



**Program Executive Office
Command, Control, Communications,
Computers and Intelligence (PEO C4I)**

**Communications and GPS Navigation
Program Office (PMW/A 170)**

Satellite Industry Association

2013 Naval & Maritime Commercial SATCOM Users' Workshop

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**Information Dominance;
Anytime, Anywhere...**



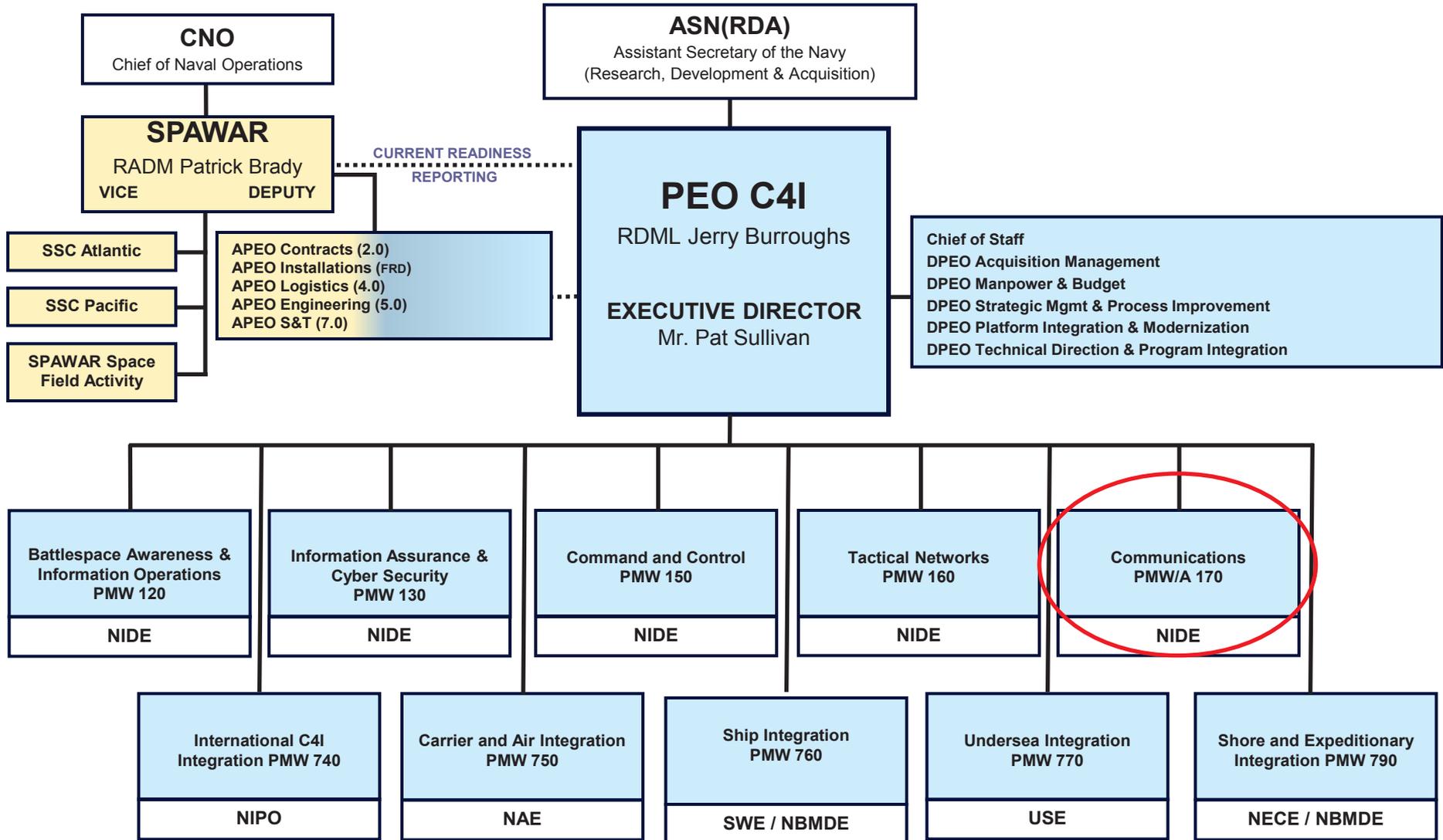


Agenda

- PEO C4I Organization
- PMW/A 170 Org Chart
