

Before the  
**Federal Communications Commission**  
Washington, DC 20554

In the Matter of

Intelsat License LLC

Application to Modify Authorization for  
Intelsat 904 (S2408)

File No. SAT-MOD- \_\_\_\_\_

**APPLICATION OF INTELSAT LICENSE LLC**  
**TO MODIFY AUTHORIZATION FOR INTELSAT 904**

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 904 satellite (Call Sign S2408). Specifically, this modification application seeks authority to relocate Intelsat 904 to, and operate the satellite at, 45.1° E.L., pursuant to the International Telecommunication Union filing of the German Administration held by EUROPE\*STAR Gesellschaft für Satellitenkommunikation mbH (“Europe\*Star”), a joint venture that is 51 percent owned by a sister entity of Intelsat – PanAmSat Europe Corporation (“PanAmSat Europe”).<sup>1</sup> Intelsat requests that the Commission

---

<sup>1</sup> PanAmSat Europe is a Delaware company that is wholly owned by Intelsat Corporation. Certain members of the Shulte-Hillen family and other entities own the remaining 49 percent of Europe\*Star. The German representative of the Schulte-Hillen family is Beatrix von Wietersheim. The managing directors of Europe\*Star are Sajid Ajmeri and Mike Green. The officers and directors of PanAmSat Europe are: Kurt Riegelman – Director and Chairman, President & COO, Stephen Chernow – Director and VP & General Counsel, Mike Green – Director and VP & Controller, Henry Heuer, VP, Treasury and Tax, & Treasurer, and Sajid Ajmeri – VP & Secretary. Intelsat incorporates by reference the New Slot Usage Agreement between Europe\*Star and PanAmSat Europe previously filed with the FCC. *See Policy Branch Information; Actions Taken*, Report No. SAT-00476, File No. SAT-STA-20061102-00128 (Oct. 12, 2007) (Public Notice) (granting STA request to drift Intelsat 601 from 63.65° E.L. to 47.5°

state its non-objection to the use of Intelsat 904 to operate against the ITU filings of the German Administration for the nominal 45° E.L. orbital location. In addition, this modification application seeks to extend the license term for Intelsat 904, and extend all previously granted waivers, through December 31, 2019.

In accordance with the requirements of the Commission's rules,<sup>2</sup> 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.<sup>3</sup>

## **I. PROPOSED MODIFICATIONS**

### **A. Relocation to 45.1° E.L.**

Intelsat requests authority to relocate Intelsat 904 to, and operate the satellite at, 45.1° E.L. Intelsat 904 is currently operating at 60.0° E.L.<sup>4</sup> Intelsat has filed a Special Temporary Authority ("STA") request for 180 days, commencing December 1, 2016, to drift Intelsat 904 to, and operate the satellite temporarily at, 45.0° E.L. for the purpose of traffic transfer, before

---

E.L.). Intelsat expects shortly to receive a copy of the German authorization to Europe\*Star for use of the nominal 45° E.L. orbital location and will file it as a supplement to this application, translated into English for the Commission's convenience.

<sup>2</sup> 47 C.F.R. § 25.117(c).

<sup>3</sup> *Id.* § 25.114.

<sup>4</sup> *See* Intelsat LLC, Application to Modify Authorizations to Operate, and to Further Construct, Launch, and Operate C-band and Ku-band Satellites that Form a Global Communications System in Geostationary Orbit, File No. SAT-MOD-20011221-00140 (stamp grant, Mar. 22, 2002).

drifting it to 45.1° E.L.<sup>5</sup> At 60.0° E.L., Intelsat 904 will be replaced by the Intelsat 33e satellite (call sign S2939), which is scheduled for launch in the third quarter of 2016.<sup>6</sup>

Intelsat 904 is being redeployed to the nominal 45° E.L. orbital location in order to provide continuity of service to customers currently on Intelsat 12, which is currently authorized by the United Kingdom. Intelsat 12 is expected to be de-orbited in late 2017. Intelsat 904 is expected to arrive at 45.1° E.L. in January 2017. Galaxy 11 (call sign S2253) will be relocated to the nominal 45° E.L. orbital location later this year as well.<sup>7</sup>

