



MDA Day 2007, New Orleans



Maritime Domain Awareness

National ConOps

D. A. Goward

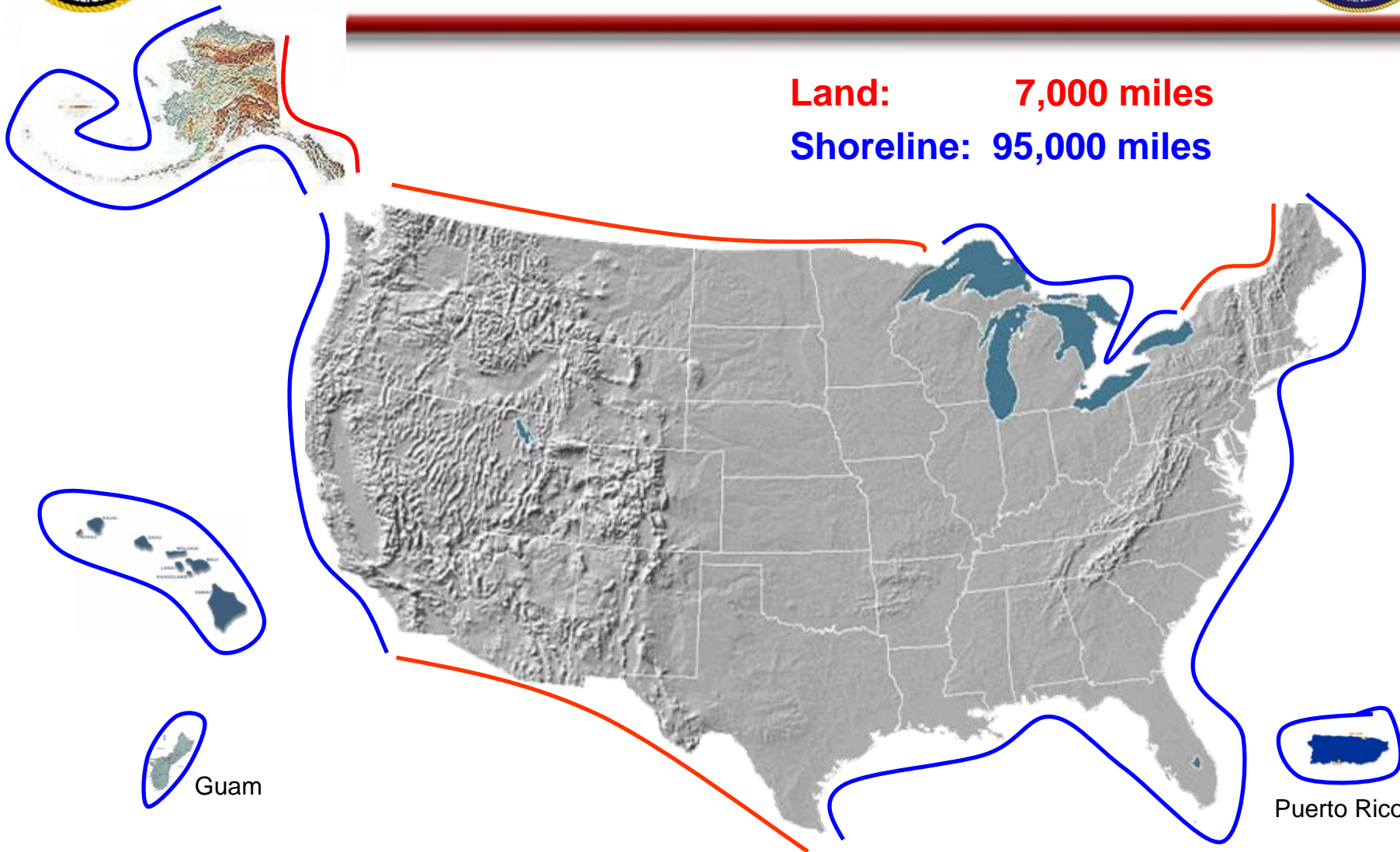
***Director, Maritime Domain Awareness
Program Integration, United States Coast Guard***



