U.S. Coast Guard Command & Control (C2) Modernization

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Chief of C5I Capabilities

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CG-761 is the front door for C5I requirements and capabilities.

Command

Control

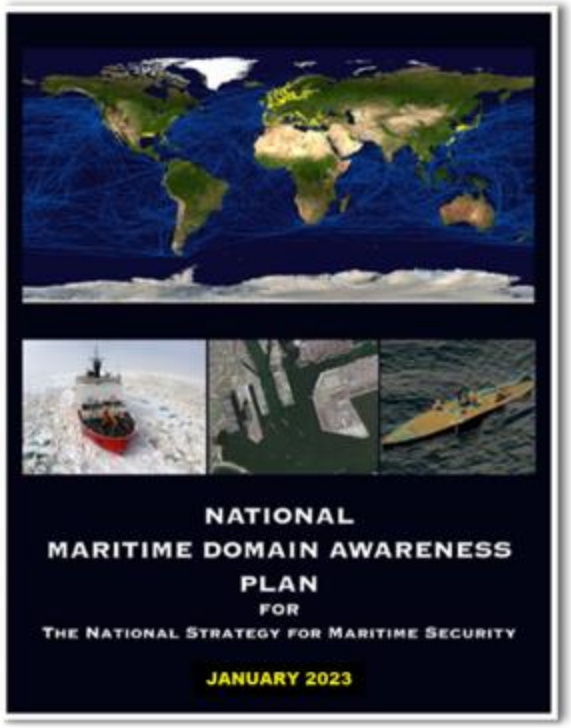
Communications

Computers

Cyber

Intelligence

National MDA and the USCG



Maritime Domain Awareness (MDA)[1] is the effective understanding of anything associated with the maritime domain that could impact the security, safety, economy, or environment of the United States.

The **Maritime Domain** is all areas and things of, on, under, relating to, adjacent to, or bordering on a sea, ocean, or other navigable waterway, including all maritime-related activities, infrastructure, people, cargo, vessels, and other conveyances.

Two Core Principles:

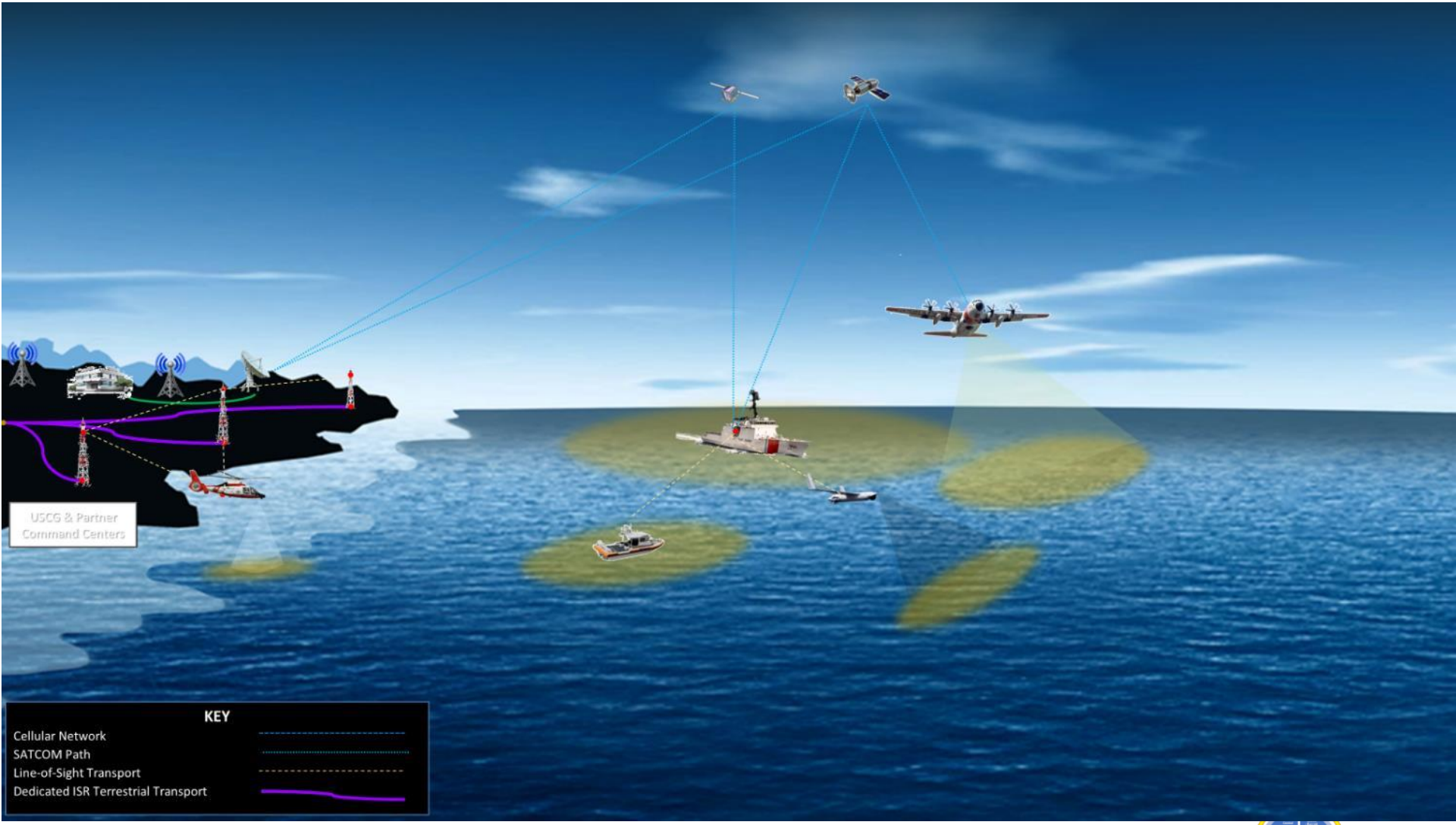
- Unity of Effort
- Foster Information Sharing and Safeguarding

