

Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of

Intelsat License LLC

Amendment to Application for Authority
to Launch and Operate Intelsat 30 at
95.1° W.L.

File Nos. SAT-AMD-2012_____
SAT-LOA-20121025-00187

Call Sign: S2887

Amendment

Intelsat License LLC (“Intelsat”), pursuant to Section 25.116 of the Federal Communications Commission’s (“FCC” or “Commission”) rules,¹ hereby amends the above captioned application seeking authority to launch and operate a C/Ku-band satellite, to be known as Intelsat 30 (Call Sign S2887), at the 95.1° W.L. orbital location. With this amendment, Intelsat seeks to (1) change the requested orbital location from 95.1° W.L. to 95.05° W.L., and remove the request for waiver of Section 25.210(j) of the Commission’s rules; (2) provide related technical updates; and (3) request a waiver of the full frequency reuse requirement in Section 25.210(f) of the Commission’s Rules, 47 C.F.R. § 25.210(f), with respect to the C-band payload of the satellite.

In support of this request, Intelsat attaches hereto a new Schedule S and an amended Engineering Statement. All other information provided in the pending modification application remains unchanged and is incorporated herein by reference.² In accordance with the requirements of Section 25.116(e) of the Commission’s rules, 47 C.F.R. § 25.116(e), this amendment is being filed electronically as an attachment to FCC Form 312.

¹ 47 C.F.R. § 25.116.

² See *Intelsat License LLC, Application for Authority to Launch and Operate Intelsat 30 at 95.1° W.L.*, File No. SAT-LOA-20121025-00187 (Oct. 25, 2012) (“*Intelsat 30 Application*”).

I. REQUEST TO CHANGE ORBITAL LOCATION TO 95.05° W.L.

Intelsat currently has a pending application to launch and operate the Intelsat 30 satellite at the 95.1° W.L. orbital location.³ Intelsat requests amendment of this application to operate Intelsat 30 at 95.05° W.L., with a 0.05° east/west station-keeping box. Accordingly, Intelsat no longer seeks waiver of Section 25.210(j) of the Commission's rules, 47 C.F.R. § 25.210(j), as originally requested.⁴ At 95.05° W.L., Intelsat 30 will be collocated with Intelsat's Galaxy 3C satellite (call sign S2381).⁵

Grant of this amendment will serve the public interest because it will ensure safe station-keeping. In preparing the pending Intelsat 30 application, Intelsat did not identify that the FCC has granted a 17/24 GHz Broadcasting-Satellite Service space station license for the 95.15° W.L. orbital location.⁶ Operation of Intelsat 30 at 95.05° W.L. with a 0.05° east/west station-keeping box as proposed in this amendment will eliminate overlap with the station-keeping box of the 17/24 GHz satellite that is licensed to operate at 95.15° W.L.

Moreover, Intelsat's proposed amendment will not change the nominal orbital location of the Intelsat 30 satellite. Intelsat will operate Intelsat 30 at 95.05° W.L. consistent with relevant international coordination agreements and thus the requested amendment will not adversely

³ *Policy Branch Information; Satellite Space Applications Accepted for Filing*, Report No. SAT-00915, File No. SAT-LOA-20121025-00187 (Nov. 30, 2012) (Public Notice).

⁴ *Intelsat 30 Application* at 3-5.

⁵ A future satellite, Intelsat 31, will be located very close to Intelsat 30 at an exact location to be determined later.

⁶ *See Policy Branch Information; Actions Taken*, Report No. SAT-00805, DA 11-1498, File Nos. SAT-LOA-20090807-00084, SAT-AMD-20100528-00114, SAT -AMD-20100729-00170, SAT-AMD-20110503-00084 (Sept. 2, 2011) (Public Notice) (authorizing Pegasus Development DBS Corporation to operate at the 95.15° W.L. orbital location). Intelsat understands that this authorization has been transferred to Spectrum Five LLC. *Policy Branch Information Actions Taken*, Report No. SAT-00834, DA 12-14, File No. SAT-T/C-20111013-00201 (Jan. 6, 2012) (Public Notice).

affect any party. Accordingly, grant of Intelsat's request to relocate Intelsat 30 to 95.05° W.L. with a 0.05° east/west station-keeping box will serve the public interest.

II. REQUEST FOR TECHNICAL CHANGES

In addition, Intelsat requests amendment of this application to update some of the technical information provided in the Engineering Statement.

- **Request to Modify the Channel Connectivity**

Intelsat requests amendment of this application to modify the channel connectivity in the 13.75 – 14.0 GHz and 11.45 – 11.7 GHz bands. Specifically, Intelsat seeks to permit uplink through the CoBC beam in the 13.75 – 14.0 GHz band with downlink through the Pan Regional beam in the 11.45 – 11.7 GHz band. Additionally, Intelsat requests modification of the Ku-band channels that can operate in the high power mode. These proposed modifications are contained in Exhibits 4A and/or 4B of the attached Engineering Statement.

