

memorandum

DATE: February 9, 2018

TO: Tim Maguire, Neal McNeil, Robert Pavlak, Sankar Persaud

CC: Rosemary Harold, Julius Knapp, Donald Stockdale, Thomas Sullivan, Matthew Hussey; William Hurst, Reza Biazaran

FROM: Rashmi Doshi, Chief, Laboratory Division, Office of Engineering and Technology

SUBJECT: Peer Review of U-NII-4 to DSRC EMC Test and Measurement Efforts Phase I Test Report

OET has completed the first phase of testing on equipment prototypes submitted to demonstrate potential sharing solutions between the proposed Unlicensed National Information Infrastructure (U-NII) devices and Dedicated Short Range Communications (DSRC) operations in the 5850-5925 MHz (U-NII-4) frequency band. The laboratory test results provide the necessary baseline data for performing analysis of specific operational scenarios and supporting “real-world” empirical tests as part of the next phase of the coexistence test effort.

The Commission issued a Public Notice (PN) on June 1, 2016 proposing three phases of a test program to assess the potential compatibility between U-NII-4 and DSRC networks operating in the band utilizing two sharing proposals from the IEEE 802.11 Tiger Team coexistence efforts. These two sharing proposals have been designated the “Detect and Vacate” (*aka* “Detect and Avoid”) and the “Re-Channelization” interference mitigation strategies.

The results of this study are set forth in the attached draft OET Report, FCC/OET TR 17-1006, entitled “U-NII-4 to DSRC EMC Test and Measurement Efforts – Phase I: FCC Laboratory Tests.” We plan to publish the report. The information we obtain from these tests will be used along with other information in the record to proceed to Phase II and III testing and in making final decisions in this matter.

Under the Information Improvement Act, OMB requires that influential scientific assessments be subject to peer review to enhance the quality and credibility of the government’s scientific information. I request your participation in a panel to conduct a peer review of OET’s Phase I Study and Test Report. This review should address the following subject areas, given the limited availability of devices and practical and technical limitations of these devices:

- Whether the scope of testing in terms of the detection and threshold conditions examined was appropriate and sufficient;
- Whether the measurement methodologies used in the testing of the prototype devices to evaluate the coexistence abilities was appropriate;
- Whether the scope of the testing was appropriate to evaluate the impact of transmissions in the U-NII-4 band to DSRC operation.
- Whether the various tests performed were properly conducted consistent with the selected methodologies.

I also ask that you provide a brief written report of your review, findings and recommendations with regard to this study. I request that you provide the report by March 2, 2018.

Thank you for your assistance in this matter.

Attachment