

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of )  
)  
The Establishment of Policies )  
and Service Rules for the Mobile )  
Satellite Service in the 2 GHz Band )

IB Docket No. 99-81  
RM-9328

JOINT REPLY COMMENTS OF HUGHES  
COMMUNICATIONS GALAXY, INC. AND HUGHES COMMUNICATIONS, INC.

Hughes Communications Galaxy, Inc., licensee of the Spaceway Ka band satellite system,<sup>1</sup> and Hughes Communications, Inc. (together with Hughes Communications Galaxy, Inc., "Hughes"), the applicant in the second Ka band satellite processing round for the SpacewayEXP GSO FSS and SpacewayNGSO FSS satellite networks,<sup>2</sup> jointly reply to the comments filed with respect to the Notice of Proposed Rulemaking<sup>3</sup> in the above-referenced docket.

Two of the applicants for 2 GHz MSS systems, Celsat America, Inc. and Iridium LLC, have requested to utilize Ka band spectrum for feeder links for their MSS systems. These requests could adversely affect Hughes's Spaceway satellite system, which is licensed to utilize 28.35 – 28.6 GHz, 29.25 – 30.0 GHz, 19.7 – 20.2 GHz and 500 MHz within 17.7 – 18.8 GHz at

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<sup>1</sup> *Hughes Communications Galaxy, Inc.*, 13 FCC Rcd. 1351 (1997).

<sup>2</sup> See FCC File Nos. SAT-LOA-19971222-00201, 00205, 00207, 00209, 00210

<sup>3</sup> *The Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band*, FCC 99-50 (rel. March 25, 1999) (the "NPRM"). No. of Copies rec'd 0+4

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several orbital locations around the world, including the 99° W.L. and 101° W.L. orbital locations over the United States, to provide broadband communications services to end-users.<sup>4</sup> The requests could also negatively impact Hughes's SpacewayEXP satellite application to utilize similar spectrum bands for communications service links at four orbital locations, including 69° W.L. and 117° W.L.

As Hughes explained in its Comments in this proceeding, the Commission should not allow Celsat or any other MSS applicant to use spectrum within the "core" 1000 MHz of paired Ka band spectrum designated for GSO FSS primary use at "prime" orbital locations. Applying this policy to feeder link requests by 2 GHz MSS applicants would be consistent with past Commission policy, which has been to preclude the use of feeder links in the "core" spectrum that is used for domestic FSS communications service links, at least at the prime orbital locations over the U.S. Nothing in the Comments of Celsat or any other commenter rebuts Hughes's position in this regard. In fact, the Comments of PanAmSat and Pegasus reaffirm Hughes's position.

Celsat argues that the Commission's policy prohibiting feeder link use of conventional FSS allocations in the domestic arc should not apply at Ka band because, it argues, the Ka band "is not currently heavily used by domestic fixed satellites."<sup>5</sup> However, Celsat's argument ignores the Commission's long-standing plan for the development of broadband GSO FSS communications services at Ka band, which is reflected in the Commission's 28 GHz band plan. More importantly, Celsat completely ignores the twelve Ka band GSO FSS systems that

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<sup>4</sup> See *Hughes Communications Galaxy, Inc.*, 13 FCC Rcd. 1351 (1997).

<sup>5</sup> Comments of Celsat America, Inc. at 24-25 (filed June 24, 1999) ("*Celsat Comments*").

the Commission has already licensed to provide broadband communications services to the U.S.,<sup>6</sup> and the additional GSO FSS applications to provide broadband service to the U.S. that are pending in the Commission's second Ka band processing round. Moreover, as PanAmSat and Pegasus noted in their Comments in this proceeding,<sup>7</sup> and as the Commission has recognized on several occasions,<sup>8</sup> the Ka band is critical expansion spectrum for GSO FSS operators and is necessary to permit the development of broadband satellite systems. Hughes and others have announced plans to implement Ka band systems in the next few years. Thus, the fact that Ka band commercial satellite systems are not heavily using the Ka band at this moment in no way provides sufficient justification for departing from the Commission's policy of precluding feeder link use of conventional FSS spectrum.

