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March 5, 2020

The Independent Communications Authority of South Africa (ICASA)
350 Witch-Hazel Avenue
Eco Point Business Park
Eco Park
Centurion

Attention:
Ms Pumla Ntshalintshali
pntshalintshali@icasa.org.za

Re: DSA Comments to the Independent Communications Authority of South Africa (ICASA) Public Consultation on a 'Draft Framework to Qualify to Operate a Secondary Geo-Location Spectrum Database"

Dear Ms Pumla Ntshalintshali:

The Dynamic Spectrum Alliance (DSA) respectfully submits the following comments in response to ICASA's consultation, "Draft Framework to Qualify to Operate a Secondary Geo-Location Spectrum Database."

The Dynamic Spectrum Alliance (DSA) is a global, cross-industry, not for profit organization advocating for laws, regulations, and economic best practices that will lead to more efficient utilization of spectrum, fostering innovation and affordable connectivity for all. Our membership spans multinationals, small-and medium-sized enterprises, as well as academic, research and other organizations from around the world all working to create innovative solutions that will benefit consumers and businesses alike by making spectrum abundant through dynamic spectrum sharing[1].

The Regulations on the use of Television White Spaces in South Africa published on 23 March 2018, in the Government Gazette No.41512 (Notice No. 147) allow white space devices to operate at locations where frequencies are not in use by licensed services. Unlicensed white space devices can be used to provide a variety of wireless services, including broadband data, Internet of Things (IoT), Super Wi-Fi, Emergency communications and community networks.

The DSA welcomes the Authority's efforts to establish the framework to qualify entities or organisations wishing to operate Secondary Geo-Location Spectrum Databases. This is an important milestone after the publication of

[1] A full list of DSA members is available on the DSA's website at www.dynamicspectrumalliance.org/members

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regulations on the use of TV White Spaces in 2018 aimed at promoting innovation to advance efficient spectrum use. The proposed framework is an important step forward for the TVWS deployments in South Africa.

According to the summary of network coverage gap analysis conducted by the Council for Scientific and Industrial Research (CSIR) in November 2018[2], in South Africa, there is extensive 3G population coverage (only 3.5% lack coverage), but 21.8% of the population live in areas without 4G/LTE coverage. Approximately two million people, out of the total population of 55.8 million, do not have coverage from a 3G or 4G network. The provinces with the largest coverage gaps are Eastern Cape (9.55%), Kwa-Zulu Natal (6.5%), Northern Cape (4%) and Limpopo (3.95%). TVWS use will be able to help bridge the connectivity gap in those places where there is limited broadband connectivity.

The UHF band has excellent propagation characteristics that make it particularly attractive for delivering communications services over long distances, coping with variations in terrain, as well as providing coverage into and within buildings. Type approved and authorized white space devices could be deployed by Wireless Internet Service Providers (WISPs) to provide Internet connectivity in rural and underserved areas, including for schools and libraries. DSA supports increasing shared spectrum use in TV white space for cost-effective broadband deployment and is convinced that Internet access will increase digital inclusion.

The DSA fully agrees with the Authority vision about the importance of spectrum, as stated in ICASA's 2017/18FY annual report, "*spectrum is the life blood of the information and communications technology (ICT) sector it is to the ICT sector what water is to the agricultural sector*".

Moreover, we believe that spectrum sharing is fundamental to a modern spectrum policy framework and applaud ICASA for its recognition of the importance of spectrum sharing and for its plans to adopt an automated dynamic access approach defining the framework to Qualify to Operate a Secondary Geo-Location Spectrum Database. We encourage the Authority to move as expeditiously as possible to implement an automated approach to dynamic spectrum sharing for Television White Spaces. This will deliver more broadband connectivity in rural and underserved areas, as well as a wider range of investment, and new opportunities for innovation.

The DSA agrees with Authority's strategy of conducting its qualification assessment of organisations that have applied to become S-GLSD's in a phased approach. To the best of our knowledge, organizations that are operating currently as White Spaces Database Administrators in Administrations where rules authorizing TV White Space operations are in place do not have a commercial nexus in South Africa. Consistent with the Authority's objectives, and to ensure as broad a pool of qualified applicants as possible, we urge flexibility with respect for applicants to meet all the self-declaration criteria at the time of submission. We suggest the Authority allow for applicants to self-declare that they will meet the non-technical self-declaration criteria at the

[2] The CSIR Broadband gap analysis of South Africa was presented in the Workshop "Exploring the Potential of Spectrum Sharing to Help Close the Digital Divide" organized by the DSA and PIP on Friday 11 October 2019 in Johannesburg.

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time of initiating service and show a path for achieving this. It is also important that in Section 4.1 (d) of the draft framework document, it needs to be stated clearly that the executive summary of the applicant's business plan will be kept confidential by the Authority. The DSA recognizes there is a disclaimer on page 2 of the document, but it requires a second simultaneous filing with the Authority. The DSA is concerned that potential S-GLSDs may be deterred from applying over concerns that competitors may become aware of its business plan

Under the proposed framework, upon a successful completion of the self-declaration phase by the applicant, the Authority will grant the respective applicants a maximum period of 90 calendar days to complete the subsequent phases of the qualification assessment. We think that the established timing is very positive and shows the Authority's interest in fast deploying TVWS projects in the country, however we think that this 90 calendar days period is challenging, and shorter than other countries that have implemented TVWS regulations, as it is the case in United Kingdom, where in 2015 Ofcom estimated 29 weeks for the certification process, including development time. In this sense, we would suggest maintaining the 90 calendar days period, but considering that if the qualify entity or organization fails to meet the specific requirements of a phase in the established timeframe, it shouldn't disqualify a S-GLSD provider from proceeding the qualification assessment but should have a time extension to meet the required set of qualification criteria.

Finally, understanding that the local context of every administration is different, we encourage the Authority in any future decisions about dynamic spectrum access, to conform as much as possible to the standards and international guidelines, which will allow to benefit from economies of scale and expeditious implementations. We also encourage the Authority to take steps towards building a strong ecosystem for TVWS by allowing initial commercial deployments using the S-GLSD developed by CSIR, and, at the same time, by sharing all relevant documents and details ahead of the self-certification process so to encourage international S-GLSD providers to correctly evaluate and plan the provision of their services in the South African market.

The DSA is available to discuss these comments and any additional requirement the Authority might have.

Respectfully submitted,

Martha SUAREZ
President
Dynamic Spectrum Alliance