



Ship Maintenance: Provider Perspective

VADM Paul Sullivan
Naval Sea Systems Command





Desired Outcomes

- Understand NAVSEA role in the Navy Enterprise
- Understand ship maintenance requirements
- Understand ship maintenance decision-making
- Understand long-term picture



NAVSEA Customers

INTERNAL

- PEO Aircraft Carriers
- PEO Ships
- PEO Submarines
- PEO Integrated Warfare Systems
- PEO Littoral and Mine Warfare Systems

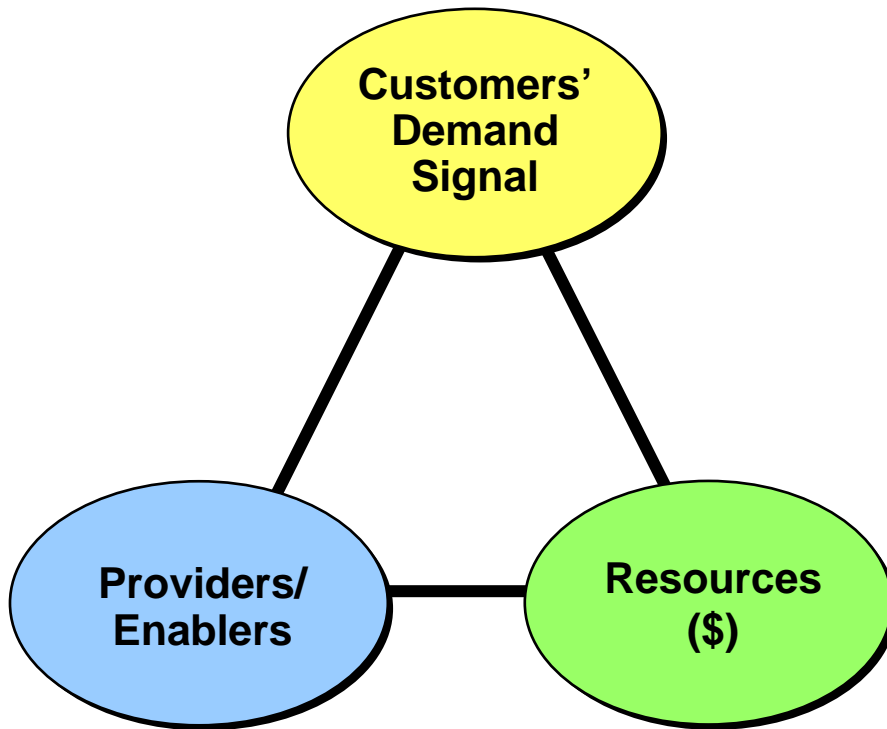
EXTERNAL

- Naval Aviation Enterprise
- Surface Warfare Enterprise
- Undersea Enterprise
- Naval Network/ FORCENET Enterprise
- Naval Expeditionary Combat Enterprise



Enterprise Model

Enterprise



Output of the Enterprise is:

Readiness
Cost

Enterprise Behavioral Model

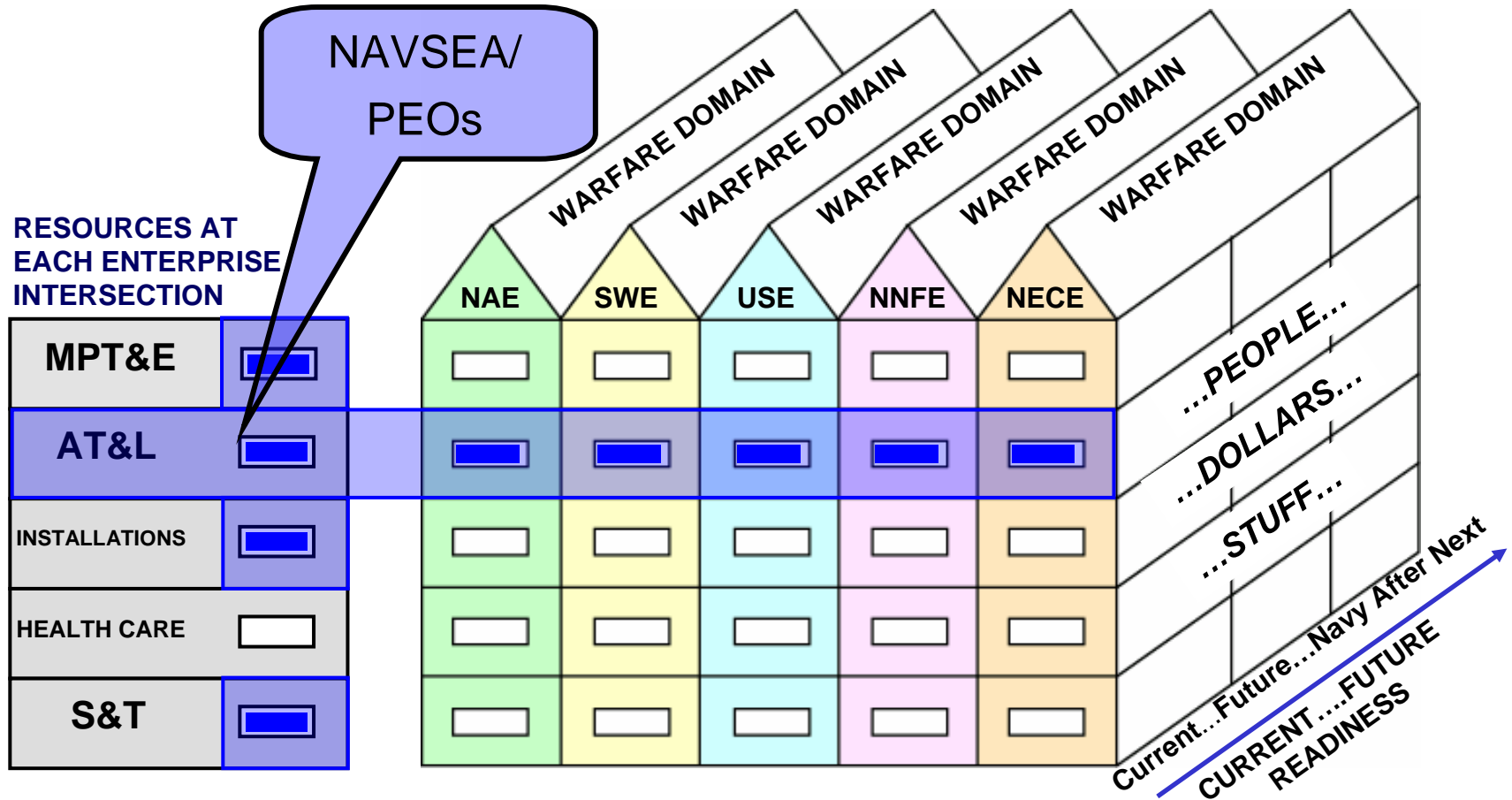
- Collaboration
- Data transparency
- Corporate decision-making
- Governed by metrics
- Understanding and strategic management of:
 - Dollars
 - People
 - Assets
- Decide as team – execute via chain of command

Our Role in the Enterprises

PROVIDERS / ENABLERS
(SUPPORTING WARFARE ENTERPRISES)



WARFARE ENTERPRISES
(DELIVERING COMBAT CAPABILITY TO COCOMS)