A Maritime Nation

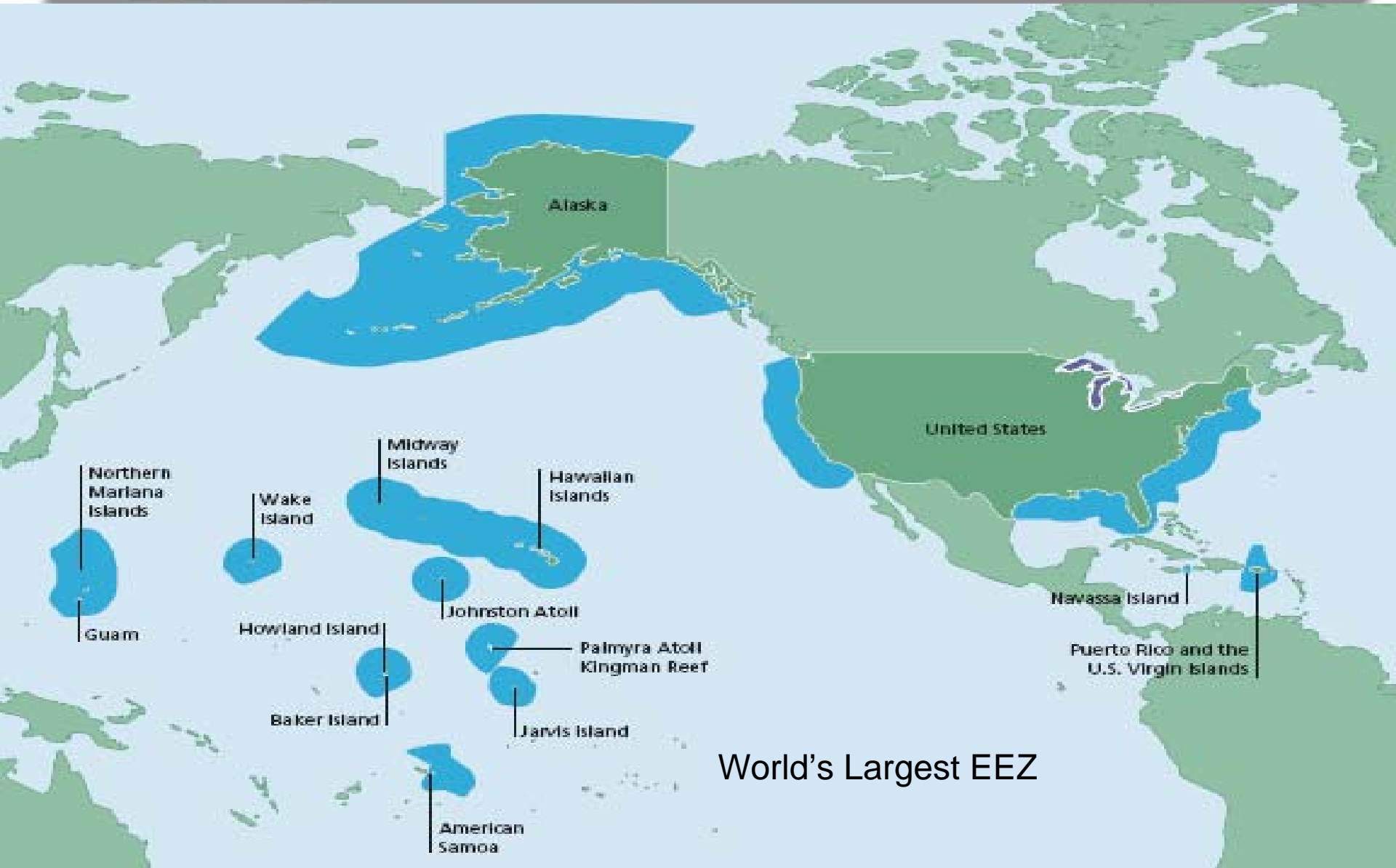
Land: 7,000 miles

Shoreline: 95,000 miles





A Maritime Nation



World's Largest EEZ



A Maritime Nation



- **95% of U.S. foreign trade**
- **8,000 foreign vsls, 50,000 port calls/yr**
- **\$800 Billion in freight per year**
- **361 commercial ports**
- **186 Million passengers per year**



- **17 Million recreational vsls**
- **70% of population is coastal**
- **Key Infrastructure & Services**





