



**SPACE-BASED POSITIONING  
NAVIGATION & TIMING**

NATIONAL EXECUTIVE COMMITTEE

# **National Space-Based PNT Advisory Board**

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**May 14, 2009**



# Overview



- **Accomplishments since last Meeting**
- **Results of 2008 EXCOM Work Plan**
- **2009 EXCOM Work Plan**
- **Space-Based PNT and New Administration**



# Key Accomplishments

since last Advisory Board meeting in Oct 08



- **FAA published 1<sup>st</sup> GPS WAAS Performance Standard – Oct 08**
- **State/NASA hosted 4<sup>th</sup> Int’l Committee on GNSS – Dec 08**
- **Published 2008 Federal Radionavigation Plan – Jan 09**
- **NASA renewed Charter for Advisory Board – Jan 09**
- **FY09 Omnibus contained \$20.7M Civil Funding for GPS – Mar 09**
- **Launched GPS IIR-20(M) to bring L5 signal into use – Apr 09**
- **Air Force released OCX RFP – May 09**



# Final Report on 2008 Work Plan



- **EXCOM approved 2008 Work Plan**
  - Total of 59 action items
    - 44 Original Action Items; 15 Action Items added
  - Suspense dates built with departmental input
  - Status reported monthly to ESG Members
- **Work plan re-baselined at June 2008 ESG**
- **Closed end of year; opened 2009 Work Plan**

**2008 Work Plan provided a foundation for a smooth transition to new administration**



# 2008 Work Plan Status



- 2008 Work Plan had 59 action items

54 Completed (92% Closed)

5 Remaining (8% Overdue)

**G** 0 Actions

**Y** 0 Actions

**R** 5 Actions



# 2008 Key Accomplishments



- **DHS released public fact sheet on Interference Detection and Mitigation (IDM) Plan – Apr 08**
- **Joint Staff/DOT held GPS Requirements Summit – Apr 08**
- **Asia Pacific Economic Cooperation (APEC) GNSS Innovation Summit held in Bangkok, Thailand – May 08**
- **AF awarded GPS III-A Contract – May 08**
- **USCG renewed USG GPS commitment to International Maritime Organization (IMO) – Jul 08**
- **DOT provided \$7.2M(FY08) to AF for Civil GPS Capabilities – Jul 08**



# 2008 Key Accomplishments



- **Announced plan to put CNAV Data on L2C in 2009 – Sep 08**
- **DoD published final Federal Register Notice on civil access to Semi-Codeless – Sep 08**
- **NASA and NOAA Agreement signed with Japan to support QZSS monitoring sites in Hawaii and Guam – Sep 08**
- **Convened 1<sup>st</sup> U.S.- EC Plenary and released GPS/Galileo Cooperation Statement – Oct 08**
- **Published Biennial GPS Report to Congress – Oct 08**
- **DOD/DOT completed MOA on Civil Use of GPS – Nov 08**



# 2009 Work Plan



- **The goal for the 2009 Work Plan is:**
  - **Continue 2004 National Policy implementation**
  - **Identify and Track Major Activities in support of National Policy goals and objectives**
  
- **Member agencies proposed 2009 actions**
  - **Identified issues and problems to be solved**
  - **Office of Primary Responsibility**
  - **Completion dates**



# 2009 Work Plan



- **Executive Steering Group (ESG) approved Work Plan in Feb 09**
  - **Total of 27 action items to include:**
    - 5 Overdue 2008 Work Plan Actions
    - 5 Previously Existing 2009 Actions
    - 17 new Action Items added
  - **Continue reporting status monthly to ESG**



## 2009 Key Events



- **Launch first GPS II-F satellite**
- **Award OCX contract**
- **Transfer FY09 civil funding to Air Force**
- **Develop a strategic plan with an investment strategy for completing NDGPS (FOC)**
- **Complete DASS and SLR assessments for possible GPS IIIB**
  - **Decide acceptability of Canadian DASS payload on GPS III**
- **Complete implementation of the DHS central data repository for interference events**
- **Finalize National Space-based PNT Advisory Board Report**



# Advisory Board Topics



- **Leadership**
- **Strategic Engagement and Communication**
- **Future Challenges**



# Advisory Board – Topic 1



## **Leadership:**

**Recommend areas where GPS and its augmentations can be made more competitive**

- a) **Near Term:** Examine navigation-communications services for civil applications, including the issues related to safety critical certification requirements, the overall business case, technical feasibility, and analyses of potential alternatives
- b) **Medium Term:** Review and prioritize future GPS III satellite capabilities, expanded ground segment capabilities, and/or regional augmentations that would provide the greatest improvement and value relative to increased benefits to the global user community at reduced risk and cost
- c) **Long Term:** Identify actions that would enhance long-term economic and regulatory stability for the development of GNSS capabilities and services in the national and international arenas



## Advisory Board – Topic 2



### **Strategic Engagement and Communication:**

**Recommend ways to promote and demonstrate current and future capabilities of GPS and its augmentations to the US and international communities**

- a) **Near Term:** Develop options for promoting GNSS capabilities for domestic and foreign audiences
- b) **Mid Term:** Identify actions the USG could take in international organizations, standards setting bodies, and/or foreign capitals to prevent attempts to mandate the exclusive use of any one GNSS system in specific geographic areas
- c) **Long Term:** Propose approaches for maintenance and improvement of GPS's leadership and acceptance around the world



# Advisory Board – Topic 3



## **Future Challenges:**

**Assess technology and market trends as the number of worldwide GNSS providers increase**

- a) **Near Term:** Recommend steps agencies should take to achieve spatial interoperability
  - Including harmonization of common grid operations that would be used to identify locations and coordinate time-critical operations
- b) **Mid Term:** Assess the implications to the USG public sector and overall U.S. economy of multiple GNSS providers
- c) **Long Term:** Propose approaches on commercial trade issues to ensure a level playing field in the space-based PNT market place (i.e. prevent adverse restrictions)



# Way Ahead



- **Next EXCOM Meeting – 18 Jun 2009**
  - First EXCOM of the new Administration
  - Primary purpose is orientation; start process
- **New EXCOM Members/Political Appointees**
  - DoD – Deputy Secretary William J. Lynn, III
  - DOT – Deputy Secretary – John D. Porcari - Nominated
  - DOS – Deputy Secretary James B. Steinberg
  - DOI – Deputy Secretary – David J. Hayes - Nominated
  - USDA – Deputy Secretary - Kathleen A. Merrigan
  - DOC – Deputy Secretary – Nomination Pending
  - DHS – Deputy Secretary Jane H. Lute
  - JCS – Vice Chairman – Gen. James E. Cartwright
  - NASA – Deputy Administrator – Nomination Pending