



September 1, 2017

By Electronic Filing

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

Re: *Update to Parts 2 and 25 Concerning Non-Geostationary, Fixed-Satellite Service Systems and Related Matters*, IB Docket No. 16-408

Dear Ms. Dortch:

EchoStar Satellite Operating Corporation (“ESOC”) and Hughes Network Systems, LLC (“Hughes,” and together with ESOC and their affiliates, “EchoStar”) files this *ex parte* letter to supplement its filings in response to the above-captioned proceeding.¹

EchoStar requests that the Federal Communications Commission (“FCC” or “Commission”) grant a co-primary allocation for GSO operations in the 18.8-19.3 GHz and 28.6-29.1 GHz band in the above-captioned proceeding. In the alternative, the Commission should add a Further Notice of Proposed Rulemaking (“FNPRM”) to its Report and Order to develop mechanisms to ensure that coordination conflicts between NGSO FSS systems and GSO FSS networks for operations in the 18.8-19.3 GHz and 28.6-29.1 GHz bands can be resolved. With the likely deployment of multiple NGSO FSS systems, the Commission should also issue an NPRM to propose ways to ensure that GSO operators are sufficiently protected by interference caused by aggregate EPFD from NGSO FSS systems.

1. The Commission Should Grant Co-Primary Status to GSO Operations in the 18.8-19.3 GHz and 28.6-29.1 GHz Bands.

EchoStar reiterates that the 18.8-19.3 GHz and 28.6-29.1 GHz bands are an important allocation for GSO FSS, enabling satellite-delivered broadband to hard-to-reach consumers,

¹ See *Update to Parts 2 and 25 Concerning Non-Geostationary, Fixed-Satellite Service Systems and Related Matters*, Notice of Proposed Rulemaking, 31 FCC Rcd 13651 (2016) (“*NGSO NPRM*”).

including EchoStar's 25/3 Mbps service and its future networks.² To advance global harmonization, the Commission should grant co-primary status for GSO operations. The ITU and most regulatory administrations around the world have allocated these frequency bands on a co-primary basis for NGSO FSS and GSO FSS.³ The Commission's current primary allocation to NGSO is founded on out-of-date rules that do not take into consideration the conclusions of both the ITU and the Commission that NGSO FSS and GSO FSS are capable of sharing efficiently in these bands.⁴

2. The Commission Should Issue an FNPRM to Develop a Default Mechanism for Coordination Disputes Between NGSO and GSO Operators that Cannot be Resolved for Operations in the 18.8-19.3 GHz and 28.6-29.1 GHz Bands

If, in the event, the Commission decides not to adopt co-primary status for GSO and NGSO FSS systems in the 18.8-19.3 GHz and 28.6-29.1 GHz bands, it nonetheless must address the protection of GSO FSS operations in these bands. EchoStar encourages the Commission to append an FNPRM to the forthcoming Report and Order in this proceeding that proposes a mechanism or default rule that will be invoked when NGSO FSS and GSO FSS systems are unable to successfully complete coordination in the 18.8-19.3 GHz and 28.6-29.1 GHz bands. As such, to provide certainty to GSO FSS and NGSO FSS operators, EchoStar respectfully requests that the Commission issue an FNPRM in order to develop a default coordination rule.

3. The Commission Should Issue an FNPRM to Create a Mechanism to Ensure NGSO Compliance with Aggregate EPFD Limits in the 17.8-18.6 GHz, 19.7-20.2 GHz, 27.5-28.35 GHz, and 29.5-30.0 GHz Bands

The Commission should issue an FNPRM seeking comment on the creation of a mechanism to ensure that all NGSO FSS systems providing service in the United States jointly meet the aggregate EPFD limits in their space-to-Earth transmissions, as established in Resolution 76 (Rev. WRC-15). EchoStar supports the Commission's proposal to codify ITU Radio Regulation Article 22 NGSO EPFD limits into its rules for operations in the 17.8-18.6 GHz, 19.7-20.2 GHz, 27.5-28.35 GHz, and 29.5-30.0 GHz bands.⁵ However, NGSO FSS compliance with these limits will likely be insufficient to protect GSO FSS operations. The Article 22 EPFD limits were derived at a time when the ITU assumed far fewer NGSO systems would be commercially viable. Even if individual NGSO FSS systems comply with single-entry

² Comments of ESOC and Hughes, IB Docket No. 16-408, at 3 (filed Feb. 27, 2017) ("EchoStar Comments"); Letter from Jennifer Manner, EchoStar, to Marlene H. Dortch, FCC, IB Docket No. 16-408, at 2 (May 12, 2017).

³ EchoStar Comments at 3-7 (filed Feb. 27, 2017); Comments of Inmarsat Inc., IB Docket No. 16-408 (filed Feb. 27, 2017); Comments of ViaSat, Inc., IB Docket No. 16-408 (filed Feb. 27, 2017).

⁴ EchoStar Comments at 5; EchoStar Reply Comments, IB Docket No. 16-208, at 3 (filed Apr. 10, 2017) ("EchoStar Reply Comments").

⁵ EchoStar Reply Comments at 8.

EPFD limits, there is likelihood that this will not adequately protect GSO FSS operations. With potentially numerous NGSO FSS systems launching in the future, compliance with the aggregate EPFD limits is necessary to guarantee sufficient protection to GSO FSS operations. In the likely event that the Commission is poised to grant pending NGSO FSS system applications before resolution of this issue, these grants should be conditioned on compliance with later Commission decisions including the application of the aggregate EPFD limits mechanism developed through the proposed FNPRM.

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EchoStar believes that the record built in response to the *NGSO NPRM* has addressed the majority of the Commission's proposals. However, in the interest of protecting GSO FSS operations in the face of a changing satellite landscape, the Commission should take the steps above.

This letter is filed pursuant to Section 1.1206 of the Commission's rules. Please direct any questions regarding this matter to the undersigned.

Respectfully Submitted,

/s/ Jennifer A. Manner

Jennifer A. Manner

Senior Vice President, Regulatory Affairs