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March 27, 2018

**Ex Parte**

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

**Re: Use of Spectrum Bands Above 24 GHz for Mobile Radio Services,**  
**GN Docket No. 14-177**

Dear Ms. Dortch:

On March 23, 2018, Bill Stone, Gregory Dial, Philip Junker, and Gregory Romano (by phone) and Catherine Hilke and I (in person) met with the attendees of the Commission listed in the Appendix to this letter. We discussed the A2, A3, and B portions of the LMDS band and the need for the Commission to explore rules to enhance efficient and effective use of this spectrum.

Verizon reiterated that the Commission should apply the same flexible-use rules it has applied to the A1 portion of the LMDS band to the A2, A3, and B blocks of the LMDS band.<sup>1</sup> While we recognized the importance of the service that Iridium offers in the A2 block and of the passive uses of the band immediately adjacent to the A3 and B blocks, we also noted that the current, highly restrictive rules in these blocks give terrestrial licensees limited ability to respond to market demand. Allowing flexible use in the rest of the LMDS band would promote investment and innovation in 5G technologies. Verizon urged the Commission to explore rules that would protect incumbents but also lead to a more efficient and effective use of these blocks.

As a global leader in the deployment of 5G technology, Verizon assured the Commission that even when sharing with other services, we would be able to make use of the 150 MHz of spectrum in this block to provide high speed broadband service to American consumers, despite Iridium's recent claims that A2 (29.1-29.25 GHz) is "too narrow, irregular, and isolated to be of use to 5G systems."<sup>2</sup> We noted that, given Iridium's co-primary status in

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<sup>1</sup> See Letter from Gregory Romano, Verizon, to Marlene H. Dortch, FCC, GN Docket No. 14-177, *et al.*, at 1 (Oct. 20, 2017); Letter from Charla Rath, Verizon, to Marlene H. Dortch, FCC, GN Docket No. 14-177, *et al.*, at 3 (Nov. 3, 2017); Letter from Charla Rath, Verizon, to Marlene H. Dortch, FCC, GN Docket No. 14-177, *et al.*, at 3 (Nov. 6, 2017).

<sup>2</sup> Iridium Reply Comments, GN Docket No. 14-177, *et al.*, at 4-5 (Feb. 22, 2018).

A2, sharing with its low earth orbit non-geostationary satellites would provide different challenges than sharing with geostationary satellites. But these challenges potentially could be solved through ongoing coordination between the two co-primary services. Given that there is very little technical information in the record that would allow Verizon and others to evaluate and thus offer a roadmap to sharing in A2,<sup>3</sup> we encouraged the Commission to request this information.

Flexible use of A3 and B (31-31.3 GHz) raises different issues. Verizon noted that there is some detail on the record on techniques to mitigate interference from flexible use licensees into the adjacent passive band. CORF, the National Academy of Science's Committee on Radio Frequency, which represents the interests of these passive users, has suggested properly scaled guard bands as a means of protecting these uses until the time that new satellites are launched with the filtering technology suited to the new environment.<sup>4</sup> Other parties suggest that there are other ways to protect passive use of the adjacent band.<sup>5</sup> Verizon urged the Commission to explore these technical solutions in more detail.

Verizon urges the Commission to explore rules that would protect incumbents but also lead to a more efficient use of the remaining LMDS blocks.

Sincerely,

A handwritten signature in blue ink, appearing to read "Charles R. Smith". The signature is fluid and cursive, with the first name "Charles" being the most prominent part.

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<sup>3</sup> See *id.* at 3-4.

<sup>4</sup> See CORF - NAS Committee on Radio Frequencies Comments, GN Docket No. 14-177, *et al.*, at 5-6 (Jan. 27, 2016).

<sup>5</sup> See, e.g., "Coexistence of Mobile Broadband Operations," at 24-28, *attached to* Letter from T. Mobile to FCC, GN Docket No. 14-177, *et al.* (Oct. 2, 2017); Reed Engineering, "Co-existence of 5G Mobile Service and RAS, EESS, and SRS at 31 GHz1," at 1, *attached to* Letter from Nextlink Wireless to FCC, GN Docket No. 14-177, *et al.* (Oct. 17, 2017).

## **Appendix**

### Wireless Telecommunications Bureau

Simon Banyai  
Matthew Pearl  
John Schauble  
Blaise Scinto  
Joel Taubenblatt