



The Overall Classification of this Briefing is:  
**UNCLASSIFIED**

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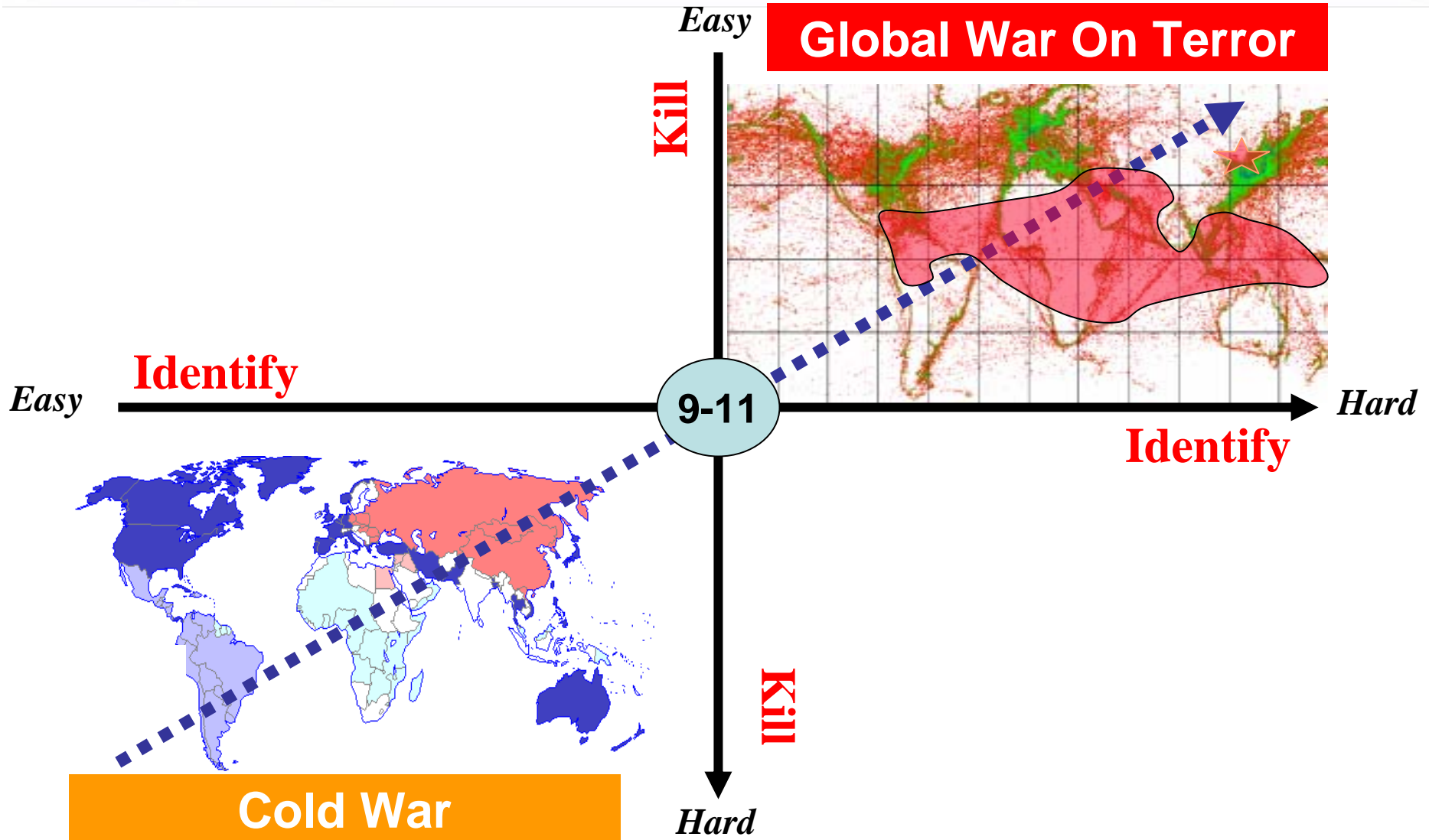
*National  
Maritime Domain Awareness  
Efforts*

*NDIA  
Strike, Land Attack & Air Defense Symposium*

*CAPT Scott Beaton, USN  
Deputy Assistant Commandant for Policy and Plans  
April 25, 2006*