Multiple Product Lines - Supporting All 5 Enterprises



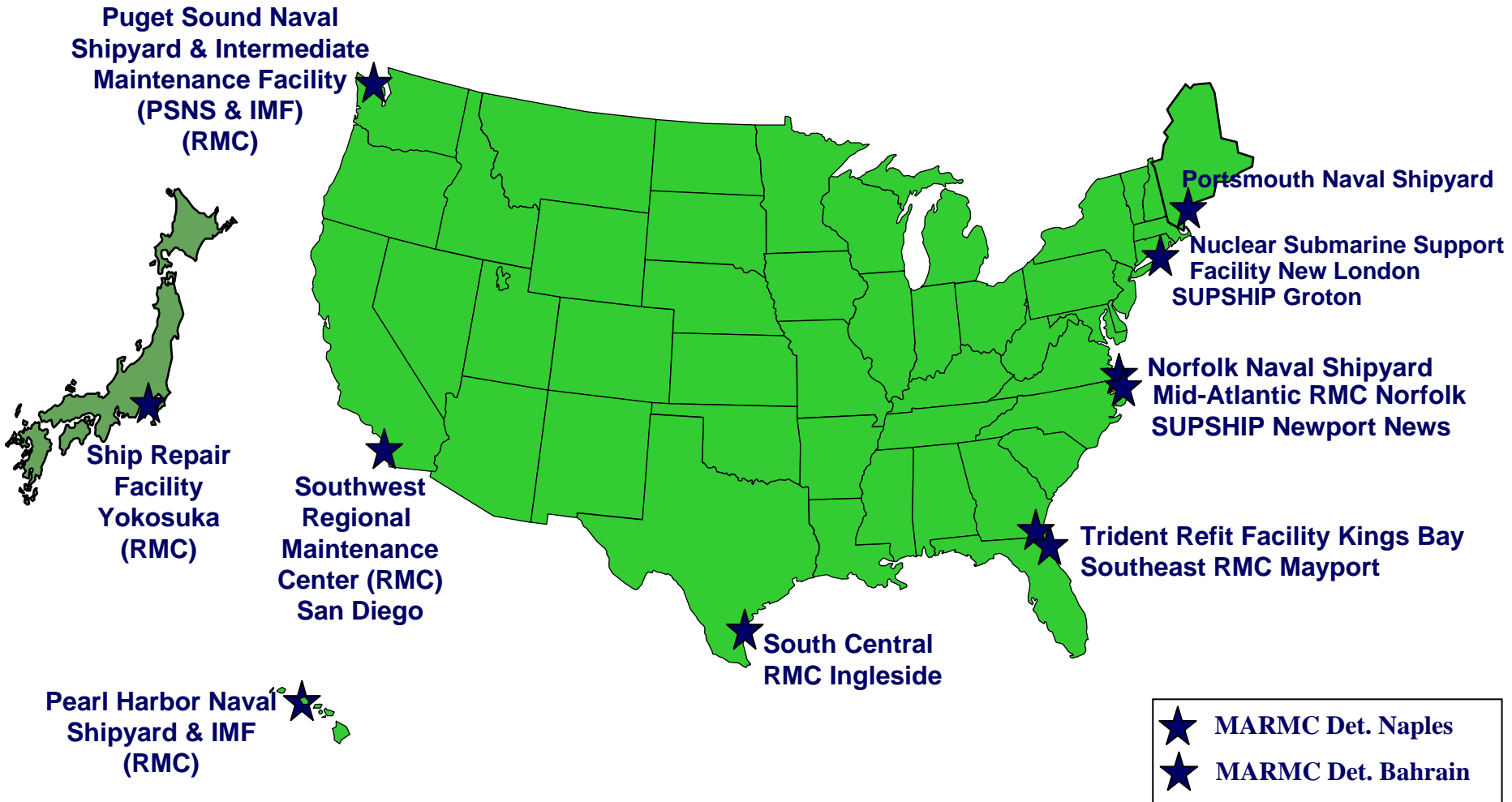
Value Proposition – From SYSCOM Provider to the Enterprise

- Aircraft Carriers ready for tasking at reduced cost
- Warships ready for tasking at reduced cost
- Submarines ready for tasking at reduced cost
- Littoral systems ready for tasking at reduced cost
- Warfare systems ready for tasking at reduced cost





Navy Ship Maintenance Activities



Mission funded & aligned through “One Shipyard” construct.

**AS-39 USS EMORY S LAND @ La Maddalena
AS-40 USS FRANK CABLE @ Guam**

Ship Maintenance Considerations

Aircraft Carriers

- Docking periodicity
- Nuclear maintenance/refueling
- Air/Ship interface

Surface Ships

- Docking periodicity
- MSMO contracts
- Warfare system modernization

Submarines

- SUBSAFE requirements
- Nuclear maintenance/refueling
- Fly-by-wire certification
- Warfare System modernization



