



The Acting Deputy-Director-General
ICT Policy and Strategy Development
Department of Telecommunications and Postal Services
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0001

Attention: Ms. M Masemola

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

31 January 2018

Dear Ms Masemola,

WRITTEN SUBMISSION - ELECTRONIC COMMUNICATIONS AMENDMENT BILL

1. The SACF hereby submits its written comments in respect of the Electronic Communications Act Amendment Bill as published in Government Gazette 41261 on 17 November 2017.
2. Welcome the opportunity to submit written comments on the Bill prior to it being tabled before Parliament. We trust that our comments will contribute to making the provisions in the Bill more workable and contribute to the objectives of the Bill.
3. The SACF would the opportunity to make an oral submission, should the Department hold any future engagement on the Bill.

Sincerely,

A handwritten signature in black ink on a light-colored background. The signature is cursive and appears to read 'K Pillay'.

Katharina Pillay
Managing Director

INTRODUCTION

1. The SACF is an industry association that represents a diverse group of members that participate throughout the ICT value chain and are therefore in a unique position, to bring considerable insights through the experience of our members – small and large across the ICT value chain. As such we believe that we are able to advance principles that will contribute to moving the debate forward to assist in revising the Bill towards creating an enabling environment.
2. The SACF welcomes the Department's approach to the amendment of the ECA through the introduction of the pre-Parliamentary round of commentary. This allows for robust engagement on the contents therein which is particularly important due to the magnitude and consequences of the changes. The SACF and its members are of the view that the draft Bill ought to be published for a further round of comments prior to its tabling in Parliament. In terms of the assessment of the Bill by the SACF, it was considered in line with the principles of administrative justice such as openness, responsiveness, transparency and accountability. Therefore, the SACF strongly argues that a fair administrative process, in the finalisation of the Bill would require further consultation.
3. The SACF supports the objectives of the Bill which includes promoting transformation, lowering the cost of communications and increasing competition. The SACF however also wishes to highlight areas of concern, as set out in this submission to ultimately ensure that these objectives would be achieved.

OVERARCHING COMMENTS

Clarity

4. We note that in 1.2 of the Background and context of the Bill, "The Act is amended to improve implementation and remove ambiguity and vagueness which hamper efficient and effective regulation." In our view the Bill, reduces some the ambiguities which have in some instances impacted on delivery and implementation, however it has also increased ambiguities in other areas. We will set out our concerns in greater detail and our members will be making individual submissions setting out further areas of concern to them.

Process

5. We note that clause 1.9 of the Bill states that, “This Bill is one of several Bills that will be introduced to give effect to the White Paper, ...”. This clause causes considerable confusion in relation to previous public statements, and the Minister’s Budget Vote of 2017. This confusion specifically relates to spectrum and the licensing thereof, however, we set out our concerns below. We understood there to be an agreed departure in terms of the implementation of some elements contained in the White Paper.

6. We note that it is the Ministry and Department’s intention to publish several draft Bills for comment, however the has only been able to publish the ECA Amendment Bill and the Postal Services Amendment Bill for comment. This creates a challenge for stakeholders interested in commenting as the Amendments of these are interrelated and stakeholders are unable to comment comprehensively with such a fragmented approach. Therefore, we welcome the publication of a further revision of the ECA Amendment Bill to allow for more comprehensive comments as well as any other amendment Bills that would have to be introduced to facilitate the logical implementation. To this end, it is at least expected that the ICASA Act would have to be amended, and without access to the anticipated amendments in the ICASA Act, this amendment process could not be seen to be fair.

Impact Assessments

7. We further note and support the Department’s drive to remove bottlenecks and create an enabling environment to ensure universal coverage and access to services in recognition of the critical role of ICTs in socio-economic development. However, in many instances it is difficult to see the link between the remedy and what problem is being cured. The problem or mischief is not clearly articulated in all instances and has unintended consequences. This would be addressed if the Department could make the required impact assessments available to the industry.