- SATCOM Roadmap
- MILSATCOM/COMSATCOM Architecture
- CVN Wideband SATCOM Connectivity
- Commercial Broadband Satellite Program (CBSP) Overview
- CBSP Hardware and Lease Follow-On
- Naval Senior Leadership Communications – Aircraft (NSLC-A) Overview
- NSLC-A Contracts Strategy
- Anti-Access Area Denial (A2AD) Overview



PEO C4I Organizational Structure





PMW/A 170 Vision/Mission Statements

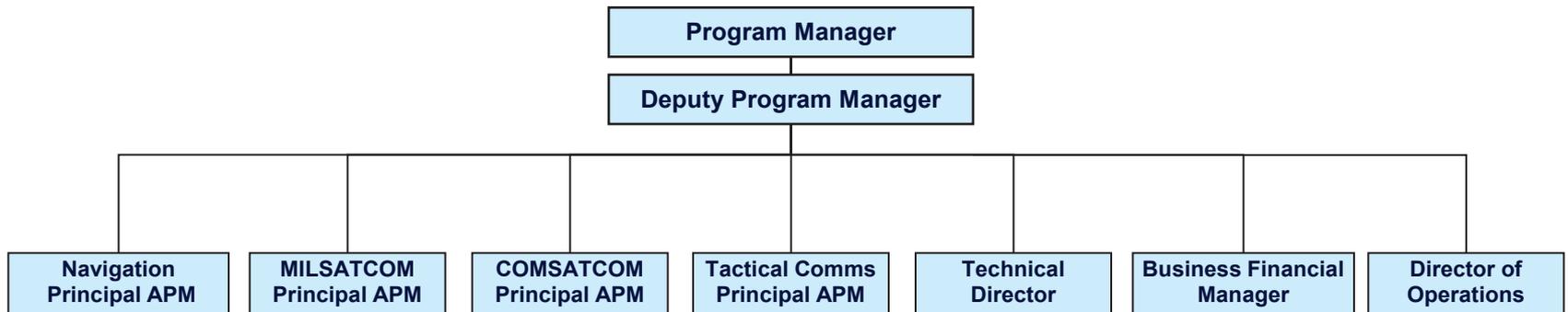
PMW/A 170 VISION:

***Assured, Resilient Communications and GPS
Navigation: Anytime, Anywhere***

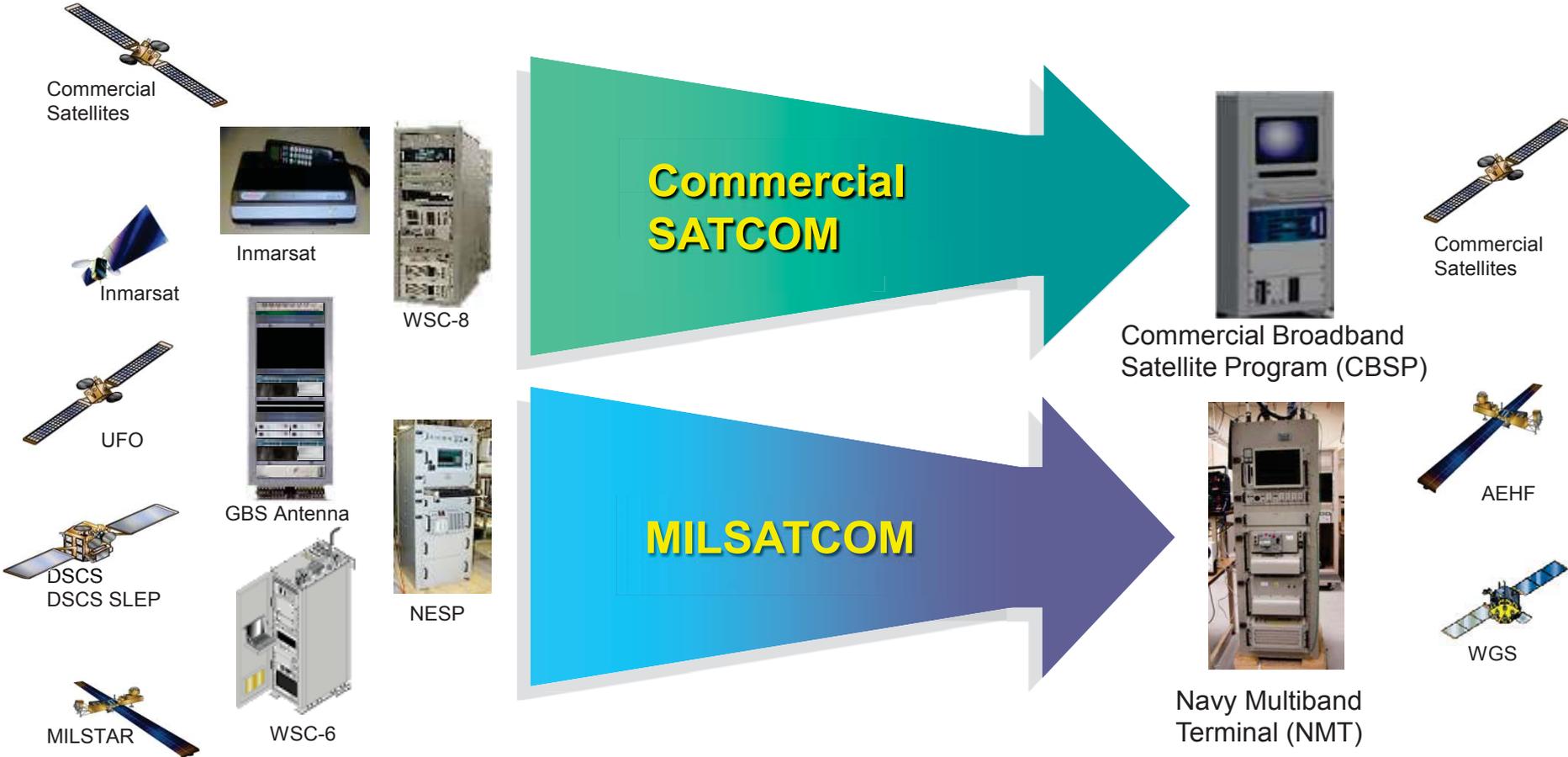
PMW/A 170 MISSION:

***Provide and support interoperable, cost-effective communications
and position, navigation, and timing services, enabling
information dominance for maritime forces***

