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November 15, 2017

## EX PARTE PRESENTATION

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> 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*; DBSD Corporation, AWS-4, Lead Call Sign T070272001; Gamma Acquisition L.L.C., AWS-4, Lead Call Sign T060430001; Manifest Wireless L.L.C., Lower 700 MHz E Block, Lead Call Sign WQJY944

Dear Ms. Dortch:

Pursuant to Section 1.1206 of the Commission's rules, 47 C.F.R. § 1.1206, DISH Network Corporation ("DISH") submits this letter summarizing the following meetings on November 13, 2017:

- A meeting with Chairman Ajit Pai and Rachael Bender, Wireless and International Advisor for Chairman Pai. Present on behalf of DISH were Charlie Ergen, Chairman & CEO; Thomas Cullen, Executive Vice President, Corporate Development; Vivek Khemka, Executive Vice President and Chief Technology Officer; Jeffrey Blum, Senior Vice President and Deputy General Counsel; and Alison Minea, Director and Senior Counsel.
- A meeting with Commissioner Mignon Clyburn; David Grossman, Chief of Staff and Media Policy Advisor for Commissioner Clyburn; and Louis Peraertz; Senior Legal Advisor, Wireless, International, and Public Safety for Commissioner Clyburn. Present on behalf of DISH were Charlie Ergen, Chairman & CEO; Thomas Cullen, Executive Vice President, Corporate Development; Vivek Khemka, Executive Vice President and Chief Technology Officer; Jeffrey Blum, Senior Vice President and Deputy General Counsel; and Alison Minea, Director and Senior Counsel.
- A meeting with Commissioner Michael O'Rielly; Brooke Ericson, Chief of Staff for Commissioner O'Rielly; and Erin McGrath, Legal Advisor, Wireless, Public Safety and International for Commissioner O'Rielly. Present on behalf of DISH were Charlie Ergen, Chairman & CEO; Thomas Cullen, Executive Vice President, Corporate Development; Vivek Khemka, Executive Vice President and Chief Technology Officer; Jeffrey Blum,

Senior Vice President and Deputy General Counsel; and Alison Minea, Director and Senior Counsel.

- A meeting with Commissioner Brendan Carr and Kevin Holmes, Acting Legal Advisor for Wireless and Public Safety for Commissioner Carr. Present on behalf of DISH were Charlie Ergen, Chairman & CEO; Thomas Cullen, Executive Vice President, Corporate Development; Jeffrey Blum, Senior Vice President and Deputy General Counsel; and Alison Minea, Director and Senior Counsel.
- A meeting with Commissioner Jessica Rosenworcel and Umair Javed, Legal Advisor, Wireless and International, for Commissioner Rosenworcel. Present on behalf of DISH were Charlie Ergen, Chairman & CEO; Thomas Cullen, Executive Vice President, Corporate Development; Jeffrey Blum, Senior Vice President and Deputy General Counsel; and Alison Minea, Director and Senior Counsel.

During the meetings, DISH provided an update on its wireless plans, consistent with the Consolidated Interim Construction Notification filed by DBSD Services Limited, Gamma Acquisition L.L.C., and Manifest Wireless L.L.C. in March 2017.<sup>1</sup> The first phase of DISH's buildout, keyed to the March 2020 deadline for its AWS-4 and Lower 700 MHz E Block licenses, will focus on narrowband Internet of Things ("NB-IoT"). DISH noted that other carriers are deploying NB-IoT as well, including T-Mobile in the United States, and Vodafone in Europe. NB-IoT is a bridge to full 5G technology, which is expected to be finalized by the Third Generation Partnership Project (3GPP) by December 2019. Ultimately, DISH expects that all of its terrestrial spectrum, including its 600 MHz licenses, will be part of a 5G network. The 600 MHz licenses are especially suited to massive IoT connectivity, which will be part of the 5G standards.

Since the March 2017 report, DISH has finalized development contracts with major vendors for radio access equipment and other associated equipment, and expects to sign a chipset vendor in the next few weeks. DISH is also negotiating with multiple vendors to provide the core for DISH's NB-IoT network. In October 2017, DISH sent out a Request for Proposal to a wide range of tower companies to start negotiating lease agreements for towers that will be used in DISH's network. DISH expects to begin deployment later in 2018.

DISH also expressed its support for making additional mid-band spectrum available for the delivery of next-generation wireless broadband services, consistent with the comments submitted by the MVDDS 5G Coalition in the above-captioned proceeding.<sup>2</sup> In particular, DISH urged the Commission to act on the petition filed by the MVDDS 5G Coalition to initiate a rulemaking proceeding designed to permit MVDDS licensees to use their 12.2-12.7 GHz

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<sup>1</sup> See DBSD Services Limited, Gamma Acquisition L.L.C., and Manifest Wireless L.L.C.'s Consolidated Interim Construction Notification for AWS-4 and Lower 700 MHz E Block Licenses (filed Mar. 7, 2017).

<sup>2</sup> See Comments of MVDDS 5G Coalition, GN Docket No. 17-183 (Oct. 2, 2017).

spectrum to provide a two-way 5G mobile broadband service.<sup>3</sup> The 12 GHz Band possesses favorable technical and other characteristics that make it ideally suited for the rapid deployment of 5G services. Acting on the Coalition's request will help unleash an additional 500 MHz of contiguous spectrum for 5G.

Respectfully submitted,

/s/ Jeffrey H. Blum

Jeffrey H. Blum

cc: Rachael Bender  
David Grossman  
Louis Peraertz  
Brooke Ericson  
Erin McGrath  
Kevin Holmes  
Umair Javed

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<sup>3</sup> 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).