

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)
)
MVDDS 5G Coalition Petition for) RM-11768
Rulemaking to Permit MVDDS Use of the)
12.2-12.7 GHz Band for Two-Way Mobile)
Broadband Service)

**SPACE EXPLORATION TECHNOLOGIES CORPORATION OPPOSITION TO
PETITION FOR RULEMAKING**

Space Exploration Technologies Corporation (SpaceX) hereby submits its opposition to the petition for rulemaking (Petition) filed by the MVDDS Coalition¹ with regard to mobile use of 12.2-12.7 GHz spectrum.² In particular, SpaceX opposes the MVDDS Coalition’s request that the Federal Communications Commission (Commission) eliminate or materially weaken the co-primary status and accompanying protections afforded to non-geostationary orbit (NGSO) Fixed Satellite Service (FSS) operations in the 12.2-12.7 GHz portion of the Ku-band.

The Petition comes at precisely the wrong time, given the ongoing, active investment and technology developments in delivery of NGSO FSS service at 12.2-12.7 GHz. In fact, the premise of the MVDDS Coalition request is based on a fundamental misunderstanding and misstatement of the current NGSO environment and further fails to recognize the significant benefits that soon-to-be-deployed NGSO FSS offerings will provide, augmenting high-speed, low-cost broadband deployment and complementing 5G terrestrial services at very low latencies. Finally, the Commission has previously considered—and carefully balanced—the equities

¹ The MVDDS Coalition is comprised of Braunston Spectrum LLC, Cass Cable TV, Inc., DISH Network L.L.C., GO LONG WIRELESS, LTD., MDS Operations, Inc., MVD Number 53 Partners, Satellite Receivers, Ltd., SOUTH.COM LLC, Story Communications, LLC, Vision Broadband, LLC, and WCS Communications, Inc.

² 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).

between NGSO FSS and MVDDS operations at 12.2-12.7 GHz, and should not upset that balance now, as NGSO FSS investment and development is at an all-time high and operators are on the precipice of bringing revolutionary broadband access services to market.

SpaceX joins Intelsat in opposing “any degradation of the NGSO FSS primary allocation in the 12.2-12.7 GHz band.”³ The MVDDS Coalition’s request that the Commission “delete or designate as secondary”⁴ the existing NGSO FSS allocation is premised almost entirely on the misstatement that the NGSO FSS allocation is “unused.”⁵ In fact, in the past 24 months, administrations around the world have submitted more than 35 filings for NGSO FSS operations at the International Telecommunications Union (ITU). Investment, technological innovation and business activities against these ITU NGSO FSS filings confirm the seriousness of NGSO FSS constellation proposals, contributing to the record levels of investment in the space segment in the last year.⁶

As further evidence, as Intelsat has pointed out, an NGSO FSS operator has filed an application for access to the U.S. market with the Commission, which likely will cause the Commission to initiate a modified processing round for NGSO FSS operations in the coming months.⁷ In such a processing round, many of the NGSO FSS operators who have filed at the ITU can be expected to seek U.S. landing rights, with the protections afforded by virtue of the NGSO FSS co-primary allocation in the 12.2-12.7 GHz portion of the Ku-band. It comes as no

³ Opposition of Intelsat, RM-11768 (filed June 3, 2016) (Intelsat Opposition).

⁴ Petition at 7.

⁵ *Id.* at 22.

⁶ See Tauri Group, *Start-Up Space*, at iv (Jan. 2016), available at http://space.taurigroup.com/reports/Start_Up_Space.pdf (last accessed June 6, 2016) (“The year 2015 was a record-setting year for space ventures with investment and debt financing of \$2.7 billion . . . More than 50 venture capital firms invested in space deals in 2015, the most in any year.”).

⁷ See Intelsat Opposition at 4; see also WorldVu Satellites Limited, Petition for Declaratory Ruling Granting Access to the U.S. Market for the OneWeb System, File No. SAT-LOI-20160428-00041 (filed Apr. 28, 2016).

surprise that the details of these proposed NGSO FSS systems are not currently well-known, as the development and deployment of satellite systems are highly proprietary and may take several years to finalize, during which time the operators hold details as highly confidential for obvious competitive reasons.

SpaceX is among those who have filed at the ITU for an NGSO constellation of satellites designed to deliver high-speed, low-cost broadband to consumers in the U.S. and around the world, including those in rural, underserved, and unserved areas.⁸ These low latency high-speed and high-capacity NGSO FSS broadband services can reach areas that are not economical for—and are thus unserved by—terrestrial wireless services, thereby providing access to broadband services for all Americans. However, these robust broadband services will only be possible if the existing allocation and accompanying protections remain in full force and effect for NGSO FSS operations, as the 12.2-12.7 GHz band is crucial for the consumer links for such NGSO networks. Indeed, the Coalition itself concedes that coexistence between soon-to-be-deployed NGSO FSS broadband services and hypothetical two-way mobile operations does not appear to “even [be] viable in the band.”⁹

Clearly, the MVDDS Coalition’s mischaracterization of the co-primary NGSO FSS allocation at 12.2-12.7 GHz as “unused” stands in stark contrast to the reality of the global scale of satellite activity emerging in the band, as evidenced by record investment and the avalanche of filings at the ITU and with the Commission. As noted earlier, therefore, the Coalition’s Petition for deleting or modifying the co-primary allocation for NGSO FSS operations comes at precisely the wrong time, at this critical stage in the development of new NGSO FSS deployment.

⁸ See Reply Comments of SpaceX, IB Docket No. 12-267, at 3 (filed Mar. 2, 2015).

⁹ Petition at 23.

Because the Coalition has not provided any accurate rationale in support of its Petition, the Commission should not abandon the balance it carefully struck in 2002, when it established the sharing regime between NGSO FSS and MVDDS operations.¹⁰ In doing so, the Commission closely considered the equities and adopted a regulatory framework that, as Intelsat rightly notes, “facilitates equitable shared use of the 12.2-12.7 GHz band by DBS, NGSO FSS and MVDDS.”¹¹ The Petition presents no reason to now alter that carefully crafted balance, but instead asks the Commission to grant MVDDS license holders windfall mobile use rights and strand NGSO FSS investment as the industry is on the precipice of delivering the exact types of innovative services the Commission envisioned when it established the sharing regime in 2002.

For the foregoing reasons, SpaceX urges the Commission to deny the Petition.

Respectfully submitted,

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¹⁰ See *Amendment of Parts 2 and 25 of the Commission's Rules to Permit Operation of NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in the Ku-Band Frequency, et al.*, Memorandum Opinion and Order and Second Report and Order, ET Docket No. 98-206, RM-9147, RM-9245, FCC 02-116, at paras. 95-125 (2002).

¹¹ Intelsat Opposition at 5.