# The New Competitive Landscape





# *Global Challenges to Maritime Security*

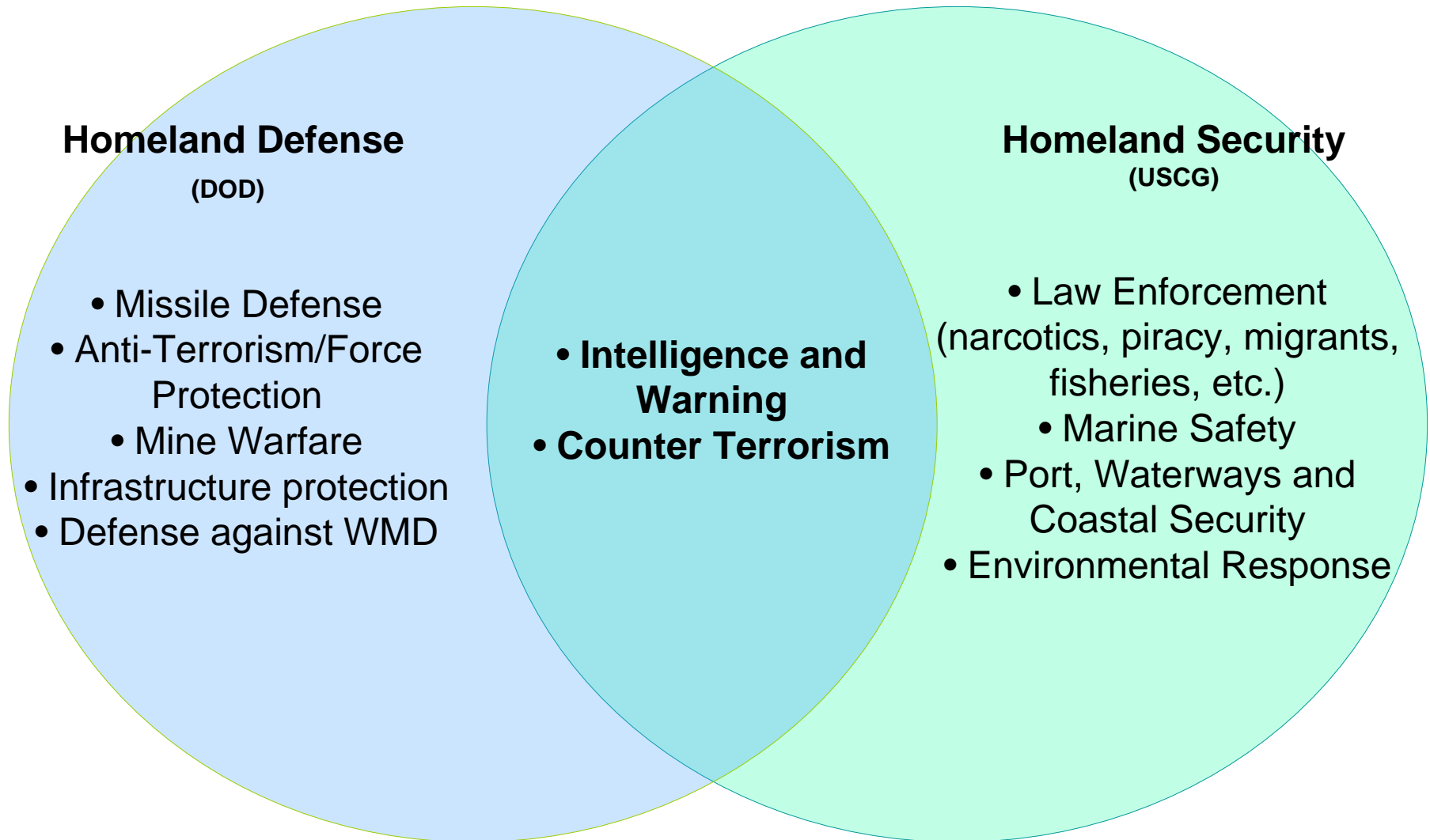


- Terrorism
- Organized crime
- Piracy
- Drug smuggling
- Human smuggling and slavery
- Illegal weapons movement/proliferation
- Exclusive Economic Zone (resource) exploitation
- Illegal fishing
- Trade disruption
- Illegal migration
- Search and Rescue
- Environmental attack