Regulatory Certainty

8. Achieving universality at lower rates as envisaged in the Bill is contingent upon an investment friendly environment. This requires regulatory certainty which would be provided by ensuring clarity, following due process and publishing the required impact assessment that should have preceded the preparation of the Bill. We note that there

was a qualitative assessment, however, this should be coupled with a quantitative assessment.

Analysis and Feasibility

9. We note that while, there has been various consultations on elements contained in the Bill which was underpinned by research and analysis, there however, appears to have been other areas that lacked the same level of consultation on specific critical issues included in the Bill. The challenge of having provisions in the Bill that are yet to be consulted on challenges the successful implementation thereof. For example, the WOAN is a key element of the Bill yet it is scant on detail and lacks the necessary feasibility studies to stack the odds in favour of the success of the WOAN. We encourage the Department to conduct the necessary feasibility study and hold the necessary consultations to firm up a strong model for the WOAN, as we do not have an existing successful model from which to draw lessons. The consequence of the failure of the WOAN will be so significant that it is undesirable to the industry and those investors which the Bill seeks to empower as well as the public. It is therefore, essential that measures are taken to mitigate the risks as far as is possible.

Structure of the Bill

10. As we understand the doctrine of the separation of powers are pivotal to ensuring accountability as enshrined in the Constitution. Policy, in line with this principle is intended to set the general thrust for sector regulation. Legislation accordingly translates the policy into greater detail assigning the requisite powers and sets out the parameters for the operations and regulations thus giving effect to the legislation. Regulations then ultimately provide the detailed rules for application.
11. The Bill however, appears to include policy, legislation and regulation. For example, the Bill goes into regulatory detail in the sections on Rapid Deployment and policy guidance and regulatory detail regarding SADC Interconnection. We are of the view that the Bill ought to be revised to removed regulatory detail that would be better placed in secondary legislation. The WOAN is an example of the detail that should be contained in licensing frameworks and reference to SIP 15 which forms part of a plan that should already be executed by 2020 is indicative of an approach that requires reconsideration.

Changing regulatory environment

12. Until the early nineties, the Minister or political head was responsible for setting policy, making regulations and being the operator of the state monopoly – a practice that was noted globally. Prices were not necessarily lower, service was less than ideal and services were not ubiquitous. During the 90s because of global best practice most countries including South Africa embarked on processes which culminated in the separation of powers. The political head was responsible for policy, independent regulators were created and the incumbent monopolist became an independent operator. Competition was introduced. Although, in South Africa, the State continues to hold a stake in more than one licensee and the Ministry of Telecommunications and Postal Services is the shareholder representative in Telkom and Broadband Infracore as examples.

13. The purpose for the separation of powers was that the political heads would determine policy which is underpinned or aligned to a specific political agenda. The need for an independent regulator with the ability to independently consider and accept or reject policy directions, is to maintain fairness. However, this is not absolute as regulation does not operate outside of overall national policy and legislative framework. Once the overarching policy has been set, the execution of regulations and licensing ought to be done independently and objectively.

14. This situation is already complicated in South Africa as the Minister currently sets policy and is also the Government shareholder representative in the largest fixed line operator which until less than a decade ago held 50% of the shares in the largest mobile operator. At this point it is also fitting to raise the SACF's grave concern with the amendment of the objective from "in the public interest" to in line with the White Paper and the interests set out in the White Paper. This is a short-sighted approach, particularly in the electronic communications sector where technology could render large portions of the White Paper irrelevant in a very short space of time. Good legislative drafting requires a more pragmatic approach that incorporates broader principles which would in any event incorporate the objectives of the White Paper.

15. The independent and converged regulator already reports to two line ministries – administratively to one and interfaces in terms of policy with the other (or is intended to). The Regulator reports to Parliament through a line ministry and receives its

budget from the Ministry. The Regulator has consistently remained underfunded and has a less than perfect track record.

