

- when it has to be **right**



May 26, 2016

Federal Communications Commission
445 12th Street SW
Washington, DC 20554
United States of America
Attention: Hon. Marlene H. Dortch, Secretary

**Re: Written ex parte presentation in IB Docket No. 11-109; DA 16-442;
IB Docket No. 12-340 (Comments Sought on Ligado's Modification Applications);
IBFS File Nos. SES-MOD-20151231-00981; SAT-MOD-20151231-00090 and
SAT-MOD-20151231-00091**

Dear Ms. Dortch:

Leica Geosystems Inc. is pleased to present its comments concerning the license modification applications submitted by Ligado Networks LLC.

Leica Geosystems Inc. is an indirect subsidiary of Leica Geosystems AG, the Swiss developer and manufacturer of systems that use and rely on precision global navigation satellite systems (GNSS). Leica Geosystems AG is a subsidiary of Hexagon AB, a Swedish information technology firm based in Stockholm that offers sensors and software for digitising the world. Hexagon and its customers rely on GNSS to solve the world's challenges in mining, agriculture, construction, safety, surveying, infrastructure and manufacturing industries.

To avoid risking the pattern of growth and stability in these industries, which may be affected by launching a potentially interfering network in the GPS frequency bands, Legado should provide further information with respect to the following areas, to ensure adequate information to evaluate the likelihood of interference:

- co-location of base stations operating at 1526-1536 MHz and 1670-1680 MHz and inter-modulation mitigation, or any parameters that must be implemented to separate the proximity of the base stations to mitigate interference;
- how base stations are intended to be dispersed in Ligado's operations; and
- mitigation of interference between Logado's 1526-1536 MHz downlink band and the MSS L Band signals operating in this area (i.e. Inmarsat operations 1526–1559 MHz).

Leica Geosystems agrees with the comments filed by NovAtel Inc. through its counsel on May 19, 2016. Novatel's comments, stated, among other things, that the existing 1-dB metric for GPS interference criteria is appropriate. The metric has developed as an agreed-upon standard that interference tolerance should be limited to a received interference signal power level that causes no more than 1-dB degradation in the received C/No level.

Regards,

A handwritten signature in black ink, appearing to read 'K. Mooyman', with a long horizontal flourish extending to the right.

Kenneth Mooyman
President