



Qualcomm Incorporated

1730 Pennsylvania Ave, NW ■ Suite 850 ■ Washington, DC 20006 ■ 202.263.0022 office ■ www.qualcomm.com

November 4, 2020

Ex Parte Notice

Marlene Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Use of the 5.850-5.925 GHz Band - ET Docket No. 19-138

Dear Secretary Dortch:

On November 2, 2020, Dean Brenner and the undersigned, representing Qualcomm, met via teleconference with Bill Davenport, Commissioner Starks' Chief of Staff and Senior Legal Advisor for Wireless and International, to discuss the Commission's draft ruling in the 5.9 GHz band proceeding.¹ Qualcomm voiced its appreciation of the aspect of the draft 5.9 GHz band ruling that reassigns the upper 30 MHz of the 5.9 GHz band to C-V2X. However, Qualcomm is concerned that the current draft does not immediately allow C-V2X operations in that portion of the band. Instead, the draft ruling merely proposes an indefinite, uncertain, and potentially lengthy transition period during which C-V2X is not permitted to use the spectrum.

Qualcomm explained that C-V2X is ready to be deployed across America today and therefore needs the spectrum now. Ford and other automakers want to sell cars equipped with highly advanced C-V2X technology, and state and local transportation agencies are ready to install C-V2X roadside units ("RSUs") in their jurisdictions. C-V2X needs to access the 5.9 GHz spectrum now so this life-saving technology can be deployed. Qualcomm also noted that the 5G Automotive Association ("5GAA") filed a waiver request two years ago to allow C-V2X deployments to use the upper 20 MHz for Basic C-V2X applications.

At a minimum, the Commission's 5.9 GHz ruling should grant the 5GAA waiver request now so C-V2X vehicles can be deployed and take immediate advantage of lifesaving V2V connectivity. As 5GAA requested in the waiver request, a condition of the waiver grant should be to require C-V2X operators to coordinate their RSU deployments with any DSRC RSU deployments that are actually operating in the upper 20 MHz of the 5.9 GHz band. In this regard, DSRC RSU licensees should be required to certify within a short limited date certain following adoption of the First Report and Order (*e.g.*, 30 days) whether and where they are actually operating in the upper 20 MHz, and to the extent any are, 5GAA would coordinate any C-V2X RSU deployments with those licensees.

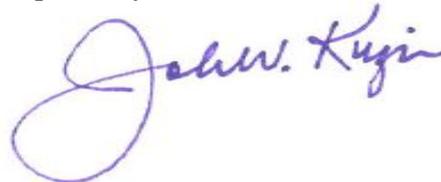
In addition, Qualcomm explained that the draft ruling would permit Out-of-Band Emissions ("OOBE") levels from new U-NII-4 indoor operations that are 30 to 40 dB higher than current

¹ See FCC Fact Sheet: Modernizing the 5.850-5.925 GHz Band, FCC-CIRC2011-01 (rel. Oct. 28, 2020) ("draft 5.9 GHz band ruling").

U-NII-3 devices are permitted to emit at the 5895 MHz edge and throughout the upper 30 MHz portion of the band being assigned to C-V2X. 5GAA proposed indoor U-NII-4 OOB limits higher than what current U-NII-3 equipment can emit at the 5895 MHz edge to allow for robust indoor unlicensed operations by taking advantage of building entry and exit losses (“BEL”). The draft ruling goes well beyond the 5GAA proposal, relying on 20 dB average BEL – even though not all buildings and operational scenarios provide this much signal loss; moreover, client devices located outdoors but connected to indoor APs provided by sidewalk cafes and restaurants will have no BEL at all.

The draft ruling goes still further, allowing U-NII-4 equipment OOB to be measured using RMS measurements that permit 10 to 20 dB higher emissions than the peak measurements that currently apply to U-NII-1, U-NII-2, and U-NII-3 OOB.² Notably, in its Comments proposing the OOB limits the draft ruling would adopt, the Wi-Fi Alliance did not also request that RMS measurements be used, but instead acknowledged that “current Commission measurement procedures for U-NII device compliance testing require application of peak, not average, unwanted emission levels.”³ Thus, Qualcomm encourages the FCC to modify the draft ruling to adopt OOB levels for indoor U-NII-4 operations that more closely align with the 5GAA proposal to provide sufficiently robust indoor unlicensed use of the new 160 MHz-wide Wi-Fi channel.

Respectfully submitted,



John W. Kuzin
Vice President and Regulatory Counsel

cc: William Davenport

² See draft 5.9 GHz band ruling at ¶¶ 82-83.

³ See Wi-Fi Alliance Comments at 7 (filed Mar. 9, 2020).