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April 17, 2017

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Via ECFS

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

**Re: GN Docket No. 14–177, IB Docket No. 15–256, RM–11664, WT Docket No. 10–112,
IB Docket No. 97–95
*Use of Spectrum Bands Above 24 GHz for Mobile Radio Services, et al.
Ex Parte Communication***

Dear Ms. Dortch:

The Fixed Wireless Communications Coalition, Inc. (FWCC) files this letter in response to the Joint Reply to Oppositions of the Boeing Company, Echostar Satellite Operating Corporation, Hughes Network Systems, LLC, Inmarsat, Inc., Intelsat Corporation, O3b Limited, SES Americom, Inc. and Worldvu Satellites Ltd. D/B/A Oneweb (“Satellite Companies”) (“Satellite Companies Opposition”), filed in these dockets on February 24, 2017.

The Satellite Companies propose to modify the limitations on earth station siting from those in the present rules, intended to protect users of Upper Microwave Flexible Use Service (UMFUS) from harmful interference.

We respond to each of their proposals in turn.

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A. POPULATION LIMITS

Present rule: an earth station protected area cannot cover more than 0.1% of the license area population.¹

The Satellite Companies propose a tiered approach under which an earth station protected area can cover between 0.2% and 10% of the license area population, depending on the band and the population of license area.²

FWCC response: The Satellite Companies' proposal would threaten UMFUS service for too many people. We continue to support either the current rule or our earlier-proposed tiered approach using smaller percentage figures:³

Type of County	Population	Interference Zone Limit
high density	greater than 300,000	0.1%
low-to-medium density	6,000 to 300,000	300 people
very low density	fewer than 6,000	5%

B. PROTECTED FACILITIES

Present rule: an earth station interference zone may not contain “any major event venue, arterial street, interstate or U.S. highway, urban mass transit route, passenger railroad, or cruise ship port[.]”⁴ The rule does not define these terms.

The Satellite Companies would define the terms as follows:

Major event venue: capacity of 10,000 or more;

Arterial street, interstate or U.S. highway: “principal arterials” as defined in a specified U.S. Dept. of Transportation publication, to include Interstates, “Other Freeways & Expressways,” and “Other Principal Arterials”;

Urban mass transit route: the Satellite Companies would eliminate this category on the ground that mass transit uses or parallels principal arterials or shares track with Amtrak;

Passenger railroad: Amtrak operations;

¹ 47 C.F.R. §§ 25.136(a)(4)(ii), (c)(2).

² Satellite Companies Opposition at 4-8.

³ Comments of the Fixed Wireless Communications Coalition at 5 (filed Jan. 31, 2017).

⁴ 47 C.F.R. §§ 25.136(a)(4)(iii), (c)(3).

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Cruise ship port: list of 15 largest ports in the U.S.⁵

FWCC response: We agree with the Satellite Companies that the terms need definition in the rules. We differ on some, but not all, of the particulars.

Definition of major event venue: We do not oppose the Satellite Companies' proposal.

Definition of arterial street, interstate or U.S. highway: We oppose a definition that relies on an external publication, in part because that publication does not give the subcategory "Other Principal Arterials" a precise meaning. We recommend instead defining the category in a way that enables licensees to tell more readily whether a roadway is protected. We suggest the definition "roadways of four lanes or more" as meeting this criterion while being roughly coextensive with the intended scope of the Satellite Companies' definition.

Elimination of urban mass transit route: We urge the Commission to preserve the category because some suburban transit lines are removed from both railways and highways. As a definition we propose, "A shared passenger-transport service available for use by the general public and operating within a metropolitan area and its suburbs."

Definition of passenger railroad: We do not oppose the Satellite Companies' proposal.

Definition of cruise ship port: We do not oppose the Satellite Companies' proposal.

C. LIMITS ON NUMBERS OF EARTH STATIONS

Present rule: there can be no more than three earth stations per license area.⁶

The Satellite Companies propose to drop this limit.⁷

FWCC response: we do not object to dropping the numerical limit so long as (a) the population percentage limit remains unchanged or, in a tiered approach, is not higher than in our proposal; and (b) the population limit applies to the aggregated protected areas of all earth stations in the license area.

⁵ Satellite Companies Opposition at 10-13.

⁶ 47 C.F.R. §§ 25.136(a)(4)(i), (c)(1).

⁷ Satellite Companies Opposition at 13.

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D. THE 70/80/90 GHZ DATABASE APPROACH APPLIED TO UMFUS

Present rule: none.

To facilitate the siting of earth stations outside UMFUS operating areas, the Satellite Companies propose a coordination system similar to that used for the 71-76, 81-86, and 92-95 GHz bands, relying on a database of UMFUS facilities.⁸

FWCC response: We disfavor the proposal as being unnecessarily expensive and complex, and as creating opportunities for error. Bilateral frequency coordination has succeeded in other bands for decades, and we expect it to succeed here as well. Moreover, the database approach would improperly permit the construction of earth stations where UMFUS facilities are planned but not yet registered in the database.

Respectfully submitted,



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⁸ Satellite Companies Opposition at 14-16.