## **EXHIBIT 1**

## **DESCRIPTION OF PROPOSED LICENSE MODIFICATION**

*Introduction*. Pursuant to 47 C.F.R. § 5.59(a), EchoStar Global Australia Pty Ltd ("EchoStar Global"), a wholly owned subsidiary of EchoStar Corporation, requests modification of its conventional experimental license (Call Sign WL2XFJ; File No. 0539-EX-CN-2020) to test and develop prototype mobile satellite service ("MSS") user terminals ("UTs"). Specifically, EchoStar Global seeks modification to add two satellites, EG-3 and Pathfinder II, as points of communication. Grant of this application will serve the public interest by facilitating development of new satellite equipment and technology that ultimately will be deployed to support mobile communications, public safety, and other services worldwide.

**Background.** With its parent company's extensive experience in the satellite industry, EchoStar Global is in the process of designing, constructing, and launching a new non-geostationary orbit ("NGSO") mobile satellite service ("MSS") system ("EG System" or "System") to provide narrowband data services, including machine-to-machine and Internet of things communications, throughout the globe. Pursuant to Australian authorization and International Telecommunication Union ("ITU") filings for the SIRION-1 network,<sup>1</sup> the EG System is licensed to provide MSS on S-band frequencies at 2000-2020 MHz (uplink) and 2180-2200 MHz (downlink). The System will consist of a constellation of approximately 28 satellites in low Earth orbit, the first of which was successfully launched in August 2020, followed by the scheduled launch of EG-3 in June 2021. Additionally, EchoStar Global acquired ownership of Pathfinder II, launched in December 2018, for operations under the SIRION-1 ITU filings.

**Purpose and Scope of Experimental Operations**. The proposed modified operations will allow EchoStar Global to test, develop, and demonstrate the technical operations of prototype UTs for use with the EG System and Pathfinder II, under real-world conditions that simulate the end user's operating environment. Pursuant to 47 C.F.R. § 5.64(b), orbital debris mitigation plans for EG-3 and Pathfinder II are set forth in Attachments A and B, respectively. Additionally, except for the addition of EG-3 and Pathfinder II as points of communication, the technical parameters specified in the accompanying FCC Form 442 remain the same as currently licensed, thus creating no increased interference risks to other authorized services.

*Hours of Operation.* The proposed operations, as modified, may occur 24 hours per day, seven days per week. The following contact is available 24 hours per day, seven days per week, to address interference or other operational issues:

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<sup>&</sup>lt;sup>1</sup> See ITU, Space Network List Part B Query Results, <u>https://www.itu.int/net/ITU-</u> <u>R/space/snl/bresult/radvance.asp??sel\_type=C&sel\_satname=SIRION-1</u> (last visited Apr. 5, 2021).