

Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of

Intelsat License LLC

Application for Authority to Launch and
Operate Intelsat 31 at 95.05° W.L.

File No. SAT-LOA- _____

APPLICATION FOR AUTHORITY TO LAUNCH AND OPERATE
INTELSAT 31 AT 95.05° W.L.

Intelsat License LLC (“Intelsat”), pursuant to Section 25.114 of the Federal Communications Commission’s (“FCC” or “Commission”) rules,¹ hereby applies to launch and operate a C/Ku-band satellite, to be known as Intelsat 31, at the 95.05° W.L. orbital location. Intelsat 31 is scheduled for launch in the third quarter of 2015 and will be collocated with a new satellite, to be known as Intelsat 30 (call sign S2887), which will operate at 95.05° W.L.² The Galaxy 3C satellite (call sign S2381) also operates at 95.05° W.L.;³ however, it is currently expected that this spacecraft will be relocated to another orbital location upon the arrival of Intelsat 31. Intelsat 31 will operate on a non-common carrier basis.⁴

¹ 47 C.F.R. § 25.114.

² See Intelsat License LLC, Application for Authority to Launch and Operate Intelsat 30, File No. SAT-LOA-20121025-00187 (filed Oct. 25, 2012); Intelsat License LLC, Amendment to Application for Authority to Launch and Operate Intelsat 30, File No. SAT-AMD-20121221-00220 (filed Dec. 21, 2012) (“Intelsat 30 Application”).

³ See *Policy Branch Information; Actions Taken*, Report No. SAT-00222, File No. SAT-MOD-20040405-00079 (June 18, 2004) (Public Notice).

⁴ Section 310(b) is not applicable to this license because Intelsat 31, like all other satellites licensed to Intelsat, will operate on a non-common carrier basis. See *Applications of The News Corp. Ltd. and The DIRECTV Group, Inc. (Transferors) and Constellation, LLC, Carlyle*

As demonstrated below, Intelsat is legally and technically qualified to launch and operate its proposed replacement satellite. Moreover, grant of this application will serve the public interest by providing additional capacity to a large Intelsat customer for services to South America. In accordance with the Commission's requirements,⁵ this application has been filed electronically as an attachment to FCC Form 312 and Schedule S.

I. INTELSAT IS QUALIFIED TO HOLD THE REPLACEMENT AUTHORIZATION REQUESTED HEREIN

A. Legal Qualifications

Intelsat is legally qualified to hold the replacement space station authorization requested in this application. The information provided in the attached Form 312 demonstrates Intelsat's compliance with the Commission's basic legal qualifications. In addition, Intelsat already holds multiple Commission satellite licenses, and its "legal qualifications are a matter of record" before the Commission.⁶

B. Technical Qualifications

In the attached Form 312, Schedule S, and Engineering Statement, Intelsat demonstrates that it is technically qualified to hold the authorization requested herein. Specifically, Intelsat provides the information currently required by Section 25.114 of the Commission's rules. In

PanAmSat I, LLC, Carlyle PanAmSat II, LLC, PEP PAS, LLC and PEOP PAS, LLC (Transferees) for Authority to Transfer Control of PanAmSat Licensee Corp., Public Notice, 19 FCC Rcd 15,424, 15,425 (n.5) (Int'l Bur. 2004).

⁵ 47 C.F.R. § 25.114(c).

⁶ *See Constellation, LLC, Carlyle PanAmSat I, LLC, Carlyle PanAmSat II, LLC, PEP PAS, LLC, and PEOP PAS, LLC, Transferors and Intelsat Holdings, Ltd., Transferee, Consolidated Application for Authority to Transfer Control of PanAmSat Licensee Corp. and PanAmSat H-2 Licensee Corp., Memorandum Opinion and Order, FCC 06-85, ¶ 23 (rel. June 19, 2006) ("The Commission previously has determined that PanAmSat and Intelsat are qualified to hold licenses.").*

addition, the Engineering Statement provides information on Intelsat’s compliance with the Commission’s orbital debris mitigation rules.⁷

C. Waiver Requests

Intelsat requests waiver of the following technical rules:

- (1) Section 25.202(a)(1) and Footnote NG52 of the U.S. Table of Allocations.
- (2) Section 25.210(f), which requires that space stations in the fixed satellite service operating in any portion of the 3600–4200 MHz band employ frequency reuse.

