Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of

LightSquared Subsidiary LLC  SAT-MOD-20101118-00239
Request for Modification of its
Authority for an Ancillary Terrestrial
Component

CONSOLIDATED OPPOSITION OF LIGHTSQUARED SUBSIDIARY LLC

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CONSOLIDATED OPPOSITION OF LIGHTSQUARED SUBSIDIARY LLC

LightSquared Subsidiary LLC (“LightSquared”) hereby submits this consolidated opposition to the Applications for Review that have been submitted in the above-captioned proceeding.1 These filings seek Commission review of an Order and Authorization issued by the International Bureau (“Bureau”) granting LightSquared a conditional waiver of the “integrated service” rule.2


I. SUMMARY OF ARGUMENT

LightSquared demonstrates in this filing that:

- The Applications for Review should be treated as petitions for reconsideration because they raise factual and legal matters the International Bureau has not had an opportunity to consider.
- The Congressional Review Act, which governs rules adopted by the Commission, does not apply to the O&A, which grants a waiver but promulgates no rules.
- The Bureau had the authority to establish a comment period of less than 30 days because there is no 30-day requirement for minor modifications or waivers, and in any event the parties had a full and fair opportunity to comment.
- The Bureau had the authority to grant LightSquared’s application because:
  - the integrated service rule permits ATC to be provided without using dual-mode handsets upon a showing based on technical, economic, and other factors;
  - LightSquared made a showing based on these factors;
  - the Bureau therefore was acting, consistent with its delegated authority, on a showing contemplated by the rule; and
  - the facts comprising LightSquared’s showing amply support a waiver because they demonstrate that the underlying purpose of the integrated service rule will be satisfied and that public interest benefits will be provided.
- The Bureau has taken appropriate action with respect to GPS interference concerns because:
  - the Commission considered the potential for interference to GPS in its ATC rulemaking and developed technical rules to protect GPS based on input from GPS interests;
  - these protections were supplemented with protections LightSquared committed to in earlier coordination agreements with USGIC, and which the Bureau incorporated into LightSquared’s ATC authorizations;
  - the potential for ATC transmitters to overload GPS receivers was known when the ATC rulemaking and LightSquared’s coordination with USGIC were conducted;
  - deviating from the protections for GPS adopted in the ATC rulemaking and the ATC licensing process under ordinary circumstances would require a new rulemaking or a new proceeding to modify LightSquared’s license;
  - instead, the Bureau provided that LightSquared could begin commercial service pursuant to the waiver only after completion to the Commission’s satisfaction of a working group process in which LightSquared would examine the interference concerns together with the GPS community; and
  - the procedures outlined in the O&A, as clarified in a subsequent letter, ensure that the working group process will be open, transparent, and fair.
• It was appropriate for the Bureau to express the authority conveyed by the O&A in terms of commercial service, given that non-commercial ATC operations are governed by a rule that was not implicated by LightSquared’s application or at issue in this proceeding.

In light of these showings, the Applications for Review should be denied.

II. BACKGROUND

The central concern underlying the Applications for Review is the possibility of interference to GPS receivers from ATC base stations, particularly if large numbers of ATC base stations are in operation. Although the filers characterize this issue as new, the potential for interference to GPS receivers, and the prospect that ATC base stations will be numerous, have long been known and considered.

In 2001, LightSquared\(^3\) filed the first application to deploy an integrated satellite-terrestrial system to provide broadband wireless communications.\(^4\) The authorization LightSquared holds today is very similar to what it first proposed in its 2001 ATC Application – a combination of high-power satellites and terrestrial base stations to (i) provide uniquely reliable nationwide coverage; (ii) increase system capacity and spectrum efficiency; and (iii) enable user devices comparable in form, function and cost to typical mobile devices. As mobile technology has evolved over the last ten years, the company’s ATC plans have evolved, but the basic concept has remained unchanged:

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\(^3\) LightSquared’s predecessor companies were Mobile Satellite Ventures Subsidiary LLC and SkyTerra Subsidiary LLC. For purposes of this Consolidated Opposition, the predecessor companies are all referred to as LightSquared, except when part of a direct quote or citation.

\(^4\) Application of Mobile Satellite Ventures Subsidiary LLC, File Nos. SAT-ASG-20010302-00017 et al. (March 1, 2001) (“2001 ATC Application”).
the provision of large-scale, affordable mobile wireless service with unparalleled reliability and coverage.

