



Attention:

The Director-General, Department of Telecommunications and Postal Services

For attention: Ms. M Masemola, The Acting Deputy Director -General, ICT Policy and Strategy Development

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Contents

ABBREVIATIONS.....	6
1. INTRODUCTION	7
2. INSTITUTIONAL ARRANGEMENTS	9
3. SPECTRUM.....	13
4. WIRELESS OPEN ACCESS NETWORKS	7
5. UNIVERSAL ACCESS AND SERVICE.....	16
6. OPEN ACCESS AND VERTICALLY INTEGRATED OPERATORS	19
7. CONCLUSION.....	20
8. REFERENCES.....	21

Abbreviations

DoC	Department of Communications
DTPS	Department of Telecommunications and Postal Services
ECA	Electronic Communications Act
ECA Bill	Electronic Communications Amendment Bill
ICT	Information and communication technology
OfCom	Office of Communications
RIA	Research ICT Africa
USAASA	Universal Service and Access Agency of South Africa
USAF	Universal Service and Access Fund
WOAN	Wireless Open Access Network

1. Introduction

1.1 The Minister of Telecommunications and Postal Services (Minister) published an invitation to provide written comments on the Electronic Communications Amendment Bill (Bill or ECAB) on the 17th of November 2017 (Government Gazette 41261, Government Notice No. 1293). The Bill seeks to implement and give effect to the policy objectives set out in the National Integrated ICT Policy White Paper, published in October of 2016. The Bill is an important document that may have a significant impact on the telecommunications sector of the country. This document sets out the comments of Research ICT Africa in response to the provisions of the Bill, focusing on issues and areas deemed problematic by the authors of this submission.

1.2 Research ICT Africa (RIA) is a regional information and communication technology (ICT) think tank, active across Africa and in the Global South. RIA conducts research on ICT policy and regulation to facilitate evidence-based and informed policy-making for improved access, use and application of ICTs for social development and to promote economic growth.

RIA welcomes this opportunity to comment on the Bill and make this submission in the public interest.

1.3 Research ICT Africa is concerned to note that the Electronic Communications Amendment Bill is one of a number of expected bills arising out of the 2016 National Integrated ICT Policy White Paper (White Paper), including:

- Digital Development Fund Bill;
- ICT Sector Commission and Tribunal Bill; and
- Electronic Communications and Transactions Amendment Bill¹.

Of the four, only the Electronic Communications Amendment Bill is currently on the table for public comment.

1.4 It is clear from the White Paper,² and from the information presented to Parliament, that the remaining Bills have substantial, even fundamental, implications for the Electronic Communications Act (ECA). It is likely they will affect the powers, competencies and independence of the ICT sector regulator (currently ICASA), as well as the future existence and scope of the Universal Service and Access Agency of South Africa (USAASA) and the Universal Service and Access Fund (USAF)³. Each of them appears to require a further set of amendments to the ECA.

1.5 RIA further notes that the White Paper and the Bill set out several fundamental departures from the recommendations of the ICT Policy Review Panel⁴ - those in relation to the proposed WOAN and to spectrum, in particular. Such key changes to policy thus require careful consideration by policymakers, along with substantial input from stakeholders and the public of South Africa.

¹ DTPS (2017) 'Briefing on proposed legislation emanating from the National Integrated ICT Policy White paper', Robert Nkuna: Director-General, Department of Telecommunications and Postal Services, Pretoria, 10 October 2017, available online at <http://pmg.org.za/files/171010whitepaper.pptx>.

² DTPS (2016, October 3) 'National Integrated ICT Policy White Paper', *Government Gazette*, Vol. 616 No. 40325.

³ See: RSA (2005) 'Electronic Communications Act', No. 36 of 2005, Republic of South Africa, Pretoria, Chapter 14.

⁴ DTPS (2015) 'National Integrated ICT Policy Review Report', Department of Telecommunications and Postal Services, Pretoria, available online at <http://www.dtps.gov.za/documents-publications/category/102-ict-policy-review-reports-2015.html>.