A Maritime Nation



UNCLASSIFIED



Why MDA is Essential



Value of transparency

- **Deter, Detect, Prevent, Respond**

All Threats/ All Hazards/ All Missions

- **Asymmetric Threats**
- **Safety, Security, Stewardship**
- **Many Partners**

Coalition Warfare/ Unity of Effort



Essentiality of Awareness

Appendix D – CMT Strategic Planning Analysis Results

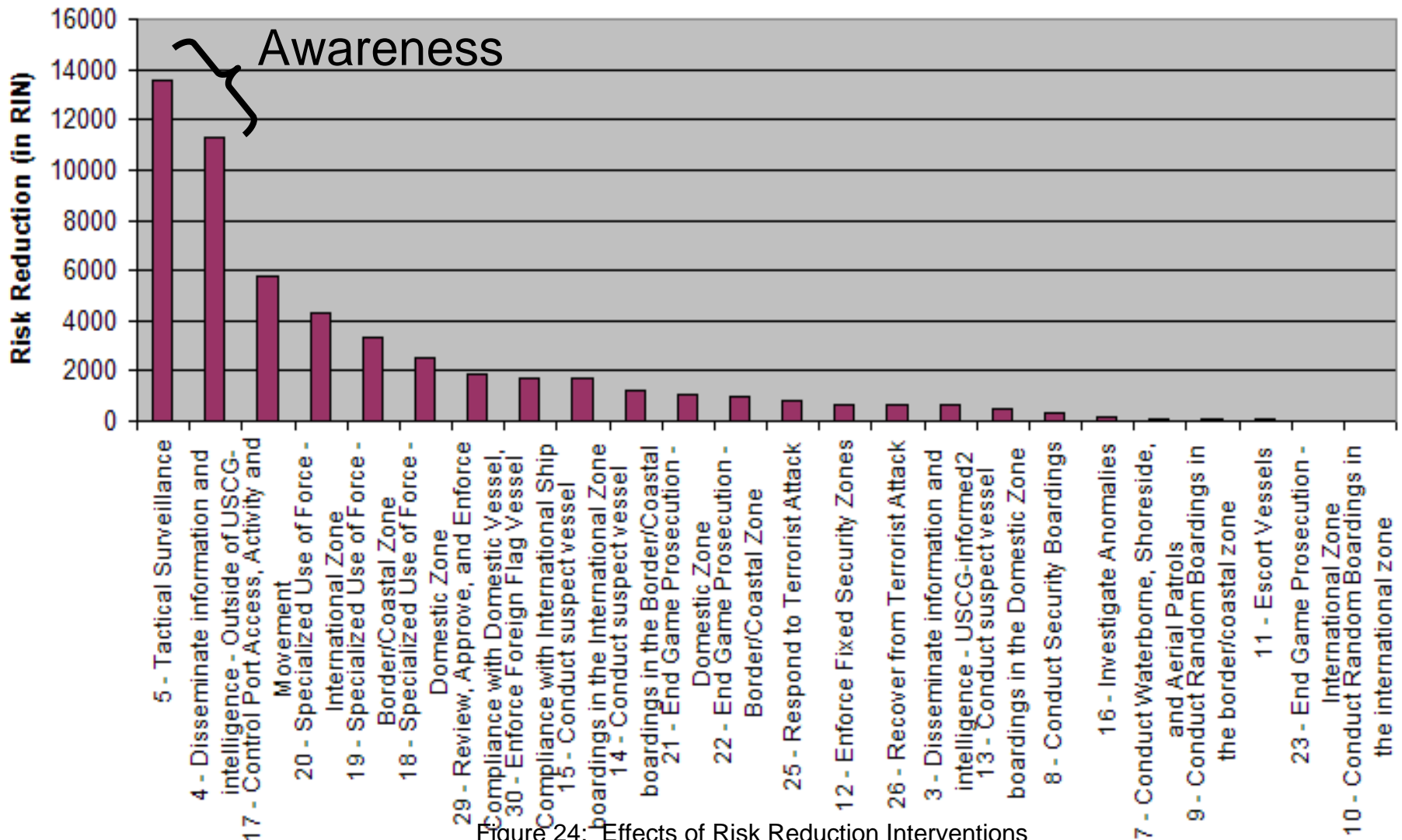
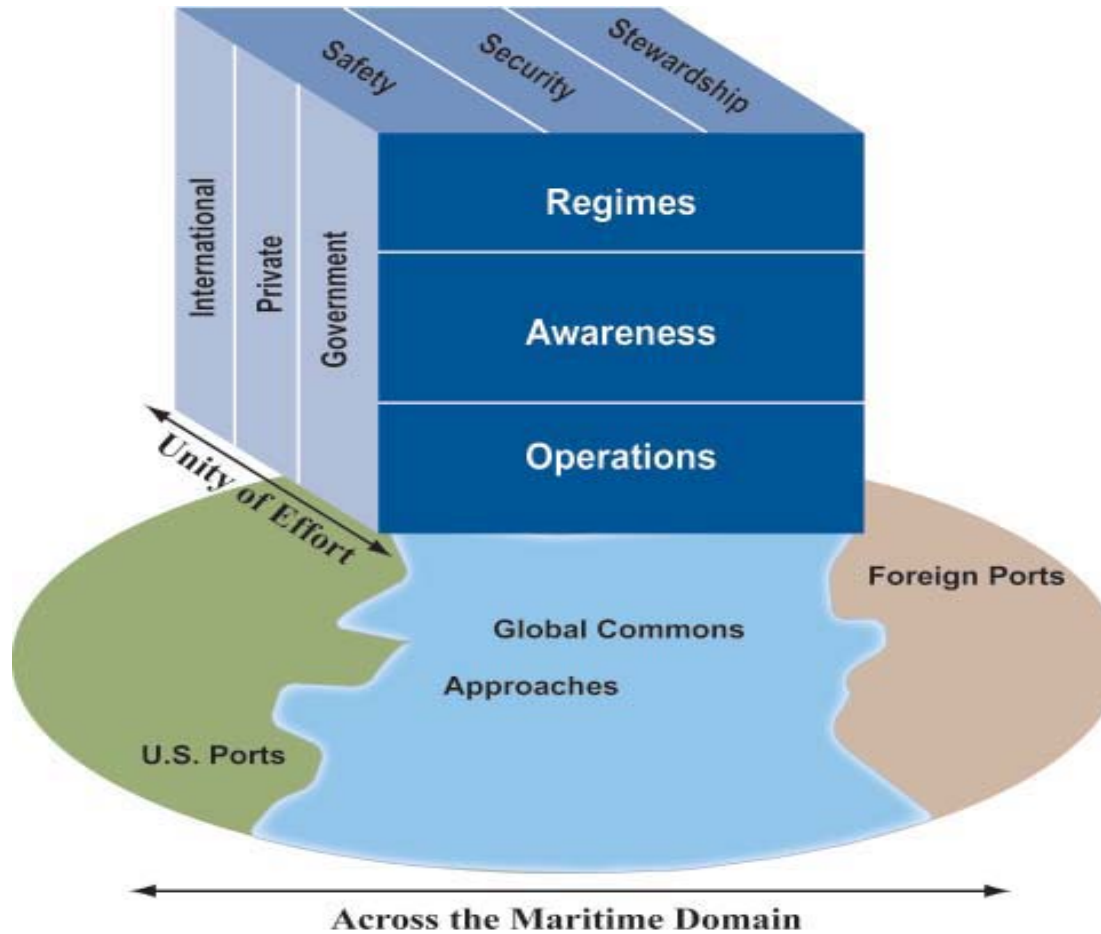


Figure 24: Effects of Risk Reduction Interventions



Maritime Governance Strategic Triad





MDA Pre-9/11

- 1998 - Coast Guard 2020 -- Strategic Plan
- 2000 - Special Interest Vessel Program
- 2001 - NSC involvement and Interagency MDA TF
- 2001 - Maritime Security Strategy and MDA White Papers
- 2001 (Aug) - ADM Loy article on MDA



MDA Post-9/11



- 2002 - USCG MDA Project Officer
- 2003 - Competing USCG Projects
- 2003 - USCG MDA PIO & Steering Committee
- 2004 - National MDA Summit & Senior Steering Group
- 2005 - NSMS & National Plan to Achieve MDA
- 2006 - GMII Director, 2007 - GMSA Director
- 2007 - DoD Executive Agent for MDA (SecNav)



Important Terms & Concepts



- **Maritime Domain Awareness**
- **Global Maritime Intelligence**
- **Global Maritime Situational Awareness**
- **Common Operational Picture**
- **User Defined Operational Picture**
- **Services Oriented Architecture**
- **Federal Governance Structure**
- **Enterprise Hubs**



Maritime Domain Awareness (MDA)



“...the effective understanding of anything associated with the global Maritime Domain that could impact the security, safety, economy, or environment...”