16. Despite this, in recent years the Regulator has been gaining traction and has demonstrated improved performance against its annual plans. Although, whether the regulator has chosen the most impactful projects for its allotted financial resources may be the subject of debate.
17. Notwithstanding the imperfections of the Regulator, the Bill seeks to marginalise the Regulator through the stripping away of its powers and reduces it to an implementation agency. Political heads are expressly excluded from licensing decisions and the Bill currently seeks to further empower the political head while marginalising the regulator. The purpose of the separation of powers is to create markets that are impervious to political tides.
18. We note that the separation of the regulator is underpinned by the apparent slow pace of regulatory intervention. It is important to note that the regulator's powers are confined to that which is bestowed upon it in law. During the political dawn in South Africa there were three sector-specific regulators that had oversight of the following sectors – broadcasting, telecommunications and postal services.
19. Since 2000 there was a process of integration of the three regulators into one. The process of integration functionally, administratively and culturally has been complex and difficult which may have been reflected in its delivery. We note that the Authority's delivery over the past three years has been more than 70% against its business plan which is a significant improvement. The turnaround times of applications have improved as it has demonstrated its teeth and independence. These are key contributors to a strong and investment friendly environment. However, there is much more for the regulator to do. Therefore, we support the notion of strengthening the Regulator and increasing funding to a hybrid – self-funded model.
20. The Bill imposes many new obligations on the Regulator while separating the functions of the regulator. The consequence of the separation of the regulators, is likely to impede delivery as result of the split at a time when a faster regulatory pace is required.

21. We therefore, urge the Department and Minister to reconsider the separation of the Regulator as we understand the Ministry and Department's focus to be the strengthening of the Regulator and are of the view that these new provisions are likely to weaken the Regulator rather than strengthen it. This is further exacerbated by the fact that the separation of services is against the backdrop of the increasing convergence of services.
22. A separate and independent regulator enhances government's accountability. "Such independence increases the perceived neutrality and insulation from political or operational pressures. This perception of independence is particularly important where government retains ownership of the PTO."¹
23. We note that the Bill strengthens the powers of the Minister while marginalising the powers of Regulator, for example, it is unclear why the Minister would want to approve universal service obligations that are attached to licences. However, it may be necessary for the Minister to periodically direct universal service obligations to achieve a specific national priority, which the Minister is able to do using policy directions to the Authority.

Regulatory forbearance

24. The South African story has demonstrated that market segments with light touch regulation or where regulatory forbearance has been exercised has resulted in the explosion of networks and services that are competitive and extensive. The fibre environment is such an example, where there are lower barriers to entry including less regulatory obligations has enabled market entry and resulted in a thriving market.
25. However, the flipside of the absence of a regulatory framework meant that rollout was impeded due to high costs and delays in obtaining the necessary permits to rollout. We therefore welcome the Bill's attempt to create a regulatory framework that will enable the rollout of infrastructure and services.
26. Our members have already noted the benefits of some of the rapid deployment provisions. Despite, our optimism at this section, we are concerned with the level of

¹ Telecommunications Regulation Handbook, Overview of Telecommunications Regulation, Module 1, Page 6

detail that borders on regulations, veering away from the level of detail intended for legislation. Rapid deployment is a critical issue that grows in importance as 5G increasingly becomes a reality – perhaps this process could be expedited through the issuance of a policy direction to ICASA to develop Rapid Deployment regulations using the draft provisions of the Bill as the basis, including the sharing of commentary emanating from this process.

KEY CONCERNS ON THE BILL

Consumer Protection

27. We note the provisions to enhance consumer protection and welcome the drive to strengthen such in the ECA. We welcome Bill's drive to make devices based on the principle of universal design more pervasive by introducing universal design as a criterion for type approval. However, we have not seen a quantitative assessment of the impact thereof on the pricing of devices. Should this measure potentially increase the cost of devices, it could drive a market for grey devices. The Bill should consider measures to close this potential unintended consequence. We believe that the greater availability of devices based on the principle of universal design will help Persons with Disabilities realize the benefits of the ICTs contributing to greater independence resulting an improved quality of life.

SADC Roaming

28. We are concerned about the level of detail contained in the Bill dealing with SADC roaming. As we understand that role of primary legislation is to establish a principle at a high level and/or prescribe the powers conferred to the Minister or the Regulator or other agency.

