

# Submission by Zenzeleni Networks NPC in conjunction with the Association for Progressive Communications and the University of the Western Cape

Ms M Masemola

Acting Deputy Director General,

ICT Policy and Strategy Development

[ecabill@dtps.gov.za](mailto:ecabill@dtps.gov.za)

31 January 2018

Dear Ms Masemola

## **WRITTEN SUBMISSION BY ZENZELENI NETWORKS, THE ASSOCIATION FOR PROGRESSIVE COMMUNICATIONS<sup>1</sup> AND THE UNIVERSITY OF THE WESTERN CAPE<sup>2</sup> ON THE ECA AMENDMENT BILL**

### **1. Introduction**

#### 1.1. Context

In Notice 1293 published in Government Gazette No. 41261 dated 17 November 2017, the Department of Telecommunications and Postal Services (DTPS) invited written submissions on the Electronic Communications Amendment Bill. The date for submissions was extended to 31 January 2018 as a result of Notice 1390 published in Government Gazette No. 41312 dated 8 December 2017. Herewith our submission for your consideration.

Our submission is premised on the practical experience of Zenzeleni Networks, which has demonstrated an alternative model to address the universal access and service gap, in rural South Africa in particular. The recommendations herein therefore articulate legislative proposals, which in our view will fundamentally alter the status quo such that South Africa may make real progress towards addressing its connectivity targets.

1 Represented by Dr. Carlos Rey-Moreno, Mr. Steve Song, Mr. Michael Jensen, and Ms. Anriette Esterhuysen.

2 Represented by Professor Bill Tucker and Professor Shaun Pather

## 1.2 Zenzeleni

Zenzeleni is a social innovation ecosystem through which rural communities have ownership of their telecommunication businesses, allowing them to maximise the benefits and value thereof. Its roots are founded in post-graduate doctoral research at the University of the Western Cape (UWC). Subsequently, it became a UWC spin-off in partnership with the Mankosi community, in one of the most disadvantaged areas of the Eastern Cape. This ecosystem is managed by a non-profit organisation, Zenzeleni Networks NPC, which ensures that the needs of the community are fulfilled. This includes:

- The deployment and use of affordable technologies that community members can install, maintain and operate.
- The co-creation of a local business whose income is re-invested back into the community.
- Knowledge transfer, uptake and transferring of skills.
- Ensuring access to a reliable backhaul network, that is scalable and managed in a way that increasingly reduces user costs, thereby ensuring a higher retention of local income within the community.
- Ongoing engagement with the broader telecommunication ecosystem to ensure compliance, access opportunities and efficiencies.

The first Internet Service Provider (ISP) in this ecosystem, Zenzeleni Networks Mankosi Co-op Ltd, is a demonstrated proof of its potential, as it currently connects 3000 people and 8 institutions, offering prices as cheap as 20 times lower than those offered by existing operators. Zenzeleni Networks Mankosi is a 100% Black Owned, 40% women, telecommunications co-operative that has been legally sanctioned by ICASA and holds ECS and ECNS exemptions.

Zenzeleni has already made submissions to the Department of Telecommunications and Postal Service Portfolio Committee on the Cost to Communicate in South Africa<sup>3</sup>, as well as presentations in their Public Hearings<sup>4</sup> showing that historically disadvantaged persons are promoting universal provision of electronic communications networks and electronic communications services and connectivity for all.

<sup>3</sup> [https://www.apc.org/sites/default/files/Policy%20brief%20Cost%20to%20Communicate\\_13092016\\_FOR%20SUBMISSION.pdf](https://www.apc.org/sites/default/files/Policy%20brief%20Cost%20to%20Communicate_13092016_FOR%20SUBMISSION.pdf)

<sup>4</sup> <https://pmg.org.za/committee-meeting/23322/>

### 1.3 Zenzeleni's relation to South African and international policy and regulation

Zenzeleni's ecosystem promotes the concept that historically disadvantaged communities can obtain the technical and related skills, including support, to install, manage and operate their own electronic communications services and infrastructure. This innovative arrangement for communities to self-provide is globally known as a Community Network, which, according to SA Connect, South Africa's Broadband Policy<sup>5</sup>, is considered as one of the alternatives to close the digital divide. This approach was also highlighted as one of the more desirable alternatives to reduce the Cost to Communicate during Public Hearings from the Department of Telecommunications and Postal Services<sup>6</sup>.

