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August 21, 2020

Ex Parte

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

Re: Petition for Rulemaking to Permit MVDDS Use of the 12.2-12.7 GHz Band for Two-Way Mobile Broadband Service, RM-11768

Dear Ms. Dortch:

The Dynamic Spectrum Alliance ("DSA")¹ submits this *ex parte* letter to request that the Commission move forward and adopt a Notice of Proposed Rulemaking to modernize the service rules governing use of the highly valuable but grossly underutilized spectrum between 12.2 and 12.7 GHz (the "12 GHz band"). The 12 GHz band presents an opportunity to adopt a sharing framework that greatly expands the availability of a contiguous 500 megahertz of spectrum with favorable propagation characteristics for both fixed and mobile broadband deployments. More specifically, DSA supports consideration of the proposal made in the petition for rulemaking filed by the MVDDS Coalition.² DSA agrees with the diverse range of parties that have recently supported the adoption of an NPRM aimed at unlocking the 12 GHz band's enormous potential to fuel 5G fixed and mobile broadband services, while simultaneously protecting incumbent satellite services (including NGSO satellite broadband) from harmful interference.³

¹ The Dynamic Spectrum Alliance is a global, cross-industry alliance focused on increasing dynamic access to unused radio frequencies. The membership spans multinational companies, small- and medium-sized enterprises, academic, research, and other organizations from around the world, all working to create innovative solutions that will increase the utilization of available spectrum to the benefit of consumers and businesses alike. A full list of the DSA members is available on the DSA's website at www.dynamicspectrumalliance.org/members/.

² See MVDDS 5G Coalition Petition for Rulemaking to Permit MVDDS Use of the 12.2-12.7 GHz Band for Two-Way Mobile Broadband Service, RM-11768 (filed Apr. 26, 2016).

³ See Letter from Jennifer McCarthy, Federated Wireless Inc., to Marlene H. Dortch, Secretary, Federal Communications Commission, RM-11768, filed June 15, 2020 ("Federated Wireless Letter"); Letter from Alexi Maltas, Competitive Carriers Association to Marlene H. Dortch, Secretary, Federal Communications Commission,

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DSA strongly agrees with Federated Wireless that "an NPRM in this proceeding is timely at this juncture, and justified, as spectrum-sharing technologies have evolved dramatically since the 2016 Petition." The new Citizens Broadband Radio Service is already demonstrating it is now possible to enable intensive sharing among several disparate services in the same band while protecting incumbent services on an automated, very reliable and cost-effective basis. DSA further concurs with Federated Wireless that there are no technical obstacles to sharing the 12 GHz band between the Direct Broadcast Satellite Service ("DBS"), non-geostationary satellite orbit ("NGSO") fixed satellite services, and fixed and mobile 5G wireless broadband services.⁵

DSA views the 12 GHz band as a major opportunity for the Commission to leverage dynamic spectrum sharing techniques to greatly expand the flexible-use spectrum available for wide-area 5G deployments *and* to simultaneously enable higher-capacity and lower-cost deployments in rural areas by authorizing opportunistic access. DSA agrees with New America, Public Knowledge and other public interest organizations that in addition to considering two-way and more flexible use rights for MVDDS licensees, "the NPRM should request comment on the authorization of coordinated, shared use of the band for high-capacity fixed wireless services on an opportunistic unlicensed or licensed-by-rule basis." By authorizing coordinated access to vacant 12 GHz spectrum on a secondary basis, the Commission can promote far more intensive use of the band "to provide spectrum-as-infrastructure to fixed wireless ISPs and other broadband network providers in underserved rural, tribal and less densely populated communities."

A "use it or share it" approach that authorizes secondary and coordinated access for fixed point-to-point and point-to-multipoint broadband deployments can expand access to unused spectrum by smaller and non-traditional ISPs in rural and underserved areas, as well as for enterprise and institutional use. As DSA stated in our 2019 comments on partitioning,

RM-11768, filed May 26, 2020 ("MVDDS Group Letter"); Letter from Michael Calabrese, Open Technology Institute at New America, and Harold Feld, Public Knowledge, to Marlene H. Dortch, Secretary, Federal Communications Commission, RM-11768, filed July 9, 2020 ("Public Interest Groups Letter").

⁴ Federated Wireless Letter at 2.

⁵ *Id*. at 1.

⁶ Public Interest Letter at 3.

⁷ Ibid.

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disaggregation and leasing of spectrum: "Adoption of use-it-or-share-it rules would encourage licensees to put their spectrum to use more quickly, or absent that, make unused spectrum available for opportunistic uses or lessees on the secondary market." Secondary market rules have failed to put an adequate share of unused spectrum to work in rural and other underserved areas that are less profitable for the holders of most exclusive, large-area licenses. In contrast, an authorization of opportunistic, shared access to fallow spectrum "creates a general incentive for licensees to build out services more quickly, or to make greater efforts to partition or lease, since opportunistic use of the band will demonstrate that other (typically smaller) operators are finding value in the unused portions of their license area."