It is essential to recognize the jurisdiction of the Bill, that it can only regulate services within the Republic. The provisions on International Roaming appear to exceed such powers as it appears to delve into the commercial operations of operators and imposes cost pricing principles on local operators. It is important to note that the success of the SADC roaming model is dependent on reciprocity. However, SADC roaming partners fall outside of South Africa's jurisdiction, the regulator must therefore enter into bilateral agreements with all SADC National Regulatory Authorities (NRAs) so that the principles of reciprocity may be enforced. Simply including the obligation in draft legislation with the level of detail that should be contained in regulations is not ideal.

29. We further note that SADC Roaming was not included in the White Paper and there has been no prior consultation in this regard. We understand this to be a crucial step of engagement that is still required. We are optimistic that the comments in this regard from the operators concerned will contribute to remedying this.

Investment

30. The objectives of the NDP and the Bill are premised on the principle of universality for infrastructure and services at costs that are affordable by the general population. While, Government sets the policy and collects levies and may provide subsidies through the Universal Service and Access Fund (USAF) for the rollout of infrastructure and services the cost of rollout and investment largely lies at the door of the private sector. Licences are granted with rights and obligations in exchange for the opportunity of investing and the right to a return on investment. Regardless, of whether the licensee is an incumbent or an entrant, infrastructure rollout is heavily, if not entirely dependent on investment.

31. This makes the investment climate central to the ability to drive the desired level of infrastructure and services. While, telecommunications or electronic communications has increasingly been under pressure to provide more capacity at higher grades of services at lower prices, it is heavily dependent on investment. The introduction of the WOAN is also premised on private sector investment, as Government has expressly stated that it will not have a stake in the WOAN.

32. Regulatory certainty is essential for investment – investors need to be assured that the rules are not going change at least for the duration of the concession or licence duration. Electronic communications networks need continuous investment and upgrading of infrastructure as well as product development. When the rules are at risk of arbitrarily changing midway and the concessions or licences have the potential be removed, this serves as a disincentive to ongoing investment. This would be undesirable to incumbents and entrants alike as this will have a significant negative impact on investment.

33. Therefore, provisions in the White Paper and the Bill that seek to instruct the Regulator to develop rules to go about retracting licensed spectrum, is ruinous to investment. This is exacerbated by the Minister's statement preceding his Budget

Vote and public statements confirming the protection of the exclusive licensing framework in respect of existing spectrum licences combined with the commitment that there would be a departure from the White Paper in terms of spectrum assignments – the WOAN will be awarded spectrum based on its needs and the remaining spectrum will be assigned to existing licensees. Regrettably, this does not appear to have made its way into the Bill. Instead, it looks like an about turn which creates even more uncertainty or perhaps may simply need appropriate drafting to reflect the Minister's commitments.

34. All stakeholders including the SACF and our members participated by providing data to the CSIR for the study to determine the spectrum required for the WOAN. The results of the WOAN spectrum demand study have not been shared with stakeholders. We urge the Department to publish the study.

Transformation

35. The SACF notes that transformation is a key objective of the Bill. We support the objectives of transformation, and are of the view that the WOAN as envisaged by the Department is one vehicle but that it should not be the only. We believe that there must be a multi-pronged to approach to transformation to ensure representivity across the value chain.

36. While, many of our members have had initiatives which includes;

- Early payment terms to black owned SMME's to promote sustainability and growth and competitiveness;
- Set-aside procurement policies to ensure (where possible) participation in the delivery of services by black owned SMME's;
- Training and development of black owned SMME's to facilitate their sustainability and growth in the ICT Sector;
- Development of communities through grassroots initiatives that drive the adoption of ICT products allowing the communities to become active in the economy;
- Increasing black owned retail distribution channels;
- Development of ICT product repair centres especially in rural and peri-urban areas.

37. In July 2016, ICASA published an ITA which places an obligation on recipients of spectrum that was to be awarded through a competitive process to establish Mobile Virtual Network Operators (MVNOs) in a bid to increase the number of Black

licensees and promote service based competition. This is an example of initiatives to promote ownership by Black people. Transformation cannot be limited to a single business model such as the WOAN. Black entrepreneurs may have innovative approaches and ideas to contribute to the sector that would not necessarily fit into this model. The legislation ought to create an enabling framework to bring more Black people into the ICT ecosystem at all levels.