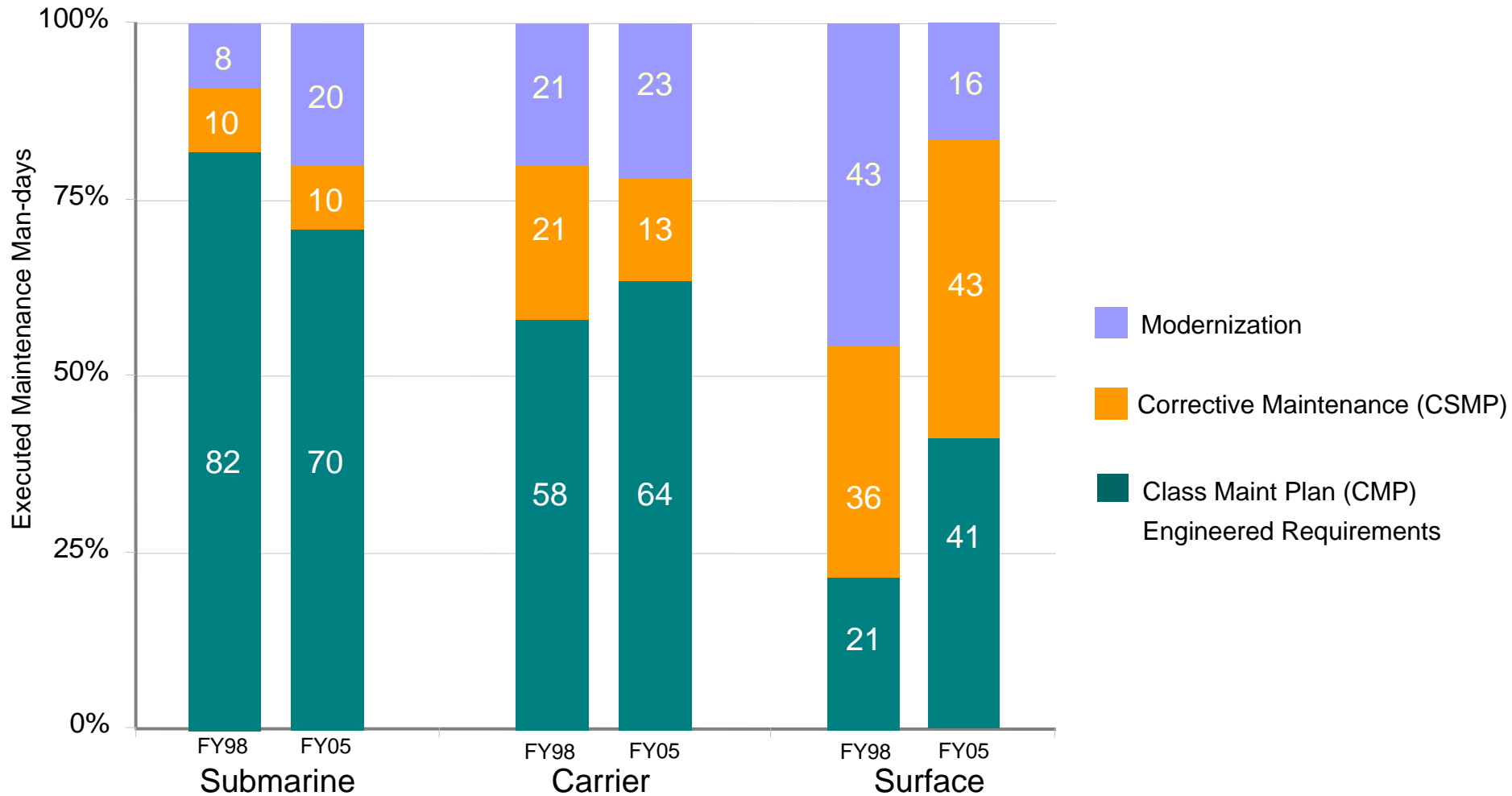


Class Maintenance Plan Drivers

- Class Maintenance Plan content differs because of:
 - System certifications (nuclear, SUBSAFE, flight deck)
 - Aging effects
 - Hull life expectancy
 - Maintenance scheduling intervals



