

Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of

Intelsat License LLC

Application to Modify Authorization for
Galaxy 33 (S3015)

File No. SAT-MOD- _____

**APPLICATION OF INTELSAT LICENSE LLC
TO MODIFY AUTHORIZATION FOR GALAXY 33**

Intelsat License LLC (“Intelsat”), pursuant to Section 25.117 of the rules of the Federal Communications Commission (“FCC” or “Commission”),¹ requests approval to modify its authorization for the Galaxy 33 satellite (Call Sign S3015).² On May 10, 2018, the Commission authorized the launch and operation of Galaxy 33—formerly known as Galaxy 15R—a C-band replacement satellite with new Ku- and Ka-band frequencies at the 133.0° W.L. orbital location.³ Galaxy 33 is scheduled to launch Q4 2022. By this modification application, Intelsat seeks to modify the Galaxy 33 authorization to (1) operate in the 19.63-19.7 GHz band and remove and

¹ 47 C.F.R. § 25.117.

² The Commission’s rules permit satellite modification applications in the 3700-4200 MHz band. *See* 47 C.F.R. § 2.106 NG182 (“In the band 3700-4200 MHz ... [a]pplications for extension, cancellation, replacement, or modification of existing space station authorizations in the band will continue to be accepted and processed normally.”).

³ *See Satellite Policy Branch Information, Actions Taken*, Report No. SAT-01314, File Nos. SAT-LOA-20170524-00078 and SAT-AMD-20170613-00086 (May 11, 2018) (Public Notice); *Satellite Policy Branch Information, Actions Taken*, Report No. SAT-01326, File Nos. SAT-LOA-20170524-00078 and SAT-AMD-20170613-00086 (June 29, 2018) (Public Notice) (re-issuing grant conditions to include the clarification to Condition 19 requested by O3b Limited) (“Galaxy 33 Authorization”).

modify conditions related to the surrendered 10.95-11.2 GHz frequency band; (2) operate telemetry, tracking, and command (“TT&C”) anywhere within the 3700-4200 MHz (space-to-Earth) and 5925-6425 MHz (Earth-to-space) bands in 100 kHz steps consistent with the satellite’s tunable design and with the *C-band Order*;⁴ and (3) update information in the Engineering Statement, Schedule S, and .gxt files, including the space station’s beam coverage, deorbit altitude, and reserve propellant.

On May 9, 2022, Intelsat filed a letter surrendering the 10.95-11.2 GHz band on Galaxy 33 and, to the extent necessary and out of an abundance of caution, requesting waiver of Section 25.165(c) of the Commission’s rules. That letter indicated that Intelsat would file this modification application noting the removal of the 10.95-11.2 GHz band, seeking authority to operate in the 19.63-19.7 GHz band and reflecting other design changes.⁵

In accordance with the requirements of the Commission’s rules,⁶ this application has been filed electronically as an attachment to FCC Form 312. Intelsat provides the technical information relating to the proposed modification on Schedule S and in narrative form in the

⁴ Intelsat will operate the Galaxy 33 satellite in accordance with the Commission’s *C-band Order* and Footnote NG182 of the U.S. Table of Frequency Allocations. *See Expanding Flexible Use of the 3.7 to 4.2 GHz Band*, Report and Order and Order of Proposed Modification, 35 FCC Rcd 2343, 2391 ¶ 112 (2020) (“*C-band Order*”); 47 C.F.R. § 2.106 NG182. Following the completion of the FCC’s C-band transition, the Galaxy 33 satellite will provide service in the 3700-4000 MHz band only to earth stations outside the contiguous United States or to Intelsat’s two consolidated TT&C/gateway sites in Brewster, Washington and Andover, Maine. Intelsat has sought reconsideration to allow its continued access to 500 MHz at these consolidated international TT&C/Gateway sites on a protected basis to ensure C-band service continuity to customers on its international C-band satellites. *See Intelsat License LLC Petition for Reconsideration*, GN Docket No. 18-122 (filed May 26, 2020).

⁵ *See Intelsat License LLC, Surrender of 10.95-11.2 GHz band on Galaxy 33 (S3015)*, IBFS File Nos. SAT-LOA-20170524-00078, SAT-AMD-20170613-00086 (filed May 9, 2022).

⁶ 47 C.F.R. § 25.117(b), (c).

attached Engineering Statement. All other information provided previously for the operation of Galaxy 33 remains unchanged and is incorporated by reference.

