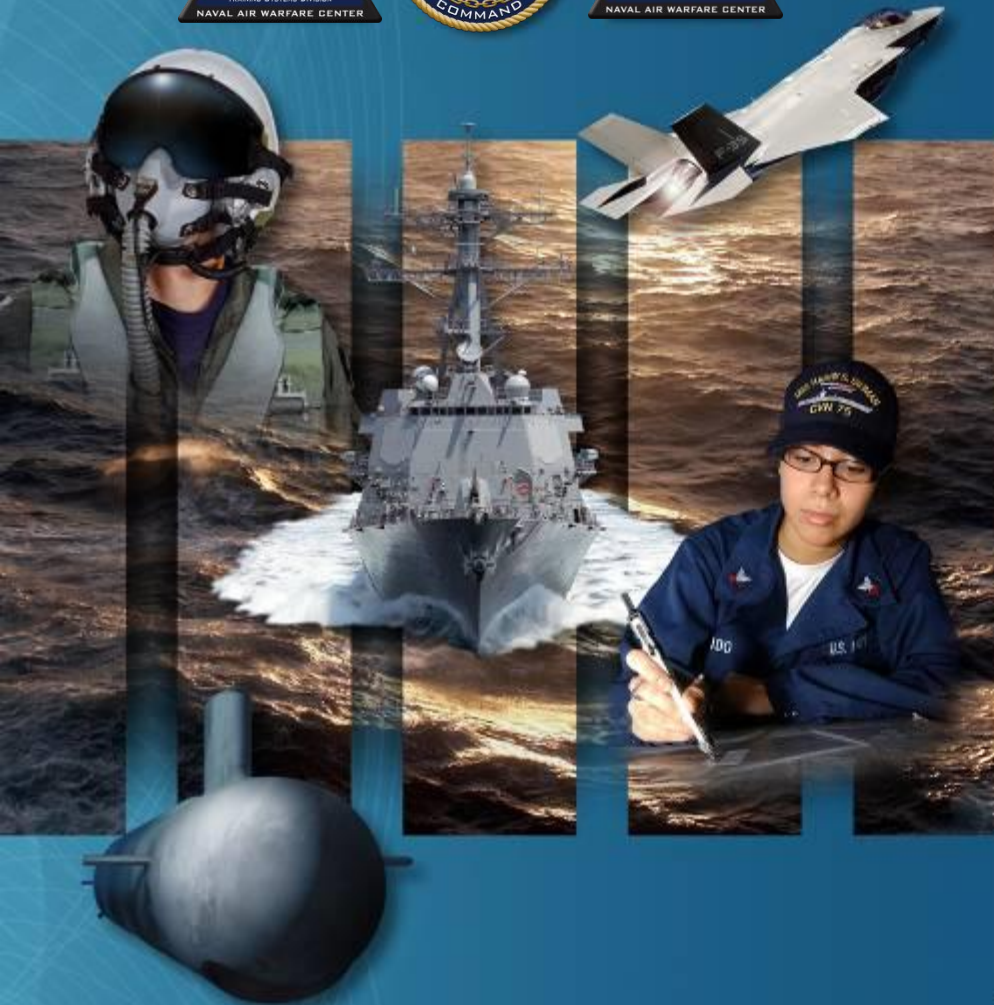


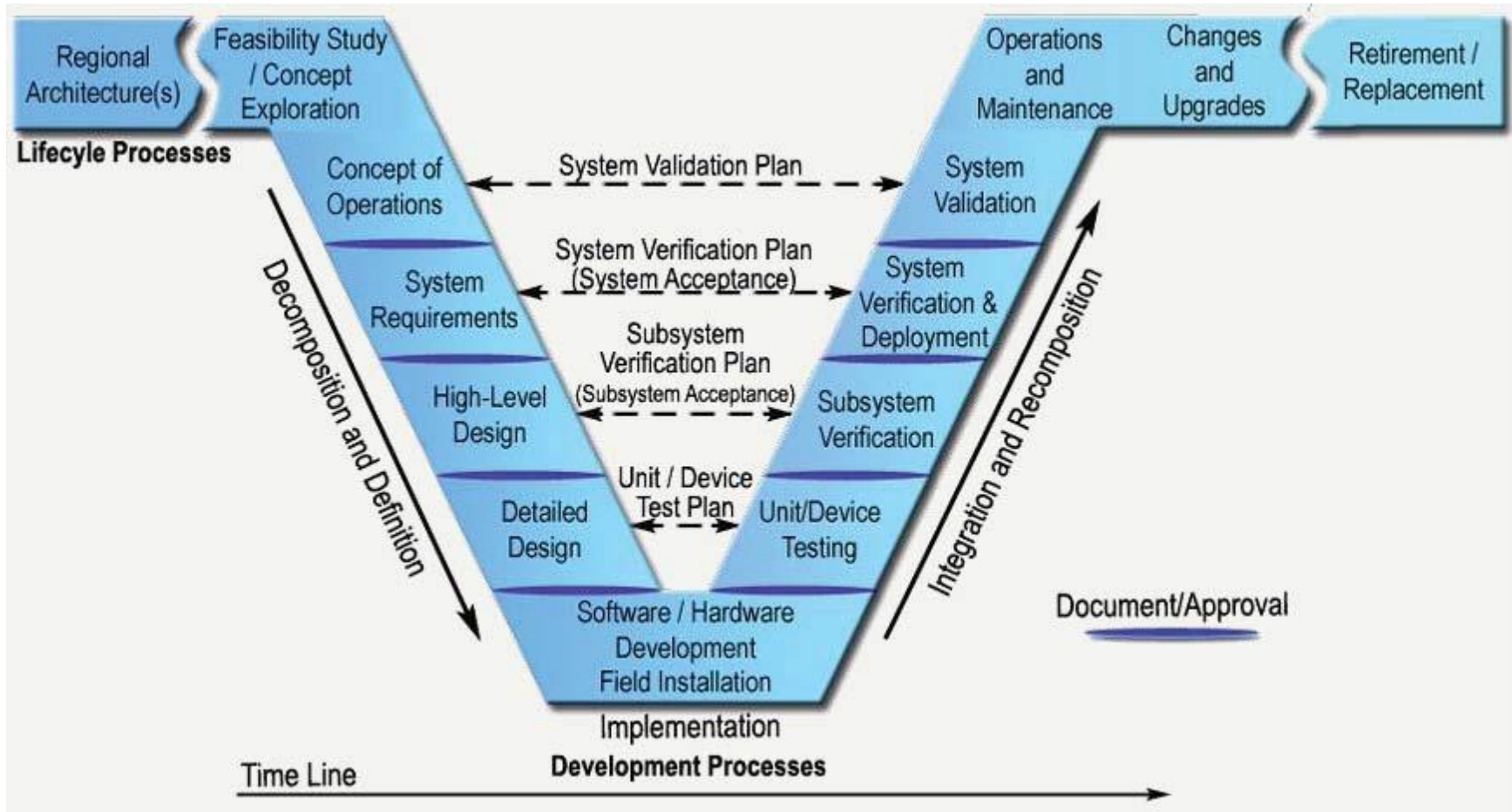
NAVAL AIR WARFARE CENTER
TRAINING SYSTEMS DIVISION
ORLANDO FLORIDA



Systems Engineering Technical Review Brief to INCOSE Orlando Chapter

Presented by
Hoang Doan (HD)
NAWCTSD AIR4685

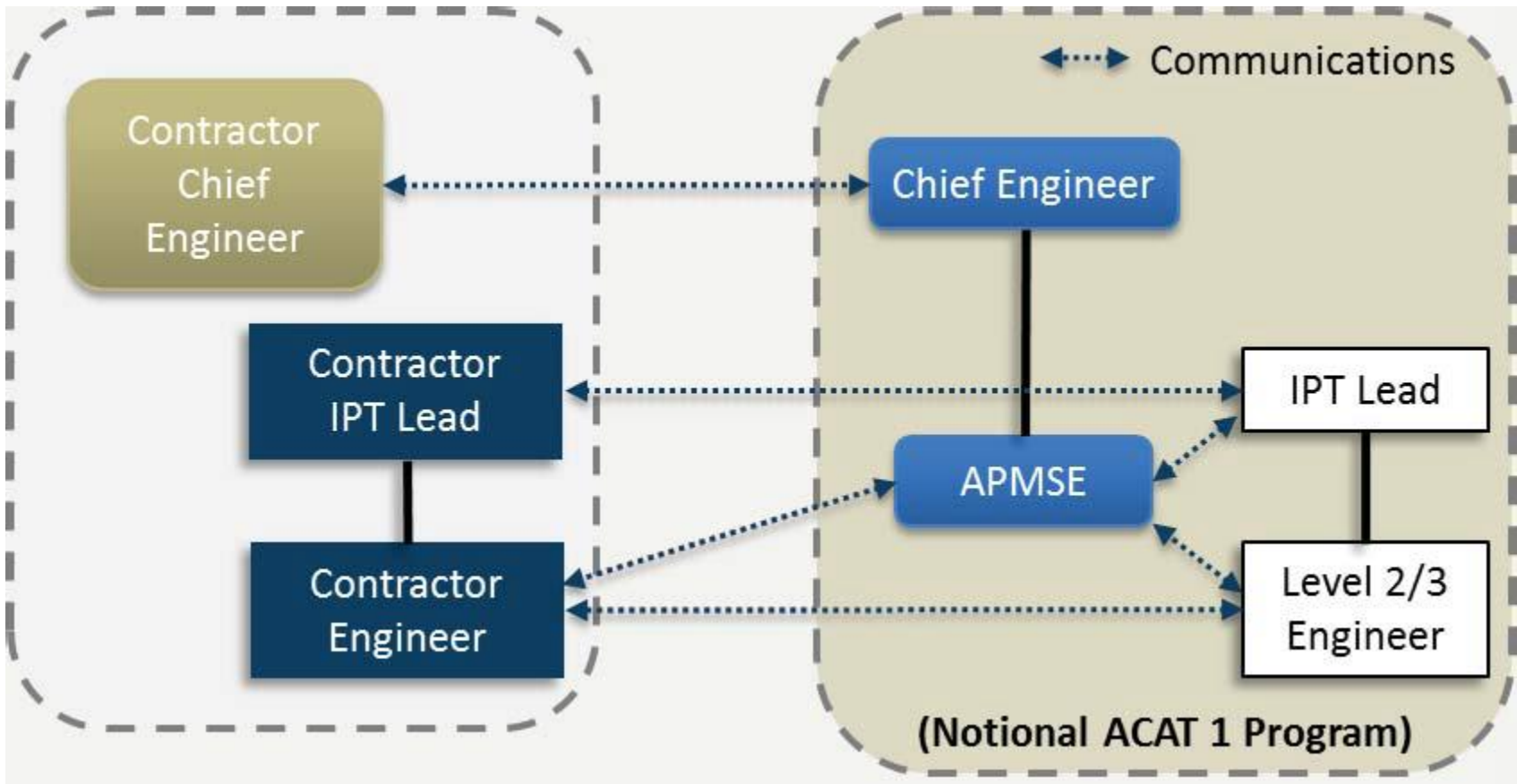
Systems Engineering



Decomposition and SET



Contractor and Govt SE Relationship





SE Focus Areas



- Specifications
- Systems Engineering Plan (SEP)
- Statement of Work (SOW)
- Technical Reviews (SETR)



Requirements



- Dynamic Object Oriented Requirements System (DOORS)
- SySML
- Other Enterprise or Stand alone SE Tools



Specification



- Performance vs. Detail Spec
- Requirements Decomposition at SRR-I
- Requirements Decomposition at SRR-II
- Key Performance Parameter
- Threshold and Objective



SEP



- All SEP should be tailored for its program
- Tailoring is guided by technical maturity and acceptable risk
- Samples can be downloaded at <https://nserc.nswc.navy.mil>