Under Section 1.3 of the Commission’s rules, the Commission has authority to waive its rules “for good cause shown.”⁸ Good cause exists if “special circumstances warrant a deviation from the general rule and such deviation will serve the public interest” better than adherence to the general rule.⁹ In determining whether waiver is appropriate, the Commission should “take into account considerations of hardship, equity, or more effective implementation of overall policy.”¹⁰ As shown below, there is good cause for each of the requested technical waivers.

1. Request for Waiver of Footnote 2 of Section 25.202(a)(1) and Footnote NG52 of the U.S. Table of Allocations

Intelsat requests waiver of Footnote 2 of Section 25.202(a)(1) and Footnote NG52 of the U.S. Table of Allocations, which restrict the use of the 11450–11700 MHz band by the non-federal fixed satellite service in the geostationary orbit to international systems only.¹¹ Two of Intelsat 31’s beams that utilize the 11450-11700 MHz band provide coverage to Puerto Rico or

⁷ *Mitigation of Orbital Debris*, Second Report and Order, 19 FCC Rcd 11,567 (2004).

⁸ 47 C.F.R. § 1.3; *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969).

⁹ *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990).

¹⁰ *WAIT Radio*, 418 F.2d at 1159.

¹¹ *See* 47 C.F.R. §§ 25.202(a)(1), fn. 2 and 2.106, fn. NG 52.

the southwest coast of the United States.

Good cause exists to waive the international only requirements for the 11450–11700 MHz frequency band. The purpose of NG52 and footnote 2 of Sections 25.202(a)(1) is to limit the number of the fixed satellite service earth stations with which the co-primary fixed service would need to coordinate.¹² Intelsat will provide services in the 11450–11700 MHz frequency band to small areas within the United States or its territories. Moreover, when such services are domestic (in this frequency band), they would be provided only on a non-interference/non-protected basis, and therefore will not need to coordinate with fixed service stations. Grant of this waiver is consistent with the Commission’s precedent. A waiver of the Table of Allocations is generally granted “when there is little potential interference into any service authorized under the Table of Frequency allocations and when the nonconforming operator accepts any interference from authorized services.”¹³ The International Bureau has found that waiving NG52 and footnote 2 of Section 25.202(a)(1) would not undermine the purpose of the rules if the party seeking a waiver will be utilizing earth stations that are receive-only in these bands and thus “not capable of causing interference into FS stations” operating in the bands.¹⁴ Intelsat satisfies these

¹² See *Satellite Services*, 26 RR 2d 1257, 1263-65. See also *EchoStar KuX Corporation Application for Authority to Construct, Launch and Operate a Geostationary Satellite Using the Extended Ku-band Frequencies in the Fixed-Satellite Service at the 83° W.L. Orbital Location*, Order and Authorization, DA 04-3162, 9 (Int’l Bur., Sept. 30, 2004) (“EchoStar 83° Waiver”).

¹³ See *The Boeing Company*, Order and Authorization, 16 FCC Rcd 22645, 22651 (Int’l Bur. & OET 2001); *Application of Fugro-Chance, Inc. for Blanket Authority to Construct and Operate a Private Network of Receive-Only Mobile Earth Stations*, Order and Authorization, 10 FCC Rcd 2860 (Int’l Bur. 1995) (authorizing MSS in the C-band); see also *Application of Motorola Satellite Communications, Inc. for Modification of License*, Order and Authorization, 11 FCC Rcd 13952-13956 (Int’l Bur. 1996) (authorizing service to fixed terminals in bands allocated the mobile satellite service).