PMW/A 170 ORGANIZATIONAL CHART



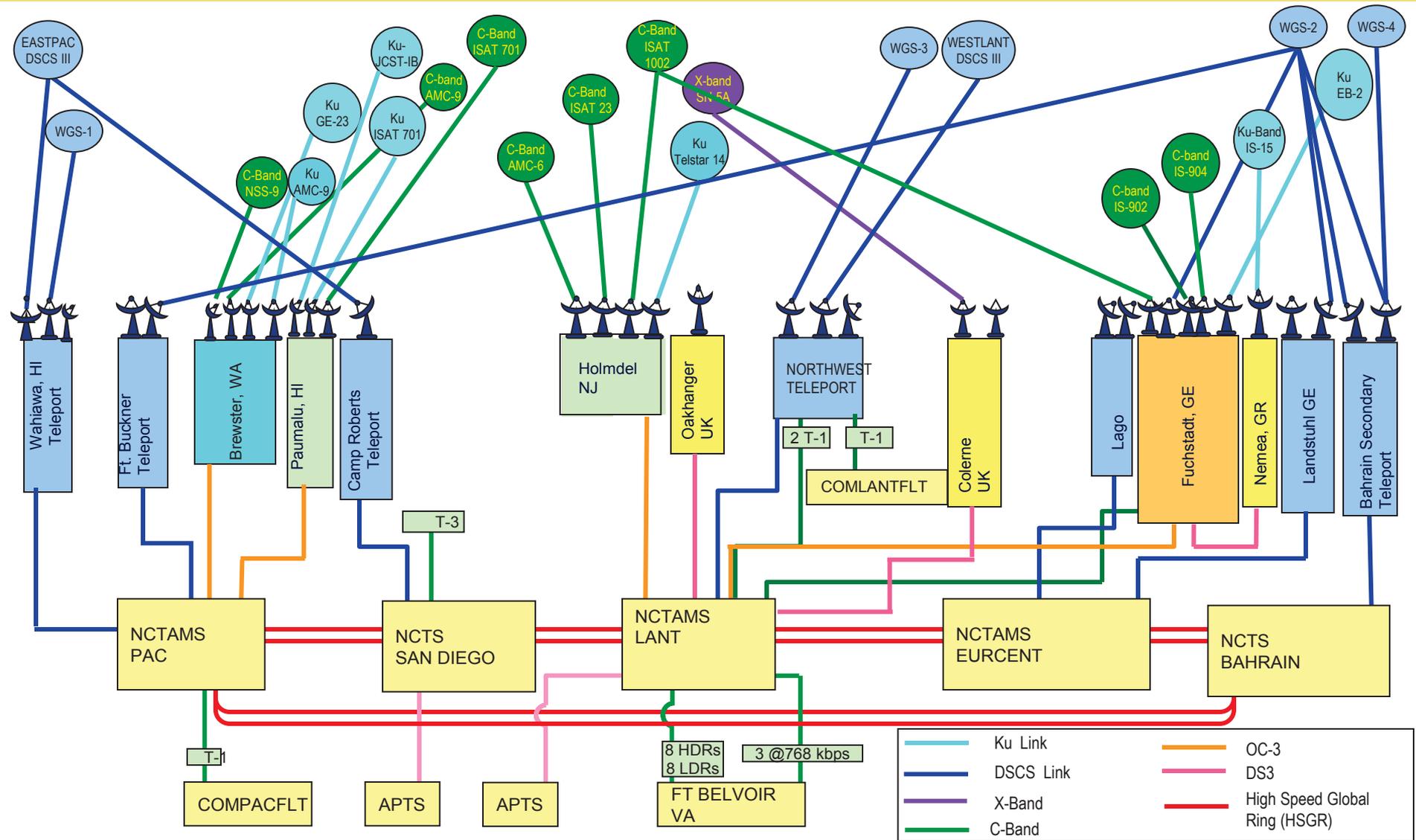
Navy SATCOM Migration



Navy Strategy is to Pursue Integrated MILSATCOM & Commercial Solutions to Meet Global Communication Needs

