

March 3, 2017

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: Application of Intelsat License LLC to Modify Authorization for Intelsat 903
Call Sign: S2407; File No. SAT-MOD-20170131-00010

Dear Ms. Dortch:

Intelsat License LLC (“Intelsat”), at the request of the International Bureau staff, hereby further supplements its above-referenced Application to add information regarding the satellite’s payload. Specifically, the first paragraph on the fifth page of the narrative should now read:

Grant of this modification application to extend the license term will serve the public interest by enabling customers to continue receiving service from Intelsat 903. Extending the license term will also promote the continued efficient use of orbital resources and is consistent with recent decisions by the Commission to extend satellite license terms. There are no single points of failure on Intelsat 903 that would result in an inability to de-orbit the satellite, *and most of the payload is operational.*

Also attached, in its entirety, is a copy of the updated narrative.

Please direct any questions regarding this supplement to the undersigned at (703) 559-6949.

Respectfully submitted,



Cynthia J. Grady
Regulatory Counsel
Intelsat Corporation

cc: Stephen Duall
Kathryn Medley

Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of

Intelsat License LLC

Application to Modify Authorization for
Intelsat 903 (S2407)

File No. SAT-MOD- _____

**APPLICATION OF INTELSAT LICENSE LLC
TO MODIFY AUTHORIZATION FOR INTELSAT 903**

Intelsat License LLC (“Intelsat”), pursuant to Section 25.117 of the rules of the Federal Communications Commission (“Commission” or “FCC”), 47 C.F.R. § 25.117, hereby seeks to modify the authorization for the Intelsat 903 satellite (Call Sign S2407). Specifically, this modification application seeks authority to relocate Intelsat 903 to 31.5° W.L., and to extend its license term for ten additional years,¹ through May 31, 2027.

In accordance with the Commission’s rules,² 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, as contained in the attached Engineering Statement, pursuant to Section 25.114 of the Commission’s rules.³

¹ In 2001, the Commission granted Intelsat waivers of § 25.140(b)(2) (Two-degree Spacing of Satellite Orbit Locations); § 25.202(g) (Telemetry, Tracking and Telecommand Functions); § 25.210(a)(1),(3) (Orthogonal Linear Polarization); § 25.210(i) (Cross-Polarization Isolation); and § 25.211(a) (C-band Downlink Analog Video Transmissions) for Intelsat 903. *See infra* n. 4. Due to the recent changes to the Commission’s Part 25 rules, many of the aforementioned rules are have been altered or are no longer required and, as such, Intelsat does not seek to extend these waivers.

² 47 C.F.R. § 25.117(c).

³ 47 C.F.R. § 25.114.

I. PROPOSED MODIFICATIONS

A. Relocation to 31.5° W.L.

Intelsat requests authority to relocate Intelsat 903 to, and operate the satellite at, 31.5° W.L.⁴ Intelsat 903 is currently operating at 34.5° W.L.⁵ Upon receipt of Commission approval, Intelsat expects to begin drifting Intelsat 903 to 31.5° W.L. on or about August 23, 2017; the drift is expected to take approximately fifteen days. Intelsat will be able to ensure continuity of service at 34.5° W.L., as Intelsat expects to launch Intelsat 35e in the second quarter of 2017 to replace Intelsat 903 at that location prior to Intelsat 903's departure.⁶

During the drift of Intelsat 903, Intelsat will utilize only the satellite's telemetry, tracking, and command ("TT&C") frequencies and will follow industry practices for coordinating TT&C transmission during the relocation process. Intelsat 903's specific TT&C frequencies are as follows:

Uplink:	Downlink:
6173.7 MHz	3947.5 MHz
6176.3 MHz	3948.0 MHz
	3952.0 MHz
	3952.5 MHz

⁴ Because Intelsat 903 is already in-orbit and operating, grant of authority to operate Intelsat 903 at 328.5° W.L. is not subject to milestone conditions and Intelsat is not required to post a bond. As such, waiver of Sections 25.164(a) and 25.165 of the Commission's rules, 47 C.F.R. §§ 25.164(a) & 25.165, is not necessary. *See Intelsat License LLC, Modification Application to Redeploy and Operate Intelsat 16 at 58.1° W.L.*, File No. SAT-MOD-20160201-00009, Condition No. 12 (stamp grant May 18, 2016).