***Nations find their well-being challenged by these common threats to Maritime Security***

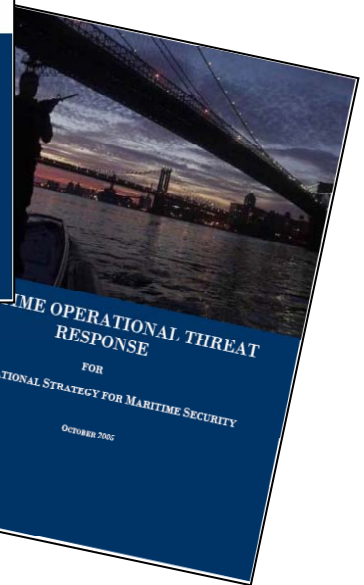
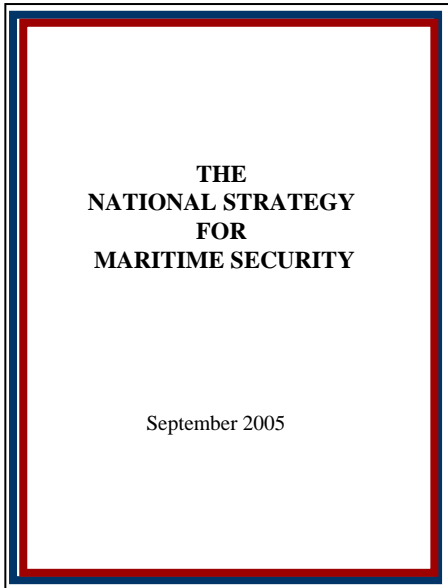


# *M-HLD / M-HLS Missions*





# National Strategy for Maritime Security





# *National Strategy for Maritime Security*



## **Strategic Principals**

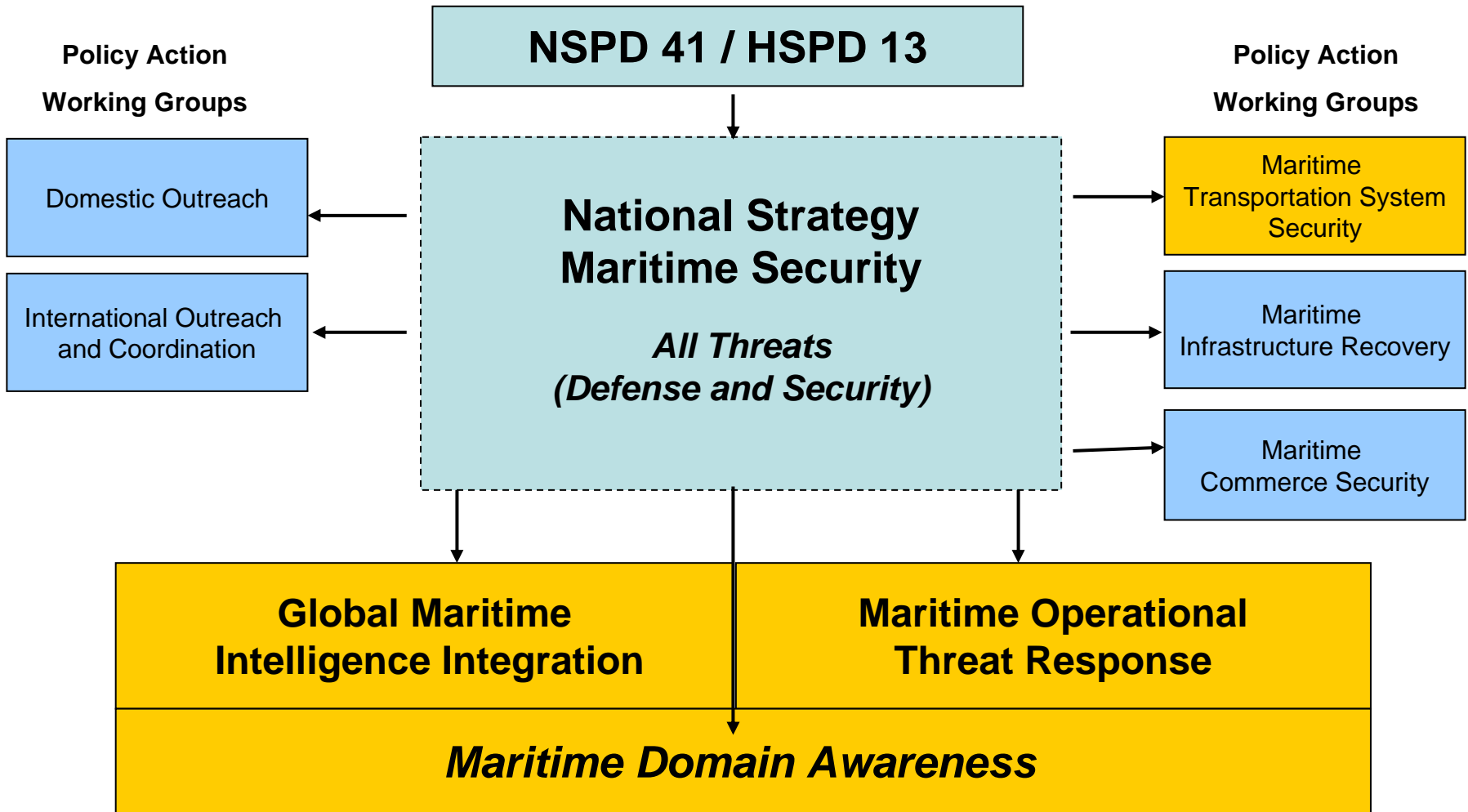
- Preserving the freedom of the seas
- Facilitate and defend commerce
- Facilitate the movement of desirable goods and people across our borders, while screening out dangerous people and materials

