

EXHIBIT 1

DESCRIPTION OF PROPOSED EXPERIMENTAL OPERATIONS

Purpose and Scope of Experimental Operations: EchoStar Global Australia Pty Ltd (“EchoStar Global” or “EG”) requests a two-year conventional experimental license to test and develop prototype mobile satellite service (“MSS”) user terminals (“UTs”).¹ 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.

EchoStar Global is a wholly owned subsidiary of EchoStar Corporation, a U.S. company with extensive experience in the satellite industry, and is in the process of designing, constructing, and launching a new S-band non-geostationary orbit (“NGSO”) MSS system (the “EG System”) in the 2000-2020 MHz (uplink) and 2180-2200 MHz (downlink) frequency bands to provide narrowband data services, including machine-to-machine (“M2M”) and Internet of things (“IoT”) communications, throughout the globe. The Australian-licensed system will consist of an initial constellation of three satellites in low Earth orbit, the first of which is scheduled to be launched in July 2020, followed by the second to be launched later in the 3rd Quarter of 2020 and third in early 2021. EchoStar Global acknowledges that it has commenced construction of the EG system at its own risk.²

The requested experimental license will allow EchoStar Global to test, develop, and demonstrate the technical operations of prototype user terminals for use with the EG System under real-world conditions that simulate the end user’s operating environment. Specifically, EchoStar Global proposes to test and develop: (i) up to 20 mobile UTs within the continental United States; (ii) up to 40 temporary fixed UTs within a five-kilometer radius area in Englewood, Colorado; and (iii) one fixed UT in Germantown, Maryland. Each temporary fixed UT will employ four directional antennas pointing in the vertical plane at 45° and horizontal plane at 0°, 90°, 180°, and 270°. The fixed UT will employ a full tracking directional antenna that will follow the trajectories of the NGSO satellites above the horizon by pointing in the vertical plane at 10° to 90° and horizontal plane at 0° to 360°.

The technical parameters of the UTs are provided in the attached Appendix A and FCC Form 442. Additionally, the orbital debris mitigation plan for the EG system is set forth in Appendix B.³

¹ See 47 C.F.R. §§ 5.54(a)(1), 5.63(c).

² See 47 C.F.R. § 5.64(a).

³ See 47 C.F.R. § 5.64(b).

No Harmful Interference: The proposed operations will not cause harmful interference to other authorized services. By its letter (attached as Appendix C), DISH Network Corporation, the parent company of the licensees of S-band MSS/AWS-4 spectrum in the United States, has consented to the proposed operations on a non-interference basis.

Hours of Operation: The proposed user terminals may operate 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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