



Naval Logistics Digital Transformation

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Naval Logistics IT Lines of Effort



Systems Managed:

- BCAT I - 2
- BCAT II - 16
- BCAT III - 119
- EIEMAs - 4
- WMA - 19
- OTHER- 11

• Naval Maintenance, Repair, and Overhaul (N-MRO)

- Plan, predict, schedule, and execute maintenance at the Organizational, Intermediate, and Depot levels

• Naval Supply Chain Management (N-SCM) (NOSS)

- Plan, procure, receive, store, distribute, dispose and manage material, goods and services across all commodities and communities

• Naval Product Lifecycle Management (N-PLM)

- Manage weapon system technical data required for life cycle support (configuration, Bill of Material, 3D models, readiness models, drawings, maintenance procedures)
- Provide workforce automation, optimization, and process standardization for program lifecycle management; integrate acquisition with the warfighter

• Integration & Infrastructure (I&I)

- Facilitates data exchange and integration between modernized, legacy, and external IT systems
- Enables synchronization of enterprise and edge instances of all portfolio components
- Includes Logistics Information Network Connector (LINC) which provides a common platform hosting environment for LOG IT systems and applications

• Logistics Integrated Data Environment (L-IDE)

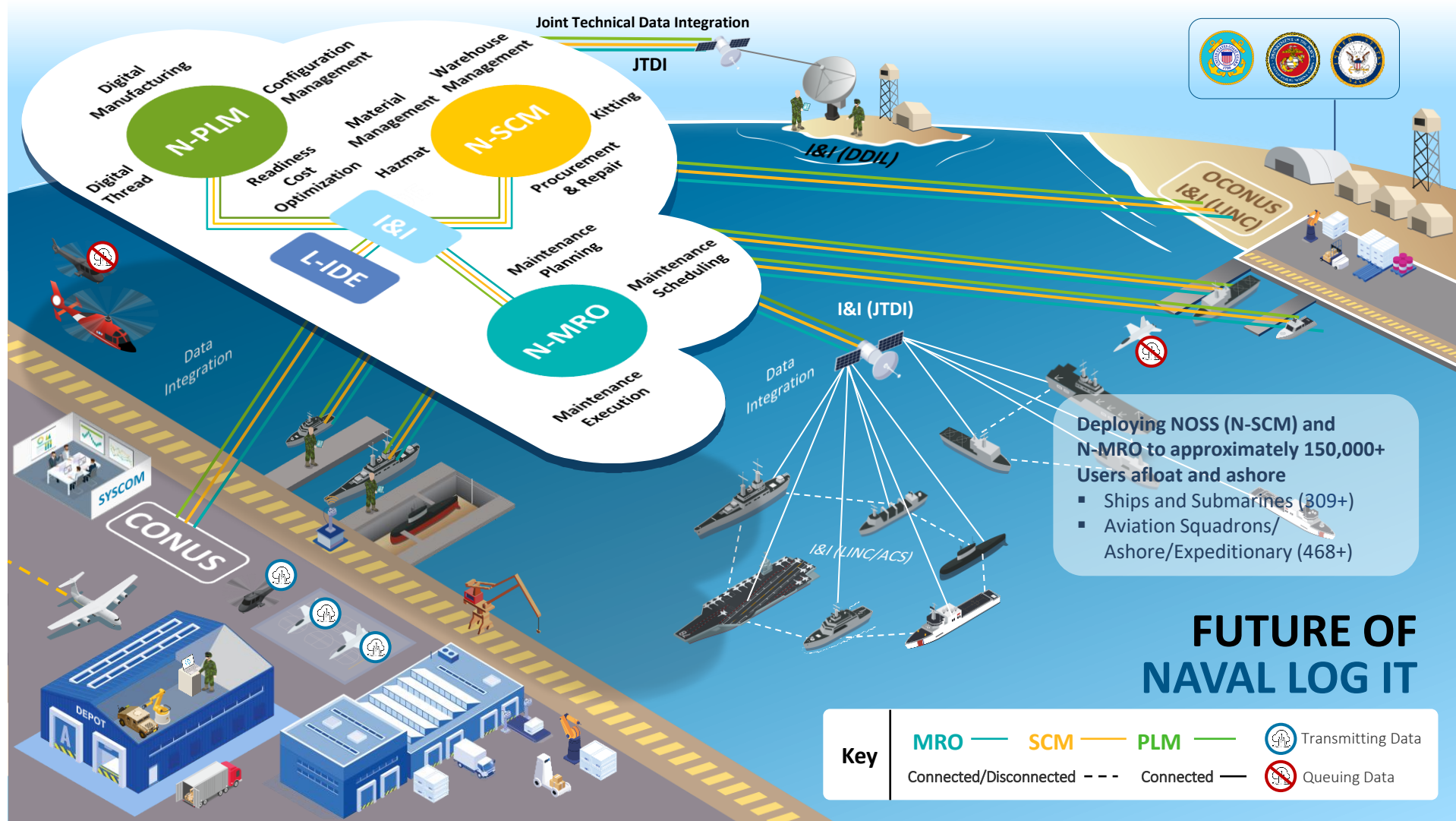
- Aligning readiness data systems to support the other 4 pillars, enable analytics, and supports broader data efforts