Class Maintenance Share





Ship Maintenance Guiding Principles

- Statutory requirements:
 - *10 USC 2464 requires a government-owned government operated core logistics capability; organic capability must exist for all weapons systems, including new systems.*
 - *10 USC 2466 limits amount of depot maintenance funds that can be contracted out to less than or equal to 50%.*
 - *10 USC 2472 requires public depot civilian employment to be managed solely on the basis of available workload and the funds available for such depot maintenance.*
- Navy requirements
 - Schedule maintenance in ships homeport when possible (PERSTEMPO / QOL)
 - Optimize critical skill usage (One shipyard concept)
 - Load public shipyards first to efficiently use organic capacity



Ship Maintenance Assignment Guidelines

- Submarine maintenance
 - PNSY preferred site for New London SSNs
 - PHNSY & IMF preferred site for Hawaii and Guam-based SSNs
 - PSNSY & IMF preferred site for CONUS West coast SSNs/Bangor SSBNs
 - NNSY preferred site for Norfolk SSNs / Kings Bay SSBNs
 - Short duration availabilities performed by public yard Tiger Teams in submarine homeports without a public yard



Ship Maintenance Assignment Guidelines

- Aircraft Carrier maintenance
 - Refueling overhauls performed at Northrop Grumman Newport News
 - Other depot maintenance performed in public depots closest to homeport
 - Significant private sector support through teaming



Ship Maintenance Assignment Guidelines

- Surface ship maintenance
 - Performed in private yards using Multi-Ship / Multi-Option (MSMO) contracts
 - Portion of LHA / LHD depot maintenance required to maintain core maintenance capabilities in public sector performed at NNSY



The Way Ahead

- Consolidate Enterprise approach
- Reduction of requirements wherever possible
- “One Shipyard”
- Lean Six Sigma as a viable tool to drive efficiency
- Naval Shipyard business plan
- Preservation improvements
- Longer docking cycle





COMNAVSEA – My Top Five

- Drive our behavior to align with the Naval Enterprise
- Transform NAVSEA to a Competency Aligned Organization
- Measure our output with customer-driven metrics
- Focus on diversity
- Document & improve our processes through Lean Six Sigma

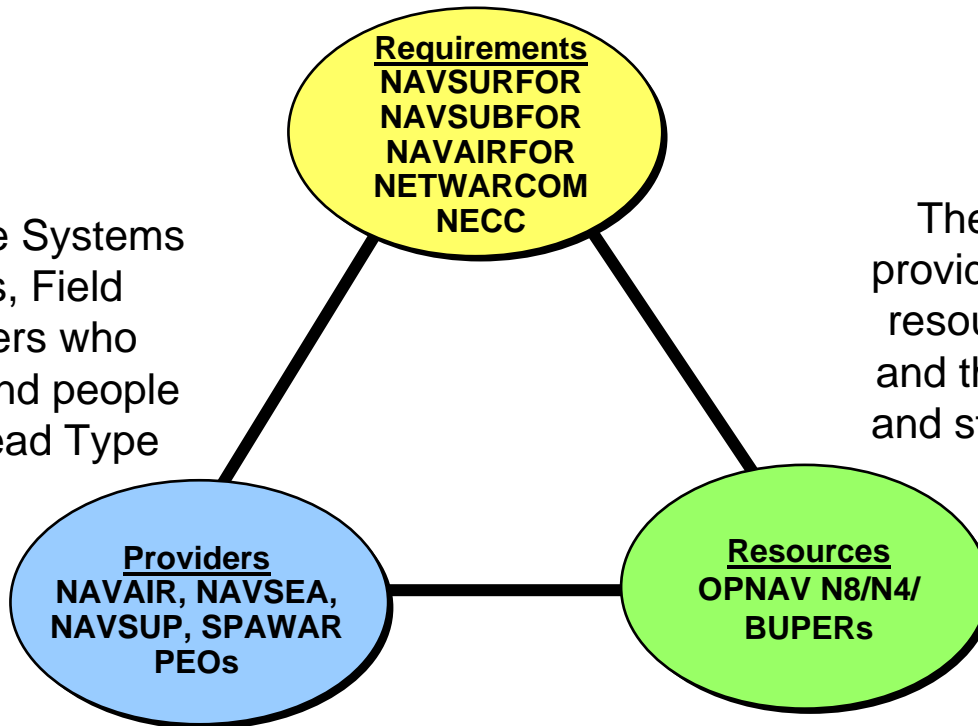


Back Up



The Navy Enterprise Construct

The **Lead Type Commander** provides the readiness “demand signal” in his role to train and equip the Fleet.

