Response to DCDT's

Invitation to provide comments on Proposed Electronic Communications Amendment Bill, 2022

A submission to the Department of Communications and Digital Technologies by: (in alphabetic order)

- **Association of Progressive Communications**
- **Mozilla Corporation**
- **University of the Western Cape**
- **Zenzeleni Networks NPC**

With endorsements by: (in alphabetic order)

- **Amadiba Community Network**
- **Black Equations**
- **Eyelook Telecomms (PTY) LTD**
- **Mozilla Corporation**
- **Pazima IT Pty Ltd**
- **Research ICT Africa**
- **iNethi NPC / University of Cape Town (Computer Science Department)**
- **Violence Prevention through Urban Upgrading (VPUU) NPC**
- **Zuri Foundation**

DATE: 30 August 2023

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GENERAL EXPLANATORY NOTE:

We utilise the same convection as in the Bill, in those parts of our submissions where we propose amendments to specific clauses as follows:

[ ] Words in bold type in square brackets indicate our proposed omission from either existing enactments or to planned amendments in the draft Bill.

____ Words underlined with a solid line indicate our proposed insertion to either existing enactments or to planned amendments in the draft Bill.

1 Introduction

We are grateful for the opportunity to provide comments on the proposed Electronic Communications Amendment Bill (the Amendment Bill), and at the outset want to record our congratulations to the Department of Communications and Digital Technologies (DCDT) for the forward thinking amendments being proposed. The Bill is especially welcome in light of the current state of the Digital Divide in South Africa[1], especially with regards to the availability of affordable and quality broadband internet to poor persons. The Amendment Bill is evidence that, as the policy maker, the Department has responded favourably to a number of prevailing issues in the broader environment.

First and foremost, we observe that the Bill is a response to the recommendations of the Competition Commission's Data Services Market Inquiry, which made several recommendations in relation to the issue of affordability of digital services in the republic. In addition, we note the acknowledgement of the input of stakeholders in the Non-Government, Not For Profit, and Academic sectors who have actively lobbied for some time for the recognition of a Community Networks (CNs) as a complementary access model addressing the lack of progress among underserved areas, especially in outlying and rural geographies. Moreover, we note that many of the proposed Amendments in the Bill are in step with policy and regulatory innovations observed internationally, such as in Mexico, Kenya, and the UK. At the same time, others are uniquely innovative, which we applaud.

Overall, we are of the view that the Amendment Bill is certainly a step in the right direction. The successful implementation of the proposed amendments will have far reaching positive consequences toward addressing the South African Digital Divide.

Our inputs herein serve to strengthen and futureproof the draft recommendations.

[1] According to Statistics SA General Household Survey (2022), 17,2 % of households in metropolitan areas had access to the Internet at home, and only 1,2% of rural households had household access. In some provinces access to the internet is low with less than one percent of rural households in Eastern Cape (0,2%), North West (0,3%) and KwaZulu Natal (0,2%) having access.

2 Community Network Definition and Licence Exemption

The first amendment proposed by the Amendment Bill introduces a number of new definitions. Among them, a definition of "Community Networks" which is stated as follows:

> *(a) by the insertion after the definition of "community broadcasting service" of the following definition:*
>
> *"community networks' means an electronic communications network service and electronic communications service that are licence exempted by the Authority, provided in an under-serviced area[2], by an entity which may include, but not limited to:*
>
> *(a) a_non-profit _organisation _registered in _terms of the Non-Profit Organisations Act, 1997 (Act No. 71 of 1997);*
>
> *(b) a non-profit company registered in terms of the Companies Act, 2008 (Act 71 of 2008): or*
>
> *(c) a_non-profit organisation _established in_terms of any other Act of Parliament;";*

As organisations who have been advocating for and implementing community networks in South Africa, we would celebrate the inclusion of this definition in the Electronic Communications Act (Act No. 36 of 2005, as amended) (ECA) and welcome the recognition it would bring to the work of many communities throughout South Africa that are striving to find a solution to their own communication needs.

