



This Briefing is
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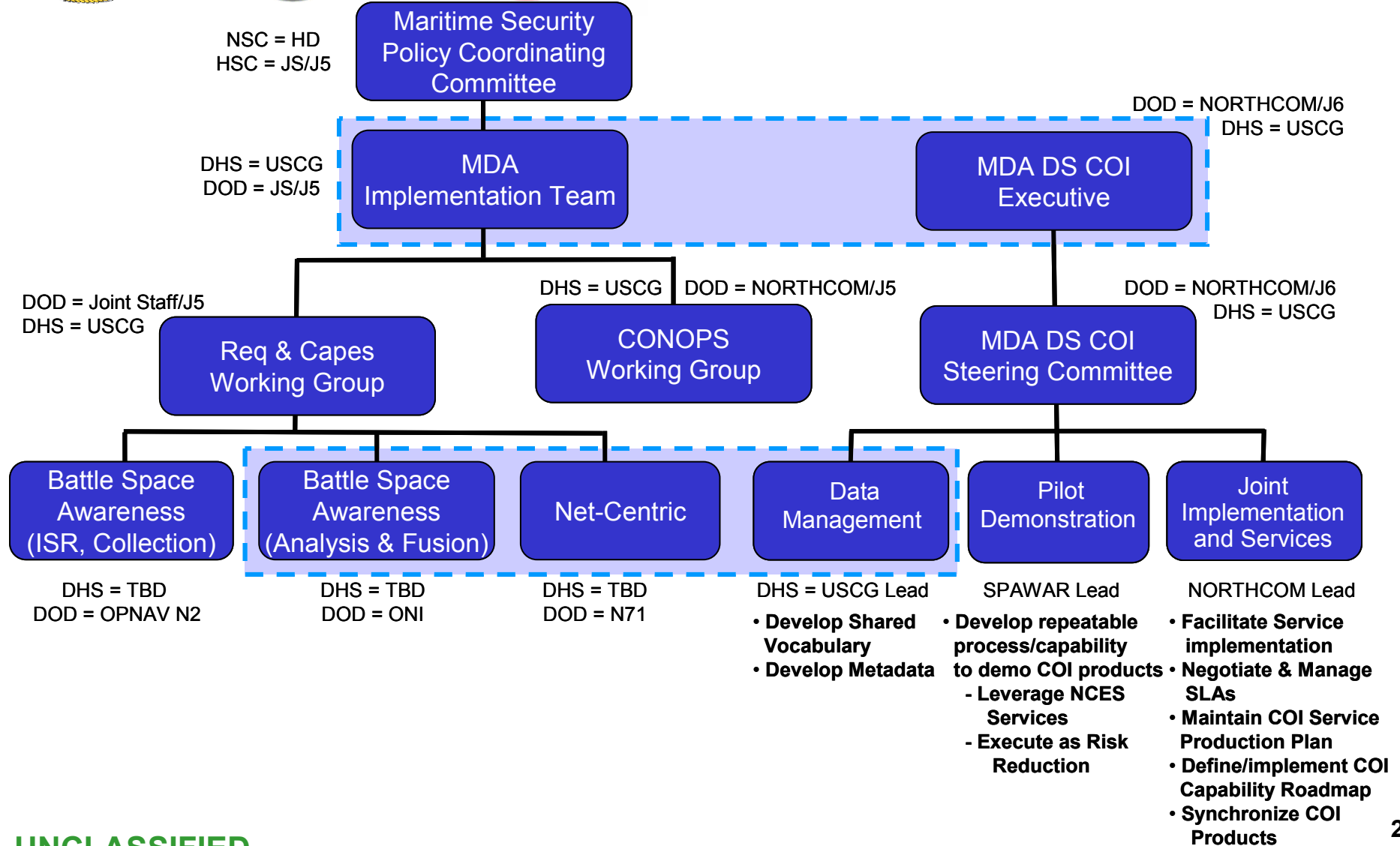
Maritime Domain Awareness Data Sharing COI