- **Request to Modify the Downlink Beam Performance**

Intelsat requests amendment of this application to modify beam peak EIRP performance and EIRP budgets for a number of downlink beams. The beam performance and EIRP budgets information for all Intelsat 30 beams, as modified, are contained in Exhibits 5 and 6 of the attached Engineering Statement.

- **Request to Modify the Power Flux Density Calculation**

Intelsat requests amendment of this application to update the power flux density (“PFD”) calculations associated with the Intelsat 30 downlink beams. This update is required as a consequence of the inclusion of the updated downlink beam (EIRP) performance. The updated PFD calculations are contained in Exhibit 10 of the attached Engineering Statement.

- **Request to Modify the Payload and Spacecraft Reliability**

Intelsat requests amendment of this application to provide updated information regarding the predicted payload and spacecraft reliability. The updated reliability factors are contained in Exhibit 1 of the attached Engineering Statement.

- **Request to Modify the Intelsat 30 and Adjacent Satellite Link Budgets**

Intelsat requests amendment of this application to modify the link analysis for Intelsat 30 and the assumed co-frequency adjacent satellites. Such a modification was required as a consequence of the proposed change in the orbital location of Intelsat 30 to 95.05° W.L. The updated link budgets are contained in Exhibits 12, 13 and 14 of the attached Engineering Statement.

- **Request to Modify the Ku-Band Payload Description**

Intelsat requests amendment of this application to provide updated information regarding the description of the Ku-band communication payload. The updated information is provided in section 2.6.3.2 of the attached Engineering Statement.

- **Request to Modify the Beam Contour Patterns**

Intelsat requests amendment of this application to provide updated beam contour patterns of the satellite from the proposed orbital location of 95.05° W.L. The updated information is provided in Exhibits 5A-1 through 5A-25, Exhibits 5B-1 through 5B-6, and Exhibits 5C-1 and 5C-2 of the attached Engineering Statement.

III. REQUEST FOR WAIVER OF SECTION 25.210(f)

Intelsat seeks waiver of the full frequency reuse requirement in Section 25.210(f) of the rules with respect to the C-band payload of the Intelsat 30 satellite. In the pending application, Intelsat explained that it would employ full frequency reuse through the use of orthogonal

polarization within the same beam and/or through the use of spatially isolated beams.⁷ Intelsat seeks to clarify that in the C-band, Intelsat 30 utilizes only one polarization with its uplink and downlink frequency beams; hence, it is not compliant with the provisions of Section 25.210(f).

The Commission may grant a waiver for good cause shown.⁸ The Commission typically grants a waiver where the particular facts make strict compliance inconsistent with the public interest.⁹ 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.¹⁰ Waiver is therefore appropriate if special circumstances warrant a deviation from the general rule, and such a deviation will serve the public interest.

In this case, there is good cause for granting the requested waiver. The full frequency reuse requirements of Section 25.210(f) were designed to ensure that satellites maximize the use of their transponder capacity to benefit the public.¹¹ As described in the attached Engineering Statement, Intelsat 30 will be located in close proximity to Intelsat 31, a future satellite that will operate very close to Intelsat 30. The beam polarization utilized by Intelsat 30 is complementary to that which will be proposed for use by Intelsat 31. When considered in tandem, Intelsat 30 and Intelsat 31 will employ full frequency reuse and are thus compliant with the provisions of Section 25.210(f) of the Commission's rules and the policy of maximizing the use of transponder

⁷ *Intelsat 30 Application*, Engineering Statement at 4.

⁸ 47 C.F.R. §1.3.

⁹ *N.E. Cellular Tel. Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990) (“*Northeast Cellular*”).

¹⁰ *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969); *Northeast Cellular*, 897 F.2d at 1166.

¹¹ *Licensing of Space Stations in the Domestic Fixed-Satellite Service and Related Revisions to Part 25 of the Rules and Regulations*, Report and Order, 54 RR2d 577, ¶ 69 (1983).

capacity. Although, based on the foregoing, a waiver does not seem to be required, Intelsat requests a waiver of Section 25.210(f) of the rules out of an abundance of caution.

IV. CONCLUSION

Based on the foregoing, Intelsat respectfully requests that the Commission grant this amendment application.

Respectfully submitted,

/s/ Susan H. Crandall

Susan H. Crandall
Assistant General Counsel
Intelsat Corporation

Jennifer D. Hindin
Colleen King
WILEY REIN LLP
1776 K Street, N.W.
Washington, DC 20006

December 21, 2012