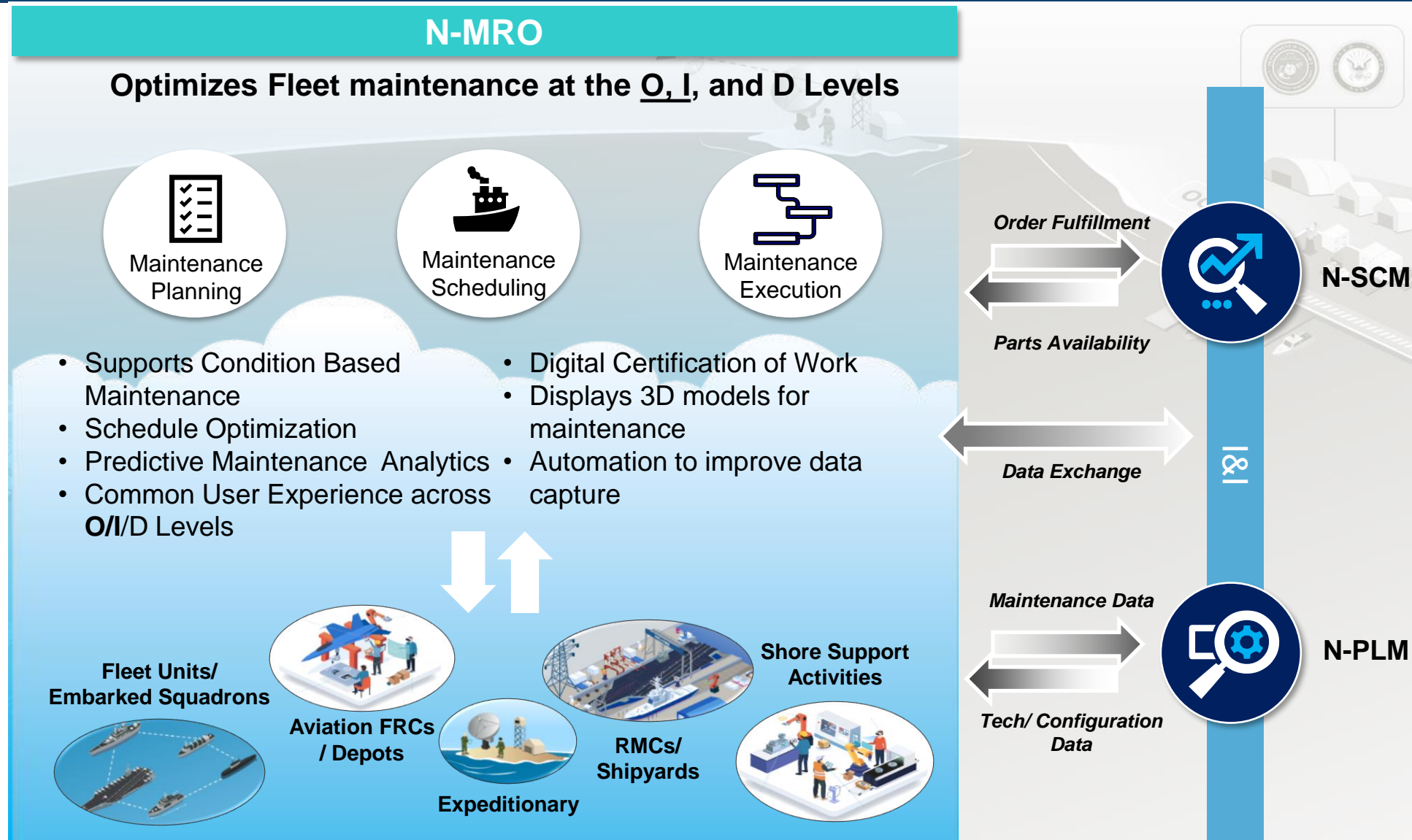
**Five Integrated Lines of Effort
Fully Aligned to CNO NAVPLAN**

