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
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