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

Pursuant to Section 25.120(b)(4),<sup>1</sup> HNS License Sub, LLC (Hughes) requests a 180-day renewal of its special temporary authority (STA) (File No. SES-STA-20150928-00642) to test a fixed earth station in Gilbert, Arizona, at 28.5005 GHz (uplink) and 19.7-20.2 GHz (downlink). Grant of this STA serves the public interest as it will enable Hughes to proceed with time-sensitive testing of new gateway earth stations to ensure that they are properly installed.

The earth station will be used as one of the gateways for the Jupiter 2 (EchoStar XIX) satellite network, which will provide advanced broadband satellite services to U.S. consumers.<sup>2</sup> An application for regular authority for this earth station was approved by the Commission on December 7, 2015.<sup>3</sup>

Grant of this STA is in the public interest because it will enable Hughes to test the antenna of this earth station upon installation. This test will enable Hughes to ensure that the earth station antenna is properly installed and can successfully operate with the Jupiter 2 satellite. Hughes will perform this test on a non-interference basis. Accordingly, there is no interference concern. In addition, testing will only occur in a frequency range where Fixed Satellite Services operate on a primary basis (28.35 GHz to 28.6 GHz).

For purposes of this STA, Hughes requests authority for the earth station to communicate with the AMC-15 satellite at 105° W.L. (call sign S2180). This is the primary satellite that Hughes will transmit to for the testing purposes. Hughes' testing may require the earth station to transmit to the:

- EchoStar XVII (Jupiter 1) satellite at 107.1 W.L. (call sign S2735),
- AMC-16 satellite at 85° W.L. (call sign S2181),
- EchoStar IX satellite at 121° W.L. (call sign S2143),
- Galaxy 28 satellite at 89° W.L. (call sign S2160), and
- ViaSat-1 satellite at 115° W.L. (call sign S2747)

Accordingly, Hughes requests special temporary authority to transmit to those satellites as well. The location data and technical parameters for the testing are provided in Attachment 1 to the initial STA application.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup> 47 C.F.R. § 25.120(b)(4).

<sup>&</sup>lt;sup>2</sup> The FCC has authorized the Jupiter 2 (EchoStar XIX) satellite at 97.1° W.L. to access the U.S. market. *See* IBFS File Nos. SAT-LOI-20110809-00148 (granted Jul. 27, 2012) and SAT-MOD-20141201-00127 (granted Jun. 23, 2015). The Jupiter 2 satellite is a next generation satellite, which will provide increased capacity for Hughes' satellite broadband services.

<sup>&</sup>lt;sup>3</sup> *See* IBFS File No. SES-LIC-20150604-00332.

<sup>&</sup>lt;sup>4</sup> See IBFS File No. SES-STA-20150928-00642.