SEP



- A living document with technical planning
- Support the approved Acquisition Strategy
- Details the execution, management and control the technical aspects of the program
- Details the SETR planning, conduct and criteria
- Continuously to be updated throughout entire contract life
- A GFI to Industry during RFP



SEP vs. SEMP



- SEP: Government produces
 - GFI with RFP package
 - Government Team will use SEP (not SEMP) for SETR
- SEMP: Contractor produces
 - Should be a CDRL item and continue to be updated
 - Outline Contractor's technical planning and executing the contractual and technical effort per Contract and align with SEP
 - Should be provided by contractor with the Proposal



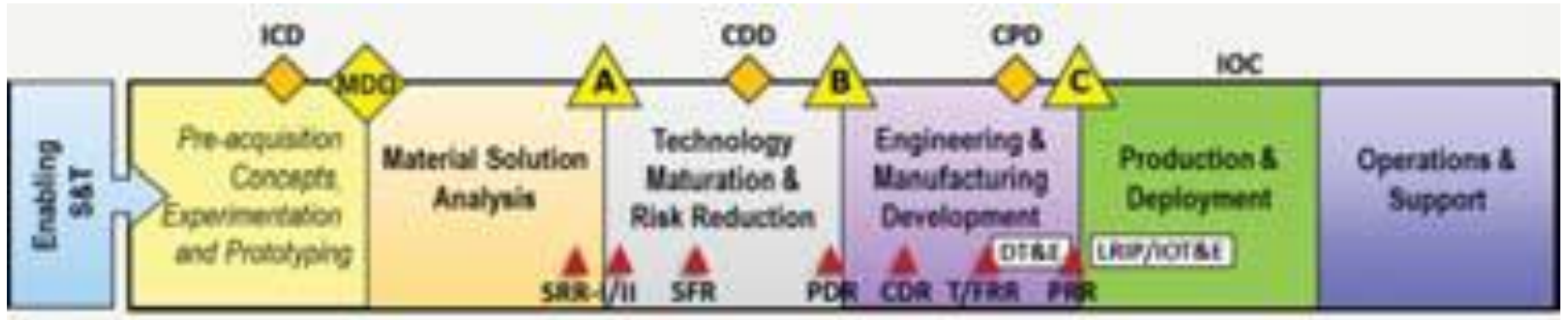
Key SETR



- System Requirements Reviews (SRR-I/II)
 - Performance Baseline
- System Functional Review (SFR)
 - Functional Baseline
- Preliminary Design Review (PDR)
 - Allocated Baseline
- Critical Design Review (CDR)
 - Initial Product Baseline
- Test Readiness Review (TRR)
- Flight Readiness Review (FRR)
- Production Readiness Review (PRR)

- Physical Configuration Audit (PCA) is not a SETR

Technical Baseline(s)





SETR Preparation



- SETRs to be conducted per approved SEP and NAVAIRINST 4355.19
- SETRs are event driven, not schedule driven
- Bottom up Review
- Govt Team prepares SETR Checklist
- Govt Team identifies Technical Review Board (TRB)
- Govt Team requests TRB Chair
- Govt Team coordinates with Contractor to plan for successful SETR event



Action Items



- **Request for Action (RFA)**
 - Critical action item required for closure
- **Request for Information (RFI)**
 - Action item to only provide information/data
 - Not required for closure
- **Action to Minutes (ATM)**
 - Action item that is programmatic in nature
 - Not required for closure



Successful SETR Event?



- Assessment of current design baseline for
 - Maturity
 - Technical Risks are identified and mitigated
 - Snapshot in time
 - Verify Technical Performance requirements, Cost, Schedule
 - Check on Resources and Staffing
 - Readiness to move to next milestone
- SETR is closed when RFAs are closed
- LSE to prepare SETR Close Out Report
- Contractor to submit SETR Event Report via CDRL



References



<http://www.acq.osd.mil/se/pg/guidance.html>

<http://www.incose.org/AboutSE/WhatIsSE>

<https://acc.dau.mil/CommunityBrowser.aspx?id=659812>