In response to the 2001 ATC Application, the Commission initiated proceedings to develop rules for integrated satellite-terrestrial services, including a Notice of Proposed Rulemaking (“NPRM”) in 2001, an initial order in 2003, and an order on reconsideration in 2005.5 With respect to LightSquared’s proposed ATC system, the FCC sought comment on the 2001 ATC Application, the 2003 ATC Application (submitted after the ATC rules first became effective), the 2005 ATC Modification Application (submitted after the ATC rules were revised on reconsideration), the 2008 Transfer of Control Application, and the 2009 ATC Modification Application before issuing LightSquared’s various ATC authorizations.6

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Throughout these proceedings, GPS interference concerns were explicitly considered by the Commission. In comments on the 2001 ATC Application, two parties - including Deere & Company, which has filed a petition for reconsideration in the present proceeding - expressed concern with the potential for ATC base stations to overload GPS receivers.7 In response to the 2001 ATC NPRM, various parties, including NTIA and the United States GPS Industry Council (“USGIC”), offered suggestions regarding GPS interference concerns.8 Those comments led to an agreement between LightSquared and the USGIC in 2002 (the “2002 Agreement”).9 The 2002 Agreement committed LightSquared to limits on the out-of-band emissions (“OOBE”) into the GPS band from its base stations and user devices.10 The agreement

7 See Comments of Deere & Company, File Nos. SAT-ASG-20010302-00017 et al., at 6 (May 7, 2001); Inmarsat Ventures PLC, Partial Petition to Deny, File Nos. SAT-ASG-20010302-00017 et al., at 10 (April 18, 2001).
8 See Letter from Fredrick R. Wentland, Acting Associate Administrator, Office of Spectrum Management, National Telecommunications and Information Administration to Donald Abelson, Chief, International Bureau, Federal Communications Commission, IB Docket No. 01-185 (November 12, 2002); Letter from Stephen Baruch, Counsel to U.S. GPS Industry Council to Marlene Dortch, Secretary, Federal Communications Commission, IB Docket No. 01-185 (May 31, 2002).
10 Id.
was supported by various public and private parties,\textsuperscript{11} including the Air Transport Association, Aeronautical Radio, and Delta Air Lines.\textsuperscript{12}

Subsequently, the development of the rules establishing the technical characteristics for MSS/ATC showed that all parties, and the FCC, anticipated the scope of future ATC networks. In advocating the incorporation of the OOBE limits into the Commission’s ATC rules, the USGIC stated that “the Proposed Limits are the product of careful industry negotiations that ‘considered all relevant issues’ and resulted in a ‘reasonable compromise’ on OOBE limits that will best protect GPS L-1 signal from Mobile Satellite Services (“MSS”) ancillary terrestrial components (“ATC”) operations.”\textsuperscript{13} With respect to LightSquared's ATC network, the USGIC recognized that “[t]he increased user density from potentially millions of MSS mobile terminals operating in ATC mode ... [and] potentially tens of thousands of ATC wireless base stations ... will significantly increase the noise floor in the bracketed GPS L1 band from ATC transmissions into the GPS L1 signal from both sides.”\textsuperscript{14} In 2004, based on the 2002

\textsuperscript{11} U.S. GPS Industry Council, Petition for Reconsideration, IB Docket No. 01-185, at 2-3 (June 11, 2003) (“The proposed MSV/GPS Industry Council OOBE limits elicited broad support from both the public and private sectors. The National Telecommunications and Information Administration endorsed these OOBE limits as ‘attainable by the MSS ATC and agreeable with the GPS community.’”).

\textsuperscript{12} Comments on Petitions for Reconsideration of Aeronautical Radio, Inc. and Air Transport Association of America, IB Docket No. 01-185 (August 20, 2003); Comments of Delta Air Lines, Inc., IB Docket No. 01-185, at 2 (August 20, 2003) (“MSV and the U.S. GPS Industry Council considered all relevant issues concerning potential interference to GPS and conducted the necessary analyses to determine commercially feasible OOBE limits. As a result, MSV and the U.S. GPS Industry Council proposed OOBE limits that will effectively protect the GPS service’s present and future operations.”).


\textsuperscript{14} Id. (emphasis in original).
Agreement, USGIC filed a letter in support of MSV’s 2003 ATC Application noting that the limits would protect GPS while allowing LightSquared to maximize the utility of terrestrial service to its users.15

In response to the GPS concerns, the Commission imposed two requirements on LightSquared. The first is the set of OOBE limits contained in the 2002 Agreement.16 The second is a coordination requirement, set out in the 2003 ATC Order, that applies to LightSquared base stations co-located with the base stations of other wireless providers that use the timing function of GPS to synchronize their networks.17

