EXHIBIT 1

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

Pursuant to Section 25.120(b)(3) of the Commission's rules,[1] HNS License Sub, LLC (together with its affiliates, "Hughes") requests to renew its special temporary authorization ("STA"),[2] for an additional 180 days until May 30, 2016, to operate up to 100,000 remote earth terminals (74 cm. in diameter) (Call Sign E060445) 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).[3] These earth terminals will operate with certain satellites to provide high-speed broadband services to consumers throughout the United States. Hughes further requests a partial waiver of the cross-polarization requirements of Section 25.209(b) of the FCC's rules to permit prompt deployment of the proposed earth terminals to consumers nationwide.

I. BACKGROUND

Hughes holds a blanket license (Call Sign E060445) to operate a network of transmit/receive Ka-band FSS earth terminals used to provide high-speed broadband services to U.S. consumers. On August 10, 2015, the FCC granted Hughes's application to modify its blanket license so as to: (i) add the EchoStar XIX (or Jupiter 97W) satellite at 97.1° W.L. as a point of communication for each antenna type;[4] and (ii) increase the number of earth station

[1] *See* 47 C.F.R. § 25.120(b)(3).

[2] *See* IBFS File No. SES-STA-20150814-00524 (granted Oct. 2, 2015).

[3] Hughes has a pending modification application for regular authority to operate these same Ka-band FSS earth terminals. *See* IBFS File No. SES-MOD-20151102-00791 (filed Nov. 2, 2015).

[4] On July 27, 2012, the FCC authorized Hughes to access the U.S. market by using Jupiter 97W, a satellite that will operate in the Ka-band and provide broadband services to U.S. consumers across the country. *See* Hughes, Letter of Intent, IBFS File No. SAT-LOI-20110809-00148 (granted Jul. 27, 2012). On June 23, 2015, the FCC granted a modification of Hughes' U.S. market access authorization for

terminals authorized under the blanket license to five million terminals for the TR74CM antennas.[5]

II. DESCRIPTION OF PROPOSED STA OPERATIONS

Hughes requests a 180-day STA renewal to operate up to 100,000 Ka-band FSS earth terminals **(**74 cm. in diameter) manufactured by Skyware Global (formerly, Raven) and Winegard (and originally designed and manufactured by GD Satcom). The proposed earth terminals will operate with the following satellites to provide high-speed broadband services to consumers throughout the United States:

1) SPACEWAY 1 at 103° W.L.;
2) SPACEWAY 2 at 99° W.L.;
3) SPACEWAY 3 at 94.95° W.L.;
4) AMC-15 at 105° W.L. (U.S.-licensed);
5) AMC-16 at 85° W.L. (U.S.-licensed);
6) EchoStar-9 at 121° W.L. (U.S.-licensed);
7) EchoStar XVII at 107.1° W.L. (U.S.-licensed);
8) DIRECTV 10 at 102.8° W.L. (U.S.-licensed); and
9) DIRECTV 11 at 99.2° W.L. (U.S.-licensed).

Except with respect to cross-polarization gain (for which a waiver is sought, as discussed below), these earth terminals are technically identical to the 74 cm. earth terminals manufactured by GD Satcom (formerly, Prodelin) and authorized under Hughes' existing blanket license.[6] Further, Hughes will operate these terminals in accordance with all coordination agreements. Accordingly, there are no interference concerns with the proposed STA operations.

Jupiter 97W to permit the following: (i) adding the 27.85-28.35 GHz frequencies (gateway uplink); and (ii) updating the FCC licensing information associated with the satellite to reflect that it will be operated by Hughes under the International Telecommunications Union filing for the RAGGIANA-5 network, registered at the ITU by Papua New Guinea. *See* Hughes, IBFS File No. SAT-MOD-20141210-00127 (granted June 23, 2015).

[5] *See* Hughes, IBFS File No. SES-MFS-20150401-00186 (filed Apr. 1, 2015).

[6] *See* Attachment A (Technical Specifications).