38. It must be noted that many of the policy and legislative initiatives intended as vehicles for transformation to promote Black Ownership have had less than the desired results with many of these entrepreneurs incurring significant losses as a result. During the engagement with CSIR in mid-2017, the business case for the WOAN was noticeably absent. Notwithstanding our members' express support of the WOAN on agreed terms, it is essential that the Department develop a business case to ensure a better outcome for the WOAN than has befallen the various initiatives before, including USALs.

Competition

39. The landmark Altech judgement which opened the market resulting in the licensing of about 400 operators who had the potential to build and operate national licences albeit unintendedly would have enabled many aspiring Black entrepreneurs access to the market. However, the various policy and regulatory missteps and disjuncture has resulted in spectrum not being licensed to new entrants or incumbents. The consequence is that licensees hold licences and may have had funding but were denied the opportunity to enter the market.
40. Global best practice has demonstrated the need and importance of competition. We note that the Bill seeks to ensure competition. It is, however essential that it is not through the removal of incumbent operators who have invested billions of rands to rollout infrastructure and provide services. Such an approach is likely to have the opposite effect, and serve as a disincentive to investment, if the rules of the game can fundamentally change mid-way and remove licensed rights.
41. We support the Bill's objective to promote competition at the service level due to the significant barriers to entry including prohibitive capital requirements that reduces competition at the infrastructure level. However, global best practice has

demonstrated the need for competition at all levels including infrastructure. Competition at the infrastructure level will enhance service level competition.

42. It should be noted that globally there is consolidation taking place. The top 3 players have generally been able to withstand the pressures on low growth and depreciating currencies that add costs on investments.

Open Access

43. The principle and benefits is widely accepted and supported. However, we note with concern that the Bill removes essential criteria like feasibility and practicable access. This serves as a disincentive to investment and seems superfluous as there are multiple networks. Perhaps, disputes can be addressed through industry players establishing ADR processes to address disputes on an urgent basis and only refer complaints to the Regulator in exceptional cases.

44. The Bill in effect declares all facilities as essential following the broadening of the definition. This appears superfluous and overreaching as the purpose of an essential facility is that the facility cannot be duplicated. Therefore, all licensees must have access to the essential facility to provide a specific service. In addition to this, the Bill imposes a cost-based obligation on all deemed licensees regardless of size or scope. Based on our reading of the Bill, all licensees are deemed. This seems counter-intuitive.

WOAN

45. The WOAN is introduced at a time when markets have demonstrated the consolidation of licensees and infrastructure to realize greater efficiencies of scope and scale. As stated above, we are of the view that it is imperative for the Department to develop a comprehensive business case and sensitivity analysis for the WOAN, to enable the required investment.

Licensing of the WOAN

46. As we understand it, the WOAN is Government's vehicle to address transformation through inclusive ownership at the network level and is considered a tool to reduce the cost of communication services through the use of cost-based pricing and the extension of services to rural and under-served areas.

47. The SACF is concerned that in May 2017 that despite an agreement between the Ministry and most SACF members who are ECS and ECNS licensees where they committed their support to the WOAN, this agreement was not included in the Bill. The commitments to purchase an agreed minimum amount of capacity was based on an agreed package which included the following:

- The commitment for current licensees to retain their spectrum, which is essential for continued investment in the sector incumbents and entrants.
- All existing and potential new licensees can apply for spectrum through transparent, fair, open and competitive processes to access high demand spectrum which is in excess to the spectrum requirements of the WOAN. The spectrum requirements for the WOAN will be informed by a study conducted by the CSIR.

48. The SACF is of the view that the current provisions in the ECA enables the licensing of the WOAN and does not need an amendment to the ECA to be effected.

49. Further to this we are of the view that legislation ought to only establish the high-level principles for the WOAN but not contain operational details relating to the WOAN that would be best placed in pre-licensing documents and licence terms and conditions under the purview of the Regulator.

