



Federal Communications Commission
Washington, D.C. 20554

March 15, 2017

Tom W. Davidson
Akin Gump Strauss Hauer & Feld LLP
1333 New Hampshire Avenue, NW
Washington, D.C. 20036

Re: Theia Holdings A, Inc., IBFS File No. SAT-LOA-20161115-00121 (Call Sign S2986)

Dear Mr. Davidson:

On November 15, 2016, Theia Holdings A, Inc. (Theia) filed the above-captioned application for authority to construct, deploy, and operate a non-geostationary-satellite orbit (NGSO) system in the fixed-satellite, mobile satellite and earth exploration satellite services. To aid in the Commission's evaluation of Theia's application, please provide the following:¹

1. Please provide an analysis of collision risk for satellites during the passive disposal phase, *i.e.*, after all propellant is consumed. Recognizing that satellites in this phase are planned for varying initial orbits, please provide an analysis for both a worst case (all satellites at 540 km perigee) as well as an anticipated range of orbits. 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 Theia satellites would transit the ISS orbit.
2. 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.
3. 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.²
4. Any information or analysis you may wish to provide with respect to treatment of this application under the Commission's environmental processing rules.³
5. For optical inter-satellite links, please provide the wavelength, power, duty cycle, beam diameter at emitter, and beam divergence. In addition, please provide the power margin at the receiver at maximum operating distance.
6. Please indicate whether optical inter-satellite links will be coordinated with other systems proposed in FCC applications and with the U.S. Department of Defense's laser clearing house, and, if such coordination has commenced, please address the status of coordination.

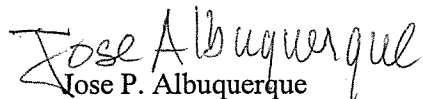
¹ 47 CFR § 25.111(a).

² We note that Theia will seek a remote sensing license from NOAA, and therefore provision of this information is optional. *See* 47 CFR § 25.114(d)(14)(iv).

³ 47 CFR §§ 1.1301-1.1309. *Cf.* Space Data Corporation, 16 FCC Rcd 16421, ¶¶ 24-27 (WTB 2001).

Theia must file a letter providing this information by April 14, 2017. Failure to do so may result in the dismissal of Theia's application 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