I. MODIFICATION REQUEST

A. Request to Add 19.63-19.7 GHz and Remove Conditions Pertaining to Surrendered 10.95-11.2 GHz

Intelsat seeks to modify the Galaxy 33 authorization to add operating authority in the 19.63-19.7 GHz band. Intelsat will coordinate its space-to-Earth operations in the 19.63-19.7 GHz band with U.S. Federal systems in accordance with footnote US334 to the United States Table of Frequency Allocations.⁷

In addition, Intelsat asks the Commission to remove or modify as necessary conditions in the original Galaxy 33 authorization that pertain to the surrendered 10.95-11.2 GHz frequency band. Specifically, conditions 6, 7, and 24 of the Galaxy 33 authorization contain references to the 10.95-11.2 GHz frequency band.⁸

B. TT&C Frequencies

Intelsat seeks to modify its authorized provision of TT&C in the C-band for Galaxy 33. Specifically, Intelsat seeks authority to operate two command frequencies and two telemetry frequencies within the 3700-4200 MHz (space-to-Earth) and 5925-6425 MHz (Earth-to-space) bands in 100 kHz steps. The Galaxy 33 design allows Intelsat to select the satellite's TT&C frequencies within the 3700-4200 MHz (space-to-Earth) and 5925-6425 MHz (Earth-to-space) bands in 100 kHz steps, and the satellite has two tunable command receivers and two tunable

⁷ 47 C.F.R. § 2.106 US334.

⁸ See, e.g., *Application of Intelsat License LLC for Authority to Launch and Operate Galaxy 15R, a Replacement Satellite with New Frequencies, at 133.0° W.L.*, IBFS File Nos. SAT-LOA-20170524-00078, SAT-AMD-20170613-00086, Stamp Grant, ¶¶ 6, 7, 24 (reissued June 26, 2018) (reissued to grant Petition for Clarification of O3b Limited).

telemetry transmitters. Intelsat seeks authority to operate TT&C anywhere within these bands consistent with the satellite's design.⁹

C. Technical Changes

Intelsat seeks to modify the Galaxy 33 coverage area, design specifications, and orbital debris plan as described in the attached Engineering Statement and depicted in the .gxt files attached to Schedule S.

Further, Intelsat seeks to deorbit Galaxy 33 at 253.8 km, rather than the previously authorized 280 km. The space station's reserve propellant will be 26.0 kg of hydrazine rather than the authorized 2.0 kg of xenon. These changes conform with the Commission's rules.¹⁰ The updated deorbit plan and other changes to the technical characteristics of the satellite are the result of a change in satellite manufacturer and are described in detail in the attached Engineering Statement.

II. MILESTONE AND BOND REQUIREMENTS

Galaxy 33 is subject to the milestone and bond requirements set forth in Sections 25.164 and 25.165 of the Commission's rules.¹¹ Intelsat currently has a bond in place for the satellite's originally authorized frequencies and accepts a condition requiring Intelsat to modify its bond to include the 19.63-19.7 GHz band for which operating authority is sought in this modification application.

⁹ See Engineering Statement at § 2.3.

¹⁰ 47 C.F.R. § 25.283.

¹¹ *Id.* §§ 25.164 and 25.165.

To the extent necessary, Intelsat seeks a waiver of condition 23 of the Galaxy 33 Authorization.¹² On August 10, 2022, Galaxy 15 suffered an anomaly that resulted in the loss of telemetry and commanding, and the satellite is currently drifting eastward.¹³

Grant of this waiver request is in the public interest. The Commission may grant a waiver for good cause shown.¹⁴ The Commission typically grants a waiver where the particular facts make strict compliance inconsistent with the public interest.¹⁵ In granting a waiver, the Commission may take into account considerations of hardship, equity, or more effective implementation of overall policy on an individual basis.¹⁶ Waiver is therefore appropriate if special circumstances warrant a deviation from the general rule, and such a deviation will serve the public interest.

Good cause exists in this case based on hardship. Due to the technical anomaly, Galaxy 15 was unable to maintain station-keeping at 133.0° W.L.¹⁷ Intelsat is taking all practicable steps to regain control of Galaxy 15, and return the satellite to its licensed location until Galaxy 33 goes into operation at 133.0° W.L. Further, Intelsat has taken steps to ensure no disruption to

¹² Galaxy 33 Authorization at condition 23 (“Galaxy 15R must begin providing service at the 133.0° W.L. orbital location in the 3700-4200 MHz (space-to-Earth) and 5925-6425 MHz (Earth-to-space) frequency bands before the satellite it is replacing, Galaxy 15 (Call Sign S2387), discontinues service at the 133.0° W.L. orbital location.”).

¹³ See Intelsat License LLC, Request for Special Temporary Authority for Galaxy 15, File No. SAT-STA-20220818-00087 (granted Aug. 19, 2022) (“Galaxy 15 STA”).

¹⁴ 47 C.F.R. § 1.3.

¹⁵ *N.E. Cellular Tel. Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990) (“*Northeast Cellular*”).

¹⁶ *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969); *Northeast Cellular*, 897 F.2d at 1166.

¹⁷ See Galaxy 15 STA.

customer service occurs due to this event and Intelsat's Galaxy 15 customers will be transitioned onto Galaxy 33 once Galaxy 33 is placed into service at 133.0° W.L.