¹⁴ EchoStar 83° Waiver, ¶ 13.

criteria. The earth stations operating in the 11450–11700 MHz band on Intelsat 31 will not transmit in this band. Moreover, when the 11450–11700 MHz band is used for domestic service, *i.e.*, the transmitting and receiving earth stations associated with the specific satellite link are located in the United States or its territories, Intelsat agrees to accept any level of interference into its receiving earth stations from fixed service stations operating in the band. Accordingly, the earth stations operating in this band pose no interference concerns with respect to co-frequency fixed service stations.

Intelsat also agrees to abide by the customer notification requirements that the International Bureau has previously imposed when granting waivers of NG52 and footnote 2 of Section 25.202(a)(1).¹⁵ Intelsat will inform its customers in writing, including any customers receiving end-user services from resellers accessing capacity on Intelsat 31, of the potential for interference from fixed service operations in the 11450-11700 MHz band.

2. 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 31 satellite. Specifically, Intelsat 31 utilizes only one polarization with its uplink and downlink frequency beams; hence, it is not compliant with the provisions of Section 25.210(f).

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.¹⁶ As described in the attached Engineering

¹⁵ See, *e.g.*, *Intelsat North America Request for Waiver*, File No. SAT-MOD-20050610-00122, 3 (stamp grant with conditions Sept. 30, 2005); *EchoStar 83° Waiver*, ¶ 13.

¹⁶ *Licensing of Space Stations in the Domestic Fixed Satellite Service and Related Revisions to Part 25 of the Rules and Regulations*, Report and Order, 54RR2d 577, ¶ 69 (1983).

Statement, Intelsat 31 will be co-located with Intelsat 30, a future Intelsat satellite for which the application for license is currently pending before the Commission. The beam polarization utilized by Intelsat 31 is complementary to that which is proposed for use by Intelsat 30. When considered in tandem, Intelsat 30 and 31 will employ full frequency reuse and are thus compliant with the provisions of Section 25.210(f) of the Commission’s rules and policy of maximizing the use of transponder 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.

D. Operational Frequencies

The following chart shows the frequencies that will be used by the Intelsat 31 and Intelsat 30 satellites at 95.05° W.L., as well as the frequencies that are currently used by the Galaxy 3C satellite at 95.05° W.L.

	Galaxy 3C	IS-30	IS-31
5925 – 6425 MHz	✓		
6425 – 6675 MHz	✓	✓	✓
6675 – 6725 MHz		✓	✓
13750– 14000 MHz	✓	✓	✓
14000 – 14500 MHz	✓	✓	✓
3400 – 3700 MHz		✓	✓
3700 – 4200 MHz	✓		
10950 – 11200 MHz		✓	✓
11450 – 11700 MHz	✓	✓	✓
11700 – 12200 MHz	✓	✓	✓

All of the existing frequencies on Galaxy 3C except for the 5925-6425 MHz and 3700-4200 MHz band are also on Intelsat 31. In addition, Intelsat 31 contains new frequencies at 6675-6725 MHz, 3400-3700 MHz, and 10950-11200 MHz that are not currently on the Galaxy 3C satellite. The 3400-3600 MHz band will not be used in the United States. Intelsat

understands that the band 3650-3700 MHz may only be used in the United States on a secondary basis, except with respect to grandfathered earth stations.

E. Request for Grant Without Milestones or a Bond

The International Bureau should grant this application without imposing milestones¹⁷ or a bond.¹⁸ As explained above, the Intelsat 31 satellite will be collocated at 95.05° W.L. with the Intelsat 30 satellite and will use the same frequencies as Intelsat 31, which include the 6675-6725 MHz, 3400-3700 MHz, and 10950-11200 MHz frequencies.¹⁹ These two satellites were designed to operate together in a complementary fashion. The Intelsat 30 application is currently pending. Upon grant of the Intelsat 30 application, Intelsat will become subject to the milestone and bond posting requirements set forth in Sections 25.164 and 25.165 of the Commission's rules for these new frequencies. There is no public interest justification to impose two bonds for the same frequencies at the same orbital location. Indeed, the FCC has previously declined to impose duplicative bonds.²⁰ Intelsat thus seeks waiver of the bond requirement for the Intelsat 31 satellite, subject to the condition that Intelsat post a bond for the Intelsat 30 satellite.

