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# Navy Enterprise Open Architecture Industry Day



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# Today's Situation

- **DoD is constantly challenged with budgetary decisions**
- **Currently many Naval systems are not:**
  - **Rapidly upgradeable**
  - **Affordable in production and modernization**
  - **Able to reuse components across programs or domains, resulting in DoN buying similar capability more than once**
- **DoN has mandated open architecture acquisition which is consistent with the Navy's vision of developing a coordinated, integrated business and technical approach for the Enterprise**



# Change is Already Underway

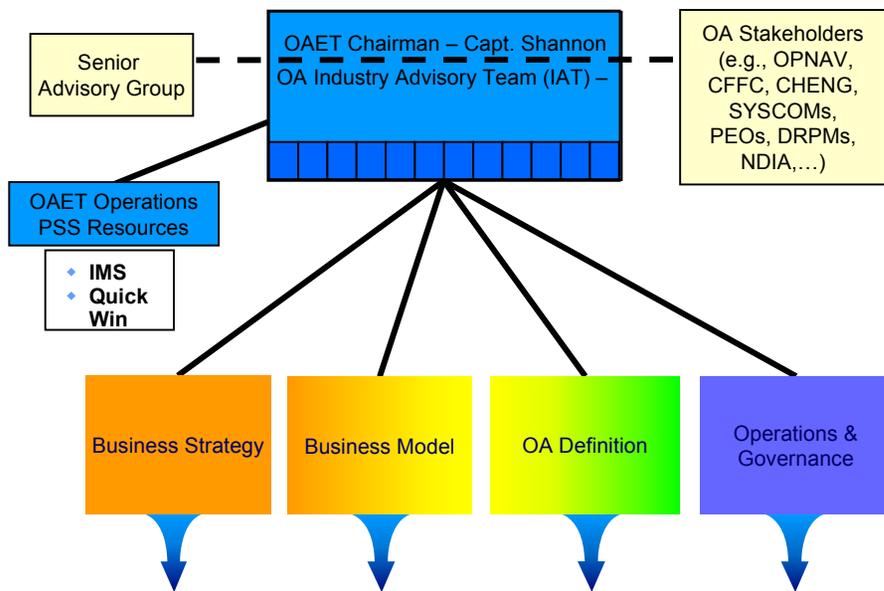
## Navy's Evolution

	<u>Yesterday</u>	<u>Today</u>	<u>Tomorrow</u>
<b>Business Model</b>	Purchase Weapons Platform	COTS Insertion into Custom-Built Weapons Platform	<b>Modular Acquisition</b>
<b>Resulting Capability</b>	Platform-Based Capability	Some Inter-Platform Capabilities	<b>Net-Centric Capability</b>
<b>Acquisition Strategy</b>	Single Unified Procurement – One Prime	Mostly Single Prime Contracts, Some Competitive Development	<b>Separable Acquisition of Architecture, Integration and Components</b>

