

DATA ITEM DESCRIPTION

1. TITLE		2. IDENTIFICATION NUMBER	
Program Management Plan (PMP)		DID-FAA-026-04	
3. DESCRIPTION/PURPOSE 3.1 The Program Management Plan (PMP) will describe the Contractor's management organization to include interrelationships between the prime Contractor, major subcontractor(s) and the contracting activity. The Program Management Plan shall describe the Contractor's organization, program planning and scheduling tools and techniques, program tracking and control methods, resource management, production planning and management, and subcontractor management methods. 3.2 The PMP will be an all inclusive management plan providing details of the specific techniques, tasks, and procedures to be used for monitoring contract management and performance, configuration control, data management, production management, and cost control. Requirements pertaining to quality control and systematic improvement will be presented in the PMP. Software quality assurance requirements may also be addressed in the Software Quality Assurance Plan (SQAP) (DID-FAA-026-23). Requirements pertaining to configuration management will be presented in the PMP. Software configuration management requirements may also be addressed in the Software Configuration Management Plan (SCMP) (DID-FAA-026-24). 3.3 The PMP documents the Contract Work Breakdown Structure (CWBS) and its extension by the Contractor. 3.4 The PMP provides the contracting activity a basis for reviewing and evaluating of performance, and for determining contractual compliance.			
4. APPROVAL DATE (YYMMDD)	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6a. DTC APPLICABLE	6b. GIDEP APPLICABLE
August 11, 2000	AIO-2/ASU-500	N/A	N/A
7. APPLICATION/INTERRELATIONSHIP 7.1 This Data Item Description (DID) contains the format and content preparation instructions for the data product generated by specific and discrete task requirements as delineated in the contract. 7.2 This DID shall be the basis for the Contractor's management approach to program technical, schedule, and cost control. The PMP shall be consistent with data products generated for the direction, coordination, and control of system engineering, interface management, configuration management, quality assurance, safety, security, risk management, training, and production management. 7.3 The Contract Data Requirements List (CDRL DD 1423 or equivalent) should specify whether deliverable data are to be delivered on paper or electronic media; are to be in a given electronic form (such as ASCII, CALS, or compatible with a specified word processor or other support software); may be delivered in developer format rather than in the format specified herein; and may reside in a computer-aided software engineering (CASE) or other automated tool rather than in the form of a traditional document.			
8. APPROVAL LIMITATION		9a. REFERENCES	9b. AMSC NUMBER
NONE		FAA-STD-026	N/A
10. PREPARATION INSTRUCTIONS 10.1 <u>General instructions.</u> a. <u>Automated techniques.</u> Use of automated techniques is encouraged. The term "document" in this DID means a collection of data regardless of its medium. b. <u>Alternate presentation styles.</u> Diagrams, tables, matrices, and other presentation styles are acceptable substitutes for text when data required by this DID can be made more readable using these styles.			
<i>(Continued on page 2)</i>			
11. DISTRIBUTION STATEMENT DISTRIBUTION STATEMENT: Approved for public release; distribution is unlimited.			

c. Title page or identifier with signature blocks. The document shall include a title page containing, as applicable: document number; volume number; version/revision indicator; security markings or other restrictions on the handling of the document; date; document title; name, abbreviation, and any other identifier for the system, subsystem, or item to which the document applies; contract number; CDRL item number; organization for which the document has been prepared; name and address of the preparing organization; distribution statement; and signature blocks for the developer representative authorized to release the document, the acquirer representative authorized to approve the document, and the dates of release/approval. For data in a database or other alternative form, this information shall be included on external and internal labels or by equivalent identification methods.

d. Table of contents. The document shall contain a table of contents providing the number, title, and page number of each titled paragraph, figure, table, and appendix. For data in a database or other alternative form, this information shall consist of an internal or external table of contents containing pointers to, or instructions for accessing, each paragraph, figure, table, and appendix or their equivalents.

e. Page numbering/labeling. Each page shall contain a unique page number and display the document number, including version, volume, and date, as applicable. For data in a database or other alternative form, files, screens, or other entities shall be assigned names or numbers in such a way that desired data can be indexed and accessed.

f. Response to tailoring instructions. If a paragraph is tailored out of this DID, the resulting document shall contain the corresponding paragraph number and title, followed by "This paragraph has been tailored out." For data in a database or other alternative form, this representation need occur only in the table of contents or equivalent.

g. Multiple paragraphs and subparagraphs. Any section, paragraph, or subparagraph in this DID may be written as multiple paragraphs or subparagraphs to enhance readability.

h. Standard data descriptions. If a data description required by this DID has been published in a standard data element dictionary specified in the contract, reference to an entry in that dictionary is preferred over including the description itself.

i. Substitution of existing documents. Commercial or other existing documents may be substituted for all or part of the document if they contain the required data.

