

August 29, 2018

EX PARTE PRESENTATION

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

Re: *Ex Parte* Presentation in GN Docket No. 17-183, *Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 24 GHz*; RM-11768, *MVDDS 5G Coalition Petition for Rulemaking to Permit MVDDS Use of the 12.2-12.7 GHz Band for Two-Way Mobile Broadband Service*

Dear Ms. Dortch:

For more than two years, the MVDDS 5G Coalition (the “Coalition”)¹ has urged the Commission to issue a Notice of Proposed Rulemaking to release an additional 500 megahertz of spectrum in the 12.2-12.7 GHz band (“12 GHz band”) for fifth-generation mobile broadband (“5G”) use. The Coalition renews that request, and it encourages the Commission to disregard numerous misstatements in a recent *ex parte* letter from AT&T.² Even if AT&T’s arguments had some merit (and they do not), AT&T’s arguments hardly imply that the Commission should not *explore* the issue of repurposing the 12 GHz band for 5G use, especially when the Commission has done so in numerous other bands³ and spectrum-sharing technologies have significantly advanced since the Commission adopted the MVDDS service rules in 2002. By initiating a rulemaking, the Commission will enable parties to comment on the use of the 12 GHz band, creating a record upon which to evaluate the issues should the Commission ultimately decide to make changes to the service rules for the band. Doing so will help fulfill the

¹ The Coalition includes a cross-section of multichannel video distribution and data service (“MVDDS”) and direct broadcast satellite (“DBS”) licensees holding authorizations in the 12.2- 12.7 GHz band, including: Braunston Spectrum LLC, Cass Cable TV, Inc., DISH Network L.L.C., GO LONG WIRELESS, LTD., MDS Operations, Inc., MVD Number 53 Partners, Satellite Receivers, Ltd., SOUTH.COM LLC, Story Communications, LLC, Vision Broadband, LLC, and WCS Communications, Inc. Members of the Coalition hold 212 of the 213 MVDDS licenses.

² See *Ex Parte* Letter from Michael P. Goggin, Assistant Vice President-Senior Legal Counsel, AT&T to Marlene H. Dortch, Secretary, FCC, GN Docket No. 17-183, *et al.* (June 14, 2018) (“AT&T *Ex Parte*”).

³ For example, the Commission recently opened a rulemaking proceeding to identify potential opportunities for additional terrestrial use of 500 megahertz of mid-band spectrum between 3.7-4.2 GHz. See *Expanding Flexible Use of the 3.7 to 4.2 GHz Band*, GN Docket No. 18-222; *Petition for Rulemaking to Amend and Modernize Parts 25 and 101*, RM-11791; *Fixed Wireless Communications Coalition, Request for Modified Coordination Procedures*, Order and Notice of Proposed Rulemaking, GN Docket Nos. 18-122, 17-183, RM-11791, RM-11778 (rel. July 13, 2018). Notably, the 3.7-4.2 GHz band involves numerous incumbents and matters far more complex than the issues at stake here.

Commission's statutory obligation to encourage the provision of new technologies and services to the public.⁴ There is thus no harm in granting the Coalition's request to initiate a rulemaking proceeding to study new rules for the 12 GHz band.

Compared to other bands, the 12 GHz band is one of the rare candidate bands that meet the Commission's criteria for 5G. The band consists of 500 megahertz of contiguous spectrum that the Commission can readily repurpose without causing disruption to DBS or other geostationary satellite operations. And the propagation advantages of the 12 GHz band make it ideal for global harmonization by equipment manufacturers and international regulators.⁵ For these reasons, the Coalition's 2016 proposal to enable two-way mobile 5G services in the 12 GHz band has drawn widespread support in the record.⁶ At a minimum, the record demonstrates that the Commission can promote a more flexible and intensive use of the band by authorizing fixed-wireless services for backhaul and other use cases.

Nevertheless, AT&T has filed an *ex parte* submission—years after the pleading cycle on the Coalition's petition closed—that resists any effort to consider reform of the 12 GHz band. AT&T's latest filing asserts that 5G terrestrial mobile services would threaten the continued viability of DBS in that band.⁷ This is not accurate. Tom Peters, the former Chief Engineer of the Wireless Telecommunications Bureau, has demonstrated in a series of exhaustive technical studies filed in the record that DBS can coexist with terrestrial 5G use.⁸

⁴ See 47 U.S.C. § 157(a)-(b).

⁵ See Comments of MVDDS 5G Coalition, GN Docket No. 14-177, *et al.*, at 19-22 (Sept. 30, 2016).

⁶ See, e.g., Petition of MVDDS 5G Coalition for Rulemaking, RM-11768 (Apr. 26, 2016) ("MVDDS Petition"); see also Public Notice, *Petition for Rulemakings Filed*, Report No. 3042 (May 9, 2016); Reply Comments of the Computer & Communications Industry Association, GN Docket No. 17-183, at 4-5 (Nov. 15, 2017) (noting that the "[12 GHz] band has many characteristics that would make it suitable for two-way mobile communications and help carriers meet ever increasing demands for broadband traffic" and urging the Commission to "include the 12.2-12.7 GHz band in an NPRM based on comments from this NOI."); Reply Comments of T-Mobile USA, Inc., GN Docket No. 17-183, at 22 (Nov. 15, 2017) (asking the Commission to examine the 12 GHz band, among others, for "potential wireless mobile broadband use" and encouraging the Commission to "use this proceeding to further develop the record regarding the potential use of those bands for wireless mobile operations."); Comments of Competitive Carriers Association, RM-11768, at 9 (June 8, 2016) (noting that the 12 GHz band "presents an excellent opportunity to make spectrum available to support 5G mobile broadband technologies."); Letter from Senators Cory Gardner and Michael Bennet to Chairman Ajit Pai (Dec. 7, 2017) (highlighting the importance of deploying 5G service and explaining that "the Commission has an opportunity to build on their 5G efforts by considering the benefits of 5G mobile broadband use in the spectrum between 12.2-12.7 GHz.").

