



SATCON 2010

Hosted Payloads

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National Space Policy: PPD-4

Commercial Space Guidelines

- Encourages the use of:
 - Innovative, non-traditional arrangements such as public-private partnerships, commercially hosted USG capabilities, and commercial data providers.
- Encourages pursuing opportunities to transfer routine operational space functions to the commercial space sector.
- Encourages the use of commercial space services and capabilities within international cooperative arrangements.



Hosted Payloads

Advantages:

- Cost Savings
- Timely Delivery of Services
- Leverage Existing Satellite and Operations

Impediments:

- Synchronizing USG Acquisition Cycles
- Lack of Commercial Feasibility
- Legal Restrictions



Hosted Payload Precedents

- **FAA** - Wide Area Augmentation System (WAAS), hosted on Intelsat & Telesat.
- **U.S. Coast Guard** - Nationwide Automatic Identification System (NAIS) Project, hosted on Orbcomm.
- **Department of Defense** - Internet Protocol Router in Space (IRIS) Joint Capability Technology Demonstration, hosted on Intelsat.
- **U.S. Air Force** - Commercially Hosted Infrared Payload (CHIRP) Flight Demonstration Program, hosted on SES Americom.
- **NASA & NOAA** - Sea Viewing Wide Field of View Sensor (SeaWiFS), hosted on GeoEye's Orbview II satellite.
- **Australian Defence Force** - Specialized UHF communications payload, hosted on Intelsat 22 satellite.



Potential Commercial Solutions

- Total Solar Irradiance
- GPS Radio Occultation
- Coronal Mass Ejection
- Ocean Color (low earth orbit)
- Advanced Atmospheric Soundings (geostationary)

Key Issues:

- NOAA prefers unrestricted data redistribution rights
- NOAA prohibited from commercialization weather satellites