FY24 Funding:
903M+ Portfolio
Consisting of 171
Systems

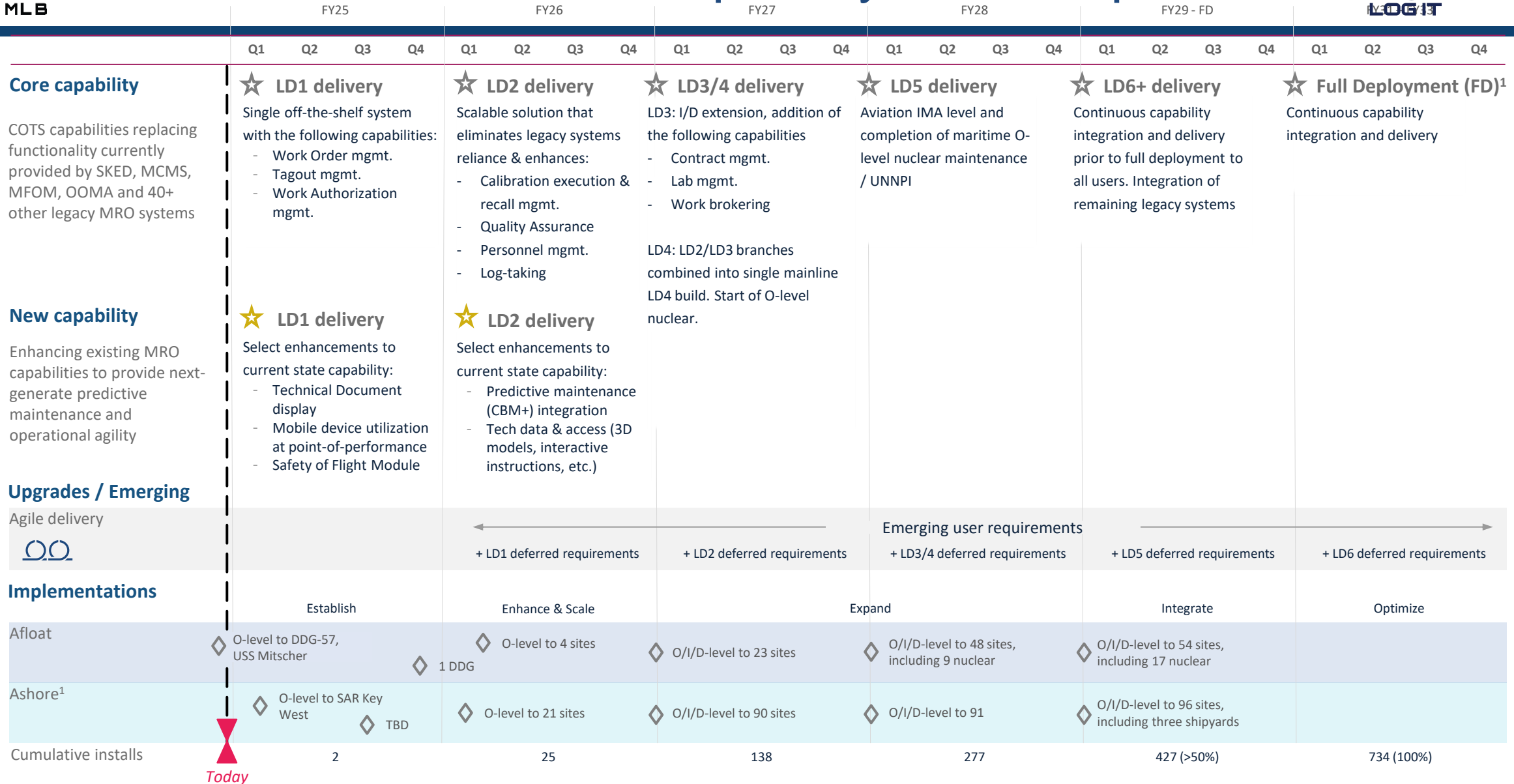
Naval LOG IT OV-1



FUTURE OF NAVAL LOG IT



LOG IT N-MRO Capability Roadmap



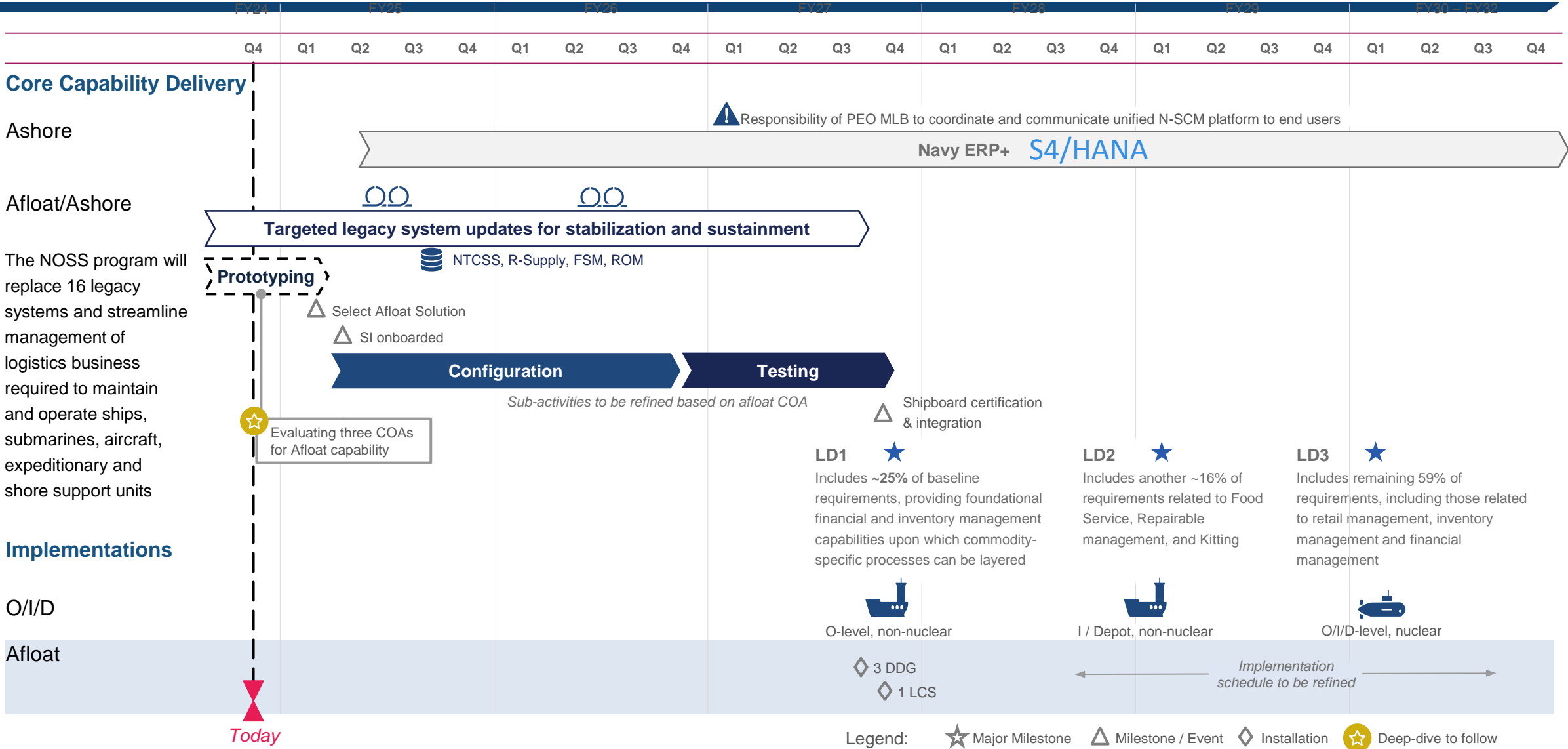
Today