- 1.6 The Bill can clearly not be considered in isolation. RIA therefore believes that it is substantively inappropriate and procedurally unfair to table this Bill in isolation. Accordingly, RIA calls on the Department of Telecommunications and Postal Services to withdraw the Bill until such time as all four bills are ready for public comment.
- 1.7 This submission shall nonetheless proceed in providing comments on the Bill as currently tabled. Our comments, however, will also cover issues we believe may be pertinent to the remaining three bills, where this is appropriate and necessary.
- 1.8 The Bill grants extensive powers to the Minister, not only in overseeing the sector, developing policies and representing the country at international fora, but also in the management of scarce resources such as spectrum. This, we believe, erodes the powers of independent entities (such as ICASA), that have the necessary technical expertise and grasp of the dynamics and trends within the broad ICT sector to implement national policy independently of government and industry.
- 1.9 One of our main concerns is that the Bill undermines the independence of ICASA. There is an undercurrent throughout the Bill that asserts the role of the Department / Minister over that of ICASA, and downgrades the independence of the latter. In our view, this may render the Bill unconstitutional. It also reflects a lack of appreciation of the centrality of effective regulation in an effectively functioning ICT ecosystem.
- 1,10 The continued separation of the Department of Communications (DoC) and the Department of Telecommunications Services (DTPS) despite the context of convergence and IP-based services is concerning. In particular, the separation of responsibilities in spectrum policy between DoC and DTPS goes against market developments, whereby the digital dividend emerging from the digital migration (DoC's jurisdiction) should be allocated to the deployment of innovative telecommunications services (DTPS's jurisdiction). Regulatory authorities around the world have implemented a converged ICT regulatory framework with a mandate to regulate broadcasting and telecommunications - and often - postal - services, due to the interconnected nature of each sub-sector's functions and applications. However, the proposed slew of legislation appears intent on further fragmenting the regulation of ICT infrastructure, services and content by setting up with two new entities (an ICT Sector Commission and ICT Sector Tribunal Bill), leaving the rump of ICASA to deal with content and broadcasting issues, while increasing the regulatory powers of the Minister. In effect, ICASA will become the IBA and SATRA again.
- 1.11 ICASA should have the authority (and capabilities) required to conduct market reviews while the existing Competition Commission continues to set guidelines and to deal with merger and ex ante complaints. Conducting telecommunications market reviews is a core aspect of enablement and enforcement of competition in ICASA's mandate, and the Competition Commission does not have the sector expertise to undertake such studies. Our recommendation on this matter is for ICASA to consult the Competition Commission on issues related to anti-competitive practices, but to retain its role of setting ex-ante pro-competitive conditions
- 1.12 These are the main reasons, amongst many described in detail below, why RIA recommends that the DTPS withdraw the Electronic Communications Amendment Bill in its current form.
- 1.13 Whilst we have a number of areas where we have views, this submission will focus on only five substantive issues in the Bill:
- Institutional arrangements;

- Spectrum;
- Wireless Open Access Network;
- Universal Access and Service; and
- Open Access and Vertically Integrated Networks.

2. Institutional arrangements

- 2.1 The Bill expands the powers of the Minister in a way that undermines the functional separation of policy, regulatory and operational powers. While according to the ECA, DTSPS is responsible for setting electronic communications policy, overseeing radio frequency spectrum, and representing South Africa in international fora such as the International Telecommunication Union (ITU), the Bill locates the responsibility of developing the National Radio Frequency Plan (an implementation function) with the Minister⁵ (Section 29A). This proposed amendment of yet another core Authority function affects the development of an integrated ICT sector in which spectrum is a key resource. With continued state holdings in sectoral operations, this represents a clear conflict of interests.
- 2.2 While some of the problems are related to ICASA's lack of independence from the DTSPS, and from certain elements of industry, structural conflicts of interest persist as a result of continued state ownership and influence in the sector, as well as through the Minister's dual responsibilities: both for the safeguarding of significant state assets in the sector, and for policy that determines the well-being of state entities, creating an environment with some degree of regulatory capture by state and the private sector.
- 2.3 The 'Rapid Deployment' of fibre and wireless networks needs to be expedited, and initiatives to do so are long overdue. However, RIA believes that many of the functions relating to rapid deployment – for example the promulgation of enabling regulations and the management of supporting databases (including the proposed geographical information system) should sit with the Regulator, and indeed do so in other countries. The regulator should be resourced and capacitated to fulfil this function.
- 2.4 Government participation in the sector, through the DTSPS, will substantially increase, if this Bill is passed. Government's role and scope of oversight would be significantly expanded through the establishment of committees such as the Rapid Deployment National Coordinating Centre, and the Rapid Deployment Steering Committee, in addition to the transfer of functions⁶ from ICASA to the DTSPS, as envisaged in the White Paper.
- 2.5 According to the White Paper, the Ministry will be responsible for formulating policy approaches to universal service and access to ICTs, including the definition of this concept, setting the objectives for policy, broadly outlining the process of reviewing the approach adopted and broadly outlining universal service and setting targets and criteria for this. Thus, many policy-related responsibilities currently resting with USAASA and the regulator will be transferred to the Minister. While policies to enable the achievement of universal access are clearly in the domain of the Ministry, the specialisation required for adapting strategies and targets to achieve them in the dynamic ICT environment have long been placed in specialised

⁵ According to the 2005 ECA, Section 34(2), "The Minister must approve the national radio frequency plan developed by the Authority, which must set out the specific frequency bands designated for us by particular types of services, taking into account the radio frequency spectrum bands allocated to the security services".

⁶ The functions are spectrum management and the Ministerial involvement in the licensing of the WOAN which may also be unconstitutional.

entities dedicated to achieving them. There is considerable evidence to indicate that these targets are best achieved as integrated parts of national policy and regulation. RIA proposes, therefore, that the function of achieving universal service and access targets be located with other specialised technical units within the regulator. This will allow close co-ordination with other regulatory activities and implementation initiatives aimed at realising similar or complementary objectives. This would also avoid the duplication of institutional and governance overheads.

2.6 The independence of ICASA is guaranteed in terms of Section 192 of the Constitution⁷, which requires that broadcasting be regulated by an “independent authority”. Further, the Preamble to the ICASA Act makes it clear that ICASA is established as an “**independent** body to regulate broadcasting, postal services and electronic communications [emphasis added]”⁸.

