

DATA ITEM DESCRIPTION

Title: Technical Manual Quality Assurance (TMQA) Program Plan

Number: DI-TMSS-81817

Approval Date: 20100525

AMSC Number: N9140

Limitation: N/A

DTIC Applicable: N/A

GIDEP Applicable: N/A

Office of Primary Responsibility: SH/SEA 04L2

Applicable Forms: N/A

Use/Relationship: The Technical Manual Quality Assurance (TMQA) Program Plan provides the Government program manager with details of the contractor's TMQA program including the organization, planning, and data control to be performed on TMs being procured. The plan is submitted to the Government for review and acceptance prior to the development of the TM(s).

This Data Item Description (DID) contains the format and content preparation instruction for the data product generated by the specific and discrete task requirement as delineated in the contract.

This data item shall not be procured when this information is provided by any other document supplied by the same contractor. Once established and approved, a contractor's TMQA Program Plan may be reapplied to support additional TM tasks; however, a revised plan should be procured when required to ensure the Plan is maintained current.

The following DIDs should be considered when TMs are being procured: DI-TMSS-81818, TM Validation Plan; and DI-TMSS-81819, TM Validation Certificate.

Requirements:

1. Format. The TMQA Program Plan shall be presented in the contractor's format.
2. Content. The TMQA Program Plan shall include a cover page identifying the following:
 - a. TM project/program name covered by the plan.
 - b. TMCR number(s), TM identification number(s), and title(s) of the TM(s) covered by the plan.
 - c. Document Type Definition (DTD) Public Identifier(s) used to develop the TM(s) covered by the plan.
 - d. Submittal date for the plan.
 - e. Name and address of contractor and contract number.

2.1 The TMQA Program Plan shall contain the scope and approach of the contractor's TMQA program. It shall also identify the contractor's TM processes from the initial collection of source data through the final product delivery and acceptance by the Government. The plan shall

DI-TMSS-81817

include the QA methods employed by the contractor to monitor and review the TM development processes. This shall include results from the review of the data generated during quality reviews and quality related reports and records.

2.3 TM development process. The TM Development Process section of the plan shall identify the method(s) used by the contractor to document their TM development processes, including TMQA processes and procedures. The plan shall identify how the processes and procedures are to be controlled and maintained current. The plan shall also identify how the contractor ensures that subcontractors and vendors involved in TM generation plan to meet the requirements of the processes and procedures.

2.4 TMQA organization. The TMQ Organization section of the plan shall identify the contractor's QA organization (e.g., structure and approximate size during the proposed course of the QA effort). It shall identify the functions and activities that directly affect TM quality and indicate how the contractor's QA personnel are organized to retain their independence from personnel responsible for TM generation.

2.5 Record keeping. Record Keeping shall identify the contractor's method of documenting and maintaining objective records of QA events, associated TM discrepancies/findings, and corrective actions taken.

2.6 Source data collection and control. The Source Data Collection and Control section of the plan shall identify the contractor's process to assure that the most current source data will be utilized for TM generation. The Plan shall identify the contractor's approach to ensure that the TM is consistent with appropriate source data elements (e.g., system maintenance plan, supportability analyses, logistics management information including supply support, provisioning, support and test equipment, manpower and training) specified in the contract. The plan shall also include measures proposed by the contractor to assure the effective use of design, manufacturing, and engineering drawings for the TM generation without the necessity to completely redo the drawings.

2.7 Quality reviews. This section of the plan shall identify the method for conducting contractor quality reviews (e.g., evaluating the availability and adequacy of materials, processes, procedures, and intermediate products which constitute TM development). The plan shall identify the contractor's intent to use sampling during TMQA efforts and the criteria intended to be used.

2.8 Support of Government TM reviews, meetings, and events. This section of the plan shall identify the contractor's plan to support and participate in Government-requested guidance and quality planning conferences, in-process reviews, and quality program reviews. The plan shall summarize the contractor's proposed approach to support the Government's verification effort for each applicable TM.

DID-TMSS-81817

2.9 Validation approach. This section of the plan shall contain a summary of the contractor's approach to TM validation and shall outline the intended methodology for TM validation planning.

2.10 Defect identification and corrective action. The Defect Identification and Corrective Action section of the plan shall contain methods for detecting deficiencies and ensuring that corrective actions were properly implemented and effective. Identifying deficiency trends and their causes, and implementing preventative action programs to prevent recurrence shall be included. Corrective actions specified shall extend to the performance of suppliers and vendors and shall identify how the contractor will be responsive to data from users concerning defects caused by suppliers.

2.11 Classification of defects. This section of the plan shall contain a Classification of Defects (CD) table listing the possible types of defects discovered in the TM. The listing shall be identified as major or minor defect categories, depending upon their probable impact.

2.11.1 Major defects. The CD table shall include the major defects (incorrect, incomplete, or missing) as they relate to the following:

- a. Maintenance procedures.
- b. Hotspots and links.
- c. Values and tolerances.
- d. Illustrations, schematics, and wiring diagrams.
- e. Part numbers.
- f. References and indices.
- g. Safety alerts/messages including dangers, warnings, cautions, and notes.
- h. Alert acknowledgement (non-linear Interactive Electronic TMs only).
- i. Technical content (source data and hardware comparison).
- j. Classified matter (incorrect identification and handling).
- k. Charts and tables.

2.11.2 Minor defects. The CD table shall include the minor defects (incorrect, incomplete, or missing) as they relate to the following:

- a. Typographical errors.
- b. Pages not collated correctly.
- c. Incorrect, incomplete, or missing Source, Maintenance & Recoverability codes.
- d. Use of unfamiliar words.
- e. Style and format inconsistencies.
- f. Inconsistent vocabulary.
- g. Long sentences.
- h. Long paragraphs.

DI-TMSS-81817

- i. Non-informative headings.
 - j. Organization not based on immediate needs of the user.
 - k. Complete or unclear illustrations.
3. End of DI-TMSS-81817.