August 28, 2012

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

Re: **EX PARTE**
WT Docket Nos. 12-70 and 04-356; ET Docket No. 10-142

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 telephone meeting on August 24, 2012 between Zachary Katz, Chief of Staff for Chairman Genachowski, and Jeffrey Blum, Senior Vice President and Deputy General Counsel for DISH.

During the meeting, DISH urged expeditious adoption of final AWS-4 rules to provide the regulatory certainty necessary for DISH to proceed with its planned wireless investments. DISH invested billions of dollars last year to acquire the specific 40 MHz of spectrum known as the S-Band, in large part, based on significant investments already made to enable this spectrum's rapid deployment for mobile broadband use. Among other issues, any modification to the existing band plan, including a 5 MHz upward shift at 2000-2020 MHz, would needlessly inject serious regulatory and technical obstacles into DISH's planned deployment, significantly undermining the Commission's stated objective of rapid wireless broadband deployment in the band.

Specifically, as explained further below, a 5 MHz shift would disserve the public interest for at least the following reasons:

- It would introduce substantial delay and risk into the standard-setting process, which in turn would further delay – if not possibly scuttle – DISH's planned deployment.
- It would significantly undermine the usefulness of DISH's 2 GHz satellites by limiting the spectrum available for mobile satellite service ("MSS").
- It would reduce the internationally harmonized spectrum to only 5 MHz in the uplink band, limiting opportunities for global MSS roaming and global economies of scale.
- It would expose AWS-4 base stations to potential interference from federal and Broadcast Auxiliary Station ("BAS") operations above 2025 MHz.

- It could complicate NTIA's consideration of the 2025-2110 MHz band as a destination for various federal government operations relocated from the 1755-1850 MHz band.

- It is unnecessary to provide protection to PCS or G Block operations, and would not resolve challenges associated with the auctioning of the H Block, which are likely to be constrained by other factors.

The National Broadband Plan called for the Commission by 2011 "to accelerate terrestrial deployments in the MSS bands," including "provid[ing] the option of flexibility to licensees to provide stand-alone terrestrial services."[1] The Chairman has consistently championed the need "to free up spectrum for broadband,"[2] and has cited this rulemaking "to convert 40 megahertz of prime spectrum from satellite to terrestrial use" as an example of the Commission's efforts.[3] The Chairman has equally stressed the need for more robust wireless competition, noting "competition is fundamental to driving innovation and investment."[4] Delaying the development of the AWS-4 device ecosystem and the entry in the market of a well-financed player would undermine – not enhance – the Commission's objectives.

DISH explained how any deviation from the existing band plan would introduce substantial delay and risk into the 3rd Generation Partnership Project ("3GPP") standard-setting process for the AWS-4 band. The 3GPP process of standardizing Band 23 (*i.e.,* 2000-2020 MHz and 2180-2200 MHz) began in December 2009, and was approved in June 2011 after extensive efforts between 3GPP vendors and operators to reach an agreement for coexistence requirements between adjacent bands as currently configured. The 3GPP group is expected to complete LTE Advanced specifications for the band by December 2012.

If a 5 MHz shift is mandated, this lengthy 3GPP process would have to be repeated before DISH could start user equipment development. Restarting this process would also significantly delay the expected completion of LTE Advanced specifications for the band and severely jeopardize DISH's plans.[5] Moreover, it would undermine millions of dollars in investments that DISH, vendors, and others have made to develop chipsets, and other technology advancements based on the existing band plan.

DISH noted the ability to offer handsets that use both terrestrial and satellite networks could serve as an important differentiator for a new competitor, and highlighted its investment with Qualcomm to develop equipment capable of supporting terrestrial and satellite use. A change in the band plan could jeopardize that functionality and investment because a 5 MHz move would

---

[1] Connecting America: The National Broadband Plan at 87 (2010).

[2] Statement of Chairman Julius Genachowski, *Service Rules for Advanced Wireless Services in the 2000-2020 MHz and 2180-2200 MHz Bands,* Notice of Proposed Rulemaking and Notice of Inquiry, 27 FCC Rcd 3561 (2012) ("*AWS-4 NPRM*").

[3] Chairman Julius Genachowski, Prepared Remarks to International CTIA Wireless 2012 (May 8, 2012), http://www.fcc.gov/document/chairman-remarks-international-ctia-wireless-2012-new-orleans.

[4] *Id.*

[5] AT&T recently highlighted the key delays associated with the 3GPP process. *See* Letter from Joan Marsh, Vice President-Federal Regulatory, AT&T, to Marlene H. Dortch, Secretary, FCC, WT Dkt. No. 07-293, IB Dkt. No. 95-91 & GEN Dkt. No. 90-357, at 4-5 (June 15, 2012)(noting that equipment design cannot begin until at least one year after commencement of the 3GPP process).

significantly undermine the usefulness of DISH's 2 GHz satellites, thereby impacting the value and effectiveness of over a billion dollars worth of satellites and associated equipment. Additionally, DISH noted that modifying the band plan would reduce the harmonized spectrum available internationally to only 5 MHz in the uplink band.[6] This reduction in the available global MSS spectrum, in turn, would limit the availability of global MSS roaming and reduce the economies of scale for device components that could be used among different regions.

