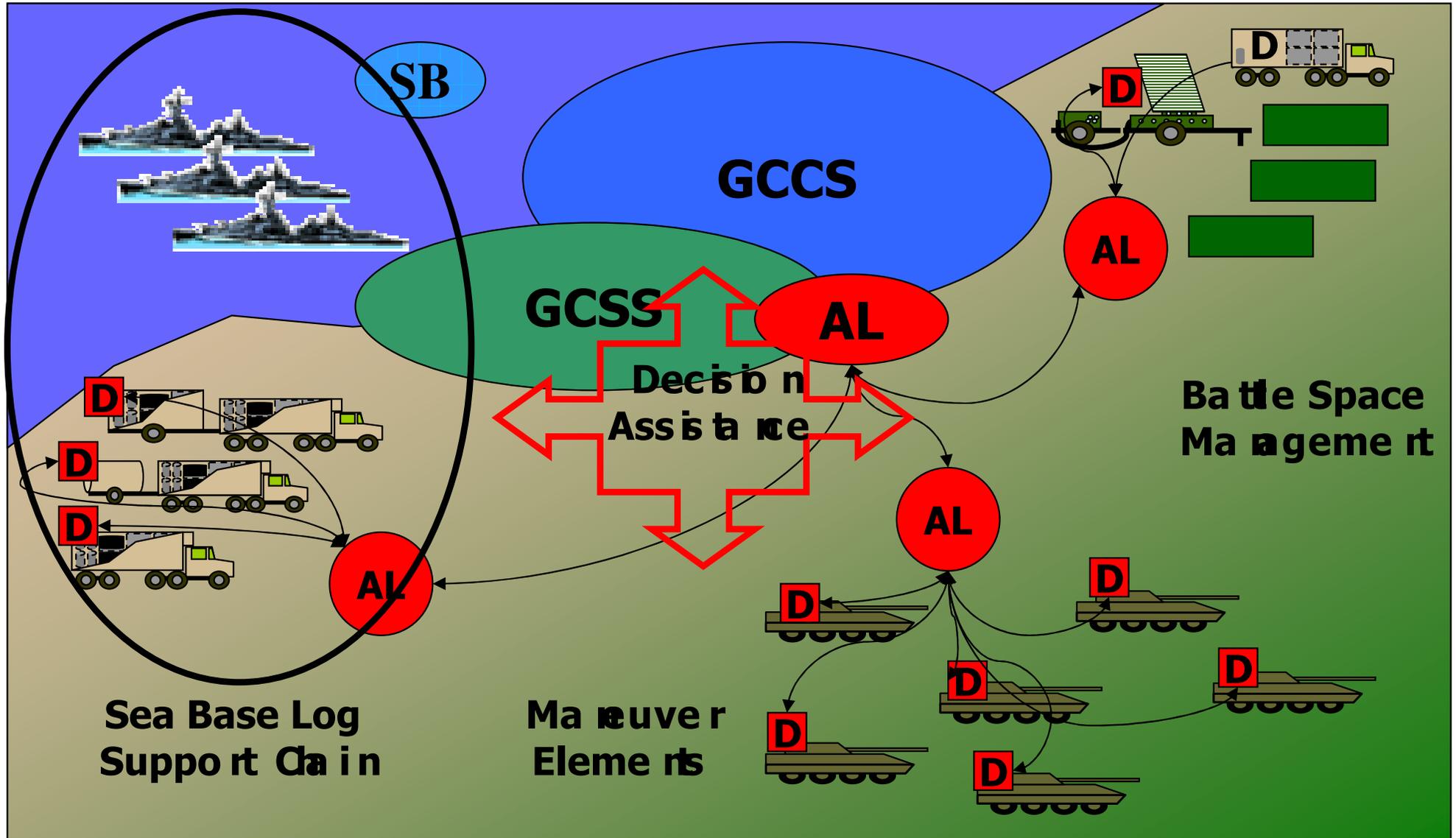


Sense and Respond Logistics

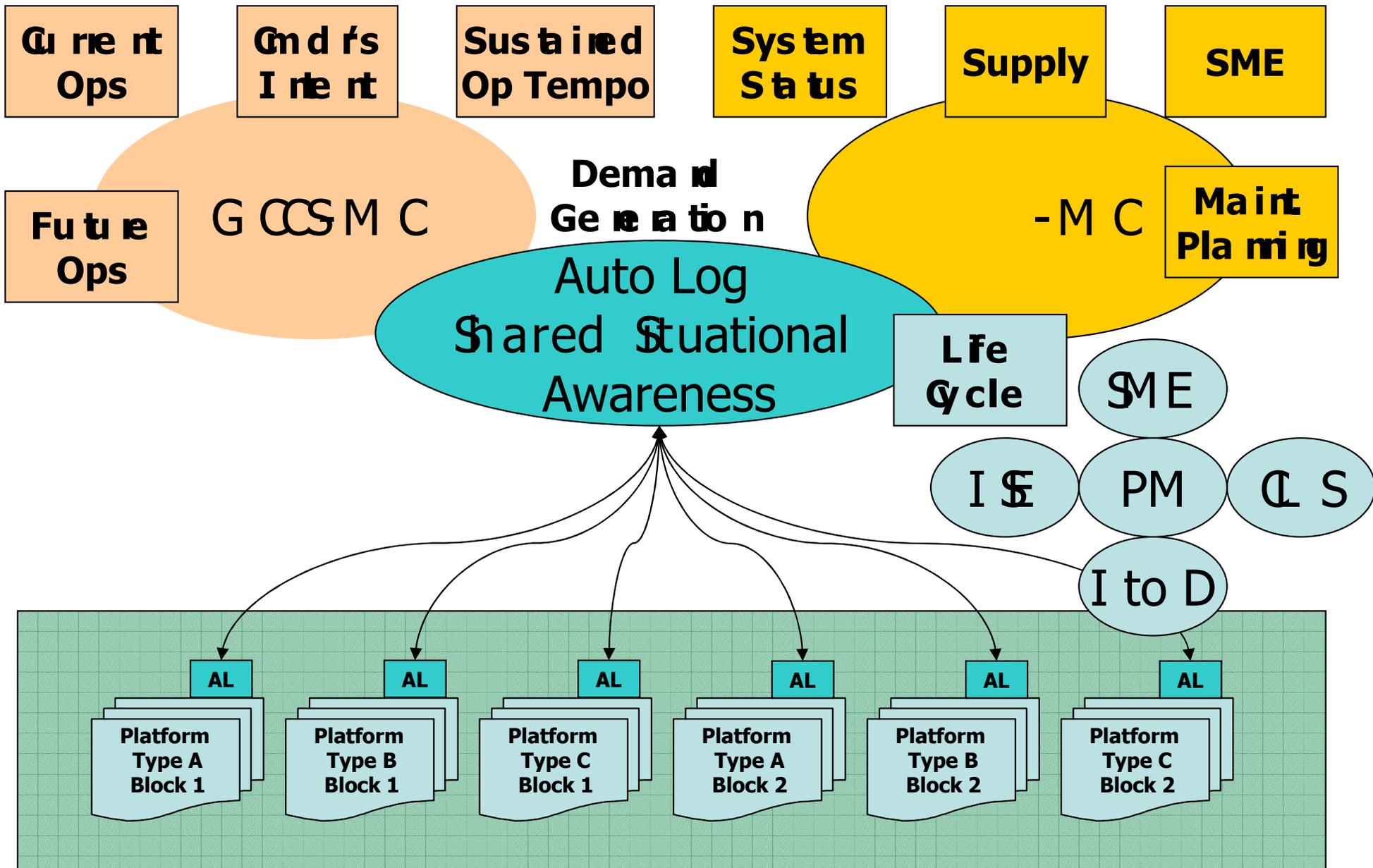
Lynn Torres

Office of Naval Research