The **USCG is the Executive Agent** for Maritime Domain Awareness oversight, strategic direction, and planning within the Department of Homeland Security[2].

Source:

1. *National Maritime Domain Awareness Plan* [Revision 3 of 2022; original December 2013)
2. *Maritime Domain Awareness (MDA) Executive Agent Designation [April 2008]*

Current State



Challenges

C2 Sensor and System obsolescence.

Bifurcated, disconnected, and stove-piped systems.

Lack C2 data infrastructure and environment to interface C2 data sources and enable data sharing across multi-level security environment to inform MDA decisions.

Inability to have real-time, two-way exchange of strategic, operational, and tactical data and plans to support mission goals and outcomes.

Inability to comprehensively monitor operational domains and ingest inputs from disparate sources, correlate/merge/fuse data, and allow operator interaction with data to output purposeful information.

Inability to visually display, organize, and link underlying data into a usable format for strategic, operational and tactical decision making.

Project Minerva

Sharpen Our Competitive Edge
Unite people, assets, systems, and data in new ways to design a more agile future force.

Project Minerva was chartered to "align Coast Guard efforts and... define the high-level **Next Gen Operational Data Ecosystem**..."

Deliver "improved **maritime domain awareness** and **decision advantage** through **interconnected, enterprise wide C5I capabilities**"

Project Minerva
Next Generation Command & Control (NextGen C2)

