

Request for Experimental Authority

The National Telecommunications and Information Administration (“NTIA”) is in the process of authorizing the National Aeronautics and Space Administration (“NASA”) to conduct experiments with the Technical Educational Satellite-16 (“TechEdSat-16”) low earth orbit nanosatellite.

Iridium hereby requests experimental authority to be issued by September 1, 2024, for operation commencing on October 1, 2024, and continuing for a period of 18 months, to transmit from its space stations to TechEdSat-16 in the 1618.725–1626.5 MHz band.¹

In connection with these experiments, NASA will operate up to three Iridium NAL 9602-I modems hosted on the TechEdSat-16 smallsat in a 12U form. TechEdSat-16 will transmit to space stations in Iridium’s “Big LEO” constellation and provide instrument command and control in the demonstration of a single Doppler Wind and Temperature Sounder (“DWTS”), demonstrate a de-orbit, compact exo-brake, and include advanced high powered neuromorphic processors.

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 used in the form that this exhibit accompanies. The only change for which Iridium seeks an STA is adding TechEdSat-16 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.