

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

In the Matter of  
Intelsat License LLC  
Application to Modify Authorization for  
Intelsat 1R (S2368)

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

**APPLICATION OF INTELSAT LICENSE LLC**  
**TO MODIFY AUTHORIZATION FOR INTELSAT 1R**

Intelsat License LLC (“Intelsat”), pursuant to Section 25.117 of the rules of the Federal Communications Commission (“Commission” or “FCC”),<sup>1</sup> hereby seeks to modify the authorization for the Intelsat 1R satellite (Call Sign S2368). Specifically, this modification seeks authority to permanently maintain and continue to operate Intelsat 1R at 157.1° E.L. Intelsat 1R’s current licensed location is 50.1° W.L.,<sup>2</sup> and the satellite is operating at 157.1° E.L. pursuant to Special Temporary Authority (“STA”).<sup>3</sup> At this location, Intelsat 1R will continue to provide services in the C- and Ku-band frequencies.

In accordance with the Commission’s rules, this application has been filed electronically as an attachment to FCC Form 312.<sup>4</sup> Intelsat provides the technical information relating to the

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<sup>1</sup> 47 C.F.R. § 25.117.

<sup>2</sup> See *Policy Branch Information; Actions Taken*, Public Notice, Report No. SAT-01156, IBFS File No. SAT-MOD-20160219-00019 (May 6, 2016).

<sup>3</sup> See *Policy Branch Information; Actions Taken*, Public Notice, Report No. SAT-01263, IBFS File No. SAT-STA-20170626-0100 (Aug. 25, 2017).

<sup>4</sup> 47 C.F.R. § 25.117(b), (c).

proposed modification on Schedule S and in narrative form in the attached Engineering Statement.<sup>5</sup>

**I. MODIFICATION FOR PERMANENT LOCATION AT 157.1° E.L.**

Intelsat requests authority to permanently locate and continue to operate Intelsat 1R at 157.1° E.L. Intelsat 1R is authorized to operate at 157.1° E.L. pursuant to STA, and its licensed location is 50.1° W.L.<sup>6</sup> Intelsat 1R is currently co-located at nominal 157° E.L. with both Intelsat 5 at 156.9° E.L.,<sup>7</sup> and with Telkom-2 at 157.0° E.L.<sup>8</sup>

Intelsat 1R currently uses pursuant to STA—and will continue to use on a permanent basis upon Commission approval—the following C- and Ku-band frequencies at 157.1° E.L.:

- 3700-4200 MHz (space-to-Earth)
- 5925-6425 MHz (Earth-to-space)
- 10950-11200 MHz (space-to-Earth)
- 11450-11950 MHz (space-to-Earth)
- 13750-14500 MHz (Earth-to-space)

The specific Intelsat 1R telemetry, tracking, and command (“TT&C”) frequencies are as follows:

Uplink:

- 13995 MHz (H and V)
- 14498.5 MHz (LHCP)

Downlink:

- 11696 MHz (H, V, and LHCP)
- 11697 MHz (H, V, and LHCP)

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<sup>5</sup> See 47 C.F.R. § 25.114.

<sup>6</sup> See *supra* notes 2, 3.

<sup>7</sup> See *Policy Branch Information; Actions Taken*, Public Notice, Report No. SAT-01236, IBFS File No. SAT-MOD-20170331-00057 (May 5, 2017).

<sup>8</sup> See *Intelsat License LLC*, Stamp Grant, Call Sign S2988, IBFS File No. SAT-LOA-20170124-00009 (Nov. 30, 2017).

The frequencies in use at nominal 157 E.L. by Intelsat 1R, Intelsat 5, and Telkom-2 are reflected in the chart below:

	<b>Intelsat 1R</b>	<b>Intelsat 5 <sup>9</sup></b>	<b>Telkom-2</b>
3700-4200 MHz	✓	✓	✓
5925-6425 MHz	✓	✓	✓
10700-10950 MHz			
10950-11200 MHz	✓		
11200-11450 MHz			
11450-11700 MHz	✓	✓	
11700-11950 MHz	✓		
12750-13250 MHz			
13750-14000 MHz	✓		
14000-14250 MHz	✓	✓	
14250-14500 MHz	✓		

## **II. PUBLIC INTEREST SHOWING**

Grant of this modification application to permanently operate Intelsat 1R at 157.1° E.L. will serve the public interest by enabling Intelsat to continue providing service to customers at the 157.1° E.L. orbital location.