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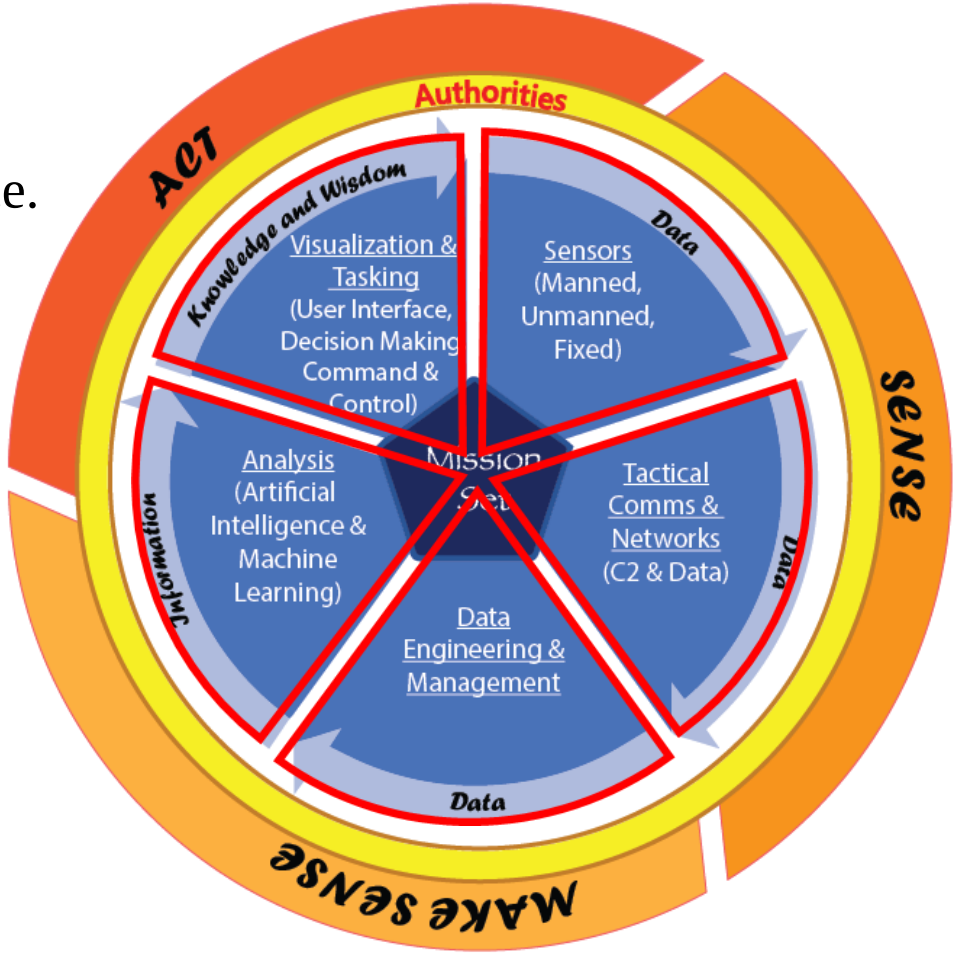