Combat Capability vice Platform



System View



Modular Design

Demand Response

Demand Generation

Top Degraders

Weapon System Specific

Subsystem X

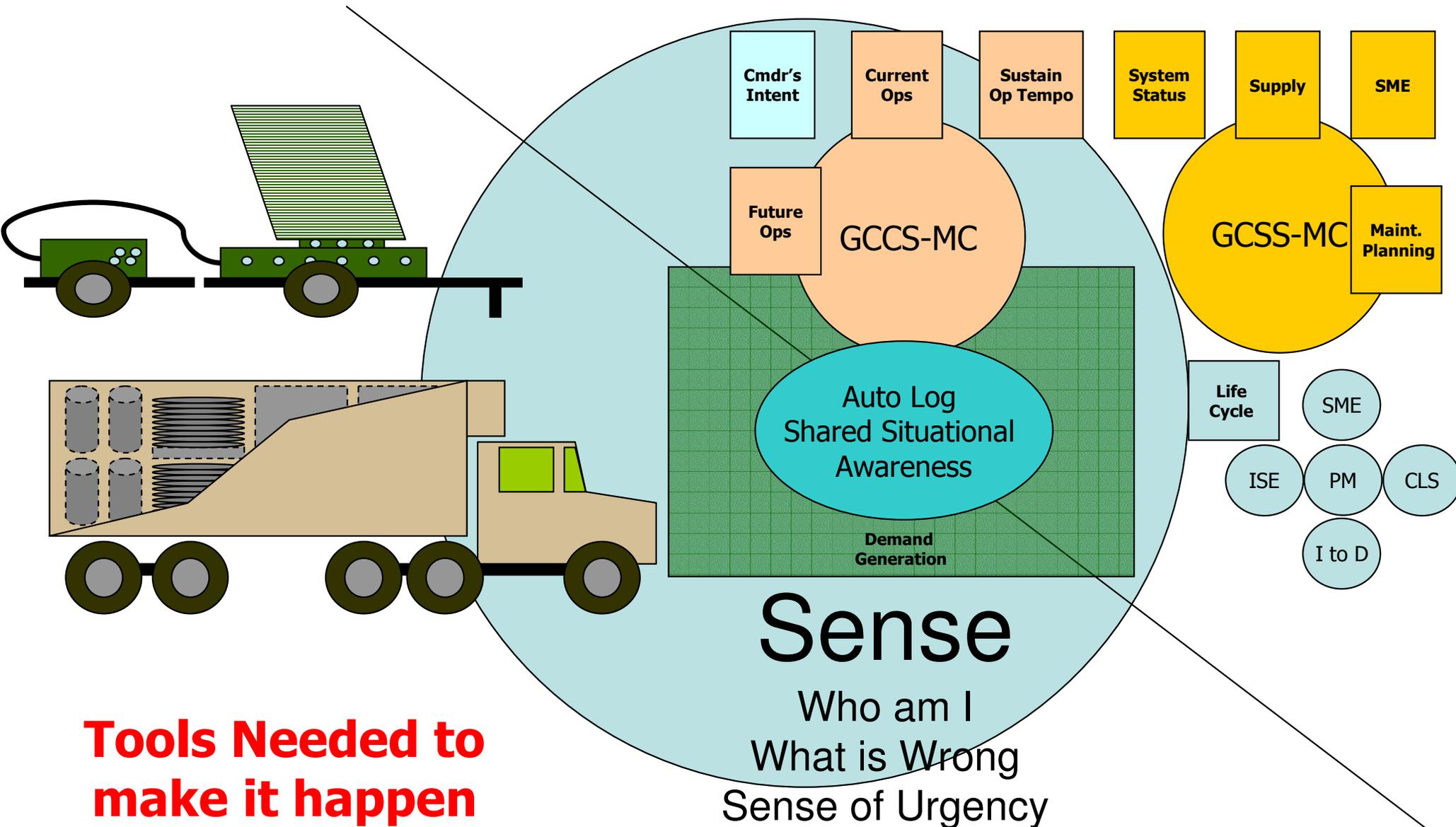
Subsystem X

Subsystem X

Multiple Weapons Systems

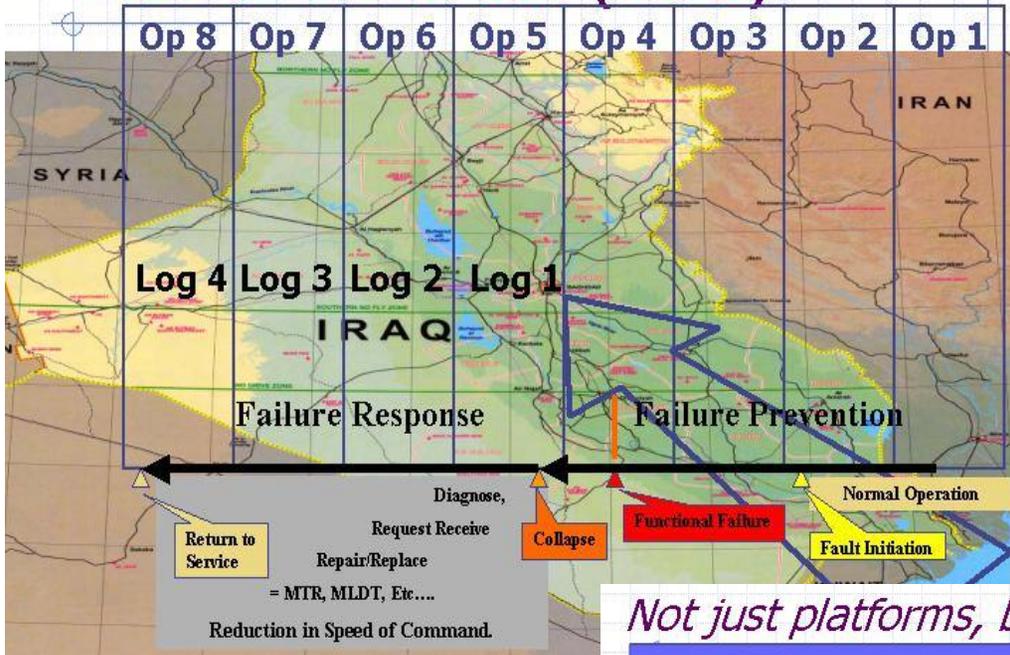
Respond

What do they need
