

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554**

In the Matter of

Intelsat License LLC

Application for Authority to Launch and Operate Galaxy 15R,
a Replacement Satellite With New Frequencies, at 133.0° W.L.
(227.0 E.L.)

File No.
SAT-LOA-20170524-00078

PETITION TO DENY OF IRIDIUM SATELLITE LLC

Earlier this year, Intelsat License, LLC (“Intelsat”) applied for authority to launch the Galaxy 14R and Galaxy 15R, two geostationary orbit (“GSO”) space stations that would operate in the fixed-satellite service (“FSS”) and communicate with earth stations using spectrum that includes the 29.25-29.3 GHz band.¹ Iridium Satellite LLC (“Iridium”), which operates a non-geostationary orbit (“NGSO”) satellite constellation in the mobile-satellite service (“MSS”), uses the 29.25-29.3 GHz band for feeder-link and telemetry, tracking, and control operations on a co-primary basis with FSS operators like Intelsat.

The Commission should deny Intelsat’s application to the extent it seeks authority to operate the Galaxy 15R in the 29.25-29.3 GHz band. Intelsat’s application does not contain even the most basic information about Intelsat’s planned operations in the band, even though that information is required by the Commission’s rules and necessary for Iridium to determine

¹ Intelsat License LLC, Application for Authority to Launch and Operate Galaxy 15R, IBFS File No. SAT-LOA-20170524-00078 (filed May 24, 2017) (the “Galaxy 15R Application”); Intelsat License LLC, Application for Authority to Launch and Operate Galaxy 14R, IBFS File No. SAT-LOA-20170524-00079 (filed May 24, 2017) (the “Galaxy 14R Application”).

whether Intelsat's proposal would be consistent with its obligations as a licensee. If the Commission grants Intelsat's application despite this lack of information, it should at a minimum condition Intelsat's authority to operate in the 29.25-29.3 GHz band on successful coordination with Iridium.

I. BACKGROUND

Iridium and its diverse set of users need reliable access to feeder-link spectrum. As Iridium has explained, more than nine hundred thousand subscribers depend on the Iridium network for mission-critical communications that other systems often cannot provide. Because of its size, mesh architecture, and position in low-Earth orbit, the Iridium constellation is the only network in the world that covers the entire world, and offers latencies that satellites communicating from more distant GSO locations cannot match.

Iridium offers these capabilities reliably and securely, aided by a robust ground infrastructure. That ground infrastructure uses the 29.25-29.3 GHz band to relay every single user communication from feeder-link earth stations to Iridium's space stations. The 29.25-29.3 GHz band also includes failsafe channels that help keep Iridium's dozens of satellites in the sky. Needless to say, even small disruptions to Iridium's feeder-link transmissions can have disastrous effects.

To improve the services available to its customers, Iridium has invested billions of dollars in a second-generation constellation, Iridium NEXT. Since the Commission authorized the new constellation in August 2016, Iridium has already placed thirty Iridium NEXT satellites into orbit, and expects to launch another ten satellites from Vandenberg today. Like Iridium's current constellation, Iridium NEXT also will depend on access to feeder-link

spectrum in the 29.25-29.3 GHz band.

II. THE COMMISSION SHOULD DENY INTELSAT'S APPLICATION

After the Commission accepted the Galaxy 14R Application for filing last August, Iridium urged the Commission to adopt the common-sense license condition that Intelsat successfully coordinate its Galaxy 14R operations with Iridium. Iridium explained that the condition would be appropriate in light of Intelsat's obligation to coordinate with Iridium under the Commission's rules,² and necessary in light of Intelsat's failure to meaningfully describe its proposed services, facilities, and operations, and refusal to provide even basic information about its proposed operations upon Iridium's request.³

The Galaxy 15R Application is just as deficient—and now establishes a pattern of neglect that the Commission should not tolerate. Under the Commission's rules, applicants for space station authorizations must do more than specify technical parameters and provide rote recitations about their plans to launch a communications satellite. They must also describe the proposed system's "facilities, operations and services" with reasonable specificity, and adequately address all relevant "public interest considerations."⁴ On that score, the information provided must be sufficient to support a finding by the Commission "that . . . the proposed facilities and operations comply with all applicable rules, regulations, and policies, and that grant of the application will serve the public interest, convenience, and necessity."⁵

For a satellite that could remain in space for decades—and would share spectrum with a satellite system first launched decades ago—Intelsat's application is woefully inadequate. The

² See 47 C.F.R. §§ 25.258, 25.278; see also *id.* § 25.208(k).

