



July 7, 2016

BY ELECTRONIC FILING

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: *Use of Spectrum Bands Above 24 GHz For Mobile Radio Services, et al.*, GN
Docket No. 14-177, IB Docket Nos. 15-256 and 97-95; RM-11664; and WT
Docket No. 10-112

Dear Ms. Dortch:

On July 7, 2016, Jennifer A. Manner, Senior Vice President, Regulatory Affairs of EchoStar Satellite Operating Corporation and Hughes Network Systems, LLC (“EchoStar”) met with Edward Smith, legal advisor to Chairman Tom Wheeler and Ariel Diamond of the Office of the Chairman.

In the meeting the parties discussed the attached talking points, which outline ways the Commission can adopt a fair and equitable sharing regime in the 28 GHz (27.5-28.35 GHz) and 38 GHz (37.5-40.5 GHz) bands between Upper Microwave Flexible Use (“UMFU”) and Fixed Satellite Service (“FSS”) licensees. In addition, EchoStar discussed its support for the development of best practices for colocation of earth stations by licensees in the 28 GHz and 38 GHz bands. To the extent the FCC adopts a population impact benchmark for the location of 28 GHz and 38 GHz band earth stations, EchoStar argued that more than one earth station location could be deployed per UMFU license area as long as the population impact benchmark was not exceeded at each location. However, because of the paucity of information in the record on a population impact benchmark, the FCC should seek additional comment on the appropriate parameters for that benchmark.

In addition, EchoStar expressed the need for the FCC to address the incongruity between the 28 GHz and 38 GHz earth station siting limitations. EchoStar understands that the FCC is currently considering an approach whereby for the 28 GHz band, FSS operators can operate at one location per county, while for the 38 GHz band, operations would be limited to one site per Partial Economic Area. As it is likely that future broadband satellites will operate with gateway



earth stations in both the 28 GHz and 38 GHz bands, it would be most efficient for FSS operators to be able to collocate their earth stations for both bands at a single location. Accordingly, operators who are collocating 28 GHz and 38 GHz band earth stations for a single satellite network should be able to locate them either pursuant to the 28 GHz or 38 GHz siting rules.

Finally, EchoStar reiterated the need for the FCC to retain the co-primary status of FSS space stations under the domestic table of allocations. As EchoStar explained, failure to provide co-primary status to U.S.-licensed FSS space stations in the 28 GHz and 38 GHz band would disincentivize satellite operators from seeking a U.S. satellite license because U.S. operators would be subject to a lower protection status than is available from most, if not all, other countries.

Pursuant to the Commission's rules, this notice is being filed in the above-referenced docket for inclusion in the public record.¹ Please contact me should you have any questions.

Respectfully submitted,

/s/ Jennifer A. Manner

Jennifer A. Manner
Senior Vice President, Regulatory Affairs
**EchoStar Satellite Operating Corporation
and Hughes Network Systems, LLC**
11717 Exploration Lane
Germantown, MD 20876
(301) 428-5893

cc: Edward Smith
Ariel Diamond
Daudeline Meme
Johanna Thomas
Brendan Carr
Erin McGrath
Brian Regan
John Schauble
Jose Albuquerque
Michael Ha

¹ 47 C.F.R. § 1.1206(b)(2).

Creating a True Sharing Regime for UMFU and FSS

1. To the extent the FCC limits the number of FSS earth station sites in a UMFU license area by requiring FSS operators to share a single location in a terrestrial license area, the FCC must adopt minimal requirements to ensure that sharing of these sites among operators is feasible. The FCC can do so by simply requiring that the first FSS earth station licensee for a site be required to find a location with sufficient room to site other FSS operators and prohibit that operator from acting in a manner that limits the use of this facility by other FSS operators. Failure to adopt such a requirement could result in a single operator being able to bar some or all other operators from sharing that single site.
2. The FCC should address the aggregate interference issues from UMFU transmissions into 28 GHz band FSS space stations directly in its Further Notice of Proposed Rulemaking. Simply monitoring the situation will not provide a solution if and when such harmful interference occurs. Accordingly, the FCC should at least ask a question on this important issue.
3. The FCC should allow the collocation of 38 GHz band FSS earth stations at protected 28 GHz band sites. The 28 GHz band sites will already meet stringent limits to protect UMFU licensees from potential interference and uncertainty. In addition, allowing FSS operators to collocate their 38 GHz band earth stations at these sites will be most efficient as it will enable FSS operators to capture operational synergies.
4. FSS space stations in the 28 GHz and 38 GHz bands should retain their co-primary status, and this should continue to be reflected in the United States Table of Frequency Allocations. Failure to do so will subject U.S.-licensed space stations to harmful interference from the space stations and radio services of other countries, hence potentially degrading FSS services to U.S. consumers.
5. The FCC should extend protection to all individually-licensed earth stations that were applied for at the FCC prior to July 14, 2016 (the date of adoption of the Spectrum Frontiers Order). This will ensure that systems that have been applied for are not subject to the uncertainties concerning earth station siting and other issues that may be a direct result of this Order.