



# ***U.S. Space-Based Positioning, Navigation, and Timing Policy***



## **Civil GPS Service Interface Committee 25 Sep 2006**

**Michael E. Shaw  
Director, National Coordination Office for  
Space-Based Positioning, Navigation, and Timing (PNT)**



# Overview

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- U.S. Space-Based PNT Policy
- Implementation Actions
- Summary



# U.S. 2004 Policy

- First U.S. national policy was titled  
“U.S. GPS Policy” – 1996
- U.S. Space-Based Positioning, Navigation, and Timing (PNT) Policy
  - Signed on 8 Dec 2004
  - Recognized changing national and international scene since 1996
  - Updated U.S. policy while retaining principles in previous policy



## 2004 Policy: Objectives

- Improve the performance of space-based PNT
  - Ensure civil services exceed, or are at least equivalent to, those of foreign civil space-based PNT services
  - Includes robust resistance to interference for civil, commercial, homeland security, and scientific users worldwide
- Provide space-based civil PNT services free of direct user fees on a continuous, worldwide basis
  - Civil, commercial, homeland security and scientific use
- Provide uninterrupted access to U.S. space-based PNT services for U.S./allied national security purposes



## **2004 Policy: Objectives (cont'd)**

- Provide open, free access to information necessary to use these civil services
- Improve capabilities to deny hostile use of any space-based PNT services
  - Without unduly disrupting civil and commercial access
- Maintain the GPS as a component of multiple sectors of the U.S. Critical Infrastructure
- Ensure that foreign PNT systems are interoperable with GPS
  - Or, at a minimum, are compatible



# 2004 U.S. Policy Summary

- Demonstrates continued U.S. Government commitment to space-based PNT for all stakeholders
- Provides framework for public/private decision makers
- Improves ability to coordinate efforts across the various agencies of the U.S. Government
- Creates basis for meaningful dialogue between service providers and end users
- Promotes common standards for worldwide interoperability



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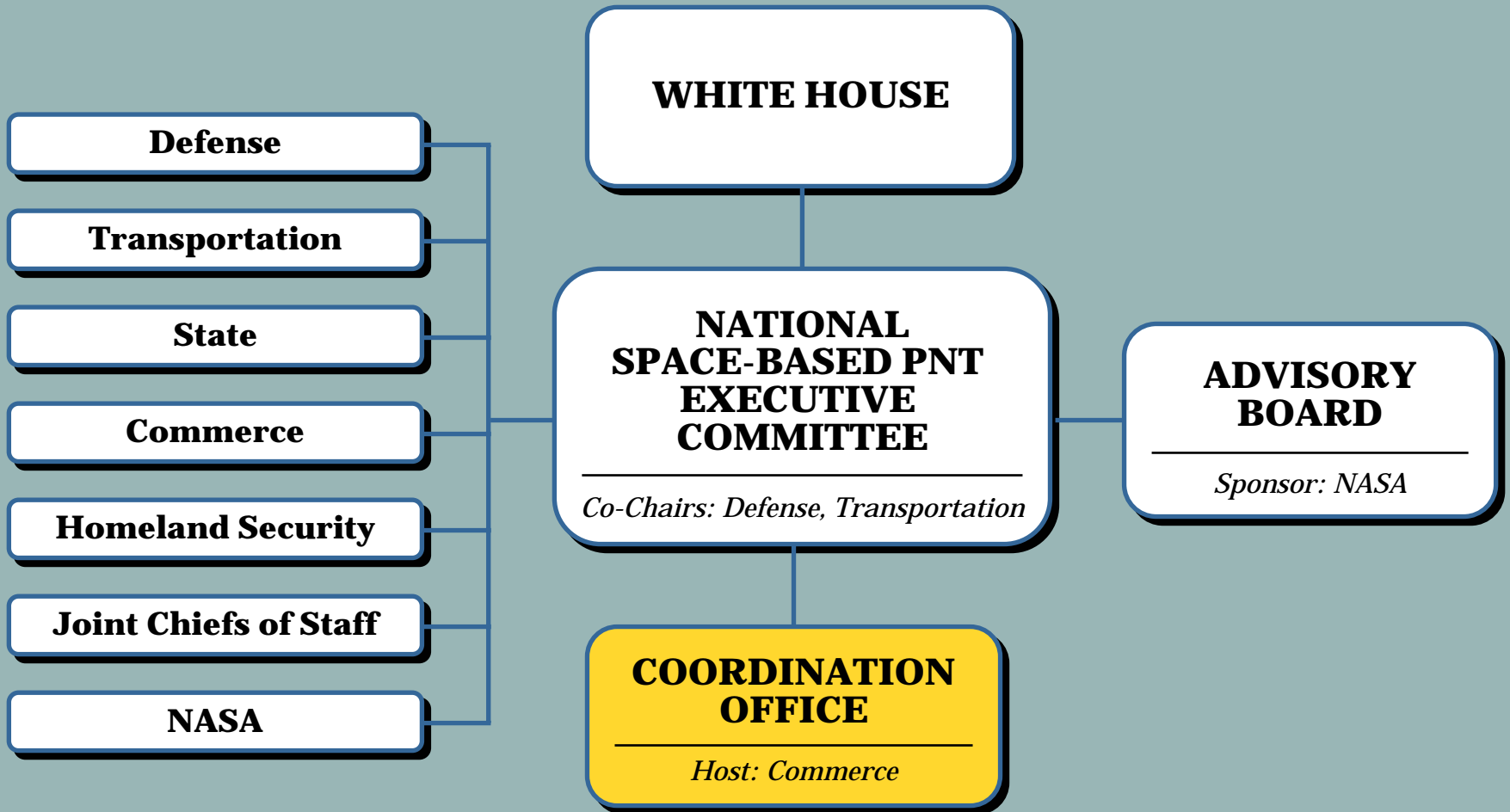


