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Integrated T&E Process and Tools in a Joint Services Acquisition Program

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Integrated T&E in a Joint Program

- Integrated Test & Evaluation (T&E) provides an integral part of the Systems Engineering Process, identifying levels of performance, assisting developers in identifying and correcting deficiencies, and validating to the system owner that performance requirements are met in a cost efficient manner. Historically, developmental T&E activities conducted by the Program Office have been fire-walled from the operational T&E activities and organizations.
- Joint Naval Platform acquisition programs have the additional constraints of supporting the needs and requirements of potentially three varied customer groups, such as the U.S. Army, The U.S. Marines, and the U.S. Navy. As the lead Program Office, NAVSEA has led the development of processes and tools that meet the various programmatic needs and potentially provide a cost savings by the use of an Integrated T&E environment.
- This presentation will discuss some of the lessons learned and an oversight into the methodology and tools used in a program that is a model for future joint programs to provide a cost-effective interface between the Requirements Engineering, and the Developmental T&E and Operation T&E communities.

Joint Acquisition for Naval Platforms

- While many know of the U.S. Navy combatant and non-combatant fleet and of the Coast Guard fleet, most do not know the U.S. Army maintains it's own fleet of littoral non-combatant vessels.

Joint High Speed Vessel Prototypes

- The U.S. Army and U.S. Navy have been very successful testing converted high speed ferries as non-combatant vessels.

- Currently the Navy, Army, and Marines are jointly acquiring a production Joint High Speed Vessel.
- NAVSEA is the lead acquisition organization.

Joint Requirements

- The three organizations formed an IPT to develop the Analysis of Alternatives (AoA), Initial Capabilities Document (ICD), and Capability Development Document (CDD) IAW Joint Capabilities Integration and development System (CJCSI 3710.01).
- NAVSEA coordinated the development and adjudication of the AoA, ICS, and CDD, including the Key Performance Parameters (KPP).
- With it's background of deepwater non-combatant ship design, NAVSEA took the lead in the development of the platform Performance Specification (PSpec) and coordinated adjudication through the Joint IPT.

Verification & Validation Traceability

ICD

CDD

PSpec

RFP

M&S
M&S VV&A
DT Eval

NAVSEA

Ship Design

Contractor
Production
Testing

Test and
Evaluation
Master Plan
(TEMP)

