Billing Code 4910-9X

DEPARTMENT OF TRANSPORTATION

GPS Adjacent Band Compatibility Assessment Testing

AGENCY: Office of the Assistant Secretary for Research and Technology, Department of Transportation.

ACTION: Notice.

SUMMARY: The Department of Transportation, through the Office of the Assistant Secretary for Research and Technology (OST-R), is providing notice to the public that it will conduct additional testing of Global Positioning System/Global Navigation Satellite System ("GPS/GNSS") receivers this July as part of the DOT Adjacent Band Compatibility Study ("the Study"). The goal of the Study is to evaluate the adjacent radio frequency band power levels that can be tolerated by GPS/GNSS receivers, and advance the Department's understanding of the extent to which such power levels impact devices used for transportation safety purposes, among other GPS/GNSS applications. In April 2016, radiated testing of GNSS devices took place in an anechoic chamber at the U.S. Army Research Laboratory at the White Sands Missile Range (WSMR) facility in New Mexico.

The Study provides for testing categories of receivers that include aviation (non-certified), cellular, general location/navigation, high precision and networks, timing, and space-based receivers. Approximately twelve receivers, representing each of these receiver categories, will be selected for additional testing from those receivers tested in April.

FOR FURTHER INFORMATION CONTACT: Stephen Mackey at the DOT/OST-R Volpe National Transportation Systems Center at stephen.mackey@dot.gov or 617-494-2753.

SUPPLEMENTARY INFORMATION: The Department obtained input from broad public outreach over the past year that included four public meetings with stakeholders on September 18 and December 4, 2014, and March 12 and October 2, 2015, public issuance of a draft test plan on September 9, 2015 (see 80 FR 54368), and comments received regarding the test plan. The final test plan was published March 9, 2016 (see 81 FR 12564) and requested voluntary participation in this Study by any interested GPS/GNSS device manufacturers or other parties whose products incorporate GPS/GNSS devices.

Privacy Act: Anyone can search the electronic form of comments received into any of our dockets by the name of the individual

submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review a Privacy Act system of records notice regarding our public dockets in the January 17, 2008 issue of the Federal Register (73 FR 3316).

Discussion at the DOT public meetings highlighted the importance of conducting GPS/GNSS receiver acquisition testing which had always been planned as part of the DOT GPS Adjacent Band Compatibility Assessment, but was not feasible due to time constraints during the radiated test conducted at WSMR in April. The goal of the additional lab testing to be conducted at Zeta Associates in Fairfax, Virginia and MITRE Corporation in Bedford, Massachusetts, is:

1) Receiver characterization for comparison with results obtained in April at the anechoic chamber at the U.S. Army Research Laboratory;

2) Evaluation of Out Of Band Emission (OOBE) interference at prescribed and proposed levels with Long Term Evolution (LTE) uplink and downlink signals;

3) GPS/GNSS signal acquisition characterization.

The same instrumentation will be used for these conducted tests at the Zeta Associates laboratory as for the radiated test at the U.S. Army Research Laboratory at WSMR, utilizing the same

GNSS playback system and interference generation equipment with modifications to support OOBE and acquisition test requirements;

4) Antenna characterizations.

The acquisition test will be conducted using 10 MHz LTE signals at four frequencies:

- Base station frequencies of 1525 MHz and 1550 MHz
- Hand-set frequencies of 1620 MHz and 1645 MHz

Information referenced in this Notice and further background can be viewed at: http://www.gps.gov/spectrum/ABC/.

Issued in Washington, DC, on June 29, 2016.

_____

Gregory D. Winfree,
Assistant Secretary for Research and Technology.
[FR Doc. 2016-16136 Filed: 7/6/2016 8:45 am; Publication Date: 7/7/2016]