This is in line with Recommendation 19 from the ITU Telecommunications development Sector, which includes that "business models which can achieve financial and operational sustainability can be operated by local entrepreneurs supported by a variety of initiatives"<sup>7</sup>.

Community Networks are akin to "community innovations" which the National Integrated ICT Policy White Paper published in Notice No. 1212, Government Gazette No. 40325 dated 3 October 2016 (the White Paper) aims at promoting. As such, Zenzeleni has received an award for South Africa's Best Innovation with Social Impact in the last edition of the Technology Innovation Agency's Innovation Bridge 2017<sup>8</sup>, and was Finalist Award in the Equal Rating Innovation Challenge by the Mozilla Foundation<sup>9</sup>.

Additionally, one of the interventions of the White Paper is to unlock the potential of ICTs to eliminate poverty and reduce inequality in the country by 2030 is to facilitate growth in SMMEs in the ICT sector. Zenzeleni Networks, the umbrella support organisation, and Zenzeleni Networks Mankosi (the local co-operative which operates the network) are SMME's as defined by the National Small Business Development Act (NSB Act) of 1996 as amended by the National Small Business Amendment Acts of 2003 and 2004, and adopted by the ICT SMME Development Strategy published in Notice No. 1252, Government Gazette No. 41243 dated 10 November 2017. Small business is defined as "*a separate and distinct business entity, including co-operative enterprises and non-governmental organisations, managed by one owner or more which, including its branches or subsidiaries, if any, is predominantly carried on in any sector or sub sector of the economy*

<sup>5</sup> Notice No. 953, Government Gazette No.37119 dated 6 December 2013

<sup>6</sup> <https://pmg.org.za/committee-meeting/23322/>

<sup>7</sup> <https://www.itu.int/en/ITU-D/Conferences/WTDC/Documents/D-TDC-WTDC-2014-PDF-E.pdf>

<sup>8</sup> <https://www.innovationbridge.info/ibportal/?q=content/landline-cellphone-internet-plan-empowers-communities-their-terms>

<sup>9</sup> <https://equalrating.com/innovative-solutions/>

mentioned in Column I of the Schedule”. Throughout this document we will consider, as in the definition above, that telecommunications co-operatives such as Zenzeleni Networks Mankosi are SMMEs.

Table 1: Broad definitions of SMMEs in the National Small Business Act

Enterprise Size	Annual Turnover (SA Rand)	Number of employees
Medium	Less than R4 million to R50 million	Fewer than 100 to 200 employees
Small	Less than R2 million to R25 Million	Less than 50 employees
Very small	Less than R200 000 to R500 000	Fewer than 10 to 20 employees
Micro	Less than R150 000	Less than 5
Survivalist	Operate in the informal economy. Income they generate is below the poverty line.	

Zenzeleni is a unique example in the country due to its focus and ability to achieve the Objects of the the Electronic Communications Act, 2005 (the ECA) that, in our opinion, are not given enough priority. The ECA Objects we refer to include:

- (c) promote the universal provision of electronic communications networks and electronic communications services and connectivity for all;
- (h) promote the empowerment of historically disadvantaged persons, including Black people, with particular attention to the needs of women, opportunities for youth and challenges for people with disabilities; and
- (p) develop and promote SMMEs and cooperatives

#### 1.4 Nature of the Submission

This submissions highlights the challenges and barriers the current policy regime poses to SMME’s such as the ones in the Zenzeleni ecosystem, those that “*promote the universal provision of electronic communications networks and electronic communications services and connectivity for all*” by empowering “*historically disadvantaged persons, including Black people*”. In addition, it proposes alternative wording and solutions so its contribution to the Objects of the Act can reach a wider population.

## 2. Greater consideration for Co-operatives and SMMEs

Despite the removal of barriers of entry for SMMEs, being one of the main interventions of the White Paper, there are only two new entries to the ECA amendment in relation to this. This, in our view indicates that it is taken for granted that the current policy promotes SMMEs and no substantive amendments to the ECA are required to change the current trend of industry concentration by large corporate players. However, as highlighted below, we believe that the proposed amendments are not sufficient, and that policy could include better provisions to promote their work.