During the drift of Intelsat 904, Intelsat will utilize only the satellite's TT&C frequencies and will follow industry practices for coordinating TT&C transmission during the relocation process. Intelsat 904'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

The specific communications frequencies associated with the satellites currently or planned for operation at the nominal 45° E.L. orbital locations are as follows:

---

<sup>5</sup> Request for Special Temporary Authority to Drift Intelsat 904 to, and Operate at, 45.0° E.L. and 45.1° E.L.; Call Sign: S2408; File No. SAT-STA-20160722-00065 (filed July 22, 2016).

<sup>6</sup> *Policy Branch Information; Actions Taken*, Public Notice, Report No. SAT-01139, DA 16-205, File No. SAT-LOA-20150327-00016 (Feb. 26, 2016).

<sup>7</sup> Intelsat has filed an application for authority to relocate Galaxy 11 to 44.9° E.L. *See* Application to Modify Authorization for Galaxy 11 (S2253), File No. File No. SAT-MOD-20160803-00077 (filed Aug. 3, 2016); *see also* *Policy Branch Information; Actions Taken*, Public Notice, Report No. SAT-01172, SAT-STA-20160623-00059 (Jul. 8, 2016) (seeking STA to relocate Galaxy 11 to 44.9° E.L.).

	<b>Intelsat 12 @ 45.0 EL</b>	<b>Galaxy 11 @ 44.9 EL</b>	<b>Intelsat 904 @ 45.1 EL</b>
3625-3700 MHz			✓
3700-4200 MHz		✓	✓
5850-5925 MHz			✓
5925-6425 MHz		✓	✓
6425-6650 MHz			
10950 -11200 MHz		✓	✓
11450 -11700 MHz	✓		✓
11700 -12200 MHz		✓	
12500 - 12750 MHz	✓		
13750-14000 MHz		✓	
14000 -14500 MHz	✓	✓	✓

**B. Extension of License Term**

Intelsat seeks to extend the license term for the Intelsat 904 satellite for just under three years through December 31, 2019. The Intelsat 904 satellite was launched in 2002.<sup>8</sup> The current license term for Intelsat 904 will expire on March 27, 2017.<sup>9</sup> That expiration date is well before the expected end of service life of the satellite, which was most recently estimated to be December 2019.

**II. PUBLIC INTEREST SHOWING**

Grant of this modification application to relocate and extend the license term of Intelsat 904 is in the public interest because it will allow Intelsat to provide additional capacity at 45.1° E.L. and continue providing service well beyond the current license term’s March 27, 2017 expiration date.

<sup>8</sup> See Letter from Jennifer D. Hindin, Attorney for Intelsat LLC, to Mr. William Caton, FCC, File No. SAT-LOA-20000119-00022 (filed Feb. 27, 2002).

<sup>9</sup> See *supra* n. 4.

Grant of this relocation request and Intelsat's prior STA request will not result in increased risk of harmful interference. As noted above, Intelsat will operate only the above listed TT&C frequencies during the drift, except during the drift from 45.0° E.L. and 45.1° E.L. pursuant to STA, 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's communications payload and TT&C frequencies at 45.1° E.L. in conformance with existing coordination agreements and the FCC's rules governing operations vis-à-vis adjacent locations.

Grant of the license term extension request will serve the public interest by enabling customers to continue receiving service from an operational satellite with three years of useful life remaining beyond the current license term expiration date. There are no single points of failure on Intelsat 904 that would result in an inability to de-orbit the satellite. Additionally, the satellite's TT&C functions are operating nominally. Moreover, as explained in the Engineering Statement, Intelsat expects to dispose of Intelsat 904 by moving it to a planned minimum altitude of 150 kilometers above the geostationary arc, and has reserved 52.8 kilograms of fuel for this purpose.<sup>10</sup> Extending the license term will promote the continued efficient use of orbital resources and is consistent with past decisions by the Commission to extend satellite license terms.<sup>11</sup>

---

<sup>10</sup> See Engineering Statement at 7.