2.9 The Bill contains multiple provisions that undermine the independence of ICASA while increasing the Ministry’s power in the sector, including:

- the allocation of frequencies and the development of a National Radio Frequency Plan, both to be undertaken by the Minister;
- the determination of what constitutes ‘high demand’ spectrum, proposed to be undertaken by the Minister;
- the proposed requirement that spectrum fees “must be in accordance” with Ministerial policies;
- the proposed requirement that ICASA must adhere to Ministerial policies and policy directions related to spectrum;
- the proposed ability of the Minister to exempt SMMEs from the proposed ‘use it or lose it’ principle as regards spectrum;
- proposed close Ministerial involvement in the licensing process for the WOAN;
- the proposed requirement for Ministerial approval on universal access and service obligations;
- the proposed involvement of the Minister in market reviews pursuant to the imposition of pro-competitive measures in respect of selected services and market segments.

2.10 Each of the proposed amendments listed above is, in the view of RIA, unconstitutional. Together, in our view, they render the Bill unable to withstand constitutional muster. Accordingly, RIA calls on the Department of Telecommunications and Postal Services to withdraw the Bill.

2.11 RIA further notes that the Bill assumes the continued separate existence of the Departments of Communications and of Telecommunications and Postal Services. RIA believes that having two ministers and two departments flies in the face of convergence and of the evolution of a complex, highly integrated, globalised ICT ecosystem. Accordingly, RIA believes that there was no rationale for the creation of the two departments with their responsible ministers, that it was contrary to the convergence policy that had been developed over the previous decade, and it was occasioned by short-term political exigencies. That decision has set the sector back 10 years. This was recognised in one of the minority recommendations from the ICT Policy Review Panel, which held that “Government needs to recognise that the phenomenon of

⁷ RSA (1993) ‘Constitution of the Republic of South Africa’, Act 200 of 1993, Republic of South Africa, Pretoria.

⁸ RSA (2000) ‘Independent Communications Authority of South Africa Act’, No 13 of 2000, Republic of South Africa, Pretoria.

convergence and the nature of the sector as a complex, interlocking ecosystem creates enormous difficulties for DTSPS and DOC in developing coherent, consistent policy and ensuring effective governance”⁹.

RIA further notes the governing party, the African National Congress, in a recent communications policy document calls for Government to “reconfigure... and integrate the Ministries of Communications and Telecommunications and Postal Services into one ICT Ministry”¹⁰. Accordingly, RIA calls on the Department of Telecommunications and Postal Services to withdraw the Bill for substantial revision pending its re-amalgamation with the Department of Communications.

2.12 The logic of a converged ICT ecosystem, together with the logic of a single ICT Ministry, dictates that ICASA should remain a converged regulator dealing with telecommunications, broadcasting and postal services, and that it should not be split with the excision of its authority over broadcasting services and issues, as appears to be contemplated via the White Paper¹¹ and the mooted ICT Sector Commission and Tribunal Bill¹². RIA notes that this proposal does not emanate from the recommendations of the ICT Policy Review Panel.

2.13 RIA further notes that the prevailing trend in regulatory oversight in other jurisdictions has been for the establishment of converged regulators, along the lines of the Office of Communications (OfCom) in the UK¹³. Other examples include: the Malawi Communications Regulatory Authority (MACRA, established in 1998); the Tanzania Communications Regulatory Authority (TCRA, established in 2003, with the merger of the Tanzanian Communications Commission and the Tanzania Broadcasting Commission; the Botswana Communications Regulatory Authority (established in 2013 as successor to the Botswana Telecommunications Authority); the Swaziland Communications Commission (established *de novo* in 2013). Mauritius is currently undertaking a merger of its Information Communication Technologies Authority (ICTA) with the Independent Broadcasting Authority (IBA). Separate regulatory institutions for content and carriage, such as the French system, are noted by exception rather than common practice.

2.14 On the other hand, RIA welcomes the proposed dissolution of USAASA, as appears to be contemplated in the proposed Digital Development Fund Bill. RIA notes that there is considerable evidence over the years of maladministration and corruption at USAASA¹⁴, not to

⁹ DTSPS (2015) ‘National Integrated ICT Policy Review Report’, Department of Telecommunications and Postal Services, Pretoria, available online at <http://www.dtps.gov.za/documents-publications/category/102-ict-policy-review-reports-2015.html>, p152.

¹⁰ ANC (2017) ‘Report of the 5th National Policy Conference, 30th June – 5th July 2017, Nasrec Expo Centre, Johannesburg’, African National Congress, Johannesburg, available online at http://www.anc.org.za/sites/default/files/5th-National-Policy-Conference-Report-Final_0.pdf, Paragraph 3.16.

¹¹ DTSPS (2016, October 3) ‘National Integrated ICT Policy White Paper’, *Government Gazette*, Vol 616 No 40325, Section 13.4.1.

¹² DTSPS (2017) ‘Briefing on proposed legislation emanating from the National Integrated ICT Policy White paper’, Robert Nkuna: Director-General, Department of Telecommunications and Postal Services, Pretoria, 10 October 2017, available online at <http://pmg.org.za/files/171010whitepaper.pptx>, Slide 27.

¹³ For instance, OfCom’s powers include: the power to undertake research and development work relating to any matter in which they have a responsibility; the power to promote the conduction of such research and development by others, or otherwise to arrange for it to be conducted by others; the power to institute and carry out criminal proceedings for an offence in a matter relating to their functions.