How do I get it there

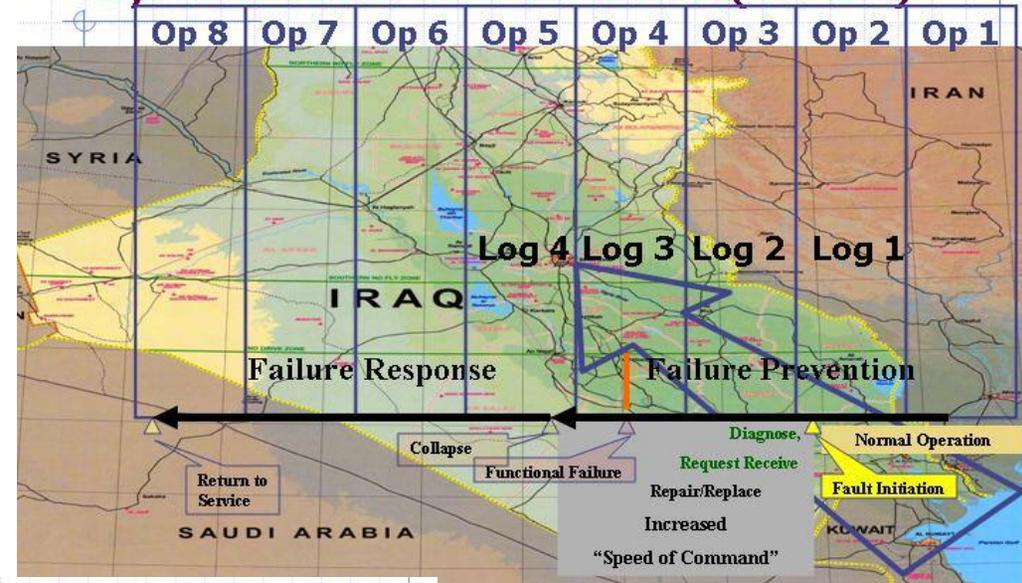


Auto Log Desired End State

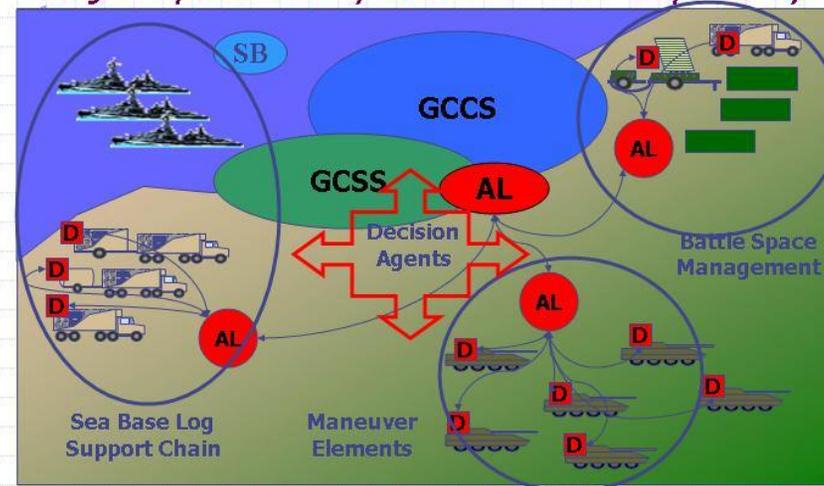
Latent Awareness (As Is)



