



VIA ELECTRONIC FILING

March 5, 2020

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

Re: Ex Parte Communication
GN Docket No. 17-183, *Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 24 GHz*
ET Docket No. 18-295, *Unlicensed Use of the 6 GHz Band*

Dear Ms. Dortch:

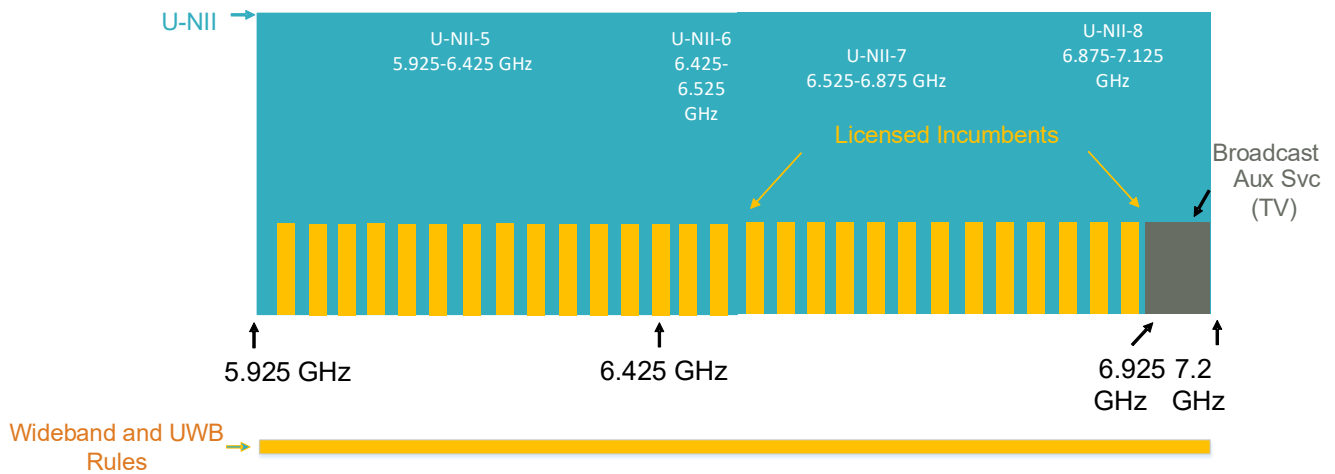
The Ultra Wide Band Alliance (“UWB Alliance”) is committed to promoting the most effective use of the spectrum around 6 GHz so as to provide the greatest public benefit in the long term. We enthusiastically support expanding unlicensed access in the band based on policy that is sustainable over the long term. To meet the goals of the Commission, we believe new rules need to promote innovation while protecting incumbent services.

The UWB Alliance has reviewed the filings of many respondents to these proceedings. One that holds significant sway with us is the recent comments of the National Association of Broadcasters (NAB)¹. We share their concerns with respect to operation of unlicensed devices at power levels so much higher than what is currently in use under Wideband and UWB rules. The current rules have proven successful in promoting innovation while protecting incumbents. UWB and Wideband (\$15.250) devices have been operating for years without causing harmful interference while providing unique capabilities and driving adoption of UWB technologies into a plethora of applications including high volume consumer markets (*e.g.*, iPhone 11). **We believe this successful experience forms a solid basis for confidence in how sharing the band between licensed incumbents and unlicensed operators can be achieved.**

The NPRM proposes to expand unlicensed operation across the 5.925 GHz to 7.125 GHz band where existing rules currently allow operation at very low power levels, *e.g.*, -41.3 dBm/MHz. As the NAB explains, the power levels as proposed in the NPRM will be disruptive to important and critical services. Figure 1 shows the new U-NII bands proposed in the NPRM overlaid on the bands of concern to the NAB.