We believe that the introduction of ECNS and ECS licence-exemptions specific to Community Networks within the South African regulatory framework will be a key enabler of future developments in this segment of the market but submit that the intended pro-competitive effect of this definition's inclusion would be bolstered by amendment of section 6 of the ECA to include specific reference to Community Network related licence exemptions, which amendment to the ECA would in turn empower the Independent Communications Authority of South Africa (ICASA) to revise the ICASA Licence Exemption Regulations, 2008[3].

In the interest of avoiding exploitation of the benefits which might attach to community networks under a revised ECA we recognise the need to impose legal constraints on the organisational forms that community networks might assume, but wish to note that communities around the world have proven to organise themselves in a myriad of arrangements in order to meet their communication needs[4].

We are accordingly concerned that the definition limits the operation of these networks to under-serviced areas. Its definition is included in the Under-Serviced Area Definition Regulations, 2012, and reads as follows:

> *"Under-serviced Area is any area with a local or district municipality in which:*

[2] Refer to our recommendation later in this document in relation to regularly assessing the access gap, and thereby producing regular updates to the list of under-serviced areas.
[3] General Notice 912. Government Gazette 31289, published on 29 July 2008.
[4] https://www.apc.org/en/pubs/financing-mechanisms-locally-owned-internet-infrastructure

(i) no electronic communications network has been constructed; or

(ii) an electronic communications network has been constructed, but coverage of the inhabited parts of the area, fall below the national average; or

(iii) an electronic communications network has been constructed, but over which no or, limited electronic communications services or broadcasting services are being provided"

In practice the geographical demarcation used by the Under-Serviced Area Definition Regulations, 2011 when referring to under-serviced areas have been that of a Metropolitan or a Local Municipality, as it can be seen in the Annexure A and B of those regulations, as well as in Appendix D of the most recent "Invitation to Apply Notice on the Licensing Process for International Mobile Telecommunications in Respect of the the Provision of Mobile Broadband Wireless Access Services for Urban and Rural Areas using Complementary Bands, IMT700, IMT800, IMT 2600 and IMT3500"[5]. While we agree on the need to use a geographical demarcation for the purpose of licensing community networks, the prevalent inequalities in South Africa contribute to the existence of under-serviced communities **within** local municipalities. Consequently a Municipality may be designated as not being under-served, yet there might be communities within its boundaries that are actually under-served. Examples are abundant in the City of Cape Town, or the City of Johannesburg local municipalities, where existing Community Networks already exist to address this[6]. Hence, we would like to propose the modifying the current amendment by the following:

*"community networks' **[means]** include an electronic communications network service, an**[d]** electronic communications service or an electronic communication facility service that are licence exempted by the Authority, provided in **[an under-serviced area]** a district or metropolitan municipality, by an entity which may include, but not limited to …"*

Additionally, and beyond being consistent with the recommendations from the Competition Commission, the proposed changes are rooted in international and regional resolutions. One example can be drawn from the 14th session of the ITU Council Working Group-Internet on "Expanding internet connectivity", where a "number of policy issues related to expanding Internet connectivity were highlighted [...] including "complementary access solutions such as community networks"[7], members states at the ITU have reached consensus to:

- "invites Member States, Sector Members and other stakeholders to work collaboratively [...] to encourage innovation and entrepreneurship in local populations, including by encouraging community support for entrepreneurship and locally based programmes, including those for complementary solutions and networks;"[8]

[5] General Notice 717, Government Gazette 45628, published on 10 December 2021.

[6] https://cnlearning.apc.org/south-africa/

[7] ITU CWG-Internet: Online Open Consultation (December 2020), https://www.itu.int/en/council/cwg-internet/Pages/consultation-sep2020.aspx

[8] Report by the ITU Secretary-General for the Sixth World Telecommunication/Information and Communication Technology Policy Forum 2021, available at: https://www.itu.int/wtpf21/en/itu-speeches/sgs-report

- "invites Member States" to consider inclusive and innovative policies to close the digital divide, taking into account national initiatives and telecommunications/ICTs complementary access networks and solutions,", something that, where it is requested, it has instructed the Director of the Telecommunication Development Bureau to support[9].

