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June 7, 2018

## 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; American H Block Wireless L.L.C., H Block, Lead Call Sign WQTX200

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:

- A meeting on June 5, 2018 with Chairman Ajit Pai and Rachael Bender, Legal Advisor, Wireless and International, for Chairman Pai. Present on behalf of DISH were Charlie Ergen, Chairman; Tom Cullen, Executive Vice President, Corporate Development; Jeffrey Blum, Senior Vice President and Deputy General Counsel; and Alison Minea, Director and Senior Counsel.
- A meeting on June 6, 2018 with Commissioner Michael 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; Tom 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 and the Interim Construction Notification filed by American H Block Wireless L.L.C. in May 2018.<sup>1</sup> As reported, DISH plans

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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); American H Block Wireless L.L.C. Interim Construction Notification for H Block Licenses (filed May 14, 2018).

to deploy its next-generation network in two phases. In Phase 1, DISH will deploy a narrowband IoT (“NB-IoT”) network using its AWS-4, 700 MHz E Block, and H Block licenses. In Phase 2, which we expect will follow as standalone 5G is standardized and as DISH’s plans for its other spectrum holdings develop (including the clearing of the 600 MHz licenses), we plan to upgrade and expand our network to full 5G to support new use cases in addition to mobile broadband services.

We expect that our 600 MHz spectrum assets will play an important role in our 5G future. But, among other frequency coordination issues, those licenses will not be fully cleared of TV broadcasters until at least July 2020, which is after the AWS-4 and 700 MHz E Block buildout deadline of March 2020. We want to deploy our 5G network with the spectrum best suited to 5G’s capabilities, including our 600 MHz licenses. In light of the March 2020 deadline, balanced against the timeline for relevant standard-setting and the clearing of 600 MHz, DISH believes its plan to roll out its network with current NB-IoT technology, with future upgrades to 5G, is the most logical and prudent path.

DISH is joining with the broader wireless industry in investing in new IoT products and services. Like DISH, incumbent carriers are increasingly expanding their vision for the future of networks that will power billions of different products across all industries. IoT offers a broad opportunity for wireless industry growth, and the characteristics of NB-IoT technology in particular will offer distinct advantages in, among other things, lower power consumption of user devices and the ability to support many more devices per individual tower compared to 4G/LTE broadband.

DISH noted that it has entered into a variety of contracts to realize its near term and long term network buildout objectives, and has many other contracts in negotiation. In the last year, DISH has completed the following:

- DISH entered into radio development deals with several technology vendors for equipment to be deployed in DISH’s NB-IoT network.
- DISH entered into a contract under which a vendor will provide DISH with the core network for our NB-IoT deployment.
- DISH entered into a development agreement with a company specializing in IoT technologies. Under this agreement, the vendor will develop and supply chipsets and modules for DISH’s network.
- DISH hired an RF planning and design firm to ensure coverage in each license area.
- In 1Q 2018, DISH entered into Master Lease Agreements (“MLAs”) with more than a dozen tower companies, both national and regional.

- Currently, as a follow-on to the above-described development agreements, DISH has been negotiating definitive master supply agreements for, among other things, radios and chipsets, which will cover equipment purchasing, installation and deployment support, and ongoing customer care.
- Throughout 2018, DISH has also been in the process of signing agreements with regional and nationwide vendors to perform site acquisition, installation, and other construction services.

DISH explained that deployment of Phase 1 of the network is expected to be conducted in stages, with the first deployments starting by the end of this year. Among other things, the core network has already been commissioned and installed. Based on what our vendors have indicated, we expect to take delivery of radios for the network in the fall of this year, and we are in the process of identifying and acquiring tower sites. We plan to install radios on towers in an initial wave of markets by the end of this year. Deployment will continue throughout 2019. Standalone 5G standardization work will continue in parallel and, as a result, following the completion of Phase 1, we plan to upgrade and expand the network to full 5G.

During the meetings, 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 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.

/s/ Jeffrey H. Blum

Jeffrey H. Blum

cc: Rachael Bender  
Erin McGrath

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

<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).