Maritime Domain Awareness (MDA)



$$\text{MDA} = \text{GMI} + \text{GMSA}$$

GMI: *Global Maritime Intelligence*

- Predictive threat warning and cueing
- Response to decision maker requests



Cued Intel, IC Products...

GMSA: *Global Maritime Situational Awareness*

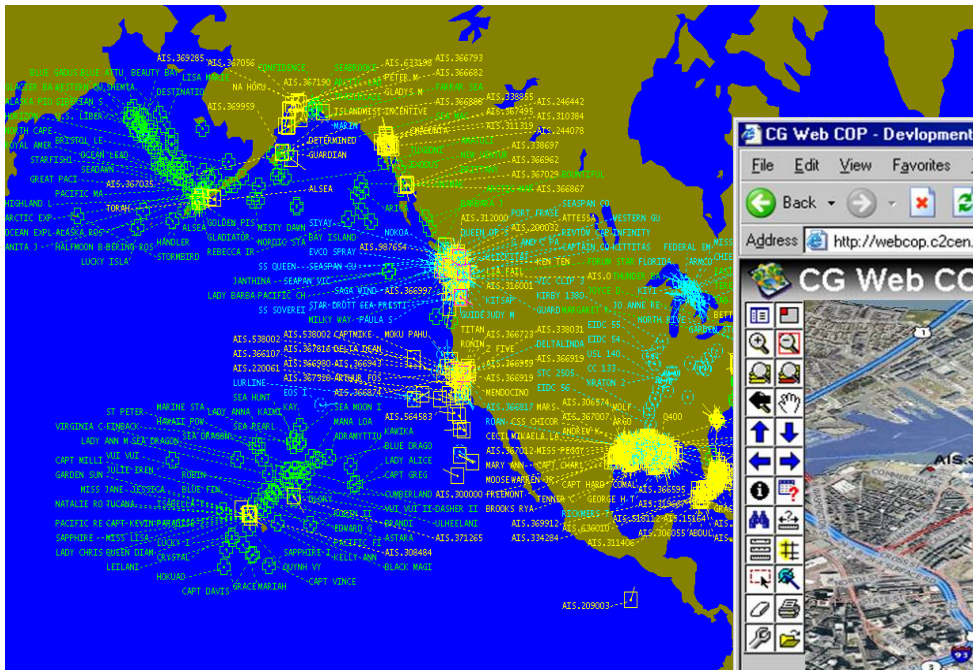
- Unclassified
- Identify/understand trends
- Anomaly detection
- “Maritime Normal”



**Persistent monitoring,
Anomaly Detection...**



COP & UDOP



CG Web COP - Development - Alpha v0.1 - Microsoft Internet Explorer provided by HSC(T)

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites

Address <http://webcop.c2cen.uscg.mil/website/htmlviewer/javapost/viewer.htm> Go Links >>