This has been further elaborated as the best practices developed by the ITU's Global Symposium for Regulators where within the regulatory tools to bridge the funding and financial gaps it recommends practices which "*Promote local innovation ecosystem and provide incentives for the participation of small and community operators in deploying low-cost rural networks, including specific licensing measures, access to key infrastructure and funding, and social coverage promotion programs*."[10]

At the regional level and as early as 2019, the African Union Commission was instructed by members to "*Promote the formulation of strategy and pilot projects for unlocking access to basic infrastructure and services for rural and remote areas including [...] community networks...*"[11].

At the national level, beyond Kenya, other countries in the region have already created community network categories in its licensing framework. Including Zimbabwe[12], Uganda[13], Ethiopia[14].

A final note on both the definition of Community Networks proposed by the Amendment Bill and our recommendation regarding amendment of section 6 of the ECA pertains to the introduction of a further category of licensed service provision in the form of electronic communications facility services (ECFS), which is framed as:

> *"A service whereby a person makes available an electronic communications facility, whether by sale, lease or otherwise for use in an electronic communications network"*

It is our understanding of the current regulatory framework that all electronic communication services (ECS) are enabled by one or more electronic communication network services (ECNS), both of which are licensed activities and may be undertaken by one or more entities. ECNS is itself dependent on the existence of an underlying

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[9] RESOLUTION 37 (Rev. Kigali, 2022), Bridging the digital divide. Provisional Final Report of the World Telecommunication Development Conference (Kigali, 2022). Available at: https://www.itu.int/md/meetingdoc.asp?lang=en&parent=D18-WTDC21-C-0103

[10] ITU's Global Symposium for Regulators 2021 Best Practice Guidelines. Available at: https://www.itu.int/en/ITU-D/Conferences/GSR/2021/Documents/GSR-21_Best-Practice-Guidelines_FINAL_E_V2.pdf

[11] 2019 Sharm El Sheikh Declaration from the African Union's Specialized Technical Committee on Communications and Information Technologies (STC-CICT). Available at: https://au.int/sites/default/files/decisions/37590-2019_sharm_el_sheikh_declaration_-_stc-cict-3_oct_2019_ver2410-10pM-1rev-2.pdf

[12] Postal and Telecommunications Regulatory Authority of Zimbabwe - License Fee Categories. Available at: http://www.potraz.gov.zw/wp-content/uploads/2022/03/Licence-Categories-Including-Fees.pdf

[13] Uganda Communications Commission's Communal Access Provider License https://www.ucc.co.ug/wp-content/uploads/2020/05/COMMUNAL-ACCESS-PROVIDER-LICENSE-25-05-2020.pdf

[14] Ethiopian Communication Authority's Telecommunications Licensing Directive 792-2021 https://eca.et/2022-03-24T06-45-04.775ZTelecommunications%20Licensing%20Directive%20No.%20792-2021%20(English).pdf

Electronic Communication Network (ECN) with all ECNs consisting of electronic communication facilities.

Despite understanding the intention of the Amendment Bill in this respect being to draw the providers of ECFS within the ambit of the broader licensing framework, thereby closing a particular access gap and source of anti-competitive behaviour, the proposed amendments are likely to create a scenario where an entity such as a Community Network providing ECS in an area without existing infrastructure will not only have to provide ECNS to itself (which is the current challenge faced by all community networks), but will now necessarily be considered as self-providing ECFS, requiring the need for an ECFS licence and further expanding the cost and administrative challenges faced by community networks. It is noted that the references to "commercial" within the amendments to section 5 of the ECA may mitigate this unintended consequence but we would suggest, for the avoidance of any doubt, that the following definition of community networks be considered:

> *"community networks' means an electronic communications network service,* ***~~[and]~~,*** *electronic communications service* ***and electronic communications facility*** *that are licence exempted by the Authority [...]"*

We furthermore suggest the introduction of a specific carve-out for the licence exempt provision of ECFS by community networks be included in section 6 of the ECA.

