



# U.S. National Space Policy Update

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# *Overview*

- ***U.S. National Space Policy***
  - ***Need for A New Space Policy***
  - ***Principles and Priorities***
  - ***New Areas of Emphasis and Focus***
- Opportunities for Cooperation



# *Need for A New Space Policy*

- Since 2006, various domestic and international developments have changed the opportunities, challenges, and threats facing the U.S., including its space capabilities
- **New opportunities for international cooperation; evolving/maturing commercial capabilities and options**
  - **More space actors, increased debris, need for enhanced transparency and stability**
- The National Space Policy accounts for those changes and reflects the integral role space plays in U.S. economic, national, and homeland security
- Continuity of basic policy principles
- Every President, since President Eisenhower, has issued a space policy



# *Principles and Priorities*

- Explore and use space for peaceful purposes and the benefit of all humankind
  - “Peaceful purposes” allows for national and homeland security activities
- No national claims of sovereignty
- Freedom of access
- Rights of passage
- **Space-based Positioning, Navigation, and Timing (PNT) principles of compatibility, interoperability and transparency affirmed**



# *New Areas of Emphasis and Focus*

- **International cooperation**
  - **Stability and transparency and confidence building measures**
  - **Data and capability sharing**
  - **Preserving the space environment**
- **New NASA direction**
- **Commercial space**
- **Resilience and mission assurance**



# *International Cooperation: (1)*

- **Openness and transparency** are principles
- Bringing **enhanced stability** to space is a goal
- To encourage stability and responsible action, the Policy directs the pursuit of bilateral and multilateral Transparency and Confidence Building Measures (TCBMs)
- Allows for the consideration of arms control proposals



## *International Cooperation: (2)*

- **Data and Capability sharing:** Explicitly required to enable safe and responsible activity in space
- Need to share data within the USG, with industry, and foreign nations for mutually agreed goals
- **Preserve space environment:** Seek to minimize creation of new debris and research options for removing debris
- Establish requirement to develop data sources and measures for space collision warning



# *NASA Direction/Commercial Space*

- **Policy** states new NASA guidance/purposes for human and robotic exploration and scientific discovery
- Addresses threats posed by near-Earth objects
- **NASA tasked, with DoD, to upgrade space launch infrastructure**
- A revitalized and competitive commercial space industry is a core principle and goal
- Importance of using commercial data and capabilities
- Commercial space sector guidance contains definition of “commercial” and provides strong guidance on using and supporting the space industrial base





# *Resilience and Mission Assurance*

- Assure continuity of mission-critical services
  - These endeavors could use non-space capabilities, foreign or commercial space systems, protection of U.S. space systems and other measures
- Tasks the development of capabilities, relationships, and response plans
- **GPS interference detection, and mitigation**  
from both natural and human causes addressed
  - *GPS users encouraged to report interference events promptly to designated authorities so appropriate response can be implemented*



# *USG Plans on Interference*

- National PNT Architecture Implementation Plan signed July 2010
- GPS Information Dissemination Coordination Team (IDCT) now under National Executive Committee (EXCOM) for PNT
- National PNT Coordination Office (NCO) now represents EXCOM on Purposeful Interference Response Team (PIRT)
- Collaborating on Critical Infrastructure
  - GPS timing essential in key sectors of U.S. critical infrastructure
- USG initiating a National Level Operations Plan standardizing interference reporting procedures
- USG Implementing a Central Data Repository
- Federal Communication Commission (FCC) Outreach



# FCC Education Campaign



## JAMMING CELL PHONES AND GPS EQUIPMENT IS AGAINST THE LAW!

In recent years, the number of websites offering "cell jammers" or similar devices designed to block communications and create a "quiet zone" in vehicles, schools, theaters, restaurants, and other places has increased substantially. While these devices are marketed under different names, such as signal blockers, GPS jammers, or text stoppers, they have the same purpose. We remind and warn consumers that it is a violation of federal law to use a cell jammer or similar devices that intentionally block, jam, or interfere with authorized radio communications such as cell phones, police radar, GPS, and VVI-E. Despite some marketers' claims, consumers cannot legally use jammers within the United States, nor can retailers lawfully sell them.

**Why are jammers prohibited?** Use of jamming devices can place you or other people in danger. For instance, jammers can prevent 9-1-1 and other emergency calls from getting through or interfere with law enforcement communications (ambulance, fire, police, etc). In order to protect the public and ensure access to emergency and other communications services, without interference, the FCC strictly prohibits the use, marketing, manufacture, and sale of jammers.

**What happens if you use a jammer?** Operation of a jammer in the United States is illegal and may subject you to substantial monetary penalties, seizure of the unlawful equipment, and criminal sanctions including imprisonment.

**Want to file a complaint or need more information?** To file a complaint alerting the FCC's Enforcement Bureau to illegal cell, GPS, or other jamming devices, please visit [www.fcc.gov/complaints](http://www.fcc.gov/complaints) or call 1-888-CALL-FCC. Additional information about jammer enforcement is available at [www.fcc.gov/eb/jammerenforcement](http://www.fcc.gov/eb/jammerenforcement) or by emailing the Enforcement Bureau at [jammerinfo@fcc.gov](mailto:jammerinfo@fcc.gov).

Issued by the Enforcement Bureau of the Federal Communications Commission

[www.fcc.gov/eb/jammerenforcement](http://www.fcc.gov/eb/jammerenforcement)



# *ICG-5 Accomplishments: Interference Detection and Mitigation*

- Spectrum protection has been a proposed area of work for the ICG since its first meeting
- Proposals were made at ICG-5 to:
  - Prevent availability of unlawful interference devices (jammers) in the open market
  - Identify national and international regulations on spectrum protection, possible inconsistencies & necessary improvements
  - Detect and neutralize interference sources at the national level and identify possible international cooperation opportunities
- Recommendations:
  - Focus on proposals to address interference detection and mitigation and draft a study plan for consideration by the ICG
  - Member States are encouraged to take appropriate action regarding “privacy jammers”



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# *International Space Cooperation*

- **Departments and agencies, *in coordination with the Secretary of State*, shall:**
  - Demonstrate U.S. leadership in space fora/activities
  - Lead in the enhancement of security, stability, and responsible behavior in space
  - Facilitate new market opportunities including commercially viable terrestrial applications that rely on government-provided space systems
  - Promote adoption of policies that facilitate full, open, & timely access to government environmental data
  - Promote appropriate cost- and risk-sharing among participating nations in international partnerships
  - Augment U.S. capabilities by leveraging existing and planned space capabilities of allies and space partners

The Secretary of State shall carry out diplomatic and public diplomacy efforts to support U.S. space policies & programs, and encourage the use of U.S. space capabilities, systems, and services



# Areas for Potential Space Cooperation (1) \*

- Space science
- Space Exploration, including human space flight activities
- Space transportation
- Space surveillance for debris monitoring and awareness
- Earth science and observation
- Environmental monitoring

*\* This is a partial list and is not intended to be all inclusive*



# Areas for Potential Space Cooperation (2) \*

- **Global Navigation Satellite Systems**
- Geospatial information products and services
- Disaster mitigation and relief
- Search and rescue
- Maritime domain awareness
- Long-term preservation of the space environment

*\* This is a partial list and is not intended to be all inclusive*





# *Take Away Points*

- New U.S. Space Policy emphasizes international cooperation
- Space-based PNT principles of compatibility, interoperability and transparency are affirmed
- GPS users worldwide are urged to provide feedback to NAVCEN on interference issues



# *Contact Information*

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