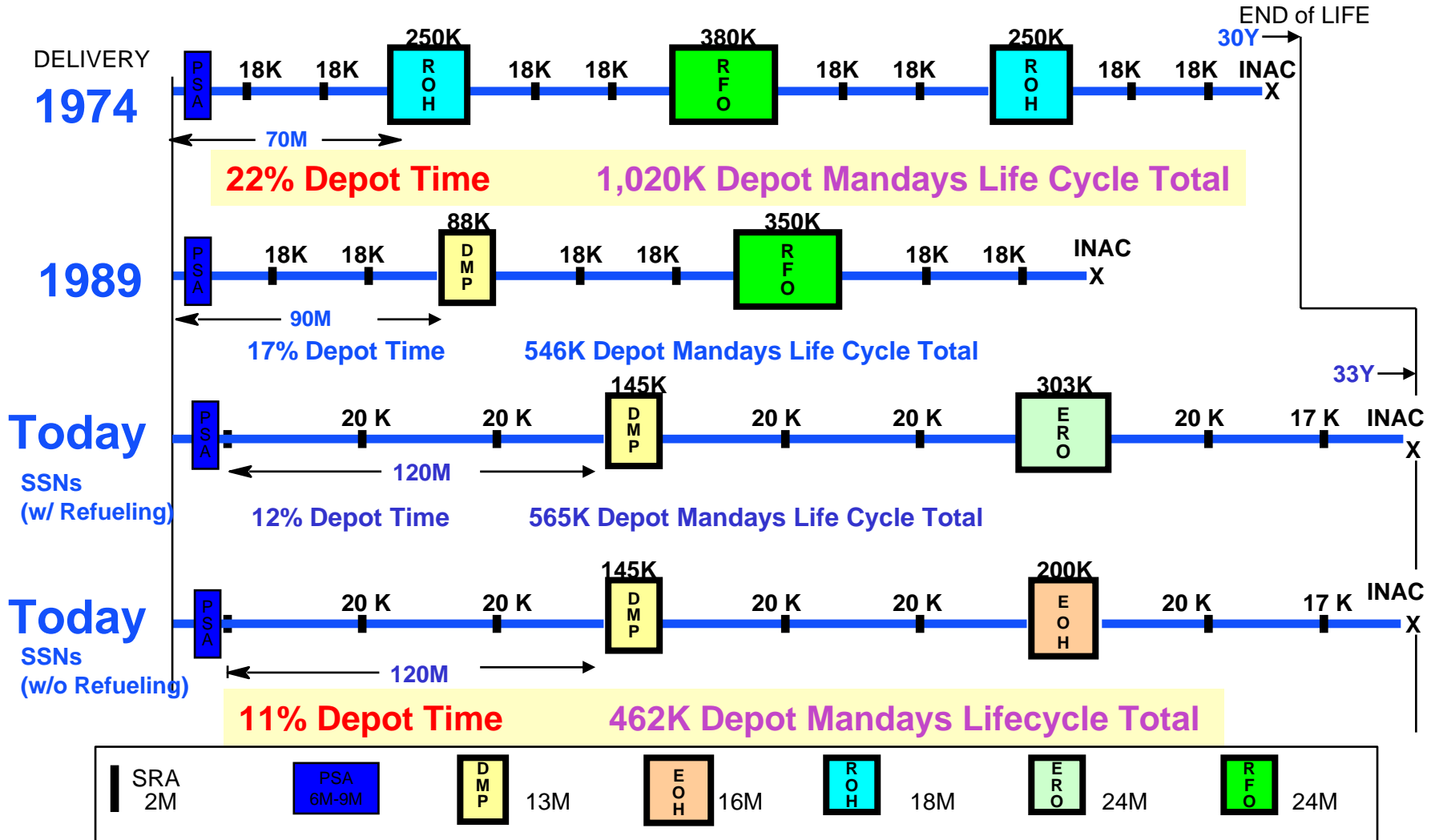


The **Providers** are Systems Commands, PEOs, Field Activities, and others who provide material and people resources to the lead Type Commanders.

