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November 8, 2012

EX PARTE PRESENTATION

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

Re: Ex Parte Presentation in WT Docket No. 12-70, *Service Rules for Advanced Wireless Services in the 2000-2020 MHz and 2180-2200 MHz Bands*; ET Docket No. 10-142, *Fixed and Mobile Services in the Mobile Satellite Service Bands at 1525-1559 MHz and 1626.5-1660.5 MHz, 1610-1626.5 MHz and 2483.5-2500 MHz, and 2000-2020 MHz and 2180-2200 MHz*; and WT Docket No. 04-356, *Service Rules for Advanced Wireless Services in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz Bands*

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 a meeting on Tuesday, November 6, 2012 with Zachary Katz, Chief of Staff for Chairman Julius Genachowski and Ruth Milkman, Chief of the Wireless Telecommunications Bureau. Present on behalf of DISH were Stanton Dodge, Executive Vice President and General Counsel and Jeffrey Blum, Senior Vice President and Deputy General Counsel.

During the meeting, DISH urged the Commission to complete the above-referenced rulemaking, consistent with the out-of-band emissions ("OOBE") limit of 43+10log(P) dB at 2000 MHz that was proposed in the *AWS-4 NPRM*.[1] Codifying that power level as proposed in the *AWS-4 NPRM* will allow the Commission to unleash 40 MHz of spectrum for mobile broadband use, thereby enabling DISH's entry as a disruptive competitor in the wireless market. More than a year ago, DISH invested billions of dollars to acquire two bankrupt satellite companies, with the aim of transforming those assets into a next-generation mobile broadband service. Since that time, DISH has made a great deal of progress in the 3rd Generation

[1] Service Rules for Advanced Wireless Services in the 2000-2020 MHz and 2180-2200 MHz Bands, WT Docket No. 12-70, Fixed and Mobile Services in the Mobile Satellite Service Bands at 1525-1559 MHz and 1626.5-1660.5 MHz, 1610-1626.5 MHz and 2483.5-2500 MHz, and 2000-2020 MHz and 2180-2200 MHz, ET Docket No. 10-142, Service Rules for Advanced Wireless Services in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz Bands, WT Docket No. 04-356, *Notice of Proposed Rulemaking and Notice of Inquiry*, FCC 12-32 (rel. Mar. 21, 2012) ("*AWS-4 NPRM*").

Partnership Project ("3GPP") standard-setting process for the AWS-4 band so that it would be positioned to enter the wireless market expeditiously when the Commission adopts AWS-4 rules. In June 2011, 3GPP approved Band 23 (2000-2020 and 2180-2200 MHz). Band 23 is the critical foundation for DISH's wireless plans, and is in jeopardy if the Commission alters the existing OOBE limit of 43+10log(P) dB at 2000 MHz.

DISH's planned entry into the wireless business is now jeopardized because an incumbent competitor, Sprint, has recently attempted to severely constrict the performance of AWS-4 mobile devices. Specifically, Sprint, has asked the Commission to require DISH to reduce its OOBE to comply with a limitation of 70+10log(P) dB at 2000 MHz.[2] This OOBE limit is unnecessary and unprecedented, as DISH has explained in detail in previous submissions.[3] But more importantly, requiring DISH to meet this power level for its mobile devices **is ultimately unrelated to the question of what types of broadband services could be authorized in a future auction of the adjacent H Block (1995-2000 MHz; 1915-1920 MHz).**

DISH thus urges the Commission to adopt the proposed OOBE limit of 43+10log(P) dB at 2000 MHz,[4] because any other level is unnecessary and unprecedented. If the Commission auctions the H Block for commercial use, it can determine appropriate power levels for the H Block base stations at that future date, while preserving the commercial viability of AWS-4.

Critically, maintaining DISH's OOBE limits at the widely accepted value of 43+10log(P) dB at 2000 MHz will **not preclude** the Commission's ability to set service rules in a future H Block proceeding. And imposing the more stringent limit of 70+10log(P) dB is unnecessary given the possibility of private coordination and the many interference mitigation techniques available using LTE technology:

- First and foremost, requiring an OOBE limit of 70+10log(P) dB at 2000 MHz would endanger DISH's planned deployment by likely reopening the 3GPP Band 23 standard for the AWS-4 band, which assumed an OOBE limitation of 43+10log(P) dB at 2000 MHz. A change in authorized OOBE limits would likely require revisiting the settled requirements of Band 23, subjecting DISH to the

[2] *See* Letter from Lawrence Krevor and Rafi Martina, Sprint Nextel Corporation, to Marlene H. Dortch, Secretary, FCC, WT Dkt. Nos. 12-70, 04-356, ET Dkt. No. 10-142 (Oct. 10, 2012), *as clarified and revised by* Letter from Lawrence Krevor and Rafi Martina, Sprint Nextel Corporation, to Marlene H. Dortch, Secretary, FCC, WT Dkt. Nos. 12-70, 04-356, ET Dkt. No. 10-142 (Oct. 11, 2012) (together, the "Sprint OOBE Letter") (imposing a limit of 70+10log(P) at the 2000 MHz H Block band edge "should produce a broadband-viable H Block").