¹⁴ See, for example, *inter alia*: Malefane, M & Ncana, N (2011, September 25) ‘Digital TV officials suspended over R29m’, *Sunday Times*, available online at <http://www.timeslive.co.za/scitech/2011/09/25/Digital-TV->

mention the repeated failure to deliver on its mandate¹⁵. RIA therefore agrees with the understated assessment of the ICT Policy Review Panel that USAASA has been “ineffective in achieving its mandate” and with their consequent recommendation that it be “dissolved and existing functions transferred to ICASA (regulatory functions) or to the DTSPS (policymaking functions)”¹⁶. The administrative and governance costs of a dedicated agency have placed a considerable and unnecessary financial burden on the sector that can be reduced with incorporation.

2.15 RIA notes that the Bill proposes a plethora of new structures and entities. These include:

- a Rapid Deployment National Coordinating Centre (Section 13);
- a Rapid Deployment Steering Committee (Section 13);
- a National Radio Frequency Spectrum Planning Committee;
- a National Radio Frequency Spectrum Division within DTSPS (Sections 19 and 23).

2.16 While RIA appreciates the need for these functions and their co-ordination RIA is concerned with issues of concurrent jurisdiction and of overlapping mandates in respect of these proposed structures, and for the potential for delays and confusion that may result.

For example, RIA notes that the Rapid Deployment National Coordinating Centre is to be overseen by a Rapid Deployment Steering Committee, which nonetheless appears to report to the Minister. Moreover, while the Rapid Deployment National Coordinating Centre is required to interface with the “SIP 15 infrastructure team”, there is no formal representation on this structure from ICASA, whose explicit role is that of promulgating rapid deployment regulations.

2.17 RIA believes that the Rapid Deployment National Coordinating Centre should at the very least have formal and substantial involvement from the regulator, and report thereto.

Section 24 of the Bill deals with the establishment of a National Radio Frequency Spectrum Planning Committee as an intra-governmental structure to “ensure fairness and equitable distribution” of spectrum. As noted elsewhere in this submission, RIA believes that Ministerial control over the development of the National Radio Frequency Plan is inappropriate and presents a conflict of interests. Moreover, RIA is concerned that there is no formal representation from ICASA on this committee, even though in terms of the Bill they remain responsible for frequency assignment, monitoring and enforcement.

2.18 RIA notes that the Bill provides for the establishment of a National Radio Frequency Spectrum Division within DTSPS. It is unclear why this was considered worthy of specification within legislation, if it is an internal unit of the department responsible for policy formulation and

[officials-suspended-over-R29m1](#); Holomisa, B (2013, June 7) 'Corruption and Maladministration at USAASA', open letter; Mzekandaba, S (2017, August 7) 'Cloud of corruption hangs over STB tender', ITWeb, available online at http://www.itweb.co.za/index.php?option=com_content&view=article&id=163914:Cloud-of-corruption-hangs-over-STB-tender&catid=260.

¹⁵ Lewis, C (2013) 'Universal Access and Service Interventions in South Africa: Best Practice, Poor Impact', *African Journal of Information and Communication*, No 13, LINK Centre, University of the Witwatersrand, Johannesburg.

¹⁶ DTSPS (2015) 'National Integrated ICT Policy Review Report', Department of Telecommunications and Postal Services, Pretoria, available online at <http://www.dtps.gov.za/documents-publications/category/102-ict-policy-review-reports-2015.html>, p167.

monitoring of implementation. On the other hand, there is no mention made of multitasker consultative bodies such the National ICT Forum¹⁷..

3. Spectrum

3.1 RIA is deeply concerned by the degree to which the independence of ICASA in respect of spectrum is undermined in the Bill. RIA notes that spectrum by definition includes spectrum assigned to broadcast signal distributors and to broadcasting services. RIA has already alluded to Section 192 of the Constitution, which requires broadcasting to be regulated by an “independent” regulator. Control over spectrum matters pertaining to broadcasting by a member of the Executive, such as the Minister, undermines the independence of regulatory functions. RIA notes in this regard in particular the proposed pre-emptive insertion of Section 29A into the chapter on spectrum. This asserts *ex ante* a primary role for the Minister in respect of spectrum. As previously noticed in this submission, the Bill proposes to amend Section 30 to relegate the role of ICASA to one of mere “administration” of spectrum.

The various and manifold provisions of the Bill that undercut ICASA’s independence in all matters of spectrum are, in our view, unconstitutional and should be withdrawn.

3.2 RIA notes that the Bill proposes, via a proposed new Section 29A(d) amendment to Section 34(2), that the Minister take over from ICASA the assignment of frequencies to the various services, and the development of a National Radio Frequency Plan. As indicated above, this creates an immediate conflict of interest for the Ministry.