50. Discussions on the WOAN could start now and should include principles for the establishment of the WOAN inter alia:

- Ownership – who may hold an ownership stake, ownership thresholds
- The operational model;
- Funding, etc.

These are likely to complex and very technical discussions which are likely to be lengthy.

Pro-competitive Regulatory Framework

51. The success of the WOAN may be dependent on a pro-competitive, asymmetric regulatory regime to enable new entrants market entry. Such a framework may be applicable to the WOAN and other new entrants. The licence terms and conditions for entrants, including the WOAN could be more favourable than the regulatory framework applicable to incumbents. However, asymmetry is finite regulatory tool and

with a defined focus to enable entrants to compete effectively, while not encouraging and an inefficient operation and is likely to be supported by regulatory mechanisms.

52. The Bill in clause 19.A(2) includes coverage obligations and cost-based pricing as obligations for the WOAN. These obligations do not apply to other I-ECNS licensees therefore these must not be imposed on a new entrant as it would threaten the sustainability of the WOAN. However, cost-based pricing may be considered in the future after due process.
53. We have explained above the undesirability of creating a monopolistic WOAN and attempts to undermine the businesses of existing licenced operations that will be counter-intuitive to the growth and development of the ICT sector and its contribution economic development which the Bill seeks to promote.
54. The SACF welcomes the provisions in the Bill where the WOAN would be able to access USAF funding for the rollout to under-served areas. Licensees have largely not been able to access these funds for this purpose since the inception of the USAF. Nevertheless, this approach is welcomed. However, we caution the Department in respect of limiting access to USAF funding to the WOAN only. Instead, all similarly licensed operators should equally have access to such funding.
55. Cost-based pricing is typically imposed after a finding of dominance and potentially the abuse of dominance. The Bill however, introduces cost based pricing on the WOAN from the beginning. Developing a costing model to enable cost-based pricing is an expensive and intensive process to determine an operators' costs. It is difficult to envisage how the cost modelling would be done in the absence of data or how cost-based pricing is possible from day one. Moreover, the costing exercise in the instance of the WOAN would be exceptionally complex and probably be a first of its kind. Cost based pricing might thus be a long-term goal and not an immediate principle.
56. To encourage the success of the WOAN, regulatory holidays and a framework for pro-competitive measures maybe essential components to enable the early success of the WOAN. Increasing the regulatory and cost-burden of a new network may be counter-intuitive to what we understand the purpose of the WOAN to be.

57. To further contribute to the successful implementation of the WOAN, the WOAN could begin its rollout in urban and metropolitan areas working its way towards rural areas, which is likely to contribute to the sustainability of the WOAN.

SPECTRUM

58. The non-licensing of spectrum for more than a decade, has had a significant impact on licensees across the market. The continuous delay in digital migration and assignment has constrained competition and the resultant consumer benefits thus impeding SA's ability to be the leader for ICTs on the continent. The delays in the licensing of spectrum has prevented new entrants from entering the market despite having the requisite licences.
59. The ECA, introduces a technology neutral approach. The current provisions in the Bill appear to deviate from this. Spectrum is scarce but renewable resource. As the number of players in a market increases so too does the pressure on access to spectrum. This makes the need for efficiency and innovation central to the effective use of spectrum. We are of the view that the current provisions on spectrum in the Bill inhibits innovation and the efficiency of use.

Refarming

60. The Bill appears to be veering away from the policy of technology neutrality when it comes to spectrum licensing. Spectrum is refarmed to enable innovation and maximize the use of spectrum already allocated through the implementation of new technologies, this practice of spectrum refarming has benefited the industry for at least the past 10 years. It is unclear how spectrum refarming would impede or is impeding competition, so that a regulatory intervention is required at this point. What is the mischief that is being addressed with subjecting spectrum refarming to regulatory approval?
61. Further, while we support the general principle of universal service obligations, we do not believe that it can be imposed arbitrarily and repeatedly on the same spectrum assignment. Consequently, we are the view that regulatory approval and universal service obligations attached to refarming must be removed and the definition of refarming clarified.