10.2 Content requirements. Content requirements begin on the following page. The numbers shown designate the paragraph numbers to be used in the document. Each such number is understood to have the prefix "10.2" within this DID. For example, the paragraph numbered 1.1 is understood to be paragraph 10.2.1.1 within this DID.

10. PREPARATION INSTRUCTIONS -- 10.2 CONTENT REQUIREMENTS (continued)

1. Introduction. This section shall be divided into the following paragraphs.
 - 1.1 Purpose. This paragraph shall describe the purpose of the PMP in terms of its relationship to the management of the project, and performance of the contract tasks outlined in the Statement of Work (SOW).
 - 1.2 Overview. This section shall contain: programmatic and technical background on the system; an overview of the Contractor's approach to program technical, schedule, and cost control; authority of the program manager; and the relationship of the PMP to other programmatic policies, procedures, and planning documents; and methods of incorporating changes into the PMP.
2. Program Management. This section shall provide information on the Contractor's management organization, internal management policies and procedures, an overall integrated program schedule, relationships with Government personnel and agencies, and roles and responsibilities of management entities within the organization.
 - 2.1 Management Organization. Present company organizational chart(s) and sufficient supplemental narrative to fully describe all organizational levels, plans and activities. This chart shall be hierarchical in nature and should delineate clearly all major area responsibilities and management positions. Provide a chart of the program organization to be used in performance of the contract. Provide a narrative describing how the Contractor shall fully integrate the management of all elements of the project. Identify key technical and management personnel who will be assigned to the project. If the project includes major subcontractors, provide organizational information about the subcontractor and include subcontractor organizational elements in the project organization chart.
 - 2.2 Roles and Responsibilities. Discuss the authority of all responsible management positions identified by the organizational description. This description shall include the role of the project manager to direct, control, and commit resources to adequately fulfill their responsibilities.
 - 2.3 Policies and Procedures. Describe internal policies and procedures to be used in managing the contract.
 - 2.4 Relationships. Describe the working relationships the Contractor will establish with the Government (FAA) and any subcontractors supporting the procurement of the system.
 - 2.5 Subcontract Management. Describe the approach to managing subcontractor activities. Include in the approach the organizational relationship maintained between the prime and subcontractors and methods of requirement flow-down and activity progress reporting back to the prime Contractor. Describe subcontractor and supplier rating systems used to select subcontractors and describe the approach to maintaining quality from products produced by subcontractors.

10. PREPARATION INSTRUCTIONS -- 10.2 CONTENT REQUIREMENTS (continued)

3. Contract Work Breakdown Structure. The PMP shall include the contract work breakdown structure (CWBS). The complete work breakdown structure (WBS) will serve as a basis for program and technical planning, scheduling, cost estimating, resource allocations, performance management, configuration management, and status reporting. The CWBS shall identify all subcontracted elements or tasks and shall include an index and dictionary.

- 3.1 CWBS Index. The CWBS shall contain the data elements listed below:

Line number for each CWBS sequential starting with 1.

Title of the CWBS element (using the specific name or nomenclature, when applicable), intended to reflect the level. Level 1 is the total contract. Levels 2, 3, etc. are successively lower levels of the program.

CWBS code.

- Contract line item(s) associated with the CWBS element,
- Statement of work (SOW) paragraph numbers(s).

- 3.2 CWBS Dictionary. The CWBS dictionary shall describe the effort and tasks associated with every CWBS element. Provide a complete description of the technical and cost content of each CWBS element. The definition shall describe the efforts, tasks, tests, components, etc., that are included in the CWBS element by the Contractor.

