

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)
)
)
LeoSat MA, Inc.) File No. SAT-PDR-20161115-00112
)
Petition for Declaratory Ruling to Permit)
U.S. Market Access for the LeoSat Ka-)
band Low- Earth Orbit Satellite System)
)

PETITION TO DENY

In the above-captioned “Petition,” LeoSat MA, Inc. (“LeoSat”) seeks authority to serve the U.S. market using a non-geostationary satellite orbit (“NGSO”) satellite system.¹ Telesat Canada (“Telesat”) files this Petition to Deny for the reasons set out below.

The frequencies proposed by LeoSat for its operations overlap with the following frequency bands Innovation, Science and Economic Development Canada (“ISED”) has authorized Telesat to use for its NGSO network: 17.8-18.6 GHz, 18.8-19.3 GHz, and 19.7-20.2 GHz (space-to-Earth) and 27.5-29.1 GHz and 29.5-30.0 GHz (Earth-to-space).² It should be noted that certain of the Canadian ITU filings that are associated with

¹ See *Public Notice, Applications Accepted For Filing, Cut-Off Established for Additional NGSO-Like Satellite Applications or Petitions For Operations in the 12.75-13.25 GHz, 13.85-14.0 GHz, 18.6-18.8 GHz, 19.3-20.2 GHz, and 29.1-29.5 GHz Bands*, DA 17-524, File No. SAT-LOI-20161115-00121 (May 26, 2017).

² Telesat Approvals in Principle, ISED file 3150-1 (557203 AT) dated June 26, 2015, and ISED file 3150-1 (565832 SS) dated June 26, 2015, for the 27.5 – 29.1, 29.5 – 30, 17.8 – 19.3, and 19.7 – 20.2 GHz bands.

Telesat's NGSO system have date priority over later ITU filings that may be associated with LeoSat's system.³

Absent coordination, LeoSat's NGSO system could interfere with Telesat's NGSO operations because the two systems would operate in overlapping geographical areas on overlapping Ka-band frequencies. Because LeoSat's NGSO system could interfere with Telesat's NGSO operations, Telesat files this Petition to Deny.⁴

LeoSat acknowledges the potential for in-line interference events with other NGSO operators.⁵ LeoSat further recognizes, as does Telesat, the role of ITU priority in resolving such interference issues, if and to the extent that the relevant parties are unable to reach resolution through voluntary coordination agreements.

As demonstrated by Telesat in its filings in the Commission's pending *NGSO NPRM* proceeding, however, the Commission's rules that require the sharing of spectrum when coordination between NGSO systems operating within a specified angle of separation cannot be reached are unworkable.⁶ No single avoidance angle will address in-line interference events. For any specific interference level, there will be a

³ See *COMMSTELLATION* network published as CR/C/3313.

⁴ Telesat is filing this Petition to Deny to preserve its rights. Telesat recognizes that the Commission is still developing rules to address constellations of NGSO-like satellites and has stated that applicants will be given an opportunity to amend their filings to conform to the new requirements. *Update to Parts 2 and 25 Concerning Non-Geostationary, Fixed-Satellite Service Systems and Related Matters*, Notice of Proposed Rulemaking, 31 *FCC Rcd* 13651 (2016) ("*NGSO NPRM*"). Telesat also recognizes that if LeoSat's Petition is granted before the Commission's rulemaking is completed, the Petition likely will be conditioned on the outcome of the rulemaking, as was done with OneWeb's application. See *WorldVu Satellites Limited, Petition for a Declaratory Ruling Granting Access to the U.S. Market for the OneWeb NGSO FSS System*, IBFS File No. SAT-LOI-20160428-00041 (rel. June 23, 2017) ("*OneWeb Grant*"), at ¶¶ 12 and 26. If the rules the Commission adopts or a future LeoSat amendment resolves Telesat's interference concerns, it will withdraw its objection.

⁵ See Petition, Attachment A, Technical Annex to Supplement Schedule S ("*Technical Annex*"), at 16-18.

⁶ See *Comments of Telesat Canada, NGSO NPRM*, at 6-15 (Feb. 27, 2017); *Reply Comments of Telesat Canada, NGSO NPRM*, at 4-12.

wide variety of angles that vary based on the ever-changing relative positions of satellites and ground terminals. Relying on these default procedures, therefore, would expose Telesat's operations to harmful interference.

In granting OneWeb's NGSO application, the Commission recognized that "[c]ompliance with ITU coordination procedures is a requirement of the ITU Radio Regulations, which hold the force of treaty to which the United States is a party," and that "[s]uch compliance is a typical condition of both U.S. space station licenses and grants of U.S. market access."⁷ Based on this requirement, and in response to concerns raised by Telesat, the Commission conditioned the grant of OneWeb's NGSO application on compliance with ITU requirements.⁸ The same considerations apply here, and so the same condition should apply to any grant of LeoSat's Petition.

⁷ *OneWeb Grant*, n. 335.

⁸ *OneWeb Grant*, ¶ 243(a).

In view of the potential for LeoSat's system to interfere with Telesat's NGSO operations, any grant of its Petition should be conditioned on the outcome of the NGSO rulemaking, as the Commission did in granting OneWeb's NGSO application.⁹ Finally, in recognition of U.S. treaty obligations, any grant should be conditioned on compliance with ITU requirements.

Respectfully submitted,

TELESAT CANADA

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June 26, 2017

⁹ *OneWeb Grant*, ¶¶ 12 and 26

CERTIFICATE OF SERVICE

I hereby certify that on this 26th day of June, 2017, a copy of the foregoing
Comments was sent by electronic mail to the following:

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