Grant of this request will not result in an increased risk of harmful interference, as Intelsat 1R is already located and operating at 157.1° E.L. Intelsat will continue to operate the Intelsat 1R satellite's communications payload and TT&C frequencies in conformance with Intelsat's coordination agreements with existing geostationary space stations for this orbital location.

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<sup>9</sup> In addition, the frequencies 13999 MHz and 14498 MHz are used for telecommand. Intelsat does not use the satellite's FSS plan band frequencies of 12750-13250 MHz, 10700-10950 MHz, or 11200-11450 MHz at 157.0° E.L. at this time.

### **III. WAIVERS**

Intelsat requests that certain waivers previously granted to Intelsat 1R at 50.1° W.L. be extended to the satellite at 157.1° E.L. Specifically, Intelsat requests that the previously-granted waivers of (i) Section 2.106, footnote NG52, of the Commission's rules, which restricts the use of the 10950-11200 MHz and 11450–11700 MHz bands by non-federal fixed satellite service in the geostationary orbit to international systems only, and (ii) Sections 25.283(c) and 25.114(d)(14)(ii) requiring demonstration that all stored energy will be vented at the satellite's end of life, be extended for the reasons set forth in the previous grant.<sup>10</sup>

### **IV. ORBITAL DEBRIS STATEMENT**

Intelsat has assessed and limited the probability of the Intelsat 1R space station becoming a source of debris due to collision with large debris or other operational space stations at 157.1° E.L. Intelsat 1R is neither located at the same orbital location nor have an overlapping station-keeping volume with any other satellite. Further, Intelsat is not aware of any other FCC licensed system, or any other system applied for and under consideration by the FCC, having an overlapping station-keeping volume with Intelsat 1R at 157.1° E.L. Finally, Intelsat is not aware of any system with an overlapping station-keeping volume with Intelsat 1R that is the subject of an ITU filing and that is either in orbit or progressing towards launch.

Intelsat has reserved 30.035 kilograms of xenon and expects to obtain a de-orbit altitude for the Intelsat 1R satellite of 300 kilometers above the geostationary arc.<sup>11</sup> Intelsat employs standard industry methods, in cooperation with the satellite manufacturer, to account for and

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<sup>10</sup> See Intelsat License LLC, Stamp Grant, IBFS File No. SAT-MOD-0160219-00019, Conditions 11, 12, 14 (granted May 5, 2016).

<sup>11</sup> See Application of Intelsat License LLC, IBFS File No. SAT-AMD-20091113-00122 (filed Nov. 13, 2009); *Policy Branch Information; Actions Taken*, Public Notice, Report No. SAT-00713, IBFS File No. SAT-AMD-20091113-00122 (Aug. 6, 2010) (granting Intelsat License LLC's amended application).

calculate remaining xenon. Although unlikely, it is possible that despite Intelsat's best efforts the Intelsat 1R spacecraft will not meet the planned 300 kilometer de-orbit altitude. However, the FCC declared that satellites launched prior to March 18, 2002, such as Intelsat 1R, would be designated as grandfathered satellites not subject to a specific disposal altitude.<sup>12</sup> Therefore, the Intelsat 1R planned disposal orbit complies with the FCC's rules.

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

Intelsat assumes that the following two conditions specified in the *Intelsat 316 Order of Modification*<sup>13</sup> will apply to the requested authorization for the Intelsat 1R satellite to use the 157.1° E.L. orbital location and associated C- and Ku-band frequencies transferred to the United States at privatization:

- (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; and
- (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 of the Public Services Agreement approved by the Twenty-fifth Assembly of Parties, as amended.<sup>14</sup>

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<sup>12</sup> See *Mitigation of Orbital Debris*, Second Report and Order, 19 FCC Rcd. 11567, 11600-01 (2004).

<sup>13</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).

<sup>14</sup> *Id.*, at 2770.

**VI. CONCLUSION**

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

Respectfully submitted,

Intelsat License LLC

By: /s/ Susan H. Crandall

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January 3, 2018

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

The Federal Communications 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*.

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<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*, IBFS 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*, IBFS 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 a Federal Communications Commission license “revoked.” However, on June 26, 2000, the Commission’s 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.

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<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 (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:

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

Board of Managers:

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 Connect Finance S.A., a Luxembourg company. Intelsat Connect Finance 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*, IBFS 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.