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DSA
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February 4th, 2016

Ms. Marlene Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re:

Use of Spectrum bands above 24 GHz for Mobile Radio Services, GN Docket No. 14-177;
Amendment of Part 15 of the Commission Rules to provide for the preservation of one vacant channel in the UHF TV Band for use by TVWS devices/wireless microphones, MB Docket No. 15-146;
Lifeline and Link Up Reform and Modernization, WC Docket Nos. 11-42, WP Docket No. 09-197,WP Docket No. 10-90**;**
Office of Engineering and Technology and Wireless Telecommunications Bureau Seek Information on Current Trends in LTE-U and LAA Technology, ET Docket No. 15-105.

Ex Parte Written Presentation

Dear Ms. Dortch:

On 4th February 2016, Prof H Sama Nwana, Executive Director of the Dynamic Spectrum Alliance[1] (DSA) - after having prior emailed a presentation containing the DSA policy positions on the above subjects (on at least one Commissioner request) – met successively with Commissioner Jessica Rosenworcel (and her Legal Advisor Joanna Thomas), Commissioner Mignon Clyburn (and her Senior Legal Advisor Louis Peraetz), Mr. Edward "Smitty" Smith (Legal Advisor for Commissioner Wheeler) and, lastly, with Chief and Deputy Chief Julius Knapp and Ira Keltz of the OET.

We discussed the DSA's positions on the above open proceedings.

On the '**Use of Spectrum bands above 24GHz for Mobile Radio Services'**, I communicated the DSA's strongly support for the Commission's proposals to designate 64-71 GHz for unlicensed operations wherein rules track those for 57-64 GHz (already in use for indoor/outdoor applications) creating a contiguous band between 57 to 71 GHz**.** I noted DSA support that in both sub-bands, the Commission should allow onboard airplane use and increase power emissions limits for lower power uses by 10 dB in order to increase indoor use cases. Furthermore, I also argued that the Commission should allow unlicensed use of 71-76 GHz and 81-86 GHz bands, so long as they do not interfere with lightly licensed operations.

On the '**Amendment of Part 15 of the Commission Rules to provide for the preservation of one vacant channel in the UHF TV Band for use by TVWS devices/wireless microphones'**, I communicated DSA's strong agreement with the Commission view that following the incentive auction and repacking of the TV

[1] www.dynamicspectrumalliance.org

bands, there should be at least one UHF band in all areas of the USA that is not assigned to a TV station in the repacking process. Therefore, the DSA strongly agrees to the preservation of a vacant channel in each area. The DSA also supports the Commission's view that the vacant channel will be in the UHF band in the range of Channel 21 and above. Indeed, I noted that the DSA argues for a minimum of 3 or more usable TVWS channels in every U. S. market. I also noted that the USA was the first (and biggest) market to date to enact TVWS regulations, and more usable channels in every U.S. market is critical to driving the TVWS-enabled ecosystem worldwide.

On the '**Lifeline and Link Up Reform and Modernization'**, I argued that the Commission should reform the Lifeline program to support wireless and wireless broadband service – as it benefits a range of beneficiary businesses, consumers and citizens including government programs such as mobile health**.** I noted that Lifeline support for broadband services would close the "homework gap", open online learning opportunities for *low-income* household students and empower *disabled* Lifeline recipients to be digitally included. Furthermore, I noted that unlicensed spectrum can be used to expand availability of affordable broadband service from just fixed and mobile cellular connections to a hybrid nomadic broadband approach using 2.4 GHz or 5 GHz (and 60 GHz) unlicensed spectrum for *capacity*. I noted this could potentially be complemented for *coverage* by additional frequencies such as licensed frequency bands below 2 GHz, the 600 MHz guard band using the unlicensed TVWS rules, and ditto for the remaining TV broadcast bands**.** I noted Wi-Fi (802.11af) and WRAN (802.22) using TVWS is now internationally proven worldwide for accessible and affordable broadband.

On the '**Office of Engineering and Technology and Wireless Telecommunications Bureau Seek Information on Current Trends in LTE-U and LAA Technology'**, I noted that the DSA agrees with the premise that rules in unlicensed spectrum bands should be technology neutral. Specifically, I argued that access to licensed spectrum should not be a de facto prerequisite for deploying unlicensed technologies. I noted that though protection within the unlicensed bands is not sensible by definition, co-existence studies should be encouraged between LTE-U/LAA proponents and the Wi-Fi alliance to ensure unlicensed bands remain open for further innovation.

Pursuant to Section 1.1206 of the Commission's Rules, this letter is being filed electronically via the Electronic Comment Filing System in the above captioned proceedings. I also attach a copy of the presentation used in these meetings.

Respectfully submitted,

Prof H Nwana

Executive Director
Dynamic Spectrum Alliance

Enclosure: Presentation slides titled *DSA_FCC_Feb_2016*