CG Web COP - Development - Alpha v0.1

Map: -95.47 , 79.42 -- Image: 378 , 6 -- ScaleFactor: 0.20274708121965584

Local intranet



COP vs UDOP



Common Operating Picture

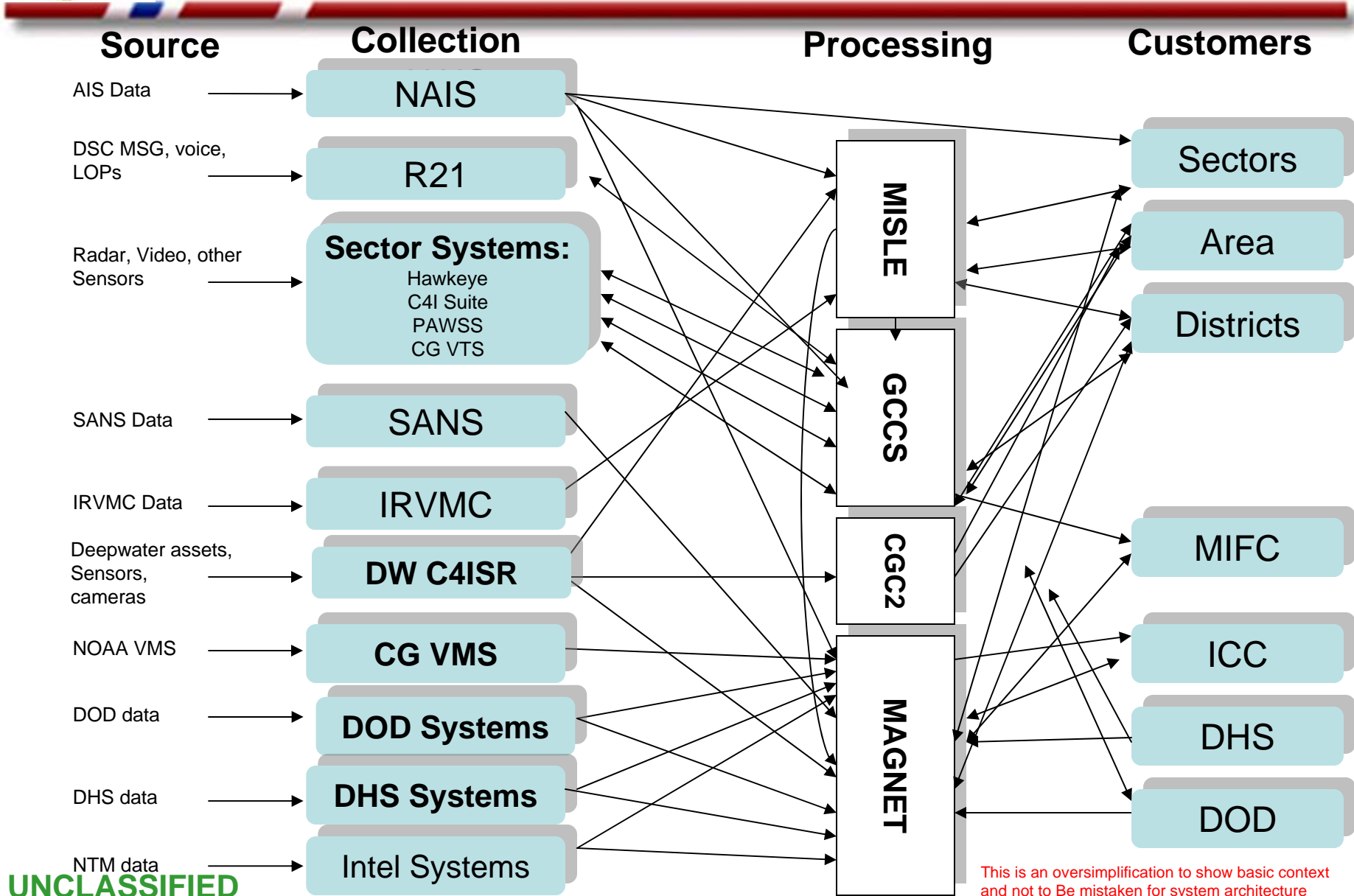
- One picture/view
- Central analysis
- High bandwidth
- Point to point sharing
- Difficult to modify

User-Defined Operating Picture

- Standard data, infinite pictures/views
- Access to raw data/Everyone an analyst
- Only needed info transmitted
- Community data sharing
- Easy to add users, applications