Radio frequency spectrum trading

62. The definition of “radio frequency spectrum trading” in section 1(l) lacks clarity. It is unclear if a trade means, from a legal perspective which relates to the change of control over spectrum or the transfer of ownership of a licence. We would also like to see a clear definition of “leasing” – presumably a temporary trade – and “sub-letting” – a lease where the lessor is a leasee itself?

57. The SACF is of the view that the trading legislation in section 31B is unnecessarily constraining. Trading can play a key role in ensuring efficient spectrum use, when a user with valuation of a particular spectrum assignment higher than the current licence holder approaches the latter with an offer for the licence. However, the proposed legislation can stop such value enhancing trades by imposing the following restrictions:

- A requirement that the current licensee must have used the spectrum in the year prior to the trade;
- A requirement that the details of the trade, including financial terms, is disclosed to the Authority; and
- A ban on trading of high demand spectrum.

63. We think that these constraints will hinder the development of a secondary market for spectrum, which is an important tool to ensure efficient use. We therefore do not see a reason to preclude the trade of high demand spectrum upfront, given that there is a requirement on the Authority to carry out a competition test before approving any trade.

High Demand Spectrum

64. We note that the Bill requires the Minister to determine what high demand spectrum is six months after the promulgation of the Act and periodically as required thereafter. It is unclear why this is necessary as it adds an additional layer of consultation and complexity. What is the consequence of the absence of the Minister identifying the relevant bands? It is important to note the number of Ministers over the recent past, and that there have been many instances where the provisions in the Act have not been enacted. We however, welcome the more recent movement on a variety of matters. Therefore, it is useful to reduce the legislative provisions which are dependencies, where its inclusion is not essential.

65. In terms of current processes, once the Authority receives multiple applications for specific bands it considers the band one of high demand and subject to a competitive process for applicable applications. The Authority has demonstrated this approach with the ITA that it published in July 2016. The mischief being cured here is unclear.

Delays in the licensing of spectrum

66. It is of grave concern that the Bill seeks to delay the licensing of high demand spectrum until the WOAN is functional. The concept of the WOAN, vague as it is, is subjected to a legislative process for it to be established. Operators face an increasingly severe spectrum crunch despite innovation and the implementation the crunch due to data services that are increasingly bandwidth hungry.

67. We are of the view that the continued delays in the licensing of high demand spectrum for more than a decade and half has and continues to negatively affect new entrants who have waited more than 10 years for spectrum to start operating. It increases the costs of rollout for incumbents.

We are also cognisant of the Department and Ministry's concerns that the licensing of the high demand spectrum to incumbents before the WOAN is functional will compromise the success of the WOAN.

68. However, we are of the view that further delays in spectrum licensing will negatively impact the economy and therefore should be licensed as a matter of urgency.

69. Consequently, we are of the view that the concerns can be mitigated through the following:

- Licensing of high demand spectrum, combined with obligations;
- The WOAN should be permitted to rollout services in metropolitan and urban areas first;
- Removing the WOAN from the Bill and the Minister issuing a policy directive to the Authority to licence a WOAN on an urgent basis.

Open licensing vs exclusive licensing framework of spectrum

70. Licences are issued on an exclusive use basis and is therefore integrally linked to the licence rights of current market players and is the basis for investment that has enabled the rollout of networks.
71. The Bill establishes the WOAN, which seeks to diversify ownership and provides for dedicated spectrum allocation to the WOAN. The Bill then, seeks to change the licensing approach for spectrum from exclusive rights methodology to an open access model.
72. It is difficult to reconcile the reasoning for the change in approach to spectrum licensing, particularly as we understand it the WOAN will have exclusive spectrum use. Why is a different approach necessary for other licensees?
73. We are not aware of the studies that support this approach for licensing spectrum necessary for dedicated networks, which are subject to significant obligations in terms of grades of service and value for services received.
74. Spectrum is used on an exclusive basis to avoid interference, enable efficient use, allow for network planning and maintenance. If spectrum is not assigned to a specific network operator:
- it will be very difficult to manage interference because it substantially complicates (if at all possible) the use of spectrum across various networks and cells. The quality of service will degrade.
 - it will be difficult (if not impossible) to achieve efficient use of spectrum across the various operators at the same time (just in time usage management across multiple networks), and it will complicate network rollout/upgrades, because it will involve multiple network operators to make changes to their networks and systems at the same time. This is likely to cause disruptions in providing services.
75. There is a fundamental difference between the radio access technologies that operate on unlicensed spectrum vs exclusively licensed spectrum. Typically, Wi-Fi under the IEEE 802.11 standard operates in unlicensed spectrum while International Mobile Telecommunications (IMT) typically based on 3GPP standards operate in exclusively licensed spectrum.