3 Spectrum sharing for Community Networks

The new definitions contemplated by the Amendment Bill also include a definition of radio frequency spectrum sharing which is stated as follows:

> *(f) the insertion after the definition of "radio frequency spectrum licence" of the following definitions: "'radio frequency spectrum sharing' means the simultaneous usage of a specific radio frequency or radio frequency spectrum band in a specific geographical area by different radio frequency spectrum licensees in order to enhance the efficient use of spectrum, and 'spectrum sharing' has a similar meaning;*

This definition is accompanied by proposed insertions within Section 31 of the ECA, which describes the "use it or share it principle".

As organisations who have been advocating for the introduction of the "use it or share it" principle for community networks in South Africa since 2016 we would very much welcome the inclusion of these clauses in the ECA.

In particular, we welcome the introduction of section 8A (b) which should allow for the expedited application of this principle, and section 8A(9) where the onus to demonstrate adequate usage of the spectrum falls to the licensee rather than the community network to prove the licensee is not using the spectrum.

ICASA has pointed out in its recent discussion document on Dynamic Spectrum Access and Opportunistic Spectrum Management[15], that primary holders of spectrum benefit

[15] https://www.gov.za/sites/default/files/gcis_document/201704/40772gen282.pdf

from the exclusive nature of their spectrum licences in order to preserve their dominant market position. The *de facto* structure of national IMT spectrum licences not only serves to empower incumbents but also to exclude newcomers and small operators in particular. In this regard, we find that Clause 8A (a) requires further clarification around what would be considered to determine that *"the licensee fails to use the assigned radio frequency spectrum adequately for a period of two years in any under-serviced area".* We therefore suggest that the text of section 8A(a) be expanded to include defined principles of usage (which need not be exhaustive) against which the performance of licence conditions and the "adequate" usage of spectrum by licensees may be measured.

As mentioned above, an under-serviced area is defined geographically as a metropolitan or local municipality. In all Local Municipalities, there is at least a town, usually used for commerce and government services, with sufficient population density for licensees to find it profitable to deploy services there. Hence, the clause above can prevent the "use it or share it" principle to meet its intended goal, if licensees apply it as if referring to "*failing to use the assigned spectrum*" in the entire local municipality. To demonstrate this, consider, for example that local Municipalities can be as big as the Dawid Kruiper Local Municipality which covers an area of 44,231 sq.km. As such if a licensee finds it profitable to use its assigned spectrum only in Upington, but fails to use it in the rest of the Local Municipality, then community networks will not be eligible to operate in the areas outside of Upington. Hence, we recommend that the term "*adequately*" is defined.

We also believe there is an opportunity to frame this clause more constructively. Although the decision to amend a licence for spectrum sharing should fall squarely in the hands of the regulator, we also believe that this should be a collegial process between regulator and operators to determine spectrum availability, recognising a shared interest in providing affordable access to communication for all. Thus, rather than framing the spectrum sharing decision in the context of a "failure" on the part of the primary spectrum holder, we propose that the amendment acknowledges that no operator serves 100% of the geography provided in a national spectrum licence. Introducing "use-it-or-share-it" provisions in spectrum licensing acknowledges the fact that a one-size-fits-all approach to spectrum licensing is unlikely to enable the goal of universal affordable access to communication; further, that innovations in operational, ownership, and technology models will be essential to developing a sustainable approach to universal service.

We suggest to modify the amendment as follows:

> *"(8A) (a) Subject to subsection (9), the Authority may amend any radio frequency spectrum licence when the licensee* ***has not put to use*** *[**fails to use**] the assigned radio frequency spectrum adequately for a period of two years in any* ***ward within an*** *under-serviced area, despite significant demand for services in the under-serviced area, and allow spectrum sharing of such spectrum in the relevant under-serviced area until such time and on such conditions as may be determined by the Authority, referred to as the 'use it or share it' principle.*

The geographical delineation of a ward is well defined which would make it straightforward for the licensee and regulator to determine whether spectrum is in use in a given ward.

