Overview of GPS Adjacent Band Compatibility Assessment

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January 13, 2012 National Space-Based Positioning, Navigation, and Timing (PNT) Executive Committee (EXCOM) co-chair letter to National Telecommunications and Information Administration (NTIA) proposed to draft new Global Positioning System (GPS) spectrum interference standards:

- Inform future proposals for non-space, commercial uses in the bands adjacent to the GPS signals.
- Ensure such proposals are implemented without affecting existing and evolving uses of space-based PNT that are vital to economic, public safety, scientific, and national security needs.
DOT GPS Adjacent Band Compatibility Assessment

- Deputy Secretary Tasking to FAA and RITA (OST-R):
  - Collaborate to develop a spectrum protection plan which provides a framework to define the processes and assumptions for development of GPS spectrum protection criteria on behalf of GPS civil users.

- GPS Adjacent Band Compatibility Assessment will identify the processes for:
  - Deriving adjacent-band power limits, as a function of offset frequency, necessary to ensure continued operation of all applications of GPS services.
  - Determining similar levels for future GPS receivers utilizing modernized GPS and interoperable Global Navigation Satellite System (GNSS) signals.
Near-Term Focus

- Frequency Bands Adjacent to GPS L1
- Leverage Receiver Categories from TWG
  - Aviation
  - Cellular
  - General Location/Navigation
  - High Precision
  - Timing
  - Networks
  - Space

- Develop a set of curves demonstrating the maximum aggregate power level as a function of frequency offset from GPS
Next Steps

- Engage with Industry
  - Public Workshops Starting Today
  - Information available on [www.gps.gov](http://www.gps.gov)

- Effort being worked in conjunction with DOT Extended Pos/Nav Working Group and GPS Directorate with support from Aerospace