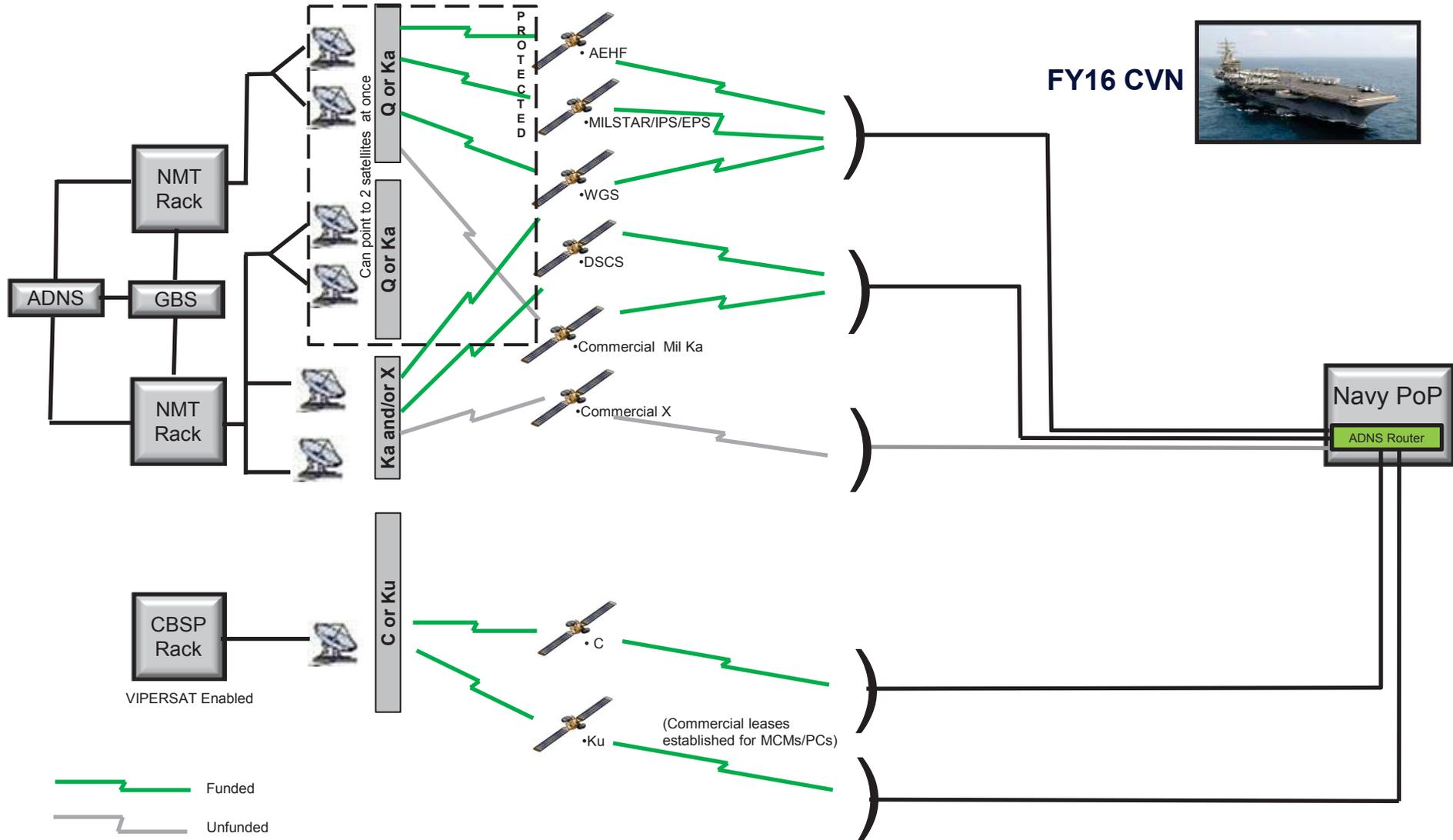


Military and Commercial Shore and Space SATCOM Architecture





CVN End to End Communications (FY16)