The two entries are the following, and we suggest they are amended:

- Amendment of section 2 of Act 36 of 2005, change (c) “by the substitution for paragraph (p) of the following paragraph”
  - “(p) develop and promote SMMEs and cooperatives and market entry by SMMEs.”
  - Zenzeleni Networks proposes the following change instead by: “ (p) develop and promote SMMEs and cooperatives and implement measures to support and encourage their entry into the market;”
- Amendment of section 31 of Act 36 of 2005, change (g), by the insertion after subsection (8) of the following subsection:
  - “(8A)  
*(a) The ‘use it or lose it’ principle contemplated in subsection (8) does not apply to passive science services due to the nature of their operations which do not transmit signals frequently.*  
*(b) The Minister may, upon recommendation by the Authority, exempt SMMEs and new entrants from the ‘use it or lose it’ principle contemplated in subsection (8), upon good cause shown. ”;*
  - Zenzeleni Networks applauds the government's decision to enforce a ‘use it or lose it’ policy to spectrum licenses and the potential exemption to SMMEs, but other policy, or its combination with this, might be even more powerful as justified in Section 2.2.3 below.

### 2.1 Increased consideration for those SMMEs holding an ECS and ECNS license exemption

There are many sections in the ECA and the proposed amendments where provisions are made for licensees. However, there is no mention regarding those holding an ECS and ECNS license exemption. These exemptions are at the heart of the success of SMMEs such as Zenzeleni Networks and Zenzeleni

Networks Mankosi as they reduce the compliance costs, highlighted as “*a key challenge hampering the development of SMMEs*” in the telecommunications industry in the ICT SMME Development Strategy.

The draft amendments fail to recognize this in several of the changes proposed as well as in not proposing changes to existing sections in the current Act which exclude this modality of service provision. In particular we refer to the following:

- In Section 37(1), provision is made for those “pursuant to a licence exemption”, however the wording is not consistent throughout the Section, and similar wording is required to be incorporated in Sections 37(4) and 37(6), and subsequent section 38(4), for consistency purposes.
- In Section 88(1b) provision should be made for those holding a license exemption to be eligible for Universal Service and Access Fund subsidies. Similarly, in Sections 90(1), 90(2a), 90(3b) and 90(3c), provision should be made for consistency purposes.
- Finally, the current model only allows for ECNS exemptions for Class-type licenses, i.e. up to district level, as per Section 6 of the Act. However, considering a ever expanding backhaul network managed as a common good, such as the one proposed by Zenzeleni Networks, it is easy to see how this Class-type licence exemption limits its potential benefit in other districts. Having to apply for a class license per district complicates unnecessarily the management of such a commons infrastructure.

## 2.2. Spectrum considerations for SMMEs

The ICT SMME strategy recognizes that “*spectrum is an important enabler for entry and effective participation in the telecommunications sector*”. Simultaneously, the White Paper acknowledges that the current model for spectrum allocation is not progressive as it further perpetuates dominance and is an inhibitor to potential entry of ICT small enterprises. Yet, as mentioned above, the only amendment to the ECA with relation to SMMEs is in relation to the “lose it or share it” policy. The rural access strategy in the amendments focus on a kind of quid-pro-quo for operators that are allowed access to spectrum/licenses in exchange for obligations to roll out into rural areas. There is more than sufficient evidence in the past of the failure of this approach. We would argue that the past practice of obligations for licensees have not worked, and therefore it does not make sense to continue to expect the large operators to address the rural connectivity divide through an obligations regime. Moreover, the business models and technology deployed by these operators may not be best suited to the sustainability of connectivity in rural areas. Thus, other approaches, in particular those which promote SMMEs working in these rural areas should be explored to reduce industry concentration.

Internationally, spectrum approaches for community networks have been already outlined, both from the ITU Telecommunications Development Section which recommends that “that administrations, in their radio-spectrum planning and licensing activities, consider mechanisms to facilitate the deployment of broadband services in rural and remote areas by small and non-profit community operators”<sup>10</sup>, as well as the Internet Society<sup>11</sup>. Zenzeleni Networks not only subscribe these approaches, but has already presented some of them to the Department of Telecommunications and Postal Services Portfolio committee<sup>12</sup>. They can be summarized as follows.

