



Netted Sensors “The Art of the Possible”

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Top Level Guidance



Secretary of Defense

Aug 07

*“The heart of the Maritime Domain Awareness program is accurate information, intelligence, surveillance, and reconnaissance of all vessels, cargo, and people extending well beyond our traditional maritime boundaries. Follow the Global Maritime Intelligence Integration Plan. **Utilize existing capabilities to integrate all available intelligence** regarding potential threats to U.S. interests in the Maritime Domain.”*

Assistant Secretary of Defense

Jan 09

*“A plan must be in place to manage the **ISR sensor tasking, dissemination, and exploitation** across BM & C2 and ISR networks.”*

Naval Network Warfare Command

Mar 07

*“Develop **persistent ISR from the AF C2 Constellation & Naval Forces FORCEnet** envisioned capabilities.”*

Numbered Fleets

Ongoing

*“Fleet requires reliable and sustainable COP that supports Joint and Coalition Operations. To include Blue force locator for Joint Ops, Multi-TADIL (LINK), and an improved automatic correlation capability. There continues to be need for a User Defined Operational Picture (UDOP), to **provide more than just track data.**”*

C2/ISR Sensor Strategy



Organizations

Multi-agency
Civil
Coalition
DOD

Missions Areas

Homeland Defense
GWOT
MDA
BMD
Counter Drug



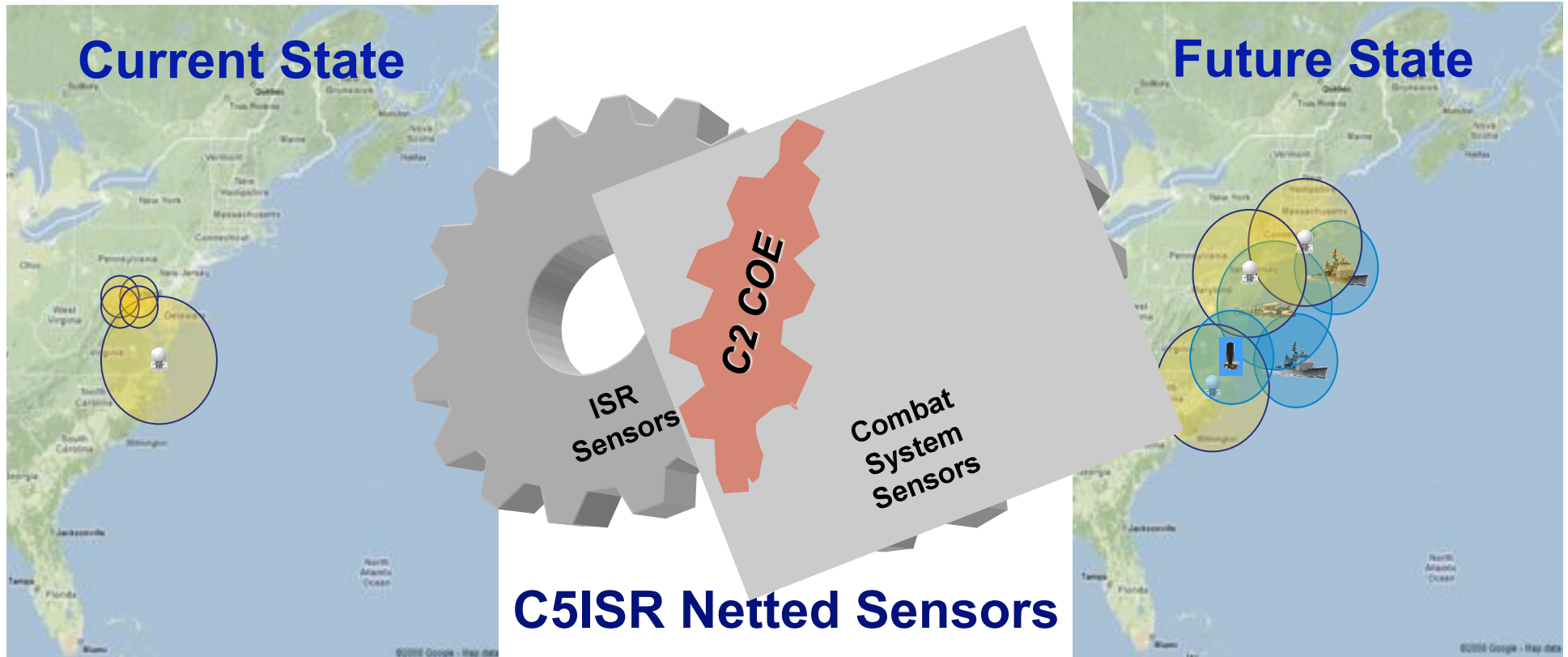
Systems Functions

National Sensors
Tactical Sensors
Combat Systems
Unmanned Sensors

IMINT
MASINT
SIGINT
CI / HUMINT
OSINT
LEA/Commercial
METOC

A single identical display of relevant info shared by more than one command, supporting an operational enterprise beyond DOD, with a dynamic tailoring capability to support real-world OPS and future planning requirements.