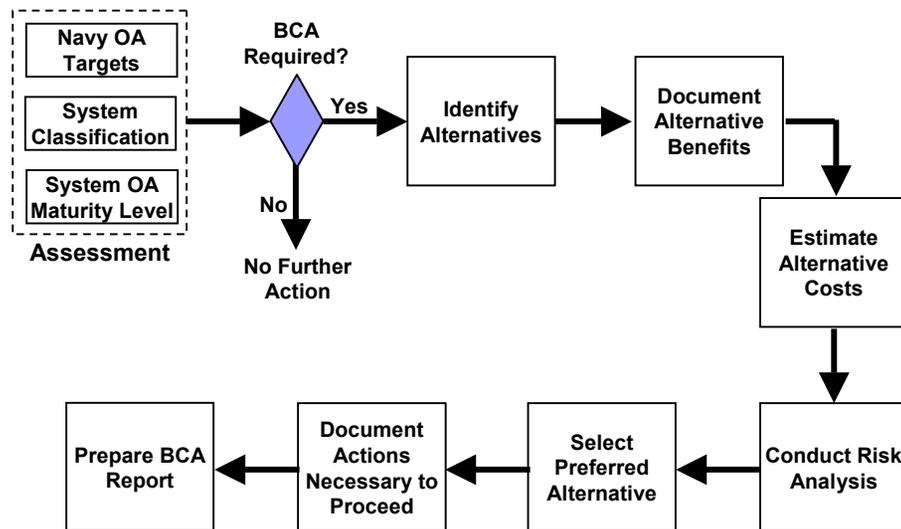
## Parallel Supplier Response

	<u>Yesterday</u>	<u>Today</u>	<u>Tomorrow</u>
<b>Business Model</b>	Custom Product Development	Prime Contractor Integrates Some COTS	<b>Focused Excellence in One or More Product Lines</b>
<b>Product Offering</b>	Typical Product is a Custom-Built System	Product is Still Mostly Custom-Built	<b>Modular Products, Support, and Integration Services</b>

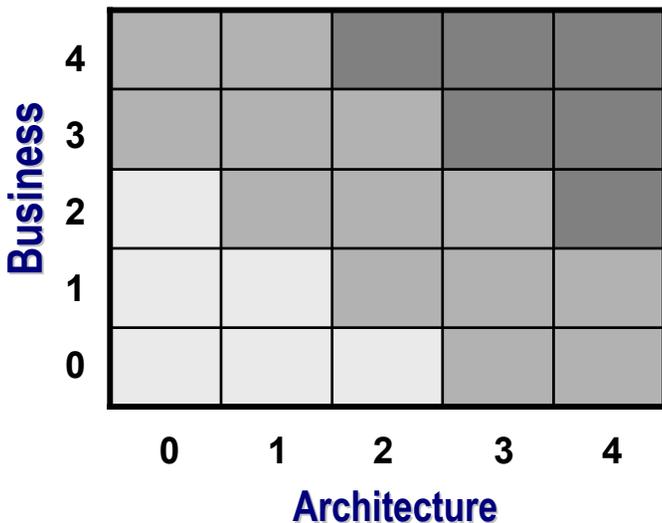
## OA Enterprise Team (OAET) Organization