### *2.2.1 Utilizing Unlicensed Spectrum*

WiFi access technologies in the unlicensed spectrum bands have proven to be an important complementary access technology, not just in South Africa but around the world. Non-profit initiatives such as Zenzeleni and Project Isizwe as well as a host of commercial SMME wireless access providers in South Africa have benefited from the availability of this technology to deliver affordable access to Internet into underserved areas. The strategic enabling role that unlicensed spectrum plays in enabling SMMEs to deliver affordable access should be explicitly recognised. Further, expanding the unlicensed frequency range and reviewing the power output levels, particularly in the 5GHz range, following the lead of regulatory changes in the UK<sup>13</sup> and the United States<sup>14</sup> would reduce interference and increase the ability of SMMEs across the entire country to delivery affordable communication.

### *2.2.2 Dynamic Spectrum Access*

South Africa has been a global pioneer in the piloting of dynamic spectrum technologies such as TV White Spaces. South African research<sup>15</sup> in this area has directly influenced United States regulation of TV White Space technologies. In addition, the Council for Scientific and Industrial Research (CSIR) have developed a Geo-Location Database<sup>16</sup> for managing the deployment of these technologies that has met stringent international standards developed by the UK regulator. This technology is particularly relevant for South Africa for two reasons. The first is that the frequencies used by TV White Space technologies are particularly

10 <https://www.itu.int/en/ITU-D/Conferences/WTDC/Documents/D-TDC-WTDC-2014-PDF-E.pdf>

11 <https://www.internetsociety.org/policybriefs/spectrum/>

12 [https://www.apc.org/sites/default/files/Policy%20brief%20Cost%20to%20Communicate\\_13092016\\_FOR%20SUBMISSION.pdf](https://www.apc.org/sites/default/files/Policy%20brief%20Cost%20to%20Communicate_13092016_FOR%20SUBMISSION.pdf)

13 OFCOM Statement on spectrum access for consumers in the 5 GHz band

<https://www.ofcom.org.uk/consultations-and-statements/category-1/5-GHz-Wi-Fi>

14 FCC Increases 5GHz Spectrum for Wi-Fi, Other Unlicensed Uses <https://www.fcc.gov/document/fcc-increases-5ghz-spectrum-wi-fi-other-unlicensed-uses>

15 TV white space for South Africa - <http://www.ee.co.za/article/tv-whitespace-south-africa.html>

16 CSIR TV White Space Database [http://whitespaces.meraka.csir.co.za/about\\_page.jsp](http://whitespaces.meraka.csir.co.za/about_page.jsp)

well-suited to rural access where affordable and pervasive access to broadband remains a challenge. The second is that this technology which serendipitously re-uses empty television broadcast channels is particularly well-suited for rural South Africa where most of these channels are unused. Urgently expediting the the publication of dynamic spectrum regulations could specifically enable clause (p). A key advantage of these technologies is that they present very low risk for regulators but potentially very high benefits.

Further, it would be worth exploring a model like the Citizens Band Radio Service (CBRS) in the United States. The FCC is in the process of authorizing CBRS in the United States. This is a novel spectrum allocation structure that uses dynamic allocation technology to enable three tiers of users to share spectrum. The U.S. military and some fixed satellite services are incumbent users of the band and have priority rights for use of the band. Using database driven spectrum access, priority access licensees and have secondary rights to the incumbents. Finally, and importantly, a General Authorized Access tier is permitted to use spectrum opportunistically, subject to protection of the two other tiers. This structure captures the benefits of incumbent protection, licensed use, and lightly-licensed opportunistic use, to drive efficient use of spectrum to a higher order.

### *2.2.3 Use It or Lose It Spectrum Policy*

We reiterate our support of government's decision to enforce a "use it or lose it" policy to spectrum licensees. However, we would suggest that a "use it or share it" policy might be even more powerful. It would be less controversial for operators, as fear of losing a spectrum license might dampen investment. Such a policy would allow organisations such as Zenzeleni access to GSM, or other spectrum of operators not active in the region. This could be framed as a subclause of the "Radio Spectrum Sharing" policy included in the proposed new Section 31C.