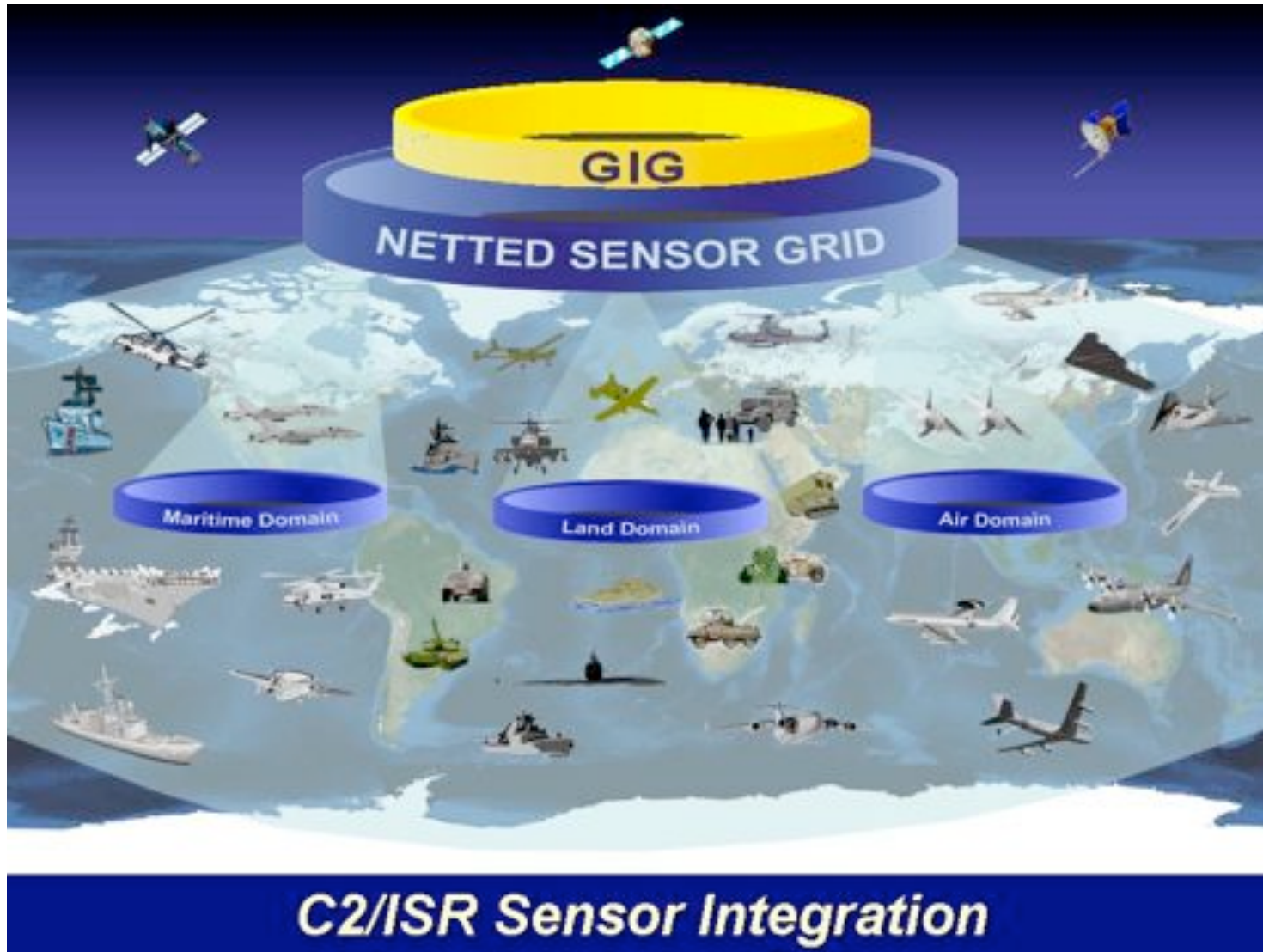
Netted Sensors Way Ahead



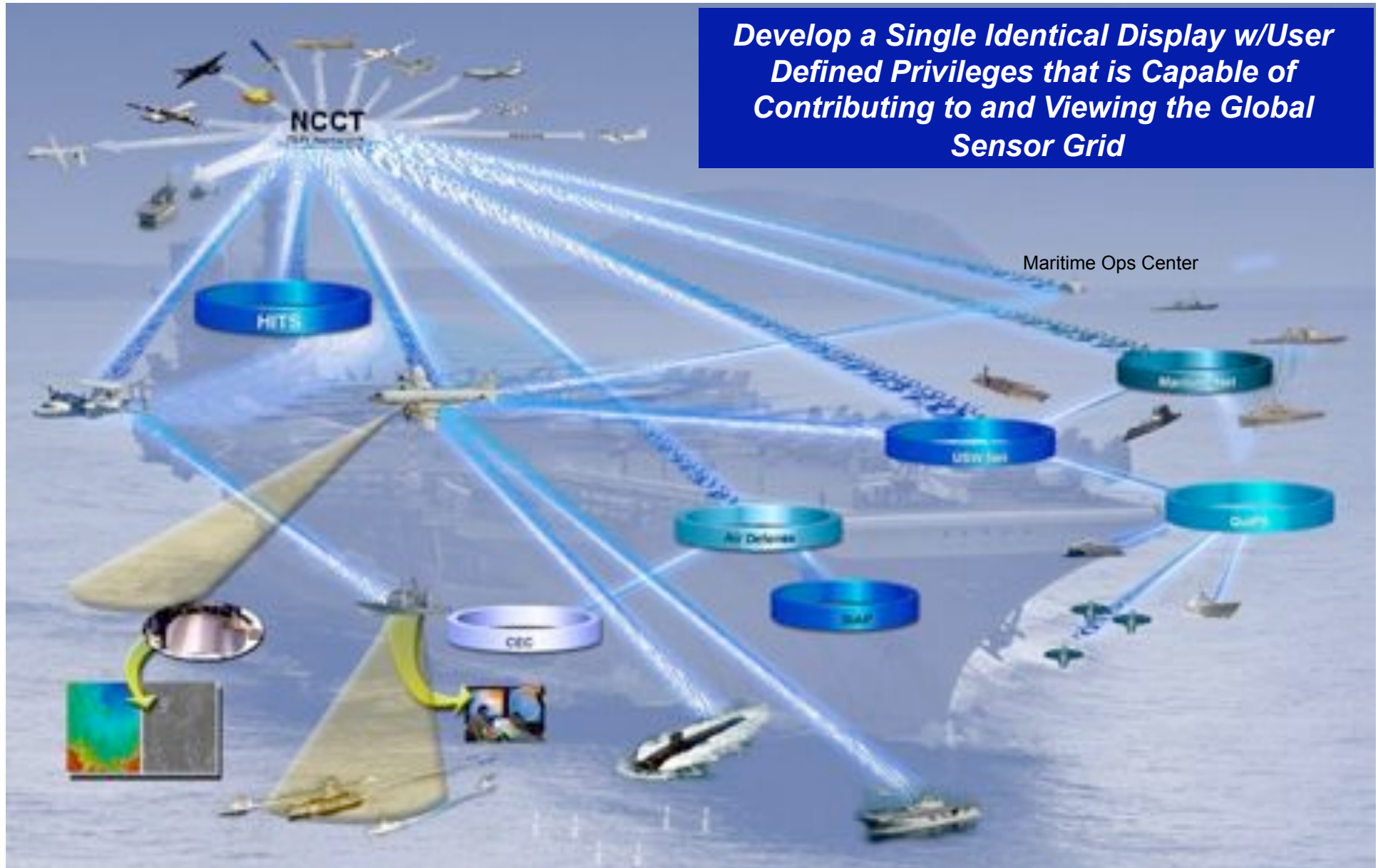
“The ability to share extremely accurate information (raw sensor measurement data) in real time between ships, aircraft, and land-based air-defense units. All sensors and weapons will be used in a common battle space to the full extent of their capabilities and displayed on a Common Operating Picture”

- Office of the CNO

Big Picture (To Be)



The Big Picture (Current Concepts)



Challenges



- **Data Structure**
 - Various Information Architectures utilize different data sets
- **Data Strategy / Management**
 - Operators overwhelmed with information
 - Fusion and dissemination cause data integrity concerns
 - Multi Level Security
 - Cross Domain Solutions
- **Number and Flavor of Common Operating Pictures**
 - Based on Classification, Missions, and Service Components
- **Integration and Interoperability**
 - Combat Systems Data w/ISR
- **Barriers**



Questions?