1. Includes USN & USMC squadrons, 14 shipyards, regional maintenance centers, refit facilities, and more
 2. FD dates prior to FY33 dependent on additional funding

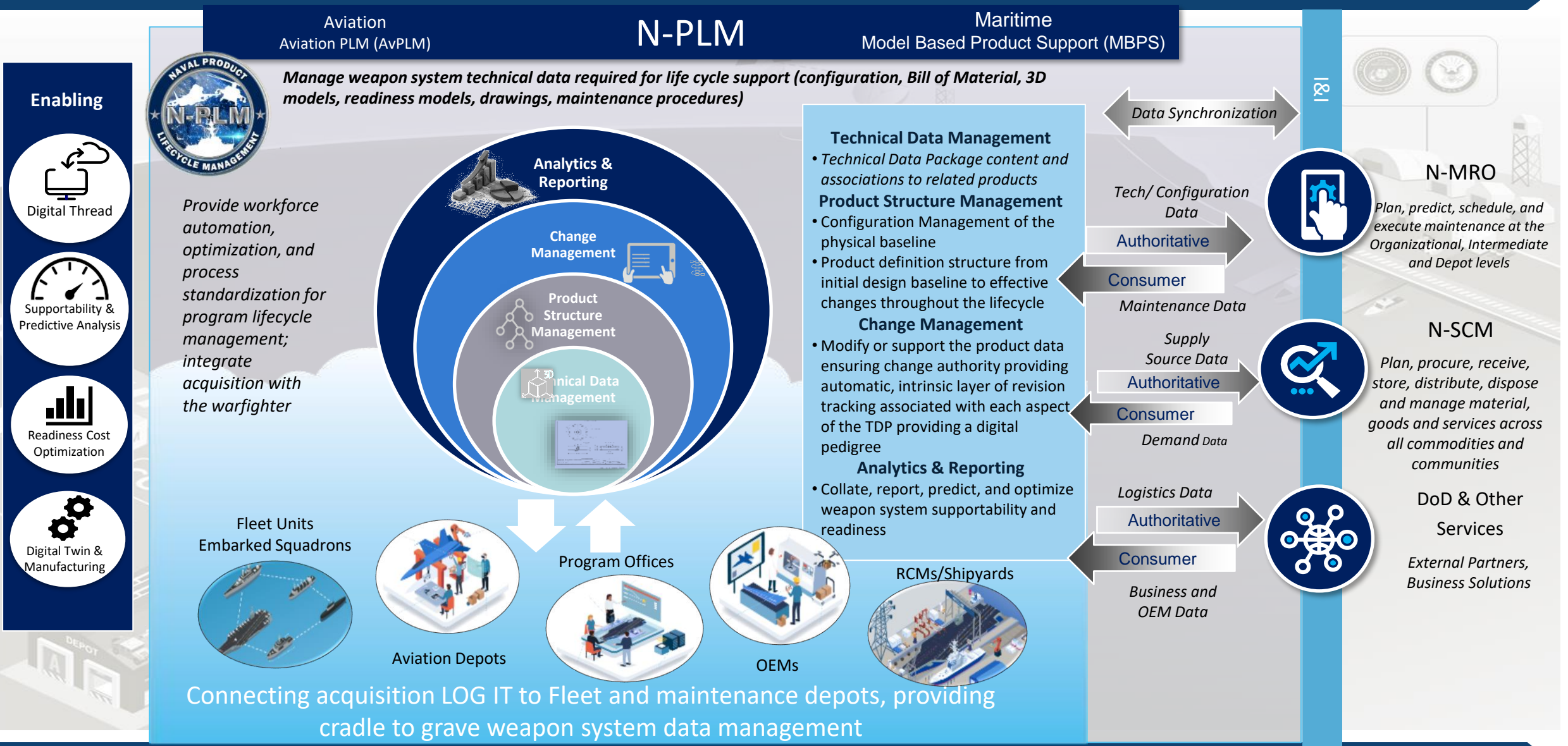
N-SCM LOG IT Operational Concept Architecture