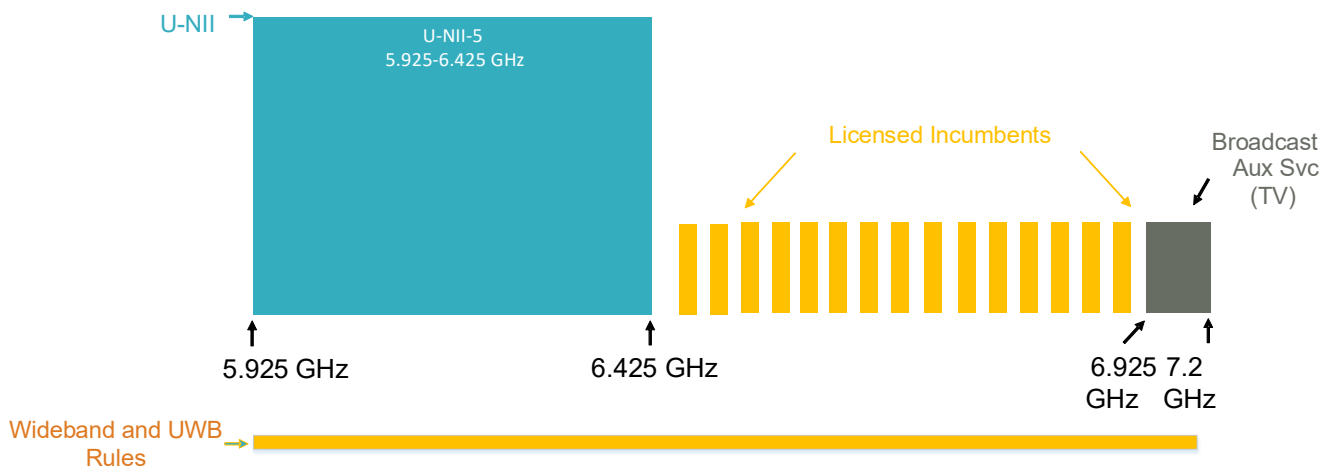
¹ Ex Parte Communication from National Association of Broadcasters to Marlene H. Dortch, Secretary, FCC, GN Docket No. 17-183, ET Docket No. 18-295 (Filed February 7, 2020).

Figure 1: Current NPRM



UWB devices operating under current FCC rules are below the thresholds for detectable interference to incumbent services. U-NII devices as proposed in the NPRM would be operating substantially above the thresholds identified by NAB as problematic. To address these concerns, the UWB Alliance proposes an incremental approach with an alternative band plan as shown in Figure 2, below. This proposal opens up 500 MHz for expanding unlicensed operation such as WLAN (Wi-Fi) as well as other uses (e.g., LTE-U and NR-U) which currently operate under U-NII rules in the 5.15 GHz to 5.85 GHz bands.

Figure 2: Proposed band plan



The proposal would retain the current power levels, but limit the higher powered unlicensed operations overlay to the U-NII-5 spectrum with automated frequency coordination as proposed in the NPRM. Operation of very low power unlicensed devices as defined above at levels proven to protect licensed services could continue above 6425 MHz, as shown in Figure 2.

In order to share the band with all other users, as well with themselves, the new entrants enabled by the new rules should hold to a tighter OOB than the currently proposed -27dBm/MHz. A value of -50 dBm/MHz is easily achieved with current technology and will greatly improve spectral efficiency.

We believe that Commission has an opportunity to open a substantial amount of spectrum for higher power unlicensed use, including providing eight wideband (160 MHz) Wi-Fi channels for AR and VR applications, while continuing to protect existing services. Making available a large amount of spectrum in the near-term would provide substantial relief to the purported shortage of Wi-Fi spectrum, while allowing time for thoughtful consideration of ways to address the most challenging interference problems, including UWB and mobile sharing.

We look forward to working with the Commission as it seeks to modify its initial proposal to create a 6 GHz spectrum policy and rules that allows all innovators to participate in the UWB ecosystem without harmful interference. Please feel free to contact me with any questions.

Respectfully Submitted,

Timothy Harrington
Executive Director
UWB Alliance