

DATA ITEM DESCRIPTION

Title: RELIABILITY AND MAINTAINABILITY (R&M) PROGRAM PLAN

Number: DI-SESS-81613A

AMSC Number: N9465

DTIC Applicable: Yes

Defense Technical Information Center

ATTN: DTIC-RIAC

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Preparing Activity: SH/NUWC-NWPT

Applicable Forms: N/A

Approval Date: 20140715

Limitation: N/A

GIDEP Applicable: Yes

GIDEP Operations Center

Naval Warfare Assessment Center

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Corona, CA 91718-8000

Use/relationship: This plan describes the Contractor's Reliability and Maintainability (R&M) program, how it will be conducted and the requirements, controls, monitoring and flow down provisions levied on Subcontractors and Vendors. It describes the R&M, including Built-in Test (BIT), procedures and tasks to be performed and their interrelationship with other system related tasks. The principal uses are to provide the contracting activity a basis for review and evaluation of the Contractor's R&M program and for determining contractual compliance to the specified R&M requirements.

This Data Item Description (DID) contains the format, intended use information, and content preparation instructions for the data product generated by the specific and discrete task described in the contract.

This DID should be tailored appropriately to each program.

This DID replace DI-SESS-81613.

Requirements:

1. Format. The Reliability and Maintainability (R&M) Program Plan shall be in the contractor's format.
2. Content. The R&M Program Plan shall identify and describe the activities planned by the Contractor for implementation of the R&M program, and shall include:
 - a. Organizational chart providing visibility into the resources, management and organizational structure of those responsible and accountable for the conduct of Reliability, Maintainability and BIT tasks.
 - b. Identification of the quantitative and qualitative R&M and BIT requirements and verification methods specified in the solicitation or contract.

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- c. List of required R&M, and BIT Tasks (CDRLs) with description and corresponding reference to the sections in the solicitation or contract.
 - d. Integrated schedule for conducting all reliability, maintainability, and BIT tasks including the relationship to engineering design reviews and program milestones (for example, systems requirements review, preliminary design review, critical design review, production readiness review, etc).
 - e. Reliability growth planning curve(s) that was integrated with the program's master schedule, plotting reliability against test time (or life units) to meet the quantitative requirement(s) specified in the solicitation or contract. Also, include the rationale for the initial reliability, planned growth rate, test resources and growth model used.
 - f. Description of how the R&M and BIT tasks (e.g. models, allocations, predictions, fault trees, critical items lists, failure mode, effects and criticality analyses, etc.), including those of subcontractors, that will be conducted and the procedures for comparing their status and results to plan.
 - g. Design guidelines (e.g. Operational Mode Summary/Mission Profile (OMS/MP), Failure Definition Scoring Criteria (FDSC), derating, stress analysis, thermal models, etc.) to be used for the reliability, maintainability and BIT tasks (e.g. models, allocations, predictions, failure mode, effects and criticality analyses, etc.).
 - h. List Government Furnished Information necessary to support R&M design, development, and test activities and identify the use of R&M data sources (e.g., service maintenance data collection systems).
 - i. Description of the intended use of GIDEP to promote and facilitate the sharing of R&M information.
 - j. Test and demonstrations planned for reliability, maintainability and BIT (e.g. accelerated tests, BIT demonstrations, Maintainability demonstrations).
 - k. Interrelationships of reliability, maintainability, and BIT tasks, including how the resulting data will be integrated with other system oriented tasks (for example, life cycle cost analyses, level of repair analyses, availability analyses, trade-off studies, etc).
 - l. Failure Reporting Analysis and Corrective Action System process to be used as well as any other data collection requirements and procedures, including a sample of the failure analysis forms.
3. End of DI-SESS-81613A.