# Policy Implementation

- Established a stronger “National Space-Based PNT Executive Committee”; IGEB disestablished
  - Chaired by Deputy Secretaries of Defense and Transportation
  - Membership includes: State, Commerce, Homeland Security, JCS, and NASA
  - Supported by a new National Coordination Office
- National Coordination Office for Space-Based PNT was established on 1 Nov 2005
  - Director, Deputy Director, and staff from the Departments and Agencies

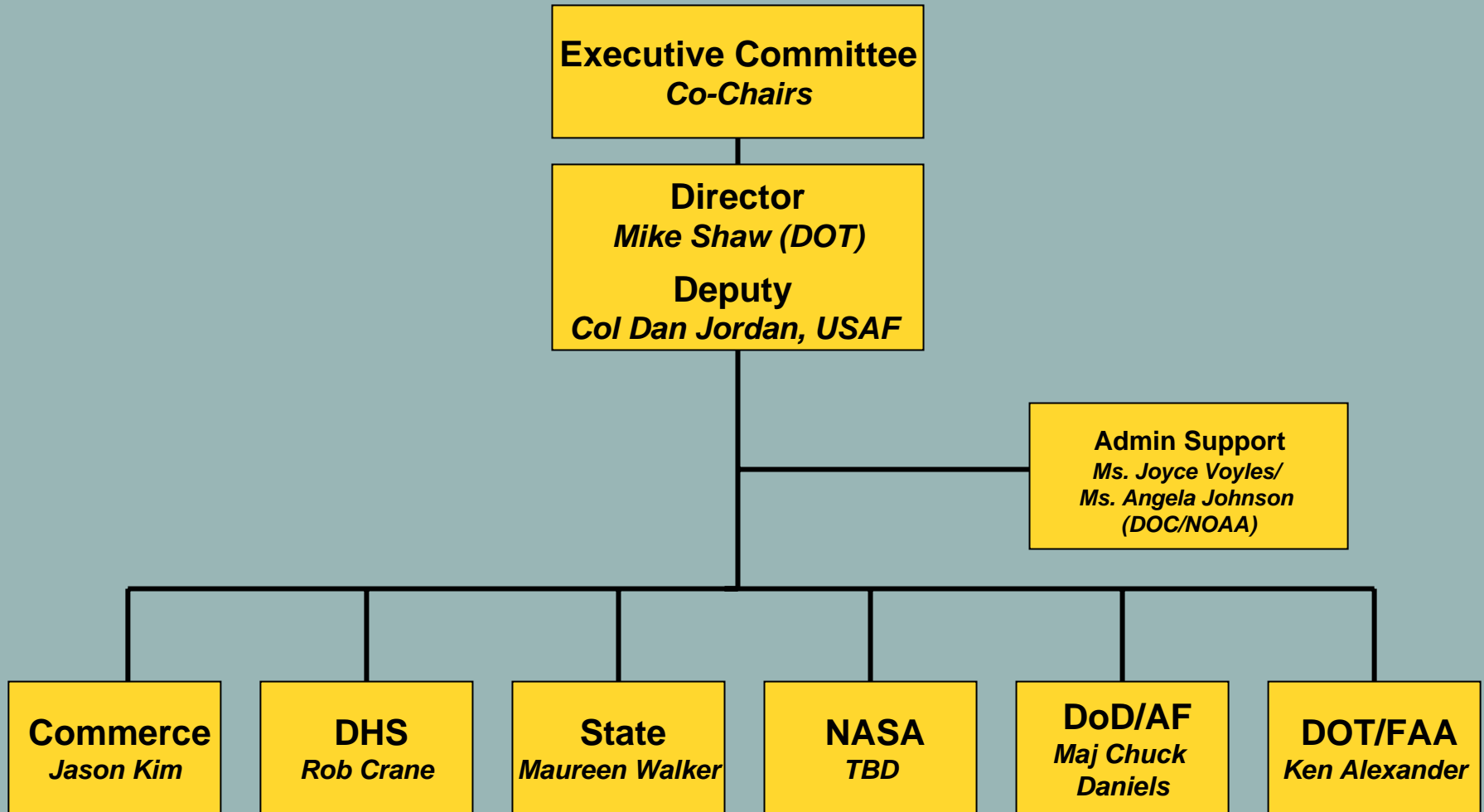


# U.S. Space-based PNT Organizational Structure





# Policy Implementation – Management National Coordination Office





# National Coordination Office

- Facilitates information sharing, coordination, and issue resolution regarding space-based PNT across the U.S. Government
- Evaluates plans to modernize the U.S. space-based PNT infrastructure
- Conducts or oversees space-based PNT studies and analyses
- Represents the National Executive Committee
  - Within the US Government, as well as with the public sector and representatives of foreign governments



# Policy Implementation (cont'd)

## Major efforts:

- **5-Year National Space-Based PNT Plan – NCO**
  - Plan is in draft with FY08 program assessment in progress
- **International Coordination and Cooperation – State**
  - Accelerating bilateral and multilateral activities
- **U.S. Space-Based PNT Advisory Board - NASA**
  - Board established with membership being finalized
  - Will conduct studies and provide advice as directed by Executive Committee
    - First meeting projected for Fall 06



# Key Executive Committee Actions

- **Interference Detection and Mitigation Plan - DHS**
  - Coordinate U.S. capabilities to detect and mitigate sources of interference to the GPS and its augmentations
- **National Space-based PNT Architecture**
  - Led by DoD's National Security Space Office and DOT's Research and Innovative Technology Administration
- **GPS Performance Standards – OSD/NII and AF**
  - Publishing PPS standard; feasibility of SPS update
- **In 2006, Nat'l Executive Committee has met 3 times**
  - Next meeting on 27 Oct



## Web-based Information

- **PNT.gov** established to disseminate information on the National Executive Committee
  - Maintained by National Coordination Office
  - Contains information on USG policy, ExCom Membership, Policy, the Advisory Board, “frequently asked questions”, and recent public presentations
