



October 29, 2015

Via Electronic Filing

Marlene H. Dortch
Secretary
Federal Communications Commission
445 Twelfth Street SW
Washington, DC 20554

Re: *Amendment of the Commission's Rules with Regard to Commercial Operations in the 3550-3650 MHz Band, GN Docket No. 12-354*

Dear Ms. Dortch:

In late July, the Wireless Innovation Forum (WinnForum) filed a Petition for Reconsideration sensibly asking for revision of the Commission's rules addressing Citizens Broadband Radio Service Device (CBSD) responses to notifications of relevant federal incumbent activity.¹ Section 96.15 of the Commission's rules requires a spectrum access system (SAS) to "confirm suspension of the CBSD's operation or its relocation to another unoccupied frequency, if available" within 60 seconds of receiving an environmental sensing capability (ESC) system's communication "that it has detected a signal from a federal system in a given area."² At the same time, section 96.39 allows 60 seconds for a CBSD to "cease transmission, move to another frequency range, or change its power level" when instructed to do so by an SAS.³ Thus, while section 96.39 contemplates that a full minute may elapse between a SAS command to vacate spectrum and a CBSD ceasing transmission, section 96.15 could be read to imply that communication must occur in less than one minute because it allots only one minute for communications to pass from an ESC to a SAS to a CBSD.

In seeking clarification, WinnForum also argued that the time to respond to an ESC command should be increased from 60 seconds to 600 seconds.⁴ In making this request, it observed that responding to ESC commands will require SAS providers to execute and confirm

¹ Wireless Innovation Forum, Petition for Reconsideration, GN Docket No. 12-354, at 3-5 (filed July 22, 2015) (WinnForum Petition) (seeking reconsideration of *In the Matter of Amendment of the Commission's Rules with Regard to Commercial Operations in the 3550-3650 MHz Band*, Report and Order and Second Further Notice of Proposed Rulemaking, 30 FCC Rcd. 3959 (2015) (*Report and Order*)).

² 47 C.F.R. §§ 96.15(a)(4) & (b)(4).

³ *Id.* § 96.39(c)(2).

⁴ WinnForum Petition at 3-5.

instructions to vacate spectrum, as well as exchange information with all other SAS providers.⁵ This distributed architecture will involve “complex non-linear transmission, queuing, and processing delays that will require ongoing design, tuning, and optimization.”⁶

The Satellite Industry Association (SIA) argues in response that the WinnForum’s request casts doubt on the overall framework for SAS-CBSD communication.⁷ SIA concedes that the ESC mandate “does not apply to protection of FSS systems” and thus does not affect its members.⁸ Nevertheless, SIA argues that the details of ESC-to-SAS communication and SAS-to-SAS communication set forth in the WinnForum Petition suggest that CBSDs may be slow to respond to all SAS shut-off commands.⁹

SIA is mistaken. Indeed, SIA appears to misunderstand the different types of commands addressed by the Commission’s rules. Section 96.39(c)(2) requires a CBSD to respond within 60 seconds to a SAS’s instruction to cease transmission, lower power, or move to another channel.¹⁰ This 60-second interval relates only the time that may elapse between a SAS’s command and a CBSD’s response, not generally to coordination between ESCs and SASs or among SASs. That is, the requirement applies narrowly to one-way commands between individual SASs and individual CBSDs, and does not implicate the broader distributed inter-SAS architecture. As a result, WinnForum’s recognition of complexities surrounding ESC-to-SAS coordination does not suggest that CBSDs will be unable to meet the 60-second requirement to vacate a channel in response to a SAS command.¹¹ The Commission should preserve its 60-second rule for CBSD responses to SAS commands, while expanding the interval for implementation of ESC directions.

SIA makes two additional arguments that are not only unpersuasive, but also repetitive of earlier SIA filings. First, as explained in Google’s Response to Petitions for Reconsideration, SIA’s request to further limit power levels and cap antenna heights lacked record support and

⁵ *Id.* at 4.

⁶ *See id.*

⁷ Opposition of the Satellite Industry Association to the Petitions for Reconsideration at 8-10, GN Docket No. 12-354 (filed Oct. 19, 2015) (SIA Opposition).

⁸ *Id.* at 8.

⁹ *Id.* at 8-9.

¹⁰ 47 C.F.R. § 96.39(c)(2).

¹¹ Even if SIA’s reasoning were correct, it is not clear that the its proposed remedy—shortening the response interval prescribed by the rules—responds to the purported problem. See Petition for Reconsideration of SIA at 11-12, GN Docket No. 12-354 (filed July 23, 2015). That is, to the extent that SIA raises a concern about the ability of a CBSD to comply with the response times established in the rules, see Opposition at 9-10, shortening the prescribed response times is not likely to improve compliance.

failed to recommend a path forward for the Commission.¹² Because SIA has failed to augment these arguments with either new facts or additional specificity,¹³ SIA's request should be rejected. Second, SIA urges the Commission to reject the idea that professional installers will ensure the accuracy of CBSD location data.¹⁴ We reiterate that allowing professional installers to provide CBSD location information will protect incumbent users from harmful interference.¹⁵ SIA's Opposition, which merely points the Commission to information originally submitted by the National Association of Broadcasters in an entirely different proceeding, in no way improves its earlier arguments.¹⁶ Accordingly, SIA provides no reason for the Commission to change its approach to device geolocation.

The Commission's *Report and Order* enables intensive shared use of the 3.5 GHz band while appropriately protecting higher-priority users. While the Commission should revisit and clarify the requirements for devices responding to an ESC, it should reject SIA's proposals to reconsider fundamental aspects of its framework, including power limits, antenna height restrictions, and location accuracy determination.

Respectfully submitted,



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¹² Response of Google Inc. to Petitions for Reconsideration at 5-6, GN Docket No. 12-354 (filed Oct. 19, 2015) (Google Response).

¹³ See SIA Opposition at 6-7.

¹⁴ *Id.* 10-11.

¹⁵ Google Response at 10-14.

¹⁶ SIA Opposition at 10-11.