Significantly, a 5 MHz move would also place AWS-4 uplink operations immediately adjacent to high-power broadcast auxiliary services ("BAS") and federal government operations in the 2025-2110 MHz band.[7] This could cause receiver overload for AWS-4 base stations and risks rendering AWS-4 services unusable.[8] At a minimum, an upward shift could require lengthy coordination with adjacent-band operations,[9] and further complicate and delay DISH's ongoing coordination negotiations with NTIA.[10]

Reshuffling the band plan could also complicate NTIA's consideration of the 2025-2110 MHz band for possible relocation of federal government operations from the 1755-1850 MHz band.[11] Given the focus on clearing federal spectrum for commercial use, it would be unwise to complicate those efforts here and limit flexibility by shifting AWS-4 operations directly adjacent to federal spectrum potentially critical to those broader efforts.

Importantly, a 5 MHz move is also unnecessary to further protect existing PCS or G Block operations. DISH demonstrated that out-of-band emission limits are sufficient to protect those

---

[6] Because the European Union has authorized the use of the 1980-2010 MHz band for MSS uplinks, only the 2000-2010 MHz segment is currently available for MSS use in both the United States and Europe. *See* Decision No. 626/2008 of the European Parliament and of the Council of 30 June 2008 on the Selection and Authorisation of Systems Providing Mobile Satellite Services, 2008 O.J. (L 172) 15. If the Commission adopts a 5 MHz upward shift in the band plan, the spectrum available for MSS use in both the United States and Europe would be further limited to merely 5 MHz in the 2005-2010 MHz band.

[7] The 2025-2110 MHz band is allocated on a primary basis to fixed and mobile services, and is used for BAS operations. *See* 47 C.F.R. § 2.106. The band also is allocated on a primary basis to federal government space science operations, and is the primary command and control band for U.S. civil space programs. *See id.*; NTIA, *Federal Spectrum Use Summary*, at 37 (June 21, 2010), http://www.ntia.doc.gov/files/ntia/Spectrum_Use_Summary_Master-06212010.pdf. The National Aeronautics and Space Administration ("NASA") uses the band to provide primary telecommand communications for the control of its spacecraft, including the Tracking and Data Relay Satellite System, the Space Shuttle, the Hubble Space Telescope, and the International Space Station. *Id.*

[8] *See* DISH Reply Comments at 28.

[9] *See* Comments of Engineers for the Integrity of Broadcast Auxiliary Services Spectrum at 3 (noting challenges of coordinating AWS-4 operations in the 2020-2025 MHz band with BAS operations above 2025 MHz).

[10] DISH also provided an update on its negotiations with NTIA to reach a coordination agreement regarding certain government facilities operating in spectrum adjacent to the 2180-2200 MHz band, which are based on the existing band plan. NTIA previously found that space science operations in the 2025-2110 MHz band cannot share spectrum with high-density terrestrial services. NTIA, *Identification of Alternate Bands in Response to the Balanced Budget Act of 1997,* at 3 (November 1998), http://www.ntia.doc.gov/files/ntia/publications/2ghz_rpt.pdf.

[11] *See* U.S. Department of Commerce, An Assessment of the Viability of Accommodating Wireless Broadband in the 1755-1850 MHz Band (March 2012), http://www.ntia.doc.gov/files/ntia/publications/ntia_1755_1850_mhz_report_march2012.pdf.

operations,[12] and that advanced handset design can accommodate the necessary limits without significant impact on frequency usage or efficiency.[13] Further, there is no evidence that altering the AWS-4 band plan is necessary to permit the future auction of H Block, or that a shift in the band plan would even address the core interference challenges associated with H Block. Congress identified "harmful interference to commercial mobile service licensees in the [1930-1995 MHz band]" as the key impediment to H Block, not the AWS-4 band.[14] Moreover, there is no consensus on the H Block's usability: some propose maintaining it as a guard band,[15] while others support auctioning it for mobile broadband use.[16] Thus, given the lack of certainty over the future use of the H Block, a modification of the AWS-4 band would offer no assured benefits for the H Block.

Finally, the Commission recognized the need for speed when it launched this rulemaking,[17] and prompt Commission action is critical to allow DISH to launch commercial service and succeed as a new entrant in the wireless broadband market. DISH seeks to use new LTE Advanced technology and has a limited window to roll out this new technology to compete effectively with the entrenched incumbents. DISH urges the Commission to complete this rulemaking as expeditiously as possible, and maintain the existing band plan consistent with the *AWS-4 NPRM*.

Respectfully submitted,

/s/ Jeffrey H. Blum

cc: Zachary Katz

[12] *See* Reply Comments of DISH at 24-27.

[13] *See* Reply Comments of DISH at 24-27; Reply Comments of AT&T at 7-8.

[14] *See AWS-4 NPRM* ¶ 147.

[15] *See, e.g.*, Comments of AT&T at 6-9; Comments of TIA at 10-12.

[16] *See, e.g.*, Comments of Sprint at 2-4; Comments of U.S. Cellular at 6-7.

[17] *See AWS-4 NPRM* ¶ 12.