### *2.2.4 Innovative Licensing*

Much attention has been given to Mexico's Wireless Open Access Network strategy but less well-known is their social-purpose licenses for rural access which enable cooperatives and community-owned networks to obtain a GSM spectrum exemption to build their own communications infrastructure<sup>17</sup>. A decision which has led to over 20 communities receiving GSM coverage where none existed previously<sup>18</sup>. The amount of spectrum required is much smaller than a traditional Mobile Network Operators (MNOs) would require (even

<sup>17</sup> [http://www.dof.gob.mx/nota\\_detalle.php?codigo=5387867&fecha=06/04/2015](http://www.dof.gob.mx/nota_detalle.php?codigo=5387867&fecha=06/04/2015)

<sup>18</sup> <https://www.theguardian.com/world/2016/aug/15/mexico-mobile-phone-network-indigenous-community>

2 x 2.5MHz could serve a small community) and would allow small chunks of fallow spectrum that is not of interest to larger operators to be put to good use. As explained to the Portfolio Committee, this approach could bring down the cost to communicate of most disadvantaged in South Africa from 22% to 3%<sup>19</sup>.

This social-purpose license targeting SMMEs that “*promote the universal provision of electronic communications networks and electronic communications services and connectivity for all*” by empowering “*historically disadvantaged persons, including Black people*” could be easily fitted by expanding the provisions of Section 31 subsection 6b of the ECA: “*The Authority may prescribe the circumstances in which the use or possession of radio apparatus, does not require a radio frequency spectrum licence, including, but not limited to radio frequency spectrum allocated for use in respect of radio astronomy and other scientific uses of radio frequency spectrum that have been coordinated and agreed to by the Authority*”.

This exemption could be made in combination with the policies already highlighted above to allow the non exclusive use of Spectrum to SMMEs.

Across Sub-Saharan Africa, a new generation of low-cost Mobile Network Operators (MNOs) have emerged with business models specifically oriented to rural access where traditional MNOs do not operate. These include Vanu<sup>20</sup> in Rwanda, Amotel<sup>21</sup> in Tanzania, Africa Mobile Networks<sup>22</sup> in six African countries. We suggest that these innovative licensing models that have enabled these operators should be examined and adapted, to address our own rural connectivity divide. We therefore recommend that Policy and regulation should be designed to specifically encourage similar South African companies, if clause (p) of the Objects of the Act is to be enacted.

#### 2.2.5 Lower Costs of Microwave Backhaul

The cost of licensed spectrum is prohibitive for many SMMEs. Zenzeleni Networks recommends a reduction in fees and administration for emerging low-cost standards in licensed backhaul such as 11GHz and 24GHz. We could, for example, follow other countries such as New Zealand which has simplified licenses for fixed-

19 [https://www.apc.org/sites/default/files/Policy%20brief%20Cost%20to%20Communicate\\_13092016\\_FOR%20SUBMISSION.pdf](https://www.apc.org/sites/default/files/Policy%20brief%20Cost%20to%20Communicate_13092016_FOR%20SUBMISSION.pdf)

20 Vanu - <http://www.vanu.com/connectivity-as-a-service-rollout-in-rwanda/>

21 Amotel - <https://wtl.be/blog/amotel-tanzanias-first-mvno-appoints-world-telecom-labs-as-its-first-supplier-for-gsm-and-data-networks-in-rural-tanzania/>

22 Africa Mobile Networks - <http://www.africamobilenetworks.com/our-coverage>

links in licensed spectrum with very low annual fees<sup>23</sup>. They also outsource licensing of these links. Anyone can apply to be a certified license examiner<sup>24</sup>.

### *2.2.6 Increase Transparency and Visibility of Telecom Infrastructure*

SMMEs, as well as policy makers and regulators, need tools and resources to create effective access strategies. A necessary stepping stone in this process is transparency of the data in relation to existing and planned network infrastructure: from fibre optic network ownership, routes and technical specifications, to tower heights and locations, to wireless spectrum assignments. Lack of information and transparency makes it difficult for all actors, including civil society, the research community and the private sector, to engage in solution-oriented dialogue with policy makers and regulators. We therefore recommend an amendment to the ECA to make provision for stakeholders to be able to access such data.

Given the importance of understanding how spectrum is allocated and assigned, spectrum authorities and regulators should make information readily available and provide transparency with respect to licensed spectrum, assignments and allocations, and where spectrum is available. In South Africa, the size of these assignments is public, but not the specific frequency ranges of the spectrum assigned. That might be a trivial issue when the band allocated is fully assigned to operators, but that is not the case of for instance, the 1800 MHz band, where adding assignments to all operators, 2.5 MHz are short from the band allocated. That amount of Spectrum might be meaningless to large operators, but it can be of great use to SMMEs, as highlighted in 2.2.4 above.

