## APPLICATION FOR SPECIAL TEMPORARY AUTHORITY

Ligado Networks Subsidiary LLC ("Ligado"), pursuant to Section 25.120 of the Commission's Rules, hereby requests a second extension of a special temporary authority ("STA")<sup>1</sup> to conduct telemetry, tracking, and command ("TT&C") communications with MSAT-2 (AMSC-1) at 107.5° WL during the pendency of its application to modify MSAT-2's authorization to relocate from 106.5° WL to 107.5° WL ("MSAT-2 Modification Application").<sup>2</sup> Ligado requests that the Commission extend the April and May STAs an additional 60 days, commencing on the expiration of the May STA on July 26, 2021 and ending on September 24, 2021.

This second extension is necessary as Innovation, Science & Economic Development Canada ("ISED") has not yet issued final authorization for operation at a nominal location of 107.3° WL and actual location of 107.5° WL. Ligado successfully completed the drift from MSAT-2's previous location at 106.5° to 107.5° on April 21, 2021, on April 29, 2021, with all systems performing as expected. Accordingly, Ligado will need to continue conducting TT&C communications with the satellite until ISED issues a final authorization, and then as the Commission considers the MSAT-2 Modification Application.

As such, the following repeats information from the April and May STA applications relevant to ongoing operations at the new orbital location.

MSAT-2 serves as a backup satellite to Ligado's other U.S. satellite, SkyTerra-1, and, as a backup satellite, does not currently carry customer traffic. The orbital location at 107.5° WL is an orbital position under Canadian authority, and Innovation, Science & Economic Development Canada ("ISED") has authorized operations at the location.<sup>3</sup> As noted in the MSAT-2 Modification, Ligado has requested that the Commission indicate to ISED that it consents to relocating MSAT-2 to 107.5° WL.<sup>4</sup> Please also note that while MSAT 2 will be authorized in the nominal Canadian orbital slot at 107.3°WL it will be physically located and operate at 107.5° WL in order to avoid overlapping with the Anik-F1R and Anik G-1 satellites, which Telesat has confirmed have station-keeping operations within a 0.05° tolerance.

Grant of this application is entirely consistent with the Commission's policy of granting Special Temporary Authority when doing so will not cause harmful interference and will serve

<sup>&</sup>lt;sup>1</sup> See FCC File No. SAT-STA-20210406-00046 (granted Apr. 19, 2021) ("April STA"); FCC File No. SAT-STA-20210521-00070 (granted May 27, 2021) ("May STA").

<sup>&</sup>lt;sup>2</sup> See FCC File No. SAT-AMD-20210412-00049 (filed Apr. 12, 2021); see also FCC File No. SAT-MOD-20210316-00034 (filed Mar. 16, 2021).

<sup>&</sup>lt;sup>3</sup> See Letter from Jeffrey Carlisle, Counsel to Ligado to Marlene H. Dortch, Secretary, FCC, April STA (filed Apr. 16, 2021).

 <sup>&</sup>lt;sup>4</sup> See ITU, Radiocommunication Bureau, WRC-12 decisions included in the Minutes of Plenary meeting relating to space services procedures, Circular Letter CR/333 (2012) at 2 (citing (§3.12 Doc. CMR12/554); see also ITU, Radiocommunication Bureau, Decisions of past WRCs concerning the application of the Radio Regulations, Circular Letter CR/380 (2015) at 3 (same).

the public interest, convenience and necessity.<sup>5</sup> There is no risk of harmful interference from MSAT-2 operating in the new location. MSAT-1 operated in that location without causing harmful interference to other operators, and MSAT-2 and MSAT-1 were built to the same design specifications.<sup>6</sup> Moreover, L-Band operation has already been coordinated with other L-band operators assuming use by a MSAT-class satellite. Thus, placement of MSAT-2 will not create any new interference risk that has not already been discussed and resolved by the relevant operators. The MSAT-2 Modification Application provides further information substantiating the absence of any risk of harmful interference.<sup>7</sup> The public interest, convenience and necessity is served because relocation will facilitate Ligado's continued efficient management of its satellites and orbital locations, and will also preserve the availability of backup service at an orbital location that Ligado has operated from for many years, thus helping to ensure continuity of service to its customers.

With regard to MSAT-2's east-west station keeping range, MSAT-2 has adopted an increasingly inclined orbit, which will continue to increase for several years after relocation to the new orbital location. Accordingly, to provide necessary flexibility for expected operations for the next five years and to extend MSAT-2 remaining fuel life, Ligado requested in the MSAT-2 Modification Application to change the north-south station-keeping range to +/-13.5 degrees and, pursuant to 47 C.F.R. §25.201(j), requested that the Commission authorize a change to the east-west station-keeping range to +/-0.1 degrees.

As explained in the MSAT-2 Modification Application,<sup>8</sup> these ranges will not result in any overlap with any neighboring satellites. Ligado has also reviewed planned satellites and determined that there will be no overlap with the nearest planned satellites, none of which will be placed into orbit through the duration of the extension requested.

Accordingly, Ligado respectfully requests that its request for an extension of the STA be granted.

<sup>&</sup>lt;sup>5</sup> See e.g., Newcomb Communs., Inc., 8 FCC Rcd 3631, 3633 (1993); Columbia Comms. Corp., 11 FCC Rcd. 8639, 8640 (1996); Am. Tel. & Tel. Co., 8 FCC Rcd 8742 (1993).

<sup>&</sup>lt;sup>6</sup> MSAT-2 does differ from MSAT-1 in only one respect: MSAT-2 uses 11.7005 GHz as a backup TT&C frequency, while MSAT-1 used 11.70275 GHz as a backup. This difference is not material, however, to interference with any other operator.

<sup>&</sup>lt;sup>7</sup> See MSAT-2 Modification Application, Exhibit C, 3-6 and Technical Exhibit.

<sup>&</sup>lt;sup>8</sup> See id., Exhibit C, 2-3.