If the Commission modifies MVDDS licenses to allow for flexible use, it should condition those more valuable rights with an obligation to accommodate opportunistic use. Until the spectrum is actually put into service in a local area it should be available for non-interfering use by networks and devices that are multi-band and required to regularly renew permission to transmit by checking a geolocation database. Primary licensees lose no rights whatsoever and bear a *de minimus* burden to simply inform the certified database coordinator prior to commencing service in a particular local area, so that any opportunistic users will be immediately denied permission to operate on that frequency band.¹¹

There is now solid precedent for a use-it-or-share-it approach to encouraging more efficient and intensive use of occupied but underutilized bands. Opportunistic access to locally-vacant spectrum in the 12 GHz band could be managed in much the same way that the CBRS rules authorize General Authorized Access to unused PAL spectrum. In its Order on Reconsideration, the Commission stated: "We believe that the 'use it or share it' approach of our rules for this unique band also thus more reasonably accommodates the goals of Section 309(j) of the Act, including 'to prevent stockpiling or warehousing of spectrum." As even some

⁸ Comments of Dynamic Spectrum Alliance, *In the Matter of Partitioning, Disaggregation, and Leasing of Spectrum*, GN Docket No. 19-38, at 4 (filed June 3, 2019).

⁹ See Id. at 5-7.

¹⁰ Public Interest Letter at 5.

¹¹ See Id. at 7.

¹² Order on Reconsideration and Second Report and Order, *Amendment of the Commission's Rules with Regard to Commercial Operations in the 3550-3650 MHz Band*, GN Docket No. 12-354, at ¶ 177 (April 28, 2016).

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mobile carriers acknowledged in that proceeding,¹³ there is no risk of harmful interference or loss of usage rights to the licensees provided that permission for opportunistic GAA use is valid only until one of the SAS operators receives a notification that the licensee is ready to commence service in that local area.

Similarly, in 2014, the Commission's Incentive Auction Report & Order authorized TV White Space devices ("WSDs") to continue operating in the 600 MHz band post-auction until such time as the licensee gives notice that it will "commence operations" in that local area. ¹⁴ The Commission expressed its confidence in the ability of an automated database to protect licensees: "Since TVWS devices can operate only on channels identified in the TV bands databases, these databases can serve to ensure that unlicensed operations will no longer occur on a channel on which a licensee has commenced service." ¹⁵

This use-it-or-share-it approach is also consistent with the Commission's very recent and successful authorization of coordinated access wireless internet service providers ("WISPs") to unused spectrum in the lower 45 megahertz of the 5.9 GHz band. ¹⁶ In response to the pandemic, the Commission authorized at least 100 WISPs to make coordinated, secondary use of the spectrum to boost the capacity of their fixed wireless deployments in mostly rural, small town and historically underserved areas. ¹⁷ As Chairman Ajit Pai explained in recent Senate testimony, the Commission "granted authority to more than 100 such providers, and we have heard that the

¹³ For example, T-Mobile reaffirmed that the company "supports allowing GAA users to access PA spectrum when it is unassigned or affirmatively unused." T-Mobile Comments, *Amendment of the Commission's Rules with Regard to Commercial Operations in the 3550-3650 MHz Band*, Further Notice of Proposed Rulemaking, GN Docket No. 12-354, at 5 (rel. Apr. 23, 2014) ("FNPRM"). Verizon stated that it "does not oppose GAA use of . . . PAL channels that the licensee is not using." Verizon Comments, FNPRM, GN Docket No. 12-354, at 10.

¹⁴ Report and Order, Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions, GN Docket No. 12-268 (2014), at 680 ("Incentive Auction Report & Order"); Notice of Proposed Rulemaking, Amendment of Part 15 of the Commission's Rules For Unlicensed Operations in the Television Bands, Repurposed 600 MHz Band, 600 MHz Guard Bands and Duplex Gaps, and Channel 37, ET Docket No. 14-165, 29 FCC Rcd 12248 (2014), at 131-144 ("Part 15 NPRM").

¹⁵ Report and Order, GN Docket No. 12-268, 680 (May 15, 2014).

¹⁶ See FCC Press Release, "5.9 GHz Band Boosts Consumer Internet Access During Covid-19 Pandemic," May 4, 2020. Available at: https://docs.fcc.gov/public/attachments/DOC-364138A1.pdf.

¹⁷ Claude Aiken, "FCC 5.9 GHz STA Helps WISPs Serve Through COVID-19 Pandemic," Claude's Blog, Wireless Internet Service Providers Association (WISPA), available at http://wispa.org/news_manager.php?page=21979.

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spectrum is helping address the increased demand for broadband associated with the pandemic." ¹⁸

Opening a rulemaking process will allow the Commission to develop a record and ultimately decide how the rules for sharing the 12 GHz band can advance more widespread deployment of 5G services, promote competition, spur innovation and help to address the digital divide in underserved communities. We therefore respectfully request that the Commission adopt a notice of proposed rulemaking with the tentative conclusion that the 12.2 – 12.7 GHz band can be made available for two-way fixed and mobile 5G wireless broadband services by primary terrestrial licensees, as well as on a coordinated and secondary unlicensed or licensed-by-rule basis.

Sincerely,

Martha SUAREZ

Presidente

Dynamic Spectrum Alliance

¹⁸ "Statement of Chairman Ajit Pai, Federal Communications Commission, Before the Subcommittee on Financial Services and General Government, U.S. Senate Committee on Appropriations," Hearing on the Oversight of the Federal Communications Commission Spectrum Auctions Program, Fiscal Year 2021, at 3 (June 16, 2021).