## **Objectives**

- Prevent terrorist attacks and criminal or hostile acts
- Protect maritime related population centers and critical infrastructures
- Minimize damage and expedite recovery
- Safeguard the ocean and its resources



# Maritime Security Policy and MDA



Requires Unity of Effort



# *National Plan to Achieve MDA*

## Goals

- Enhance transparency in the maritime domain to detect, deter and defeat threats as early and distant from US interests as possible
- Enable accurate, dynamic and confident decisions and responses to the full spectrum of maritime threats
- Sustain the full application of the law to ensure freedom of navigation and the sufficient flow of commerce

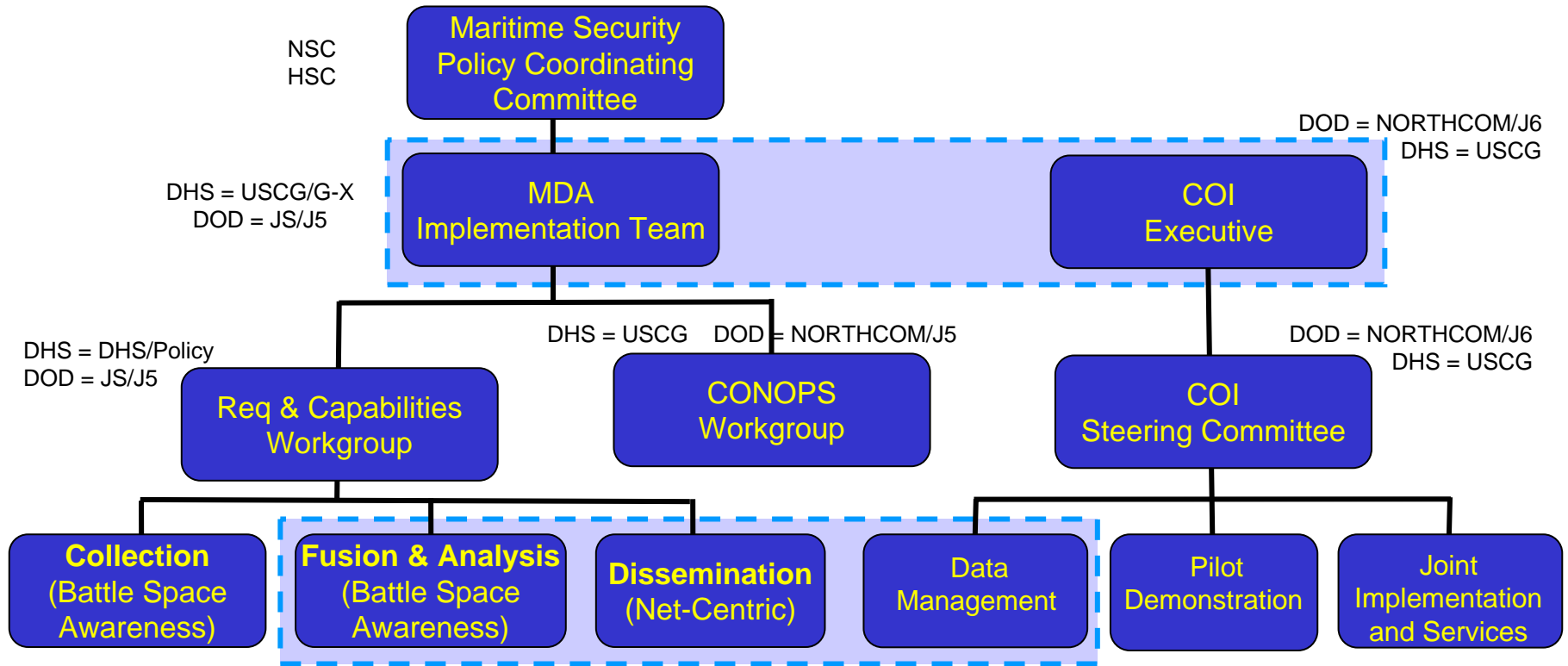
## Guiding Principals

- Unity of Effort
  - *Coordinated effort*
  - *Mutual interest*
  - *Stakeholders cooperation*
- Information Sharing
  - *Unparalleled information sharing*
  - *Bi-lateral or multi-lateral*
  - *Protection of proprietary information*
- **Safe and Efficient Flow of Commerce**



