



SPACE-BASED POSITIONING
NAVIGATION & TIMING
NATIONAL COORDINATION OFFICE



U.S. Space-Based Positioning, Navigation & Timing (PNT): A Policy Update

***Civil Global Positioning System (GPS) Service
Interface Committee***

***Savannah, Georgia
15-16 Sep 2008***

**Michael Shaw, Director
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Overview

- **U. S. Space-Based PNT Policy**
- **2008 EXCOM Work Plan**
 - **Accomplishments**
- **Way forward**
 - **Items to be completed by end of 2008**



2004 U.S. Space-Based PNT Policy



GOAL: Ensure the U.S. maintains space-based PNT services, augmentation, back-up, and service denial capabilities that...

ASSURES SERVICE

Provide uninterrupted availability of PNT services

MEETS DEMANDS

Meet growing national, homeland, economic security, and civil requirements, and scientific and commercial demands

LEADS MILITARILY

Remain the pre-eminent military space-based PNT service

STAYS COMPETITIVE

Continue to provide civil services that exceed or are competitive with foreign civil space-based PNT services and augmentation systems

INTEGRATES
GLOBALLY

Remain essential components of internationally accepted PNT services

LEADS TECHNICALLY

Promote U.S. technological leadership in applications involving space-based PNT services



2004 U.S. Space-Based PNT Policy



- Provide GPS and augmentations free of direct user fees on a continuous, worldwide basis
- Provide open, free access to information needed to develop equipment
- Improve performance of GPS and augmentations to meet or exceed that of international systems
- Encourage international development of PNT systems based on GPS
- Seek to ensure international systems are interoperable with civil GPS and augmentations
- Address mutual security concerns with international providers to prevent hostile use



2004 U. S. Space-Based PNT Policy



- **Recognizes the changing international scene**
 - Other nations are implementing space-based systems that provide PNT services
- **National Executive Committee (EXCOM) for Space-Based PNT**
 - Chaired by Deputy Secretaries of Defense and Transportation
 - Membership includes: State, Interior, Agriculture, Commerce, Homeland Security, Joint Chiefs of Staff and NASA
- **National Coordination Office (NCO)**
 - Established with staff from member agencies
- **National Space-Based PNT Advisory Board**