<sup>11</sup> See, e.g., *Policy Branch Information; Actions Taken*, Public Notice, Report No. SAT-00905, DA 12-1680, File No. SAT-MOD-20120629-00109 (Oct. 19, 2012) (extending license terms of an SES satellite for an additional five years); *Policy Branch Information; Actions Taken*, Public Notice, Report No. SAT-00664, DA 10-236, File No. SAT-MOD-20091119-00123 (Feb. 5, 2010) (extending license term of Sirius XM satellites for an additional seven years).

### **III. REQUEST FOR TECHNICAL WAIVERS**

Intelsat requests that the waivers previously granted for Intelsat 904 be extended to Intelsat 904 at 45.1° E.L and to Intelsat 904's extended license term. Specifically, Intelsat requests continued waiver of Sections 25.202(g), 25.210(a)(1), 25.210(a)(3), 25.210(i)(1), and 25.211(a), for the reasons previously stated.<sup>12</sup>

In addition, to the extent necessary, Intelsat requests a waiver of Section 2.106, footnote US245, which limits use of 3625-3650 MHz and 5850-5925 MHz to international inter-continental systems, and footnote NG185, which limits use of 3650-3700 MHz to international inter-continental systems, and Section 25.140(a), which requires an interference analysis to show compatibility of a proposed FSS system with respect to authorized space stations within two degrees of the proposed orbital location.

Under Section 1.3 of the Commission's rules, the Commission has authority to waive its rules "for good cause shown."<sup>13</sup> 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.<sup>14</sup> In determining whether waiver is appropriate, the Commission should "take into account considerations of hardship, equity, or more effective implementation of overall policy."<sup>15</sup>

---

<sup>12</sup> See Application of Intelsat LLC to Modify Intelsat 904 License, File No. SAT-MOD-20011221-00140 (stamp grant, Mar. 22, 2002), Attachment; *Applications of Intelsat LLC for Authority to Operate and Further Construct, Launch, and Operate C-Band and Ku-Band Satellites that Form a Global Communications System in Geostationary Orbit*, 15 FCC Rcd 15460, 15529 (Appendix C)(2000)(Memorandum Opinion and Order and Authorization), recon. denied, 15 FCC Rcd 25234(2000)(Order on Reconsideration).

<sup>13</sup> 47 C.F.R. § 1.3; *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969).

<sup>14</sup> *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990).

<sup>15</sup> *WAIT Radio*, 418 F.2d at 1159.

To the extent footnotes US245 or NG185 of Section 2.106 would limit use of these bands to international inter-continental operations, Intelsat seeks waiver. The international inter-continental requirement was intended to limit use of these bands by FSS in the U.S. to encourage other uses, including terrestrial operations.<sup>16</sup> Waiver is warranted here because at 45.1° E.L., Intelsat 904 will not serve the United States. As such, no domestic operations in the 3625-3700 MHz and 5850-5925 MHz bands are affected by Intelsat 904.

Intelsat also seeks waiver of the requirement in existing Section 25.140(a) to provide a two-degree interference analysis for the C-band transmissions on the Intelsat 904 satellite. As explained in the technical narrative, the Intelsat 904 transmissions in C-band will comply with the levels contained in Sections 25.212(c) and (d) and Section 25.140(a)(3)(i) and (ii) of the Commission's rules, as modified pursuant to the 2015 Part 25 Streamlining Order,<sup>17</sup> unless higher levels are coordinated with affected adjacent satellite operators within  $\pm 6^\circ$ . The same public interest rationales for modification of Section 25.140(a) as part of the 2015 Part 25 Streamlining Order justify a waiver of the rule in this case.<sup>18</sup>

#### **IV. REQUEST FOR GRANT WITHOUT A BOND**

Intelsat seeks a waiver to the milestone and bond posting requirements set forth in Sections 25.164 and 25.165 of the Commission's rules<sup>19</sup> for all of the frequencies on the Intelsat 904 satellite, which are not currently on a FCC-licensed satellite at the nominal 45° E.L. orbital

---

<sup>16</sup> See *Wireless Operations in the 3650-3700 MHz Band*, Report and Order and Memorandum Opinion and Order, 20 FCC Rcd 6502, 6510 ¶ 22 (2005).

