

October 2, 2015

Ms. Marlene H. Dortch Secretary Federal Communications Commission 445 12<sup>th</sup> Street, S.W. Washington, D.C. 20554

Re: Request for Special Temporary Authority to Drift Intelsat 805 to, and Operate at, 169.0° E.L.

Call Sign: S2404

Dear Ms. Dortch:

Intelsat License LLC ("Intelsat") herein requests 180 days, commencing December 1, 2015, of Special Temporary Authority ("STA")<sup>1</sup> to drift Intelsat 805 (Call Sign S2404) from 55.5° W.L. to 169.0° E.L. and operate the satellite temporarily at 169.0° E.L.

The Intelsat 805 satellite is currently operating at 55.5° W.L.<sup>2</sup> Subject to receipt of FCC approval, the satellite will be relocated to 169.0° E.L.—with an anticipated drift start date of December 1, 2015. The drift of the Intelsat 805 satellite is expected to take approximately three months. Intelsat is relocating the Intelsat 805 satellite following traffic transfer to the recently-launched Intelsat 34.

During the drift of the Intelsat 805 satellite, Intelsat will utilize only the satellite's telemetry, tracking, and control ("TT&C") frequencies and will follow industry practices for coordinating TT&C transmission during the relocation process. The specific TT&C frequencies are: 3947.5 MHz, 3948.0 MHz, 3950 MHz, 3952.0 MHz, 3952.5 MHz, 6173.7 MHz, 6176.3 MHz and 12501 MHz.

Once on-station at  $169.0^{\circ}$  E.L., Intelsat will also operate on the following communications frequencies: 3400 - 4200 MHz, 5850 - 6650 MHz, 12500 - 12750 MHz, and 14000 - 14250 MHz.

Grant of this 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, 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. Once on-station at 169.0°

<sup>&</sup>lt;sup>1</sup> Intelsat has filed this STA request, an FCC Form 159, and a \$930.00 filing fee electronically via the International Bureau's Filing System.

<sup>&</sup>lt;sup>2</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, Order and Authorization, File No. SAT-MOD-200209191-00178 (rel. Feb. 18, 2004).

E.L., Intelsat will operate the communications payload in conformance with its coordination agreements concerning the nominal 169.0° E.L. location.

Further, Intelsat has assessed and limited the probability of the space station becoming a source of debris as a result of collisions with large debris or other operational space stations. Intelsat 805 will be temporarily located at the same orbital location as Intelsat 8 (Call Sign S2460)<sup>3</sup> during traffic transition. Intelsat 8 is currently operating at 169.0° E.L., but will be relocated, subject to receipt of FCC approval, after traffic transition has been completed. 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 805 at 169.0° E.L. Finally, Intelsat is not aware of any system with an overlapping station-keeping volume with Intelsat 805 that is the subject of an ITU filing and that is either in orbit or progressing towards launch.

In support of this STA, Intelsat requests the prior waivers granted for Intelsat 805<sup>4</sup> for Sections 25.202(a)(1),<sup>5</sup> 25.202(g), 25.210(a)(3), 25.210(i)(1), and 25.210(f)<sup>6</sup> be extended to Intelsat 805 at 169.0° E.L. To the extent necessary, Intelsat also requests a waiver of Sections 25.202(a)(1) and 2.106, which allocate 12500 – 12700 MHz to Fixed Service ("FS") and Broadcast Satellite Service ("BSS"), and 12700 – 12750 MHz to FS, Mobile Service ("MS"), and Fixed Satellite Service ("FSS") (Earth-tospace) in International Telecommunication Union ("ITU") Region 2.

Under Section 1.3 of the Commission's rules, the Commission has authority to waive its rules "for good cause shown." 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. In determining whether waiver is appropriate, the Commission should "take into account considerations of hardship, equity, or more effective implementation of overall policy." As shown below, there is good cause for each of the requested technical waivers.

Good cause exists to waive Sections 25.202(a)(1) and 2.106 for Intelsat 805's Ku-band payload for the 12500 – 12750 MHz frequency band. The purpose of Sections 25.202(a)(1) and 2.106 is to harmonize the use of spectrum and thereby reduce harmful interference to allocated services within ITU Region 2.

<sup>&</sup>lt;sup>3</sup> See Policy Branch Information; Actions Taken, Report No. SAT-00 00883, File No. SAT-MOD-20120619-00100 (Public Notice) (Aug. 16, 2013).

<sup>&</sup>lt;sup>4</sup> See 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>&</sup>lt;sup>5</sup> The existing waiver of Section 25.202(a)(1) applies only to C-bands frequencies on Intelsat 805.

<sup>&</sup>lt;sup>6</sup> Intelsat 805 previously obtained a waiver of Section 25.210(g)(1), which required full frequency reuse. *See* supra n. 4. This requirement is now included in Section 25.210(f).

<sup>&</sup>lt;sup>7</sup> 47 C.F.R. § 1.3; WAIT Radio v. FCC, 418 F.2d 1153, 1159 (D.C. Cir. 1969).

<sup>&</sup>lt;sup>8</sup> Northeast Cellular Telephone Co. v. FCC, 897 F.2d 1164, 1166 (D.C. Cir. 1990).

<sup>&</sup>lt;sup>9</sup> WAIT Radio, 418 F.2d at 1159.

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At 169.0° E.L., Intelsat 805's Ku-band coverage will be solely in Region 3, where 12500 – 12750 MHz is allocated to the FSS in the space-to-Earth direction. As such, Intelsat 805's FSS downlink use of the 12500 – 12750 MHz band at 169.0° E.L conforms to the International Table of Frequency Allocations. The proposed use therefore will not cause harmful interference to FS, BSS, or FSS in ITU Region 2.

Moreover, Intelsat 805's operations in the 12500 – 12750 MHz frequency band will not impact other space stations. According to the ITU Region 2 BSS Plan, which allocates the 12200 – 12700 MHz band to BSS, no BSS assignment can be located further west than 175.2° W.L. <sup>10</sup> As a result, there would be at least 15.8° of orbital separation between Intelsat 805 at 169.0° E.L. and the nearest BSS network that could provide service to any portion of ITU Region 2. With this large orbital separation, there would be no risk of harmful interference to BSS networks from the operation of Intelsat 805 in the 12500 – 12700 MHz frequency band.

Given these particular facts, the additional waiver sought herein is plainly appropriate. Grant of this STA request is in the public interest because it will allow Intelsat to meet customer demand at 169.0° E.L.

For the reasons set forth herein, Intelsat respectfully requests that the Commission grant this STA request. Please direct any questions regarding this supplement to the undersigned at (703) 559-7848.

Sincerely,

Susan H. Crandall

Associate General Counsel

**Intelsat Corporation** 

cc: Stephen Duall Jay Whaley Cindy Spiers

<sup>&</sup>lt;sup>10</sup> International Telecommunications Union, Radio Regulations Vol. 2 Appendices 477 (2012).