Mar 2006

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COMDT CG-66
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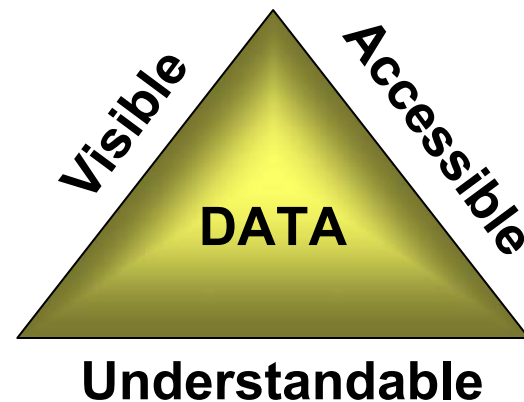
MDA DS COI Governance



COI Defined

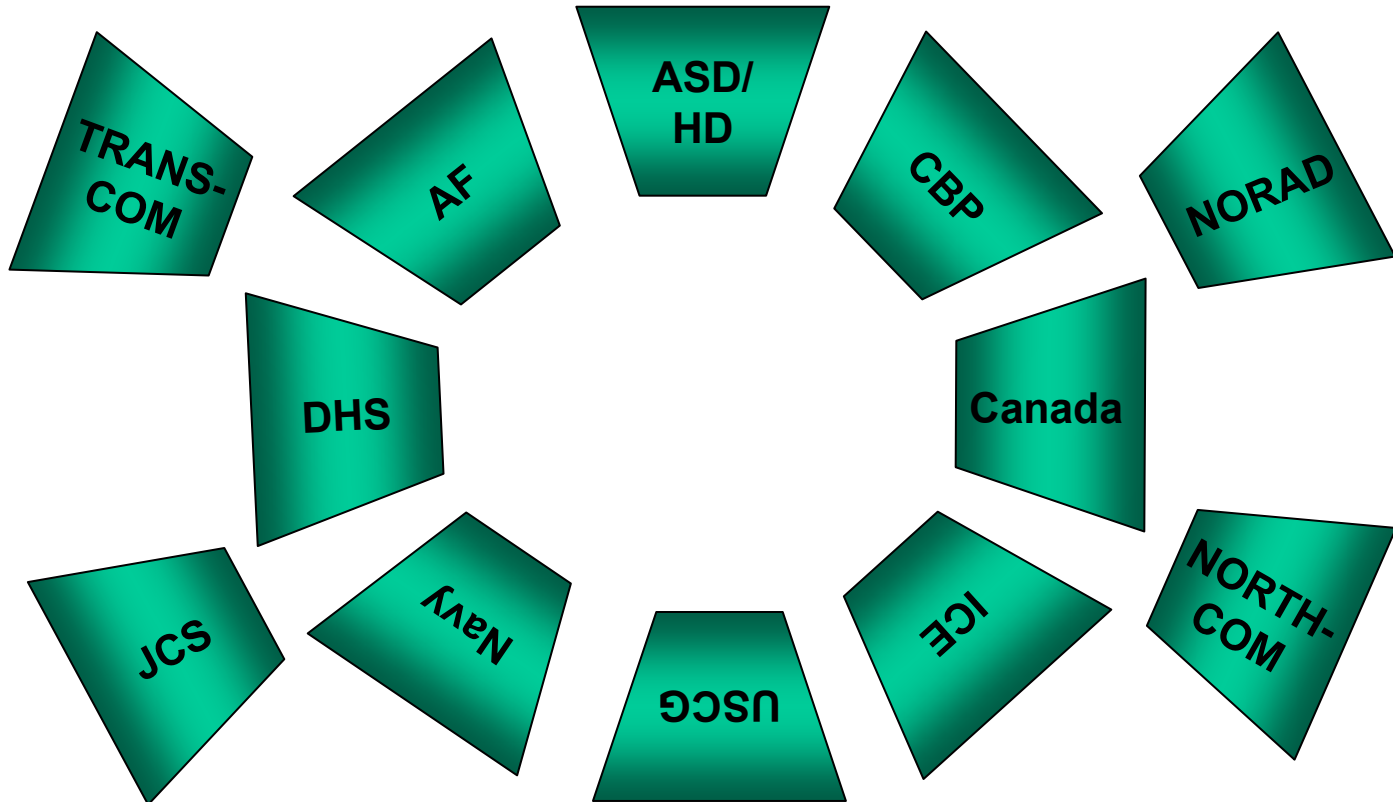


- **A collaborative group of users that must exchange information in pursuit of its shared goals, interests, missions, or business processes and therefore must have a shared vocabulary for the information it exchanges....DOD Directive 8320.2**



The Community

- Kick-off Meeting had strong DHS and DOD presence
