## Before the Federal Communications Commission Washington, DC 20554

In the Matter of

Intelsat License LLC

File No. SAT-MOD-

Application to Modify Authorization for Intelsat 19 (S2850)

# <u>APPLICATION OF INTELSAT LICENSE LLC</u> <u>TO MODIFY AUTHORIZATION FOR INTELSAT 19</u>

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 19 (Call Sign S2850) satellite. Specifically, this

modification application seeks a waiver of Section 2.106 (the "U.S. Table of Frequency

Allocations") to permit Intelsat to operate Intelsat 19 in the 12250-12750 MHz frequency band in

the space-to-Earth direction for commercial Fixed-Satellite Service ("FSS") on a non-interference,

non-protected basis in International Telecommunication Union ("ITU") Region 2.

In accordance with the requirements of the Commission's rules,<sup>1</sup> this application has been filed electronically as an attachment to FCC Form 312. All technical information for the Intelsat 19 satellite is incorporated herein by reference.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> 47 C.F.R. § 25.117(c).

<sup>&</sup>lt;sup>2</sup> See Policy Branch Information; Satellite Space Applications Accepted for Filing, Report No. SAT-00843, File No. SAT-RPL-20111222-00245 (Feb. 10, 2012) (Public Notice); see also Policy Branch Information; Actions Taken, Report No. SAT-00871, File No. SAT-RPL-20111222-00245 (May 25, 2012) (Public Notice) ("Intelsat 19 Application").

# I. <u>BACKGROUND</u>

On May 25, 2012, the Commission authorized the launch and operation of the Intelsat 19 satellite at the 166.0° E.L. orbital location.<sup>3</sup> Intelsat 19 was launched on June 1, 2012, and will replace the Intelsat 8 satellite (Call Sign S2460), which is currently operating at 166.0° E.L.<sup>4</sup> The Commission authorized Intelsat 19 to provide FSS in the 12250–12750 MHz frequency band in ITU Regions 1 and 3, but not in Region 2.<sup>5</sup>

Intelsat recently filed a request for a grant of Special Temporary Authority for 60 days from July 20, 2012 through September 7, 2012—to use Intelsat 19 to provide commercial FSS using the 12250–12750 MHz frequency band on a non-interference, non-protected basis at the 166.0° E.L. orbital location in ITU Region 2.<sup>6</sup> This STA request included a request for waiver of the U.S. Table of Frequency Allocations, which allocates the 12200–12700 MHz frequency band to Fixed Service ("FS") and Broadcast Satellite Service ("BSS"), and the 12700–12750 MHz frequency band to FS, Mobile Service ("MS") and FSS (Earth-to-space).<sup>7</sup>

# II. MODIFICATION AND WAIVER REQUEST

By this modification application, Intelsat seeks a waiver of the U.S. Table of Frequency Allocations to permit the Intelsat 19 satellite to provide commercial FSS using the 12250–12750

 $<sup>^3</sup>$  Id.

<sup>&</sup>lt;sup>4</sup> See PanAmSat Licensee Corp. Application for Authority to Construct, Launch and Operate a Hybrid International Communications Satellite, 14 FCC Rcd 2719 (1998); Policy Branch Information; Actions Taken, Report No. SAT-00358, DA 06-980, File No. SAT-MOD-20060228-00017 (May 5, 2006) (Public Notice).

<sup>&</sup>lt;sup>5</sup> See Policy Branch Information; Actions Taken, Report No. SAT-00871, File No. SAT-RPL-20111222-00245 (May 25, 2012) (Public Notice).

<sup>&</sup>lt;sup>6</sup> Request for Special Temporary Authority to Use Intelsat 19 to Provide Commercial Fixed Satellite Service Using the 12250–12750 MHz Frequency Band, File No. SAT-STA-20120613-00097 (filed Jun. 13, 2012).

<sup>&</sup>lt;sup>7</sup> Id.

