



GPS Civil Liaison Report

Hansen & Skalski 64th CGSIC, Baltimore, MD 17 Sep 2024

U.S. Department of Transportation

GPS Enterprise Interagency Activities

Driven by Space Policy Directive 7 and Executive Order 13906, IAW 10 U.S.C. § 2281 and 49 U.S.C. § 44505

Interagency Partnership for Developing and Operating the GPS Enterprise

- Reaffirmed of DOT-DoD Memorandum of Agreement on Civil Use of GPS (Nov 2023)
- Fulfill SPD-7 responsibilities for requirements development, implementation, operation, and monitoring of GPS service
- Ensure earliest operational availability for modernized civil signals and services including monitoring, authentication, and application
- Facilitate international coordination of standards, awareness, and augmentation in relationship to foreign GNSS and PNT services

GPS Public Interface Control Working Group (PICWG)

- 2023 Meeting held virtually, 27 Sep 2023
- 2024 Meeting (virtual) planned for Dec 2024, PCNs forthcoming
- Key development: specification of the Integrity Support Message (ISM) for Advanced Receiver Integrity Monitoring (ARAIM)

U.S. Executive Branch Partnerships on Advancing Space-based PNT Services

- World-wide monitoring and performance assessment of GNSS signals
- Developing new GNSS standards for PNT services, e.g. ARAIM, signal authentication, time transfer, and space service volume(s)

Coordination on Complementary and Alternative PNT Technologies

- Interagency collaboration to support Executive Branch response to Executive Order 13905, "Responsible Use of PNT"
- DOT <u>Complementary PNT Action Plan</u>—drive high TRL service adoption to strengthen resiliency of PNT for critical infrastructure
- USSF <u>SpaceWERX AltPNT Challenge</u>—spur art-of-the-possible TRL advancement of PNT technologies for multi-source military PNT

GPS Enterprise Interagency Activities (cont.)



Civil Signal Operational Capability (CSOC) Integrated Product Team (IPT)

- CSOC IPT Steering Group in-person meeting held 30 Jul 2024 in El Segundo, CA.
- Co-Chairs: Ms. Karen Van Dyke (DOT), Ms. Deborah Lawrence (FAA), Mr. Marcus McInnis (SSC), Mr. Joseph Gambrell (S35P)
- Key Topics:
 - CSOC IPT Alignment within S35P (PNT Division)/MD 31/SYS Delta Structure
 - Pconst Current Status
 - Pre-Upload/Post-Upload Checkers
 - Enterprise Roadmap for Operational Capabilities
 - Civil Signal Monitoring System (CSMS)

Civil GPS Senior Leadership Operations Summit

- Civil Ops Summit in-person meeting 15-16 May 2024, Schriever SFB, CO
- P5 Members: DOT/FAA/FCC/2 NWS/NAVCEN/CISA
- CRUCIBLE Events/Process
- Cease Buzzer Discussion

GPS Enterprise Upcoming Activities



Requirements Modifications Proposal (DoD 1067)

- Out-of-Band Navigation Message Authentication (OOB NMA)
 - HQ SpOC SES currently working current costing and impact analysis
 - DOT providing funding to SSC
- AEP Inherent Mode Recovery Backwards Data Migration
 - Rough Order Magnitude (ROM) created for SV memory dump capability
 - HQ SpOC SES currently working current costing and impact analysis
 - DOT providing funding to SSC

OCX Test Events

- Civil Operational Test (OT) Annex for the Global Positioning System (GPS) Enterprise Test & Evaluation Master Plan (E-TEMP)
 - Passed Department of Transportation's Agency Approval process
 - Currently routing through
 - USSF
 - SF/TE
 - AF/TE
 - ASAF/SQ
 - DTE/A
 - DOT&E



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