<sup>17</sup> *Comprehensive Review of Licensing and Operating Rules for Satellite Services*, Second Report and Order, 30 FCC Rcd 14713, 14755 (2015) ("2015 Part 25 Streamlining Order").

<sup>18</sup> *Id.* at 14754-55. See also Application to Launch and Operate Intelsat 33e, a Replacement Satellite With New Frequencies, File No. SAT-LOA-20150327-00016, Stamp Grant, ¶ 6 (Feb. 25, 2016) (waiving Section 25.210(i)(1)'s cross-polarization requirement based on modified Part 25 rules adopted in 2015 Part 25 Streamlining Order).

<sup>19</sup> 47 C.F.R. §§ 25.164 and 25.165.

location.<sup>20</sup> The Commission should grant this application without imposing milestones or a bond because Intelsat 904 is already in-orbit and, as such, there is no risk of warehousing. Indeed, the Commission has granted similar applications for in-orbit satellites without imposing milestones or a bond.<sup>21</sup>

**V. CONDITIONS RELATED TO FREQUENCIES AND ORBITAL LOCATIONS TRANSFERRED AT INTELSAT PRIVATIZATION**

Intelsat assumes that the conditions specified in the *Intelsat 316 Order of Modification*<sup>22</sup> will no longer apply to the requested authorization for the Intelsat 904 satellite (Call Sign S2408) at the 45.1° E.L. orbital location.

**VI. 11.45-11.7 GHZ FREQUENCY BAND**

Intelsat understands that operations in the 11.45-11.7 GHz frequency band are subject to certain limitations and obligations, which Intelsat accepts and will fulfill.

Specifically, Intelsat accepts the following condition:

- Intelsat's use of the 11.45-11.70 GHz 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.

---

<sup>20</sup> Intelsat understands that when the recently adopted modified milestone and bond requirements come into force, the FCC will apply them to pending space station applications, such as this one. 2015 Part 25 Streamlining Order at 14825 (¶ 363).

<sup>21</sup> See *Policy Branch Information; Actions Taken*, Report No. SAT-00541, File No. SAT-MOD-20080225-00051 (July 25, 2008) (Public Notice); See *Policy Branch Information; Actions Taken*, Report No. SAT-00561, File No. SAT-MOD-20080725-00150 (Oct. 24, 2008) (Public Notice).

<sup>22</sup> *Petition of the International Telecommunications Satellite Organization under Section 316 of the Communications Act, as Amended*, Order of Modification, 23 FCC Rcd 2764 (2008).



**VII. 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  
Colleen King  
WILEY REIN LLP  
1776 K Street, N.W.  
Washington, D.C. 20006  
(202) 719-7000

August 5, 2016

**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*.<sup>1</sup> In December 2009 and October 2011, the Commission also approved *pro forma* changes in Intelsat’s foreign ownership.<sup>2</sup> There have been no other material changes to Intelsat’s foreign ownership since the date of the *Intelsat-Serafina Order*.

---

<sup>1</sup> *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).

<sup>2</sup> *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”),<sup>1</sup> based on the Bureau’s finding that PanAmSat had not satisfied applicable construction milestones.<sup>2</sup> 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.

---

<sup>1</sup> 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).

<sup>2</sup> See *PanAmSat Licensee Corp.*, Memorandum Opinion and Order, 15 FCC Rcd 18720 (IB 2000).

**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, 27 FCC Rcd 5226 (2012). This change of control has not yet been fully consummated.