[3] *See* Letter from Jeffrey H. Blum, DISH Network Corporation, to Marlene H. Dortch, Secretary, Federal Communications Commission, WT Dkt. Nos. 12-70, 04-356, ET Dkt. No. 10-142, at 2-5 (Oct. 17, 2012); Letter from Jeffrey H. Blum, DISH Network Corporation, to Marlene H. Dortch, Secretary, Federal Communications Commission, WT Dkt. Nos. 12-70, 04-356, ET Dkt. No. 10-142, at 4-8 (Nov. 6, 2012) ("Nov. 6 DISH Ex Parte").

[4] *See AWS-4 NPRM* ¶ 39.

substantial delay and risk associated with reopening the Band 23 standardization process.

- Second, 70+10log(P) dB at 2000 MHz is an unprecedented and unnecessary level that radically departs from Commission precedent, because it grants a **500-fold increase** in protection to immediately adjacent band operations as compared to existing protection levels of operational broadband and cellular networks.[5] In the most recent broadband service rules orders for the 700 MHz spectrum, the Commission concluded that it did not need to impose guard bands and unnecessarily costly and burdensome technical rules for enabling adjacent band operations, and required a 43+10log(P) dB OOBE level at the licensed frequency edge.[6] Similarly, the BRS rules for enabling adjacent TDD and FDD operations (similar uplink next to downlink scenario as AWS-4 and H Block), limit the OOBE of mobiles to 43+10log(P) dB at the channel edge and then 55+10log(P) dB at 5.5 MHz away.[7] There is no reason for setting OOBE levels for AWS-4 beyond what the Commission has established in the past; it is unnecessary and places the entire burden on the AWS-4 licensee.

- Third, as DISH previously explained, interference to an H Block mobile device from an AWS-4 mobile device is a highly unlikely event that could be solved though private coordination agreements or public industry forums such as 3GPP **without** changing the existing AWS-4 proposed OOBE rules at 2000 MHz and below.[8] Even in the *AWS-4 NPRM*, the Commission noted that the proposed OOBE of 43+10log10(P) could be beneficial because "licensees above and below 2000 MHz would be placed on a more equal footing, and could determine among themselves if there is a need for any stricter limits."[9] DISH agrees.

- Fourth, regardless of the authorized power levels, the H Block likely will be used as a carrier aggregation LTE band to other spectrum. In this case, the effect of any low probability mobile to mobile interference from AWS-4 to H Block will be even more negligible. In the unlikely event that a full-power AWS-4 device is operating within a few meters of the H Block device, the H Block device will automatically default to an alternative downlink frequency.

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[5] *See* Nov. 6 DISH Ex Parte at 5-6.

[6] *See generally* Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, *Report and Order*, WT Docket No. 06-150, 22 FCC Rcd 9100 (2007).

[7] *See* 47 C.F.R. § 27.53(m)(4).

[8] *See* Nov. 6 DISH Ex Parte at 6.

[9] *See AWS-4 NPRM* ¶ 39.

DISH also explained that it is committed to working with the Commission to establish H Block service rules. DISH encouraged the Commission to investigate options that enable use of the full 10 MHz H Block, and not limit it to a downlink frequency use of 5 MHz, which is the only scenario where a full power LTE network is feasible without interfering with existing PCS operations, but with a penalty of reducing the AWS-4 uplink by at least 25%. In short, adopting Sprint's proposal and auctioning H Block for high-power would likely make them the only bidder for H Block and reduce proceeds to the U.S. Treasury.

Finally, DISH described the importance of flexible buildout milestones, noting that any buildout schedule must be commercially reasonable for a new entrant. Imposing a "death penalty" condition of automatic license termination for failure to meet a buildout deadline is a significantly harsher condition compared to previous Commission-imposed buildout milestones.[10]

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DISH stands ready to inject necessary investment and competition in the wireless economy and urges the Commission to reject proposals that would hobble or delay its entry. To facilitate the effective use of AWS-4 and the H Block, the Commission should adhere to the OOBE standard of 43+10log(P) dB at 2000 MHz for the AWS-4 band, as proposed in the *AWS-4 NPRM*. Adopting more stringent limits is unnecessary to protect the H Block, unprecedented when compared to other mobile broadband spectrum bands, would preclude more efficient, market-based solutions for resolving the possibility of mutual interference, and would introduce substantial delay and risk in the 3GPP standards setting process.

Respectfully submitted,

/s/ Jeffrey H Blum
Jeffrey H. Blum

cc: Zachary Katz
Ruth Milkman

[10] *See* Reply Comments of DISH Network Corporation, WT Docket No. 12-70, ET Docket No. 10-142, WT Docket No. 04-356 (June 1, 2012), at 15.