## Initial Business Case Analysis (BCA) Process



## OA Assessment Model

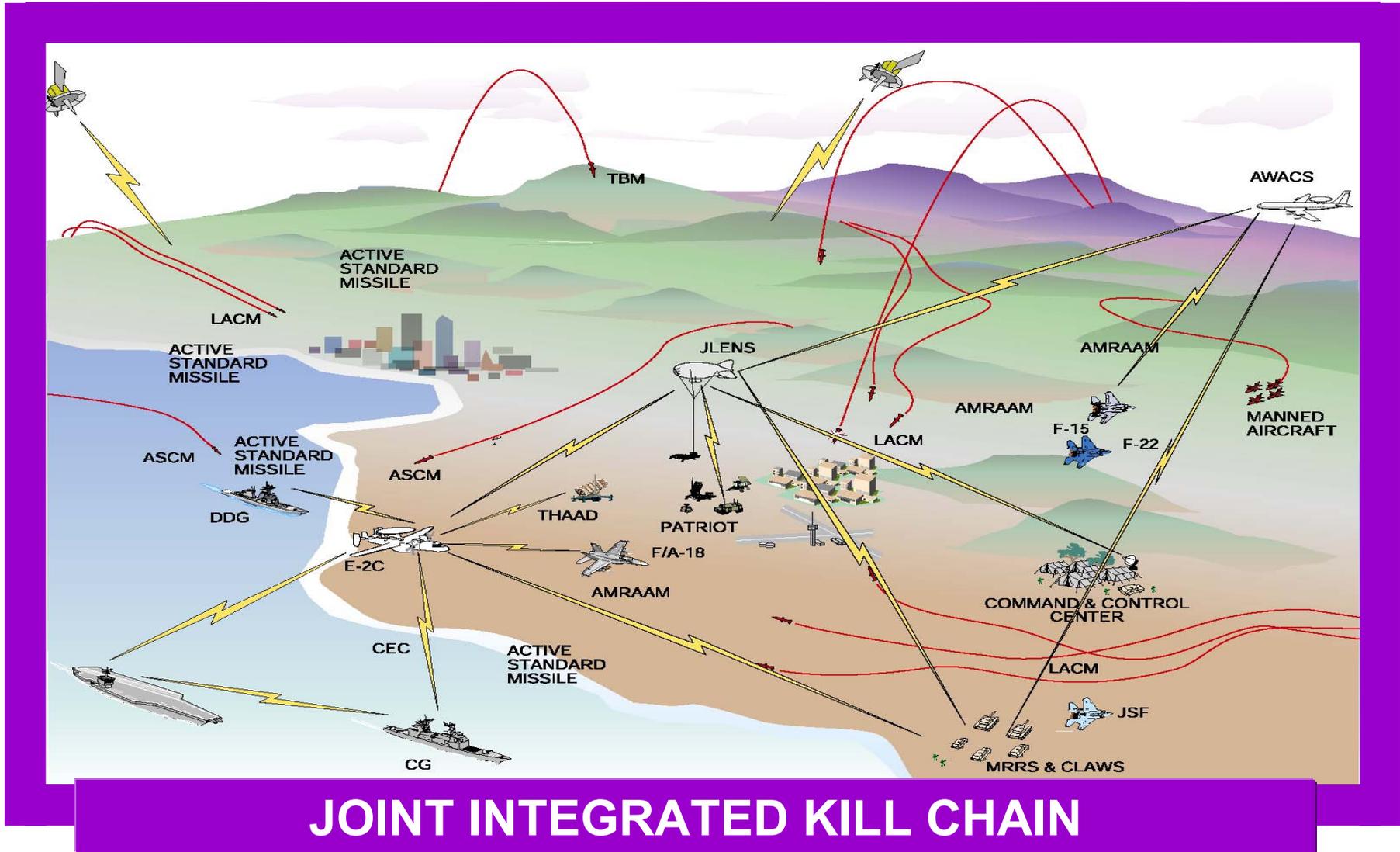


## Way Ahead

- All ACAT I (and selected II, III, & IV) programs to conduct BCA to analyze cost and benefit of moving to coordinate selected OA Target Level
- Assess ACAT I & II programs against the OA Assessment Model
- Prepare a business case to meet the OA goal
- Decide how to change course to meet OA

