SPACE-BASED POSITIONING
NAVIGATION & TIMING
NATIONAL COORDINATION OFFICE

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

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Civil GPS Service Interface Committee

Portland, Oregon
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Overview

- U.S. Space-Based PNT Policy
- U.S. Space-Based PNT Organization
- Key Accomplishments
- Summary

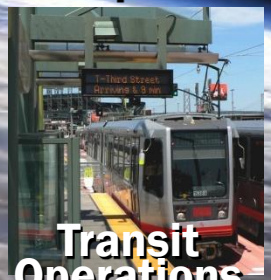
GPS enables a diverse array of applications

Satellite Operation

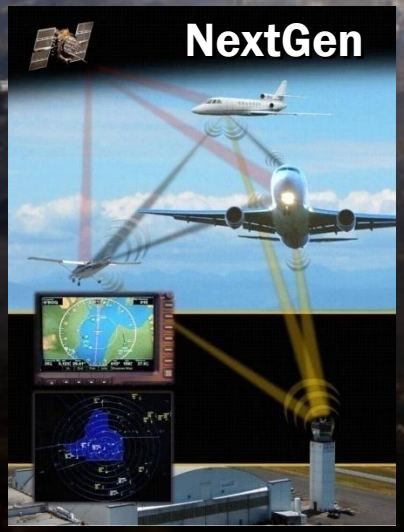
Surveying & Mapping

Power Grids

Precision Agriculture



Transit Operations



NextGen

Disease Control

IntelliDrive

TeleComm

Trucking & Shipping

Personal Navigation

Oil Exploration

Fishing & Boating

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 user equipment
- Improve performance of GPS and augmentations
- Seek to ensure international systems are interoperable with civil GPS and augmentations or, at a minimum, are compatible

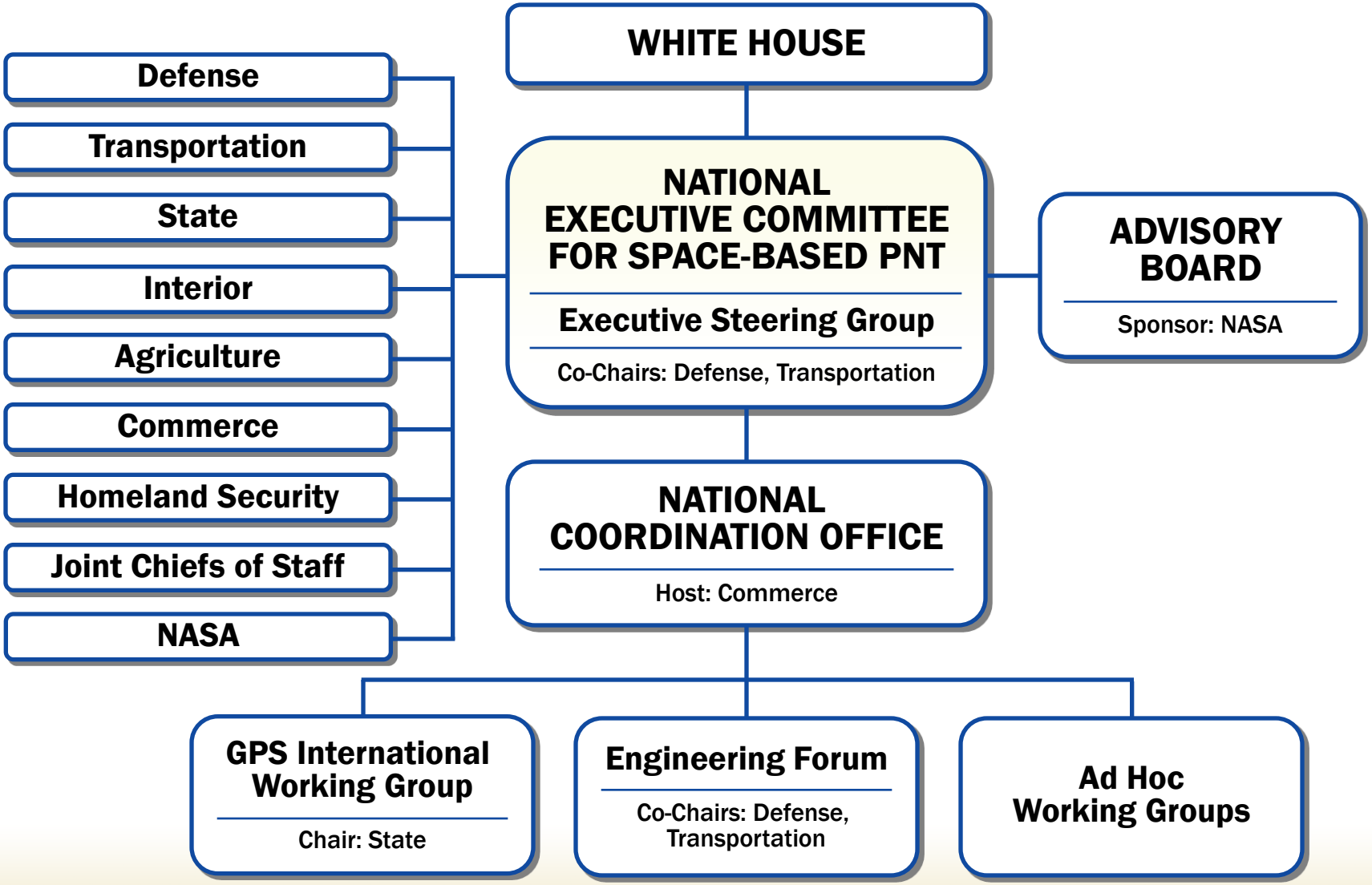
Policy stability and transparency improve industry confidence and investment