There were no GPS-related petitions for reconsideration or review of the 2004 MSV ATC license or of the 2005 ATC Reconsideration Order.18 Moreover, the 2005 ATC Reconsideration Order eliminated the numerical limit on ATC base station deployment in L-band, and rejected an argument to limit the number of simultaneously-transmitting ATC handsets, in favor of the general limits on interference that exist today.19

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15 Letter from Raul R. Rodriguez, Counsel to the U.S. GPS Industry Council to Marlene H. Dortch, Secretary, Federal Communications Commission, File Nos. SAT-MOD-20031118-00333 et al. (March 24, 2004) (The USGIC “urges the Commission to grant the above referenced applications of Mobile Satellite Ventures…and to do so as soon as possible.”; USGIC and MSV “worked diligently to develop…OOBE limits from MSV…ATC base stations and terminals into the GPS band, which are intended to protect GPS receivers and at the same time allow MSV to maximize the utility of its ATC service to its users.”).
17 See 47 C.F.R. § 25.253(c)(2); 2003 ATC Order, Technical Appendix, at 2192, Section 3.5.
18 2005 ATC Reconsideration Order, supra.
19 See 2005 ATC Reconsideration Order, at 4631-32, 34 ¶¶ 41-42, 49. Originally, the Commission limited the maximum number of base stations operating in North America on any one 200 kHz channel to 3,450 in order to control potential uplink emissions that might cause interference into L-band MSS satellites. See
Until the end of 2010, there was only one subsequent filing regarding potential interference to GPS from L-band ATC – a USGIC filing in response to the 2009 ATC Modification Application, which sought additional technical flexibility as the result of a coordination agreement between LightSquared and Inmarsat Inc. (“Inmarsat”) permitting LightSquared’s deployment of 5 MHz and 10 MHz LTE carriers and greater reuse by LightSquared of Inmarsat spectrum (the “Inmarsat Agreement”). The USGIC filing expressed concern only with respect to potential interference from LightSquared's proposed indoor femtocells, and the issue was resolved by LightSquared agreeing to USGIC’s proposed power levels for femtocells.\textsuperscript{20}

There were no GPS-related petitions for reconsideration or appeals of the March 2010 orders granting LightSquared’s 2008 Transfer of Control Application and its 2009 ATC Modification Application. The 2010 Transfer of Control Order requires

\textsuperscript{20} Comments of the U.S. GPS Industry Council, File Nos. SAT-MOD-20090429-00046 et al. (July 10, 2009); Letter from Bruce D. Jacobs, Counsel for SkyTerra Subsidiary LLC and Raul R. Rodriguez, Counsel for the U.S. GPS Industry Council to Marlene H. Dortch, Secretary, Federal Communications Commission, File Nos. SAT-MOD-20090429-00046 et al. (August 13, 2009) (“The U.S. GPS Industry Council (“Council”) and SkyTerra have agreed on out-of-band emissions (‘OBOE’) limits for the operation of low power base stations with a maximum EIRP of -4 dBW/MHz that are intended to be deployed indoors (‘femtocells’) and personal computer (‘PC’) data cards communicating with such base stations. Specifically, SkyTerra will limit OBOE for femtocells and data cards communicating with such femtocells to less than -114.7 dBW/MHz and -111.7 dBW/MHz in the 1559-1605 MHz band, respectively. These limits are intended to reduce the potential for harmful interference to GPS receivers operating indoors, thereby addressing the concerns expressed by the Council in its Comments regarding the ATC Modification Application.”)

\textsuperscript{203 ATC Order, at 2054 ¶ 187 and Appendix C2, § 2.1.1. Even that limit, assuming typical reuse patterns, would have permitted LightSquared to operate several multiples of that number of base stations. Moreover, on reconsideration, LightSquared sought an interpretation of the rule that would have permitted its operation of nearly 15,000 base stations per 200 kHz channel, all of which was made moot by the 2005 ATC Reconsideration Order.}
LightSquared to provide terrestrial coverage to at least 100 million people by the end of 2012, 145 million people by the end of 2013 and 260 million people by 2015.21

III. THE APPLICATIONS FOR REVIEW SHOULD BE TREATED AS PETITIONS FOR RECONSIDERATION BECAUSE THEY RAISE FACTUAL AND LEGAL MATTERS THE INTERNATIONAL BUREAU HAS NOT HAD AN OPPORTUNITY TO CONSIDER

The Commission’s rules expressly identify the manner in which new factual and legal arguments must be made after a decision has been issued pursuant to delegated authority. The rules provide that these new arguments can be made only in a petition for reconsideration, so that the original decision maker has an opportunity to consider them, and cannot be made in an application for review.22

