



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***

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U.S. NATIONAL COORDINATION OFFICE**



# 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...*

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## **ASSURES SERVICE**

Provide uninterrupted availability of PNT services

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## **MEETS DEMANDS**

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

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## **LEADS MILITARILY**

Remain the pre-eminent military space-based PNT service

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## **STAYS COMPETITIVE**

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

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## **INTEGRATES GLOBALLY**

Remain essential components of internationally accepted PNT services

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## **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**



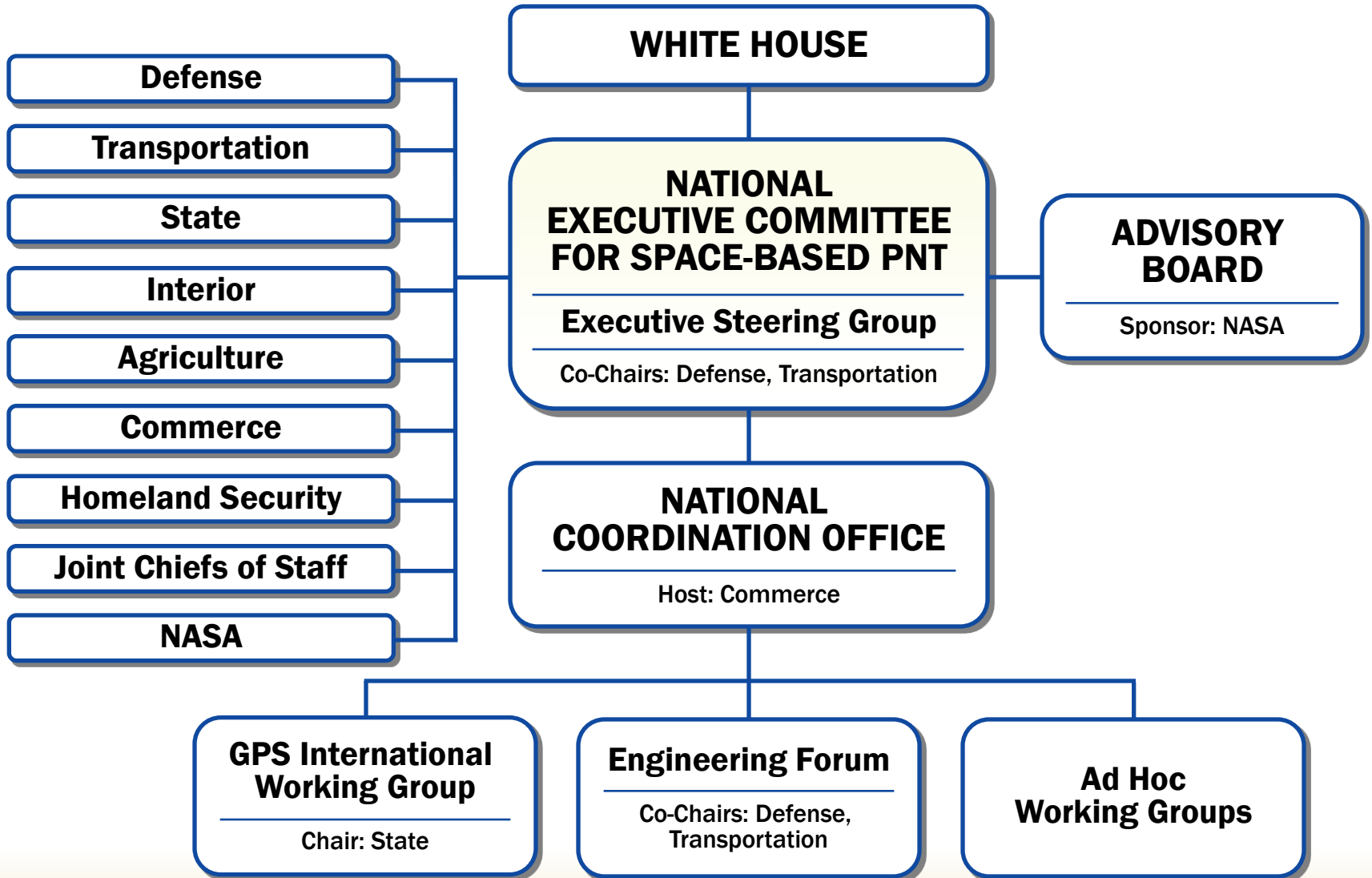
# 2004 U. S. Space-Based PNT Policy



- **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 3<sup>rd</sup> 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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