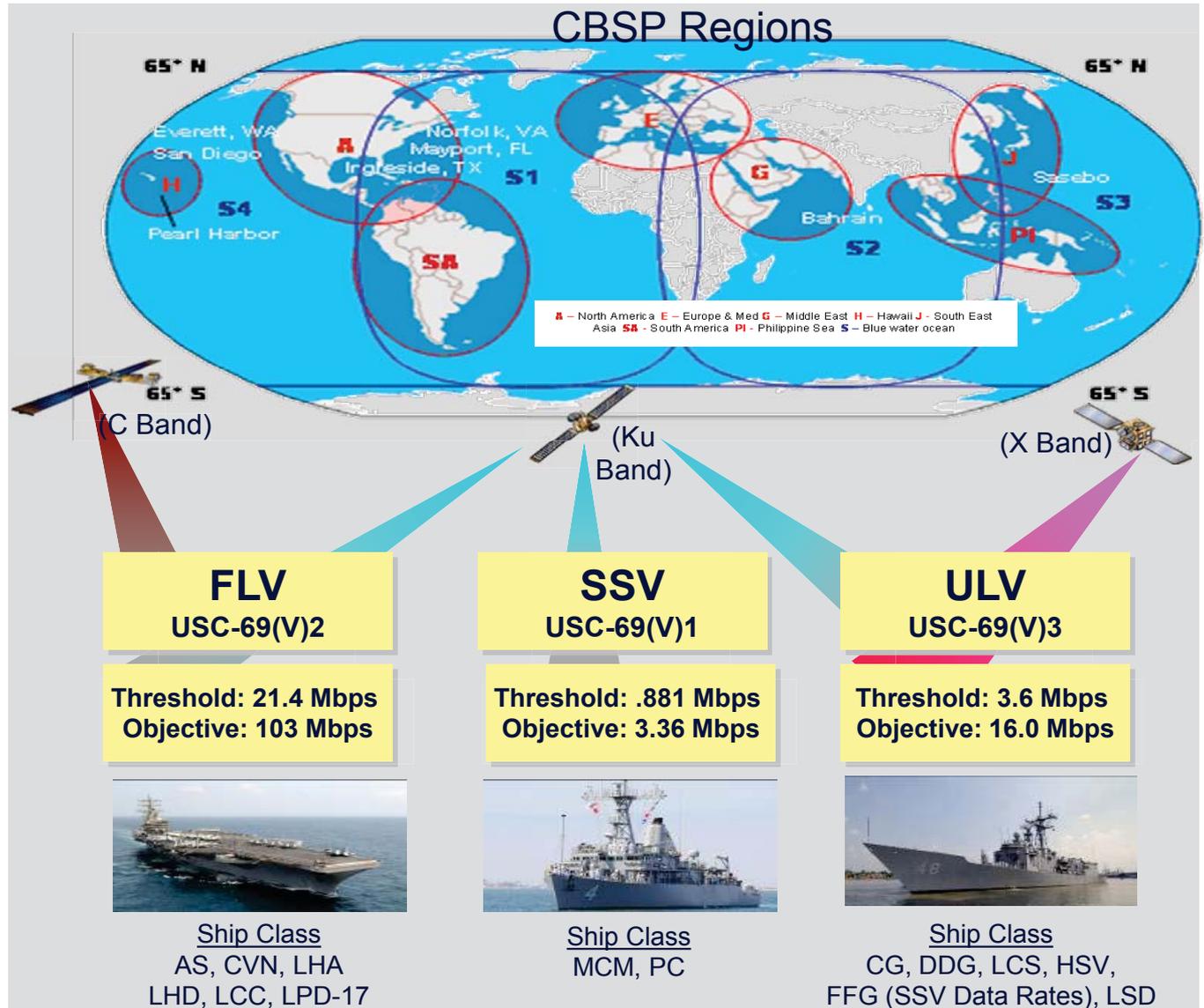


CBSP Flexibility

Meeting Multiple Requirements

Requirements

Space Segment	
Band	Area between 65° Lat
C	95%
X	95%
Ku	95% in Littoral Waters
Terminal	
Operational Availability (Ao)	
Threshold	94%
Objective	99%
System End to End	
Operational Availability (Ao)	
Threshold	91%
Objective	97%





CBSP ULV Follow-On Contract



- Unit Level Variant (ULV) Follow-On contract Request for Proposal (RFP) expected Jan/Feb 2013
 - ULV integrated X and Ku band terminals
 - Modem suites
 - Provisioning items, training, and engineering support services
 - FY13 through FY20
- Options
 - Ka Kits
 - RF carriers
 - Radar Cross Section (RCS) kits
 - Adjustable Ku Filters
 - Spectrum analyzer
- Two RFI's have been released in September 2011 and March 2012
 - Synopsis posted in June 2012
 - Draft specifications announcement posted November 2012
- All specifications have been posted for industry review