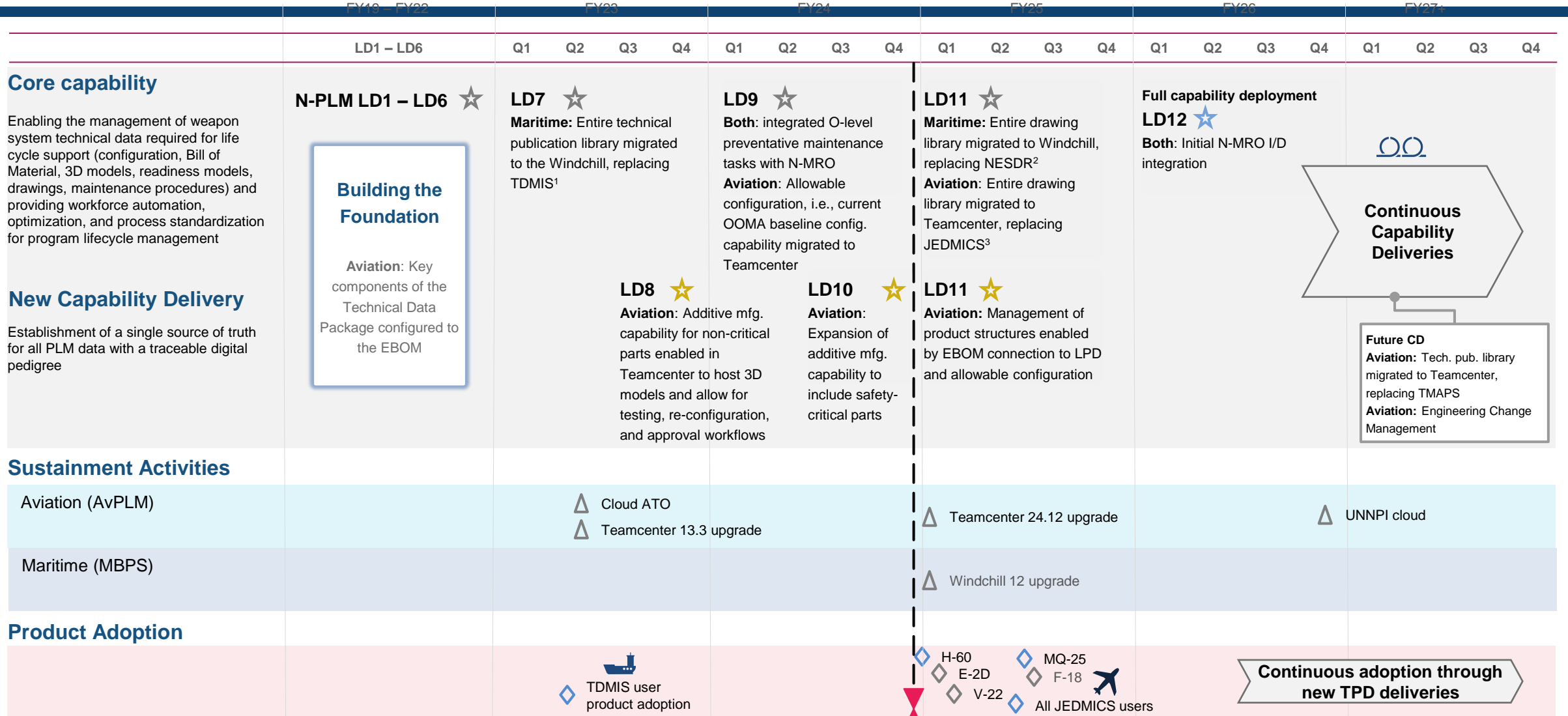
LOG IT N-SCM Capability Roadmap



N-PLM: The Digital Backbone of LOG IT



LOG IT N-PLM Capability Roadmap



1. Technical Data Management Information System

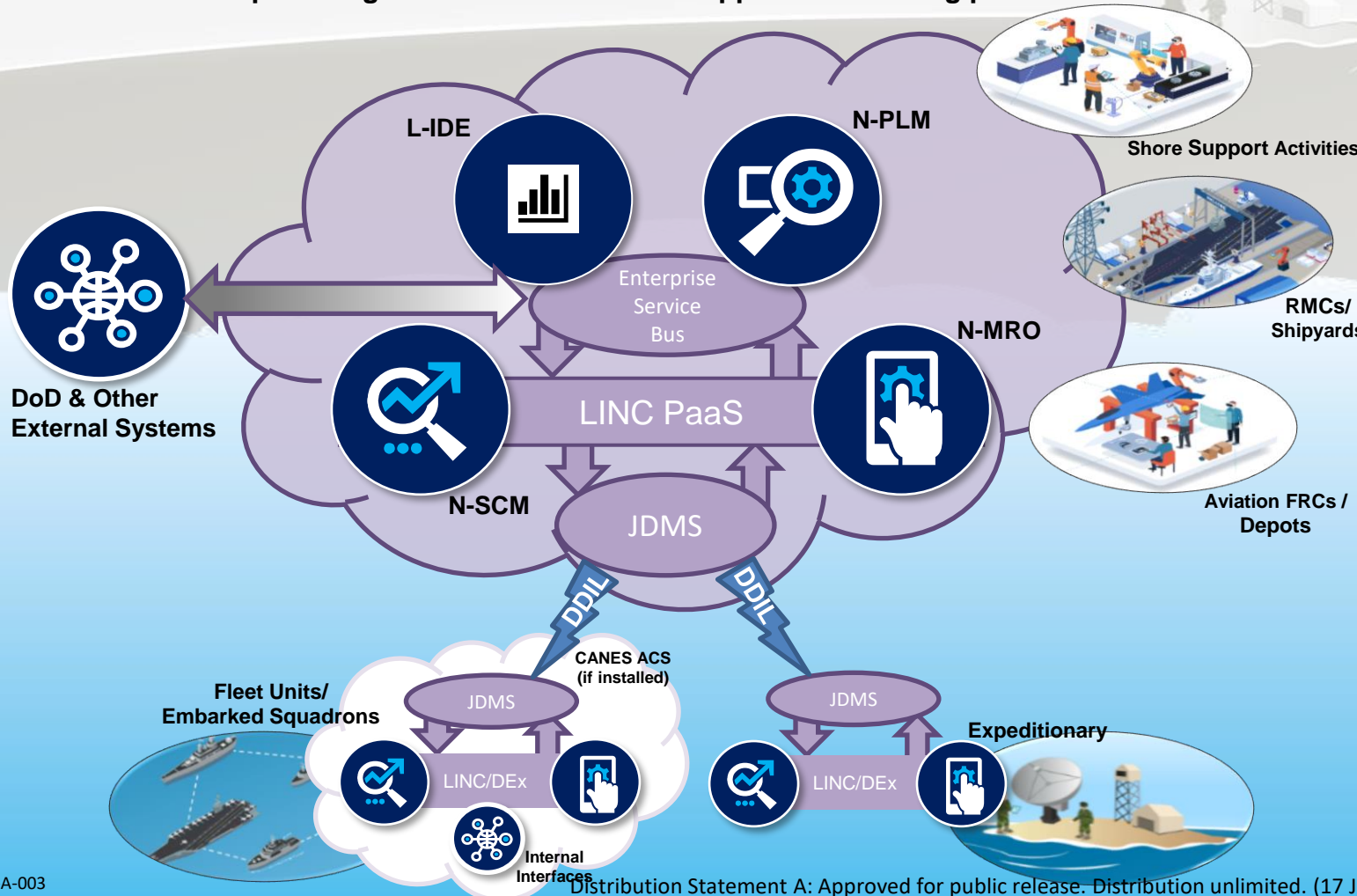
2. Naval Ships Engineering Drawing Repository

3. Joint Engineering Data Management and Information Control System

Note: as a cloud-based solution, PLM is "adopted" rather than "implemented"

LOG IT Integration and Infrastructure

Orchestration of the Enterprise: Providing the services, tools and programs to enable data transport and sharing through interfaces and transformation services in the cloud and for disconnected operations while also providing common containerized application hosting platforms



I&I Services

- Program Integration and Data Interfaces
- Data Transformation
 - LINC DEx – Afloat
 - Enterprise Service Bus – Cloud/Ashore
- JDMS Data Transport
- Containerized Application Platform Integration / Hosting
 - CANES ACS Unclass / SIPR Afloat Integration
 - LINC ACS PaaS; where CANES ACS is unavailable
- Hosting Brokerage
- Mobility Integration

I&I Programs

Joint Technical Data Integration (JTDI)	Transport
Enterprise Service Bus (ESB) Data Exchange Environment (DEx)	Data Fabric
Logistic Information Naval Connector (LINC)	Platform Services
NAVAIR Fleet System Array (NFSA)	Legacy System Hosting Platform

I&I Services

Integration & Infrastructure Services



Program Integration And Data Interfaces

I&I harmonizes the various LOG IT programs and external interface partners and aligns them, offering a holistic approach to planning and execution of Enterprise Architecture. Plans and executes interface data exchanges



Data Transformation

I&I provides the infrastructure, engineering and services to transform data in motion to allow for Interface connectivity with Legacy and Enterprise systems, both afloat and ashore. The Enterprise leverages eQ MI and afloat uses Confluent as the COTS tools for transformation.



Data Transport

I&I provides data management, data architecture, data services, and information intelligence with the execution of programs under the JTDI/JDMS, Enterprise Service Bus and LINC Data Exchange Environments



Containerized Application Platform Hosting Services

I&I will leverage CANES ACS, where available, or provide a common platform hosting environment, Platform-as-a-Service (PaaS), for LOG IT systems and applications, and facilitates data exchange and integration between modernized, legacy and external IT systems. The PaaS also include Identity and Access Management, ProdOps and other underpinning services of test and production environments.



Hosting Brokerage

I&I provides planning, engineering and testing services for integration of LOG IT applications onto Hardware Platforms of Record such as CANES ACS, Total Shipboard Computing Environment (TSCE) and GovCloud Environments (NAVAIR, NAVSEA, NAVWAR CAPs).

