

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

In the Matter of)	
)	
Iridium Constellation LLC)	File No. SAT-MOD-20120813-00128
)	
Application for Modification of)	
Authorization (Call Sign S2110))	

OPPOSITION OF IRIDIUM CONSTELLATION LLC

Iridium Constellation LLC (“Iridium”), pursuant to Section 25.154(c) of the rules of the Federal Communications Commission (the “Commission” or “FCC”),¹ hereby submits this Opposition to the Supplemental Petition to Deny, Dismiss, or Defer in Part (the “Petition”) filed by HNS License Sub, LLC (“Hughes”) in the above-captioned proceeding.² This is the second round of comments on Iridium’s modification application (the “Modification Application”) to co-locate and operate additional satellites periodically in Iridium’s mission constellation as a result of an inaccurate description in the Public Notice issued one year ago. As described in the “Opposition of Iridium Constellation LLC” (the “2012 Opposition”) submitted on November 15, 2012 in this proceeding,³ which Iridium incorporates fully herein, the authority Iridium seeks will not require additional bandwidth in the 29.25-29.3 GHz band shared with GSO FSS networks such as Hughes. In each co-located pair, only one of the two satellites will utilize the Ka-

¹ 47 C.F.R. § 25.154(c).

² Petition to Deny or Dismiss, in Part of HNS License Sub, LLC, File No. SAT-MOD-20120813-00128 (filed Oct. 31, 2012) (“Hughes Petition”).

³ Opposition of Iridium Constellation LLC, File No. SAT-MOD-20120813-00128 (filed Nov. 15, 2012) (“Iridium Opposition”).

band feeder link to receive telemetry, tracking, and control (“TT&C”) communications. This wholly moots the interference concern raised by Hughes a year ago and repeated again here. Furthermore, grant of the Modification Application will serve the public interest by improving service quality for the needs of first responders, U.S. military, U.S. government, consumers, businesses, maritime users, machine-to-machine (“M2M”) applications, and users in rural or remote areas by allowing Iridium engineers the flexibility to address efficiently occasional system faults and anomalies. Accordingly, the Commission should grant the Modification Application and deny the Petition.

I. IRIDIUM’S PROPOSED OPERATION OF CO-LOCATED SATELLITES WILL NOT CHANGE INTERFERENCE IN THE KA-BAND

As described fully in the 2012 Opposition, Iridium’s proposed configuration of co-located satellites will not increase bandwidth use in the 29.25-29.3 GHz band—which is the spectrum shared with Hughes.⁴ Each pair of co-located satellites will operate in tandem as the functional equivalent of one satellite with just one of the two satellites in each pair using the 29.25-29.3 GHz band. Specifically, in each pair of co-located satellites, one satellite will use Ka-band frequencies to receive TT&C communications, and the other will receive a relay of any TT&C information from the first satellite via inter-satellite link frequencies outside the 29.25-29.3 GHz band. Simply put, there will be no additional strain on the existing spectrum sharing environment between Iridium and GSO FSS networks.

⁴ Modification Application, at 4-5, Exhibit A.

Nevertheless, Hughes once again uses Iridium's application to reargue interference issues that exist in other pending Hughes applications.⁵ Accordingly, Iridium once again asks the Commission to strike arguments regarding other proceedings from the record in this proceeding.

II. GRANT OF IRIDIUM'S MODIFICATION APPLICATION WILL PROVIDE IMPORTANT PUBLIC INTEREST BENEFITS

Grant of Iridium's modification application will generate definitive public interest benefits for consumers by advancing the FCC's policy of providing satellite operators the necessary flexibility to react to technological changes within their fleets. In its evaluation of modification applications, "the Commission has determined that spacecraft design decisions should be left to each space station licensee, because the licensee is in a better position to determine how to tailor its system to meet the particular needs of its customer base."⁶ This "flexible" policy "allow[s] satellite operators to respond promptly to changing technological . . . conditions."⁷ As a result, "[i]f a [modification] proposal will not cause interference to other licensed operations, the Commission generally authorizes it if it is otherwise in the public interest."⁸ As described in the Modification Application, the 2012 Opposition, and herein, Iridium has designed each co-located pair to leave unaffected the sharing environment with FSS operators in the 29.25-29.3 GHz band.

⁵ See File Nos. SES-MFS-20120322-00290; SES-MFS-20120426-00395; and SES-AFS-20120426-00396.

⁶ *DigitalGlobe, Inc.*, Order and Authorization, 20 FCC Rcd 15696, ¶ 9 (I.B. 2005).

⁷ *Assignment of Orbital Locations to Space Stations in the Domestic Fixed-Satellite Service*, Memorandum Opinion and Order, 3 FCC Rcd 6972, ¶ 2 (1988); see also *DigitalGlobe, Inc.*, ¶ 9.

⁸ *DigitalGlobe, Inc.*, ¶ 9 (citing *EarthWatch Inc.*, Order and Authorization, 16 FCC Rcd 15985, ¶ 10 (I.B. 2001)).

Flexibility to co-locate satellites will also improve global service and lower costs for Iridium customers such as first responders, U.S. military, and the U.S. government. As described in the Modification Application, the 2012 Opposition, and herein, grant will enable Iridium engineers to implement a more flexible configuration of its satellite constellation when necessary to mitigate quickly and efficiently occasional system faults and anomalies.⁹ The Modification Application affirmatively serves the public interest, and the Petition is without merit.¹⁰

III. CONCLUSION

The periodic co-location of satellites will not make the Iridium constellation any more susceptible to interference from co-frequency GSO FSS operations in the 29.25-29.3 GHz band and will produce affirmative public interest benefits. The Commission expeditiously should grant the Modification Application and deny the Petition.

Respectfully submitted,

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⁹ Modification Application, at 4; 2012 Opposition at 3-4.

¹⁰ See 47 C.F.R. § 25.154(a)(4).

CERTIFICATE OF SERVICE

I, Jackie Martin, do hereby certify that on this 19th day of November 2013, I caused copies of the foregoing "Opposition of Iridium Constellation LLC" to be delivered to the following via First Class U.S. mail:

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/s/

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