- Our data producer/consumer community is many more agencies, international, and commercial





MDA DS COI- AIS Pilot

- The **Automatic Identification System (AIS)** is a shipboard broadcast transponder system operating in the Very High Frequency (VHF) maritime band that is capable of sending and receiving ship information, including Navigation (Position, Course, Speed ...), Identification (Name, Call Sign, Length, Beam ...), and Cargo (Draft, Type, Destination ...).

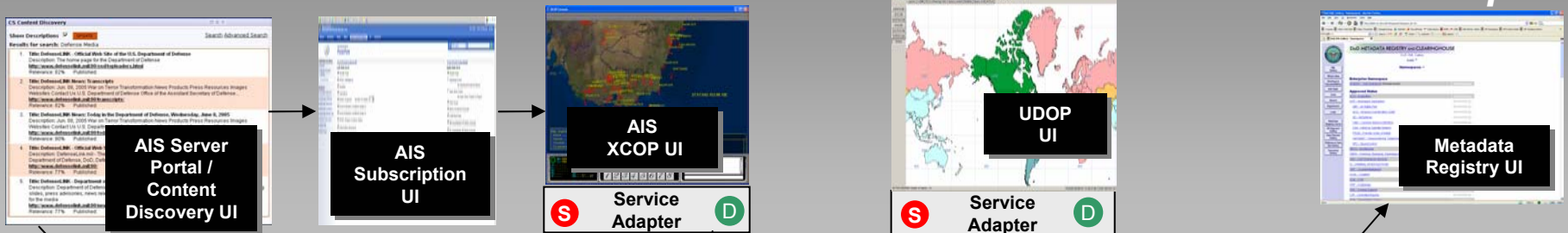


MDA DS COI Pilot Service = AIS Data RM + NCES Security/Discovery/Adapter + NCES M2M Messaging + Metadata Registry

