communications through the broadband policy needs to assign a very high priority to indigenous manufacture of Broadband related equipments. The Department must endeavor to work closely with concerned Ministries (such as Department of Trade and Industry, Department of Science and Technology, National Treasury) and Manufacture's Association so that equipments are available at an affordable price.

4.7.3 The Department must take cognizance of the fact that Broadband services can reach the urban and rural consumers only if services are affordable and easy terms. It is therefore recommended that the Department of Communications must work out a package in consultation with Ministry of Finance and related Departments as well as concerned service providers to achieve this.

4.8 Broadband Infraco

4.8.1 The Agency wishes to recall the strategic intent and objectives in which Broadband Infraco was intended for. Broadband Infraco was established based against the following background “ *Acknowledging that Broadband Infraco (Proprietary) Limited has been established in terms of the Broadband Infraco Act, 2007 (Act No. 33 of 2007) to expand the availability and affordability of access to electronic communications, including but not limited to under-developed and under-serviced areas, through the provision of:*

*(a) electronic communications network services; and
(b) electronic communications services. “*

4.8.2 The draft Broadband policy has failed to acknowledge the role of Broadband Infraco and it will be of national importance for Broadband Infraco to be obligated to expand its network to under-developed and under-served areas in order to enable availability and affordability of access to broadband.

5. Conclusion

5.1 The Agency would like to thank the Department for giving it this opportunity to express its views on the draft broadband policy.

5.2 The Agency hopes that its various concerns in respect of the draft broadband policy will be given due consideration by the Department in finalizing the broadband policy.

5.3 The Agency also requests the Department to organize and facilitate a public workshop on the draft broadband policy with relevant stakeholders and interested parties. This will ensure that the Department takes all relevant factors into account. The Agency believes that this public workshop would need to be held in order to inform the finalization of the draft broadband policy for South Africa.