Synchronized Awareness (To Be)



Not just platforms, but Combat Capability



Initial High Pay-Off Targets Areas

Status >> Demand
GCSS- System Based

Demand "Message"

Log/Suppl

Allocate

Prioritize
Deconflict

SENSE

Command Control
Commanders Intent
Tactical Objectives
Plan: who, what & when

RESPONSE

Asset Visibility
Status of Consumables
System Health

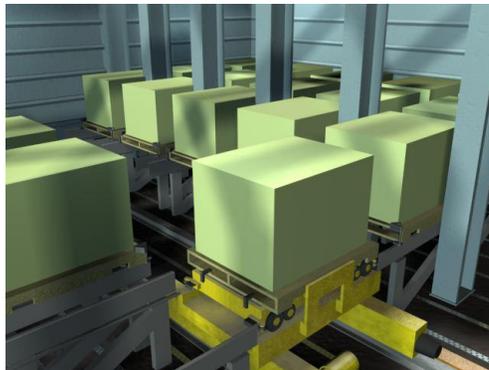
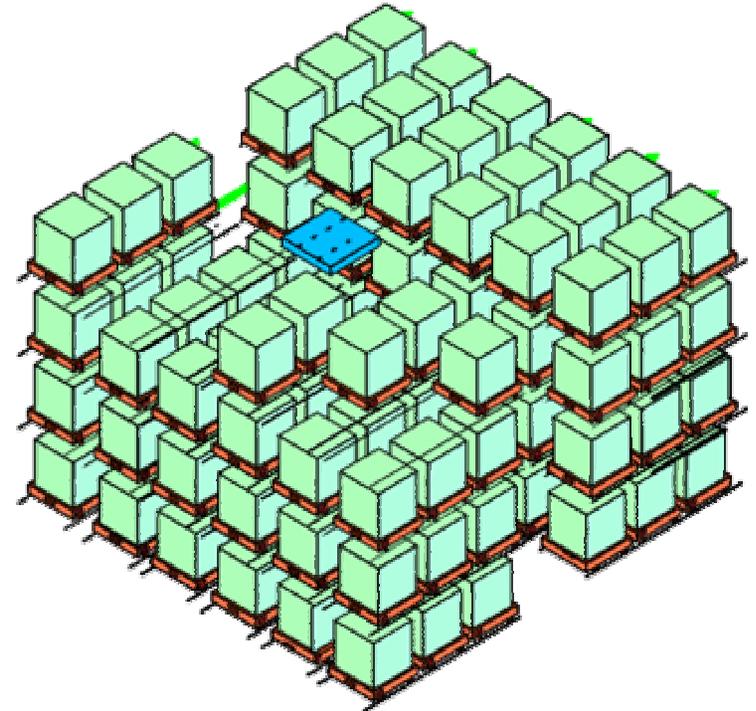
Diagnostics & Prognostics
Platform Based

Need the Operational Viewpoints
of: Asset operator; Combat;
maintainer; CSS; Log/supply; C2
;PM

