Maritime Domain Awareness Strategic Concept

NSPD 41 / HSPD 13
Maritime Security Policy

National Strategy for Maritime Security
ASD(HD) & DHS leads

Review Team (JS/J5)

Domestic Outreach

International Outreach

Global Maritime Intelligence Integration

Maritime Domain Awareness

Maritime Operational Threat Response

Maritime Transportation Security

Maritime Infrastructure Recovery

Maritime Commerce Security

Maritime Domain Awareness is the effective understanding of anything associated with the global maritime domain that could impact the security, safety, economy, or environment of the United States.

--National Strategy for Maritime Security

“No one nation has the resources required to provide safety and security throughout the entire maritime domain. Increasingly, governments, non-governmental organizations, international organizations, and the private sector will form partnerships of common interest to counter these emerging threats”

-- A Cooperative Strategy for 21st Century Seapower
MDA Requirements

• Persistently Monitor in the global maritime domain:
  • Vessels and Craft
  • Cargo
  • Vessel crews and passengers
  • All identified areas of interest
• Access and maintain data on vessels, facilities and infrastructure
• Collect, fuse, analyze and disseminate information to decision makers to facilitate effective understanding
• Access, develop and maintain data on MDA-related mission performance

Source: National Plan to Achieve Maritime Domain Awareness
17 May 07 SECNAV memo laid out objectives for expeditiously fielding a prototype MDA capability

13 July 07 ASN RDA ADM established PEO C4I as MDA Acquisition Lead

03 August 07 SECNAV identified as MDA EA for DOD
The MDA Concept

Collect

Fuse/Analyze

Display/Disseminate

Common Operational Picture
Common Shared Data Base
Information Sharing
Actionable Intelligence

Act

Immigration
Marine Police
Customs
International Partners

Threat
Safety
Security
Economy
Environment

Navies
COCOMs

Source: NORTHCOM
MDA Capabilities

• Collect, Fuse, and Monitor/Visualize
  • Vessels, Cargo, People, and Infrastructure

• Analyze
  • Detect anomalies, trends, and patterns
  • Predict behaviors

• Identify threats to the U.S., U.S. forces overseas, or U.S. partners and Allies

• Identify illegal activities

• Collaborate across departments, agencies, coalition and non-traditional partners
  • Collect & Disseminate data from & to the tactical edge
  • Across and at multiple security domains
Spiral 1 Prototype Goals

- Establish foundation for lasting MDA capability
- Leverage ongoing JCTDs, RTTs, and RDCs
  - Technology maturity is critical
- Use technologies ready for Fleet introduction
- Deploy a select set of MDA capabilities to a limited number of locations
  - CENTCOM & PACOM AORs
  - Interagency Partners
  - Domestic and international port data
- Share data with international strategic partners
- Share data with additional interagency partners
  - USCG, NORTHCOM(*CMA feed), JIATF-W
- Achieve IOC by August 2008
Spiral 1 Capabilities

- Enhanced Vessel Tracking
- Initial situational monitoring and threat detection
  - Automated monitoring, anomaly detection, and alerting
- Enhanced Extended Maritime Intercept Operations (E-MIO)
- Enhanced sharing of port and coastal data
- Broad collaboration and data sharing capabilities between analyst and agencies, as well as with coalition and non-government organizations
  - CENTRIXS
  - Geospatial visualization tools
  - Collaborative tools – Google, NCES, etc
**Spiral 1 Capabilities/Nodes**

**NAVCENT, MIFC-PAC and PACFLT (C3F/C7F*)**
- Limited Anomaly Detection
- Vessel Tracking
- Initial Threat Assessment
- Regional Maritime Data Archives
- Non-Navy Maritime Data Access
- Maritime Data Archives
- Collaborative Toolset

**U.S. Port Data - San Diego**
- Integrated port transit & sensor data
- Collaborative toolset

**NCIS Field Sites**
- MTAC data fusion-analysis
- Expanded Regional SMEs
- Collaborative toolset

**International Partners**
- Collaborative tool set
- Port transit data
- Coastal AIS data*

**Initial AOR Deployers**
- Automated Afloat Maritime Data Collection (E-MIO)
- Improved wireless transmission of Biometric data
- Collaborative toolset
- AIS, GCCS-M, HF-IP, SNR

* some locations will use remote access

**NMIC/ONI**
- Global Maritime Data Archives
- Limited Anomaly Detection
- Vessel Tracking and Threat Assessment
- Non-Navy Maritime Data Access
- Collaborative Toolset
- Integrated EMIO data capture and distribution

**JIATF-W**
- Regional Maritime and Law Enforcement Data Archives
- Expanded Regional SMEs
- Collaborative Toolset
Questions
Backup
AIS – Automatic Identification System
BTR – Below Threshold Request
CAS – Collaboration At Sea
CENTRIX-M - Combined Enterprise Regional Information Exchange System for the Maritime Environment (CENTRIXS-M)
CFT – Cross Functional Team
CMA – Comprehensive Maritime Awareness
COP – Common Operational Picture
DT – Developmental Testing
E2E – End-to-End
E-MIO – Expanded - Maritime Interdiction Operations
FASTC2 AP – Fast Connectivity for Coalition Agents Program
FDCE – Federated Development & Certification Environment
GCCS-M – Global Command and Control System, Maritime
GCCS-I3 – GCCS Integrated Imagery & Intelligence
GMSA – Global Maritime Situational Awareness
IOC – Initial Operating Capability
JCTD – Joint Capability Technology Demonstration
JIATF – Joint Inter-Agency Task Force

JTAA – Joint Test Asset Activity
MAGNET – Maritime Awareness Global Network
MASS – MDA AIS Sensor Server
MDA – Maritime Domain Awareness
MHQ/MOCs – Maritime Headquarters/Maritime Operations Centers
MIO – Maritime Interdiction Operations
ONI – Office of Naval Intelligence
POR – Program of Record
QRA – Quick Reaction Assessment
RTT – Rapid Technology Transition
RDC – Rapid Development Capability
SCC-J – Sector Command Center-Joint
SIMEX – Simulation Exercise
SMS – Sensor Management System
TAANDEM – Track Assessment and Anomaly Detection Maritime
TTP – Tactics, Techniques, and Procedures
TW 08 – Trident Warrior 08