NARRATIVE

Skynet Satellite Corporation ("Skynet") hereby requests that the Commission modify the license for Telstar 12, S2462, by extending the satellite's license term for five years, through and including November 30, 2022. Skynet demonstrates below that an extension will enable it to continue to provide service to its customers at its current location, pending launch of a replacement satellite as authorized by Innovation, Science and Economic Development Canada ("ISED"). Grant of Skynet's extension request, therefore, is in the public interest.

Telstar 12 is a Ku-band satellite that was launched on October 19, 1999, and was originally placed into service at 15° W.L in December 1999. In 2016, it was replaced at that location by Telstar 12V, then relocated to 109.2° W.L., which is a Canadian orbital location.[1]

The operation of Telstar 12 at 109.2° W.L is the subject of a Mutual Informal Understanding between the U.S. and Canadian Administrations under which the satellite is subject to Canadian authority, through a license held by Skynet's affiliate, Telesat Canada, from ISED.[2] At the request of the International Bureau, Skynet also modified its FCC license for Telstar 12 to specify operation at 109.2° W.L.[3] It is Skynet's

[1] The ITU filing, CANSAT-64, for 109.2° W.L. for the frequencies Telstar 12 operates on was submitted by ISED.
[2] Mutual Informal Understanding of the Administration of Canada and the Administration of the United States for the Operation of the Telstar 12 Satellite at the 109.2° W Orbital Position, Attachment to grant of Telstar 12 modification application, FCC File No. SAT-MOD-20160513-00050, dated August 18, 2016.
[3] *See* FCC File No. SAT-MOD-20160513-00050.

understanding that the Bureau wanted Skynet to continue to hold an FCC license for Telstar 12 because the United States, in connection with the launch of Telstar 12, had registered the satellite under the UN Convention on Registration of Objects Launched into Outer Space.

Absent an extension, the FCC license term for Telstar 12 will expire on November 30, 2017. Skynet has built a customer base for Telstar 12 at 109.2° W.L. and has customers that require service from that location beyond the license expiration date.

Skynet's current license term corresponds to the calculation made by Skynet in 2014 that there was sufficient fuel on board to allow Telstar 12 to continue providing reliable service through the end of the current license term and then to deorbit the satellite to a disposal altitude of approximately 300 km above geostationary orbit, barring a catastrophic failure of satellite components. Skynet has updated its calculations, based on the fact that Telstar 12 now is operating in inclined orbit.[4] Skynet has determined there is sufficient fuel on board to allow Telstar 12 to continue providing reliable service well past the end of the proposed extended license term and then to deorbit the satellite to a disposal altitude of approximately 300 km above geostationary orbit, barring a catastrophic failure of satellite components.[5] In making

[4] *See* letter, dated April 19, 2016, from Joseph A. Godles, attorney for Skynet, to Marlene H. Dortch, Secretary, FCC, call sign S2462.

[5] This is consistent with the most recent SEC filing of its parent company, Telesat Canada, which identifies the end of orbital maneuver life of Telstar 12, based on operation in inclined orbit, as 2027. *See* Telesat Canada, Annual Report, SEC Form 20, available at https://www.sec.gov/Archives/edgar/data/1465191/000114420417012314/v457388_20f.htm#tIOC, at 41-42.

these calculations, Skynet has assumed that standard station keeping maneuvers will be performed to maintain Telstar 12, within its existing east-west and north-south inclined orbit station keeping tolerances.

Although there have been anomalies, the overall health of Telstar 12 is good. One of two command receivers failed, but a Redundant Command Unit ("RCU") software patch was uploaded that restored redundancy. As Skynet's parent has reported publicly,[6] Telstar 12 experienced some solar array string failures that affected the total power available to the spacecraft but have not had any operational impact to date. Apart from some failures of payload units, all other satellite subsystems are functioning nominally. There is no single point of failure in the satellite's design; and with the RCU patch in place, the satellite has redundancy for critical systems, i.e., propulsion and tracking, command and telemetry.

In sum, extending the license term for Telstar 12 through and including November 30, 2022, will facilitate continuing service and is consistent with the fuel budget and health of the satellite. Accordingly, grant of this license extension application is in the public interest.

[6] *Ibid*, at 43.