¹⁷ 47 C.F.R. § 25.164(a).

¹⁸ 47 C.F.R. § 25.165.

¹⁹ See Intelsat 30 Application, supra note 2 at 7-8.

²⁰ See, e.g., *Telesat Canada Petition for Declaratory Ruling for Inclusion of ANIK F3 on the Permitted Space Station List*, Order, 22 FCC Rcd 588, 593-4 (¶ 14).

II. GRANT OF THIS APPLICATION WILL SERVE THE PUBLIC INTEREST

Grant of this application will serve the public interest by ensuring that additional capacity is available to serve the South American region from the nominal 95.05° W.L. orbital location. The Intelsat 31 capacity will allow an Intelsat customer to greatly expand its service offering in the region, for the benefit of consumers. In addition, the excess capacity will ensure that this customer has back-up capacity available in the event it is needed.

III. ITU COST RECOVERY

Intelsat is aware that processing fees are currently charged by the ITU for satellite filings, and that Commission applicants are responsible for any and all fees charged by the ITU.²¹ 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 the satellite proposed in this Application, as well as any ITU filings associated with any satellite system for which Intelsat may request authorization at a later date.

IV. 10950-11200 MHZ, 11450-11700 MHZ, 13750-14000 MHZ, AND 3600-3650 MHZ FREQUENCY BANDS

Intelsat understands that operations in the 10950-11200 MHz, 11450-11700 MHz, 13750-14000 MHz, and 3600-3650 MHz frequency bands are subject to certain limitations and obligations, which Intelsat accepts and will fulfill. Specifically, for operations in the 10950-11200 MHz frequency band, Intelsat accepts the following conditions:

- Operations in the 10.95-11.2 GHz frequency band shall comply with the terms of footnote US211 to the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, US211, which urges applicants for airborne or space station assignments to

²¹ See *Implementation of ITU Cost Recovery Charges for Satellite Network Filings*, Public Notice, DA 01-2435 (Oct. 19, 2001).

take all practicable steps to protect radio astronomy observations in the adjacent bands from harmful interference.

- Operations in the 10.95-11.2 GHz frequency band is limited to international operations in accordance with footnote NG 52 to the United States Table of Frequency Allocations, 47 C.F.R. 2.106, NG 52, and footnote 2 of Section 25.202(a)(1) of the Commission's rules, 47 C.F.R. § 25.202(a)(1).

In the 11450-11700 MHz frequency band, Intelsat accepts the following conditions:

- Intelsat's use of the 11450-11700 MHz band (space-to-Earth) is subject to footnote US211 to the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, US211, which urges applicants for airborne or space station assignments to take all practicable steps to protect radio astronomy observations in the adjacent bands from harmful interference, consistent with footnote US74.

In the 13750-14000 MHz frequency band, Intelsat accepts the following conditions:

- Pursuant to footnote US356 of the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, in the 13750-14000 MHz band (Earth-to-space), receiving space stations in the fixed- satellite service shall not claim protection from radiolocation transmitting stations operating in accordance with the United States Table of Frequency Allocations.
- Pursuant to footnote US337 of the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, any earth station in the United States and its possessions communicating with the Intelsat 31 space station in the 13750-14000 MHz band (Earth-to-space) is required to coordinate through National Telecommunications and Information Administration's ("NTIA") Interdepartment Radio Advisory Committee's (IRAC's) Frequency Assignment Subcommittee ("FAS") to minimize interference to the National Aeronautics and Space Administration Tracking and Data Relay Satellite System, including manned space flight.
- Operations of any earth station in the United States and its possessions communicating with the Intelsat 31 space station in the 13750-14000 MHz band (Earth-to-space) shall comply with footnote US356 to United States Table of Frequency Allocations, 47 C.F.R. § 2.106, which specifies a mandatory minimum antenna diameter of 4.5 meters and a non-mandatory minimum and maximum equivalent isotropically radiated powers (e.i.r.p.). Operations of any earth station located outside the United States and its possessions communicating with the Intelsat 31 space station in the 13750-14000 MHz band (Earth-to-space) shall be consistent with footnote 5.502 to the ITU Radio Regulations, which allows a minimum antenna diameter of 1.2 meters for earth stations of a geostationary satellite orbit network and specifies mandatory power limits.