The Applications for Review of the O&A all raise issues of law or fact that were not raised before the Bureau below. With the exception of USGIC, moreover, none of the parties filing Applications for Review participated in this proceeding during the initial pleading cycle.23 The new matters that have been raised include the following:

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21 In the Matter of SkyTerra Communications, Inc. and Harbinger Capital Partners Funds, 25 FCC Rcd 3059, 3085 ¶ 56 (2010) (“2010 Transfer of Control Order”). Two parties challenged the FCC’s condition in the transfer of control order limiting the ability of LightSquared to lease ATC spectrum to the top two wireless providers. See Verizon Wireless, Petition for Partial Reconsideration, File Nos. SAT-T/C-20080822-00157 et al. (April 1, 2010); AT&T Wireless Services, Inc., Petition for Reconsideration, File Nos. SAT-T/C-20080822-00157 et al. (March 31, 2010).

22 Section 1.115(c) of the rules states that “[n]o application for review will be granted if it relies on questions of fact or law upon which the designated authority has been afforded no opportunity to pass.” A note accompanying Section 1.115(c) clarifies that “[s]ubject to the requirements of § 1.106, new questions of fact or law may be presented to the designated authority in a petition for reconsideration. Section 1.106 permits new matters to be raised on reconsideration, among other things, when events or circumstances arise after the last opportunity a party had to raise an issue at the Bureau level.

23 The Commission’s rules require parties first seeking to participate in a proceeding upon review or reconsideration to make a showing as to why it was not possible for them to participate in the earlier stages of the proceeding. See 47 C.F.R. § 1.115(a) and 1.106(b)(1). LightSquared notes the only new parties that appear to have done so were Lockheed Martin and Deere. See Lockheed Martin Application for Review at 4; Petition for Reconsideration of Deere & Company at 5.
• whether the Bureau’s Order violated the Congressional Review Act (“CRA”); 24

• whether it was proper for the Bureau to act on LightSquared’s minor modification application under delegated authority; 25

• whether the inter-industry working group process provided for in the O&A is consistent with Commission requirements; 26

• whether the Bureau was required to specify in the O&A that any expenditures made by LightSquared in pursuit of its development of its terrestrial broadband service should be at LightSquared’s exclusive risk; 27

• additional assertions of fact and more extensive technical arguments regarding the potential for interference to GPS receivers; 28 and

• claims relating to the specifications for aviation GPS receivers established by a private standard settings body. 29

Because the Applications for Review raise new issues, under the rules they must first be considered at the Bureau level. The Applications for Review, therefore, should be treated as petitions for reconsideration.

IV. THE CONGRESSIONAL REVIEW ACT IS INAPPLICABLE

USGIC and GAMA 30 assert that the O&A had to be referred to the Congress under the procedures of the Congressional Review Act (“CRA”). 31 Their assertion, however, is inconsistent with the

24 5 U.S.C. 801(a)(1); see USGIC Application for Review, at 10; GAMA Application for Review, at 8-9, n.17.
26 See GAMA Application for Review, at 7-8; ASRI Application for Review, at 7-9; Stansell Application for Review, at 4-5; ACPA Application for Review at 5-6. We note that a separate “Emergency Petition for Immediate Clarification” (“Emergency Petition”) was filed with the Bureau by the U.S. GPS Industry Council questioning whether the working group would be subject to the Federal Advisory Committee Act (“FACA”), which issue the Bureau Addressed in a letter ruling on February 25, 2011. See Letter from Mindel De La Torre and Julius Knapp to Jeffrey J. Carlisle, File No. SAT-MOD-20101118-00239, DA 11-367 (Feb. 25, 2011). However, the issues raised in the Applications for Review with respect to the working group process go beyond those raised with the Bureau in the Emergency Petition.

27 See USGIC Application for Review, at 20-22
30 See USGIC Application for Review at 10; GAMA Application for Review at 8-9, n.17.
express language of the CRA, which by its terms is limited to when an agency promulgates “a rule.”32 The O&A is an order, not a rule. It is, moreover, an order that is based upon particular facts and circumstances that pertain only to LightSquared. Accordingly, the CRA is inapplicable.

USGIC and GAMA maintain that CRA procedures should have been followed because, in their view, LightSquared’s minor modification should have been addressed in a rulemaking proceeding. Six months ago, the Commission considered a similar argument made by parties challenging a waiver involving ultra-wideband devices.33 Those parties, like USGIC and GAMA, claimed that CRA procedures should have been followed because (they asserted) the Commission should have proceeded by rulemaking rather than waiver. The Commission rejected their argument,34 and the same result should apply here.