CBSP Lease Follow-On

- Currently conducting market research with DISA/DITCO for CBSP Lease Follow-On
- Current end-to-end architecture and contract structure meets cost and schedule requirements for wide range of DOD customers
 - Services can be awarded within days
 - Requirements can be easily integrated into architecture
 - Contract has flexibility to accommodate changing user needs
- CBSP is collaborating with potential customers whose requirements closely align to CBSP
 - Contributes to economies of scale and operational efficiencies for all end users

PEO C4I Goal is to Continue Modular Architecture That Assures Scalable Bandwidth and Network Architecture



Naval Senior Leadership Communications – Aircraft (NSLC-A)



- Mission Statement

- Supporting the end to end architecture of the C-37/C-20 aircraft. Key enablers are:
 - Procurement of new SATCOM system and Air to Ground Network
 - NMCI Optimization
 - Wiring repairs
 - Training for personnel
 - ISEA Stand-up

- Requirement

- Four C-37 Aircraft
- One C-20 Aircraft

- Locations

- Pacific Region
- East Coast
- Europe





NSLC-A Contracts Strategy



- Short-term contract strategy: Utilize the existing Air Force C-37 Engineering services contract for the equipment and installation efforts and DISA/DITCO for lease subscriptions
 - ✓ Suite ready for install Q3FY13

- Long-term contract strategy: Compete an equipment contract that moves the project off of a proprietary lease network
 - Develop BCA - Q2FY13
 - Develop Spec - TBD



NSLC-A Use of CBSP Leases Follow-On Contract



- Industry is asked to respond to RFI (anticipated release in January 2013) to explore a hybrid solution for airborne and maritime architecture.
- Near world-wide **roaming** airborne network requirements will be added to the CBSP Follow-On Contract RFI

➤ Bandwidth

- Data rate of 1536 kbps (obj.)
- 512 kbps (threshold)

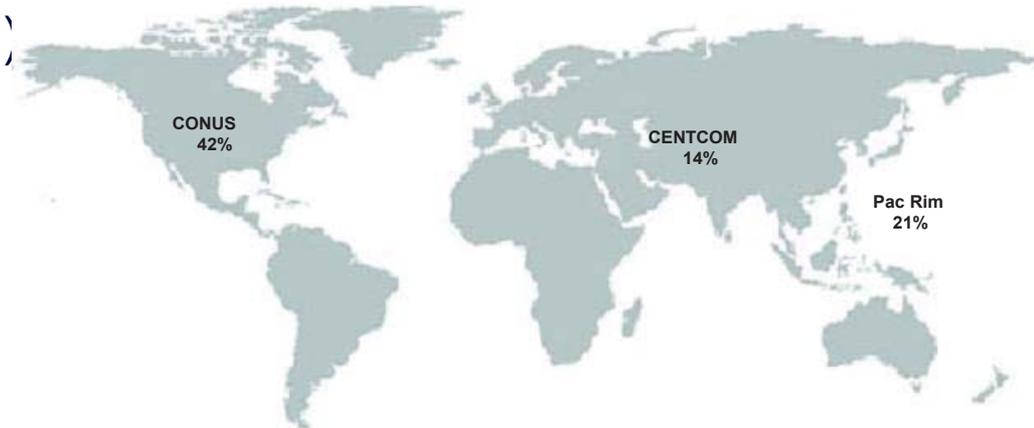
➤ Terrestrial

- Redundant and secure

➤ Antenna size

- 12 inch and 18 inch

Projected Usage Based on Analysis





Navy Comms Plans for the Future



- Anti-Access Area Denial (A2AD)
 - Navy continues to investigate mitigations for A2AD scenarios
 - PMW/A 170 is looking for opportunities to maximize the value of our existing and planned technology investments in A2AD scenarios
 - We are interested in hearing your proposals
- Pacific Shift
 - As the Navy shifts to the Pacific, we're interested in solutions that can augment our communications capability in that theater



We get IT.

We also integrate it, install it and support it. For today and tomorrow.

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