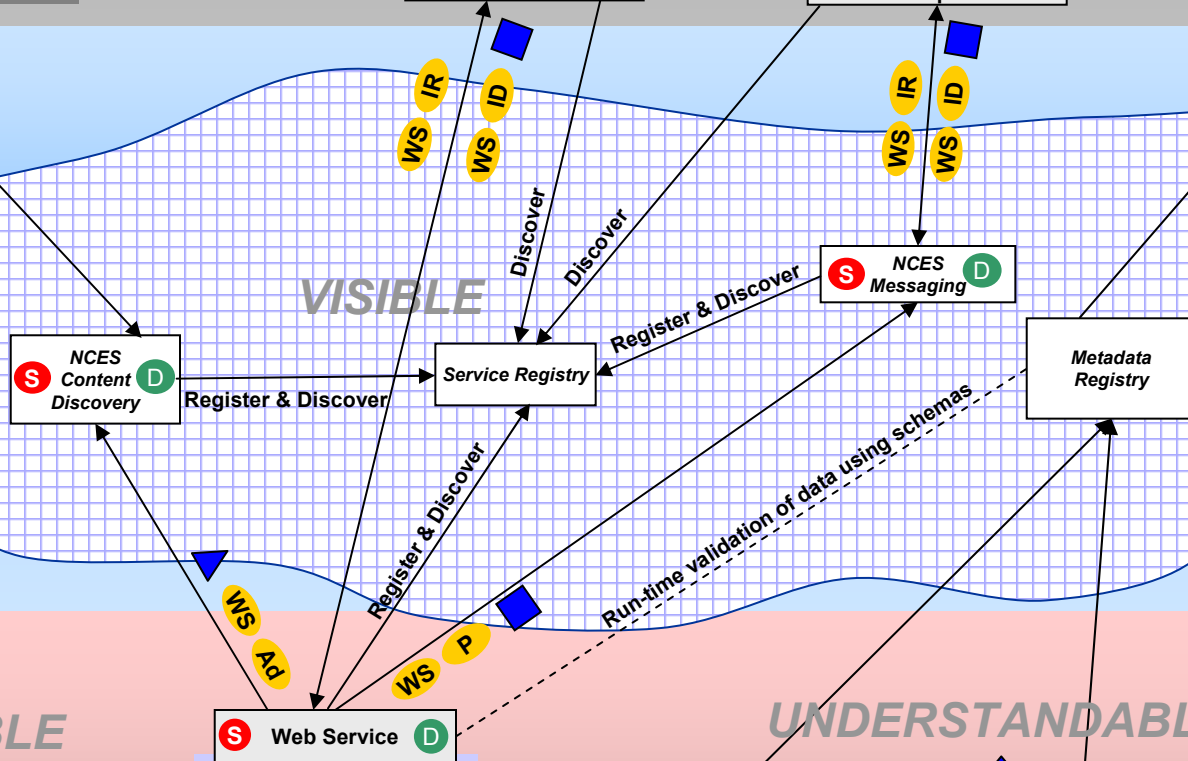
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Consumers

Developers



NCES Services



Web Services Info Grid

- WS Ad Advertise
- WS P Post
- WS IR Info Request
- WS ID Info Delivery

- = data flow uses AIS data ref model and xml schema
- ▲ = data flow uses DDMS Discovery metadata schema
- Ⓢ = uses NCES Security for SBU Identity mgmt and authorization
- ⓓ = uses NCES Service Discovery for web service registry

ACCESSIBLE

UNDERSTANDABLE

Information exchange message types:

- Human interpreted
- Machine interpreted
- Shared, distributed DB

AIS Data Model Schema (XML)