COMOPTEVFOR

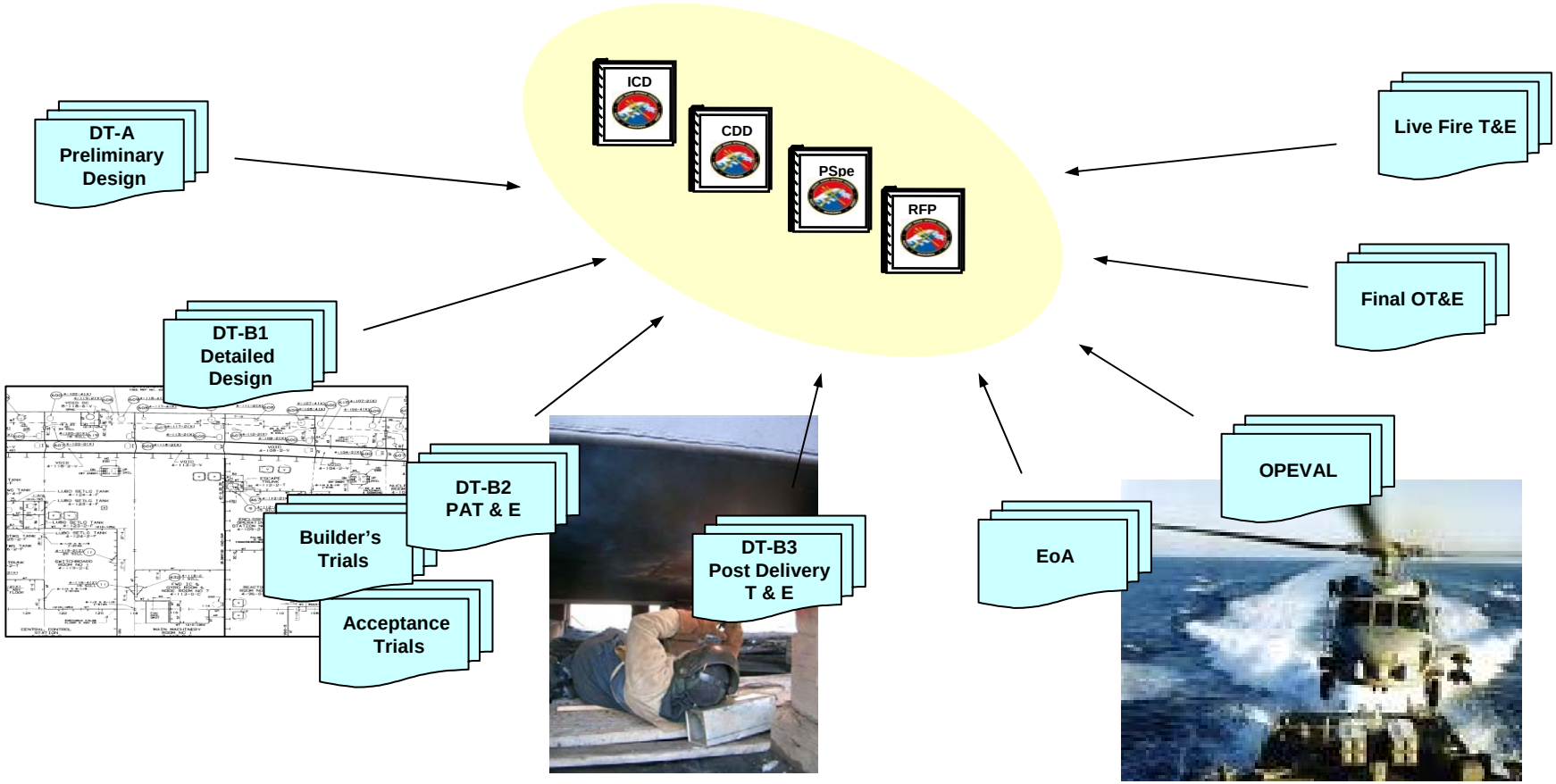
MOE/MOSs, CTPs and COIs

- Requirements module and T&E modules linked by various categories of measures.
- Developmental T&E test events linked to PSpec via Critical Technical Parameters (CTP).
- Operational T&E test events linked to CDD via Measures of Effectiveness and Suitability (MOE/MOS).
- Additional concerns in regards to survivability features and Live Fire Test &Evaluation Issues

