



June 1, 2018

By Electronic Filing

Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

Re: *Ex Parte* Presentation
IBFS File Nos. SAT-LOA-20170621-00092 & SAT-AMD-20170908-00128;
SAT-MOD-20160624-00060, SAT-AMD-20161115-00116, SAT-AMD-20170301-
00026 & SAT-AMD-20171109-00154; SAT-LOA-20161115-00117

Dear Ms. Dortch:

Pursuant to 47 C.F.R. § 1.1206, Hughes Network Systems, LLC (together with its affiliates, "Hughes") submits this letter summarizing *ex parte* meetings on May 30 regarding the above-referenced applications for satellite operations in the V- and other frequency bands. Specifically, Pradman Kaul, President of Hughes, and the undersigned, along with outside counsel Kathleen Abernathy, met with Chairman Ajit Pai and his Wireless and International Advisor, Rachael Bender. They also met separately with Will Adams, Legal Advisor to Commissioner Brendan Carr, and Umair Javed, Wireless and International Advisor to Commissioner Jessica Rosenworcel. Hughes discussed the points set forth in the attached presentation.

Please direct any questions regarding this matter to the undersigned.

Respectfully Submitted,

/s/ Jennifer A. Manner

Jennifer A. Manner

Senior Vice President, Regulatory Affairs

Attachment

cc: Rachael Bender (FCC)
Umair Javed (FCC)
Bruce Olcott (counsel to Boeing)

Will Adams (FCC)



FCC ACTION ESSENTIAL FOR ONGOING INVESTMENT IN AND DEPLOYMENT OF NEW JUPITER 3 SATELLITE AND FUTURE V-BAND SATELLITE SYSTEMS

(IBFS File Nos. SAT-LOA-20170621-00092 & SAT-AMD-20170908-00128; SAT-MOD-20160624-00060, SAT-AMD-20161115-00116, SAT-AMD-20170301-00026 & SAT-AMD-20171109; SAT-LOA-20161115-00117)

May 2018

- Hughes Network Systems, LLC (“Hughes”), a U.S.-based company, is the largest provider of satellite broadband services in the United States and globally.
- Hughes operates a fleet of three high-capacity broadband satellites. JUPITER 2 is the most recent satellite to commence operation providing broadband services that meet or exceed FCC-defined broadband speeds of 25 Mbps down/ 3 Mbps up.
- Hughes’ next-generation satellite, JUPITER 3, is under construction, planned for launch in early 2021, and will deliver even higher estimated speeds of up to 100 Mbps down, along with expanded services to consumers throughout the United States and the Americas.

Ongoing Investment in JUPITER 3 at Risk Absent Prompt FCC Grant of Pending Applications

- On March 20, 2018, the International Bureau (“IB”) stamp-granted Hughes’ JUPITER 3 application, but indefinitely deferred consideration of the request for uplink operations in the 50.4-51.4 GHz band despite the lack of opposition against the application. Hughes’ unopposed applications for associated gateways also have been pending for nearly a year.
- Additionally, at its next June 7 open meeting, the Commission will consider two draft orders that would authorize market access for additional Ka- and V-band satellites in O3b’s non-geostationary satellite orbit (“NGSO”) system, as well as deployment of Audacy’s Ka- and V-band NGSO system, while also deferring action on both parties’ request to use the 50.4-51.4 GHz band for service and gateway uplinks. Notably, the draft orders would defer action “until sharing between terrestrial and satellite operations in the band, as well as other uses of the band, are addressed in the context of the *Spectrum Frontiers Proceeding*.” If adopted as is, the draft orders would set bad precedent for deferring action on all pending requests for satellite use of the 50.4-51.4 GHz band until sharing issues are addressed in *Spectrum Frontiers*, thus creating significant, undue regulatory uncertainty, deployment costs, and business risks for Hughes and a number of other planned V-band satellite systems.
- Commercial satellite systems, including new satellites operating on V-band and previously unused frequencies, are critical to U.S. domestic and global communications policies, as recognized in the President’s Space Policy Directive - 2.

Accordingly, the Commission should support and promote deployment of these systems by providing regulatory certainty through established licensing policies and practices. The economics of building a satellite requires providing regulatory certainty sooner than later with respect to authorizing use of spectrum. Providing regulatory certainty allows satellite operators to build satellites more efficiently, deploy services more rapidly, and deliver high-speed broadband and other services to consumers throughout the United States, including remote and underserved areas.

- Long lead time for satellites is such that JUPITER 3 construction already has commenced under an expedited schedule for launch within the next three years. To meet this schedule and justify ongoing investment, Hughes has an urgent need for regulatory certainty and action on the deferred portion of its JUPITER 3 application, as well as the long-pending applications for associated gateways.

Failure to Act on the Hughes Application for the 50.4-51.4 GHz Band Puts the JUPITER 3 Project at Risk

- The requested 1 GHz of spectrum at 50.4-51.4 GHz is essential to accessing the total satellite capacity. Loss of access to the spectrum will materially affect the satellite's usefulness.
- The satellite has been designed to take full advantage of this band. PDR is complete. CDR analysis is ongoing and will be complete by the end of this year. All long-lead components have been ordered and are beginning to be delivered. It is too late to change the satellite design without significant cost and schedule impact.
- Contracts have been concluded for the ground segment of the system, which includes the V-band TWTAs that uplink signals in these bands. Loss of the use of this band would require (in addition to a major satellite reconfiguration) more gateways, greatly increasing ground segment costs.

There is No Reason Not to Act Now

- The record developed in Hughes' JUPITER 3 license proceeding, as well as O3b's, Audacy's, and other V-band license proceedings, indicate no objections or issues with satellite uplink use of the 50.4-51.4 GHz band and no basis for deferring FCC authorization of such use.
- The requested FSS uplink use of the 50.4-51.4 GHz band is consistent with existing international and U.S. allocations and does not conflict with the FCC's *Spectrum Frontiers FNPRM* because new terrestrial operations can be licensed in the band and still share spectrum with satellite uplink use of this band. Indeed, under the draft *Spectrum Frontiers Third FNPRM*, the FCC is proposing to adopt rules permitting licensing of individual FSS earth stations in the 50.4-51.4 GHz band using sharing criteria identical to those applicable in the 24.75-25.25 GHz band.
- The draft O3b and Audacy orders offer no basis for arbitrarily deferring action on uplink use of only the 50.4-51.4 GHz band, and not other V-band spectrum such as 47.2-50.2 GHz. The draft orders merely note that the 50.4-51.4 GHz band is designated for terrestrial fixed and mobile services and that the Commission has not yet

acted on its proposal in the *Spectrum Frontiers FNPRM* to authorize fixed and mobile use of the band under UMFUS rules. The same, however, can also be said of the 47.2-50.2 GHz band (or at least the 47.2-48.2 GHz segment, which is designated for terrestrial services), for which the Commission has proposed, but not yet acted, to authorize fixed and mobile operations under UMFUS rules.

- The FCC should promptly grant access to the requested spectrum, **subject to any rules adopted following the *Spectrum Frontiers FNPRM* and/or coordination with existing federal government operations.** In addition, the FCC should move expeditiously to grant the pending gateway authorizations, all of which have been pending for almost a year and are unopposed.