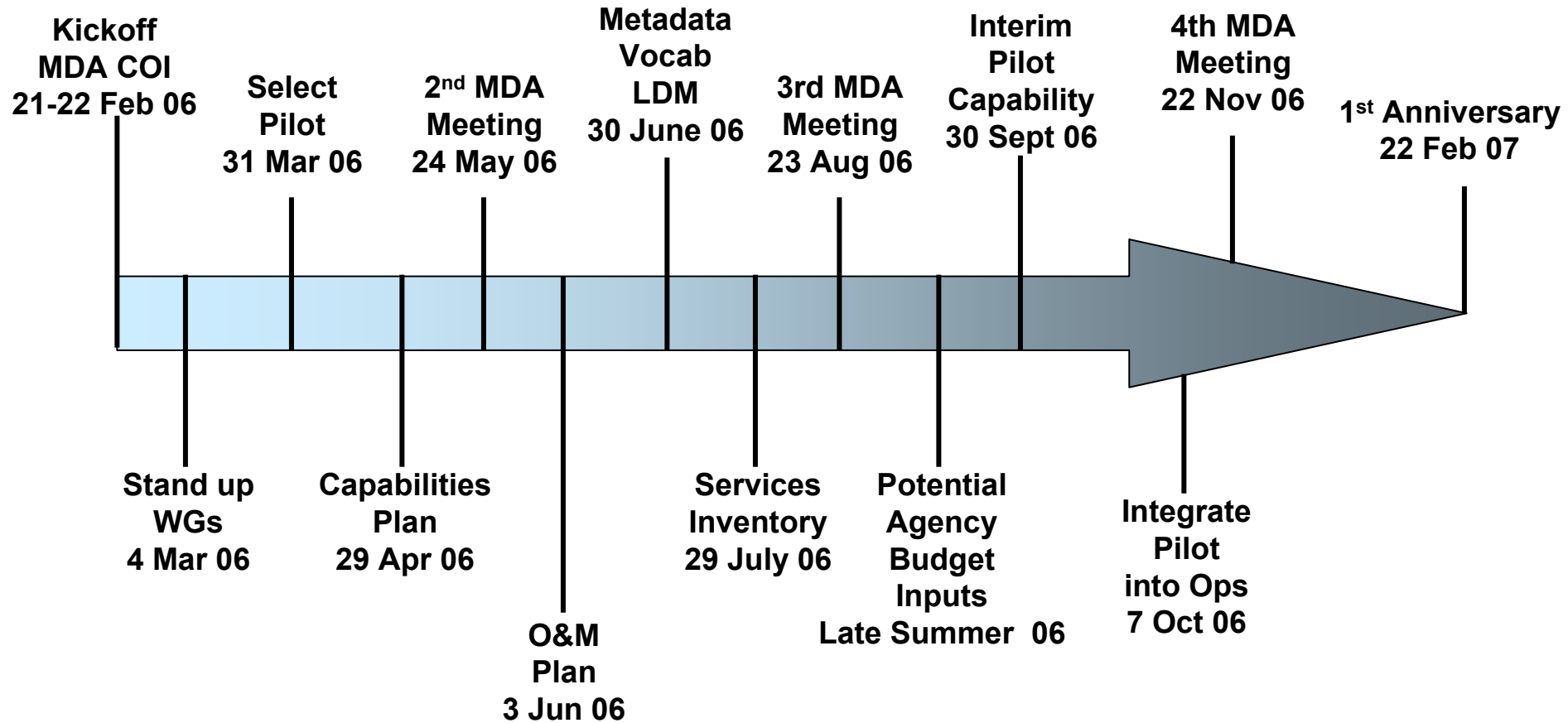
DDMS Discovery Metadata Schema w/ AIS extensions (XML)

Data Producers

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(Draft) COI Pilot POA&M





Maritime Fusion Challenge

Current Tasking: Corresponds with MDA Essential Tasks: Find, ID, track

Delivery Warehouse



Receiving Warehouse

Data

Information

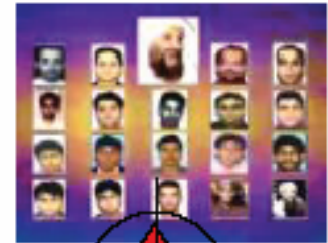
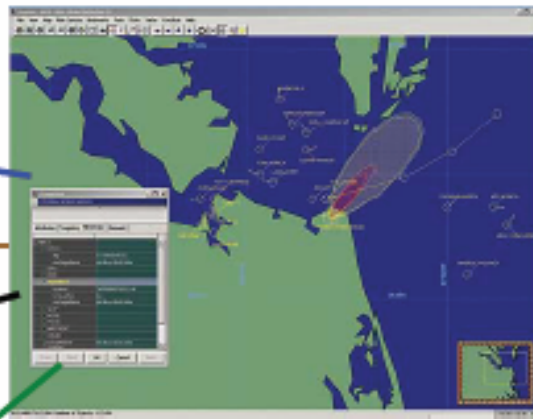
Operationally Actionable Intelligence

Vessels

Cargo

People

Infrastructure



Gather data from disparate sources:

- Commercial
- Law Enforcement
- Foreign Partners
- Military NTM/ISR

Develop Maritime Domain Awareness:

- Fuse data into information (COP)

Establish Maritime Domain Dominance:

- Exploit anomalies in information to identify operationally actionable intel

