

## EXHIBIT 1

### REQUEST FOR SPECIAL TEMPORARY AUTHORIZATION (Response to Question 12, FCC Form)

Pursuant to Section 25.120(b)(3) of the Commission's rules,<sup>1</sup> HNS License Sub, LLC (together with its affiliates, "Hughes") requests special temporary authorization ("STA") for 60 days to operate up to 100,000 remote earth terminals (90 cm. in diameter) in the fixed satellite service ("FSS") on the following Ka-band frequencies: 28.35-28.6 GHz (uplink), 29.25-30.0 GHz (uplink), 18.3-19.3 GHz (downlink), 19.7-20.2 GHz (downlink).<sup>2</sup> These earth terminals will operate with certain Ka-band FSS satellites to provide high-speed broadband services to consumers throughout the United States utilizing the latest technologies.

#### I. BACKGROUND

Hughes holds a blanket license (Call Sign E060445) ("Ka-band Blanket License") to operate a network of transmit/receive Ka-band FSS earth terminals used to provide high-speed broadband services to U.S. consumers. These licensed earth terminals include antennas of various sizes, ranging from 69 cm. to 3.5 m. in diameter, and are authorized to communicate with a number of Ka-band satellites,<sup>3</sup> including the following:

- 1) AMC-15 at 105° W.L. (U.S.-licensed);
- 2) AMC-16 at 85° W.L. (U.S.-licensed);
- 3) EchoStar-9 at 121° W.L. (U.S.-licensed);
- 4) EchoStar XVII at 107.1° W.L. (U.S.-licensed); and
- 5) JUPITER 2 (a/k/a EchoStar XIX or JUPITER 97W) (U.S.-licensed).<sup>4</sup>

---

<sup>1</sup> See 47 C.F.R. § 25.120(b)(3).

<sup>2</sup> Hughes shortly will file a modification application for long-term authority to operate these same Ka-band FSS earth terminals.

<sup>3</sup> See Hughes, FCC Radio Station Authorization, Call Sign E060445, IBFS File No. SES-MOD-20151102-00791 (granted May 23, 2016).

<sup>4</sup> On September 15, 2016, the FCC authorized Hughes to operate Jupiter 2 (a/k/a EchoStar XIX or Jupiter 97W), a Ka-band FSS satellite, at 97.1° W.L. See Hughes, Application, IBFS File No. SAT-LOA-20160624-00061 (granted Sept. 15, 2016).

## **II. DESCRIPTION OF PROPOSED STA OPERATIONS**

Hughes requests a 60-day STA to operate up to 100,000 Ka-band FSS earth terminals (90 cm. in diameter) manufactured by Skyware Global. Like other earth terminals authorized under the Ka-band Blanket License, the proposed 90 cm. earth terminals will operate with the same Ka-band satellites listed in Section I above, including JUPITER 2, to provide high-speed broadband services to consumers throughout the United States.

The proposed earth terminals are fully consistent with the FCC's technical requirements,<sup>5</sup> including power density limits under 47 C.F.R. § 25.138 and cross-polarization requirements under 47 C.F.R. § 25.209(b). Additionally, Hughes will operate these earth terminals in accordance with all applicable coordination agreements.<sup>6</sup> Accordingly, there are no interference concerns with the proposed STA operations.

## **III. GRANT OF THE REQUESTED STA WILL SERVE THE PUBLIC INTEREST**

Grant of the requested STA will serve the public interest by allowing Hughes to quickly deploy the latest technology in user terminals that will be used to provide high-speed broadband services to consumers throughout the United States. Specifically, these user terminals will be deployed to meet the broadband needs of business, government and residential users in the United States, delivering such high-demand services as access to the Internet, digital video streaming, voice over IP, digital music, interactive television, video conferencing, and high capacity two-way communications.

Hughes has deployed more than one million broadband user terminals throughout the United States and Canada, and demand continues to increase significantly with the successful

---

<sup>5</sup> See Attachment A (Technical Specifications).

<sup>6</sup> Specifically, Hughes has previously concluded a coordination agreement with Iridium, the only NGSO licensee in the 29.25-29.50 GHz frequency band. The proposed operations will comply with the coordination agreement, hence protecting Iridium's operations in the band.

launch of EchoStar XIX.<sup>7</sup> This increasing demand for high-speed broadband service demonstrates that there is an ample market for the types of broadband services that Hughes provides.<sup>8</sup> Additionally, areas of the United States that are currently underserved or unserved by terrestrial broadband technologies will benefit from the availability of these new user terminals. Deployment of these new user terminals will provide high-speed broadband service to rural and underserved areas, promote regional commerce, facilitate development of applications and content for consumers, and create new opportunities for economic development in the United States.

---

<sup>7</sup> See Hughes, Press Release, *Hughes Launches World's Largest and Fastest Broadband Satellite Network* (Mar. 7, 2017).

<sup>8</sup> See Hughes, Press Release, *Hughes to Highlight Growth in High Throughput Satellite Technology at CSAT 2014 Conference* (Sept. 8, 2014).

## ATTACHMENT A TECHNICAL SPECIFICATIONS

ANTENNA ID:	TR90CM	90 cm.	Skyware Global	
28350.0000 - 28600.0000 MHz	650KG7W		5.15 dBW, 29.4 dBW / 4 kHz	512 KSPS, PSK, DIGITAL CARRIER
29250.0000 - 30000.0000 MHz	650KG7W		51.5 dBW, 29.4 dBW / 4 kHz	512 KSPS, PSK, DIGITAL CARRIER
18300.0000 - 19300.0000 MHz	100KG7W			100 KHZ, PSK, DIGITAL CARRIER
18300.0000 - 19300.0000 MHz	500MG7W			500 MHZ, PSK, DIGITAL CARRIER
19700.0000 - 20200.0000 MHz	100KG7W			100 KHZ, PSK, DIGITAL CARRIER
19700.0000 - 20200.0000 MHz	500MG7W			500 MHZ, PSK, DIGITAL CARRIER