

April 6, 2016

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 Conduct In-Orbit Testing of the Intelsat 31 Satellite; Call Sign S2934

Dear Ms. Dortch:

Intelsat License LLC ("Intelsat") herein requests a grant of Special Temporary Authority ("STA")<sup>1</sup> for 60 days, beginning June 4, 2016 to conduct in-orbit testing ("IOT") of the Intelsat 31 satellite (Call Sign S2934) at 76.5° W.L. and to drift the satellite to its permanent location of 95.05° W.L.<sup>2</sup> Intelsat 31 is scheduled to be launched on May 28, 2016. The IOT period is expected to last approximately 20 days; and the drift to 95.05° W.L. is expected to last approximately three weeks.<sup>3</sup>

Intelsat 31 IOT payload testing will be performed in the following frequency bands:

- 3400 3700 MHz, 10950 11200 MHz, 11450 12200 MHz (space-to-Earth); and
- 6425 6725 MHz and 13750 145000 MHz (Earth-to-space).

Telemetry, Tracking, and Command ("TT&C") services for Intelsat 31 will be performed in the following center frequencies: 11194.25 MHz, 11195.5 MHz, 11196.25 MHz, 111967.5 MHz (space-to-Earth); and 13998.5 MHz and 14006.0 MHz (Earth-to-space).

In support of its request, Intelsat submits the following information.

During the IOT of Intelsat 31, Intelsat will operate in the above referenced C- and Ku-bands. To Intelsat's knowledge, the only co-frequency, co-coverage, satellites within plus/minus six degrees of 76.5° W.L. are AMC 6 at 72.0° W.L., Star One C3 at 75.0° W.L., VENESAT-1 at 78.0° W.L., Arsat-1 at 79.3° W.L., Sky Mexico-1 at 80.2° W.L, Arsat-2 at 80.4° W.L., and AMC 2 at 80.8° W.L. Intelsat is currently in coordination discussions with SES, the operator of AMC 6 and AMC 2; Star One, the

<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 Policy Branch Information; Actions Taken, Report No. SAT-01052, File No. SAT-LOA-20140410-00038 (November 7, 2014) (Public Notice). During the drift from 76.5° W.L. to 95.05° W.L., only the satellite's TT&C frequencies will be utilized. At 95.05° W.L., Intelsat 31 will be co-located with Intelsat 30 (S2887) and Galaxy 3C (S2381).

<sup>&</sup>lt;sup>3</sup> Intelsat is seeking authority for 60 days to accommodate a possible launch delay.

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operator of Star One C3; Venesat, the operator of VENESAT-1; ARSAT, the operator of ARSAT-1 and Arsat-2; and DirecTV, the operator of Sky Mexico-1, regarding the Intelsat 31 IOT. Intelsat expects to complete coordination discussions before launch of the Intelsat 31 satellite. In the unlikely event that harmful interference occurs, Intelsat will take all necessary steps to eliminate the interference.

Intelsat has assessed and limited the probability of the space station becoming a source of debris as a result of collision with large debris or other operational space stations during IOT at 76.5° W.L. Intelsat 31 will not be located at the same orbital location as another satellite or at an orbital location that has an overlapping station-keeping volume with another 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 31 at 76.5° W.L. Finally, Intelsat is not aware of any system with an overlapping station-keeping volume with Intelsat 31 at 76.5° W.L. that is the subject of an International Telecommunications Union ("ITU") filing and that is either in orbit or progressing towards launch.

Finally, Intelsat requests that the waiver previously granted to Intelsat 31 at 95.05° W.L. be extended to the satellite at 168.9° E.L. In particular, Intelsat requests that the previously-granted waiver of Section 25.202(a)1 and 25.210(f) be extended to the satellite at 76.5° W.L., for the reasons previously set forth in the previous grant.

The IOT of Intelsat 31's C- and Ku-band payloads at 76.5° W.L. is a critical step in ensuring that the satellite will be fully operational at 95.05° W.L. This, in turn, will provide additional capacity to customers at the 95.05° W.L. location, and thereby promotes the public interest.

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

Sincerely,

Cynthia J. Grady Regulatory Counsel

Intelsat Corporation

Cynthia J. Gradly

cc: Stephen Duall Jay Whaley Cindy Spiers