



ACQUISITION INNOVATION  
RESEARCH CENTER



## *THE NEED FOR THREE PORTFOLIO MANAGEMENT STRUCTURES*

*PORTFOLIO PERFORMANCE ANALYSIS AND VISUALIZATION (WRT-1057.18c)*

***JOHN DRIESSNACK, JDRIESSN@UMD.EDU***

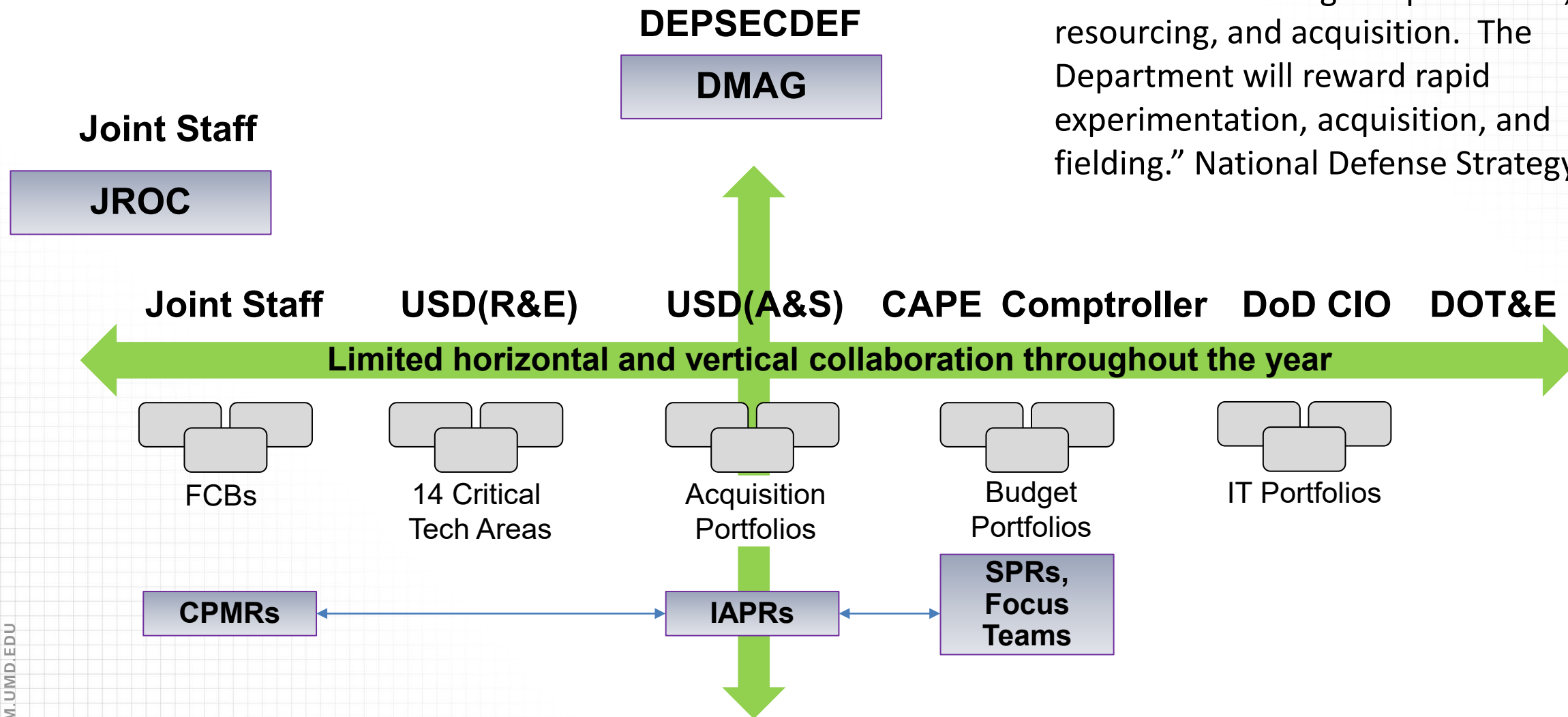
**NPS Acq Symposium  
May 11, 2023**



# DoD Portfolio Management

- DODD 7045.20 CPM
- DODI 8115.02 IT PFM

“We will better align requirements, resourcing, and acquisition. The Department will reward rapid experimentation, acquisition, and fielding.” National Defense Strategy

