

## Federal Communications Commission Washington, D.C. 20554

August 10, 2011

Mr. Jeffrey Carlisle, Executive Vice President for Regulatory Affairs and Public Policy LightSquared Subsidiary LLC 10802 Parkridge Boulevard Reston, Virginia 20191

Mr. Charles R. Trimble, Chairman U.S. GPS Industry Council c/o Raul R. Rodriguez, Esq. Lerman Senter PLLC 2000 K Street, N.W., Suite 600 Washington, DC 20006

Re: Request for additional information

Gentlemen,

The Commission's staff has been reviewing the June 30, 2011, Final Report of the Working Group that was formed to study the GPS overload/desensitization issue described in our Order and Authorization of SAT-MOD-20101118-00239.

To better evaluate receiver performance, we seek some additional information, as described below. Certain information may be kept confidential pursuant to Section 0.459 of our rules upon your appropriate request for such treatment. We note that the Commission may disclose such confidential information to other federal agencies under the procedures set forth in Section 0.442 of our rules. We seek the following additional information:

**Device Code Key**. As discussed in Section 2.6 of the Working Group Report, the results of the testing were made anonymous via a mechanism that assigned numbers randomly to GPS receivers in each class. In order to help determine the characteristics of those receivers most-and least-affected by interference, we wish to identify the receivers associated with each measurement and therefore request the "device code key," which provides that cross-reference. If an external antenna was used, please also provide the manufacturer and model number of the antenna.

**Production/sales information**. It is unclear to what extent the GPS receivers and devices tested are current production models, into what market segments those receivers and devices are most commonly sold, what fraction of a given market segment those devices represent, and their design lifetimes and typical owner-use lifetimes. This information is important in assessing the likely impact, if any, of interference on various use cases over time. We therefore request production and U.S. sales information for each of the devices tested, including (1) the dates of

DA 11-133, "In the Matter of LightSquared Subsidiary LLC, Request for Modification of its Authority for an Ancillary Terrestrial Component," Adopted and Released January 26, 2011.

production, (2) the market segment(s) to which the device is targeted or sold, (3) total annual sales volume and annual sales volume by market segment or estimates thereof, (4) the date on which full support of the device by the manufacturer ceased (or will cease), (5) estimated time period after which the device owner would likely replace or discontinue use of the device.

**Technical performance data**. It is unclear which technical specifications may be limiting the interference susceptibility of the GPS receivers and devices of various classes. The frequency response of the first stage of the device often limits its ability to reject energy from emissions outside the band of interest. We therefore request data showing the frequency response of the RF front-end (including the antenna system, if commonly integrated or associated with the receiver or device) to input signals over a frequency range of at least 1,100 to 2,000 MHz, low noise amplifier gain and the low noise amplifier 1 dB gain compression point. This information should be provided for each receiver or device tested.

**Base Station deployment plan**. LightSquared's current plan for base station deployment envisions use only of the lower 10 MHz segment of the downlink band. Because that amount of spectrum is more limited than initially submitted to the Working Group for study, we request an updated plan for base station deployment.

The Commission's staff will continue to work with LightSquared and the GPS community to fully study the potential for overload interference to GPS devices and to identify any measures necessary to prevent harmful interference to GPS. A full understanding of the technical performance of receivers and devices as well as of the user segment is important to this effort and we appreciate the cooperation of LightSquared and the GPS industry in supporting our review of the compatibility of the two services.

To further assess the interference susceptibility of the various categories of GPS receivers and devices, we ask that you provide the device code key on or before August 15, 2011. We recognize that the remaining information may take more time to assemble. We therefore request that you submit the production/sales information, technical performance data, and base station deployment plan on or before August 22, 2011. Should you have any questions concerning this request, please do not hesitate to contact me or Ron Repasi, Deputy Chief of OET.

Sincerely,

Julius P. Knapp

Juliu P. Knopp

Chief

Office of Engineering and Technology

cc: Henry Goldberg, Esq. Counsel for LightSquared Subsidiary, LLC Goldberg, Godles, Wiener & Wright 1229 19<sup>th</sup> Street, N.W. Washington, DC 20036