MHz frequency band at the 166.0° E.L. orbital location on a non-interference, non-protected basis in ITU Region 2 in the space-to-Earth direction. More specifically, Intelsat requests authority to permit Intelsat 19 transmissions in the 12250–12750 MHz frequency band to its Napa, California, earth station as well as in the visible portion of ITU Region 2.<sup>8</sup>

The Commission may grant a waiver for good cause shown.<sup>9</sup> The Commission typically grants a waiver where the particular facts make strict compliance inconsistent with the public interest.<sup>10</sup> 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.<sup>11</sup> Waiver therefore is appropriate where special circumstances warrant a deviation from the general rule, and such a deviation will serve the public interest. Good cause exists for the Commission to grant Intelsat's request for a waiver of the U.S. Table of Frequency Allocations to permit use of the 12250–12750 MHz frequency band in ITU Region 2 because Intelsat's use of these frequencies in ITU Region 2 will not cause harmful interference to any terrestrial stations or satellites.<sup>12</sup>

## A. <u>Operation in the 12250–12700 MHz Band Will Not Cause Harmful</u> <u>Interference.</u>

Terrestrial systems operating within the United States will not be subjected to harmful interference because Intelsat 19's transmissions in the 12250–12750 MHz frequency band in ITU

<sup>10</sup> *N.E. Cellular Tel. Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990) ("Northeast Cellular").

<sup>11</sup> *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969); *Northeast Cellular*, 897 F.2d at 1166.

<sup>&</sup>lt;sup>8</sup> See ITU Radio Regulations, Art. 5, § I (2008).

<sup>&</sup>lt;sup>9</sup> 47 C.F.R. § 1.3.

<sup>&</sup>lt;sup>12</sup> See Intelsat North America LLC, Application for Authority to Modify Earth Station Authorization to Provide Launch and Early Orbit Phase ("LEOP") Operations for Newly Launched Satellites, Order and Authorization, 21 FCC Rcd 14672, 14674 (¶ 6) (Int'l Bur. 2006) ("If a proposal will not cause interference to other licensed operations, the Commission generally authorizes it if it is otherwise in the public interest.").

Region 2 are compliant with the ITU space-to-Earth power flux density ("PFD") limits over the Earth. Specifically, to ensure protection of terrestrial communication links from space station transmissions, Article 21.16 of the ITU Radio Regulations imposes PFD limits on satellite transmissions in the space-to-Earth direction.<sup>13</sup> As specified in the Intelsat 19 Application, Intelsat 19 is compliant with the PFD limits specified in Art. 21.16 of the ITU Radio Regulations.<sup>14</sup>

Moreover, Intelsat 19's operations in the 12250–12750 MHz frequency band will not impact other space stations. According to the ITU Region 2 BSS Plan, where the use of the 12250–12700 MHz band is specified, no BSS assignment can be located further west than 175.2° W.L. As a result, there would be at least 18.8° of orbital separation between Intelsat 19 at 166.0° E.L., and the nearest BSS network that could provide service to any portion of ITU Region 2. With this orbital separation, there would be no risk of harmful interference to BSS networks from the operation of Intelsat 19 in the 12250–12700 MHz frequency band. Further, there are no BSS satellites currently in operation at 175.2° W.L.; the nearest operational BSS satellite to Intelsat 19 that serves any portion of ITU Region 2 in the 12250–12700 MHz band is located at 129.0° W.L. Accordingly, no operational BSS satellite providing service to ITU Region 2 would be subjected to harmful interference from the Intelsat 19 transmissions.

<sup>&</sup>lt;sup>13</sup> ITU Radio Regulations, Art. 21.16 (2008). For ITU Region 2, PFD limits are specified only for non-geostationary satellites operating in the 11.7 - 12.7 GHz band. However, these limits may also be applied to geostationary satellites, since the PFD limit is intended to protect terrestrial stations from space station transmissions irrespective of whether the radiating space station is geostationary or non-geostationary. Moreover, when converted to the same reference bandwidth, the PFD limits are identical to those applicable to geostationary FSS space stations in ITU Region 3 which apply to the 12200–12750 MHz frequency band.

<sup>&</sup>lt;sup>14</sup> See Intelsat 19 Application, Engineering Statement at Exhibit 10. The PFD calculations contained in Engineering Statement, Exhibit 10 of the Intelsat 19 Application assumed a referenced bandwidth of 4 KHz. These calculations may be converted to a reference bandwidth of 1 MHz by adding the value of  $\{[10Log(1000000 \text{ Hz})]-[10log(4000 \text{ Hz})]=\}$  24 dB to the ITU limit as well as to the calculated PFD level specified in that exhibit. There is no change to the PFD margin specified in the Intelsat 19 Application.