⁵ *See Intelsat LLC, Application to Modify Authorizations to Operate, and to Further Construct, and Launch and Operate C-band and Ku-band Satellites that Form a Global Communications System in Geostationary Orbit*, File No. SAT-MOD-20011221-00139 (stamp grant Mar. 22, 2002).

⁶ *See Intelsat License LLC, Application for Authority to Launch and Operate Intelsat 35e, A Replacement Satellite with New Frequencies, at 34.5° W.L.*, File No. SAT-LOA-20160408-00034 (stamp grant Oct. 5, 2016).

At 31.5° W.L., Intelsat 903 will be co-located with Intelsat 25 (S2804). The chart below illustrates the frequencies that will be used by Intelsat 25 and Intelsat 903 at 31.5° W.L. Intelsat will coordinate the operations of both satellites.

	Intelsat 25	Intelsat 903
3400-3625 MHz	✓	
3625-4200 MHz	✓	✓
5845-5850 MHz	✓	
5850-6425 MHz	✓	✓
6425-6645 MHz	✓	
10950-11200 MHz		✓
11450-11700 MHz	✓	✓
12250-12750 MHz	✓	
13750-14000 MHz ⁷	✓	
14000-14500 MHz	✓	✓

B. Extension of License Term

Intelsat seeks to extend the license term for the Intelsat 903 satellite through May 31, 2027. The Intelsat 903 satellite was placed into service on May 22, 2002.⁸ Pursuant to Sections 25.121(a) and (d)(1) of the Commission’s rules, the license term for Intelsat 903 will expire on

⁷ The Commission’s online records in the International Bureau Filing System (“IBFS”) indicate that the 13750-14000 MHz band is licensed to Intelsat 903. As demonstrated in Table 3.3-1 of Volume II, Annex 1 of Intelsat’s application to launch and operate Intelsat 903, Intelsat did not request authorization to use these frequencies. The Commission’s order granting the application for Intelsat 903 did not include a list of frequencies on which Intelsat 903 would be authorized to operate. See *Applications of Intelsat LLC for Authority to Operate, and to Further construct, Launch, and Operate C-band and Ku-band Satellites that Form a Global Communications System in Geostationary Orbit*, Memorandum Opinion and Order, 15 FCC Rcd 15460 (2000). Intelsat concludes that the inclusion of 13750-14000 MHz on IBFS was a clerical error.

⁸ See Letter from Jennifer D. Hindin, Counsel for Intelsat LLC, to Marlene H. Dortch, FCC, File No. SAT-LOA-2000119-00021 (filed May 23, 2002).

May 22, 2017.⁹ This expiration date is well before the expected end of service life, which was most recently estimated to be June 2018, assuming no inclined orbit operation; inclined orbit operation would extend Intelsat 903's expected end of service life into mid-2027. In order to accommodate the planned inclined orbit operation of Intelsat 903, Intelsat is requesting that the license term be extended through May 31, 2027. To the extent the satellite's projected end of service life is extended in the future, Intelsat will seek an additional license term.

II. PUBLIC INTEREST SHOWING

Grant of this modification application to relocate and extend the license term of Intelsat 903 is in the public interest because it will allow Intelsat to provide additional capacity at the 31.5° W.L. location and continue providing service on the satellite well beyond the current license term's May 22, 2017 expiration date. Further, grant of this application will not impact continuity of service at Intelsat 903's current location, as Intelsat has already received authority to launch a replacement satellite at this location prior to Intelsat 903's departure.¹⁰

Grant of this relocation request will not result in increased risk of harmful interference. As noted above, Intelsat will operate only at the above listed TT&C frequencies during the drift, and will coordinate its TT&C transmissions with operators of satellites in the drift path. Should any interference occur during the drift, Intelsat will take all reasonable steps to eliminate such interference. Intelsat will operate Intelsat 903's communications payload and TT&C frequencies at 31.5° W.L. in conformance with existing coordination agreements and the FCC's rules governing operations vis-à-vis adjacent locations.

⁹ 47 C.F.R. §§ 25.121(a)(1) & (d)(1).

¹⁰ See note 6, *supra*.

