



October 17, 2018

Marlene Dortch, Secretary
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

Re: Comments on Recommendations Approved by World Radiocommunication
Conference Advisory Committee, IB Docket 16-185

Dear Ms. Dortch:

EchoStar Satellite Operating Corporation and Hughes Network Systems, LLC (collectively, and together with its affiliates, “EchoStar”); Inmarsat, Inc. (“Inmarsat”), and Intelsat US LLC (“Intelsat”) submit these comments on the World Radiocommunication Conference 2019 Advisory Committee (“WAC”) recommendations on issues to be considered at the 2019 World Radiocommunication Conference (“WRC-19”).¹ Specifically, we urge the Commission: (1) to adopt View A for the 47.2-50.2 GHz band under Agenda Item 1.13, (2) to adopt the consensus WAC proposal for regulatory considerations for non-geostationary orbit (“NGSO”) fixed-satellite systems under Agenda Item 1.6, (3) to present these proposals to the U.S. Department of State as United States Proposals to WRC-19, and (4) to urge the State Department to submit these proposals to the upcoming meeting of CITEL PCC.II for adoption as a CITEL Inter-American Proposal going forward for WRC-19.

Agenda Item 1.13

View A for Agenda Item 1.13² proposes no change to the Radio Regulations in the 48.2-50.2 GHz band, taking into account the identification of this band in ITU-R Region 2 for high density applications in the fixed-satellite service (HDSSS), the United States *Spectrum Frontiers* decision to provide core uplink spectrum in the fixed-satellite service (FSS) in this band, and the critical requirement for core spectrum for regional and international GSO and NGSO satellite operations. This approach is consistent with prior FCC decisions to reserve the HDFSS identifications at 48.2-50.2 GHz and 40-42 GHz, which will accommodate both gateways and user terminals for exclusive FSS use.³ Economies of scale in both earth station and spacecraft design require that satellite operators be able to rely on the availability of HDFSS identifications throughout the ITU Regions to which they apply.

¹ See Public Notice, *International Bureau Seeks Comment on Recommendations Approved by World Radiocommunication Conference Advisory Committee*, DA 18-1017 (October 3, 2018) (hereinafter “Public Notice”).

² *Id.*, Attachment A, at 5.

³ *Spectrum Frontiers Second Report and Order* ¶189.

View A suggests that IMT may be accommodated in the 47.2-48.2 GHz band under certain conditions that ensure an appropriate balance between spectrum available for IMT, FSS user terminals, and FSS gateways. We note the NTIA proposal for no change in any portion of the 47.2-50.2 GHz band.⁴ We agree with the NTIA proposal with respect to the 48.2-50.2 GHz band, and meaningful fixed-satellite service use of the 47.2-48.2 GHz segment requires, if a change is to be made, that any IMT identification in the segment be conditioned at least to the extent given in View A.

We note that that international focus on the 47.2-50.2 GHz band has been less intense than the focus on other bands under consideration for IMT identification at WRC-19. WRC-19 should identify bands for IMT which match expectations for deployment of IMT. Identification of bands which are not likely to be used for IMT would bring uncertainty for both the satellite and terrestrial industries.

Agenda Item 1.6

The consensus WAC proposals for Agenda Item 1.6 closely track Method A in the draft CPM Report text. The proposals identify a methodology to allow for maximum spectrum efficiency for NGSO FSS systems, while protecting operations of geostationary orbit (“GSO”) networks from operations of NGSO FSS systems. This proposal also provides a regulatory solution to ensure that aggregate emissions from operating non-GSO FSS systems do not exceed aggregate protection requirements of GSO networks.

The consensus WAC proposal has carefully considered earth exploration-satellite service (“EESS”) (passive) protection from non-GSO FSS transmissions, and contains limits to unwanted emission power in the adjacent band 50.2-50.4 GHz. After careful consideration of the unwanted emission power from GSO stations into EESS (passive), this proposal retains the current GSO limits, both to ensure maintenance of the current operating environment, and because amendment to the GSO limits in Resolution 750 is outside the scope of the agenda item. We oppose the NTIA proposal for Agenda Item 1.6⁵ to the extent it seeks to amend 50.2-50.4 unwanted emissions standards for GSO systems for this reason.

⁴ Public Notice, *supra* n.1, Attachment B, at 60.

⁵ *Id.*, Attachment B, at 36.



INTELSAT

Envision. Connect. Transform.



Conclusion

For the foregoing reasons, EchoStar, Inmarsat, and Intelsat urge the FCC to adopt the proposals described above, and so inform the U.S. Department of State. The United States should then submit these proposals to the upcoming meeting of CITEL PCC.II for the relevant agenda items for adoption as a CITEL Inter-American Proposal at the upcoming CITEL meeting, and adopt this position for WRC-19.

Respectfully submitted,

/s/ Jennifer A. Manner

Jennifer A. Manner
Senior Vice President, Regulatory Affairs

Brennan T. Price
Senior Principal Engineer, Regulatory Affairs

Fernando Carrillo
Senior Principal Engineer, Regulatory Affairs

EchoStar Satellite Operating Corporation,
Hughes Network Systems, LLC
11717 Exploration Lane
Germantown, MD 20876
(301) 428-5893

/s/ Jack Wengryniuk

Jack Wengryniuk
Vice President, Regulatory and
Market Access

Inmarsat, Inc.
1101 Connecticut Ave., N.W.
Suite 1200
Washington, D.C. 20036
(202) 615-4428

/s/ Oscar DeGuzman

Oscar DeGuzman
Regulatory Engineer
Intelsat US LLC
7900 Tysons One Place
McLean, VA 22102
(703) 559-7069