Coordination with Non-geostationary Satellite Orbit ("NGSO") Feeder Links. Hughes will operate these earth terminals in the 29.25-29.50 GHz frequency band. This frequency band is shared on a co-primary basis with the feeder link stations of MSS NGSO systems under 47 C.F.R. § 25.258. Hughes has previously concluded a coordination agreement with Iridium, the only NGSO licensee in this band. Hughes operations comply with the coordination agreement, hence protecting Iridium's operations in the band.

Waiver Request. The proposed Ka-band FSS earth terminals will slightly exceed the cross-polarization gain specified in Section 25.209(b) of the FCC's rules[7] only in the elevation plane and only on one side (*i.e.*, the side higher than the main beam). Accordingly, pursuant to Section 1.3 of the FCC's rules,[8] Hughes requests a partial waiver of the cross-polarization requirements of Section 25.209(b).[9]

Except with respect to cross-polarization gain, the proposed earth terminals are technically identical to the 74 cm. earth terminals that have been authorized under Hughes' existing blanket earth station license (Call Sign E060445) and fully consistent with the FCC's technical requirements. Based upon the manufacturers' test reports, the degree of non-conformance with respect to the cross-polarization antenna pattern is *de minimis*, and occurs only in the elevation plane and only on one side. Specifically, the cross-polarization pattern in the upper elevation side is higher than the FCC's cross-polarization mask ($19–25\log_{10}\Theta$) for $\Theta > 7$ only. At no point is the cross-polarization pattern higher than the FCC's co-polarization mask

[7] 47 C.F.R. § 25.209(b).

[8] 47 C.F.R. § 1.3.

[9] A waiver of the Commission's rules is warranted when "good cause" is shown. *See* 47 C.F.R. § 1.3; *see also WAIT Radio v. FCC*, 418 F.2d 1153, 1157 (D.C. Cir. 1969). A waiver may be granted if the grant "would not undermine the policy objective of the rule in question and would otherwise serve the public interest." *See EchoStar KuX Corp. Application for Authority to Construct, Launch and Operate a Geostationary Satellite Using the Extended Ku-band Frequencies in the Fixed-Satellite Service at the 83° W.L. Orbital Location*, Order and Authorization, 20 FCC Rcd 919, ¶ 12 (2004).

$(32–25\log_{10}\Theta)$. Moreover, the proposed earth terminals are in compliance with the power density limits under Section 25.138 of the FCC's rules.[10]

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

Grant of the requested STA renewal will serve the public interest by allowing Hughes to quickly deploy user terminals that will provide high-speed broadband services to consumers throughout the United States without any interference concerns. Specifically, these user terminals will be deployed to meet the broadband needs of business and residential users in the United States, delivering such high demand services as high-definition video programming, on-demand entertainment, digital music, interactive television, video conferencing, and high capacity two-way communications.

Following the successful launch of EchoStar XVII in 2011, Hughes has deployed more than one million broadband user terminals throughout the United States and Canada, and demand continues to increase.[11] This increasing demand for high-speed broadband service demonstrates that there is an ample market for the types of services that Hughes provides.[12] These services include high-speed data transmission and high-speed broadband Internet access, which can be used to support Internet and content-provider offerings such as high-definition video programming, on-demand entertainment, digital music, interactive television, video conferencing, and high-capacity two-way communications.

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. Provision

[10] 47 C.F.R. § 25.138.

[11] *See* Hughes, Press Release, *Hughes Becomes First Satellite Internet Provider to Surpass One Million Active Users* (Sept. 8, 2014).

[12] *See* Hughes, Press Release, *Hughes to Highlight Growth in High Throughput Satellite Technology at CSAT 2014 Conference* (Sept. 8, 2014).

of broadband service to these areas will promote regional commerce while providing new job opportunities in the United States through launch of the satellite, development of applications and content for consumers, and deployment of gateway earth stations and user terminals. The additional high-speed capacity will improve communications links in rural and underserved areas, and create new opportunities for economic development in the United States.