⁷ AT&T *Ex Parte* at 3.

⁸ See Tom Peters, *MVDDS 12.2-12.7 GHz Co-Primary Service Coexistence*, at 35 (June 8, 2016), available at Attachment I to Comments of MVDDS 5G Coalition, RM-11768 (June 8, 2016) (finding that "coexistence between MVDDS 5G operations and DBS receivers is possible with modest adjustments to MVDDS site locations and radiofrequency design parameters."); Tom Peters, *MVDDS 12.2-12.7 GHz Co-Primary Service Coexistence II* (June 23, 2016), available at Attachment I to Reply Comments of MVDDS 5G Coalition, RM-11768 (June 23, 2016) (revalidating the original coexistence study in different topological use-cases); Tom Peters, *MVDDS 12.2-12.7 GHz NGSO Coexistence Study* (Aug. 15,

AT&T makes no systematic effort to refute the Peters studies. Rather, in its cursory discussion of Peters’s extensive engineering modeling, AT&T claims that the studies use “cherry-picked” assumptions regarding the location of DBS antennas and 5G deployments. AT&T, for example, criticizes the studies for considering “one deployment scenario involved a section of downtown Washington, D.C. near Capital One Arena” which has “not be[en] considered heavily residential compared to other areas of the city where there are likely many more DBS receivers and, therefore, much more challenging conditions.”⁹

Far from debunking the Peters studies, AT&T’s supposed criticism validates them. The locations chosen by the Peters studies are the ideal areas to deploy the 12 GHz band spectrum to provide 5G mobile broadband services *precisely because* those locations pose so little risk of interference with DBS. The Peters studies never claim that terrestrial mobile 5G can be deployed in all locations, and in fact they emphasize several times that careful radio-frequency engineering will be required to avoid interference to DBS. Sharing through careful site selection is, in other words, one of the foundations of the Coalition’s proposal to use the 12 GHz band more intensively for next-generation two-way operations.

Next, AT&T claims that the Peters studies do not consider a scenario in which a DBS customer receives interference.¹⁰ Here again, that criticism misses the mark—the Peters studies adopt conservative network design assumptions to ensure that interference to DBS users would rarely, if ever, occur. Having eliminated the possibility of interference through geographic separation, absorption in the clutter, transmitter power constraints on MVDDS operations, and other mechanisms, it would be unnecessary for the Peters studies to invent an interference scenario that the Coalition’s proposed network design and operating constraints would prevent from occurring.

AT&T’s attacks on the Peters studies ignore the broader point: coexistence between terrestrial mobile 5G services and DBS is possible by carefully designing a network that meets the current EPFD limits from both base stations and mobile devices. Moreover, the Coalition has urged DBS to remain co-primary in the band, with 5G operators bearing the responsibility to ensure that the conservative EPFD levels are met and that interference to DBS does not occur. And notwithstanding AT&T’s suggestions to the contrary, the Coalition does not propose to eliminate the interference protection criteria for DBS operations.¹¹

Indeed, one of the members of the MVDDS 5G Coalition is DISH Network, which is a DBS provider operating in the 12 GHz band. DISH would have never been a member of the

2016), *available at* Attachment I of Petition to Deny of MVDDS 5G Coalition, RM-11768, *et al.* (Aug. 15, 2016).

⁹ AT&T *Ex Parte*, App’x A at 1-2.

¹⁰ *Id.* at 3.

¹¹ *Compare, e.g.,* AT&T *Ex Parte* at 3 (“the Coalition proposes to enable mobile MVDDS 5G services while eviscerating the existing [DBS] interference protection rules in a single stroke”), *with* MVDDS Petition at 16 (“[The Commission] should ensure that it guards against harmful interference to incumbent DBS services and mitigates interference among MVDDS operators.”).

Coalition if 5G terrestrial mobile services posed a meaningful risk of harmful interference to its DBS operations.

More than two years have passed since the Coalition filed its Petition for Rulemaking, and the Commission has not opened a rulemaking proceeding to evaluate the costs and benefits of using the 12 GHz band for terrestrial, two-way 5G, whether mobile or fixed-wireless services. The Coalition has presented more than enough information to justify a timely rulemaking. It submitted several coexistence studies demonstrating the feasibility of terrestrial mobile 5G services in the 12 GHz band in rural areas, urban canyons, and other unique geographic conditions. And no party—not even AT&T—has put forth any meaningful technical data challenging the extensive engineering analysis that the Coalition presented.

The MVDDS 5G Coalition therefore urges the Commission to modernize the 12 GHz band rules by issuing a Notice of Proposed Rulemaking in response to the MVDDS 5G Coalition’s longstanding proposal for expanded and flexible use of the 12 GHz band.

Respectfully submitted,

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