Zenzeleni Networks would request changes in the Amendment Act for this information to be open, especially in the databases proposed in Sections 20B(3a) and 30(2f). This would not only be of great benefit for the SMMEs in the industry, but would allow South Africa to meet its commitments as part of the Open Government Partnerships<sup>25</sup>. As it has committed that “*Information on government activities and decisions is open, comprehensive, timely freely available to the public and meets basic open data standards (e.g. raw data, machine readability).*” We believe that making data on spectrum assignments, fibre networks, and tower locations publicly available will lead to more informed debate on the national strategic development of

23 <https://www.rsm.govt.nz/licensing/licence-fees/annual>

24 <https://www.rsm.govt.nz/licensing/list-of-engineers-examiners/rsm-approved-are-arc-available>

25 <http://www.ogp.gov.za/>

telecommunications infrastructure and also to more investment as deliberate transparency in this sector will serve to increase trust.

### *2.2.7 Wireless Open Access Networks*

A big portion of the amendments, and the debate around it is dedicated to the Wireless Open Access Network. Zenzeleni Networks considers that the WOAN is unlikely to focus on the least-served areas first and, as such, complementary strategies as the ones highlighted above are needed.

## 2.3 Include SMME Associations and experts in regulatory proceedings

The value of industry associations to stimulate SMMEs growth is critical. These organisations, specially the Internet Service Provider Association (ISPA) and the Wireless Access service Provider Association (WAPA), in which Zenzeleni is a member, should receive more formal recognition and engagement by government and the regulator.

## 2.4 Public funding for SMMEs targeting universal access

Allowing a broader range of SMMEs, including those holding an ECS and an ECNS license exemption as justified in section 2.1, will certainly contribute to the more adequate funding of SMMEs that “promote the universal provision of electronic communications networks and electronic communications services and connectivity for all” by empowering “historically disadvantaged persons, including Black people”. As included in the Recommendation 19 from the ITU Telecommunications development Sector<sup>26</sup>, additional mechanisms should be considered, such as making available dedicated Universal Service and Access Funds, or the proposed Digital Development Fund, to enable SMMEs like Zenzeleni to gain market entry and to remain sustainable. In this regard, the ECA should make reference to the following set-aside policy for SMMEs, to be able to bring SMMEs into the sector, especially to address the access gap.

Another opportunity for community networks comes from the Preferential Procurement Regulations of 2017 which makes provision for government to set-aside 30% of appropriate categories of State procurement for purchasing from SMMEs, cooperatives as well as township and rural enterprises.

26 <https://www.itu.int/md/D10-WTDC14-C-0038/es>

A further note in respect of funding, is that we need to acknowledge that the anticipated developmental outcomes from Internet connectivity, will not emanate from the provision of infrastructure only. We have sufficient evidence of this in research conducted at UWC, and through our experience with Zenzeleni. We therefore advocate that future funding models must take into account the ICT ecosystem, in which infrastructure, together with local content, and ICT uptake and adoption are jointly funded. There is no, or scant, evidence to date that funding from the Universal Service and Access Fund (USAF), for infrastructure projects has led to developmental outcomes.

### **3. Issues related to the Access Gap and Definitions of Universal Service and Access**

In this section we would like to address what has to date been a gross oversight in policy implementation with regards to definitions and the measurement of the access gap.

#### **3.1 Universal Service and Access definition**

*The Amendment bill states:*

by the insertion in subsection (2) after paragraph (b) of the following

paragraph:

“(bB) universal service or universal access obligations or both, having identified any access gaps;”;

We agree with this. We further note that in order to determine the prevailing gap, there has to be a set of definitions of what constitutes Universal Service and Access. To date these have largely been absent, save for a set of definitions which were Gazetted in 2010 – and which are now outdated.

We further note that the dissolution of the Agency, and hence a repeal of Chapter 14 is imminent. However it will be short-sighted in amending the ECA, not to compel some Government organ, perhaps the regulator, to ensure definitions are regularly updated, to take into account evolving needs of citizens, and advances in technology.