V. THE INTERNATIONAL BUREAU HAD THE AUTHORITY TO ESTABLISH A COMMENT PERIOD OF LESS THAN 30 DAYS

USGIC, GAMA, and ACSM object to the fact that the pleading cycle for filing comments on LightSquared’s application was less than 30 days.35 They assert that LightSquared’s filing should have been classified as a “major modification,” in which case Part 25 of the Commission’s rules requires that 30 days be provided for filing petitions to deny.36 USGIC, GAMA, and ACSM are incorrect for multiple reasons.

32 Id. The Congressional review requirements are further limited to “major rules.”
34 See id.
35 See GAMA Application for Review at n. 17; USGIC Application for Review at 2, 5, 14-17); ACSM Application for Review at 4-5.
36 See, e.g., GAMA Application for Review at n. 17.
First, the Commission’s rules state explicitly that ATC modification applications are minor modifications, and minor modifications are not subject to the 30-day requirement. Accordingly, establishing a comment period of less than 30 days was within the Bureau’s discretion.

Second, neither USGIC, GAMA, nor ACSM sought an extension of time or commented on CTIA’s request to extend the comment period. If those parties believed they were entitled to relief, the time for objecting to the length of the pleading cycle was over three months ago, when the Bureau released the public notice accepting LightSquared’s application for filing. There is no way to extend the pleading cycle now.

Third, USGIC, GAMA, and ACSM could express their views after the initial filing deadline either by filing a reply or by having ex parte communications with Commission staff. USGIC took full advantage of these chances; it engaged in extensive ex parte communications. USGIC, GAMA, and ACSM, therefore, had a full and fair opportunity to participate in this proceeding before the O&A was released.

Fourth, the objections of USGIC, GAMA, and ACSM to the O&A are based on the waiver granted by the Bureau, and as the Bureau correctly stated in the O&A, neither the Communications Act nor the Commission’s rules mandates a particular time frame for opposing waivers.

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37 47 C.F.R. §25.117(f) (“An application for ... an ancillary terrestrial component ... will be treated as a request for minor modification.”)
38 LightSquared discussed this legal principle at length previously and hereby incorporates by reference its prior discussion. See Consolidated Reply of LightSquared Subsidiary LLC (Dec. 9, 2010) at Section II.
39 Request for Extension of Comment and Reply Comment Deadlines, filed by CTIA – The Wireless Association (Nov. 24, 2010).
40 See USGIC ex parte filings dated December 15 and 30, 2010, and January 7 (two filings), 14 (two filings), 19, 20, 21, 24 (two filings), and 26, 2011.
41 See O&A, ¶ 23.
Finally, as the Bureau explained in the O&A, the comment period was “consistent with Section 25.154 of the Commission’s rules and Sections 309(b) and 309(d)(1) of the Communications Act” because “the filing date for ‘petitions to deny’ LightSquared’s application was 30 days after the Comment Public Notice.”

For all of these reasons, the objections made by USGIC, GAMA, and ACSM to the adequacy of the initial pleading cycle should be rejected.

VI. THE BUREAU HAD THE AUTHORITY TO GRANT LIGHTSQUARED’S APPLICATION

Several filers challenge the Bureau’s authority to grant LightSquared’s minor modification application. They question whether the Bureau’s action is consistent with the authority the Commission has delegated to it “[t]o act on applications … pursuant to part 25” of the Commission’s rules. They also take issue with the adequacy of the Bureau’s findings under the standards for waivers. These objections all proceed from the same premise: The parties making the objections believe that the showing LightSquared made, and the Bureau relied on in granting a waiver, is so far outside the bounds of what the Commission envisioned when it adopted the integrated service rule that it amounted to a change of the rule.

The language and logic of the integrated service rule directly contradicts the filers’ arguments. LightSquared made its showing in support of its minor modification application under Section 25.149(b)(4) of the rules, which states that ATC applicants may make their integrated service showing

\[\text{References:}\]

42 Id. ¶ 23 n. 100.
45 See GAMA Application for Review at 4-5; USGIC Application for Review at 6-10; Stansell Application for Review at 3; AOPA Application for Review at 3-4.
either on the basis of using dual-mode handsets\textsuperscript{46} or by providing “[o]ther evidence establishing that the MSS ATC operator will provide an integrated service offering to the public.”\textsuperscript{47} The Commission has stated that the “other evidence” standard can be satisfied “through technical, economic or any other substantive showing”\textsuperscript{48} and that “[a]n economic showing could include, for example, information on the pricing structure of an integrated service.”\textsuperscript{49} LightSquared’s showing was based on economic, technical and other factors, including its pricing structure and, therefore, fell squarely within the terms of the present rule.