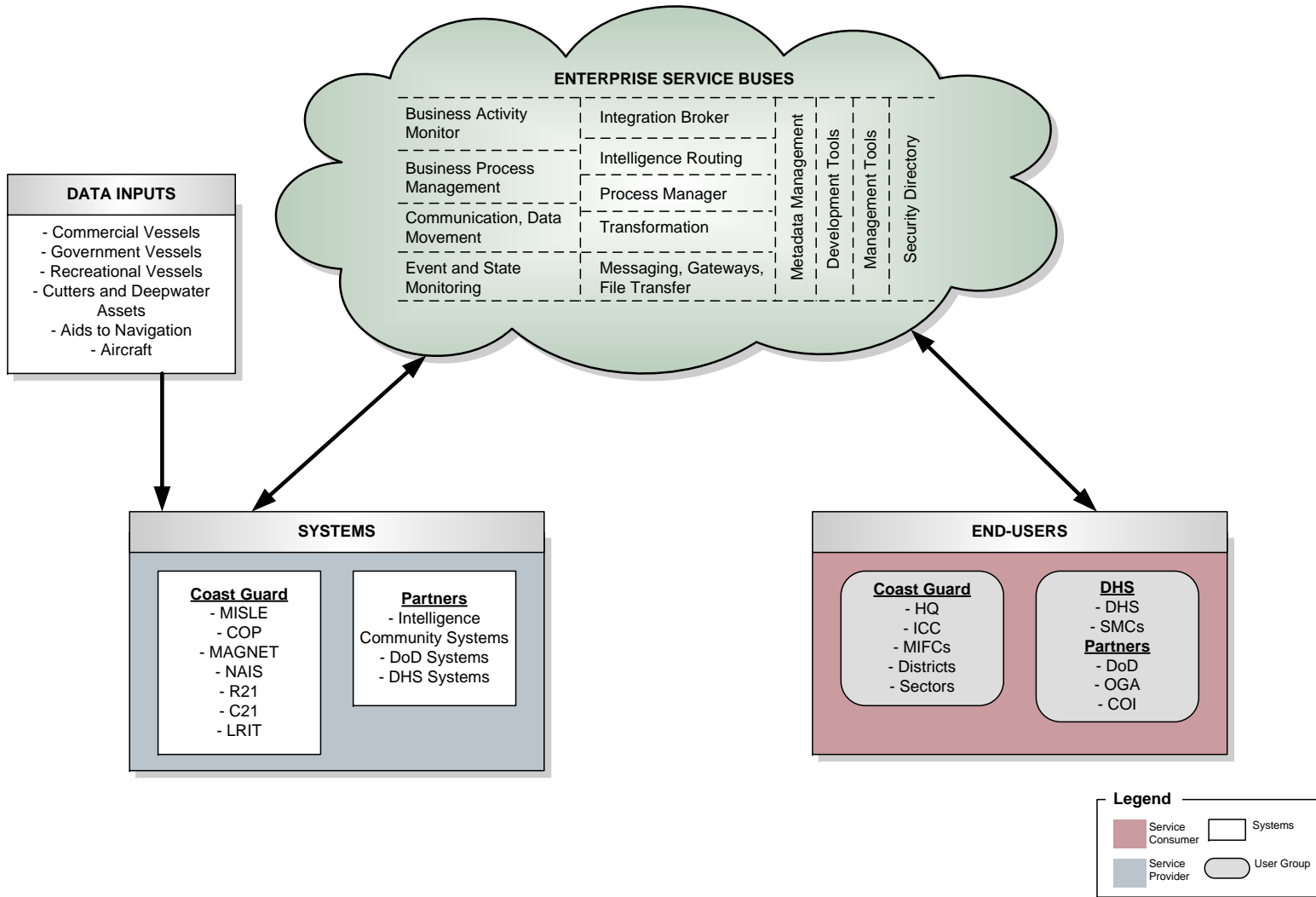


Current Point-to-Point Data Sharing



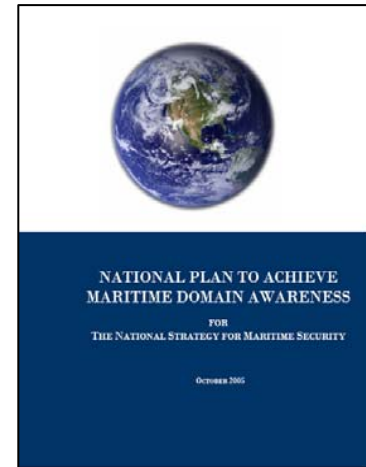
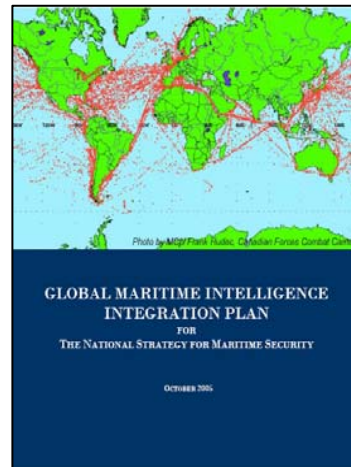
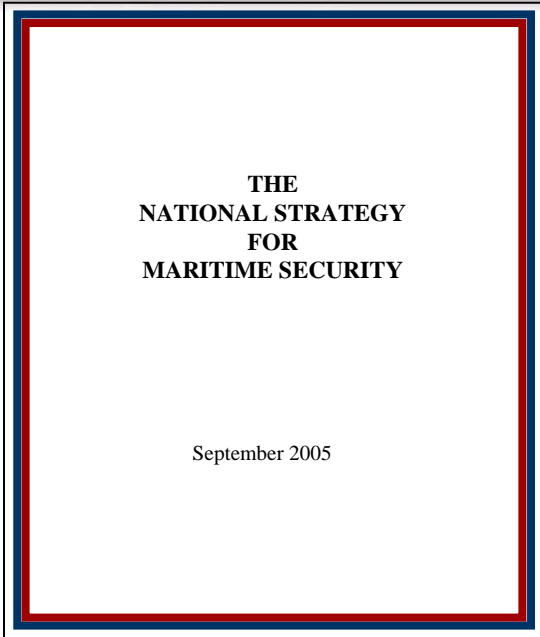


Services Oriented Architecture





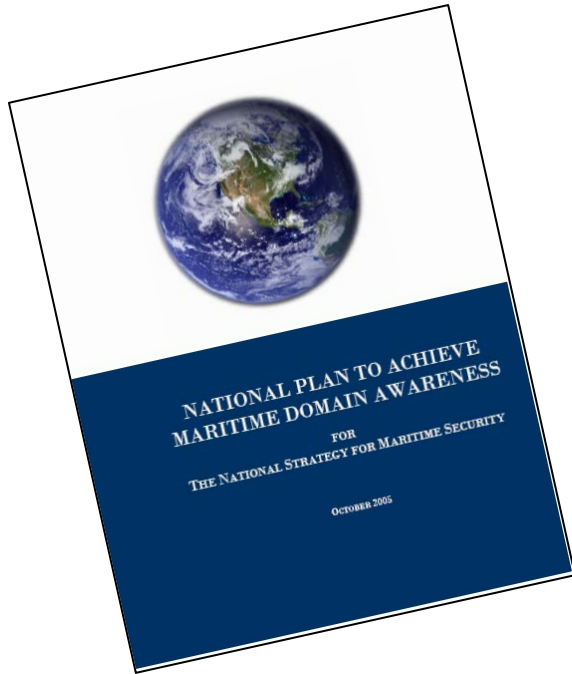
Federal MDA Governance



“Maritime Domain Awareness...
 a key national security requirement...
 requires integrating all-source
 intelligence, law enforcement
 information, and open-source data
 from the public and private sectors...”



National Plan to Achieve MDA



Goals

- Enhance transparency
- Enable accurate, dynamic and confident decisions and responses
- Freedom of navigation and flow of commerce