# Joint Integrated Air Defense

## Joint Theater Context



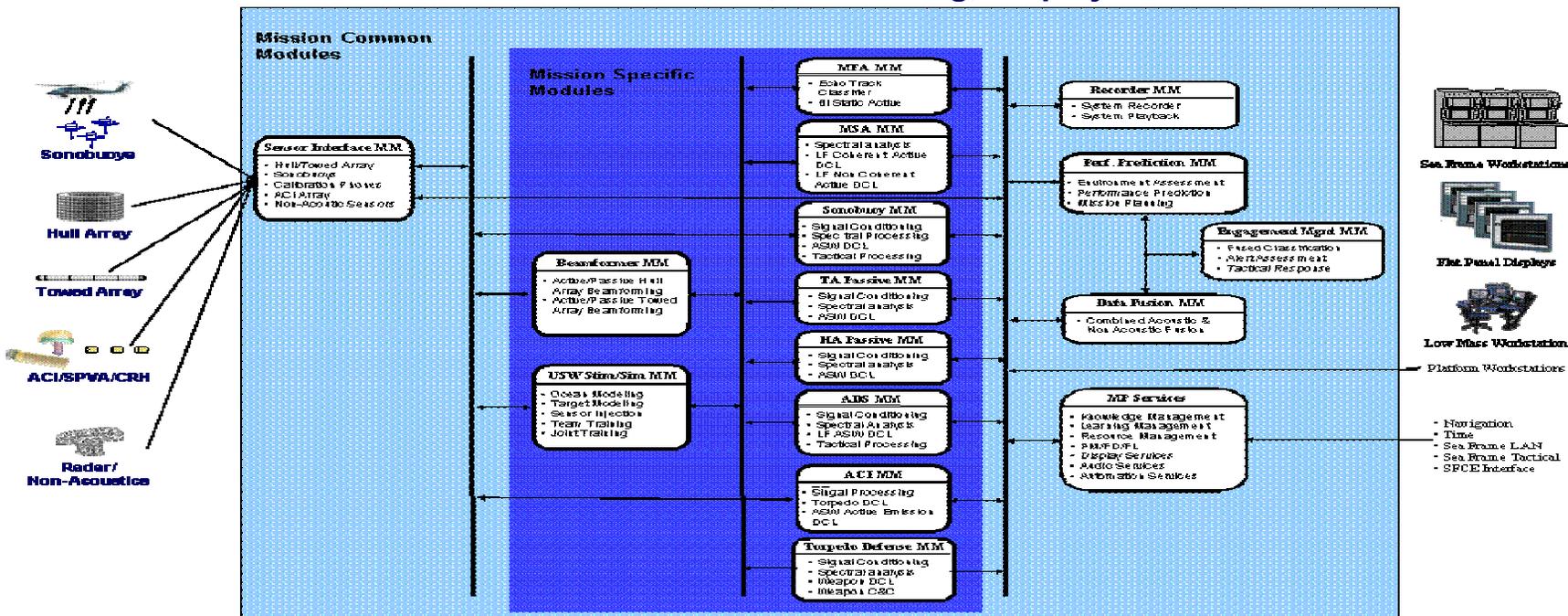
**JOINT INTEGRATED KILL CHAIN**

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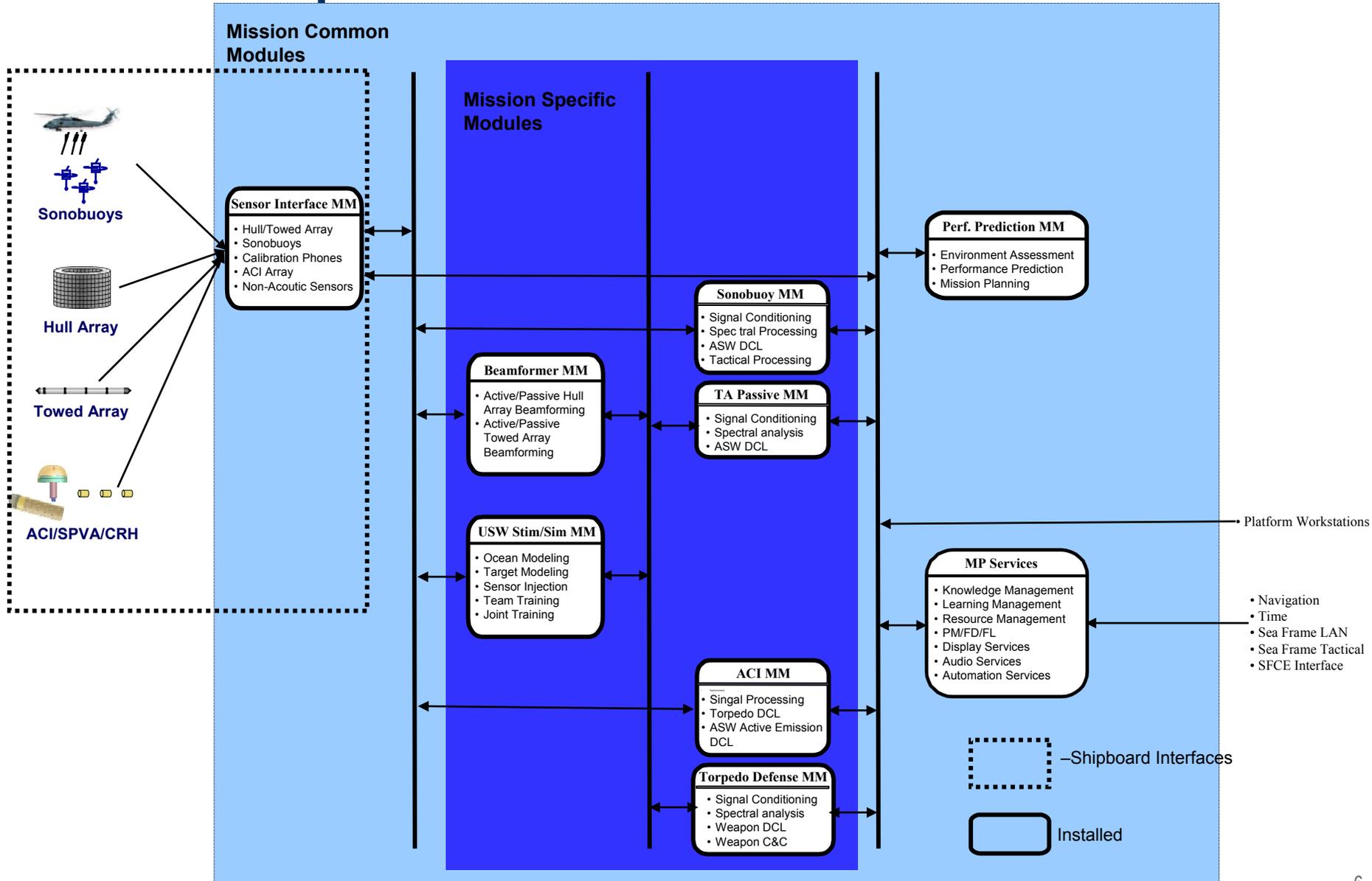
# First Step – Unglue the Stack

