

June 13, 2012

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



Re: 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-RPL-20111222-00245, Call Sign S2850

Dear Ms. Dortch:

Intelsat License LLC (“Intelsat”) herein requests a grant of Special Temporary Authority (“STA”)¹ for 60 days – from July 10, 2012, through September 7, 2012 – to use Intelsat 19 (Call Sign S2850) to provide commercial Fixed-Satellite Service (“FSS”) using the 12250 – 12750 MHz frequency band (space-to-Earth) on a non-interference, non-protected basis at the 166.0° E.L. orbital location. Specifically, Intelsat requests a grant of STA 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 International Telecommunication Union (“ITU”) Region 2.² Intelsat plans shortly to file a modification application seeking permanent authority to provide commercial FSS using the above referenced frequency band in ITU Region 2 on a non-interference, non-protected basis.

Intelsat recently was granted authority to construct, launch and operate Intelsat 19 at the 166.0 E.L. orbital location.³ The Intelsat 19 satellite was

¹ Intelsat has filed its STA request, an FCC Form 159, a \$860.00 filing fee and this supporting letter electronically via the International Bureau’s Filing System (“IBFS”).

² See ITU Radio Regulations, Art. 5, § 1 (2008).

³ See *Policy Branch Information; Actions Taken*, 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”). Prior to grant of the Intelsat 19 Application, Intelsat filed a letter pursuant to Section 1.65 of the FCC rules withdrawing its request for Commission authorization to operate Intelsat 19 in the 12250 – 12750 MHz frequency band for FSS in ITU Region 2. See *Letter from Susan H. Crandall to Marlene H. Dortch*, File No. SAT-RPL-20111222-00245 (filed May 8, 2012).

launched on June 1, 2012, and will replace the Intelsat 8 satellite (Call Sign S2460), which is currently operating at the 166.0° E.L. orbital location.⁴ Previously, the Commission authorized Intelsat to use the Intelsat 8 satellite to provide FSS using the 12250 – 12750 MHz frequency band at the 166.0° E.L. orbital location.⁵ In doing so, it granted Intelsat’s request for waiver of the United States (“U.S.”) Table of Frequency Allocations to permit use of the 12250 – 12750 MHz frequency band for FSS downlinks in ITU Region 2.⁶ In the U.S. Table of Frequency Allocations, the 12200 – 12700 MHz frequency band is allocated for use by the Fixed Service (“FS”) and Broadcast Satellite Service (“BSS”), and the 12700 – 12750 MHz frequency band is allocated for use by the FS, Mobile Service (“MS”) and FSS (Earth-to-space).⁷ To continue to provide the same types of services it currently provides through the Intelsat 8 satellite, Intelsat seeks a waiver of the U.S. Table of Frequency Allocations, 47 C.F.R. § 2.106, to permit it to use the frequencies identified above for commercial FSS in ITU Region 2.

The Commission may grant a waiver for good cause shown.⁸ The Commission typically grants a waiver where the particular facts make strict compliance inconsistent with the public interest.⁹ In granting a waiver, the

⁴ 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).

⁵ 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).

⁶ *Id.*

⁷ 47 C.F.R. § 2.106. In Region 2, the ITU Table of Frequency Allocation specifies that the 12250 – 12700 MHz band is allocated to the Broadcast Service, BSS, FS, and MS on a primary basis, and the 12700 – 127500 MHz band is allocated for use by the FSS (Earth-to-space), FS and MS on a primary basis.

⁸ 47 C.F.R. §1.3.

⁹ *N.E. Cellular Tel. Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990) (“*Northeast Cellular*”).

Commission may take into account considerations of hardship, equity, or more effective implementation of overall policy on an individual basis.¹⁰ Waiver is therefore appropriate if 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, 47 C.F.R. § 2.106, to allow Intelsat 19 to provide commercial FSS using the 12250 – 12750 MHz frequency band in ITU Region 2.

First, Intelsat's use of the 12250 – 12750 MHz band will not cause harmful interference to any terrestrial stations or satellites.¹¹ Terrestrial systems operating within the United States will not be subjected to harmful interference from the use of the 12250 – 12750 MHz frequency band by Intelsat 19 because the satellite's transmissions 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.¹² As specified in the Intelsat 19 Application, Intelsat 19 will be compliant with the PFD limits specified in Art. 21.16 of the ITU Radio Regulations.¹³ Accordingly, terrestrial stations operating in ITU Region 2

¹⁰ *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969); *Northeast Cellular*, 897 F.2d at 1166.

¹¹ *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.").

¹² 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.

¹³ *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.

will not be subjected to harmful levels of interference from Intelsat 19's transmissions.¹⁴ Intelsat is not aware of any complaints of harmful interference from any terrestrial station operating in the 12250 – 12750 MHz frequency band in connection with the existing operation of the Intelsat 8 satellite. In its operation of Intelsat 19, Intelsat will not cause interference to, nor claim interference from, lawfully authorized terrestrial stations operating in the 12700 – 12750 MHz frequency band in ITU Region 2.

Space stations operating in the 12250 – 12750 MHz frequency band will not be impacted. 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. Hence, there is 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 – 12750 MHz frequency band. Moreover, 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 – 12750 MHz band is located at 119.0° W.L. Accordingly, no operational BSS satellite providing service to ITU Region 2 would be subjected to harmful interference from the Intelsat 19 transmissions.

Moreover, operation of the 12700 – 12750 MHz frequency band on the Intelsat 19 satellite will not cause harmful interference to any FSS (Earth-to-space) links operating in the 12700 – 12750 MHz frequency band. Two

These calculations may be converted to a reference bandwidth of 1 MHz by adding the value of $\{[10\text{Log}(1000000 \text{ Hz})]-[10\text{log}(4000 \text{ Hz})]\} = 24 \text{ dB}$ 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.

¹⁴ The Commission has taken a similar approach previously. In its authorization of Intelsat's request to modify its license and operate Intelsat 805 at 55.5° W.L. in the 12700 – 12750 MHz frequency band, the Commission required Intelsat to comply with the PFD limits as specified in Article 21.16 of the ITU Radio Regulations for satellite downlink transmissions in this band in Region 3. *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*, Order and Authorization, File No. SAT-MOD-200209191-00178 (rel. Feb. 18, 2004).

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modes of interference to the FSS (Earth-to-space) links are possible. The first mode is interference from a transmitting FSS earth station into an earth station receiving the Intelsat 19 signal. 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. If sufficient distance separation cannot be achieved, Intelsat will not claim protection from interference that may be due to the FSS earth station. The second mode of interference is due to interference from the Intelsat 19 downlink transmissions being received by a receiving space station. Intelsat is not aware of any geostationary space station in ITU Region 2 receiving in the 12700 – 12750 MHz frequency band.

Second, the use of the 12250 – 12750 MHz frequency band by Intelsat 19 at the 166.0° E.L. orbital location is critical to Intelsat's ability to continue providing the same type of services that it currently provides through the Intelsat 8 satellite. Thus, the Commission's grant of a waiver will ensure continuity of service to customers at the 166.0° E.L. location thereby promoting the public interest.

For the reasons set forth herein, Intelsat respectfully requests that the Commission grant this request.

Respectfully submitted,

/s/ Susan H. Crandall

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