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Mr David Moshweunyane

Independent Communications Authority of South Africa
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Dear Mr Moshweunyane

BROADBAND INFRACO – SUBMISSION ON INFORMATION MEMORANDUM ON LICENSING OF UNASSIGNED HIGH DEMAND SPECTRUM

INTRODUCTION

- 1.1 Broadband Infraco welcomes the opportunity to make this written submission on the Information Memorandum on ***the notice on the licensing process for International Mobile Telecommunications (“IMT”) spectrum, inviting comments in respect of the provisioning of mobile broadband wireless open access services for urban and rural areas using the complimentary bands IMT700, IMT800, IMT2300, IMT2600 and IMT3500.***
- 1.2 Broadly speaking, Broadband Infraco welcomes the draft Information Memorandum’s attempt to provide a much-needed clear path to licensing long-awaited IMT frequency bands to enable the provision of secure, reliable and robust wireless broadband connectivity to millions of South Africans.
- 1.3 From a public policy perspective, one of the key objectives of the National Integrated ICT White Paper is **making high-speed broadband internet universally available at competitive prices.**

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- 1.4 Broadband Infraco is aware of the White Paper outlining the overarching policy framework for the transformation of South Africa into an inclusive and innovative digital and knowledge society. The White Paper reinforces and extends existing strategies such as SA Connect, the National Cyber-security Policy Framework and the National Information Society and the National Development Plan.
- 1.5 The Authority's IM rightfully recognises that to enable SA Connect in as an efficient and cost-effective manner as possible, access to the identified IMT frequency bands is crucial to achieving this national objective.

SPECIFIC COMMENTS

2. SA Connect

- 2.1 Broadband Infraco fully endorses the Authority's decision to simultaneously licence *IMT700*, *IMT800*, *IMT2300*, *IMT2600* and *IMT3500* bands ("High Demand Spectrum / HDS"), to stimulate competition and to expand broadband coverage, and in doing so, bridge the digital divide and the disparities between rural and urban access to broadband networks and services.
- 2.2 Broadband Infraco draws to the Authority's attention that due the Analogue Switch-off having not occurred yet, actual operation of wireless broadband services in the IMT700 and IMT800 MHz frequency bands will not happen until the ASO concludes. This structural hurdle, however, does not need to prevent or delay the Authority from licensing these bands though.
- 2.3 Given the Authority's unequivocal regulatory policy statement about issuing SA Connect with an allocation of HDS, Broadband Infraco expects that such an allocation of HDS spectrum for SA Connect will not be awarded via an auction process but rather through at least a set-aside of bandwidth. As mentioned in paragraph 4.8 of the IM, the Authority could issue such HDS spectrum to SA Connect via an Invitation to Apply., as per the Radio Frequency Regulations ("RFSR") of 2015. Such an ITA process would, in compliance with the 2015 RFSR, be transparent, fair and be an efficient means to award HDS to SA Connect. The statutory power to award HDS spectrum to SA Connect is catered for by the 2015 RFSR's flexibility in granting the

Authority powers to impose special conditions and procedures for issuing such HDS spectrum licences.

- 2.4 Broadband Infraco believes that an allocation of 2 x 10 MHz of bandwidth in the 800 MHz frequency band would be adequate for SA Connect's wireless broadband requirements. This amount of bandwidth would also be sufficient for SA Connect to comply with the *Obligations* enunciated in paragraph 6 of the IM. Currently, Broadband Infraco is providing 98% Quality of Service for SA Connect sites using MW backhaul frequencies.
- 2.5 If Broadband Infraco were to be assigned high-demand spectrum, local SMME partners could use it to expand the SA Connect network from schools, hospitals, clinics and government offices to provide wireless broadband connectivity to more and more South Africans residing in rural communities.
- 2.6 Broadband Infraco is a mandated entity to roll-out SA Connect. SA Connect entails providing at least 10 Mbps connectivity to designated clinics, hospitals, schools and other public bodies located in rural areas over the next seven years. Thereafter, almost a further 40 000 government facilities will have to be connected with a minimum download speed of 100 Mbps. Given the coverage area of 800 MHz resulting in lower capex requirements to deploy fewer base stations and the availability of handsets from different OEMs, Broadband Infraco has identified the 800 MHz frequency band as ideal for SA Connect's capacity requirements.
- 2.7 Currently, Broadband Infraco is using MW backhaul frequencies to provide the necessary last-mile access. Utilisation of MW frequencies for last-mile access is not the best use of radio frequencies above 1 GHz, as their coverage, especially over long-distances, and availability of handsets are limited. Typically, frequencies below 1 GHz provide network operators with far better coverage, robustness and availability of handsets. The Authority's Information Memorandum recognises as much

3. Coverage Obligation for Industry – Alternative to Reverse Auction

- 3.1 Paragraph 6.2 of the IM proposes that Licensees of *Lots B, C and D will be required to ensure that identified geographical areas are provided with broadband coverage in accordance with standards prescribed by the Authority and or set out in their licences terms and conditions.*

Licensees will be required to roll-out the broadband network to 97% of the population in all the identified under-services areas before rolling-out in urban areas.