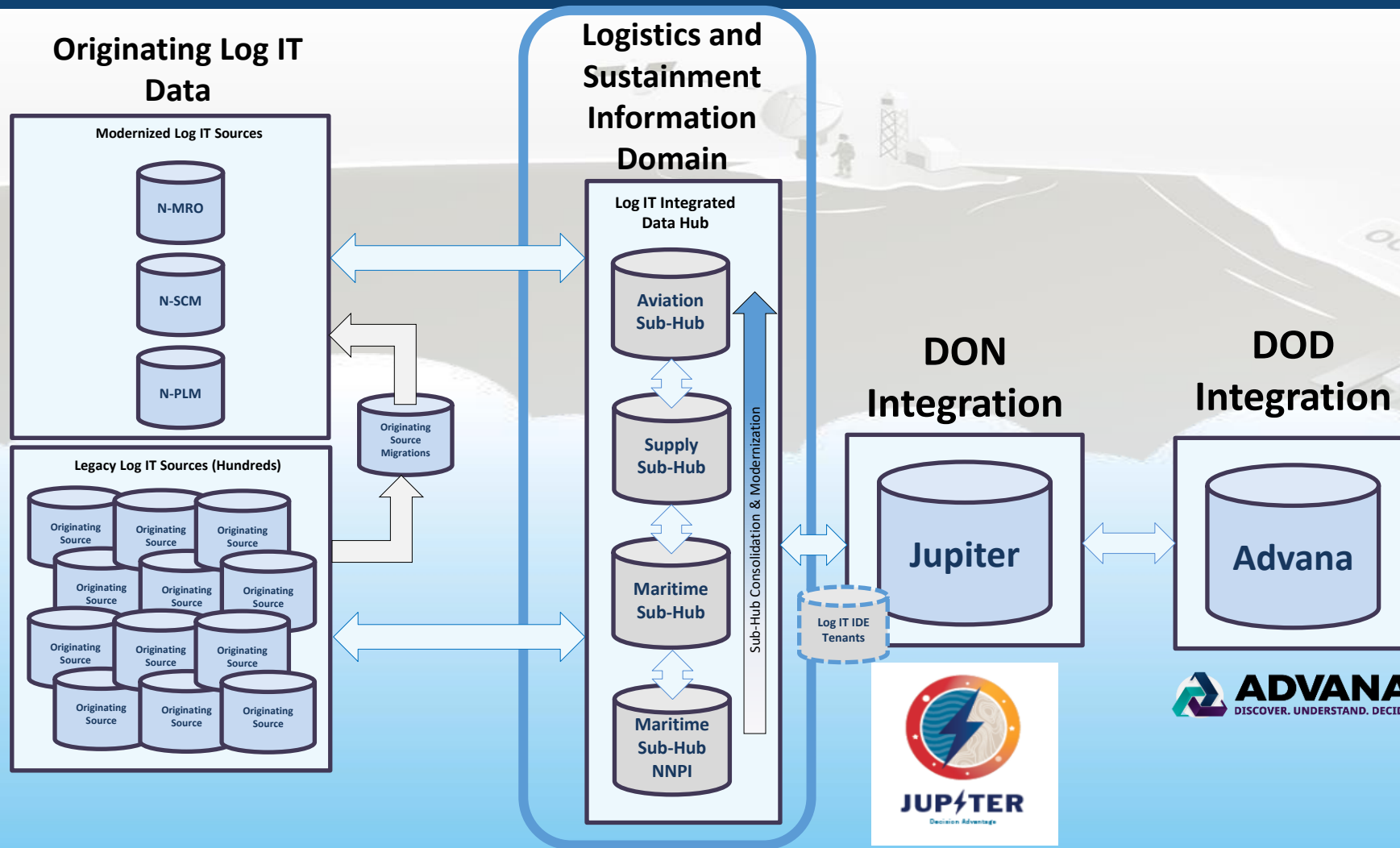


Mobility Integration

I&I provides integration, testing and OS management for mobile devices across the LOG IT family of systems.

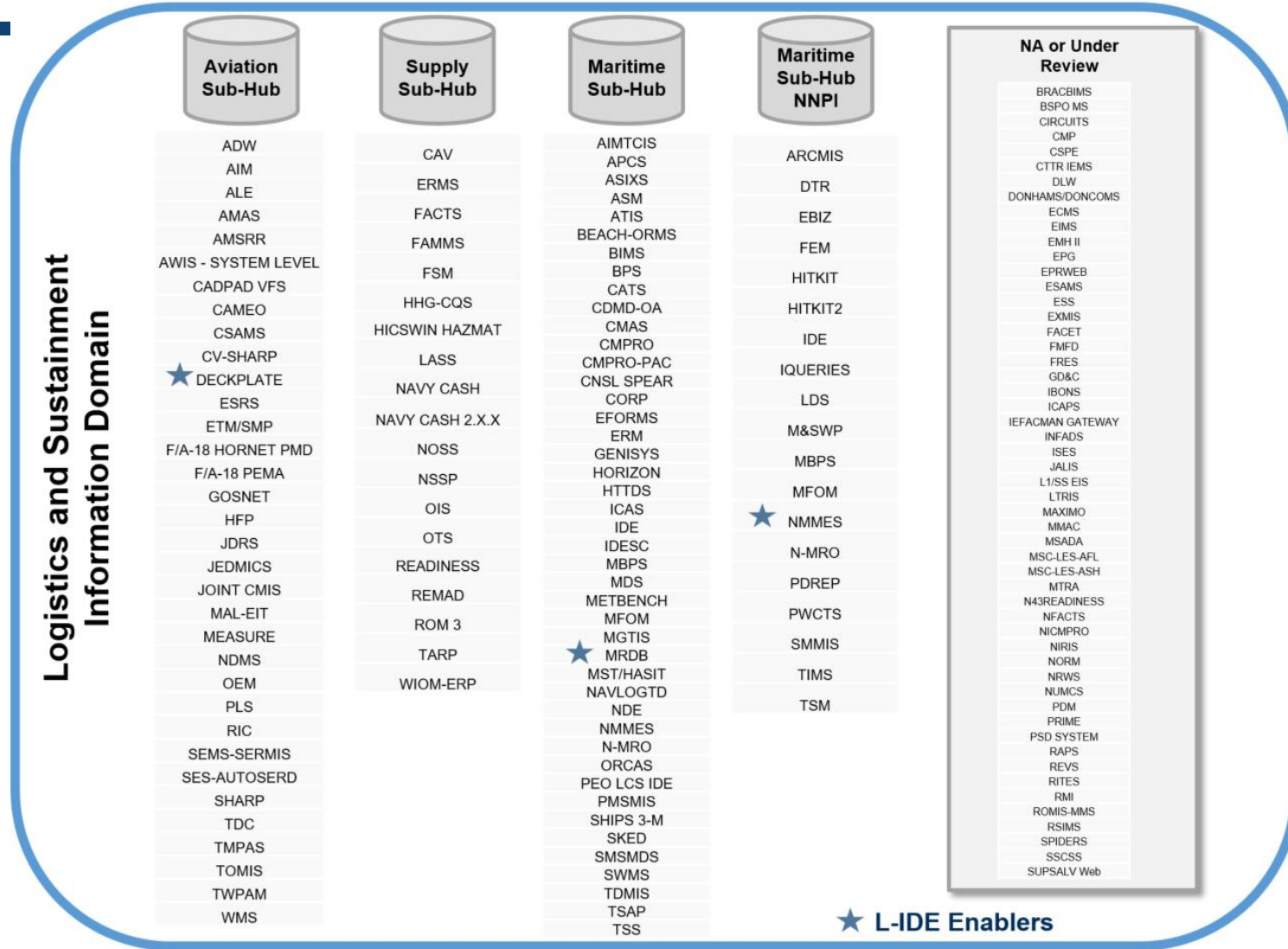
- Data
 - Guaranteed data delivery
 - Robust error handling for interfaces
 - Dashboards, reporting, alerting
 - Data normalization
 - Data fabric – data integration, transformation and sharing
- NIS integration / Zero Trust
- LINC PaaS solution – including small form factor
- Cross Domain Solutions – bidirectional (ashore to cloud AND cloud to cloud)
- IL4/5 and NNPI compliance

