



Oregon

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July 29, 2011

The Honorable Julius Genachowski, Chairman
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re:RE: IB Docket 11-109 and IB Docket File No. SATMOD2010111800239

Dear Mr. Genachowski:

I am writing to you on behalf of the Governor's Oregon Geographic Information Council (OGIC), a committee of 27 state agency directors, 4 local government representatives, one tribal representative, and two federal representatives, established by Governor's Executive Order 00-02. We appreciate this opportunity to comment on the recently completed final report of the Technical Working Group regarding the potential harmful interference to GPS users from LightSquared's terrestrial transmissions. OGIC seeks to express its urgent and critical concern regarding the issues under consideration by the Commission in the referenced proceeding.

The final report of the Technical Working Group shows significant harmful interference to a broad range of GPS applications, including: mapping, geographic information systems (GIS) and surveying, as well as other engineering, resource, law enforcement, consumer navigation, emergency response, aviation, and scientific applications – all of which negatively impact the geospatial community in Oregon.

If GPS is not fully available, in a clear, consistent and unencumbered manner, the impact to public and private organizations in Oregon will be extremely significant and costly. The current, accurate geospatial information the public and businesses expect to be readily available would become extremely and unnecessarily expensive to collect and the time it would take to collect such data through non-GPS means would make much data obsolete by the time it becomes available to users.

The Technical Working Group's team on High Precision Networks and Timing found there would be harmful interference with high precision GPS receivers – particularly those used in aviation and geospatial activities. Because Oregon public and private organizations not only conduct surveys using GPS, but also fly aircraft to collect imagery and use other airborne and spaceborne sensing equipment, those organizations would be significantly impacted by this interference.

The LightSquared original rollout configuration plan would have caused harmful interference to these receivers beyond 2 km from each tower. In the LightSquared recommendation to use the lower 10 MHz channel, harmful interference is observed at 1.2 km from each tower, with complete loss of high accuracy positioning within one-half mile of any tower. When considering

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typical cell tower spacing, a mobile GPS user operating in an urban area covered by LightSquared terrestrial operations would potentially be within a quarter- to a half-mile from a tower. This means that harmful interference could be expected to blanket large areas of the U.S., including under the lower 10 MHz-only proposed terrestrial broadband operations.

Utilizing alternative technologies, methodologies and procedures to avoid LightSquared interference with GPS adds significantly to the cost of data acquisition and is not a viable option for the geospatial community in Oregon. If the LightSquared application to utilize bandwidth near the GPS bands is ultimately approved, millions of dollars in GPS-enabled or dependent equipment, receivers and devices that organizations in Oregon have already purchased will need to be retrofitted. Additionally, and perhaps more costly, all business processes that utilize the precise locational data that are derived from GPS and the global navigation satellite system would be affected and in need of modification. Taken together, the hardware and business process costs of this application would be unreasonable, expensive and impractical for the geospatial community in Oregon to bear.

OGIC respectfully urges that the FCC deny the LightSquared application related to bandwidth near the GPS transmission frequencies, unless and until accepted and unequivocal engineering tests are submitted that demonstrate such proposed system can operate with no interference with high precision GPS. Any FCC approval of a LightSquared application must ensure that the national GPS utility and the proven positioning and navigation information that it provides is sustained, as well as supporting the continued innovation of location-based technologies that benefits the Nation and delivers the operational performance on which Oregon public and private organizations and citizens depend.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Cyril R. Smith". The signature is written in a cursive, somewhat stylized font.

Cyril R. Smith, GISP
Statewide Geographic Information Officer

CC: Oregon Geographic Information Council