RIA believes that this is inappropriate and unwarranted in the face of ICASA’s effective management of the national band plan to date¹⁸. Many countries around the world have assigned spectrum through competitive mechanisms, in order to maximise the available resources with consequent potential benefits to consumers. Good international regulatory practices have introduced market-based mechanisms to distribute spectrum access, including assignment of spectrum bands for licence-exempt use, effectively allowing more freedom for market players to manage spectrum among themselves¹⁹. RIA believes there is a need to extend and safeguard spectrum commons, and enable un or under-utilised spectrum (even licensed) to be used for secondary use, dynamic allocation and community access, but this needs to be implemented in a co-ordinated way that prioritises the efficient use of spectrum in ways that enhance consumer welfare. The proposed institutional arrangement for spectrum management introduce unnecessary levels of co-jurisdiction over spectrum

3.3 RIA has a number of concerns regarding the sections in the Bill dealing with ‘high-demand’ spectrum. For similar reasons to those outlined above, RIA is concerned by the proposed involvement of the Minister in respect of ‘high demand’ spectrum. Firstly, the Bill proposes under new Section 31E(1) that it be a Ministerial prerogative to determine what constitutes ‘high demand’ spectrum. As ICASA is, and should be, the body receiving spectrum assignment requests, it is best placed to determine when there is high demand. In any respect, global

¹⁷ The Forum was established by Minister Siyabonga Cwele with the mandate, among other things, to engage in spectrum allocation. See <https://www.gov.za/speeches/minister-siyabonga-cwele-launch-national-ict-forum-15-may-2015-0000>. It was designed as a stakeholder consultation forum but it was not invested with any formal powers, and appears only to have been convened once.

¹⁸ "Nine out of ten ICT regulators also take part in spectrum allocation and assignment, which are vital for the sector to thrive" p 98 ITU (2017) 'Global ICT Regulatory Outlook 2017', International Telecommunication Union, Geneva

¹⁹ See: <https://www.itu.int/ITU-D/treg/publications/ICT-Reg-News-e.pdf>.

standardisation around next-generation spectrum is likely to indicate what is going to be high demand spectrum. High-demand spectrum could, of course, also be in the unlicensed bands, for example, public Wi-Fi bands. Mechanism for determining demand for such spectrum also needs to be considered by ICASA.

The Bill specifies further that it is the Minister who must determine which unassigned high demand spectrum must be assigned to the Wireless Open Access Network (WOAN). RIA believes that this provision will undermine the existing rights of current spectrum licensees and the high levels of investment in the sector. Not only that, its asymmetrical application will serve to disadvantage other applicants for spectrum, making it anti-competitive. Concerns over structural conflicts of interest that pertain to continued state intervention in the sector are reinforced by the Bill, as in its current form it will legitimise greater interests and powers of the Minister in radio spectrum affairs.

In addition, RIA notes with concern the proposed addition of Section 31E(6), which mandates the expropriation of any “exclusively/individually assigned high demand spectrum” not assigned to the WOAN. This undermines the rights of those current holders - and users - of licences for (still to be determined) ‘high demand’ spectrum. Further, the proposed provision will disincentivise licensees from rolling out infrastructure for the deployment of such spectrum, to the detriment of service provision.

Finally, RIA is concerned by the proposed insertion of Section 31E(5). This makes any new assignment of high-demand spectrum conditional on the WOAN being “functional”. Making access to ‘high-demand’ spectrum conditional to the successful deployment and operation of the WOAN, is risky and will further delay the urgent release of 4G spectrum on which SA is now lagging many other African countries. This consequently forces operators to continue using other spectrum bands. This innovative but nevertheless sub-optimal use of spectrum contributes to the high data prices witnessed in South Africa. The sector also requires competitive mechanisms for spectrum assignment, and the assignment of unused spectrum to alternative network deployment mechanisms such as community networks and secondary use in rural areas, for example²⁰. Dynamic spectrum technologies also have the potential to reduce the cost of communications dramatically, but a strategy for this has not been proposed in the Bill.

- 3.4 The Bill proposes that ICASA must adhere to a number of Ministerial policies and policy directions related to spectrum. For example, it proposes to require that spectrum fees “must be in accordance” with Ministerial policies (proposed Section 4(1A) and requires ICASA to “comply with... ministerial policies and policy directions” in respect of spectrum (Section 30(2)(a)). It is inappropriate for the Minister to determine fees; it is an administrative function of the regulator. Both of these provisions undermine the independence of ICASA and are, in the view of RIA, unconstitutional. They should therefore be withdrawn.
- 3.5 RIA notes that the proposed amendment to Section 31(8) formally introduces the ‘Use it or Lose it’ principle governing spectrum management. RIA welcomes this as a further regulatory measure, over and above ICASA’s current Administrative Incentive Pricing (AIP) scheme, to incentivise optimal and effective use of the available spectrum.

²⁰ Recent technological developments have opened up the possibility of using already-licensed spectrum on a secondary basis. An example of this is using the “unused” spectrum in the television bands - known as television white spaces (TVWS) - to provide Internet access. See: www.internetsociety.org/policybriefs/spectrum/

It is also useful to have SMMEs and new entrants exempted from this provision on good cause (new Section 31(8A) (b), in order to encourage market development. However, for reasons of regulatory independence, this should be at the discretion of the regulator, with due consideration of the relevant market factors at the time, rather than requiring Ministerial approval.

- 3.6 RIA also welcomes the proposed provisions covering spectrum trading, sharing and re-farming. Together with the 'Use it or Lose it' principle, this will, RIA believes, encourage effective use of the available spectrum, enable the correction of assignment or pricing errors and stimulate service innovation by assigning spectrum to those who value it most.

4. Wireless open access networks

- 4.1 Section 19A of the Electronic Communications Act Bill envisages the establishment of an ECNS licensee with special privileges known as the Wireless Open Access Network (WOAN), which will be granted an individual ECNS licence and radio frequency spectrum licence to provide wholesale electronic communications network services on an open access basis to other operators licensed in terms of the ECA. Incentives for the WOAN could include:

- reduced or waived fees as contemplated in section 3(2)(d);
- access to rights of way, public infrastructure as well public electronic communications facilities through government facilitation; and
- allocation of funds as contemplated in section 88 of the Act to construct or extend an electronic communication network in under-serviced areas.