Logistics IDE Enables Naval Data Architecture



Naval Logistic Information Domain Data Hubs in the DON Enterprise Data Environment

Draft LOG IT System to Sub-Hub Data Mapping



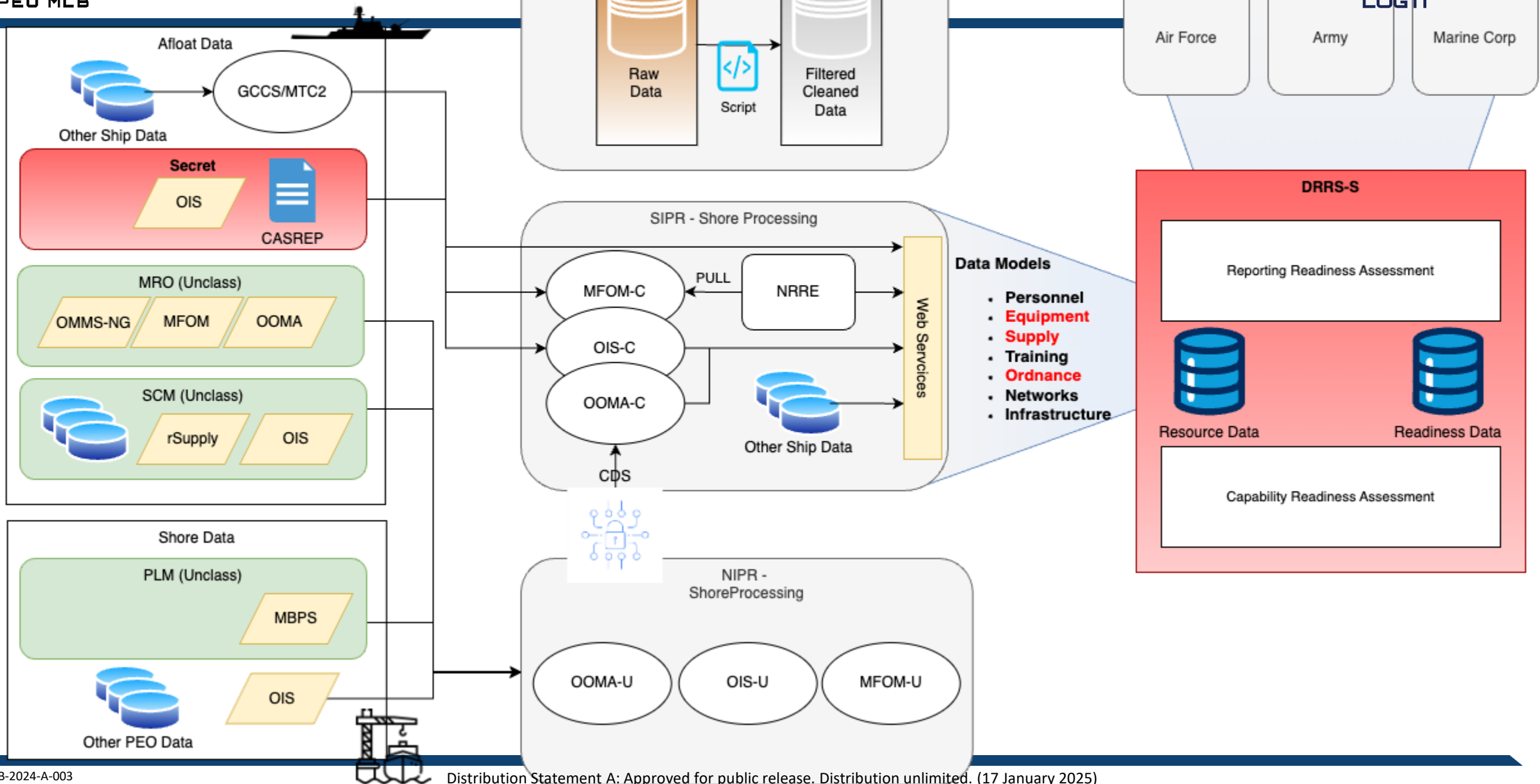
Sub-Domains provide visibility and access to LOG IT Systems Data throughout System Rationalizations

