INTERNATIONAL BUREAU INVITES COMMENT ON NTIA LETTER REGARDING LIGHTSQUARED CONDITIONAL WAIVER

IB Docket No. 11-109

Comment Date: March 1, 2012

This Public Notice seeks comment on a letter submitted by the National Telecommunications and Information Administration (NTIA) on February 14, 2012, concerning the results of additional government testing of the potential interference effects of communications equipment that LightSquared Subsidiary LLC (LightSquared) seeks authority to operate. The International Bureau (Bureau) also identifies specific actions that may be taken in light of the NTIA Letter and the full record developed to date in this proceeding.

The authorizations at issue here were granted nearly a decade ago. In 2003, the Commission adopted rules permitting Mobile Satellite Service (MSS) licensees, after satisfying certain preconditions known as “gating criteria,” to integrate a limited Ancillary Terrestrial Component (ATC) into their satellite networks. ATC authorization enabled MSS licensees to offer ancillary ground-based mobile services using the same spectrum resources already allocated to their MSS operations. In 2004, the Bureau modified the MSS license now held by LightSquared to allow that licensee to offer MSS and an ATC service. In 2005, the Commission removed a limit it had imposed in the 2003 rules on the number of terrestrial base stations that an MSS/ATC provider may deploy.


5 Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Bands, Memorandum Opinion and Order and Second Order on Reconsideration, IB Docket No. 01-185, 20 FCC Rcd 4616, 4634 (para. 48) (2005) (ATC Second Reconsideration Order).
The Commission received and incorporated into each of those rules extensive input from the public and federal agencies. In particular, the Commission adopted recommendations offered by the Global Positioning System (GPS) Industry Council and NTIA to protect against harmful emissions from MSS/ATC operations into other bands, including the GPS frequency bands. No party in those proceedings raised any issue of possible overload interference to GPS receivers. Concerns were raised about overload interference from ATC operations in the L-Band, where LightSquared is now operating, to Inmarsat mobile satellite terminals. The Commission fully resolved that issue in its 2005 rulemaking order.

On July 10, 2009, in connection with the Commission’s consideration of an application to modify an MSS/ATC license now held by LightSquared, the GPS community raised concerns about interference to GPS. A month later, the U.S. GPS Industry Council and LightSquared’s predecessor licensee submitted a joint letter to the Commission stating that those interference issues had been resolved. Technical modifications to the license were again coordinated with and agreed to by the Executive Branch. No commenter raised any other concerns about GPS interference and, in March 2010, the modification application, as well as an application to transfer control of the MSS/ATC license to the entity now known as LightSquared, were approved. The Bureau conditioned its approval of the transfer “on [LightSquared]’s actually moving forward with its plan to use [its MSS spectrum] to provide 4G mobile wireless service, and . . . to build a terrestrial network using [its] ATC authority to facilitate broadband service to most of the U.S. population.” No party sought reconsideration of that build-out requirement.

In January 2011, the Bureau granted LightSquared a limited waiver of the MSS/ATC gating criteria that narrowly addressed LightSquared’s obligations with respect to the mobile devices (such as handsets) that wholesale customers of LightSquared would make available to their retail customers for use on LightSquared’s MSS/ATC network. The Bureau explained that it was granting LightSquared additional flexibility with respect to mobile devices because, in addition to the company’s demonstrated commitment to MSS satellite service, realization of the company’s MSS/ATC business plan would include rationalization of interleaved L-Band spectrum through private arrangements into contiguous blocks that would support next-generation broadband technologies. Further, LightSquared had made enforceable commitments that would

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6 For purposes of this public notice, the term “overload interference” is defined as interference caused by signals from a nearby transmitter into a receiver susceptible to those signals. In this case, the signals are received by GPS receivers outside the frequency bands allocated to GPS.

7 ATC Second Reconsideration Order, 20 FCC Rcd at 4635-40 (paras. 52-67).


9 See Letter from Raul Rodriguez, Counsel for the U.S. GPS Industry Council (GPSIC) to Marlene H. Dortch, Secretary, FCC, IBFS No. SAT-MOD-20090429-00047 (dated Aug. 17, 2009).