Joint Test & Evaluation Master Plan

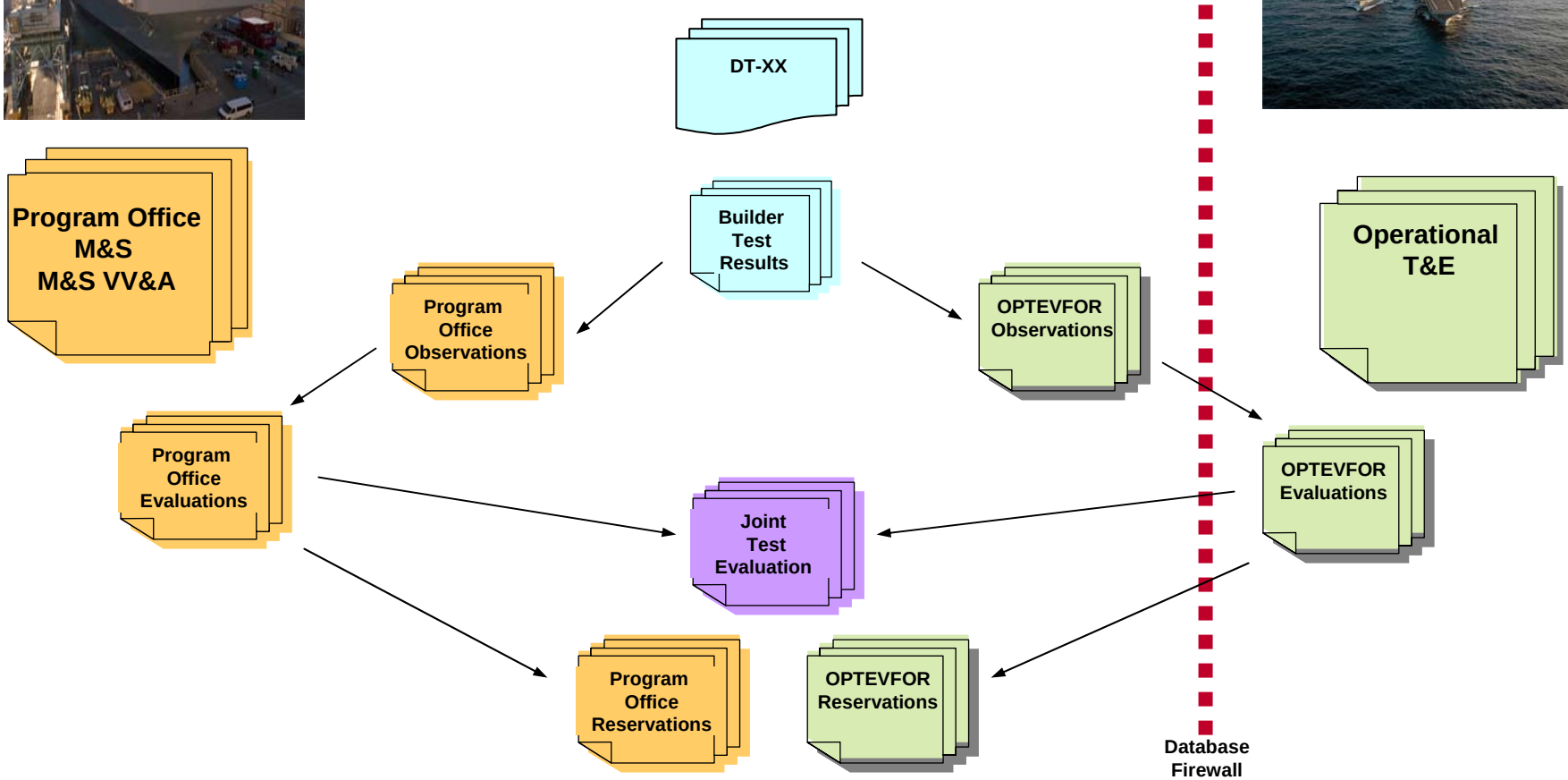
- The T&E W-IPT developed to represent all the major stakeholders.
- Stakeholders include:
  - Program Executive Office, Ships (PEO SHIPS)
  - NAVSEA Ship Design Manager (SEA 05D3)
  - Commander, Operational Test and Evaluation Force (COMOPTEVFOR)
  - Army Test and Evaluation Command (ATEC)
  - Marine Corps Test and Evaluation Activity (MCOTEA)
  - Chief of Naval Operations, Expeditionary Warfare (OPNAV N85)
  - Chief of Naval Operations, Navy Test and Evaluation Division (OPNAV N912)
  - Deputy Assistant Secretary of the Navy (DASN(Ships))
  - Army Test & Evaluation Executive
  - U.S. Army Test and Evaluation Management Agency (TEMA)
  - Office of the Assistant Secretary of the Army (Acquisition, Logistics and Technology) (OASA(ALT))
  - Office of the Secretary of Defense, Director, Operational Test and Evaluation (OSD/DOT&E)
  - Office of the Under Secretary of Defense (Acquisition, Technology and Logistics), System and Software Engineering/Assessments & Support (OUSD(AT&L)/SSES/AS)