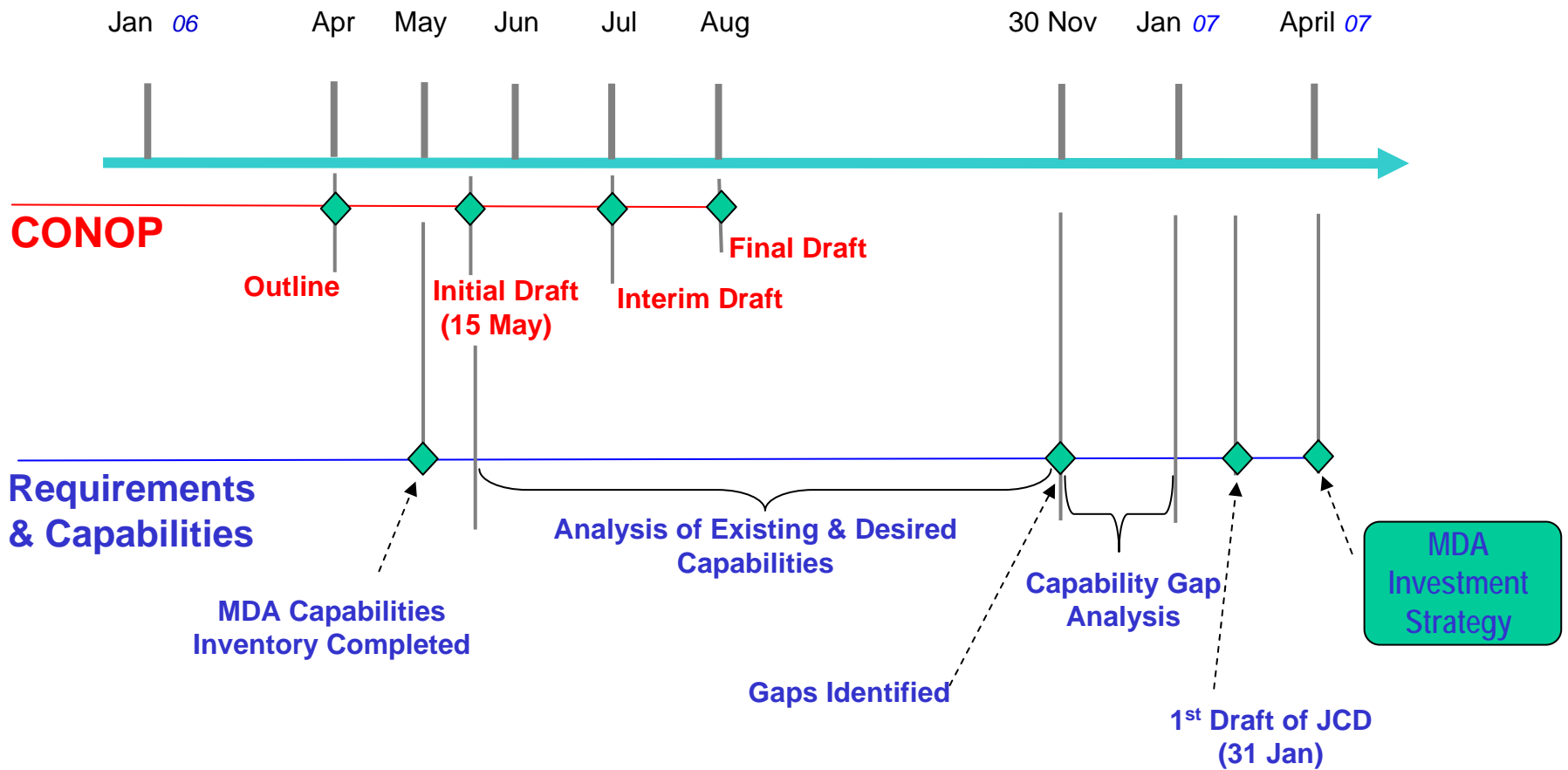


# National MDA-IT & DS COI





# MDA-IT Timeline





# MDA Objectives & Gaps

## National Plan to Achieve MDA

### Essential Tasks List

- Persistently monitor in the global maritime domain:
  - Vessels and craft
  - Cargo
  - Vessel crews & 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