11 Transfer Order, 26 FCC Rcd at 3088 (para. 71); see also id. at 3088-89 (para. 72).

increase the availability of terrestrial mobile wireless broadband service, including to new users in rural areas and the public safety community.\textsuperscript{13}

The \textit{Conditional Waiver Order} established conditions LightSquared must meet before it may provide commercial service under the mobile device provisions of the waiver. In particular, late in 2010, during the waiver proceeding on requirements for mobile devices, the GPS community had raised for the first time concerns that LightSquared’s terrestrial base stations (that is, its cell towers) would cause widespread overload interference to GPS receivers and other GPS devices. In response to those newly expressed concerns about base stations, the \textit{Conditional Waiver Order} prohibited LightSquared from going forward and launching its competitive 4G LTE service. The order prescribed an Interference Resolution Process by which LightSquared would work with the GPS community to resolve the new concerns. Specifically, as a condition of commencing commercial ATC operations under the waiver, the \textit{Conditional Waiver Order} required that LightSquared must first “complete” the Interference Resolution Process, defined as the point at which “the Commission, after consultation with NTIA, concludes that the harmful interference concerns have been resolved and sends a letter to LightSquared stating that the process is complete.”\textsuperscript{14}

Consistent with the requirements of the \textit{Conditional Waiver Order}, in December 2011 Congress enacted Section 628 of the 2012 General Government Appropriations Act, which prohibits the Commission from using funds made available by that Act “to remove the conditions imposed on commercial terrestrial operations in the [\textit{Conditional Waiver Order}], or otherwise permit such operations, until the Commission has resolved concerns of potential widespread harmful interference by such commercial terrestrial operations to commercially available Global Positioning System devices.”\textsuperscript{15}

The Interference Resolution Process has not been successfully completed and harmful interference concerns have not been resolved. On June 30, 2011, LightSquared submitted the final report of the technical working group that it co-chaired with the U.S. GPS Industry Council (USGIC). The Bureau and the FCC’s Office of Engineering Technology issued a \textit{Public Notice} asking that interested persons comment on the report\textsuperscript{16} and has since asked for additional technical submissions and testing. On February 14, 2012, the Bureau received a letter from NTIA. In its letter, NTIA states that it has monitored the testing done through the Interference Resolution Process and has coordinated additional testing of LightSquared’s equipment by other federal agencies, to assess the interference effects of such equipment on GPS receivers and devices.\textsuperscript{17} Based on this testing, NTIA has concluded that LightSquared’s proposed mobile broadband network will impact GPS services and there currently is no practical way to mitigate the potential harmful interference from LightSquared’s planned terrestrial operations in the 1525-1559 MHz band.\textsuperscript{18} NTIA “conclude[s] at this time that there are no mitigation strategies that both solve the interference issues and provide LightSquared with an adequate commercial network deployment.”\textsuperscript{19}

\textsuperscript{13} \textit{Id.} at 581-83 (paras. 29-35).

\textsuperscript{14} \textit{Id.} at 587 (para. 44).


\textsuperscript{17} \textit{NTIA Letter} at 1-3.

\textsuperscript{18} \textit{Id.} at 1, 8.

\textsuperscript{19} \textit{Id.} at 8.
The NTIA Letter supplements the record established in this docket to date regarding the likelihood of interference from LightSquared’s planned terrestrial operations to GPS receivers and devices. These materials indicate that it is highly unlikely that LightSquared will, in any reasonable period of time, be able to satisfy the requirements of the Conditional Waiver Order for providing commercial ATC service in the 1525-1559 MHz band. In addition, although the GPS community raised overload interference issues in connection with the 2011 Conditional Waiver Order, the interference addressed by the NTIA Letter is associated with LightSquared’s planned terrestrial base stations rather than the mobile handsets at issue in the Conditional Waiver Order. Thus, the test results stated in the NTIA Letter appear to apply to the full LightSquared ATC service authorized in 2004 and 2010. In these circumstances, we propose the following actions:

1. Vacatur of the Conditional Waiver Order, which is currently the subject of petitions for reconsideration, due to LightSquared’s inability to address satisfactorily the legitimate interference concerns surrounding its planned terrestrial operations, and the appearance that the Interference Resolution Process has no realistic prospect of being successfully completed by LightSquared in a reasonable period of time, and

2. Modification of LightSquared’s satellite license pursuant to Section 316 of the Communications Act to suspend indefinitely LightSquared’s underlying ATC authorization, first granted in 2004, to an extent consistent with the NTIA Letter.

We invite interested parties to file comments in response to these tentative conclusions, no later than March 1, 2012.

This proceeding is a “permit-but-disclose” proceeding in accordance with the Commission’s ex parte rules. Persons making ex parte presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation. Persons making oral ex parte presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the ex parte presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter’s written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during ex parte meetings are deemed to be written ex parte presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written ex parte presentations and memoranda summarizing oral ex parte presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission’s ex parte rules.

Action by the Chief, International Bureau.

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20 47 U.S.C. § 316. We note that in the event we decide – after evaluating the public comment received in response to this Public Notice – to modify LightSquared’s license as envisioned herein, our order of modification would not become final until after LightSquared has been given an additional period of time to protest, pursuant to the requirements of Section 316(a).

21 47 C.F.R. §§ 1.1200 et seq.