- 4.2 As mentioned above, the Bill creates a distinction between 'high-demand' radio frequency spectrum and 'non-high demand' radio frequency spectrum, and states that the former, which has not already been assigned, must be assigned to and managed by the WOAN. The WOAN must, in turn, make such spectrum available in compliance with open access rules, the universal access and service obligations as well as any others that may be imposed on it by ICASA in line with national policy objectives and priorities, which would include the directives issued by the Minister.

- 4.3 The Bill hopes to realise the vision of open access networks bringing about affordable and ubiquitous broadband access through increased service-based competition as depicted in its ICT Policy White Paper. It should be noted that the WOAN was introduced in the White Paper and that there were no consultations on it during the green paper process. RIA is concerned by the assumption that openness inevitably produces positive outcomes. Openness can be a mechanism to achieve certain outcomes but it is not necessarily the only or best way to do so. There is considerable evidence that openness can reduce investment, perpetuate dominance and requires enforcement once it is found to effective in meeting its objectives.

- 4.4 The study commissioned by the Department of Communications and Treasury on the viability of the open access network by Analysis Mason indicated that there was not a case to be made for the introduction of an open access wireless network and that the only cases that were being trialled at the time suggested caution. Any other studies commissioned by the Department were not made public. RIA has also undertaken research in to the open access initiatives, that accompanied the broadband plans of Nigeria, Kenya and South Africa. It also examined the case of Rwanda. There has been no successful implementation of the various initiative undertaken in realisation of these policies. RIA also did an intensive study of the Mexican model which the Department aspired to, but the delays and opportunity costs associated with the delays have raised any red flags there. The project was only possible because of the

constitutional mandate and it was also this that compelled it to proceed even when there was significant concerns about its viability and benefits. Extensive processes and institutions have been implemented to mitigate the risk associated with the project and this is with a far more limited wireless open network of the digital dividend spectrum only. Further the powers given to the regulator with the constitutional reforms which permitted the asymmetrical regulation of the operator that enjoyed extreme dominance of the market (as much as 80%) unlike South Africa, dominance has already fall to 65% and continues to decline as the market become more competitive and regulatory efficiency improves.

- 4.5 RIA notes that competition in the South African mobile telecommunications markets could possibly be improved. In order to have the evidence for making the decision to improve competition in mobile telecommunications, the long overdue market review be conducted by ICASA and the necessary market restructuring or wholesale access and pricing remedies be put in place. Experimenting with the WOAN in a more limited capacity without inhibiting market developments would reduce the high risk associated with the current model.

5. Universal access and service

- 5.1 RIA notes that the Bill contains very few provisions that pertain to universal access and service - Chapter 14 of the ECA - presumably because these issues will be dealt with via the proposed Digital Development Fund Bill, in terms of which it is likely that USAASA will be dissolved and the USAF reconfigured to create the mooted Digital Development Fund.

There are, however, some amendments in the current Bill affecting universal access and service, which is addressed below. However, RIA reiterates the concerns for the piecemeal approach to the amendments arising from the White Paper, and our call for the Bill to be shelved until all the relevant bills are on the table.

- 5.2 In relation to universal access and service, and to the provisions of Chapter 14, it is important to consider the track record of USAASA and the USAF which it is entrusted to manage. As already noted, the track record is far from impressive.
- 5.3 USAASA has failed to deliver on many of the core areas of its mandate as set out in Section 82 of the ECA. Its research related to universal access and service in South Africa has been almost non-existent, and what there was, lacked both profile and impact. In advocacy, the Agency has been weak and ineffectual. It is only when it comes to support for and input into regulation that the Agency can claim any level of success: several sets of definitions were developed and promulgated.

USAASA's management of the USAF has, as seen above been bedevilled by repeated instances of corruption²¹. Over the lifespan of the USAF, over ZAR 2 billion in universal service levies was collected, almost exclusively from the telecommunications licensees²². Most of those contributions have disappeared into the fiscus. Allocations to the USAF by treasury,

²¹ See, for example, *inter alia*: Malefane, M & Ncana, N (2011, September 25) 'Digital TV officials suspended over R29m', *Sunday Times*, available online at <http://www.timeslive.co.za/scitech/2011/09/25/Digital-TV-officials-suspended-over-R29m1>; Holomisa, B (2013, June 7) 'Corruption and Maladministration at USAASA', open letter; Mzekandaba, S (2017, August 7) 'Cloud of corruption hangs over STB tender', ITWeb, available online at http://www.itweb.co.za/index.php?option=com_content&view=article&id=163914:Cloud-of-corruption-hangs-over-STB-tender&catid=260.

²² Broadcast licensees have overwhelmingly preferred to contribute to the Media Development and Diversity Agency fund.

excluding funds earmarked for the Digital Migration²³, total a mere ZAR 625 million. There is very little to show for this expenditure, however. Some ZAR 400 million was spent on telecentres, few of which remain in operation today. A further ZAR 150 million went to finance Internet connectivity for public schools and FET colleges, and just over ZAR 60 million was squandered on the failed Under-serviced Area Licensee experiment. No money ever reached ‘needy persons’, the key objective of the USAF.