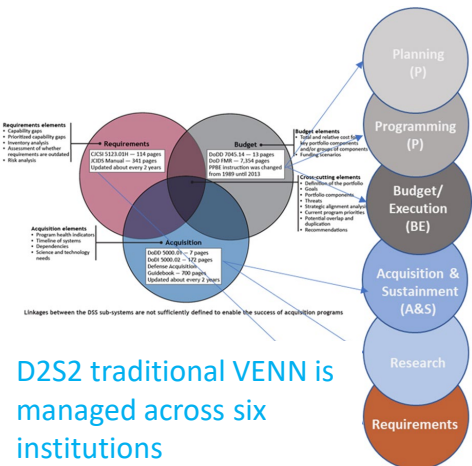


# Multidimensional Portfolio Framework - Kaleidoscope Model

## Deputy's Management Action Group (DMAG)

- Program-Resource Management Group (PRMG) - CAPE
- Innovation Steering Group – USD (R&E)
- Defense Strategy Steering Group USD (Policy)
- Acq & Sustain related bodies – USD (A&S)
  - DAB
  - Nuclear Weapons Council
  - ...

## Enterprise Portfolio (integrates across portfolios)



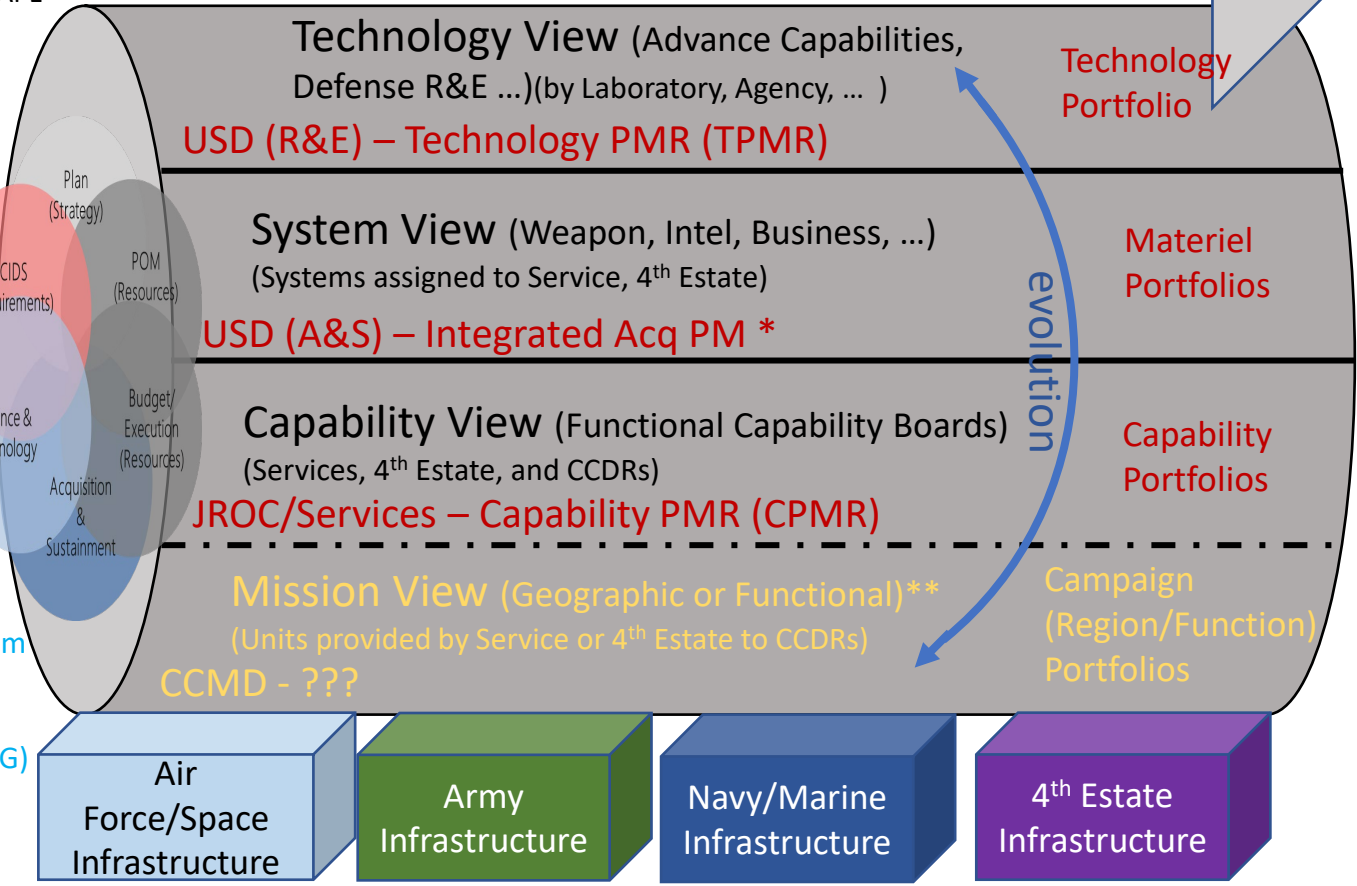
DoD Decision Support System D2S2 (only integrates through DMAG)