As discussed in LightSquared’s Consolidated Reply, the choice given licensees under Section 25.149(b)(4) between using dual-mode handsets and making a showing based on “other evidence” means that an MSS licensee can satisfy the integrated service requirement without providing every customer with a dual-mode handset.\textsuperscript{50} If the Commission had meant for dual-mode handsets to be the only way to comply with the rule, it would not have referred to it as a “safe harbor” and provided for an “other evidence” alternative.

The Bureau held that the integrated service rule prevented LightSquared’s customers from offering an “ATC-only subscription” and did not, as the GPS filers have suggested, eliminate the requirement for integrated service.\textsuperscript{51} The Bureau did decide, however, that based on the factual showing LightSquared made a waiver of the rule was warranted. There is no basis, therefore, for the assertion that a rulemaking was required to address LightSquared’s minor modification application.\textsuperscript{52}

\begin{footnotes}
\item[46] See 47 C.F.R. § 25.149(b)(4)(i).
\item[47] 47 C.F.R. § 25.149(b)(4)(ii).
\item[48] 2003 ATC Order, ¶ 88.
\item[49] Id. n. 230.
\item[50] See Consolidated Reply of LightSquared Subsidiary LLC (Dec. 9, 2010) at 22.
\item[51] See, e.g., ACSM Application for Review at 3-4.
\item[52] LightSquared continues to believe that the Bureau had the authority to grant its minor modification application without waiving the rules.
\end{footnotes}
The facts LightSquared presented provided ample support for a waiver. These facts ensure that the underlying purpose of the integrated service rule will be satisfied and present public interest benefits further supporting a waiver:

- **Substantial satellite service.** LightSquared’s commitment to the satellite portion of its network is unquestioned. LightSquared “has provided MSS since 1996” and “has invested $600 million to construct and launch its next-generation, broadband capable satellite.”\(^{53}\) LightSquared also has committed to “dedicate at least 6 MHz of MSS L-band spectrum, nationwide, exclusively to satellite service.”\(^{54}\)

- **Integrated pricing/integrated chipset.** LightSquared will charge the same integrated price to all of its retail customers, without regard to handset. LightSquared also has underwritten the development of a chipset that will be fully integrated. LightSquared’s actions: (1) make it impossible for LightSquared to profit by selling a terrestrial-only service; (2) eliminate any economic incentive for retailers to withhold satellite service from end users; and (3) establish the market conditions needed for competitive pricing of dual-mode handsets and integrated services.

- **Rationalization of MSS L-band.** LightSquared is spending hundreds of millions of dollars “to rationalize narrow, interleaved bands of L-band spectrum … into contiguous blocks that will support next-generation broadband technologies for both mobile satellite and terrestrial use.”\(^{55}\) The waiver granted by the Bureau “increase[s] … [LightSquared’s] capacity to advance the ongoing rationalization of L-band spectrum use.”\(^{56}\)

- **Buildout benefits.** LightSquared is required to satisfy terrestrial buildout requirements that ramp up and culminate in a requirement that 260 million people receive coverage by the end of 2015. This buildout will benefit “rural areas that do not currently have access to broadband services” and the “public safety and homeland security communities” and will “enhance competition for terrestrial mobile wireless broadband services.”\(^{57}\)

In sum, the Bureau remained faithful to the purpose and application of the rule. As the Bureau stated, there was good cause to grant the waiver because of LightSquared’s

\(^{53}\) O&A, ¶ 29.
\(^{54}\) Id. ¶ 36.
\(^{55}\) Id. ¶ 31.
\(^{56}\) Id. ¶ 31.
\(^{57}\) Id. ¶ 34.
commitments to support the purposes of the MSS/ATC gating criteria by offering ubiquitous, nationwide satellite service and taking action to create an MSS/ATC service and device marketplace where none appears to exist today.\textsuperscript{58}

The Bureau had the authority to grant the waiver it did, and it properly exercised that authority based on the record before it. Accordingly, the challenges to the Bureau’s authority should be rejected.\textsuperscript{59}

\section*{VII. \quad THE BUREAU HAS TAKEN APPROPRIATE ACTION WITH RESPECT TO GPS INTERFERENCE CONCERNS}

As LightSquared has stated previously in this proceeding, it takes very seriously the GPS community’s interference concerns.\textsuperscript{60} LightSquared is committed to resolving these concerns, and it has backed up that commitment by devoting substantial resources to the tasks of organizing the working group; developing, in cooperation with GPS representatives, test procedures for assessing interference potential and recommendations for mitigating interference potential. That said, LightSquared believes the filers’ concerns with the approach taken by the Bureau are misplaced.

