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BY ELECTRONIC FILING

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Re: Revision of Part 15 of the Commission's Rules to Permit Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz Band, ET Docket No. 13-49

Dear Ms. Dortch:

The 5 GHz band is the nation's best hope for expanding unlicensed spectrum resources in the near future and for ensuring that all Americans can access the next generation of Wi-Fi technology. Recognizing this fact, the Federal Communications Commission ("Commission") opened a proceeding to explore spectrum sharing in the band in February 2013. Open-minded collaboration between incumbent engineers and Wi-Fi engineers allowed the Commission to move forward quickly to adopt new rules that improved spectrum efficiency in the 5150-5250 MHz band ("U-NII-1"). This welcome change has already produced benefits for American consumers, as members of the National Cable & Telecommunications Association ("NCTA") and other Wi-Fi investors have already incorporated the U-NII-1 band into their networks.

The Commission's 2013 Notice of Proposed Rulemaking also identified the great benefit of permitting Wi-Fi consumers to share the 5850-5925 MHz band ("U-NII-4" or "5.9 GHz") with incumbents. Unfortunately, however, progress on sharing in this band has stalled. The Commission and Wi-Fi providers had hoped that the IEEE 5.9 GHz Dedicated Short Range Communications Systems ("DSRC") Tiger Team—a body established specifically to examine technical solutions to facilitate sharing between DSRC and unlicensed users—would be a useful forum for incumbents and Wi-Fi companies to work together to find a sharing solution, as resulted from collaboration in the U-NII-1 band. This was not the case. The Tiger Team has now concluded without reaching agreement on a single consensus position for band sharing.

The recent ex parte letter filed by the Alliance of Automobile Manufacturers, Inc., and Association of Global Automakers (“Auto Ex Parte”)¹ blatantly mischaracterizes the Tiger Team report and its conclusions. First, the Auto Ex Parte attaches an outdated draft version of the Tiger Team report that has not been approved by the IEEE. The draft version of the report contains straw poll results—which the automakers make much of—that were ultimately deemed unreliable by the IEEE and that were later excluded from the report. The IEEE determined not to include the straw poll results for good reason, as the poll was conducted in an unscientific fashion using Survey Monkey with no controls or oversight. Second, the Auto Ex Parte states that the Tiger Team rejected the Qualcomm sharing proposal, when in fact the latest version of the report notes simply that “[t]here was no consensus among the participants.” Neither of the two sharing proposals was ultimately adopted or rejected.

The Commission waited patiently for incumbents to demonstrate that they were willing to work towards a solution in the Tiger Team. But the Tiger Team experience demonstrates that a sharing solution is not likely to be identified without the Commission’s intervention to facilitate the exchange of information between DSRC and unlicensed stakeholders, and to help broker a solution.

Early in the process, Wi-Fi engineers requested that incumbent DSRC interests share information central to any sharing analysis, including information on the noise tolerance of DSRC systems, the emission limits that would be necessary to protect DSRC communications, DSRC performance and use case information, and data from the DSRC testing that incumbents point to as demonstrating the feasibility of their technology.² DSRC proponents did not provide the materials requested, contrary to claims in the Auto Ex Parte that the DSRC community shared its test data.³ DSRC interests would not even share the results of the tests that they rely on in their comments to the Commission. Without this basic information, the Tiger Team heard presentations on the two sharing proposals, but lacked the basic, foundational information needed to make progress.

In addition, it is important for the Commission to recognize that not all of the final Tiger Team report will reflect the consensus of the participants of this group. Most importantly, the present draft version of the report contains a new appendix—Appendix D—that Tiger Team participants had no opportunity to review or discuss. This Appendix D, drafted by the U.S.

¹ Letter from Ari Q. Fitzgerald, Counsel to the Alliance of Automobile Manufacturers, and Frederick M. Joyce, Counsel to the Association of Global Automakers, to Marlene H. Dortch, Secretary, FCC, ET Docket No. 13-49 (filed Mar. 25, 2015) (“Auto Ex Parte”).

² See *DSRC Coexistence Tiger Team Action Item List – August 2014*, Doc. No. IEEE 802.11-14/1060r0 (Aug. 2014), available at <https://mentor.ieee.org/802.11/dcn/14/11-14-1060-00-Oreg-dsrc-coex-tt-action-item-list-july-aug.doc>. The document is appended as an attachment to this letter. NCTA requested that the Tiger Team’s final report include this list of requests, but that request was rejected by the Chair.