- PEO-IWS 5B Unglued Mission Components from Across the Enterprise

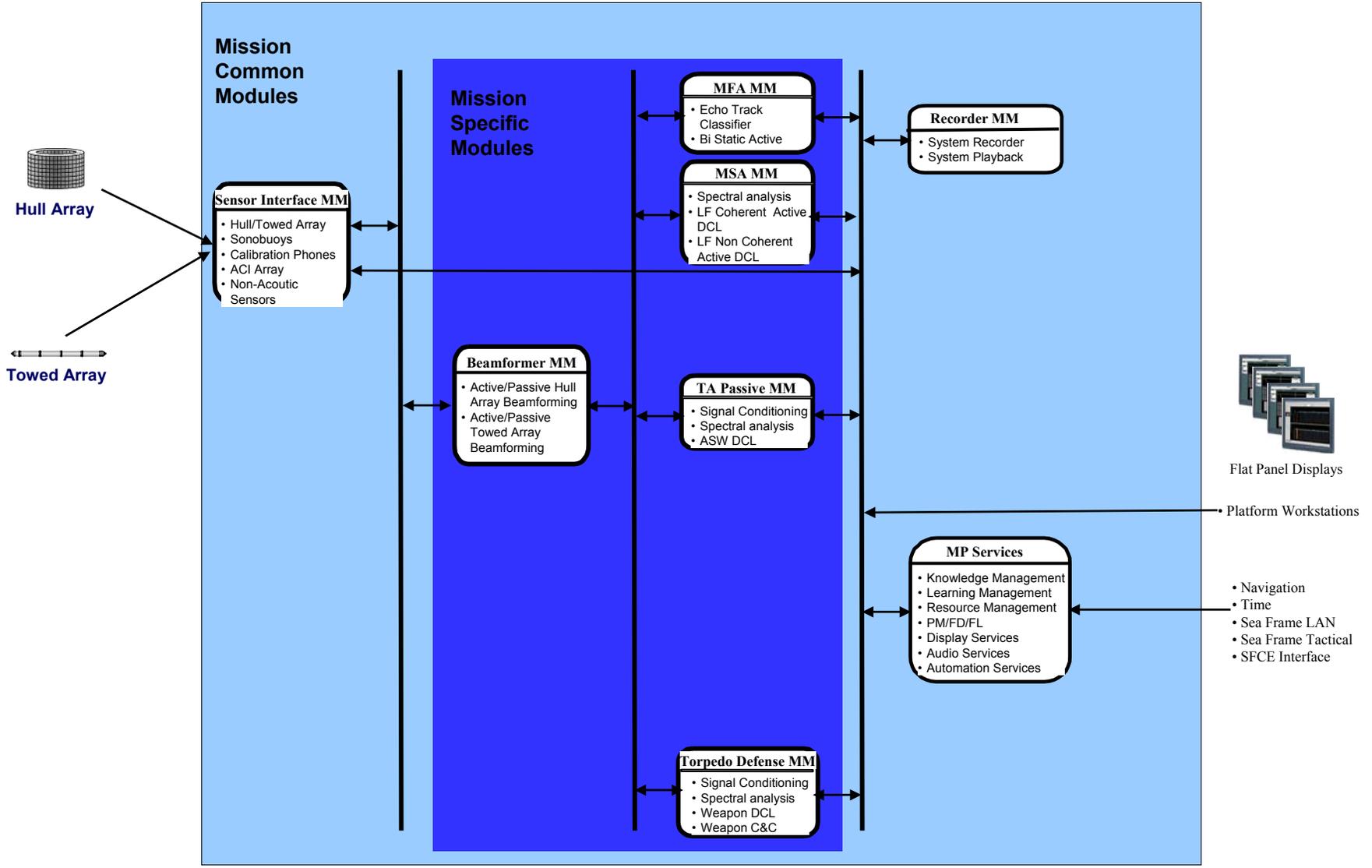
## IPS Modular Architecture Mix/Match Sensors, Processing, Displays