#### B. Operation in the 12700–12750 MHz Band Will Not Cause Harmful Interference

Intelsat will also protect terrestrial stations in the 12700–12750 MHz band by limiting the PFD level of the Intelsat 19 carriers that may be transmitted to Region 2 to the levels specified in the ITU Art. No. 21.16 for Region 2 for the fixed satellite service in the 11700–12700 MHz band, as described above.<sup>15</sup> The Commission granted a similar waiver for Intelsat 805 to operate in the 12700–12750 MHz frequency band conditioned on compliance with the ITU Article 21.16 PFD limits.<sup>16</sup>

Regarding Intelsat 19 transmissions in the 12700–12750 MHz frequency band to earth stations in ITU Region 2, Intelsat will not cause harmful interference to, nor claim protection from, any FSS (Earth-to-space) links operating in the 12700–12750 MHz frequency band in ITU Region 2. Intelsat will ensure that its receiving earth stations are sufficiently separated from any transmitting FSS earth station operating in the 12700–12750 MHz frequency band in ITU Region 2. If sufficient distance separation cannot be achieved, Intelsat will not claim protection from interference that may be due to the transmitting FSS earth station. The Intelsat 19 downlink transmissions in the 12700–12750 MHz frequency band will not cause interference to receiving space stations. Intelsat is not aware of any geostationary space station in ITU Region 2 receiving in the 12700–12750 MHz frequency band.

Grant of this modification application will serve the public interest. Previously, the Commission granted a waiver of the U.S. Table of Frequency Allocations to permit Intelsat to use the Intelsat 8 satellite to provide FSS using the 12250–12750 MHz frequency band at the 166.0°

<sup>&</sup>lt;sup>15</sup> See supra notes 13 and 14 and accompanying text.

<sup>&</sup>lt;sup>16</sup> See In the Matter of Intelsat LLC, Application to Modify Authorization for Intelsat 805 to Allow the Provision of Fixed-Satellite Service Between Non-U.S. Points in the 12.7-12.75 GHz Frequency Band, File No. SAT-MOD-200209191-00178, Order and Authorization, 19 FCC Rcd 2775, ¶ 11 (Feb. 18, 2004).

E.L. orbital location.<sup>17</sup> In over five years of service at 166.0° E.L., Intelsat is not aware of any complaints of harmful interference regarding Intelsat 8's operations in the 12250–12750 MHz frequency band in ITU Region 2. Grant of this waiver will allow the Intelsat 19 satellite to continue providing the same type of services that it currently provides through the Intelsat 8 satellite, thereby ensuring continuity of service to customers at 166.0° E.L.

# III. <u>CONCLUSION</u>

For the reasons set forth herein, Intelsat respectfully requests that the Commission grant this modification application to permit Intelsat to operate Intelsat 19 in the 12250–12750 MHz frequency band for commercial FSS on a non-interference, non-protected basis in ITU Region 2.

Respectfully submitted,

Intelsat License LLC

By: /s/ Susan H. Crandall

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June 28, 2012

<sup>&</sup>lt;sup>17</sup> See In the Matter of PanAmSat License Corp. Application for Modification of Authority to Operate the Pas-5 Satellite at the 166° degrees E.L. Orbital Location, Order and Authorization, DA 06-6, File Nos. SAT-MOD-19980928-00078, SAT-AMD-19990222-00024, SAT-AMD-20020326-00055, SAT-STA-20020705-00097, and SAT-AMD-20051116-00220, 21 FCC Rcd 36, ¶ 1 (Jan. 4, 2006).

#### 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>&</sup>lt;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>&</sup>lt;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>3</sup> based on the Bureau's finding that PanAmSat had not satisfied applicable construction milestones.<sup>4</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>&</sup>lt;sup>3</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>&</sup>lt;sup>4</sup> 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 Phillip Spector, Secretary Simon Van De Weg, Director, Finance

Board of Managers:

Michael McDonnell Flavien Bachabi Phillip Spector

The 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 Holdings License LLC, also a Delaware limited liability company. Intelsat Holdings License 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 S.A., a Luxembourg company. Intelsat S.A. is wholly owned by Intelsat Holdings S.A., a Luxembourg company. Intelsat S.A. is wholly owned by Intelsat Holdings S.A., a Luxembourg company. Intelsat Investment Holdings S.à r.l., a Luxembourg company. Intelsat Investment Holdings S.à r.l. is wholly owned by Intelsat Global Holdings S.A., a Luxembourg company. Each of these entities may be contacted at the following address: 4 rue Albert Borschette, L-1246 Luxembourg.

Intelsat Global Holding 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.<sup>5</sup> 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.<sup>6</sup> This transaction has not yet been consummated.

<sup>6</sup> 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).

<sup>&</sup>lt;sup>5</sup> 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").