III. INTERNATIONAL TELECOMMUNICATION UNION COST RECOVERY

Intelsat is aware that processing fees are currently charged by the International Telecommunication Union ("ITU") for satellite filings, and that Commission applicants are responsible for any and all fees charged by the ITU.¹⁸ Intelsat is aware of and unconditionally accepts this requirement and responsibility to pay any ITU cost recovery fees associated with the ITU filings that the Commission makes on behalf of Intelsat for Galaxy 33, as well as any ITU filings associated with any satellite system for which Intelsat may request authorization at a later date.

IV. GRANT OF THIS APPLICATION WILL SERVE THE PUBLIC INTEREST

Grant of this modification application will serve the public interest by enabling Intelsat to enhance the service offerings of Galaxy 33, including the relocation of C-band customers from Galaxy 15, by incorporating design changes, using more efficient technical parameters, and expanding coverage to serve customers in additional areas visible from the 133.0° W.L. orbital location. This, in turn, will allow Intelsat to meet existing and future customer demands. Specifically, the newly requested 19.63-19.7 GHz band will be used to serve a customer in Alaska, thus providing needed expansion capacity.

V. CONCLUSION

For the reasons set forth above, Intelsat respectfully requests that the Commission grant this modification application.

¹⁸ See *Implementation of ITU Cost Recovery Charges for Satellite Network Filings*, Public Notice, DA 01-2435 (Oct. 19, 2001).

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August 22, 2022

Respectfully submitted,

Intelsat License LLC

By: /s/ W. Ray Rutngamlug

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Exhibit A

FCC Form 312, Response to Question 34: Foreign Ownership

The Commission previously approved Intelsat's ownership structure, including foreign ownership.¹ There have been no material changes to Intelsat's ownership since the *2022 Intelsat Order*.

¹ See *Intelsat S.A., as debtor-in-possession (Transferor) and New TopCo S.A. (Transferee)*, Order, IBFS File No. SAT-ASG-20210826-00117, IB Docket No. 21-375, DA-22-162 (rel. Feb. 16, 2022) ("*2022 Intelsat Order*").

Exhibit B

FCC Form 312, Response to Question 40: Officers, Directors, and Ten Percent or Greater Shareholders

Intelsat License LLC is a Delaware limited liability company. The officers and directors/managers of Intelsat License LLC and Intelsat License LLC, as debtor in possession, are as follows:

Officers:

José Toscano, Deputy Chairman
Michelle Bryan, General Counsel,
Chief Administrative Officer, and
Secretary
Mirjana Hervy, Director, Finance

Board of Managers:

José Toscano
Michelle Bryan

The business address of all Intelsat License LLC officers and members of the Board of Managers is: 7900 Tysons One Place, McLean, Virginia 22102.

Intelsat License LLC is a Delaware limited liability company that is indirectly wholly owned by Intelsat S.A. (formerly named Intelsat Emergence S.A.). Specifically, Intelsat License LLC is wholly owned by Intelsat License Holdings LLC, a Delaware limited liability company. Intelsat License Holdings LLC is wholly owned by Intelsat Ventures S.à r.l., a Luxembourg company, which is in turn wholly owned by Intelsat Alliance LP, a Delaware limited partnership. Intelsat Alliance LP is managed by one general partner (Intelsat Genesis GP LLC, a Delaware limited liability company) and two limited partners (Intelsat Genesis Inc., a Delaware corporation, and Intelsat Jackson Holdings S.A., a Luxembourg company). Intelsat Genesis GP LLC is wholly owned by Intelsat Genesis Inc., which is wholly owned by Intelsat Jackson Holdings S.A. Intelsat Jackson Holdings S.A. is wholly owned by Intelsat Connect Finance S.à r.l., a Luxembourg company, which in turn is wholly owned by Intelsat Envision Holdings LLC, a Delaware limited liability company. Intelsat Envision Holdings LLC is wholly owned by Intelsat (Luxembourg) S.à r.l., a Luxembourg company. Intelsat (Luxembourg) S.à r.l. is wholly owned by Intelsat Investments S.à r.l., a Luxembourg company, which in turn is wholly owned by Intelsat Holdings S.à r.l., a Luxembourg company. Intelsat Holdings S.à r.l. is wholly owned by Intelsat S.A., a Luxembourg company. Each of these entities may be contacted at the following address: 4, rue Albert Borschette, L-1246 Luxembourg.

Pacific Investment Management Company LLC (“PIMCO”), a Delaware limited liability company, serves as the manager or investment advisor for a number of investment funds and other investment vehicles that each hold less than 10% of the voting and non-voting equity interests in Intelsat S.A. However, to the best of Intelsat’s knowledge, as of February 23, 2022, the aggregate total of the voting and non-voting equity interests in Intelsat S.A. held by PIMCO-managed funds and certain parent entities of PIMCO exceeded 10%. Details regarding PIMCO are listed below.

Name:	Pacific Investment Management Company LLC
Address:	650 Newport Center Drive, Newport Beach, CA 92660
Citizenship:	United States, Delaware
Indirect Voting Interest:	Approximately 32.99%
Indirect Non-Voting Interest:	Approximately 32.99%