

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
LightSquared Technical Working Group Report)	IB Docket No. 11-109
)	
)	
LightSquared Subsidiary LLC Request for Modification of its Authority for an Ancillary Terrestrial Component)	File No. SAT-MOD-20101118-00239
)	
)	

**REPLY COMMENTS OF
THE ALLIANCE FOR TELECOMMUNICATIONS INDUSTRY SOLUTIONS**

The Alliance for Telecommunications Industry Solutions (ATIS), on behalf of its Copper/Optical Access, Synchronization and Transport (COAST) Committee, hereby submits these Reply Comments in response to the Federal Communications Commission’s (Commission) *Public Notice* seeking comments on the GPS Technical Working Group and the Recommendations submitted by LightSquared Subsidiary LLC (LightSquared).¹ Like many other commenters, ATIS COAST is concerned over possible interference to Global Positioning System (GPS) receivers from the ancillary terrestrial service planned by LightSquared, and particularly over the potential impact that such interference could have on critical communications network synchronization functions. ATIS COAST recommends that additional testing be completed before the deployment of terrestrial mobile broadband services is permitted on frequencies near those used by GPS receivers.

¹ Comment Deadlines Established Regarding the LightSquared Technical Working Group Report, IB Docket No. 11-109, *Public Notice*, DA 11-1133 (re. June 30, 2011).

I. Introduction

ATIS is a global standards development and technical planning organization that leads, develops and promotes worldwide technical and operations standards for information, entertainment and communications technologies. More than 200 companies actively participate in ATIS' committees and forums, which develop standards, specifications, best practices, and guidelines essential to communications networks' operation and continued evolution.

Among ATIS' industry committees is COAST, which develops and recommends standards and technical reports for home, access and transport network and synchronization technologies over copper and optical mediums. COAST is comprised of four subcommittees: COAST Network Access Interfaces (NAI), COAST Optical Access Networks (OAN), COAST Optical Hierarchical Interfaces (OHI), and COAST Synchronization (SYNC). COAST has a number of active initiatives, including work on: a technical report describing methods for delivering a time and frequency reference from a Building Integrated Timing Supply (BITS) to network elements in an intra-office environment; and a study of edge access packet synchronization requirements relative to telecom applications.

II. Comments

In the *Public Notice*, the Commission seeks input on the report submitted to the Commission by the industry technical working group that examined potential interference issues associated with LightSquared's planned deployment of terrestrial mobile broadband services in the L-Band. The Commission also seeks input regarding recommendations submitted by LightSquared to address the problems identified by the technical working group.² In response to the *Public Notice*, many comments have expressed concerns regarding the significant risk of

² *Public Notice* at p. 2.

interference to GPS receivers associated with the proposed terrestrial operations.³

ATIS COAST shares these concerns. As COAST has previously noted, North American telecommunications networks are critically dependent on GPS.⁴ GPS-derived timing using stationary antennas, for example, allows the precise synchronization of networks operated by different network providers, and adherence to national telecom network synchronization standards. GPS-based synchronization is also vital to proper network operation, including wireless call handoffs, and the realization of network-to-network and international error performance objectives. Moreover, GPS-based network synchronization is critically important for location-based services, and is required in many North American networks to meet Commission-mandated E9-1-1 emergency location services requirements. Interference to these critical network operations could significantly impact the operations of communications networks.

ATIS COAST agrees with those commenters who recommend that additional testing be required before any deployment of wide-area transmitters in the bands near those used by GPS is permitted.⁵ COAST believes that additional studies on the impact to telecommunications timing receivers and antennas would be beneficial to ensure that the planned deployment would not interfere with these receivers and antennas. The significant risk of service disruptions, along with the cost and difficulty of resolving any such problems, justifies a very thorough and comprehensive evaluation. ATIS COAST therefore urges the Commission to exercise caution in determining whether and/or on what terms and conditions the deployment of the planned wide-

³ See, e.g., Comments of Association of Public-Safety Communications Officials-International, Inc. (APCO) at pp. 1-2, Comments of AT&T at pp. 6-7, Comments of CenturyLink at p. 4, Comments of Lockheed Martin Corporation at pp. 2-3, Comments of National Association of Manufacturers at p. 1, Comments of U.S. Global Positioning System Industry Council at pp. 19-20, 26, Comments of Verizon Wireless at pp. 8-9.

⁴ ATIS Coast Letter to Federal Communications Commission Chairman Julius Genachowski submitted June 1, 2011, in IB Docket No. 08-184.

⁵ See, e.g., Comments of CenturyLink at pp. 5-6, Comments of APCO at p. 2, Comments of Verizon Wireless at pp. 9-14.

area transmitters would be permitted on frequencies near those used by GPS receivers.

III. Conclusion

ATIS COAST shares the concerns expressed by commenters regarding the possible interference to GPS receivers from the proposed ancillary terrestrial service proposed in the L-Band and recommends that the Commission require the completion of additional testing before any deployment of terrestrial mobile broadband services utilizing L-band frequencies is permitted.

Respectfully submitted,
Alliance for Telecommunications Industry
Solutions

By:

A handwritten signature in black ink, appearing to read "Thomas Goode", written in a cursive style.

Thomas Goode
General Counsel

Dated: August 15, 2011