76. Wi-Fi operates in unlicensed spectrum bands because it was inherently designed to do so through the implementation of a technology feature called Carrier Sense Multiple Access with Collision Avoidance (CSMA/CA). CSMA/CA operation is a process of where the transmitter actually expects that some other transmitter could also be using the medium at the same time and hence follows a process of sensing the use of the medium and if there is use which would typically result in a collision, it stops transmitting for a random period and then retries the transmission. Consequently, this enable the scenario where the same spectrum is used by several users at the same time and at the geographic location.
77. IMT technologies (eg: LTE) on the other hand, do not implement CSMA/CD and therefore have no mechanism to share spectrum between multiple users in the same way as Wi-Fi. IMT only implements the typical Forward Error Correction mechanisms which only seek to perform a check whether a transmitted frame is received correctly at the receiver and if not then the transmitter retransmits that particular frame which is a scenario that is only intended to occur as an exception to the rule i.e. the technology is designed with the objective that in general transmitted frames will be correctly received in most cases. When frames are re-transmitted it directly impacts the throughput and hence user experience.
78. Where several licensees deploy IMT in the same frequency, in the same time and geographic domains, will simply result in overwhelming radio frequency interference and consequently simply not work.

Return of Spectrum

79. The SACF is gravely concerned about with the provisions of 31.E(6) of the Bill which instructs the Authority to conduct an inquiry in respect of the return of spectrum. We understand this to fly in the face of commitments made by the Minister in May 2017. The consequence of this is dire to investment certainty which underpins service delivery. As we do not have sight of the spectrum study for the WOAN, we are unclear on the precise amount of spectrum required for the WOAN, however, we believe that there is a general acceptance by SACF members, and we understand the Department and Ministry recognize that all the spectrum is not necessary for the WOAN although we understand that this was the original position contained in the White Paper. We

welcome the Minister's public statements of May 2017 which support this view, and indicated that high demand spectrum not allocated to the WOAN will be licensed to other licensees through a competitive process.

80. We do not believe that it is possible or desirable to have a single network at the expense of current networks as it will not advance competition, the cost of services or improve consumer protection.
81. As a result, it is vital that regulatory frameworks don't simply encourage competition in the existing markets, but seek to include entrants, especially Black people in new markets and fields so that they are significant players by design from the start. For example, 5G brings significant promise of new areas where entrants would be able to compete more effectively with the necessary support and have the potential to become global players.
82. The global experiences of monopolies for infrastructure and services have demonstrated that low levels of service, poor customer service and higher prices are the result of services provided by a monopoly. Therefore, we do not imagine that the Bill is trying to repeat the history of monopolies while promoting competition at the services layer. History and global practice have demonstrated that monopolies are ineffective and expensive.
83. Therefore, notwithstanding the provisions of the White Paper on a single wholesale network, we understand the WOAN to be an additional network limited to wholesale services as a platform to enable market entry by new players on a more sustainable basis, although we do not understand the Bill to say this. The Minister of Telecommunications and Postal Services in his 2017 Budget Vote said this and was supported by our members. We are of the view that the Bill ought to be revised to clearly articulate this as it has a significant impact on investment in the interim. The merits of the success and sustainability of the WOAN are yet to be proven, which makes the continued success and sustainability of the ICT sector essential to deliver economic growth and development.