



August 30, 2017

BY ELECTRONIC FILING

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 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:

On August 30, 2017, EchoStar Satellite Operating Corporation and Hughes Network Systems, LLC (collectively “EchoStar”) met with members of the International Bureau (“Bureau”) to discuss the Hughes’ filings in the above-referenced proceeding. EchoStar was represented by Jennifer A. Manner, Senior Vice President, Regulatory Affairs, and Fernando Carrillo, Senior Principal Engineer, Regulatory Affairs. Representatives of the Bureau included Jose Albuquerque, Chip Fleming, Karl Kensinger, and Clay DeCell.

In the meeting, EchoStar discussed the attached talking points, including reiterating its position that the United States should harmonize the technical and operational rules in the 18.8-19.3 GHz and 28.6-29.1 GHz bands with ITU allocations to permit co-primary use by GSO and NGSO satellite operations. EchoStar also discussed the expanded use of the former-LMDS bands, adoption of a default sharing rule, codification of ITU EPFD limits, and the retention of existing milestone requirements for proposed NGSO constellations. The attached talking points were distributed to the attendees.

Pursuant to the Commission’s rules, this notice is being filed in the above-referenced dockets for inclusion in the public record. Please contact me should you have any questions.

Respectfully submitted,

/s/ Jennifer A. Manner

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Attachments

cc: Jose Albuquerque
Chip Fleming
Karl Kensinger
Clay DeCell



The FCC Should Create a Regulatory Regime that Enables the Fullest and Best Use of the Orbit and Spectrum Resources for Geostationary and Non-Geostationary Orbit Satellite Systems

EchoStar Satellite Operating Corporation (“ESOC”) and Hughes Network Systems, LLC (“Hughes,” and together with ESOC and their affiliates, “EchoStar”) support the FCC’s efforts to create a regime that supports non-geostationary (“NGSO”) use of the orbit and spectrum resource.

The Commission should align its rules with the ITU’s rules

Several parties propose that the Commission should use this proceeding to align its technical and operational rules with the current ITU regulations. Harmonizing FCC and ITU rules would benefit the satellite industry as a whole. It would lessen the regulatory burden and promote regulatory certainty for satellite operators who deploy satellites around the world. To the extent that the Commission does not harmonize its rules with ITU rules, the Commission should explicitly state that: (i) its rules are limited to U.S. operations; and (ii) U.S.-licensed systems must operate consistent with international regulations when providing service outside the United States.

The Commission should grant co-primary status to GSO FSS operations in the 18.8-19.3 GHz and 28.6-29.1 GHz bands (“NGSO bands”)

Internationally, the NGSO bands are harmonized for use on a co-primary basis by both geostationary (“GSO”) and NGSO systems. However, over 20 years ago, based on antiquated technical assumptions, these bands domestically were designated on a primary basis for NGSO, and not GSO, use. Despite this FCC designation, until 2013, the spectrum laid fallow for use by NGSO systems. However, EchoStar and other GSO FSS operators did put this spectrum into use to support millions of broadband satellite users across the United States.

Since the FCC’s NGSO designation, the ITU, based upon technical studies showing sharing between NGSO and GSO in these bands is technically feasible, has adopted rules to enable the use of the NGSO bands on a co-primary basis by NGSO and GSO systems. There have been many coordination agreements negotiated by GSO FSS operators for sharing with NGSO FSS in this band globally. Accordingly, co-primary status in these bands has and can work in this band to warrant NGSO and GSO use on a co-primary basis.

The Commission should permit GSO and NGSO operations in the 19.3-19.4 GHz, 19.6-19.7 GHz, and 29.3-29.5 GHz frequency bands

The FCC should adopt its proposal to allow GSO and NGSO FSS systems to operate in these bands (currently designated for, but unused by, NGSO MSS feeder links), with GSO FSS systems operating on a primary basis and NGSO FSS systems operating on an unprotected, non-interference basis. In the United States, GSO FSS operators can and have successfully coordinated with Iridium’s feeder link operations. This plan is consistent with the ITU Radio



Regulations (RRs). Creating exceptions to this policy would undercut the coordination process required under ITU rules for GSO FSS and MSS feeder link use of these frequency bands.

The Commission should adopt a default GSO-NGSO sharing rule

The Commission should delete the first sentence of Section 25.156(d)(5) of its rules and adopt, as a default sharing rule, language similar to No. 22.2 of the ITU RRs. This will facilitate use of spectrum by both GSO and NGSO systems. We support the comments in the record that current satellite technology and well-established inter-operation coordination mechanisms will enable appropriate spectrum sharing between NGSO and GSO constellations.

The Commission should codify existing ITU EPFD limits

We support the FCC's proposal to codify Article 22 of the ITU RRs establishing EPFD limits for NGSO use of the 17.8-18.6 GHz, 19.7-20.2 GHz, and 27.5-28.35 GHz and 29.5 GHz bands. The FCC also should adopt a realistic and practical mechanism to ensure that aggregate EPFD limits are met by all NGSO systems that are providing service in the United States.

The Commission should retain existing milestone requirements for NGSO constellations

The Commission should retain existing milestone requirements for the launch and operation of NGSO constellations. Some parties recommend a flexible milestone regime that would provide excessive leeway to NGSO constellation operators seeking to deploy and alter the size of large constellations, to the detriment of other satellite operators.¹ EchoStar does not object to SpaceX's request that the Commission cap the constellation size of the NGSO licensee at the six-year milestone date, rather than revoke the authorization. The NGSO licensee, however, should be required under existing FCC rules to seek additional authorization to expand its constellation after the six-year milestone.

¹ The flexibility requested by parties including Boeing and SpaceX to deploy additional satellites without additional authorization would create regulatory uncertainty for the rest of the satellite industry. In particular, other satellite operators would be unable to plan with any certainty for the number of NGSO satellites that would be operating and must be accounted for in terms of coordination. It would also give NGSO authorization holders the chance to engage in spectrum speculation. 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).