As much as we applaud the inclusion of clause 8B and the prioritisation of community networks as recipients of this spectrum, we feel that, in order to be consistent with the most recent licences awarded as part of the latest ITA process, SMMEs need also to be included in the clause. This would be consistent with the spirit of the Guiding Principles from the "Next Generation Radio Frequency Spectrum for Economic Development" shared for comments last year. One of them refers to the need to "Adopt spectrum management approaches that promotes SMME participation and emergences of new entrants to the ICT sector.". In turn, this would be consistent with the findings recommendations from the Competition Commission that recommend:

> *"That ICASA consider models and regulatory changes to allow at least non-profit community networks, and possibly small commercial enterprises to access licensed spectrum not used by mobile operators in rural areas in a similar manner to television white space."*

Hence we recommend clause 8B to be amended as follow:

> *"The Authority must prioritise the assignment of spectrum contemplated in subsection (8A) to community networks**, and SMMEs**."*

Again, this is in line with the Best Practices developed in 2021 by the ITU's Global Symposium for Regulators where it recognises that "Spectrum Innovation" is key for the Digital Future" and recommends that regulators "*Adopt a multifaceted approach to freeing up additional spectrum in the low, mid and high bands for a variety of business plans to successfully meet the need of additional network capacity while facing finite spectrum resources, including releasing spectrum for the establishment of community networks on a technology-neutral basis*"[16]. At the national basis, spectrum sharing mechanisms have been implemented in the United Kingdom[17], USA[18], France[19], Germany[20], New Zealand[21], and Canada[22], among others.

4 Further considerations towards the enablement of Community Networks

While the Competition Commissions Report has been expansive in its scope, there are some mechanisms in relation to successfully achieving the goals of Universal Service and Access, which it might not have touched on, but which need to be reviewed since they complement the proposed amendments. We therefore argue that if the amendments proposed to ECA to have a sustainable transformational effect in the lives of the poor in South Africa, then additional steps and policy amendment must be considered. In particular, these are in relation to how to leverage Chapter 14 of the ECA to create an

[16] ITU's Global Symposium for Regulators 2021 Best Practice Guidelines. Available at: https://www.itu.int/en/ITU-D/Conferences/GSR/2021/Documents/GSR-21_Best-Practice-Guidelines_FINAL_E_V2.pdf

[17] Shared access licences - Ofcom

[18] https://docs.fcc.gov/public/attachments/FCC-18-149A1.pdf

[19] France launches new measures to boost industrial 5G adoption

[20] German Telecom Regulator awards 5G private network licenses in the 3.7GHz to 3.8GHz band

[21] Managed spectrum park licences

[22] Consultation on a Non-Competitive Local Licensing Framework, Including Spectrum in the 3900-3980 MHz Band and Portions of the 26, 28 and 38 GHz Bands

institutional framework to support those from rural communities in South Africa to address their communication needs. The submissions hereunder serve to achieve this objective.

4.1 Funding mechanisms

Whereas Chapter 14 of the ECA should have, from a conceptual perspective, been sufficient to address Universal Service and Access deficiencies in the Republic, there is scant evidence that the objectives of the policy makers who were the architects of the 2005 Act have realised their intentions.

The 2016 Integrated ICT White Paper has underscored the problems related to the USAF and its somewhat inadequate performance, and we would like to reiterate them here. Accordingly, we propose that the issue of funding be considered in the planned ECA Amendment. We note with concern the following statement that the USAASA[23] makes in its 2023/2024 Annual Performance Plan:

> *"The National Integrated ICT Policy White Paper of 2016 recommended that the Universal Service and Access Agency of South Africa (USAASA) is to be dissolved; and that the Universal Service and Access Agency (USAF) be transformed - subsequently the decision to transfer the management and administration of the USAF to the South African Postbank (SOC) Limited, under the control and instructions of the Minister, has been made." (pg 5.)*

If the considerations of the White Paper are beyond the remit of the currently proposed ECA amendments, we would firstly ask that you note the following points, in relation to our recommendation that follows:

(i) The USAF appears set to to continue to benefit from a 0.2% of turnover contribution from operators;
(ii) There is scant evidence in the broader environment that the USAF has achieved its objectives over approximately two decades;
(iii) A holistic view should be taken in relation to the plight of Community Networks, who would potentially benefit from the promulgation of the amendments to the Act; and,
(iv) Without targeted support Community Networks will struggle to enter the market, and to serve the poor people of rural South Africa.