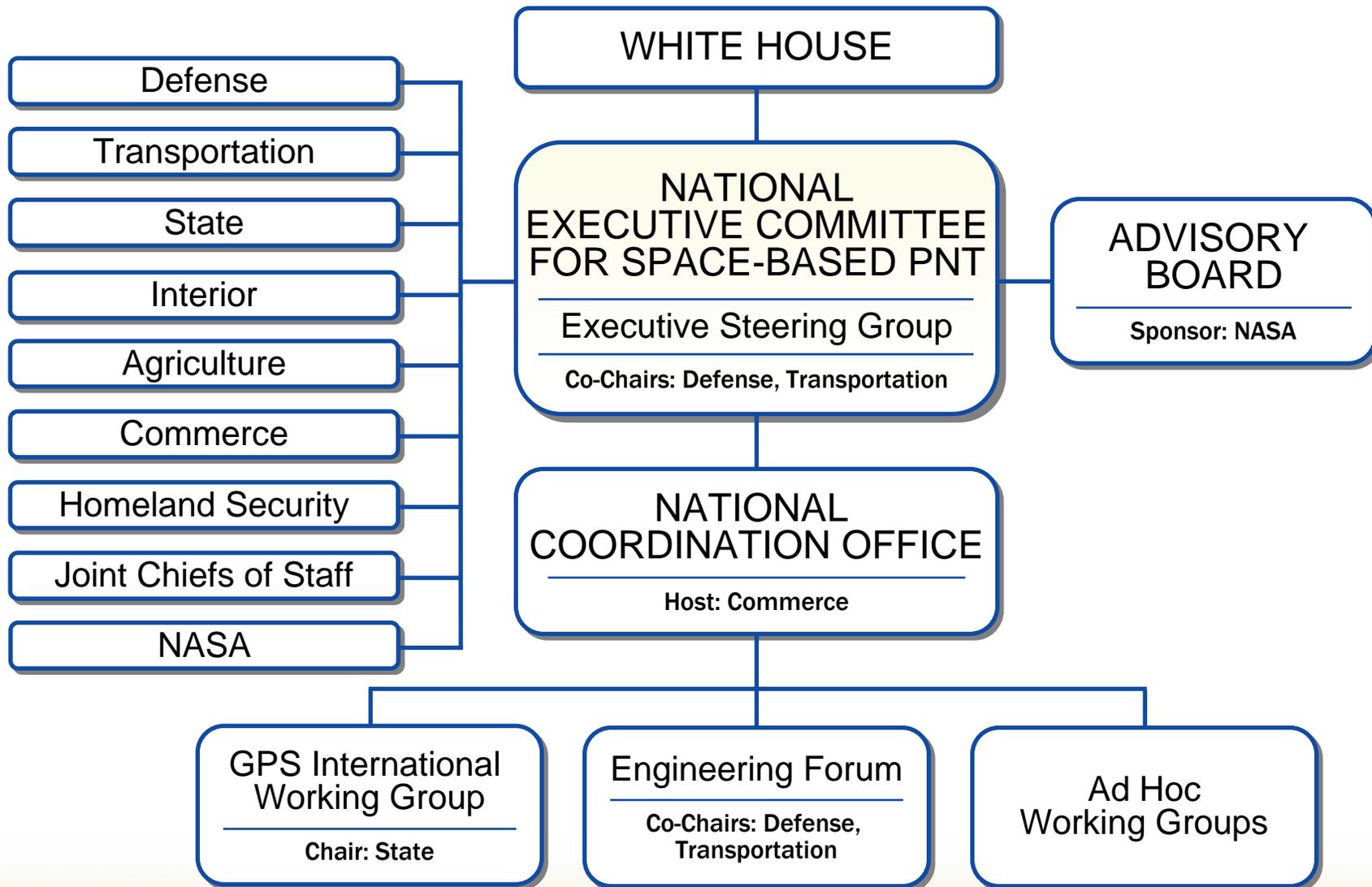
2004 U. S. Space-Based PNT Policy



- **National Space-Based PNT Advisory Board**
 - Conducts assessments; makes recommendations to EXCOM in support of national policy goals and objectives
- **Twenty-four members; 6 international members**
 - Chaired by Dr. James Schlesinger
 - Oct 07 and Mar 08 Meetings; Minutes posted on PNT.gov



U.S. Space-Based PNT Organizational Structure





U.S. Space-Based PNT Policy



Very active Senior USG Leadership

- **National Executive Committee Meetings**
 - Nov 07, Mar 08 and Jul 08
- **Executive Steering Committee Meetings**
 - Met Oct 07, Jan 08 and Jun 08
- **2008 Work Plan Approved at Aug 07 EXCOM Meeting**
 - Total of 52 Action Items
 - 43 Action Items initially; 9 Action Items added later
 - 29 Action Items completed to date



Accomplishments Oct - Dec 07



- **Completed GPS Architecture Evolution Plan (AEP) – AF**
 - Transitioned to new GPS Ground Control Segment
 - Activated fully capable backup GPS Operations Center
- **Announced GPS III without Selective Availability – DoD**
- **Delivered First National Space-Based PNT Five-Year Plan to White House – NCO**
- **Launched 2 GPS-IIR(M) satellites (Dec 07/Mar 08) – AF**
- **Awarded GPS OCX Development Contracts – AF**



Accomplishments Jan - Mar 08



- **Welcomed Departments of Interior and Agriculture as new EXCOM members – EXCOM**
- **ICAO accepted US offer on GPS/SPS and WAAS – FAA**
- **Completed IDM Implementation Strategy – DHS**
- **Decided to continue Inland NDGPS operations – DOT**
- **Established Maritime Info Operations Center – USCG**



Accomplishments Apr – Jun 08

- Released 2007 EXCOM Annual Report – NCO
- Released Public fact sheet on Interference Detection and Mitigation (IDM) Plan - DHS
- Awarded GPS IIA Contract - USAF
- Held Asia Pacific Economic Cooperation (APEC) Summit on GNSS Innovation in Thailand – State
- Held GPS Requirements Summit - Joint Staff/DOT
- Approved National PNT Architecture Guidance Memorandum – OSD/DOT



Accomplishments July – Sep 08



- Convened U.S.-EC Working Group on Trade and Civil Applications – DOC
- Transferred \$7.2M of civil FY08 funding to Air Force for civil unique GPS capabilities – DOT
- Delivered USG GPS commitment letter to International Maritime Organization – USCG
- Completed amendment to National Space-Based PNT EXCOM Charter – NCO



2008 EXCOM Work Plan

- **Next EXCOM scheduled for 5 Nov 08**
 - Next ESG scheduled for 10 Oct 08
- **Next Advisory Board scheduled for 15-17 Oct 08**
- **Current 2008 EXCOM Work Plan Status**
 - Total 52 Action Items
 - Total Accomplished: 29 / To Be Completed: 23



To Be Completed – Oct-Dec 2008



- **Publish Federal Register Notice “Preservation of Continuity for Semi-Codeless Applications” – DoD**
- **Publish GPS SPS Performance Standard update – DoD**
- **Publish WAAS System Performance Standard – FAA**
- **Complete Action Plan for Future of Loran – DHS/DOT**
- **Deliver Biennial Congressional Report on GPS – DoD**
- **Complete MOUs for establishing Japanese QZSS monitoring stations – State/DOC/NASA**



To Be Completed – Oct-Dec 2008



- Identify FY10-13 funding sources for civil unique GPS requirements – DOT
- Complete funding arrangement in FY10 budget for NDGPS inland component – DOT
- Complete req'ts evaluation and identify resources for repository for Interference Detection reports – DHS
- Renew National PNT Advisory Board charter – NASA
- Publish 2008 Federal Radionavigation Plan - DOT/DoD/DHS
- Host 3rd meeting of the International Committee on GNSS – State/NASA



Summary



- **U.S. Space-based PNT effort progressing significantly in areas of policy, programs and international outreach**
 - **Implementation of 2004 U.S. Policy proceeding well**
 - **Very active senior USG leadership**
 - **Continuing to improve performance of U.S. space-based PNT systems**
 - **International cooperation is a top U.S. priority**
 - **Actively engaged in multi-lateral/bi-lateral consultations**

As new space-based GNSS emerge globally, compatibility and interoperability is the key to “success for all”



Web-based Information



- **PNT.gov** established to distribute information on the U.S. National Executive Committee to include:
 - U.S. Policy, Executive Committee membership, Advisory Board and frequently asked questions
 - Recent announcement on Selective Availability and offer letter to International Civil Aviation Organization
 - All recent public presentations to include this one
- **GPS.gov** established for public information about GPS applications
 - Available in English, French, Spanish, Arabic and Chinese
 - Brochure also available in hardcopy upon request
 - Contains additional links to various other web sites



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