Request for Experimental Authority

Iridium Satellite LLC ("Iridium") hereby requests a two-year experimental license to transmit from its space stations to the OMNI-LER1 smallsat in the 1618.725–1626.5 MHz band.¹

The OMNI-LER1 mission is run by Internet Think Tank, Inc. ("Internet Think Tank") to conduct research associated with measuring the behavior of blockchain technology in low earth orbit. Experiments will include transactions of data acquired from on-board sensors and use of smart contracts for automated transactions.

The satellite will be launched aboard the SpaceX Falcon 9 Teleporter 7, from Cape Canaveral, no earlier than January 31, 2023. Transmission will begin 30 minutes after satellite deployment.

The OMNI-LER1 cubesat carries a single RockBLOCK model 9603 modem that will support data relay to mission control via space stations in Iridium's "Big LEO" constellation. The OMNI-LER1 mission is detailed in an experimental license application filed with the Commission by Internet Think Tank.²

There will be no change during the experiment in the operating parameters of Iridium's space stations, which are licensed as Part 25 space stations under Call Sign S2110. For this reason, no operating parameters, other than effective radiated power and emission designator, are identified in the form this exhibit accompanies. The only change for which Iridium seeks experimental authority is adding the OMNI-LER1 cubesat as a point of communication. Iridium's Part 25 space station license does not cover space-to-space communications.

¹ Iridium's constellation is comprised of 66 satellites, any one of which may be used as part of the experiment at any point in time.

² Internet Think Tank, Inc., Application for Experimental Authority to Launch and Operate the OMNI-LER1 Satellite, OET File No. 1053-EX-CN-2022, filed Sep 23, 2022.