# Next Step – Create Common Interfaces



# Last Step – Mix & Match Missions – IPS SIPS ASW





# Fielding Summary

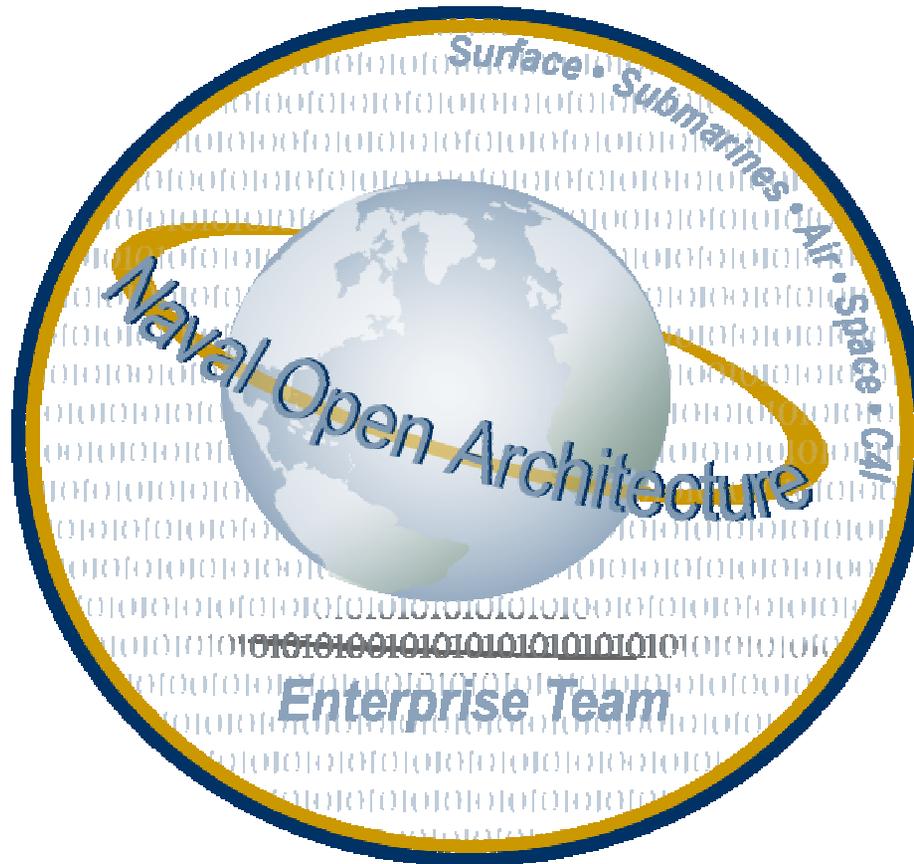
- IPS systems currently installed on USS John S. McCain (DDG 56) & USS Paul Hamilton (DDG 60)
- Shared IPS/TDCL installs planned for USS Decatur (DDG 73, April 05) & USS Shoup (DDG 86, Aug 05)
- IPS systems operating regularly at sea
  - Fleet ASW mission module assessments
  - Continuous data collection opportunities
- Scaled IPS systems requested by Navy for forward deployment
  - Production installs underway for 36 Scaled IPS
    - 2 SIPS installs completed
- DD(X), LCS, LHD, ARCI, and TDCL demo are leveraging IPS and ASW commonality baseline
- Destined for use in the Spanish F-100 Frigates
  - OA implemented in the US Navy will trickle down into Allied Navies