Objectives

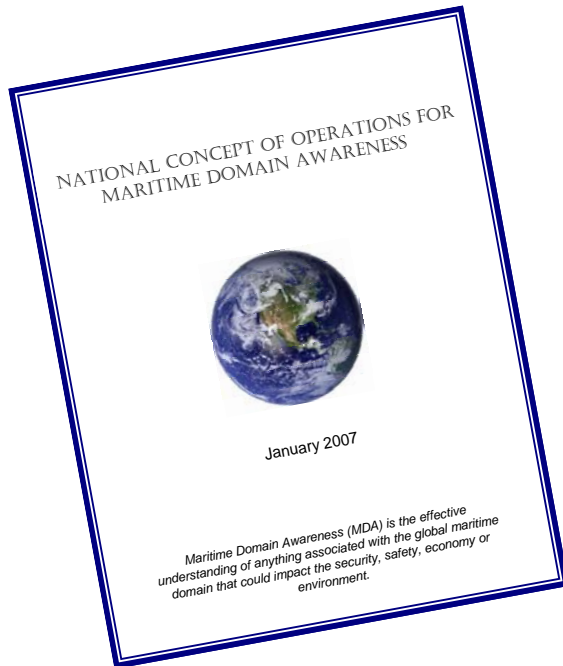
- Persistently monitor the global maritime domain
- Access and maintain data on vessels, cargo, facilities, people and infrastructure
- Collect, fuse, analyze, and disseminate information
- Access, develop and maintain MDA-related mission performance data



Concept of Operations for MDA



At a minimum the CONOPS will detail:

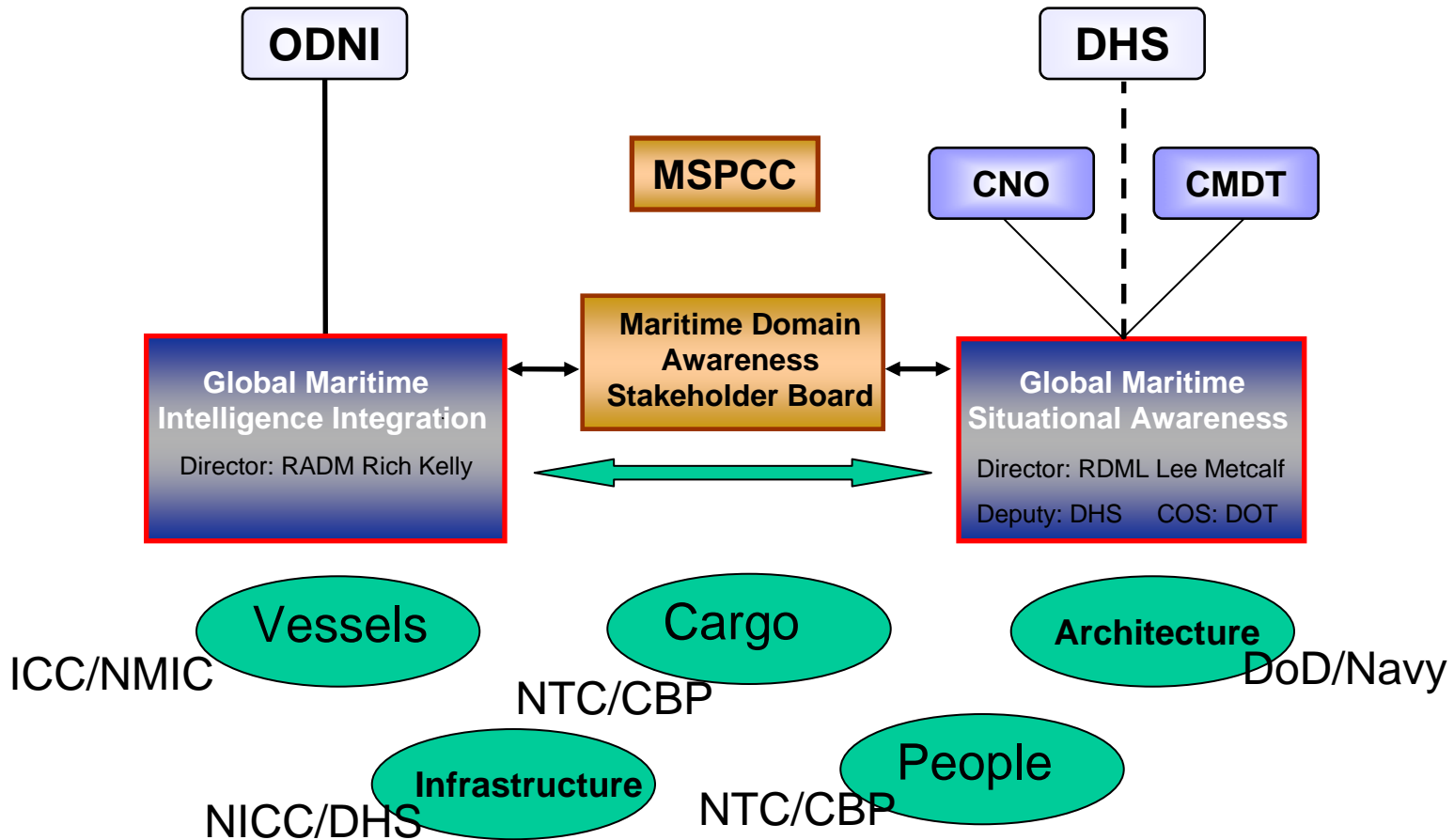


- Interagency Coordination
- Shared Situational Awareness
- Support MOTR
- Integration with GMII