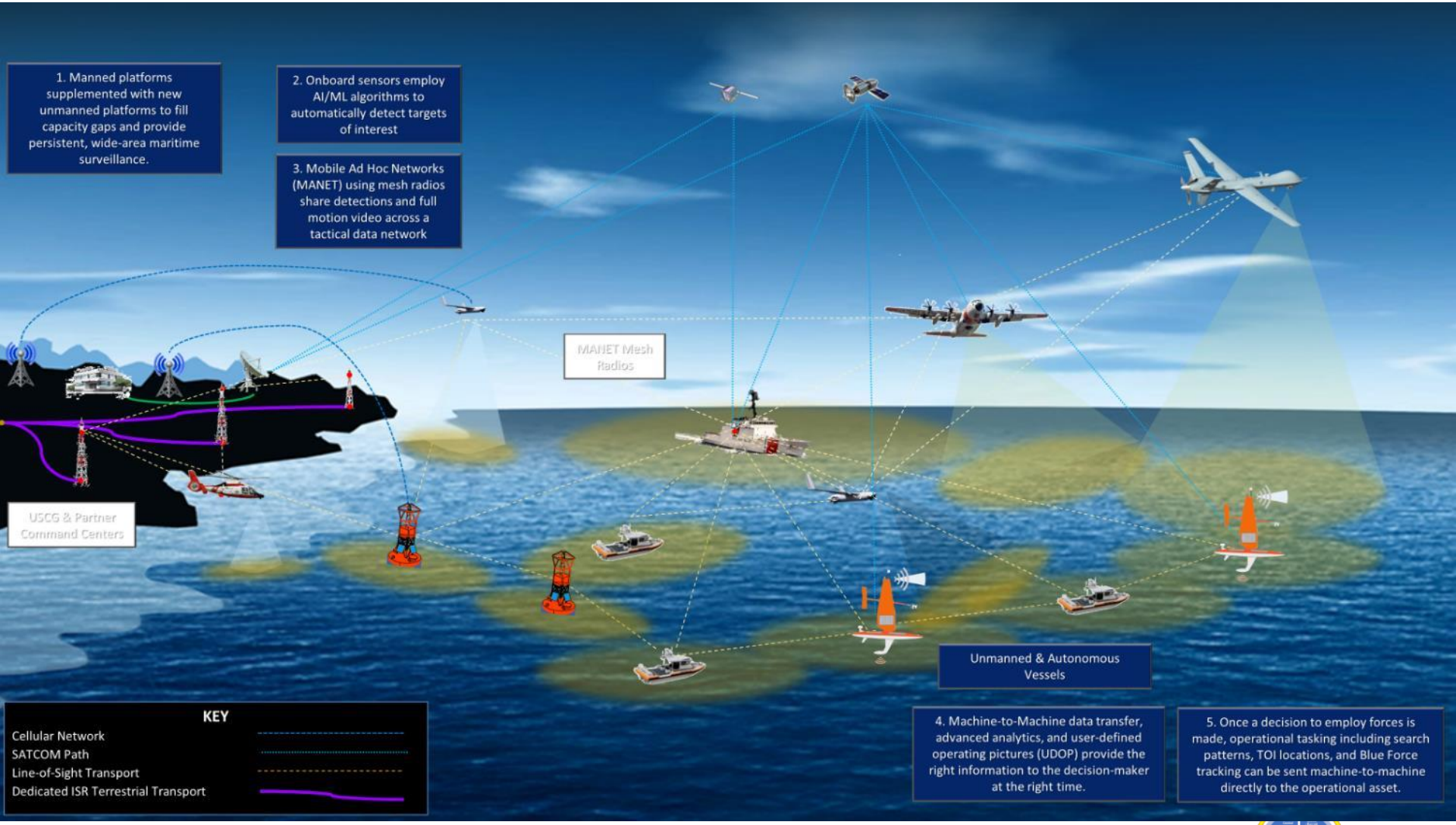
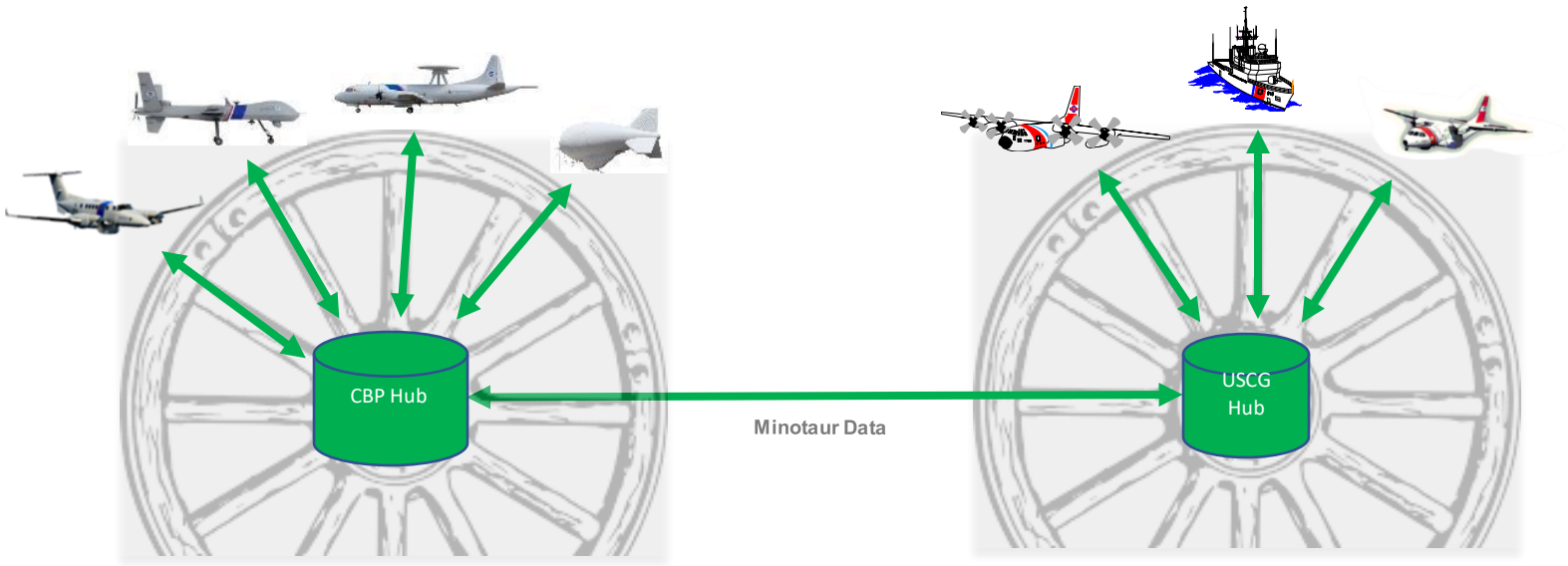