The **Resource Sponsors** provide budget and financial resources to both providers and the Type Commanders, and steward the warfighter’s requirements for the acquisition process.



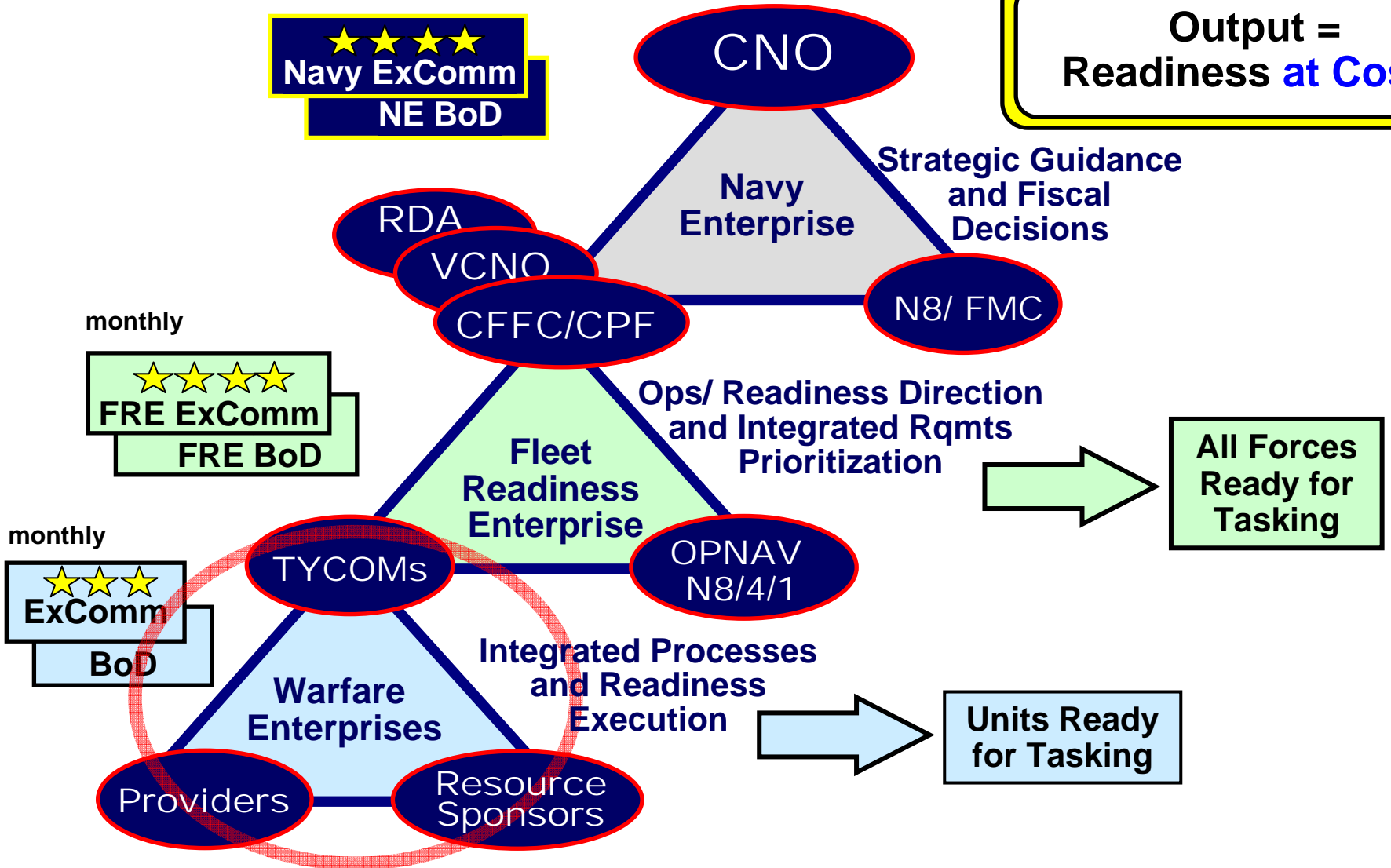
Reduced Requirements – Example: SSN 688 Class Lifecycle Evolution



Mandays (K) shown are typical notional for Type Commanders repairs and services.

Enterprise Construct

**Output =
Readiness at Cost**



Alignment