- Operators of earth stations accessing the Intelsat 31 space station in the 13750-14000 MHz band are encouraged to cooperate voluntarily with the National Aeronautics and Space Administration (NASA) in order to facilitate continued operation of NASA's Tropical Rainfall Measuring Mission (TRMM) satellite.²²

In the 3600-3650 MHz frequency band, Intelsat accepts the following condition:

- The operation of the Intelsat 31 space station in the 3600-3650 MHz band (space-to-space) is limited to international operations in accordance with footnote US 245 to the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, US 245.

V. CONCLUSION

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

Respectfully submitted,

/s/ Susan H. Crandall

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²² NASA's TRMM satellite system radar in the 13.793-13.805 GHz band remains operational and is a highly valuable and visible United States asset with a broad range of international users. Accordingly, NTIA has requested cooperation from the Commission and non-Federal Government entities in providing assistance in reducing interference with the TRMM radar. Specifically, NTIA requests that FSS earth stations in the 13.793 - 13.805 GHz band located south of 39° N. and east of 110° W. operate with emission levels below -150 dBW/600 kHz at the TRMM space station receiver. Letter from Frederick R. Wentland, Acting Associate Administrator, Office of Spectrum Management, NTIA, to Don Abelson, Chief, International Bureau, FCC (February 28, 2002). Considering the secondary nature of the TRMM operation, NTIA's request is not a condition of this authorization. The Commission, however, urges all operators of earth stations accessing the Intelsat 20 space station in the 13.75 - 14.0 GHz band to cooperate voluntarily with NASA in order to facilitate continued operation of the TRMM satellite.

Exhibit A
FCC Form 312, Response to Question 34: Foreign Ownership

The Commission previously approved foreign ownership in Intelsat License LLC (“Intelsat”), in the *Intelsat-Serafina Order*.¹ In December 2009 and October 2011, the Commission also approved *pro forma* changes in Intelsat’s foreign ownership.² There have been no other material changes to Intelsat’s foreign ownership since the date of the *Intelsat-Serafina Order*.

¹ *Intelsat Holdings, Ltd. and Serafina Holdings Limited, Consolidated Application for Consent to Transfer of Control of Holders of Title II and Title III Authorizations*, Memorandum Opinion and Order, 22 FCC Rcd 22,151 (2007).

² See *Intelsat North America LLC, Intelsat LLC, PanAmSat Licensee Corp., PanAmSat H-2 Licensee Corp., and Intelsat New Dawn Company, Ltd., Applications for Pro Forma Transfer of Control*, File Nos. SAT-T/C-20091125-00128, SAT-T/C-20091125-00124, SAT-T/C-20091125-00127, SAT-T/C-20091125-00125, SAT-T/C-20091125-00126, SES-T/C-20091125-01505, SES-T/C-20091125-01502, SES-T/C-20091125-01506, SES-T/C-20091125-01504 and SES-T/C-20091125-01503 (granted Dec. 3, 2009); *Intelsat Application for Pro Forma Transfer of Control*, File Nos. SAT-T/C-20110810-00160, SAT-T/C-20110811-00161, SES-T/C-20110811-00948, SES-T/C-20110812-00963 (granted Oct. 13, 2011), and 0004825139 (granted Oct. 19, 2011).