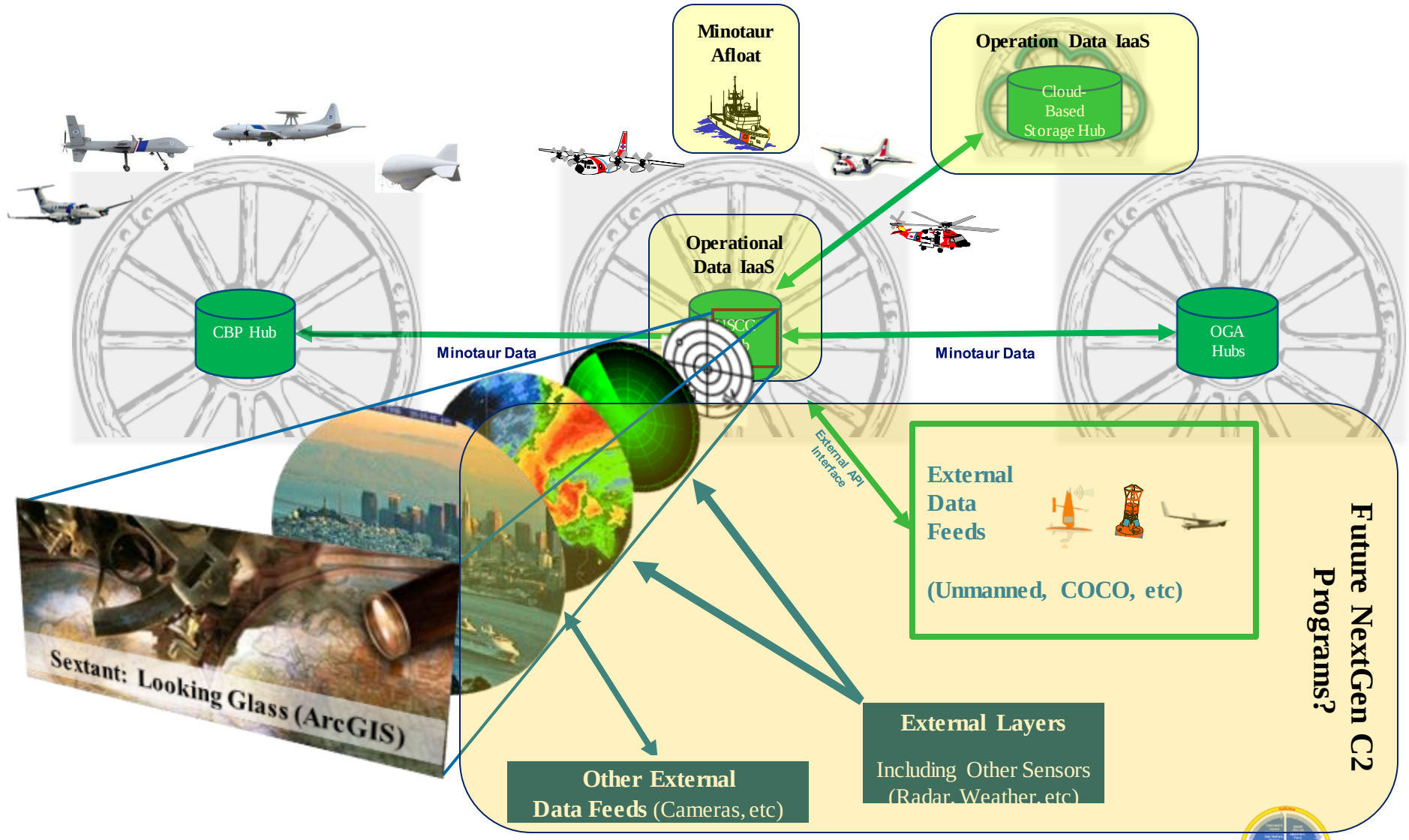
Future State



Minotaur

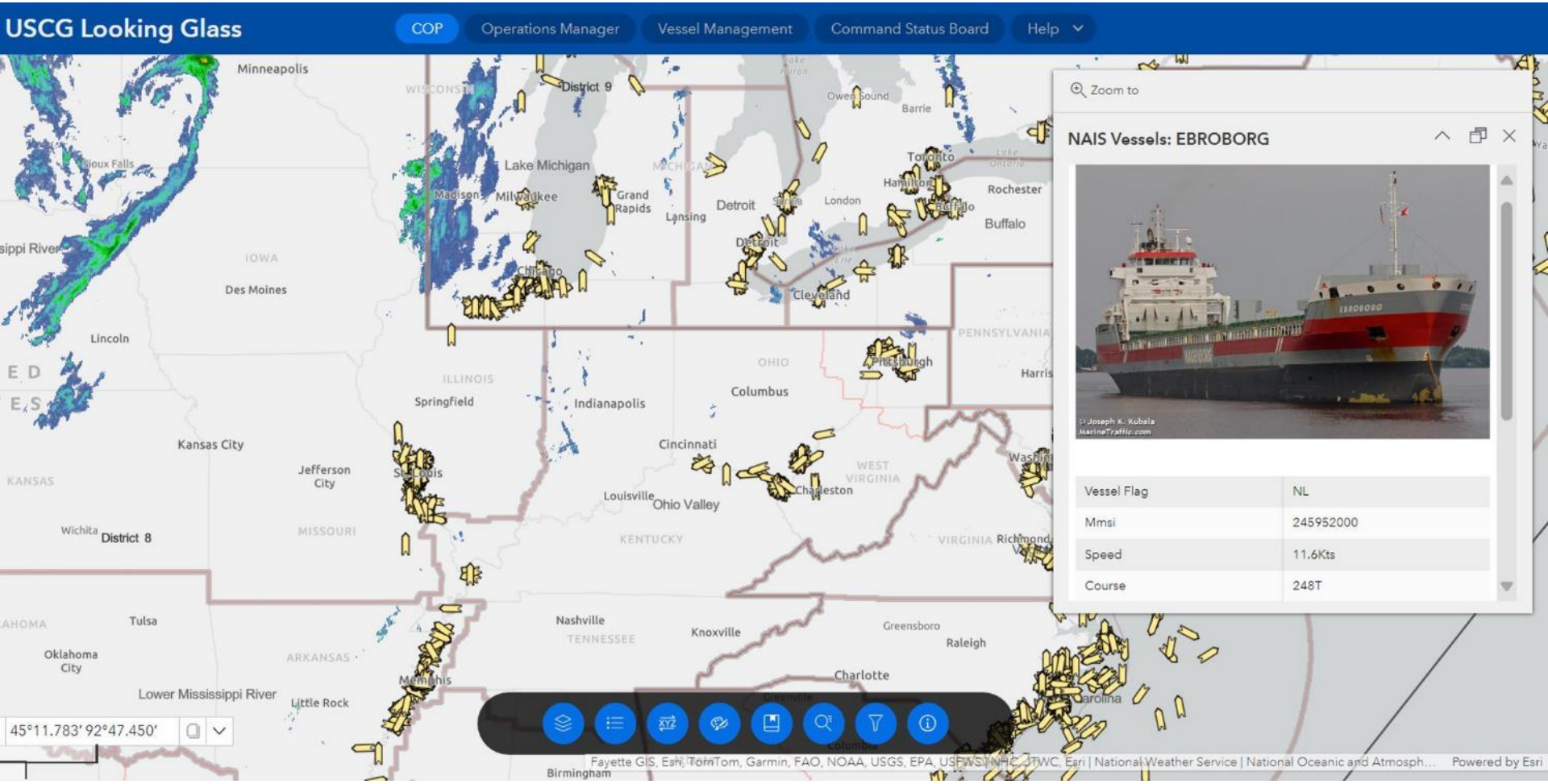


Future Architecture & Implementation

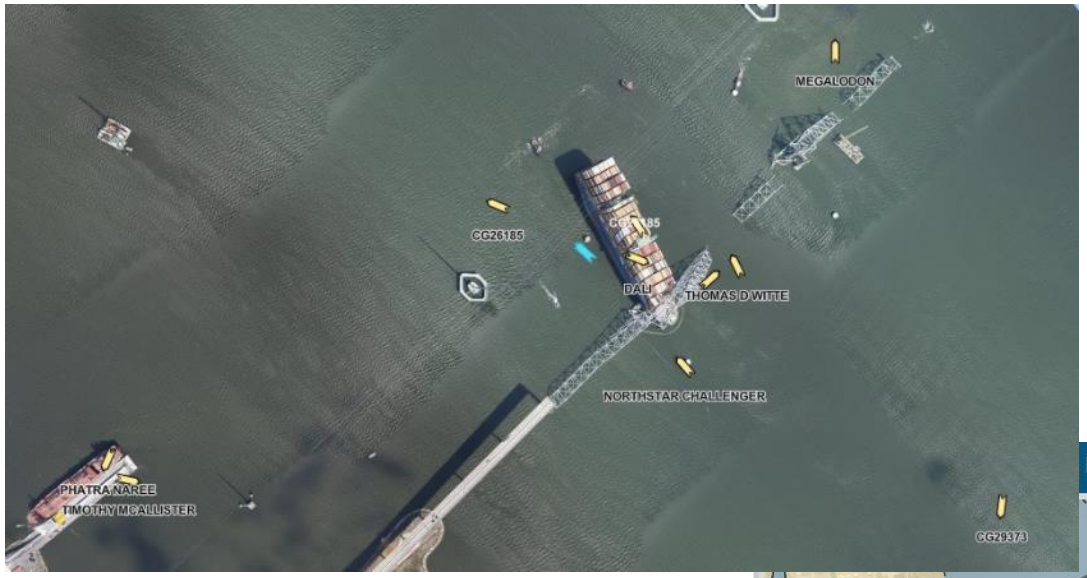


Visualization & Tasking: Sextant

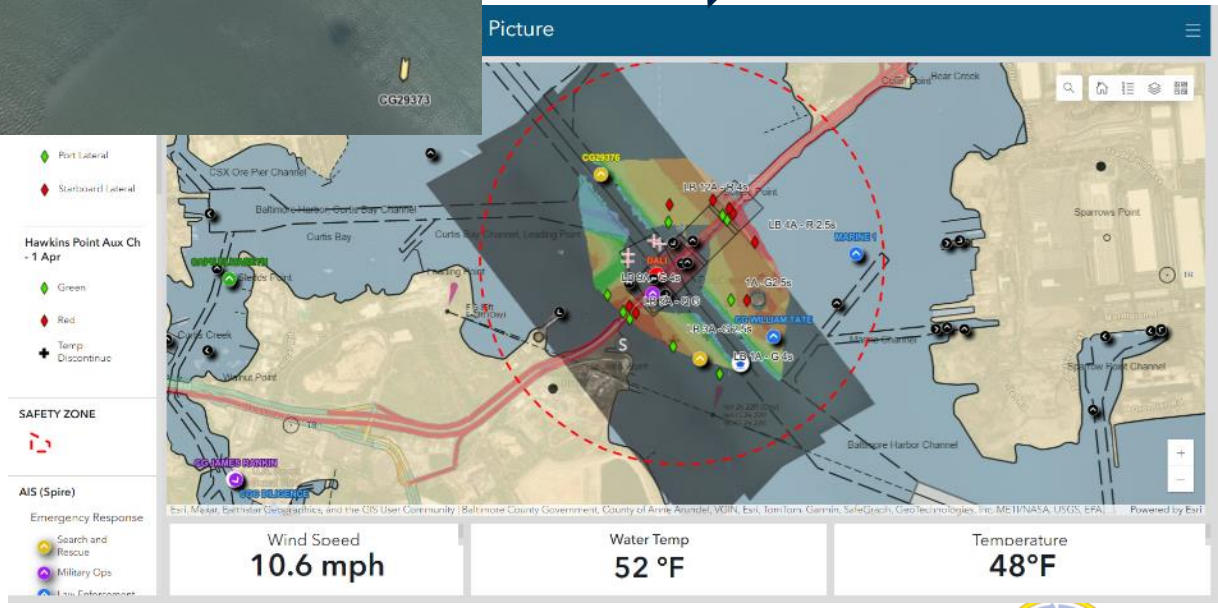
Sextant: Looking Glass COP