- **www.GPS.gov** established to disseminate information on GPS applications
  - Recently released brochure on GPS applications available for download
    - Also being widely distributed; copies available upon request
  - Contains additional links to various other websites



# PNT.gov

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The National Space-Based Positioning, Navigation, and Timing (PNT) Executive Committee was established by **Presidential directive** in 2004 to advise and coordinate federal departments and agencies on matters concerning the **Global Positioning System (GPS)** and related systems.

The Executive Committee is chaired jointly by the Deputy Secretaries of Defense and Transportation. Its **membership** includes equivalent-level officials from the Departments of State, Commerce, and Homeland Security, the Joint Chiefs of Staff, and NASA. Components of the Executive Office of the President participate as observers to the Executive Committee, and the FCC Chairman participates as a liaison.

A permanent **Coordination Office** located in Washington, D.C., provides day-to-day staff support to the Executive Committee. It consists of an interagency staff headed by a Director, Mr. Michael Shaw of the Department of Transportation. The Coordination Office is a point of contact for inquiries regarding PNT policy.

*Learn more about the uses of space-based PNT at [www.GPS.gov](http://www.GPS.gov)*

*For civilian user support, visit the **USCG NAVCEN***

**What's New at PNT.gov...**

- **Member Agency Profiles**
- **Presentation from NRITS 2006**
- **Published Article on Economic Benefits of GPS Modernization (PDF)**
- **Presentation to Chinese Aviation Executives**

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# Summary

- **Implementing U.S. National Space-Based PNT Policy**
  - Coordination Office activated on 1 Nov 05
  - Executive Committee meeting regularly
- **U.S. policy encourages and promotes worldwide use of civil GPS and augmentations**
- **International coordination and cooperation is a priority**
- **GPS performance is getting better and will continue to improve**
  - Augmentations enable high performance today
  - First new GPS signal now available
  - Additional improvements will continue in the future



# Contact Information

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