D2S2 traditional VENN is managed across six institutions

**Total Life-Cycle View (Execution + Budget + POM + Strategy (20 plus years))**

Future Systems & Technology Concepts .....  
 Systems & Technology in Development.....  
 Systems in Production.....  
 Systems in Operations and Sustainment

**TIME - USD (C) (E/B) – then CAPE (POM) – then USD (P) (Planning)**



**Technology View (Advance Capabilities, Defense R&E ...)(by Laboratory, Agency, ... )**

**USD (R&E) – Technology PMR (TPMR)**

Technology Portfolio

**System View (Weapon, Intel, Business, ...)**  
 (Systems assigned to Service, 4<sup>th</sup> Estate)

**USD (A&S) – Integrated Acq PM \***

Matériel Portfolios

**Capability View (Functional Capability Boards)**  
 (Services, 4<sup>th</sup> Estate, and CCDRs)

**JROC/Services – Capability PMR (CPMR)**

Capability Portfolios

**Mission View (Geographic or Functional)\*\***  
 (Units provided by Service or 4<sup>th</sup> Estate to CCDRs)

CCMD - ???

Campaign (Region/Function) Portfolios

Air Force/Space Infrastructure

Army Infrastructure

Navy/Marine Infrastructure

4<sup>th</sup> Estate Infrastructure

ALIGNED COMBAT CAPABILITY across DOTmLPP-P

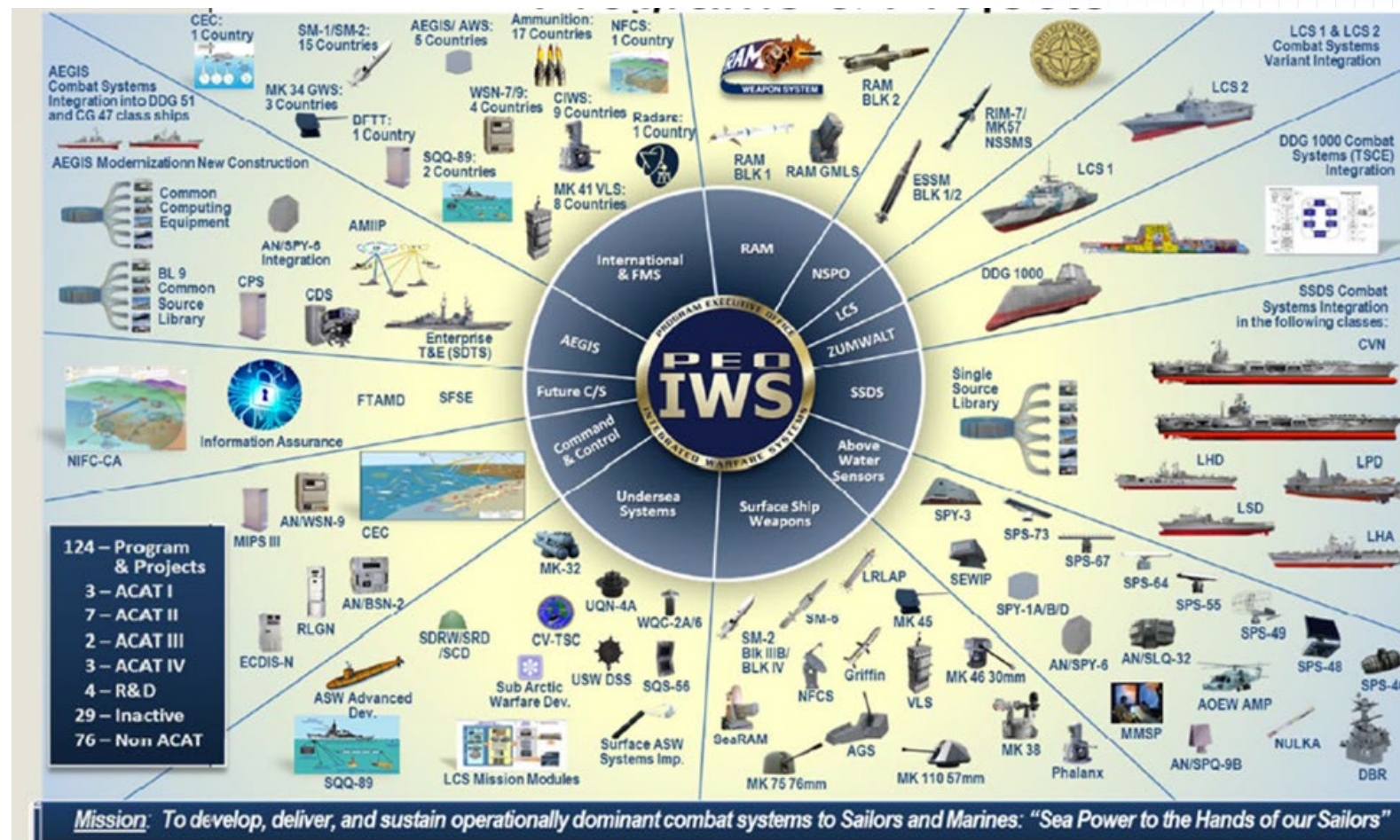
The D2S2 Capacity & Capability assigned to Services/4<sup>th</sup> Estate

\* IAPR is part of DoDD 7045.20, but systems managed by MDA by DoDD 5000

\*\* JCIDS does not outline a Mission view. Has “task list” view, which need to be combined to make missions