Therefore we recommend the following:

**ECA 2005, Section 82(3)(a) be amended as follows:**

The [**Agency**] **Regulator** must [**from time to time**], **every three years** with due regard to circumstances and attitudes prevailing in the Republic and after obtaining public participation to the greatest degree practicable, make recommendations to enable the Minister to determine what constitutes—

### 3.2 Measuring the Access Gap

In addition, our comment in respect of the above Section 3 amendment is that there should be an equivalent clause, possibly in Chapter 2 (3) or Chapter 2(4), which **compels** government to ensure regular public reporting of the access gap. Without continuous measurement and reporting the extent to which the access gap is addressed will not be able to be determined.

In addition to the above, we also recommend that if Universal Service and Obligations are to be continued as a mechanism to address the access gap (although this mechanism has been largely ineffective to date), that the following amendment is also made to the proposed amendment in paragraph (a):

*Amendment bill states:*

(d) by the insertion of the following subsection after subsection (4):

"(4A) The Authority must review the regulations contemplated in subsection (4) at least every five years and the review must include an assessment of—

(a) the appropriateness of target levels set in universal service and universal access obligations **having duly assessed the prevailing access gap**;

(b) the timelines set for achieving such targets;

(c) the level of service to be provided; and

(d) mechanisms to enforce compliance, including reporting frameworks."; and

On a final note regarding this section we note that the mechanisms to enforce compliance have not really worked. We therefore strongly advocate for a review of the use of Universal Service and Access obligations. Refer to proposal earlier in this submission regarding sharing of spectrum.

## 4. Research and Development to advance the ICT Sector

We have experienced the benefit of a partnership between a research institution and an implementing entity viz. University of the Western Cape and Zenzeleni Networks. We therefore would like to propose an addition to the following Section 2 amendment:

### **Section 2:**

*Amendment bill states:*

by the substitution for paragraph (i) of the following paragraph:

“(i) encourage research and development as well as new innovative services within the ICT sector;” and

Following on the above proposed amendment, and in keeping with the White Paper directive in respect of R&D and innovation, it is not sufficient to only encourage, but there must be active support. We therefore recommend the following

“(i) encourage, **facilitate and support** research and development as well as new innovative services within the ICT sector;” and

## 5. Conclusion

1. Based on our practical experience as Zenzeleni Networks, and our evidence based as UWC researchers, we are of the view that the Bill does not address the challenges faced by SMMEs and co-operatives, especially of those that “promote the universal provision of electronic communications networks and electronic communications services and connectivity for all” by empowering “historically disadvantaged persons, including Black people”.
2. Additional amendments are required for the Bill to “develop and promote SMMEs and cooperatives”.  
It is clear that the current policy regime has not been able to address the rural connectivity divide and therefore the proposed amendments will enable a radical shift in the dispensation in which SMMEs are able to use innovative, community-based, bottom-up approaches to address the rural digital divide.
3. Zenzeleni Networks, APC and UWC trust that these submissions will be of assistance to the DTSPS and to the relevant Parliamentary Portfolio Committees
4. Please do not hesitate to contact Zenzeleni Networks and/or the Association for Progressive Communications and/or the University of the Western Cape should the DTSPS or the Portfolio Committees have any queries or require any further information.

Thank you

**Yours Sincerely**

**Yours Sincerely**

**Dr Lwando Mdleleni ([lwando@zenzeleni.net](mailto:lwando@zenzeleni.net))**

**Zenzeleni Networks**

**Professor Shaun Pather ([spather@uwc.ac.za](mailto:spather@uwc.ac.za))**

**University of the Western Cape**

**and**

**Dr Carlos Rey-Moreno ([carlos@apc.org](mailto:carlos@apc.org))**

**Association for Progressive Communications**

**cc.**

Honourable Chairperson of the Portfolio Committee on Telecommunications and Postal Services

Mr J L Mahlangu, MP

Committee Secretary

Ms Hajiera Salie

Email: [hsalie@parliament.gov.za](mailto:hsalie@parliament.gov.za)

Honourable Chairperson of the Parliamentary Portfolio Committee on Communications

Mr CH Maxegwana, MP

Committee Secretary:

Mr Thembinkosi Ngoma

Email: [tngoma@parliament.gov.za](mailto:tngoma@parliament.gov.za)