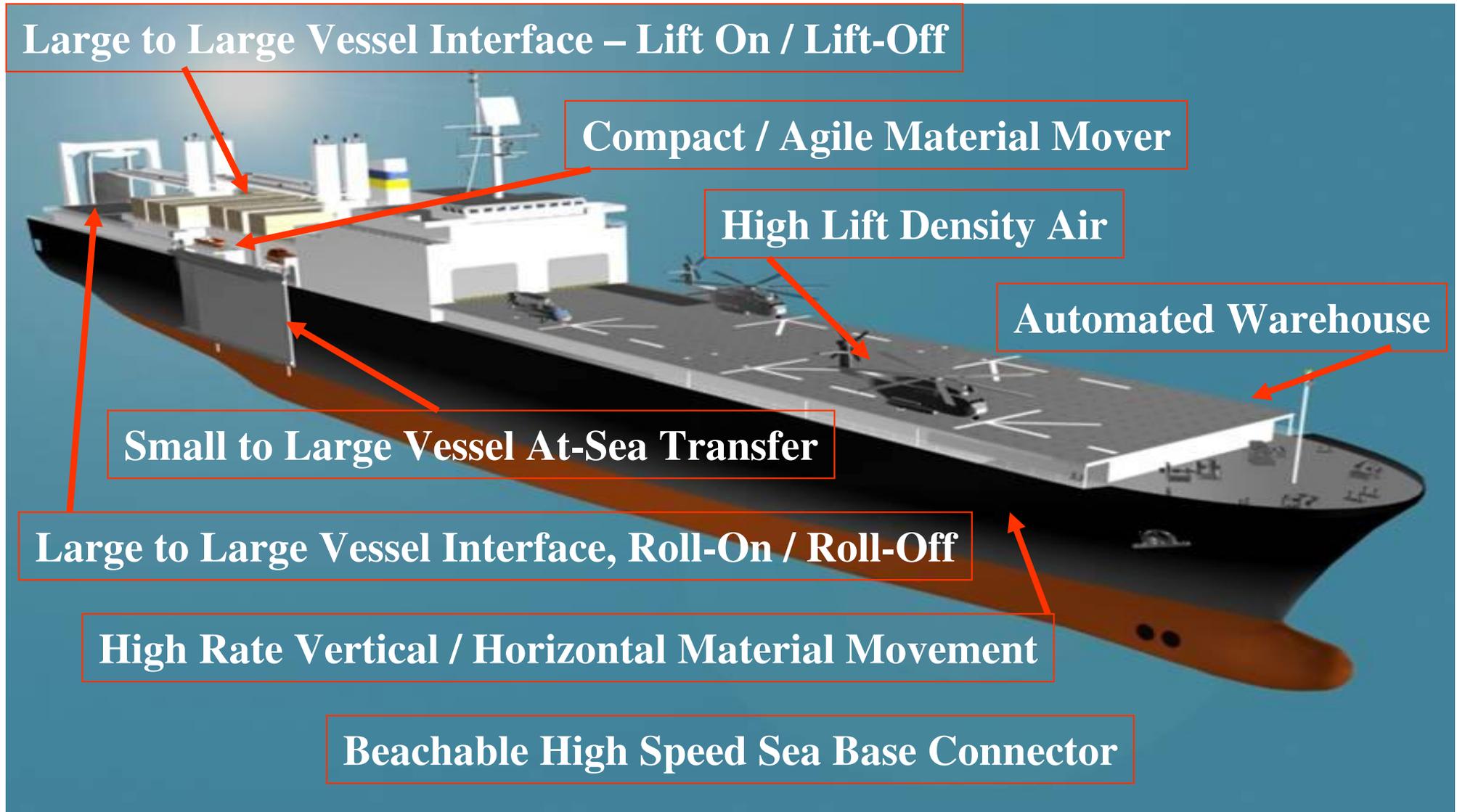
Automated Stowage & Retrieval (ASRS)

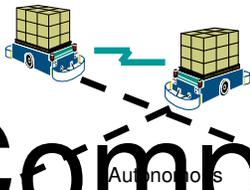
Automated Warehouse:

- Automated selective retrieval
- Automated cargo restraint
- Large container scalability
- Workload reducer



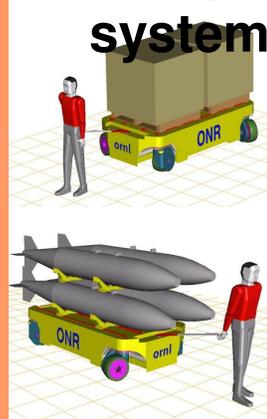
Potential DoN S&T Contributions to future MPF(F)





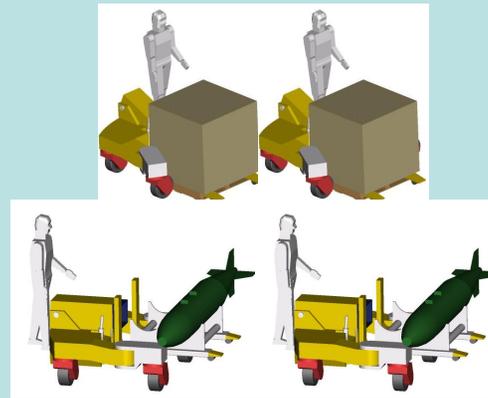
Compact Agile Material Mover

10-12,000 lb payload



High sea state ops
1 system
1 Sailor/Marine
1 Round-trip

5,000-6,000 lb payload



High sea state ops
2 systems
2 Sailors/Marines
2 Round-trips

Human Amplification Technology:

- Very high payload transporters / lifters
- Highly mobile
- Workload reducer
- Low ship design impact - Backfitable

Current system



High sea state ops not possible
4 (2) systems
8 (2) Sailors/Marines
2 RT – elevator/4 RT - travel