# PEO IWS Portfolio Management Challenge

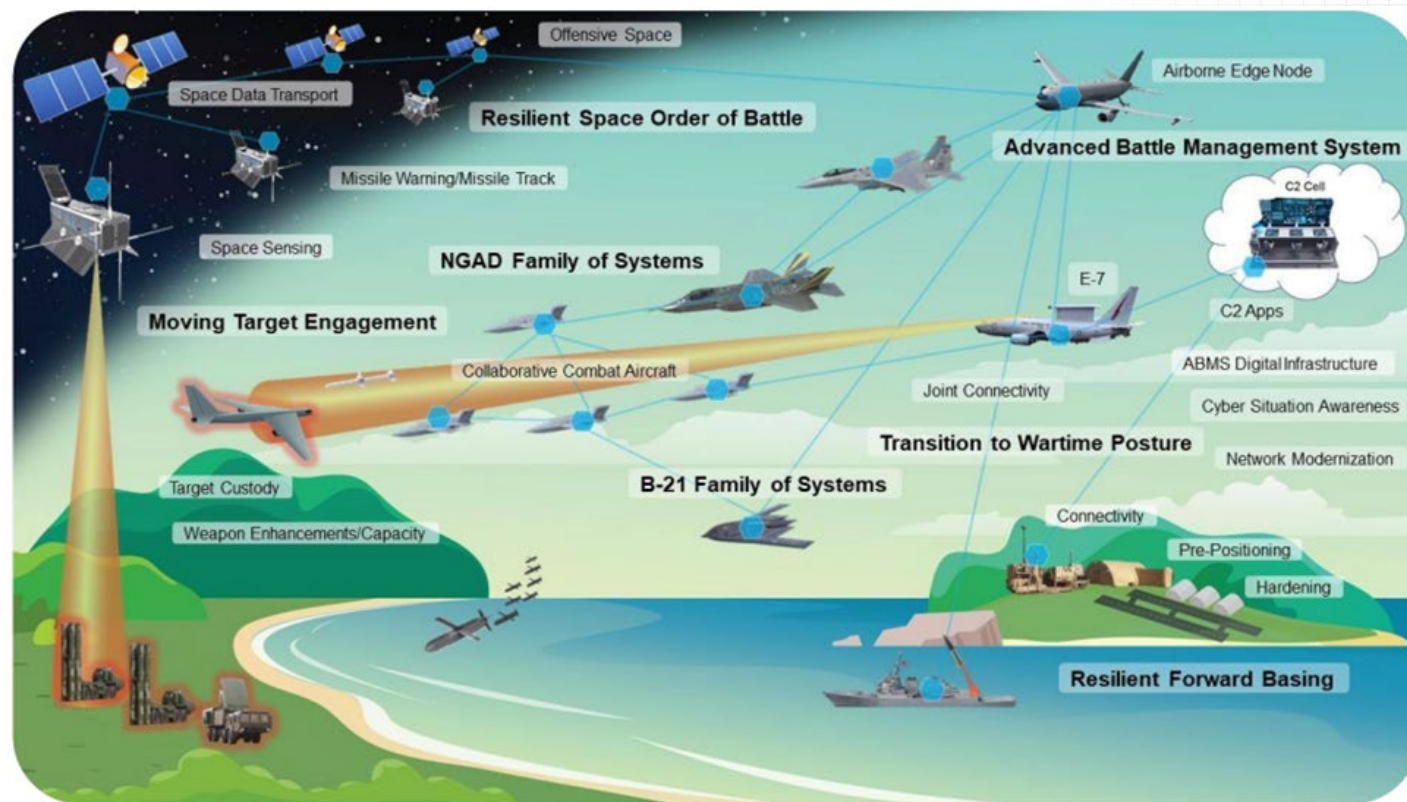
- You can't find PEO IWS in the Budget/POM! No sort for the portfolio, not even programs of record
- Defined by Budget Structure limited alignment
  - Project in budget is not necessarily a project in the program?
- The FORGE software factory is not a program of record!
  - A key effort not captured
- Data structure doesn't consider capability or mission data needs



# Capability/Mission Challenge

## DAF FY24 Budget/POM Operational Imperatives

- SECAF drove “capability” view through OIs – cuts across PEO structure
- Aggregate of OIs focused on pressing mission needs through cross-functional teams
- OI #2 DAF Battle Network
  - BA 4 and 5 - R docs
  - Cover half dozen efforts
  - PEO C3BM has identified Dozens of Programs across DAF
- What is the portfolio structure?



DAF FY24 Budget Brief (AF Comptroller website)