- 5.4 Both the institutional arrangements around USAASA, and the management and effectiveness of the USAF, therefore, in the view of RIA will need to be addressed urgently. In particular, clear, firm and explicit measures will be needed to prevent corruption and ensure transparency, accountability and effectiveness in the operations of the mooted DDF. These might include: establishing an independent, high-profile board to promote good governance; mandating the development and application of a fund manual; requiring formal and regular needs assessments and careful research prior to any funding interventions; ensuring timely and full publication of all fund documentation, including bids, adjudications and compliance reports; mandating the conduct of third party monitoring and evaluation reports; conducting and publishing independent research into DDF impacts and outcomes. The DDF will also need to have a wider focus than the supply-side interventions that were the limited purview of the USAF: demand-side interventions and long-term sustainability need to be key areas of focus.
- 5.5 Contributions to the DDF need to be properly researched and carefully considered. RIA notes in this regard that the White Paper incorrectly states that the Minister holds “responsibility for setting and reviewing the Fund levy”, and express our concern that the White Paper calls for the levy to be pegged at a level of “at least one per cent”²⁴. This represents a very substantial hike from the 0,2% currently set in ICASA’s regulation, and was not part of the recommendation of the ICT Policy Review Panel. In addition, RIA trusts that the Minister does not intend to further undermine the independence of ICASA by taking over this regulatory function from them.
- 5.6 Further in this regard, RIA views with concern measures in the current Bill that suggest that it is the intention of the Minister to intervene more directly in respect of universal access and service regulation. For example, Section 3(b) of the Bill proposes to insert a new clause under Section 3 of the ECA (which deals with Ministerial Policies and Policy Directions) to the effect that such policy directions may also address “universal service or universal access obligations or both, having identified any access gaps²⁵”. This is further compounded by the proposed requirement under Section 31(2) of the Bill for advance Ministerial “approval on the nature and form of all universal access and universal service obligations before they are imposed” on licensees.
- 5.7 RIA is further concerned by the proposed amendment, via Section 6 of the Bill, to Section 8(4) of the ECA, which removes the discretion of ICASA in respect of designating which licensees will be subject to USOs and of including such clauses in the licences. This proposed amendment is further strengthened by the insertion of Subsection 4A, which requires that

²³ Funding in the USAF, earmarked for the Digital Migration totals some ZAR 2,25 billion to date (Lewis, C (2015) ‘Establishing a Local Content Fund: The Experience of Funding Universal Access and Service’ Available at SSRN: <https://ssrn.com/abstract=2663055> or <http://dx.doi.org/10.2139/ssrn.2663055>).

²⁴ DTSP (2016, October 3) ‘National Integrated ICT Policy White Paper’, *Government Gazette*, Vol 616 No 40325, Section 5.5.2.

²⁵ RIA notes that ‘access gap’ does not appear amongst the Definitions of either the Act or the Bill, an oversight that needs to be corrected to avoid confusion in the application of the amended ECA.

ICASA review these regulations at least every five years. It is our view that it is not necessarily appropriate to impose USOs on each and every licensee. ICASA has currently chosen only to impose USOs on the holders of individual licences.

- 5.8 RIA notes that, in terms of the proposed new Section 31A, all spectrum licensees “must” now be given USOs and that “such obligations [must be] complied with in rural and under-served areas before the assigned spectrum may be used in other areas by the licensee”. At issue is not the approach *per se* - it is used in certain other jurisdictions²⁶, and has been previously contemplated by ICASA²⁷ - but the fact that regulatory discretion is removed. USOs may not be appropriate in all cases of spectrum assignment, and some spectrum is not suitable for deployment in rural areas.
- 5.9 It is RIA’s view on the basis of extensive research with its sister organisation, LIRNEAsia, that universal access and service funds have largely been unsuccessful in enhancing universal access²⁸. The levy is normally added to the cost of the services, which are already unaffordable in many jurisdictions. Often the funds are used in the establishment and operating of institutions, and in most cases no or partial disbursements are made allowing for the accrual of massive unspent funds. The double negative impact of the funds is that on the one hand they may constrain investment in a jurisdiction if they are not spent; on the other hand, they would simply push up the cost of communications, making it unaffordable for the poor. Universal services obligations that are attached to targeted interventions seem to be the most effective measures to ensure coverage, but are often not found to be in uneconomic areas. This includes the auctioning of high-demand spectrum, for example, with the condition that appropriate services are first rolled out in unserved areas before the high-demand spectrum services can be introduced in lucrative urban areas. Mozambique provides a very successful example of the entire licensed service offering first being rolled out in under-served areas in the north that were almost entirely unserved before the third entrant was permitted to offer services in Maputo. Not only was this successfully done, but within four years of entering the market, Viettel has the largest number of subscribers, dramatically forcing down prices of the incumbents.
- 5.10 Further, RIA’s research across the continent shows that even if prices of services and devices come down significantly and are effectively regulated, large numbers of citizens across the continent will not be able to afford services-based GSM technologies. As indicated above, a

²⁶ Cave, M & Nicholls, R (2016) ‘The use of spectrum auctions to attain multiple objectives: Policy implications’, *Telecommunications Policy*, <http://dx.doi.org/10.1016/j.telpol.2016.12.010>.