\subsection*{A. \quad More protection for GPS than under usual FCC procedures}

As stated in the Background section above, LightSquared filed its minor modification application over nine years after the Commission began considering, and five years after it concluded adopting, service and technical rules for MSS licensees to provide ATC. Members of the GPS community participated in that rulemaking and, as a result, the Commission adopted technical rules that were

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{58} \textit{Id.} ¶ 37.
\item \textsuperscript{59} USGIC also asserts that, in order to protect investors in LightSquared, the Bureau had to state explicitly that any construction engaged in by LightSquared at this stage is at the company’s risk. \textit{See} USGIC Application for Review at 20-22. There is no requirement in the Commission’s rules or policies that such a statement be made, however, and independently of FCC requirements the investors, all of which are large and sophisticated companies, are required to be properly advised of risks relating to regulatory considerations.
\item \textsuperscript{60} \textit{See} letter from Sanjiv Ahuja, Chairman and CEO of LightSquared, to Marlene H. Dortch, Secretary Federal Communications Commission (filed Jan. 21, 2011).
\end{itemize}
\end{footnotesize}
intended to protect GPS receivers. The Commission also incorporated into LightSquared’s ATC authorization a coordination agreement entered into with USGIC in which LightSquared committed to much tighter OOBE limits than those specified in the rules. After USGIC expressed concern several years later about LightSquared’s proposed use of femtocells, LightSquared agreed to additional restrictions.

Once the Commission has adopted technical rules that are designed to protect against interservice interference, it normally will not entertain objections to an application based on claims that the rules do not provide adequate interference protection. In ordinary circumstances a party that believes the rules are insufficient must file a petition for rulemaking. Similarly, deviating from the coordination agreement protections that were incorporated into LightSquared’s license normally would require a new proceeding to modify LightSquared’s license.

In this case, the Bureau took actions to protect GPS that went well beyond these routine Commission procedures. Even though LightSquared’s operations comply with the OOBE requirements the Commission adopted to protect ATC receivers, and even though the operations also comply with the more restrictive limits LightSquared had agreed to in coordination with USGIC, the O&A did not grant LightSquared authority to operate terrestrial-only devices pursuant to the waiver at this time. Rather, the Bureau provided that LightSquared could begin such service only after completion of the working group process to the Commission’s satisfaction.

The Bureau’s action to protect GPS is all the more significant given the questionable relevance of the grant of the waiver to the GPS interference issue. As LightSquared explained in its Consolidated

61 See 2003 ATC Order, ¶¶ 180, 183.
Reply, nothing in its application changed any of the technical requirements already applicable to LightSquared.64

The Bureau’s action gives recognition to the GPS community’s interference concerns; provides a process for testing the potential for interference; and ensures that the commercial operations that were the subject of the order will begin only after the Commission has seen the test results and is satisfied.

B. Open, transparent, and fair working group process

Several filers object to the nature of the working group process. They characterize it as an unlawful delegation of the Commission’s authority to LightSquared.65 They also claim that the ground rules for the working group are not sufficiently definite and question whether there is sufficient opportunity for public input and comment.66 Some suggest that these perceived deficiencies constitute a violation of due process.67

A recent letter, issued jointly by the Bureau and the Office of Engineering and Technology ("OET"), resolves all but one of these issues.68 The Bureau and OET issued the letter in response to a petition that had been filed by USGIC. The letter clarified the roles to be played by LightSquared, the Commission, federal interests, and the GPS community in the working group process. The letter also

64 LightSquared Consolidated Reply at 19-21. At the same time, however, LightSquared has stated that it “takes this issue [potential GPS interference] very seriously and believes that it is appropriate for interested parties to devote resources to its solution as soon as possible,” thus accepting as a condition on the grant of its request the establishment of a process to address interference concerns. Letter from Sanjiv Ahuja, Chairman & CEO LightSquared, to Marlene H. Dortch, Secretary, FCC, File No. SAT-MOD-20101118-00239 (Jan. 21, 2011), 1-2. That the Bureau applied such a condition given LightSquared’s willingness to accept it does not change the fact that the process itself is an extraordinary level of protection.
65 See, e.g., GAMA Application for Review at 6-7.
66 See, e.g., id. at 8.
67 See, e.g., id. at 8.
68 Letter from Mindel De La Torre, Chief, Media Bureau, and Julius P. Knapp, Chief, Office of Engineering and Technology, to Jeffrey J. Carlisle, Executive Vice President, Regulatory Affairs and Public Policy, DA 11-367 (Feb. 25, 2011).
made plain that GPS stakeholders have the right to include their interference analyses and recommended in the final report that LightSquared will submit to the Commission and that all progress reports and the final report will be placed in the public record and may be commented on by interested parties. These clarifications ensure that the working group process will be open, transparent, and fair. In fact, USGIC has reported to the Commission that to date “the working group process … has proceeded on a cooperative and constructive basis.” 69

The one remaining issue – whether the Bureau improperly delegated its authority to LightSquared – is easily addressed. The Bureau has not delegated its decision-making authority. Rather, it has requested additional input so it can be better informed when it exercises that authority. The O&A and the recent letter make clear that LightSquared is making no decisions on behalf of the Commission, which remains the arbiter of the interference issue.

