

July 24, 2012

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



Re: Request for Further Extension of Special Temporary Authority for  
Intelsat 19, File No. SAT-RPL-20111222-00245,  
Call Sign S2850

Dear Ms. Dortch:

Intelsat License LLC (“Intelsat”) herein requests an additional 30 days — from July 30, 2012 through August 28, 2012 — of the Special Temporary Authority (“STA”)<sup>1</sup> previously granted Intelsat for its Intelsat 19 satellite (call sign S2850) to (1) permit launch and early orbit phase (“LEOP”) 500 kHz wide telemetry transmissions centered at the 12253.5 MHz, 12254.0 MHz, 12256.0 MHz, and 12256.5 MHz towards Region 2,<sup>2</sup> (2) conduct in-orbit testing (“IOT”) at 176.0° E.L. in the 3700-4200 MHz (downlink), 5925-6425 MHz (uplink), 12250-12750 MHz (downlink), and 14000-14500 MHz (uplink) frequency bands, and (3) drift from the 176.0° E.L. IOT location to the 166.0° E.L. permanent location using the satellite’s telemetry, tracking and command (“TT&C”) frequencies.<sup>3</sup> Intelsat 19 was launched on June 1, 2012, has completed in-orbit testing, and is drifting to 166.0° E.L. As part of this further extension request, Intelsat continues to seek a waiver of the U.S. Table of Frequency Allocations to permit continued drift operations using downlink frequencies in the 12250-12750 MHz band in Region 2. The satellite is expected to be on-station by mid-August and, as such, no further extension beyond the one herein requested is contemplated.

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

<sup>2</sup> Intelsat’s application for authority to launch and operate the Intelsat 19 satellite included a request to operate in the frequencies necessary to conduct LEOP transmissions that are not included in this STA request for the Ku-band downlink. See *Policy Branch Information; Actions Taken*, Report No. SAT-00871, File No. SAT-RPL-20111222-00245 (June 1, 2012) (Public Notice) (“Intelsat 19 Application”).

<sup>3</sup> See *Intelsat License LLC Request for Extension of Special Temporary Authority*, File No. SAT-STA-20120621-00102 (filed June 21, 2012); *Policy Branch Information; Actions Taken*, Report No. SAT-00871, File No. SAT-STA-20120508-00081 (June 1, 2012) (Public Notice).

### **Request for Extension of Special Temporary Authority**

Drift. During the drift from 176.0° E.L. to 166.0° E.L., only the satellite's TT&C frequencies will continue to be utilized. Intelsat is coordinating the telemetry (and other TT&C) transmissions of Intelsat 19 with the operator of any other co-frequency satellite that may be in its drift path.

### **Request for Waiver**

In the U.S. Table of Frequency Allocations, the 12250-12700 MHz band is allocated to Fixed Service ("FS") and Broadcast Satellite Service ("BSS"); the 12700-12750 MHz band is allocated to FS, Mobile Service ("MS"), and uplink Fixed-Satellite Service ("FSS").<sup>4</sup> Intelsat seeks continued waiver of the U.S. Table of Frequency Allocations to allow use of the 12250-12750 MHz band for downlink Fixed-Satellite Service ("FSS") in Region 2.

The Commission may grant a waiver for good cause shown.<sup>5</sup> The Commission typically grants a waiver where the particular facts make strict compliance inconsistent with the public interest.<sup>6</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>7</sup> 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 waiver to authorize LEOP transmissions and the drift of Intelsat 19 from 176.0° E.L. to 166.0° E.L. because Intelsat's use of the 12250-12750 MHz band for these purposes will not cause harmful interference to any terrestrial stations or satellites.<sup>8</sup> Terrestrial stations

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<sup>4</sup> 47 C.F.R. § 2.106. In Region 2, the International Table of Frequency Allocation allocates the 12250-12500 MHz band to Broadcast Service, BSS, FS, and MS on a co-primary basis; and the 12700-12750 MHz band to FS, MS and FSS (Earth-to-space).

<sup>5</sup> 47 C.F.R. §1.3.

<sup>6</sup> *N.E. Cellular Tel. Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990) ("*Northeast Cellular*").

<sup>7</sup> *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969); *Northeast Cellular*, 897 F.2d at 1166.

<sup>8</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.").

within the United States will not be subjected to harmful interference from the telemetry transmissions of Intelsat 19 because the satellite's telemetry carriers are compliant with the International Telecommunication Union ("ITU") space-to-Earth power flux density ("PFD") limits over the Earth. Specifically, in order 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>9</sup> In the Intelsat 19 application, Intelsat calculated the PFD level of its telemetry carriers on the Earth.<sup>10</sup> These calculations show that the Intelsat 19 telemetry transmissions will be compliant with the PFD limits specified in Art. 21.16 of the ITU Radio Regulations.<sup>11</sup> Accordingly, terrestrial stations operating in ITU Region 2 will not be subjected to harmful levels of interference from Intelsat 19's telemetry transmission. Moreover, as explained above, space stations operating in the 12250-12750 MHz frequency band will not be impacted because Intelsat will coordinate the telemetry of Intelsat 19 with any affected satellite operators that are in the LEOP or drift path.

Grant of this STA further extension request and continued waiver of the U.S. Table of Frequency Allocations set forth in Section 2.106 of the FCC's rules will facilitate the drift of Intelsat 19 from its IOT location to its permanent location. This, in turn, will ensure continuity of service to customers, and thereby promotes the public interest.

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<sup>9</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. Actually, when converted to the same reference bandwidth, these limits are identical to those applicable to geostationary FSS space stations in Region 3.

<sup>10</sup> See Intelsat 19 Application, Engineering Statement at Exhibit 10.

<sup>11</sup> It is noted that calculations in the Intelsat 19 application addressing the PFD produced on the Earth by the telemetry transmissions show that there is enough margin for the PFD to be met even when during LEOP the satellite is at a height lower than that corresponding to the geostationary orbit.

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

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Susan H. Crandall", written in a cursive style.

Susan H. Crandall  
Assistant General Counsel  
Intelsat Corporation

cc: Robert Nelson  
Karl Kensinger  
Kathryn Medley  
Stephen Duall  
Jay Whaley