³ See Auto Ex Parte at 6.

Department of Transportation (“DOT”), states that one of the sharing proposals submitted for consideration by the group is unworkable. The proponents of this sharing solution—the same proposed by Qualcomm in its comments submitted to the Commission in this proceeding⁴—had no opportunity to rebut the statements made by DOT or to include their own Appendix with dissenting views. The Appendix also was submitted after the conclusion of Tiger Team discussions on the report—Tiger Team participants did not see it or even know of its existence until approximately 2:00 AM local time (in Berlin), when the final report was scheduled to be discussed in the IEEE Regulatory Standing Committee meeting at 10:30 AM. This being the case, the Commission should understand that Appendix D, or even its inclusion in the report, does not reflect NCTA’s views or the views of many other Wi-Fi proponents that participated in the Tiger Team.

Because the Tiger Team did not reach an agreement on a consensus position, the Commission should step in to move the ball forward on a plan for spectrum sharing in U-NII-4. As a first step, the Commission should call on DSRC interests to put forward the information needed to properly consider sharing mechanisms on the record at the Commission, including the full results of DSRC testing described in comments submitted to the Commission by DSRC proponents. NCTA remains eager to engage in real technical discussions with DSRC stakeholders, and looks forward to a new chapter in the work to develop a sharing solution that will facilitate unlicensed use of the U-NII-4 band while protecting DSRC operations from harmful interference.

Respectfully submitted,

/s/ Rick Chessen

Rick Chessen

⁴ See Comments of Qualcomm Incorporated at 8-17, ET Docket No. 13-49 (filed May 28, 2013).

IEEE P802.11
Wireless LANs

DSRC Coexistence Tiger Team**Action Item List – August 2014****Date:** 2014-08-21**Author(s):**

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Abstract

Summary list of action items from DSRC Coexistence Tiger Team calls during July and August 2014.

**IEEE 802.11 Regulatory SC DSRC Coexistence Tiger Team
Action Item List**

Date Created	Item/Description	Requested By	Date Completed	Comments
8-15-14	Spreadsheet of overall list of Tiger Team attendees, including person's name, company and brief description.	Chair		
8-8-14	What would be the required OOB limits from lower UNII-4 in order to protect vehicle-to-vehicle communications in the upper part of the band? What should the values be for "L1" and "L2" shown on slide 8 of the Qualcomm presentation? They would like to understand an acceptable emission limit specification, and the rational why.	Qualcomm		
8-8-14	What is the current noise tolerance of DSRC from existing noise sources: in-band and out-of-band FSS, radars, adjacent-channel unlicensed devices (from FCC ISM rules, UNII-rules)?	Qualcomm		
8-15-14	What information is available regarding the DSRC service channel use cases?	Qualcomm		
8-15-14	What information is available for DSRC public safety channel scenario analysis?	Qualcomm		
8-15-14	Please provide feedback on the 20 MHz DSRC service channel performance	Qualcomm		
8-15-14	Please provide any additional relevant information on the Michigan testing, including the test plan and results, not already published by DOT.	Qualcomm		
8-8-14	Have field trials been conducted for DSRC interference testing? Is there an organizational structure in place to help with interference testing?	Dirk Grunwald		
8-8-14	Has there been any interference testing into the DSRC channels	Qualcomm		

	from satellite, radars, adjacent channel ISM or UNII devices? Please provide any data that exists.			
8-8-14	Has any NTIA coordination been done with interference from satellite, radars, adjacent channel ISM or UNII devices? Is there a process for this to happen?	Rob Aldefer		
8-8-14	If state DOTs operate roadside units, would other entities that use this spectrum be licensed through the state or local DOTs? How will this work?	Rob Aldefer		
8-15-14	How will the public safety channels work? Will they always be transmitting at maximum power when they are in a particular area? Does the public safety channel "take over" the other channels when in use?	Rob Aldefer		
8-15-14	What kind of interference will occur inside a car into the DSRC channels when WiFi is also transmitting in the car?	Chair		
8-22-14	Briefing by automotive side to the Tiger Team on the NHTSA Research Report and ANPRM on V2V Technologies	Rob Aldefer		
8-22-14	Briefing by the automotive side to the Tiger Team on the DSRC system compared to the European approach	Rob Aldefer		