Logistics IDE Implementation Strategy

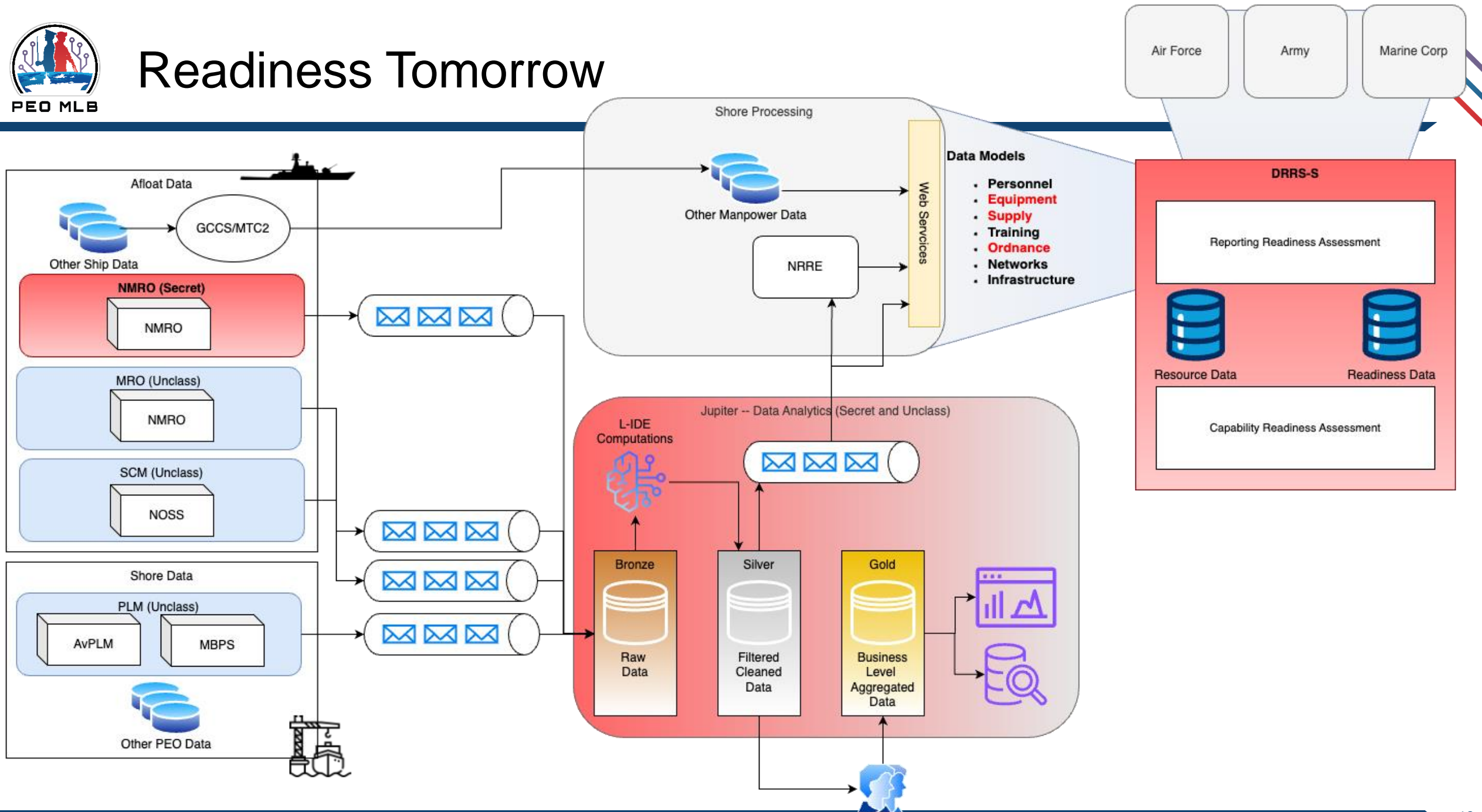
- L-IDE approach provides the IT solution to federate, rationalize and evolve existing data sources into a fully connected and transparent Navy solution
 - Continue alignment and curation of multiple data sources to broader Naval Data Architecture
 - Mitigation of disparate data pipelines into IDE sub-domains will minimize duplicative and non authoritative data, improve data quality and usability, while expediting data analytics for readiness assessments and visualizations
 - L-IDE approach will drive federation and rationalization of legacy data sources and data warehouses in alignment with the DON Data Architecture
 - N-PLM, N-MRO and N-SCM will functionally align data to increase confidence and facilitate data analytics from the operational edge to the Enterprise
- FY24 – Continue integration with Jupiter and federation of selective near-term readiness LOG IT IDE systems to enable rationalization aligned with Cattle Drive and Super Nova as resources allow
 - Institute more robust data governance for LOG IT with the goal of:
 - Increasing footprint of authoritative data
 - Enabling use case prioritization with stakeholders
 - Complete detailed planning to support FY25 execution
- FY25+ Plan – Execute full scale migration to long term future state

- ✓ L-IDE Sub-Domains allocated initial FY25 L-IDE funding
- ✓ L-IDE Aviation/Supply/Maritime Integrated with Advana-Jupiter
 - Aviation Sub-Domain Data Sharing Agreement (DSA) approved
 - Rationalized AMSRR, DECKPLATE, MBPS, MRDB, OARS, FSM, and FACTS LOG IT Data Pipelines into L-IDE Sub-Domain tenants of Jupiter
 - Implemented automated Egress of LOG IT Aviation data ISO eVAMOSC
- ✓ Aviation, Supply and Maritime NNPI Sub-Domain environments established in AWS (IL5) enabling hybrid-cloud L-IDE
- ❑ FY25Q2-4: Sub-Domains scale L-IDE team support to:
 - ❑ (Q2) Complete LOG IT Supply and Maritime DSA's with Jupiter
 - ❑ (Q2-4) Consolidate catalog data for L-IDE managed sources
 - ❑ (Q3-4) Prototype Information Domain level Data Quality reporting
 - ❑ (Q3-4) Expand System Capability Modeling to L-IDE Supply/Maritime
 - ❑ (Q3-4) Establish L-IDE Aviation IL6 Environment (pending ATO)
 - ❑ (Q4) Establish L-IDE Maritime Non-NNPI IL5 Environment in Azure
 - ❑ (Q4) Begin Data Catalog/Federation Pilots (Supply & Aviation)
 - ❑ (Ongoing) Continue supporting priority DOD/DON/LOG IT use cases

Readiness Today



Readiness Tomorrow



LOG IT Capability Modernization, Deployment, and Support (CMD5) Acquisition

- **Need statement**
 - Seeking highly qualified experienced naval LOG IT capability providers to execute continuous integration and continuous delivery (CI/CD) of LOG IT capabilities and to the fleet.
 - Perform system level execution for LOG IT programs such as N-MRO, NOSS, MBPS, I&I, AvPLM, L-IDE etc.
- **Goals**
 - accelerate speed to fleet,
 - facilitate competition and maintain a strong industrial base for LOG IT.
- **Performance Scope Overview**
 - Capability Modernization (PWS Section 2.1.1)
 - Operations and Sustainment (PWS Section 2.1.2)
 - Afloat Installation (PWS Section 2.1.3)
- **Intended Acquisition Approach**
 - IDIQ MAC with a 5-year ordering period
 - Enable shorter term and smaller task orders
- **Timeline**
 - Draft and final RFP Release in-progress
 - MAC award Q1FY25
 - First Task Order award Q4FY25

For more info, please watch
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