



Federal Communications Commission
Washington, D.C. 20554

March 15, 2017

Joseph C. Anders
LeoSat MA, Inc.
3573 Southwest 10th Street
Pompano Beach, FL 33069

Re: LeoSat MA, Inc., IBFS File No. SAT-LOI-20161115-00112 (Call Sign S2979)

Dear Mr. Anders:

On November 15, 2016, LeoSat MA, Inc. (LeoSat) filed a petition for declaratory ruling requesting access to the U.S. market for a non-geostationary orbit (NGSO) Low Earth Orbit (LEO) fixed-satellite service (FSS) system utilizing Ka-band frequencies. To aid in the Commission's evaluation of LeoSat's petition, please provide the following:¹

1. A statement concerning whether it is LeoSat's intent to seek registration of the LeoSat NGSO FSS system by France consistent with the Convention on the Registration of Objects Launched into Outer Space.
2. Any software used to generate the EPFD results shown in the petition, including inputs and output results.
3. Commission rules require petitioners requesting U.S. market access for non-U.S. licensed space stations to provide a narrative description of the design and operational strategies that will be used to mitigate orbital debris.² Alternatively, an applicant seeking market access for a non-U.S. licensed system can satisfy this requirement "by demonstrating that debris mitigation plans for the space station(s) for which U.S. market access is requested are subject to direct and effective regulatory oversight by the national licensing authority."³ LeoSat states that it satisfies this requirement because the operations of its NGSO FSS system are subject to direct and effective regulatory oversight by France. LeoSat also disclosed certain information concerning its orbital debris mitigation plans pursuant to Section 25.114(d)(14) of the Commission's rules. In order to assist in our assessment of whether LeoSat has demonstrated that it is subject to direct and effective regulatory oversight, or alternatively, to permit analysis of the debris mitigation plans for the constellation, we request the following additional information:
 - a. The current status of French licensing authority's review of the orbital debris mitigation plans for the LeoSat NGSO FSS system.
 - b. A statement from LeoSat disclosing the accuracy within which the space station orbital parameters will be maintained for any orbit in which the LeoSat NGSO satellites will

¹ 47 CFR § 25.111(a).

² 47 CFR § 25.114(d)(14); 47 CFR § 25.137 (b), (d).


³ 47 CFR § 25.114(d)(14)(v).

operate, including apogee, perigee, inclination, and the right ascension of the ascending node(s).⁴

- c. Please provide an analysis of collision risk for satellites during the passive disposal phase, *i.e.*, after all propellant is consumed. As part of that analysis, please provide an assessment of how many conjunctions and/or collision avoidance maneuvers might be required of the International Space Station (ISS), assuming it is in operation throughout the period in which LeoSat satellites would transit the ISS orbit.
- d. Please provide an analysis of collision risk, assuming rates of satellite failure resulting in the inability to perform collision avoidance procedures of 10, 5 and 1 percent. This analysis should include a study performed assuming all failures occur at the mission altitude, but may also include additional studies specifying alternative assumptions concerning the orbital locations (such as injection altitude) at which failures might occur.
- e. Any additional information you may wish to provide concerning human casualty risk resulting from satellite disposal, such as any risk or loss mitigation strategies under development.
- f. Any information or analysis you may wish to provide with respect to treatment of this application under the Commission's environmental processing rules.⁵

LeoSat must file a letter providing this information by April 14, 2017. Failure to do so may result in the dismissal of LeoSat's request pursuant to Section 25.112(c) of the Commission's rules, 47 CFR § 25.112(c).

Sincerely,


Jose P. Albuquerque
Chief, Satellite Division
International Bureau

cc: Phil Marchesiello
Wilkinson Barker Knauer, LLP
1800 M Street, NW
Washington, D.C. 20036

⁴ 47 CFR § 25.114(d)(14)(iii).

⁵ 47 C.F.R. §§ 1.1301-1.1309. *Cf.* Space Data Corporation, 16 FCC Rcd 16421, ¶¶ 24-27 (WTB 2001).