

August 9, 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 Intelsat 36; Call Sign S2948

Dear Ms. Dortch:

Intelsat License LLC ("Intelsat") herein requests a grant of Special Temporary Authority ("STA")<sup>1</sup> for 30 days, beginning September 4, 2016,<sup>2</sup> to conduct in-orbit testing ("IOT") of the Intelsat 36 satellite (Call Sign S2948) at 63.1° E.L. and to drift the satellite to its permanent location of 68.5° E.L.<sup>3</sup> Intelsat 36 is scheduled to be launched on August 24, 2016. The IOT period is expected to last approximately 20 days and the drift to 68.5° E.L. is expected to last approximately eight days.

Intelsat 36 IOT payload testing will be performed in the following frequency bands:

- 3625 4200 MHz, 11200 11450 MHz, and 11700 12500 MHz (space-to-Earth);
- 5925 6725 MHz, 13000 13250 MHz, and 17300 18100 MHz (Earth-to-space).

Telemetry, Tracking, and Command ("TT&C") services for Intelsat 36 will be performed in the following center frequencies:

- 3652.0 MHz, 3652.5 MHz, 3653.5 MHz, and 3654.0 MHz (space-to-Earth);
- 6722.00 MHz and 6724.5 MHz (Earth-to-space).

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

<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> Intelsat previously was granted authority to conduct in-orbit testing beginning September 10, 2016. *See Policy Branch Information; Actions Taken*, Report No. SAT-01178, File No. SAT-STA-20160722-00068 (Aug. 5, 2016) (Public Notice). However, because of a recent schedule change, Intelsat is now requesting an earlier commencement date.

<sup>&</sup>lt;sup>3</sup> See Policy Branch Information; Actions Taken, Report No. SAT-01166, File No. SAT-LOA-20151231-00089 (Jun. 10, 2016) (Public Notice). During the drift from 63.1° E.L. to 68.5° E.L., only the satellite's TT&C frequencies will be utilized. At 68.5° E.L. Intelsat 36 will be collocated with Intelsat 20 (S2847). See Policy Branch Information; Actions Taken, Report No. SAT-00886, File No. SAT-LOA-20111024-00208 (Jul. 27, 2012) (Public Notice).

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During the IOT of Intelsat 36, Intelsat will operate in the above referenced C-, Ku- and Ka-bands. Intelsat has identified the operational satellites within +/-6 degrees of the IOT location. Coordination is ongoing with several operators of such satellites to resolve potential interference issues. Intelsat expects to complete coordination discussions before launch of the Intelsat 36 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 63.1° E.L. Intelsat 36 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 36 at 63.1° E.L. In addition, Intelsat is not aware of any system with an overlapping station-keeping volume with Intelsat 36 at 63.1° E.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 waivers previously granted to Intelsat 36 at 68.5° E.L. be extended to the satellite at 63.1° E.L. In particular, Intelsat requests that the previously-granted waivers of Sections 25.210(a)(2), 25.210(a)(3), and 25.210(i)(1) be extended to the satellite at 63.1° E.L., for the reasons set forth in the previous grant.

The IOT of Intelsat 36's C-, Ku-, and Ka-band payloads at 63.1° E.L. is a critical step in ensuring that the satellite will be fully operational at 68.5° E.L. This, in turn, will provide additional capacity to customers at the 68.5° E.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

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Intelsat Corporation

cc: Stephen Duall Jay Whaley Cindy Spiers