C. Absence of Detrimental Reliance

The GPS filers maintain that LightSquared’s waiver will, for the first time, permit LightSquared to operate large numbers of ATC base stations and end user devices. They assert this is an entirely new development, and thus argue there was no reason for them to take overload interference into account when they designed their receivers. 70

As shown in the Background section above, however, the fact that MSS licensees might operate large numbers of base stations has been known since the earliest days of ATC. For example, in a petition for reconsideration of the order first adopting rules for ATC, USGIC acknowledged that under the rules there would be “potentially millions of MSS mobile terminals operating in ATC mode” and that these

70 See Stansell Application for Review at 7; USGIC Application for Review at 5-6; GAMA Application for Review at 2-3.
mobile terminals “will transmit back to potentially tens of thousands of ATC wireless base stations in the 1525-1559 MHz bands.” That was true in 2003 and remains true today.

The potential for ATC transmitters to overload GPS receivers also has been known since the advent of ATC. It was raised in 2001 by Deere & Company and Inmarsat. Moreover, in the order that adopted rules for ATC, the Commission took up a “scenario not specifically addressed by the MSV/GPS Industry Council agreement “covering out-of-band emissions limits. The Commission recognized there could be “potential interference to GPS time-base receivers commonly used in cellular networks” because of “the possible close proximity of the MSV base station transmit antenna to a cellular time-base receiver of another system, particularly if they are on the same tower.” The Commission expressly limited the coordination obligation to these co-located cellular operators. The GPS industry never objected to that limitation.

D. Commercial operations

Several filers take issue with the fact that, pursuant to the waiver, the restriction on LightSquared’s commencement of operations is limited to “commercial service.” They claim there is no common understanding of what this term means.

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71 Reply to Comments, IB Docket No. 01-185, filed by USGIC on September 4, 2003, at 2. Similarly, in the cover letter accompanying the initial coordination agreement between USGIC and MSV, the parties stated that the “expected density” for MSV’s MSS was “well known” and that “MSV’s proposed terrestrial augmentations are also well known.” Letter, dated July 17, 2002, from Raul R. Rodriguez, counsel to USGIC, and Bruce D. Jacobs, counsel to MSV, IB Docket No. 01-185, p. 1.
73 2003 ATC Order, Appendix C2, Section 3.5.
74 Id.
75 See USGIC Application for Review at 18-20; Lockheed Martin Application for Review at n. 5; ACSM Application for Review at n. 4.
The Commission’s rules, however, distinguish clearly between commercial and non-commercial ATC services. When MSS licensees apply for an ATC license under Section 25.149 of the rules, which includes the integrated service and other gating criteria, they are seeking authority to operate ATC facilities on a commercial basis.\(^{76}\)

Non-commercial ATC operations are subject to a different regulatory regime. Under Section 25.143(j) of the rules, MSS licensees are entitled to “engage in pre-operational build-out and conduct equipment tests” of ATC facilities so long as they “[do] not offer ATC service to the public for compensation.”\(^{77}\) Accordingly, LightSquared’s minor modification application was an application for modified commercial authority. It was appropriate, therefore, that the Bureau would express the authority conveyed by the O&A in terms of commercial service, as that term has already been used in the context of ATC operations.

CONCLUSION

For the reasons stated herein, the Applications for Review should be treated as petitions for reconsideration and should be denied.

Respectfully submitted,

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76 See, e.g., 2003 ATC Order, ¶ 225 (“Thus, to implement an ATC, an MSS licensee must … offer ATCs on a commercially bundled basis with MSS … “); id. ¶ 86 (“we find that permitting commercial operation of ATC prior to commencement of MSS operations would disserve the public interest”). See also 47 C.F.R. § 25.149(b)(3) (“Mobile-satellite service must be commercially available (viz., offering services for a fee) in accordance with the coverage requirements that pertain to each band as a prerequisite to an MSS licensee’s offering ATC service.”).

77 47 C.F.R. § 25.143(j).
CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Consolidated Opposition of LightSquared Subsidiary LLC was sent by first class mail, this 14th day of March, 2011, to each of the following:

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