Visualization: Sextant



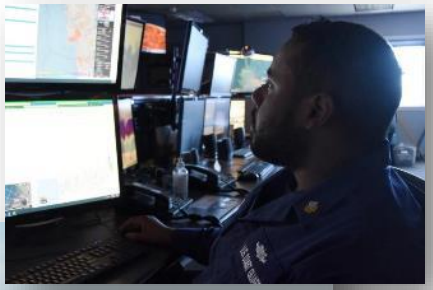
Rapid development of geographic imagery for emergency response



Shoreside Capabilities

Recapitalization and modernization efforts underway to enhance C5I and Sensor capabilities:

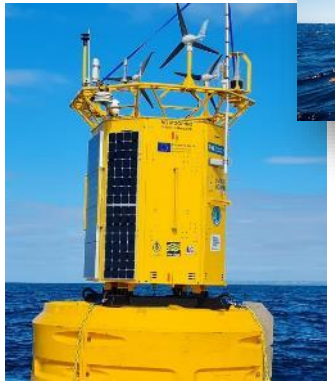
- Persistent Wide Area Maritime Surveillance (PWAMS)
- Nationwide Automatic Identification Service (NAIS)
- Maritime Public and Tactical Comms (i.e. R21, VDES)
- Vessel Traffic Service (VTS)



Platform Capabilities

Recapitalization and modernization efforts underway to enhance C5I and Sensor capabilities:

- Fixed Wing
- Helicopters
- Cutters
- Patrol Boats
- Small Boats
- Unmanned

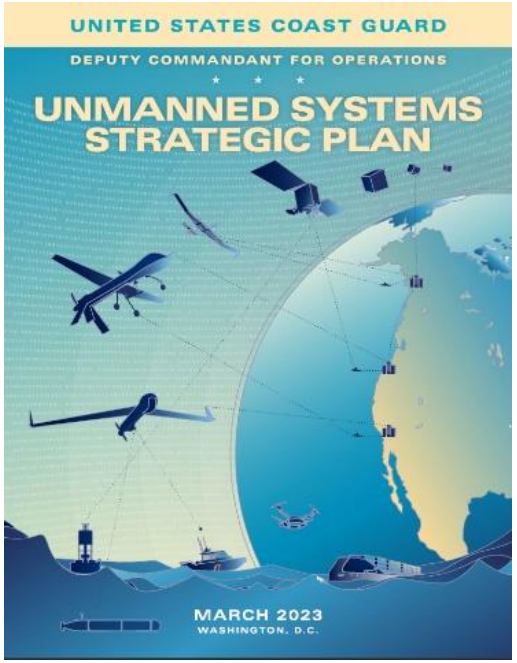


Unmanned Systems

VISION STATEMENT:

The Coast Guard effectively employs, defends against, and regulates unmanned systems in a complex maritime environment advancing maritime safety, security, and prosperity for the American public.

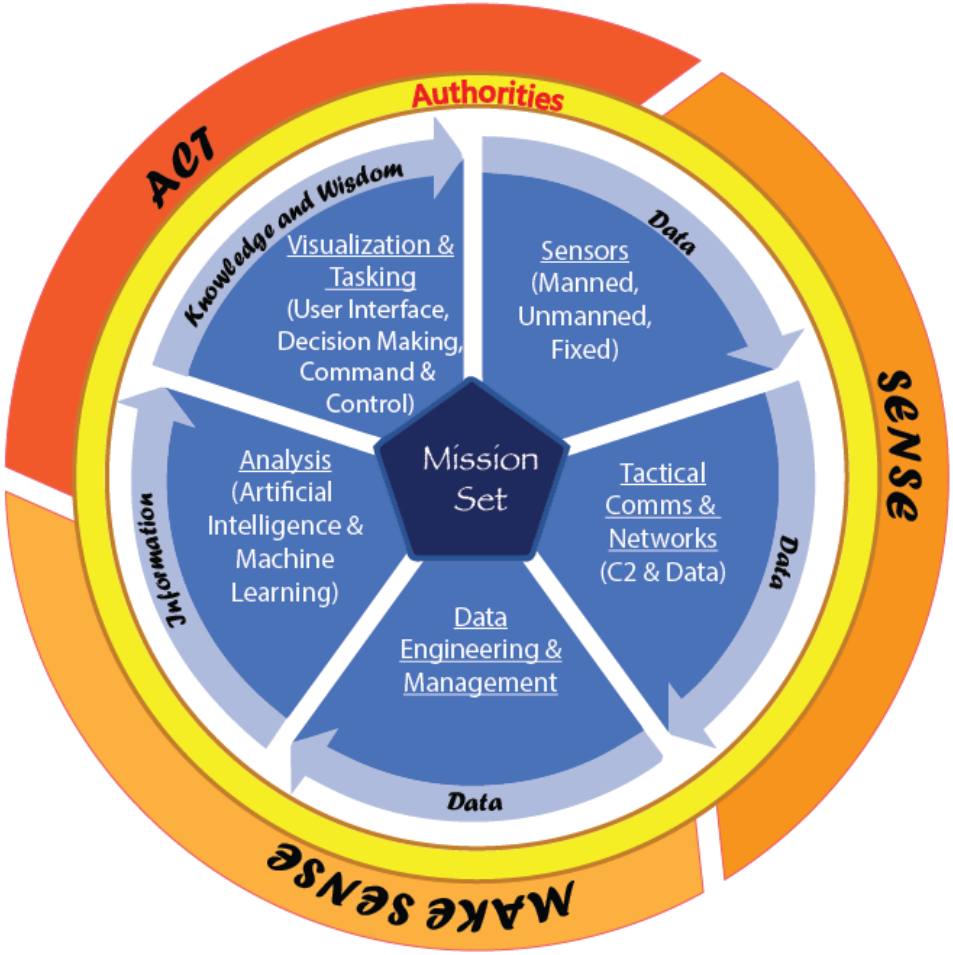
- Unmanned Systems Strategic Plan:



Project Minerva

The Goal is to deliver:

- **The right information,**
- **To the right user,**
- **At the right classification,**
- **At the right time,**
- **Via the right route,**
- **For the right reason,**
- **On the right device.**



Questions

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