DATA ITEM DESCRIPTION

Title: Systems Engineering Management Plan (SEMP)

Number: DI-SESS-81785A
AMSC Number: 9584
DTIC Applicable: No
Preparing Activity: SE
Applicable Forms: N/A

Approval Date: 20150929
Limitation: None
GIDEP Applicable: No
Project Number: SESS-2015-054

Use/relationship: The SEMP describes the contractor's technical approach and proposed plan for the conduct, management, and control of the integrated systems engineering (SE) effort. It reflects the scope, purpose, and life-cycle phase(s) of the program.

This Data Item Description (DID) contains the content and intended use information for the data deliverable resulting from the work task described in paragraph 6.3.1.4 of IEEE 15288.1, or by the specific and discrete task requirements as delineated in the contract.

This DID supersedes DI-MGMT-81024 and DI-SESS-81785.

Requirements:

1. Reference documents.
    a. Office of the Secretary of Defense (OSD) Systems Engineering Plan (SEP) Outline.
    b. IEEE 15288.1, IEEE Standard for Application of Systems Engineering on Defense Programs
    c. IEEE 15288.2, IEEE Standard for Technical Reviews and Audits on Defense Programs

2. Format. The SEMP format shall be selected by the contractor.

3. Content. The SEMP shall be consistent with and address all topics in the government SEP, if available. In the absence of a government SEP, the SEMP shall address the topics in the OSD SEP Outline active at the time of the Request for Proposal (RFP). Minimally, the SEMP shall:

    3.1. Describe the contractor’s planned engineering approach to meeting the program’s contract, objectives, and overall technical and management approach.

    3.2. Describe the contractor’s detailed operational plan for executing systems engineering, including integration of the specialty engineering disciplines.

    3.3. Contain an annotated mapping between contractor and government SE processes. Identify any technical or technical management processes not mapped, including rationale for why they are not needed.

3.4. Show alignment of SE processes of the contractor and subcontractors providing engineering effort.

3.5. Describe planned technical solution activities, including:

a. Development, documentation, maintenance, and communication of the system architecture, including both internal and external interfaces.

b. Formal technical reviews and audits, as defined in IEEE 15288.2 or by the specific and discrete task requirements delineated in the contract, including the entry and exit criteria for each review/audit.

c. Trade studies for system requirements definition, architecture definition, design definition, integration, and verification/validation decisions.

d. Integration, verification, and validation down to the appropriate system element level.

3.6. Describe related planning associated with application of the contractor's systems engineering processes as tailored to meet the needs of the program and at a level of detail necessary for the contractor to manage and execute the technical effort. Details of process integration and communication with suppliers (i.e., subcontractors of engineered system elements and COTS vendors) shall be provided.

3.7. Include referenced lower-level and subcontractor technical plans (e.g., risk management plan, requirements management plan, data management plan, and configuration management plan) as determined necessary by the contractor to plan and execute a total systems engineering effort.

3.8. Provide detail related to other areas deemed necessary to execute systems engineering to meet the program's contract, objectives, and overall technical and management approach.

END OF DI-SESS-81785A