³ Comments of Iridium Satellite LLC, IBFS File No. SAT-LOA-20170524-00079 (filed Sept. 11, 2017) ("Iridium Galaxy 14R Comments").

⁴ 47 C.F.R. § 25.114(d).

⁵ *Id.* § 25.156(a).

rules, regulations, and policies governing the 29.25-29.3 GHz band include Sections 25.208(k), 25.258, and 25.278, which require new GSO FSS licensees to coordinate with existing NGSO MSS licensees like Iridium. And the public interest requires that Iridium's existing operations be protected. Indeed, as explained above, the Iridium network has co-primary rights to use the 29.25-29.3 GHz band, provides mission-critical communications to a large and growing number of users, and is in the process of a \$3 billion upgrade.

Yet Intelsat, instead of explaining what its proposed operations will be and saying anything about how coordination with Iridium might be achieved, summarily dismisses the issue in a footnote that simply says coordination will be required.⁶ Intelsat does not provide even basic information about the services it plans to deliver, and the facilities with which the Galaxy 15R would communicate, which could help Iridium determine how the two systems might successfully co-exist. Instead, Intelsat merely states that the Galaxy 15R will be capable of supporting “various services . . . [d]epending on the needs of users.”⁷ This is the equivalent of saying, “it’s a satellite.” Under the Commission’s rules, this simply is not enough.

Iridium’s users include first responders, U.S. soldiers, and commercial crews that must communicate from the most remote locations on Earth—and in our own neighborhoods when the terrestrial networks we take for granted are inoperable. Neither Iridium nor its users should be required to accept a footnote in an application exhibit as a substitute for meaningful explanation of how essential communications services will be protected.

The threadbare description of Intelsat’s plans for the 29.25-29.3 GHz band is not just deficient. It is also suspicious. Although Intelsat fails to address coordination with Iridium in its

⁶ See Galaxy 15R Application at Engineering Statement p.1 n.2.

⁷ *Id.* at p. 4.

application, it also opposes standard-issue license conditions to protect Iridium.⁸ Meanwhile, in other frequencies, Intelsat provides at least *some* explanation of its approach to co-existence, while also explicitly accepting license conditions to protect virtually *every other user* in shared or adjacent bands.⁹ Moreover, Intelsat has yet to approach Iridium about coordinating 29.25-29.3 GHz band operations, despite urging the Commission to act on its applications quickly because Intelsat “should be able to deploy a replacement satellite in the shortest possible time.”¹⁰ And as discussed, Intelsat rebuffed Iridium’s request for the most basic information about the type of communications planned for the Galaxy replacement satellites.

Finally, it bears noting that Intelsat’s existing Galaxy fleet does not communicate in the 29.25-29.3 GHz band. Thus, the Commission should not excuse the flaws in Intelsat’s application based on Intelsat’s claim of replacement expectancy. The proposed launch and operation of the Galaxy 14R and 15R will not be business as usual, at least with respect to the new frequencies Intelsat has added. Accordingly, Intelsat should be required to describe its plans to comply with newly applicable rules and regulations on the record.

III. CONCLUSION

The FCC should deny Intelsat’s application for authority to operate the Galaxy 15R in the 29.25-29.3 GHz band. At a minimum, the Commission should condition any grant of authority to operate in the 29.25-29.3 GHz band on Intelsat’s successful coordination with Iridium.

⁸ Response of Intelsat, IBFS File No. SAT-LOA-20170524-00079 (filed Sept. 21, 2017).

⁹ Galaxy 15R Application at Legal Narrative pp. 10-11.

¹⁰ *Id.* at Legal Narrative p. 7; *see also* Galaxy 14R Application at Legal Narrative p. 9.

Respectfully submitted,

A handwritten signature in black ink that reads "SCOTT HARRIS". The letters are in all caps and have a casual, slightly slanted appearance.

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December 22, 2017

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**DECLARATION OF SCOTT BLAKE HARRIS IN SUPPORT OF
PETITION TO DENY OF IRIDIUM SATELLITE LLC**

I, Scott Blake Harris, declare under penalty of perjury that the following is true and correct:

1. I am outside counsel to Iridium Satellite LLC.
2. I have read the foregoing "Petition to Deny of Iridium Satellite LLC." I have personal knowledge of any facts alleged therein of which the Federal Communications Commission may not take official notice, and those facts are true and correct to the best of my knowledge, information, and belief.

Executed on December 22, 2017



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CERTIFICATE OF SERVICE

I hereby certify that on December 22, 2017, a copy of the foregoing Petition to Deny of Iridium Satellite LLC was sent by first-class, United States mail to the following:

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/s/ Elizabeth Marley
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