Reduce Baselines – Field for the Fleet

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# Take Aways

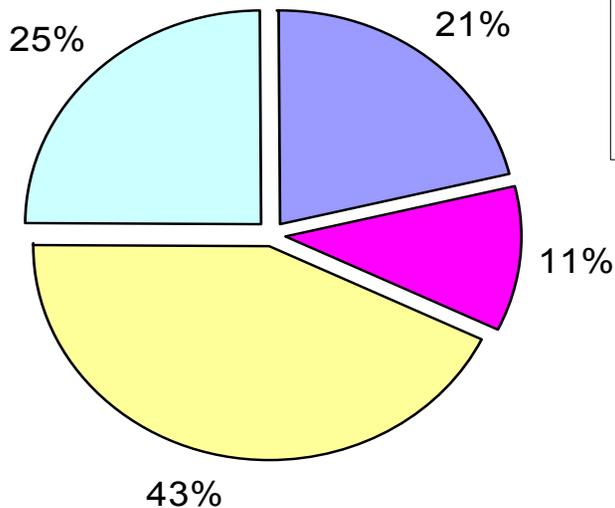
- **No one vendor has the total solution for any Naval system anymore**
  - **Proprietary elements are okay, provided they do not preclude others from interfacing with them or otherwise developing any part of the system**
- **OA is the Navy's path to:**
  - **Provide Industry with the protections needed to ensure revenue and profit**
  - **Provide the Government with the resources it needs to deploy its systems and reap the benefits of its investments**
    - **Build once, use many times**
- **Future requirements and system development will be open and component-based**



<http://www.nswc.navy.mil/wwwDL/B/OACE/>  
<http://nesipublic.spawar.navy.mil/>

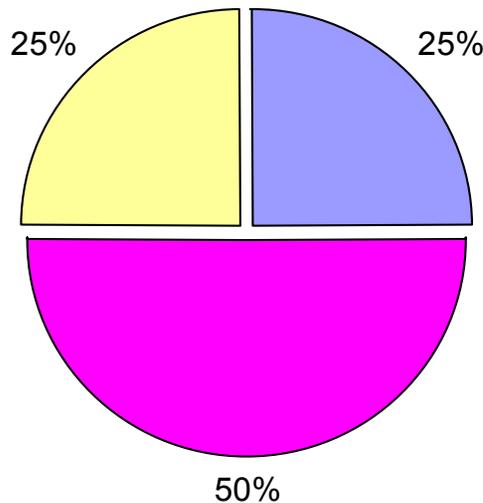
# Best of Breed Community

## Best of Breed Community Composition

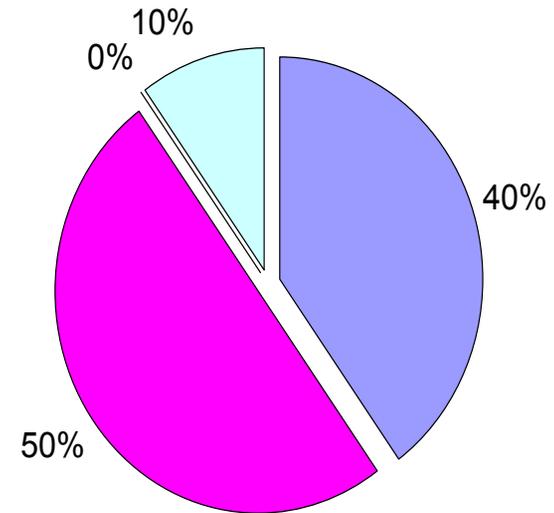


- Navy Organizations
- Universities
- Small Business
- Large Companies

## PRP Step 3 Integrators



## PRP Chairs



28 organizations contribute to the success of Team IPS