# Multidimension Portfolio Cube

## Three dimensions

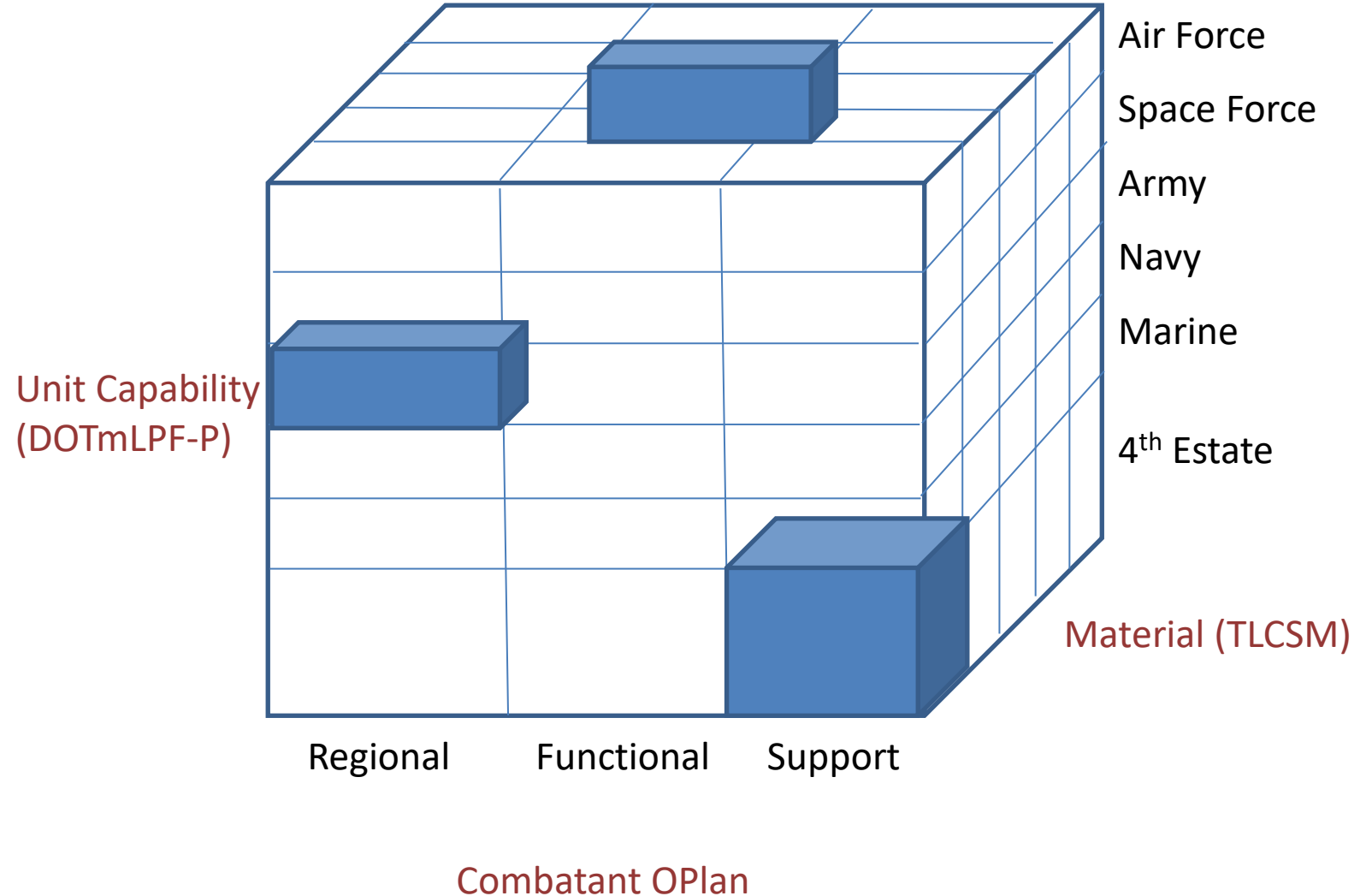
- Each with trade space
- Organized by Components (two dimensions)