Grant of this modification application to extend the license term will serve the public interest by enabling customers to continue receiving service from Intelsat 903. Extending the license term will also promote the continued efficient use of orbital resources and is consistent with recent decisions by the Commission to extend satellite license terms.¹¹ There are no single points of failure on Intelsat 903 that would result in an inability to de-orbit the satellite. Additionally, the satellite's TT&C functions are operating nominally, and most of the payload is operational.

As outlined in the attached Orbital Debris Mitigation Plan, Intelsat intends to dispose of the spacecraft by moving it 283.3 kilometers above the geostationary arc.¹² Intelsat has reserved 47.7 kilograms of fuel for this purpose.¹³

III. INTELSAT ACCEPTS SECTION 316 PETITION CONDITIONS

Intelsat understands and accepts that its license to operate Intelsat 903 at 31.5° W.L. will be conditioned as follows:

- (a) Intelsat shall remain a signatory to the Public Services Agreement between Intelsat and the International Telecommunications Satellite Organization ("ITSO") that was approved by the ITSO Twenty-fifth Assembly of Parties, as amended.
- (b) No entity shall be considered a successor-in-interest to Intelsat under the ITSO Agreement for licensing purposes unless it has undertaken to perform the obligations

¹¹ See e.g., *Policy Branch Information; Actions Taken*, Report No. SAT-01156, File No. SAT-MOD-20160219-00019 (May 6, 2016) (Public Notice) (granting license extension for Intelsat 1R, a station-kept satellite, based on the satellite's current projected end of service including future inclination).

¹² See Engineering Statement at 6.

¹³ *Id.*

of the Public Services Agreement approved by the Twenty-fifth Assembly of Parties, as amended.¹⁴

IV. 3600-3650 MHz, 3650-3700 MHz, 5850-5925 MHz, 10950-11200 MHz, AND 11450-11700 MHz FREQUENCY BANDS

Intelsat understands that operations in the 3600-3650 MHz, 3650-3700 MHz, 5850-5925 MHz, 10950-11200 MHz, and 11450-11700 MHz frequency bands are subject to certain limitations and obligations, which Intelsat accepts and will fulfill. Specifically, for operation in the 3600-3650 MHz frequency band, Intelsat accepts the following conditions:

- The operation of the Intelsat 903 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, which states that the 3600-3650 MHz use of the non-Federal fixed-satellite service is limited to international inter-continental systems and is subject to case-by-case electromagnetic compatibility analysis.

In the 3650-3700 MHz frequency band, Intelsat accepts the following conditions:

- Intelsat's use of the 3650-3700 MHz (space-to-Earth) band is subject to footnote NG185 of the United States Table of Frequency Allocations, 47 C.F.R. § 2.106 NG185, which states that the 3650-3700 MHz use of the non-Federal fixed-satellite service is limited to international inter-continental systems.

In the 5850-5925 MHz frequency band, Intelsat accepts the following conditions:

- Intelsat's use of the 5850-5925 MHz band (Earth-to-space) is subject to footnote US245 of the United States Table of Frequency Allocations, 47 C.F.R. §2.106, US245, which states that the 5850-5925 MHz use of the non-Federal fixed-satellite service is limited to international inter-continental systems and is subject to case-by-case electromagnetic compatibility analysis. Intelsat shall not claim protection from radiolocation transmitting stations operating in accordance with footnote G2.

In the 10950-11200 MHz frequency band, Intelsat accepts the following conditions:

- Operations in the 10950-11200 MHz 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

¹⁴ See *Petition of the Int'l. Telecomms. Satellite Org. under Section 316 of the Commc 'ns Act, as Amended*, Order of Modification, 23 FCC Rcd 2764, 2769-71 ¶¶ 11-13 (Int'l Bur. 2008).

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

- Operations in the 10950-11200 MHz 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.

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

- 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.

V. CONCLUSION

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

Intelsat License LLC

By: /s/ Susan H. Crandall

Susan H. Crandall
Associate General Counsel
Intelsat Corporation

Jennifer D. Hindin
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(202) 719-7000

January 31, 2017

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 22151 (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”),¹ based on the Bureau’s finding that PanAmSat had not satisfied applicable construction milestones.² 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.

¹ 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).

² 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:

Jacques Kerrest, Chairman
Franz Russ, Deputy Chairman
Michelle Bryan, Secretary
Mirjana Hervy, Director, Finance

Board of Managers:

Jacques Kerrest
Franz Russ
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 fully consummated.