- 3.2 Broadband Infraco is of the view that the public policy off-set for granting entities involved in rolling-out SA Connect free access to bandwidth in the 800 MHz frequency band can be linked to them assisting private operators meeting their rural coverage obligation of providing wireless broadband connectivity to 97% of the rural population before being granted spectrum licences in coveted IMT bands for deployment in urban areas. The IM states at paragraph 2.2 that *There is a need to assign a minimum of 1011 MHz and a maximum of 1036 MHz for use by IMT (including GSM) by this year to achieve SA Connect's [coverage] targets. It is the Authority's position that the licensing of IMT700, IMT800, IMT2300, IMT2600 and IMT3500 will contribute significant bandwidth towards achieving SA Connect's targets.*
- 3.3 In addition, the IM states that *The IMT700, IMT800, IMT2300, IMT2600 and IMT3500 bands have been identified worldwide for IMT services. These bands complement each other in the sense that they fulfil the requirements for capacity and coverage which make them suitable for rural and urban areas and for bridging the digital divide.*
- 3.4 Such policy trade-offs could be incorporated into operators' licence terms and conditions; similar to how Universal Access Obligations and their respective Implementation Plans are made part of operators' licence conditions.
- 3.5 What Broadband Infraco is proposing requires government to expand the mandate of SA Connect to include rural communities in addition to the policy's targeted public sector Users.
- 3.6 By expanding SA Connect's mandate to include rural communities, which expanded remit would overlap with the Wireless Open Access Network ("WOAN") stated objectives, government could both:
 - 3.6.1 Leverage off of Broadband Infraco's existing experience of deploying wireless broadband networks in rural communities; and
 - 3.6.2 Leverage Broadband Infraco's expertise as a fixed broadband wholesale open access operator.

- 3.7 In so doing, the socio-economic and transformational policy objectives of the WOAN could be addressed by Broadband Infraco.
- 3.8 Additionally, noting the WOAN's stated transformational purpose, part of SA Connect's expanded remit would need to include its operator serving as a wholesale open access provider to ECS licensees or ISPs operating in rural communities or who want to operate in under-serviced areas. However, somewhat distinct from SA Connect's current business model which relies on government to subsidise SA Connect's opex, the business model that Broadband Infraco would look to employ would be a User-based fee one. In this case community members would be involved in constructing, managing, maintaining and owning their own networks. Zenzeleni Community Networks in the Wild Coast area of the Eastern Cape is successfully using this particular model, which Broadband Infraco believes better ensures the long-term viability and sustainability of community owned networks.
- 3.9 Expanding SA Connect's mandate in this way would be congruent with one of the White Paper's stated objectives of increasing service based competition. As mentioned above, Broadband Infraco is a fixed broadband wholesale carrier that already provides services to other licensed entities. The Company has the technical capability, a Network Operations Centre, a 15 000 kms national fibre network complimented by almost 60 Points of Presence throughout the country, field services office in almost 15 primary and secondary towns in South Africa in addition to direct connectivity to the WACS undersea cable to enable fast, reliable and robust Internet services. Broadband Infraco would bring all of this value to bear to enable SMMEs to develop into wireless broadband providers in their communities.
- 3.10 From an oversight perspective, government would only have one entity to deal with in managing wireless broadband access in rural areas instead of disparate entities with overlapping mandates.

4. Nominal spectrum licence fees for SOCs with Statutory Mandate

- 4.1 ICASA has taken cognizance of the preliminary decision made during the World Radio Conference-12 to allocate the 700MHz for IMT services for Region 1 (Africa, the Middle East and Europe).
- 4.2 SA Connect acknowledges that the slow deployment of fixed broadband services and its relatively high cost has meant that, over time, mobile broadband quickly became the default option of many

South Africans to access the Internet as opposed to it being a complimentary service to fixed broadband. However, the cost of access is affected by the technology used to go online. According to BMI-T connecting over DSL (connection over a telephone line) cost around R12/GB and the “prevailing rate” for mobile broadband services was R50/GB. This point underscores the imperative for far less expensive forms of access to wireless broadband services. Hence, the need for entities involved in the deployment of SA Connect to be granted free access to a reasonable amount of spectrum in the 800 MHz frequency band.

- 4.3 Given the expected lower Average Revenue Per User that could be achieved by SA Connect than compared to operators who deploy 4G and 5G networks in urban areas, the Authority should not impose licence fees on SA Connect commensurate with licensees operating in urban areas.

5. Empowerment Obligations

- 5.1 Broadband Infraco notes the Level 3 B-BBEE status that holders of HDS spectrum would have to achieve within three years of obtaining their HDS spectrum licences. For clarity and regulatory certainty, it is suggested that the Authority state, in a regulation of general application, instead of in an operator’s HDS spectrum licence, what the consequences of a licensee not meeting this particular B-BBEE requirement would be.
- 5.2 The benefit and necessity of stipulating what the consequences of non-compliance with the empowerment obligation would be in a regulation of general application is that all HDS spectrum licensees would be treated the same without preferential treatment.

6. Conclusion

- 6.1 Broadband Infraco welcomes the Authority’s initiative in issuing the IM. Broadband Infraco appreciates the recognition the Authority has given SA Connect as far as its policy mandate to provide connectivity to government facilities; but using more appropriate spectrum that is suited for wireless broadband access.
- 6.2 One critical issue of clarity that Broadband Infraco requests is exactly how SA Connect will be allocated an HDS spectrum licence. Will it be according to an ITA or via some other licensing process?

- 6.3 As HDS represents government's one key leverage to extract reciprocity in terms of awarding a much needed and scarce national resource to enable private investment, economic growth, job creation and digital transformation, it is imperative that the Authority extract as much counter-benefit for the country as possible. The issues of *reverse auction*, B-BBEE obligations and support for the WOAN go some way towards achieving such social benefits.
- 6.4 In so doing, the Authority should not over-emphasise the auction fees that HDS licence applicants will pay for auctioned spectrum. Broadband Infracore implores the Authority to take a long-term view as to what HDS spectrum can do for the electronic communications industry, the economy and the country as a whole. Successful licensees who win HDS spectrum allocations should not be compelled to pay exorbitant auction fees to obtain a resource that is essential to grow the economy and create jobs. Rather, such entities should pay reasonable auction fees that enable them to expend their financial resources on deploying their HDS networks as rapidly as possible.

Yours faithfully,



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