Integrated Test Database



Supports Staged T&E Approach through Acquisition Lifecycle

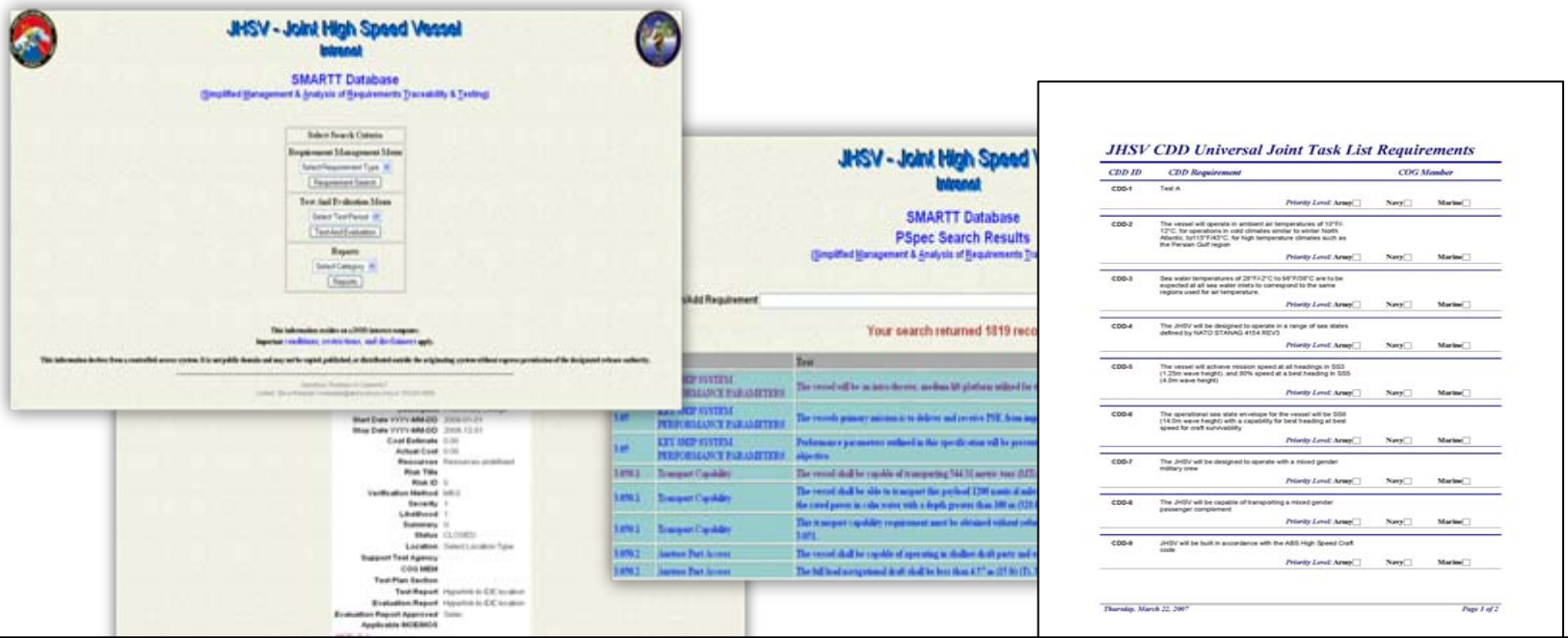
Web-Enabled Integrated Test Evaluation Tool



Provides for Independent Evaluation

SMARTT ® Alion's Web-enabled Integrated Requirements Management and T&E Database

- Integrated program developed by Alion and currently used in a variety of internal and external naval acquisition programs.



Provides Virtual Team Direct Editing and Management of Data

Questions or comments can be forwarded to:

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