## **REQUEST FOR SPECIAL TEMPORARY AUTHORITY**

Denali 20020, LLC (Denali ) hereby respectfully requests special temporary authority for a period of thirty days, starting on November 20, 2010, for its earth station in Brewster, Washington (call sign E960222) to communicate with the AMC-18 C-band satellite during maneuvers that will take the satellite outside its assigned stationkeeping volume. AMC-18 is a Gibraltar-licensed spacecraft authorized to serve the U.S. from 104.95° W.L.<sup>1</sup> SES Satellites (Gibraltar) Limited ("SES Gibraltar"),<sup>2</sup> the licensee of AMC-18, has advised Denali that it plans to temporarily operate AMC-18 up to 0.2 degrees to the east and west of its assigned orbital location, *i.e.* between 104.75° and 105.15° W.L. The Denali earth station will be used to perform Telemetry, Tracking and Control ("TT&C") during these maneuvers.<sup>3</sup> The satellite's communications payload will also be operational while the satellite is outside its typical stationkeeping box.<sup>4</sup>

The AMC-18 maneuvers are intended to mitigate potential interference from the PanAmSat Licensee Corp. ("PanAmSat") Galaxy 15 satellite (call sign S2387), which suffered an anomaly and which is drifting in an uncontrolled manner in the direction of AMC-18. Grant

<sup>&</sup>lt;sup>1</sup> See SES Satellites (Gibraltar) Limited, File No. SAT-PPL-20061006-00118, Call Sign S2713 ("AMC-18 Permitted List Filing"), grant-stamped Dec. 7, 2006 (adding AMC-18 to the Commission's Permitted Space Station List for C-band operations from 104.95° W.L.).

<sup>&</sup>lt;sup>2</sup> SES Gibraltar is a wholly-owned subsidiary of SES Americom.

<sup>&</sup>lt;sup>3</sup> The TT&C will be performed in the frequencies for which AMC-18 is authorized: command at 6423.5 MHz and telemetry beacons at 3700.5 MHz and 4199.5 MHz. *See* AMC-18 Permitted List Filing, Technical Appendix at A-16.

<sup>&</sup>lt;sup>4</sup> Separate STA requests are being filed by the licensees of the earth stations used to uplink communications to AMC-18, and SES WORLD SKIES is concurrently filing a waiver request seeking authority for the earth stations that receive signals from AMC-18 to continue to do so during the maneuvers described herein.

To the extent required, SES WORLD SKIES requests a waiver of the requirement to maintain a spacecraft authorized to serve the U.S. within +/- 0.05 degrees of its assigned station-keeping position. *See* 47 C.F.R. §§ 1.3 (waiver for good cause), 25.210(j) (east/west station-keeping).

of the requested authority and any necessary waiver will serve the public interest by allowing AMC-18 to continue to serve U.S. customers during the planned maneuvers, minimizing disruptions as Galaxy 15 approaches and passes through the 104.95° W.L. orbital location.

As the Commission is aware, because of an anomaly that occurred on or about April 5, the Galaxy 15 satellite began drifting eastward from its assigned orbital location of 133° W.L. Galaxy 15 is nearing AMC-18 and is expected to pass through AMC-18's stationkeeping box with its payload active on or about November 24. Because Galaxy 15 operates on the same C-band frequencies as AMC-18, the potential for harmful interference into AMC-18 operations is significant as Galaxy 15 approaches. There will also be an increased risk of an inorbit collision as Galaxy 15 passes through AMC-18's stationkeeping box.

SES Gibraltar is considering options to address these matters in conjunction with its customers and Intelsat. One such method is to ensure a minimum orbital separation between AMC-18 and the active Galaxy 15 as it approaches and passes through 104.95° W.L. Specifically, AMC-18 would first move to the east as Galaxy 15 approaches from the west, and then be maneuvered to the west of 104.95° W.L. as Galaxy 15 continues on its passage east. The maneuvers are expected to be completed within a week, after which AMC-18 will recommence operating with its standard stationkeeping tolerance.

This method has previously been used successfully to mitigate interference. For example, PanAmSat managed the transition of traffic from Galaxy 15 to Galaxy 12 by operating Galaxy 12 outside of the 133° W.L. box (with Commission authority) for a period of time to maintain a minimum separation between the satellites.<sup>5</sup> SES WORLD SKIES requested and

<sup>5</sup> See File No. SAT-STA-20100408-00070, Call Sign S2422, grant-stamped Apr. 9, 2010.

received Commission authority to use the same approach to mitigate interference when Galaxy 15 passed through the assigned stationkeeping volume of AMC-11.<sup>6</sup>

Grant of the requested authority will not adversely affect other authorized operations. There are no C-band satellites assigned to operate within +/- 0.2 degrees of 104.95° W.L. The closest C-band spacecraft to AMC-18 are SES WORLD SKIES' AMC-1 at 103° W.L. and Telesat Canada's Anik F1 and F1R satellites at 107.3° W.L. SES WORLD SKIES does not expect that the proposed temporary operations of AMC-18 outside of its assigned station-keeping box will cause harmful interference to adjacent satellites. SES WORLD SKIES and SES Gibraltar will coordinate internally with respect to AMC-1. SES WORLD SKIES understands that SES Gibraltar has notified Telesat Canada of the planned AMC-18 maneuvers, and has reached an agreement with Telesat Canada concerning the maneuver parameters described herein.

During the proposed maneuvers, there will be a temporary overlap between the assigned station keeping volume of SES WORLD SKIES' AMC-15 satellite at 105.05° W.L. and the enlarged stationkeeping volume proposed for AMC-18. SES WORLD SKIES and SES Gibraltar will closely monitor the two satellites' positions during the AMC-18 maneuvers to ensure physical separation between the spacecraft. Apart from AMC-15, AMC-18 will not be located at the same orbital location as another satellite or at an orbital location that has an overlapping stationkeeping volume with another satellite.

For the foregoing reasons, Denali seeks temporary authority for a period of up to 30 days beginning on November 20, 2010, to communicate with AMC-18 while the spacecraft is

<sup>&</sup>lt;sup>6</sup> *See* File No. SAT-STA-20100430-00086, Call Sign S2433, grant-stamped May 12, 2010.

located between 104.75° and 105.15° W.L. At the end of this period, AMC-18 will be returned to its assigned orbital location of 104.95° W.L.