We therefore propose that an institutional plan that includes funding mechanisms that enables Community Networks to operationalise themselves must be considered. We propose the following recommendations:

(i) Until it is replaced, the USAF, or whatever derivative is planned for it in the interim, should be directed to support and fund the implementation of Community Networks, with emphasis on rural underserved areas and peri-urban areas which meet an agreed household income threshold;

(ii) The funds in the USAF must be used exclusively to fund under-served areas;

[23] USAASA 2023/2024 Annual Performance Plan

(iii) When the USAF is re-established, it should be directed to continue with the rural connectivity programme of expanding Community Networks; and

(iv) In all instances, the funding should target holistic interventions that go beyond the provision of network services, covering skills development and awareness programmes, which are vital to the development of functional universal access components[24].

Beyond USAF, there might be other public funding mechanisms to increase connectivity in underserved areas made available to players in the telecommunications industry from time to time. In those, and in order to realise the spirit of the amendments, it would be important to make sure that community networks licence-exempt holders are also included as eligible candidates.

4.2 Monitoring of the access gap

Several proposals inherent in the Amendment Bill concern the identification of *underserved areas.* A practical matter, in relation to implementing these provisions will be the ability of the regulator to regularly monitor the access gaps in the republic. A second practical concern would be clear definitions[25] of what constitutes *access gaps* (ECA 82 4(c), (d) and *needy persons (ECA 881(a)* as contemplated in Chapter 14 of the ECA.

We therefore propose the following to improve the regular monitoring of the gap:

(a) The Minister must be empowered to issue a directive to the regulator / or the regulator must be directed through the ECA to i. Annually measure and maintain a list of underserved areas; ii. To define what constitutes underserved areas in the republic;
(b) The identification of the access gap requires regular collection of data and reporting. ICASA, should be mandated to collect and publish annual data that reflects the access gap in the country. Such data should be available at voting district level, or at least at ward level, to enable proper planning to address prevailing gaps;
(c) Statistics South Africa's ward demarcation should be used for the monitoring of the access gap;
(d) Either section 3 or 4 of the ECA (Chapter 2) should be amended to compel government to ensure regular public reporting of the access gap;
(e) The monitoring of the access gap requires universal access definitions to be published by the DTPS; and,
(f) To the extent possible, the government should embrace the principle of transparency through the use of Open Standards and Open Data in the collection of network coverage data for access gap monitoring.

4.3 Universal service and access definitions

In light of the prospective dismantling of the USAASA, the definitions for Universal access and service must reside with some competent Authority. Definitions are critical to the

[24] See the recommendation on Definitions in this submission
[25] See the recommendation on Definitions in this submission

implementation of the planned amendments especially since they will provide the parameters of how resources, such as from the current USAF, must be directed.

We propose the following amendment, which consolidates the mandate and responsibility with the policy maker, who in turn should, be in a position to direct the appropriate agency, or even the Regulator for that matter, on the periodic review and updating of such definitions. We propose the following amendment:

Section 82 (3) *(a)*

> ''*(a)* **[The Agency]** The Minister must from time to time, 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—
>
> (i) universal access and universal service.''

Furthermore, we submit that economic and social benefit from access to electronic communication services is holistic. This means that it is not just about the access layer, such as is the focus of the ECA. If the true intention of the ECA is economic emancipation and social development there is an urgent need to look at the picture more broadly, and to consider several sources of experience and evidence at hand, such as the case study of Zenzeleni Networks, and others in developing countries. We therefore propose the following:

(a) A new set of definitions for universal access and universal service should be developed urgently. The definitions in *Government Gazette* 32939 (February 2010) are outdated and should be reviewed;

(b) There should be a specific definition of a rural area in terms of population density. This will permit the prioritisation of funding a CN regime to address the rural access gap; and,

(c) The definitions of universal access should be expanded to beyond the narrow confines of *access*. New definitions are therefore needed to uphold the universal service and access principles for basic services as outlined in the National Integrated ICT Policy White Paper (p 32), including, inter-alia, in relation to affordability, awareness, and ability to use services.

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