355 Adelaide Street West, Toronto, Canada
Our Ref: \Reg\ExParte\180622 – Ex Parte

VIA ELECTRONIC FILING

22 June 2018

Marlene H. Dortch

Secretary Federal
Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: Oral *Ex Parte* Notice
Kepler Communications Petition for Declaratory Ruling
IBFS File No. SAT-PDR-20161115-00114

Dear Ms. Dortch:

On June 19th, 2017, representatives of Kepler Communications Inc. ("Kepler") spoke with representatives of the International Bureau to discuss Kepler's pending application to operate a non-geostationary satellite orbit ("NGSO") fixed-satellite service ("FSS") system in Ku-band. Participating in the meeting on behalf of the International Bureau were Stephen Duall, Karl Kensinger and Cindy Spiers. Participating in the meeting on behalf of Kepler were Nickolas Spina, Jared Bottoms and Mina Mitry.

The meeting participants discussed Kepler's orbital debris ("ODAR") plan that was submitted to the Commission on August 1st, 2017.[1] Kepler highlighted that the ODAR, out of an abundance of care, made numerous assumptions that were overly conservative when representing the potential to generate debris by a single satellite. Clarification was provided to the Commission on how these assumptions are irrelevant and should be disregarded when considering the risk associated with the entire constellation. In short, assumptions such as a 100% failure rate for solar panel deployment and all satellites being deployed at a 600 Km orbit were shown to be excessive when considering the entire constellation and its planned orbits. Kepler further added that its first satellite was launched in January of this year, below 550 Km and without any deployment failures. The Commission's attention was also drawn to the satellite's ability to maneuver by way of differential drag, and how this could effectively be used to mitigate in orbit collisions. In combination with a threat ellipsoid similar to that used in previous filings[2] granted by the Commission, Kepler illustrated how the real operational risk of collision is well below NASA requirements.[3]

For clarity on the discussion, Kepler has attached an internal technical report that demonstrates compliance with relevant ODAR requirements[4], while maintaining conservative assumptions that exceed representative operational probabilities.

[1] *See Kepler Orbital Debris Assessment Report (ODAR) For MULTUS Filing*, Kepler Communications Inc., File No. SAT-PDR-20161115-00114 (1 Aug, 2017).
[2] *See Accidental Collision Risk Assessment,* Planet Labs Inc., File No. SAT-MOD-20150802-00053 (Dated Nov 25, 2015)
[3] The analysis shows that the risk of collision over the lifetime of the 750 objects is COMPLIANT, as calculated under the NASA DAS program.
[4] See Process for Limiting Orbital Debris, NASA-STD 8719.14A, Section 4.5.2.1. (probability of collision with space objects larger than 10 cm should be less than 0.001).

Pursuant to Section 1.1206(b)(2) of the FCC's rules, 47 C.F.R. § 1.1206(b)(2), this *ex parte* notification is being filed electronically for inclusion in the public record of the above-referenced proceeding.

Thank you for your attention to this matter. Should you have any questions, please do not hesitate to contact me.

Sincerely,

/S/ Nickolas G. Spina

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