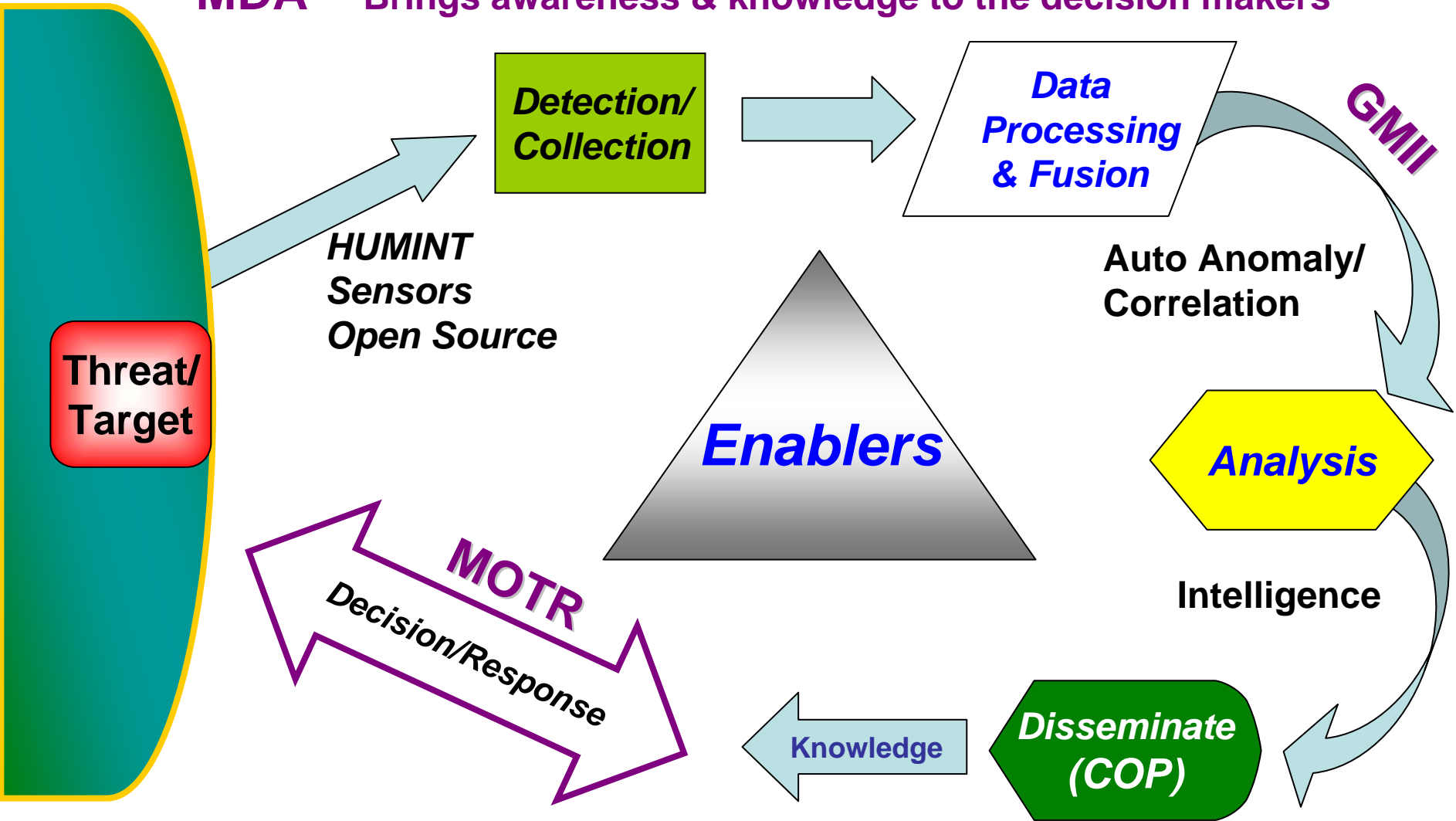
### Identified Gaps

- ↔ Non Cooperative/Small vessels
- ↔ Detecting dangerous cargoes
- ↔ Criminals/High Risk Persons
- ↔ Government and Commercial database access
- ↔ Data fusion and analysis capability



# MDA Knowledge Process Cycle

MDA – Brings awareness & knowledge to the decision makers



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# Maritime Domain Awareness

## Observables

- Vessels
- People
- Facilities
- Cargo
- Infrastructure
- Sea lanes
- Threats
- Friendly forces
- Weather