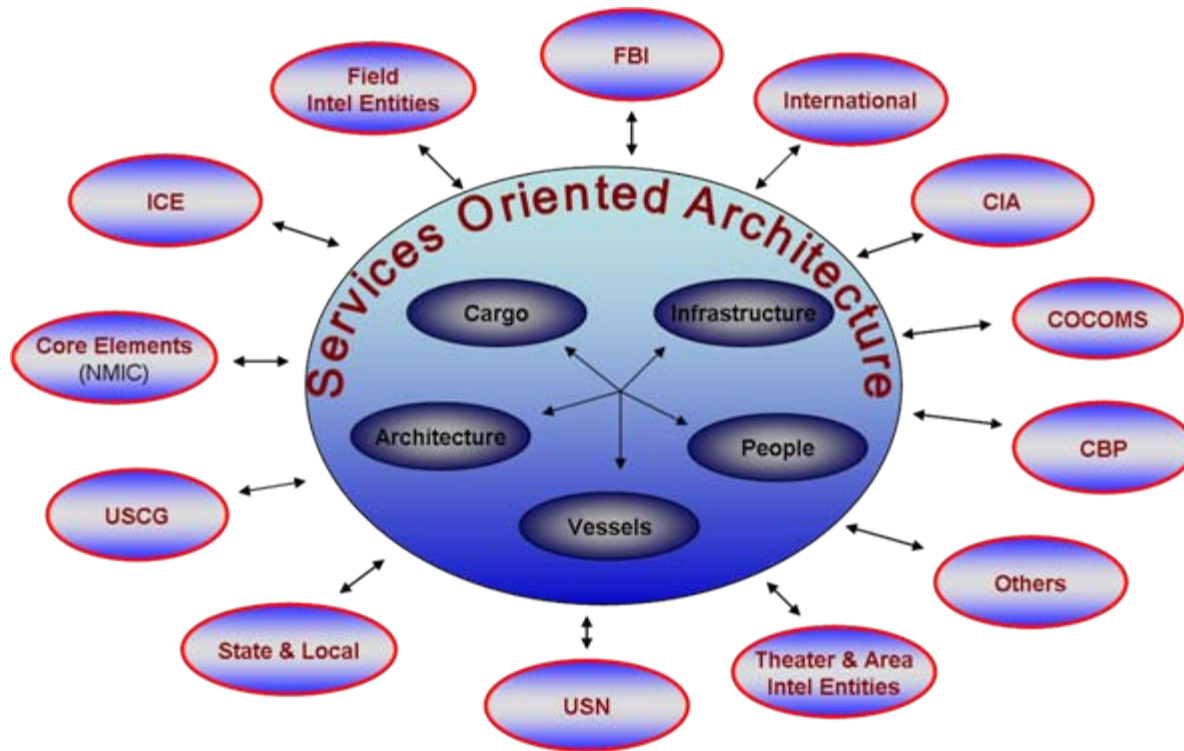
National MDA Structure

A federal, interdepartmental and interagency leadership structure





Enterprise Hubs

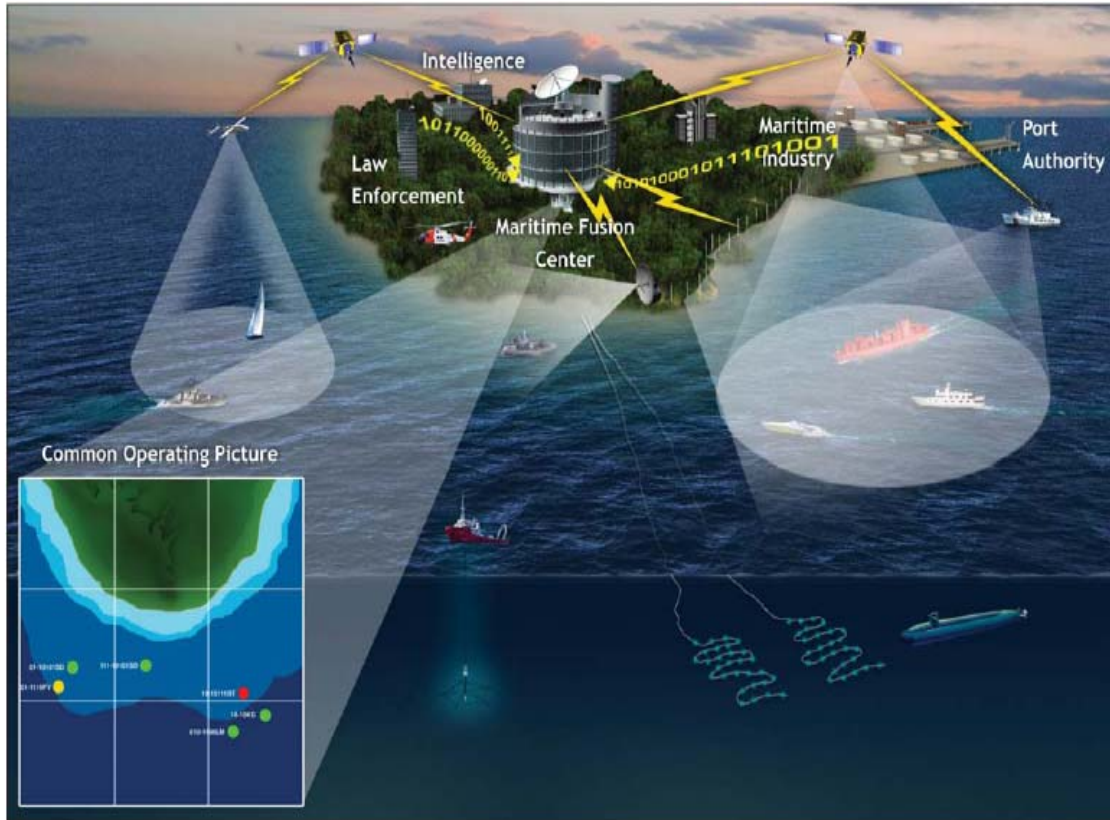


Inventory & Catalog
Facilitate Sharing

Coordinate Information Flow
Identify Gaps



The Goal – Level 3



National Maritime Picture

Understand:

- 1. What happened**
- 2. What is happening**
- 3. What will happen next**



Questions?