New U.S. National Space Policy

Space-Based PNT Guideline: Maintain leadership in the service, provision, and use of GNSS

- Provide civil GPS services, free of direct user charges
  - Available on a continuous, worldwide basis
  - Maintain constellation consistent with published performance standards and interface specifications
  - Foreign PNT services may be used to augment and strengthen the resiliency of GPS
- Encourage global compatibility and interoperability with GPS
- Promote transparency in civil service provision
- Enable market access to industry
- Support international activities to detect and mitigate harmful interference

U.S. Space-Based PNT Organizational Structure



National Space-Based PNT Advisory Board

- Conducts assessments & makes recommendations to EXCOM in support of national policy goals and objectives
- 18 members (including 5 international members)
  - Co-Chaired by Dr. James Schlesinger, Dr. Brad Parkinson
- Next cycle of taskings approved
- Next meeting – October 14-15, 2010

Key Accomplishments
(Since last CGSIC Meeting)

- 4th Int'l Committee on GNSS (ICG)
  - September 2009
- OCX Contract awarded to Raytheon Systems
  - January 2010
- Hosted US-Japan Plenary
  - January 2010; Washington D.C.
- Submitted Annual Report to the President
  - March 2010
- $43.4M in FY10 Civil Funding for GPS
  - March 2010
- Launched First Block IIF Satellite
  - May 2010 – Set healthy 28 Aug 2010

Key Accomplishments
(Since last CGSIC Meeting)

- Hosted 14th APEC – GNSS Implementation Team
  - Seattle, WA; June 2010
- National PNT Architecture Implementation Memo
  - July 2010
- Released updated GPS Interface Specs, including new baseline phase relationship for L2C signal
  - August 2010
- Expanded "gps.gov" and "pnt.gov"
  - FAQs, briefs, news releases, and new links to technical documents, FY11 budget info, and legislative updates
- Smithsonian's "Time and Navigation" Exhibit
  - Sponsoring and contributing technical advice

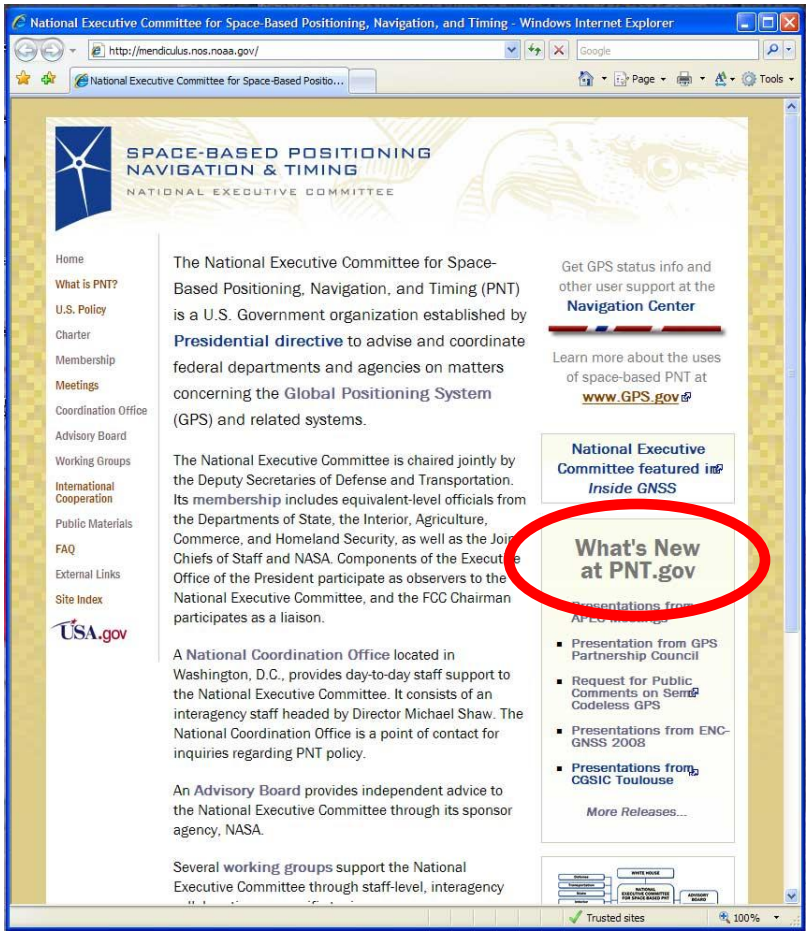
Looking Ahead

- Next Executive Committee Meeting
  - 3 November 2010
- GPS Biennial Report
  - First edition under "EXCOM" signature – Oct/Nov 2010
- National Five Year Plan for Space-Based PNT
  - In Coordination
- Interference Detection and Mitigation
  - DHS making strides, raising community awareness

Summary

- GPS application and use are growing exponentially
- U.S. policy continues to encourage worldwide use of civil GPS and augmentations
  - Maintain and enhance Space-Based PNT systems
  - Compatibility, interoperability, and transparency
  - Foreign PNT may be used to strengthen resiliency
- Making PNT progress Nationally and Internationally
  - Focusing on improved interagency processes
  - Strengthening U.S. National presence
  - Addressing interference challenges

For Additional Information…



GPS.gov **PNT.gov**

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