Exhibit B
FCC Form 312, Response to Question 36: Cancelled Authorizations

Intelsat License LLC (“Intelsat”) has never had an FCC license “revoked.” However, on June 26, 2000, the International Bureau “cancelled” two Ka-band satellite authorizations issued to a former Intelsat entity, PanAmSat Licensee Corp. (“PanAmSat”),³ based on the Bureau’s finding that PanAmSat had not satisfied applicable construction milestones.⁴ In that same order, the Bureau denied related applications to modify the cancelled authorizations. PanAmSat filed an application for review of the Bureau’s decision, which the Commission denied, and subsequently filed an appeal with the United States Court of Appeals for the District of Columbia Circuit, which was dismissed in January 2003 at PanAmSat’s request. Notwithstanding the fact that the Bureau’s action does not seem to be the kind of revocation action contemplated by question 36, Intelsat is herein making note of the decision in the interest of absolute candor and out of an abundance of caution. In any event, the Bureau’s action with respect to PanAmSat does not reflect on Intelsat’s basic qualifications, which are well-established and a matter of public record.

³ All licenses previously held by PanAmSat Licensee Corp. have been assigned to Intelsat License LLC. See IBFS File Nos. SAT-ASG-20101203-00252 (granted Dec. 23, 2010), SES-ASG-20101203-0150 (granted Dec. 20, 2010), and SES-ASG-20101206-01502 (granted Dec. 20, 2010).

⁴ See *PanAmSat Licensee Corp.*, Memorandum Opinion and Order, 15 FCC Rcd 18720 (IB 2000).

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

The officers and directors/managers of Intelsat License LLC are as follows:

Officers:

Michael McDonnell, Chairman
Flavien Bachabi, Deputy Chairman
Michelle Bryan, Secretary
Simon Van De Weg, Director, Finance

Board of Managers:

Michael McDonnell
Flavien Bachabi
Michelle Bryan

The business address of all Intelsat License LLC officers and members of the Board of Managers is:
4 rue Albert Borschette
L-1246 Luxembourg

Intelsat License LLC is a Delaware limited liability company that is wholly owned by Intelsat License Holdings LLC, also a Delaware limited liability company. Intelsat License Holdings LLC is wholly owned by Intelsat Jackson Holdings S.A., a Luxembourg company. Intelsat Jackson Holdings S.A. is wholly owned by Intelsat (Luxembourg) S.A., a Luxembourg company. Intelsat (Luxembourg) S.A. is wholly owned by Intelsat Investments S.A., a Luxembourg company. Intelsat Investments S.A. is wholly owned by Intelsat Holdings S.A., a Luxembourg company. Intelsat Holdings S.A. is wholly owned by Intelsat Investment Holdings S.à r.l., a Luxembourg company. Intelsat Investment 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.

Intelsat S.A.'s ownership was approved by the Commission as part of the *Intelsat-Serafina Order* and the recent Intelsat Pro Forma and is incorporated by reference. *See Intelsat Holdings, Ltd. and Serafina Holdings Limited, Consolidated Application for Consent to Transfer of Control of Holders of Title II and Title III Authorizations*, Memorandum Opinion and Order, 22 FCC Rcd 22,151 (2007) ("*Intelsat-Serafina Order*"); *Intelsat Application for Pro Forma Transfer of Control*, File Nos. SAT-T/C-20110810-00160, SAT-T/C-20110811-00161, SES-T/C-20110811-00948, SES-T/C-20110812-00963 (granted Oct. 13, 2011), and 0004825139 (granted Oct. 19, 2011) ("*Intelsat Pro Forma*"). On May 16, 2012, the International Bureau granted an application to transfer control of Intelsat pursuant to a public offering of newly issued voting shares by Intelsat, subsequent voting share sales by current shareholders and possible private placements of newly issued voting shares. *In the Matter of Intelsat Global Holdings, S.A., Applications to Transfer Control of Intelsat Licenses and Authorizations from BC Partners Holdings Limited to Public Ownership*, Order, DA 12-768 (rel. May 16, 2012). This change of control has not yet been consummated.