## Missions can cut across ...

- Blue boxes represent needs
- Multiple PEOs and Services
- Multiple combatants

Data needs to be structured to be aggregated in each of the three dimension

Missions require a network of capabilities and materiel systems

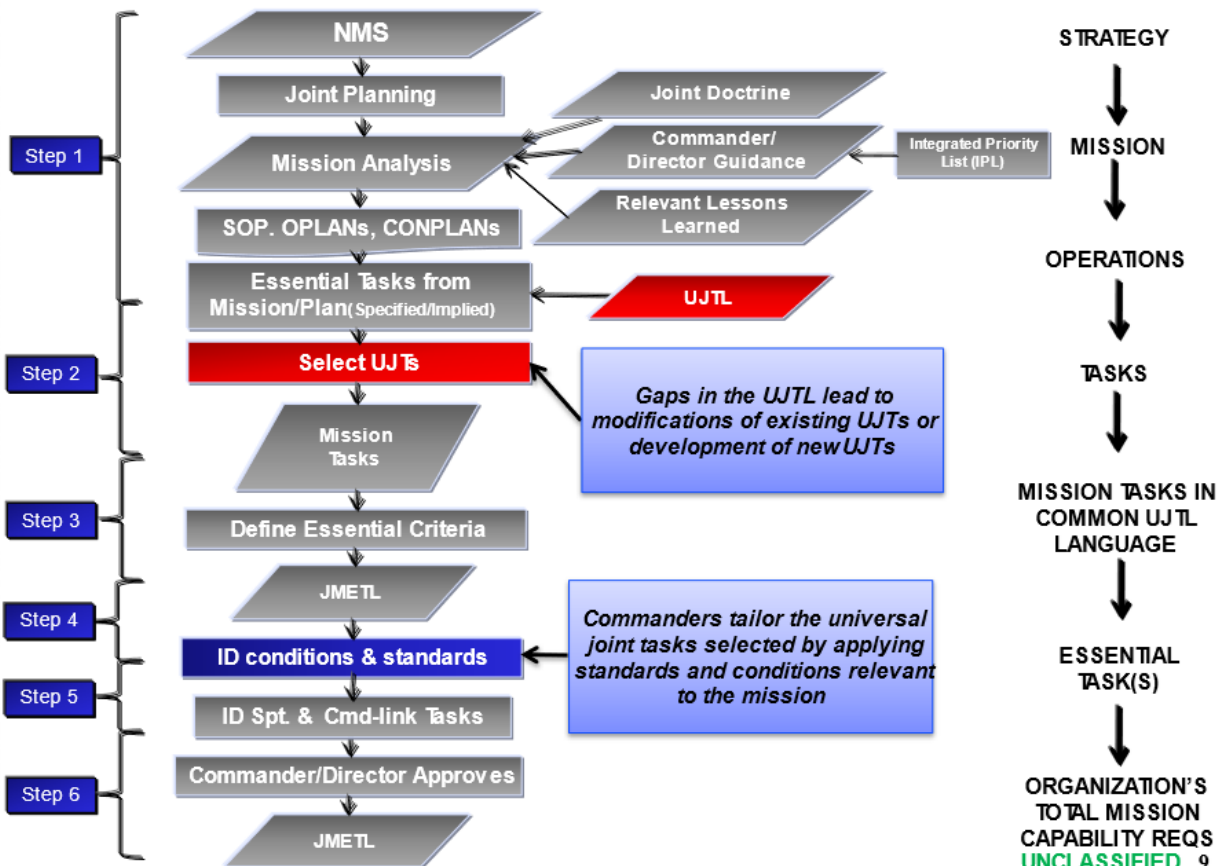


# CJCS has a structure with measuring systems

UNCLASSIFIED

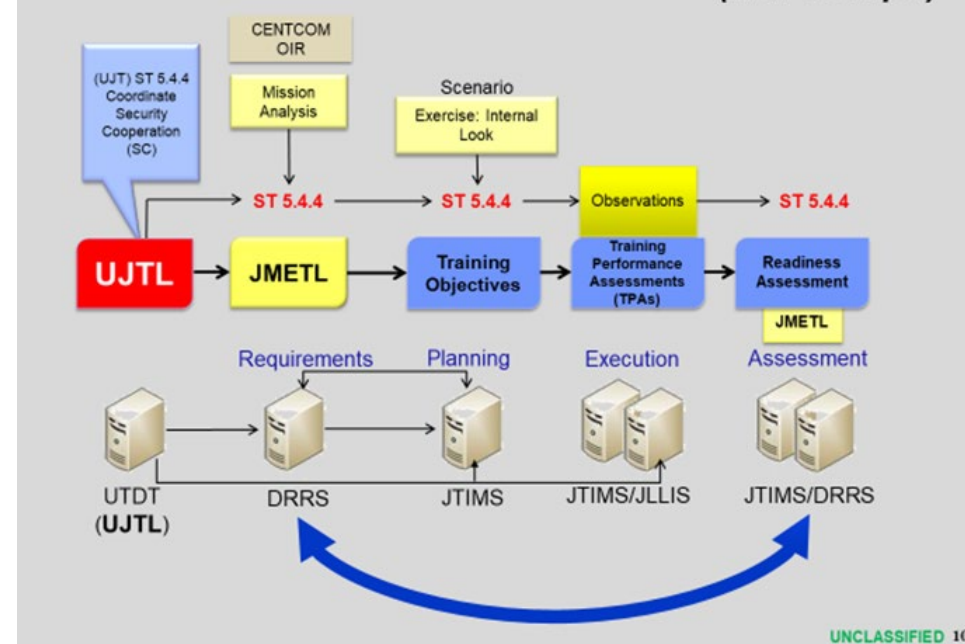
JMETL TASK DEVELOPMENT PROCESS

The Joint Mission Essential Task List (JMETL) Development Process



UNCLASSIFIED

Mission to Readiness (with example)



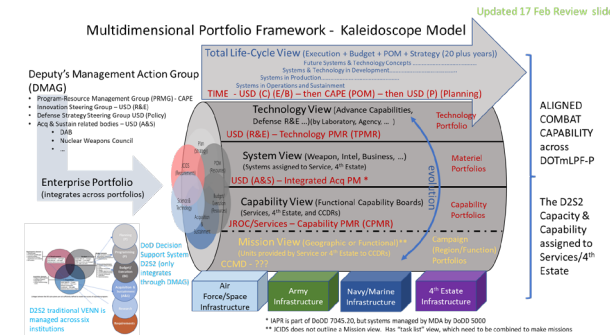
UNCLASSIFIED 10

JCIDS does not appear to align with the operational use of UJTL and DRRS ?

Measures:		
M1	Minutes	To notify friendly counterair forces (to gain intercept position).
M2	Percent	Of joint security area (JSA) and joint operational area (JOA) in which friendly freedom of movement allowed.
M3	Percent	Of enemy air attacks detected early enough to allow engagement.
M4	Percent	Of enemy air defense targets successfully engaged.
M5	Percent	Of enemy aircraft penetrate air defenses.
M6	Percent	Of first-shot kills by friendly fighters in air-to-air combat.

# What data gets created/captured - not in DAVE today

- **Matériel Portfolio** – programmatic, engineering, logistics, industry ....
  - Portfolio/Program/Project structure – governance structure (WBS for governance ... maybe us PNO with alphanumeric)
  - Cost Estimate data – using ACEIT files (based on Cost Guide - Cost/Schedule/Performance/Risk & Assumptions/Constraints)
  - AoA structure and assumptions/constraints with results (Use GAO Best Practice Guide (GAO 15-37))
  - Performance Management data – Earned Value (cost, schedule, performance), CAIRO, Lean/Agile, ... various sources/levels
  - MBSE data set (need a standard set) – worth with SERC/INCOSE
  - Other data across logistics, industry (DCMA/DCAA), ...
- **Operational Capability Portfolio** – by Operational Unit
  - Unit over DOTmLFP-P ... what is the Governance structure ?
  - Explore Unit Capability data sets using CJCS UJTL/DRRS
  - Capability-based AoA structure/data
- **Mission Portfolio** – by Combatant (regional, functional, support)
  - Combatant Governance Structure ??
  - OPlan data, with Campaign to Mission Thread structure/data?
  - Mission-based AoA
- **Enterprise Portfolio** (DMAG decision level)
  - TBD? What are the questions? Likely **POM/Budget/Execution Decision Analysis of Alternatives**



What are the questions to be analyzed  
How to structure/create data