## Collect

- Sensors
- Operators & field personnel
- Intel. agencies
- Open source
- Private sector data
- Law Enf
- Intl Sources

## Fuse

- Tracks w/ tracks
- Data w/ data
- Tracks w/ Data

## Analyze

- Anomaly Detection
- Pattern Recog & analysis
- Compare w/ rules
- Research tools

## Disseminate

- Networks
- Displays (COP/UDOP)
- Command Centers

## Decide/Act

- Strategic
- Operational
- Tactical

Situational Awareness

Current & Predictive Intelligence

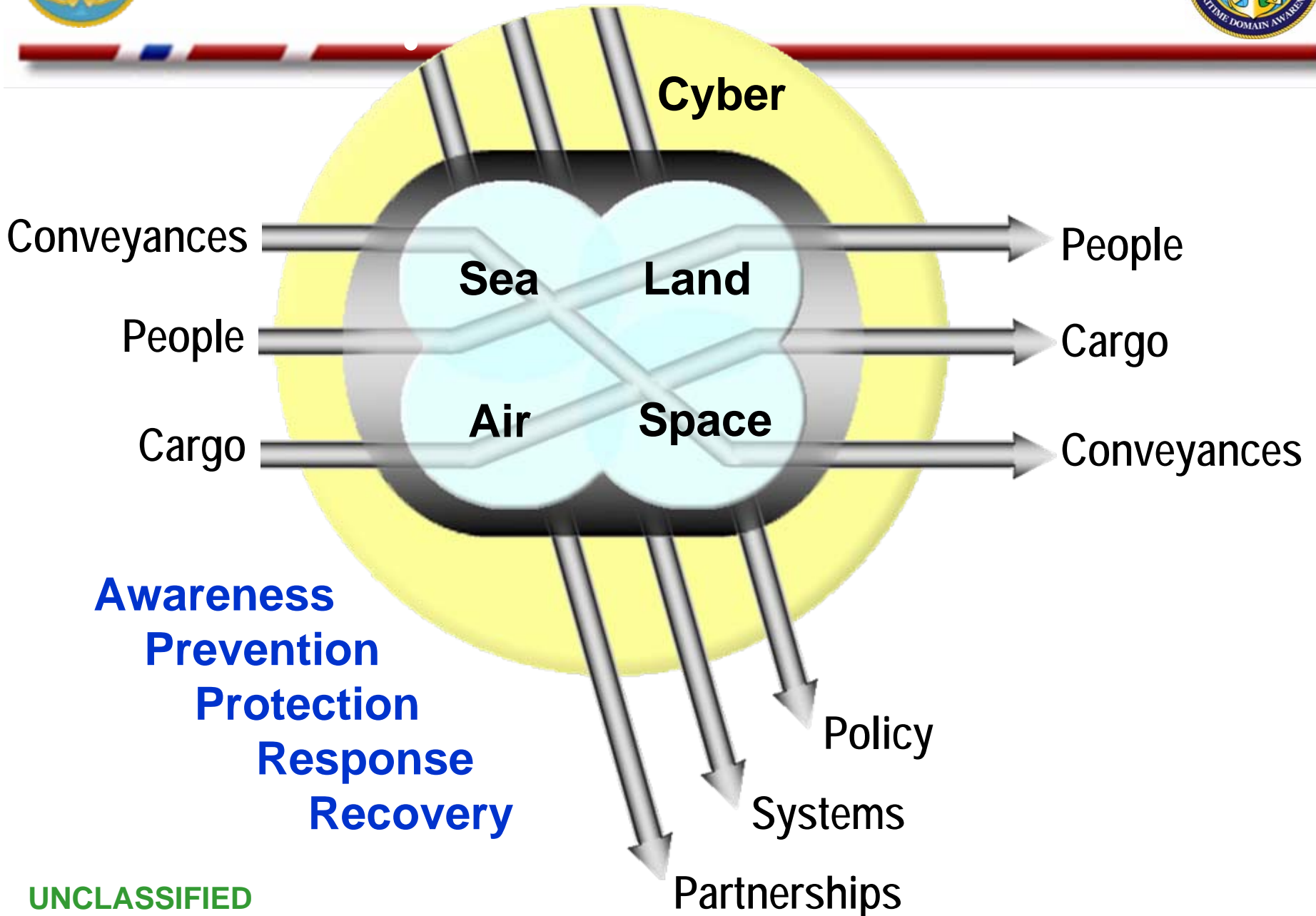


# Systems Under Development or Consideration

|                    | Collect  | Analyze   |                  |                           | Disseminate  |        |             |
|--------------------|--|---|------------------|---------------------------|--------------|--------|-------------|
|                    | Platform   | Sensor  | Processor        | Fuse                      | Analyze      | Decide | Disseminate |
| <b>Broad Ocean</b> |  | <b>RADAR SAT-2</b>  |                  | <b>MASTER (SCI)</b>       |              |        |             |
|                    |  | <b>CSTARS</b>   | <b>OCEANVIEW</b> |                           |              |        |             |
|                    |  | <b>Upgraded ROTH</b>  |                  |                           |              |        |             |
|                    | <b>HAA</b>   | <b>PCL (Space)</b>  |                  |                           |              |        |             |
|                    | Hy HALEs<br>Global Observer  |   |                  |                           | <b>PANDA</b> |        |             |
| <b>Approaches</b>  | <b>Zephyr</b>  | <b>ACINT</b>  |                  |                           |              |        |             |
|                    | <b>CASS</b>  |   |                  |                           |              |        |             |