Indeed, perhaps in recognition of the weakness of its argument, Celsat indicates in its Comments that it "may be able to use certain portions of the Ka band where GSO FSS is allocated on a secondary basis . . ."<sup>9</sup> As Hughes described in its Comments, Hughes agrees that licensing Celsat to utilize Ka band spectrum outside the "core" 1000 MHz designated for GSO

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<sup>6</sup> See *Assignment of Orbital Locations to Space Stations in the Ka Band*, 13 FCC Rcd. 1030 (1997).

<sup>7</sup> See Comments of PanAmSat Corporation at 6 (filed June 24, 1999); Comments of Pegasus Development Corporation at 3-4 (filed June 24, 1999).

<sup>8</sup> See *Redesignation of the 17.7-19.7 GHz Frequency Band*, IB Docket 98-172, FCC 98-235 at ¶¶ 9, 12 (rel. September 18, 1998); *In the Matter of Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5 - 29.5 GHz Frequency Band, to Reallocate the 29.5 - 30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services*, 11 FCC Rcd 19005, ¶¶ 58, 78 (1996); *In the Matter of Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5 - 29.5 GHz Frequency Band, to Reallocate the 29.5 - 30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services*, 11 FCC Rcd 53, ¶¶ 54-55 (1995).

FSS primary use may provide an acceptable solution for all parties by allowing Celsat to operate at a “prime” orbital position without unduly encumbering the GSO FSS use the Ka band for the planned GSO FSS broadband communications services.

Finally, as to Iridium LLC’s requests for (i) 400 MHz of spectrum at 29.1 – 29.5 GHz and 400 MHz of spectrum at 19.3 – 19.7 GHz for feeder links for its MACROCELL system and (ii) a waiver of Commission rule Section 25.258(c) to permit its use of 29.25 – 29.5 GHz, Iridium argues that its proposal is “entirely consistent with the existing Ka Band plan” and “creates no meaningful spectrum coordination issues whatsoever.”<sup>10</sup> Iridium’s claims and its argument that it should be licensed in advance of the resolution of the second Ka band processing round are groundless. Iridium’s request to use 29.25 – 29.5 GHz simply does not conform with Commission rule Section 25.258(c). The Commission has clearly indicated that it will not address that request in this proceeding,<sup>11</sup> and Hughes supports that approach. Indeed, Hughes already has formally opposed Iridium’s pending request to utilize the 29.25 – 29.5 GHz band, and the associated waiver request.<sup>12</sup> To the extent that the Commission decides to address Iridium spectrum and waiver requests in any other proceeding, the Commission will be required to provide public notice and the opportunity to comment thereon.

At bottom, the Commission must preserve the “core” 1000 MHz of GSO FSS Ka band spectrum at the prime U.S. orbital locations for GSO FSS communications service links

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<sup>9</sup> Celsat Comments at 25.

<sup>10</sup> Comments of Iridium LLC at 34 (filed June 24, 1999).

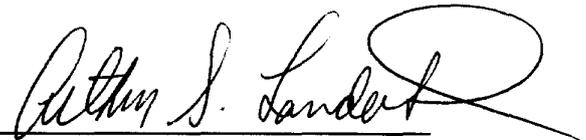
<sup>11</sup> NPRM at ¶ 66.

<sup>12</sup> See Petition to Deny of Hughes Communications Galaxy, Inc., FCC File No. 187-SAT-P/LA-97 (filed December 22, 1997). See also Reply of Hughes Communications Galaxy, Inc., FCC File No. 187-SAT-P/LA-97 (filed February 23, 1998).

and must not let ancillary uses of this spectrum, such as MSS feeder links, impinge of the development of GSO FSS broadband communications services in the U.S. Moreover, there is no basis for allowing Iridium to use the 29.25 – 29.5 GHz band in a manner that is inconsistent with existing Commission rules and the 28 GHz band plan in general.

Respectfully submitted,

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