²⁷ ICASA (2014) ‘Final International Mobile Telecommunications (IMT) Roadmap 2014’, Notice 1009 of 2014, *Government Gazette*, Number 38213, Independent Communications Authority of South Africa, Johannesburg.

²⁸ See, for instance, Calandro, E., and Moyo, M. (2010). ‘Is the Universal Access Fund in Africa Creating an Enabling Environment for ICT Infrastructure Investment in Rural and Perceived Uneconomic Areas?’ 5th Communication Policy Research Conference (CPRsouth5), Xi'an, China, available online at SSRN: <https://ssrn.com/abstract=1724465> or <http://dx.doi.org/10.2139/ssrn.1724465>. And Samarajiva, R., and Hurulle, G. (2017). ‘Measuring Disbursement Efficacy of Universal Service Funds: Case Studies from India, Malaysia, Pakistan & Sri Lanka’. Available online at SSRN: <https://ssrn.com/abstract=3044254> or <http://dx.doi.org/10.2139/ssrn.3044254>

new holistic assessment of the current Internet and platform environment needs to be undertaken.

5.11 New forms of aggregated demand that leverage the growing ownership of Internet-enabled devices needs to be exploited to provide complementary always-on public access to citizens currently unable to optimise Internet use. The deployment of public Wi-Fi as proposed by SA Connect in a more systematic programme would go a long way to address digital inequality that simply providing connectivity does not.

5. Open access and vertically integrated operators

6.1 In the Open Access section 29(a), the Bill creates an obligation to provide open access to electronic communications facilities at a wholesale level along the following principles:

- active infrastructure sharing that includes but not limited to national roaming, radio access network sharing and enabling mobile virtual network operators, for voice and data based on the latest generation of technologies;
- cost-based pricing;
- access to its electronic communications network or electronic communications facilities as prescribed by the Authority; and
- specific network and population coverage targets.

In a similar fashion to the WOAN, this provision threatens the incentive for wholesale network operators to invest in their networks. RIA's study on open access broadband networks in South African and Nigeria demonstrates that operators in the wholesale segment of the broadband market have been moving to capitalise on high demand for broadband access by leasing capacity to any internet service providers on an open access basis voluntarily. Other voluntary co-ordination and commercial infrastructure sharing, such as passive infrastructure sharing by mobile operators, has resulted in significant avoidance of duplication.

The incentives to recoup their investments and pay back the loans taken to build such infrastructure, not to mention turning a profit in the process, has sparked a "land-grab" in the wholesale broadband sector in South Africa. More importantly, this encouraged the adoption of the pricing transparency and non-discriminatory principles advocated by open access in order to become more market friendly without necessitating the *ex ante* type of regulation that would stretch ICASA's limited resources and capacity. Various mandatory open access interventions such as local-loop unbundling and the open access, state-owned, national wholesale infrastructure carrier Broadband Infracore have failed.

6.2 **Voluntary** commercial open access models have challenged closed, incumbent networks by strongly investing in the extension of broadband networks and providing access on an open basis voluntarily. These new operators are exploiting the gaps left in the various network levels by installing fibre, even where there are extensive municipal and commercially closed networks. The incentive to voluntarily adopt OA principles exists simply because it makes commercial sense to sell to as many customers as possible.

In addition to stimulating complementary investments in backhaul network investments, this commercial open access logic has also initiated last-mile fibre deployment. Companies such as Vumatel have been able to roll out fibre-to-the-premise as a retail service on the back of relatively low cost open access wholesale providers.

7. Conclusion

- 7.1 The Bill's stipulations that restrict spectrum sharing, trading and shared use should be revised to enable commercial correction of incorrect spectrum valuation, to enable self-provision in communities where services are not competitively available, and to enable more effective commercial wholesale access to incumbent networks by wireless services providers.

Some operators have argued that if spectrum should be reserved for an open access licence, it should have at least one of the current licensees with competitive experience in it, and spectrum trading should be permitted to rectify an inefficient spectrum assignment, with regulatory approvals to avoid speculation or hoarding.

- 7.2 Achieving universal access and service policy objectives in a context of sufficient competition while avoiding the unintended consequences of delayed investment requires the allocation of high-demand spectrum and forbearance on implementing a mandatory open access wireless regime that would siphon spectrum and threaten the incentive to invest.

RIA therefore advises that open access should only be introduced where markets are highly concentrated and there is evidence of abuse of dominance.

Ensuring that the release of this high-demand spectrum for use in more lucrative urban markets does not happen at the expense of underserved areas can be addressed through requirements on the winning bidders to provide mobile broadband coverage in those areas before the operator is permitted to deploy the new spectrum in areas already serviced. This has been done successfully in Sweden and other jurisdictions. Moreover, no artificial scarcity should be created to push up the price but there should be sufficient room in each block for operators to evolve their services.

- 7.3 The DTSPS has received different views on the desirability and feasibility of an open access wireless network given that other social and economic policy imperatives are being considered in addition to the optimal business case. Some operators have argued, along with RIA, that a single wireless open access network favoured by the DTSPS is a high risk intervention that South Africa cannot afford – the proposal of it in the Bill creates an uncertain investment environment. Other ways of enabling entry into the market, more efficient use of spectrum, and preservation and extension of the Commons need to be implemented for social and economic inclusion..

- 7.4 For these reasons, RIA stands by its call to withdraw the Bill as in its current form.

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