|                    | <b>WASS F/O</b>  |   |                  | <b>Joint Fusion Study</b> |              |        |             |
|                    | <b>AEROSTATS</b><br><b>HALE</b><br><b>MALE</b><br><b>Manned A/C</b><br><b>AIRSHIPS</b> | <b>Radars</b><br><b>ENHANCED X-Band</b><br><b>W/ GOTS MULTI-INT</b> |                  |                           |              |        |             |
|                    | <b>CODAR/ROMR</b>  |   |                  |                           |              |        |             |
| <b>Near Shore</b>  |  | <b>PCL (Terrestrial)</b>  |                  |                           |              |        |             |
|                    |  | <b>CMA (SECRET)</b>   |                  |                           |              |        |             |
|                    | <b>MSS</b>   | <b>VTP</b>  | <b>CDVD/IE</b>   |                           |              |        |             |
|                    | <b>RMAC (unclas only)</b>  |   |                  |                           |              |        |             |
|                    |  | <b>MDA DS COI</b>   |                  |                           |              |        |             |
|                    | <b>HAWKEYE (+ several others)</b>  |   |                  | <b>ASU</b>                |              |        |             |



# All Domain Awareness



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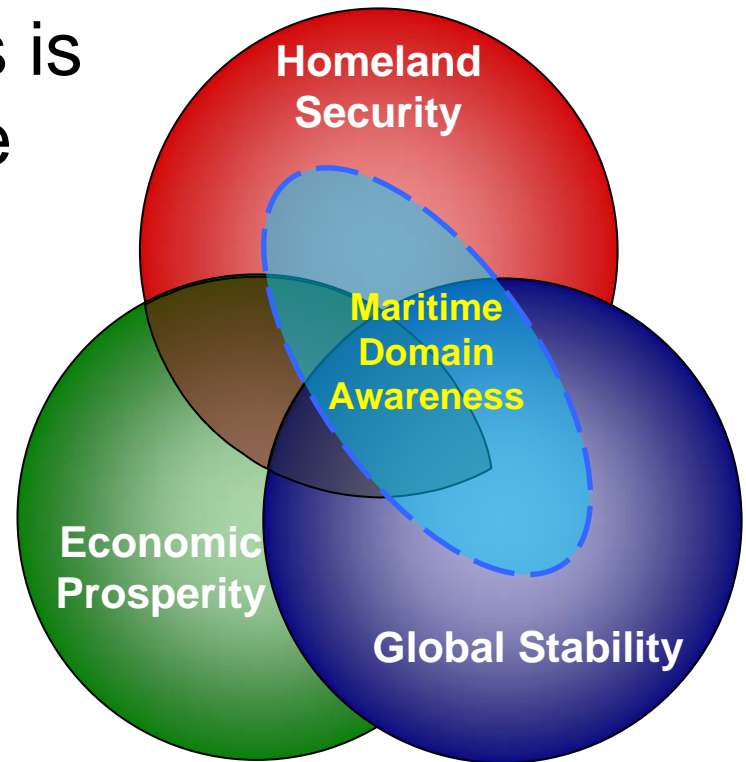


# *Maritime Domain Awareness*

## *The Bottom Line*



- Maritime Domain Awareness is a critical enabler for Maritime Security
- Maritime Security is a critical enabler for Global Stability
- Global Stability is a critical enabler for Economic Prosperity



**MDA is about Global Security, Stability and Economics**