4. Schedule. Present a baseline schedule and processes for control of the schedule.

- 4.1 Baseline Schedule. Present a Baseline Master Integrated Project Schedule (BMIPS) that shall include all formal reviews and audits, all key programmatic and technical events, and the preliminary and final submission of all documentation identified in the Contract Data Requirements List (CDRL). Include developmental and production processes discussed in the plan. The schedule shall show task dependencies and interrelationships and shall be tied to the WBS and CWBS. Schedules shall be presented in summary, intermediate, and detailed levels tied to CWBS work elements.

- 4.2 Summary master schedules. A graphical display of top level program activities and key milestones that depict major work activities in an integrated fashion at the summary level of the CWBS.

- 4.3 Intermediate schedules. A graphical display of top level program activities and key milestones that depict major work activities in a major CWBS element.

- 4.4 Detailed schedules. A graphical display of detailed activities and milestones that depict work activities in a particular CWBS element.

10. PREPARATION INSTRUCTIONS -- 10.2 CONTENT REQUIREMENTS (continued)

- 4.5 Schedule Management. Provide a detailed description of how the Contractor will implement a fully integrated, defined, planning and control system. The description shall include discussion of interrelationship of tasks, and tracking criticality of tasks. If subcontractor(s) are used, similar information shall be presented and shall include a discussion on how Contractor and subcontractor schedules shall be integrated and updated.
5. Resource Planning. Provide a detailed description of how the Contractor will allocate and plan resources to meet the delivery requirements of the project. Discuss any resource planning tools used for this purpose.
6. Metrics. Describe the management indicators (metrics) that will be used to track contract performance and contract work breakdown structure (CWBS) activities throughout the contract life cycle. Include description of contract metrics (e.g. Earned Value metrics) used to monitor cost and schedule progress in a cost plus environment.
7. Risk Management. Describe the internal approach and method for the identification, assessment, and mitigation of program risks. This approach should include provision for identifying risk areas, assessing risk factors, assigning appropriate resources to reduce risk factors, identifying and analyzing alternative actions available, identifying the most promising alternatives, and planning for implementation of risk reduction. Identify and assess each possible area of risk to the program, applying the internal risk reduction procedure. Describe your procedures to develop a plan of action to mitigate risk when management indicators (metrics) show a deviation of 10% or greater between planned and actual indicators.
8. Data Management: Describe the organization, procedures, and tools to be used to ensure that all data deliverables required by the contract are made in a timely manner. Identify the individual responsible for integrating and maintaining the total data management effort. This effort shall involve monitoring, reporting, status accounting, and development of a cross-matrix (e.g. Government change requirements versus implemented changes) of all changes to, additions to, or deletions from CDRL contents. The Contractor's procedures for controlling the generation, receipt, approval, storage, and delivery of subcontractor data (as well as its inclusion in status accounting) shall also be described.
9. Configuration Management Plan. This section shall describe the Contractor's configuration management (CM) Plan, how the contractor's CM program is organized, how it will be conducted, and the methods, procedures and controls used to assure effective configuration, identification, change control, status accounting, and audits of the total configuration, including hardware, software and firmware.

10. PREPARATION INSTRUCTIONS -- 10.2 CONTENT REQUIREMENTS (continued)

9.1 Configuration management phasing and milestones. This section shall describe and graphically portray the sequence of events and milestones for implementation of CM in phase with major program milestones and events, including:

- a. Release and submittal of configuration documentation in relation to program events (e.g., technical reviews);
- b. Establishment of internal developmental configuration and contractual baselines;
- c. Implementation of internal and Government configuration control;
- d. Establishment of configuration control boards;
- e. Implementation of a status accounting information system and provision of reports/or access to the status accounting information; and
- f. Conduct of configuration audits.

9.2 Configuration identification. This section shall describe the Contractor's procedures for meeting the requirements of Statement of Work (SOW) requirements related to configuration management, including:

- a. Selection of Configuration Item(s) (CI) ;
- b. Establishment and management of developmental configuration including document, drawing and software development libraries and corrective action process ;
- c. Establishment of contract baselines, definition of the configuration documentation required for each and graphic illustration of configuration documentation relationships;
- d. Engineering release and correlation of manufactured products; and
- e. Assignment and application of configuration identifiers including document numbers, nomenclature, serial numbers and part number to hardware; and software identifiers to software and firmware.

9.3 Configuration control. This section shall describe the Contractor's procedures for meeting Statement of Work (SOW) requirements related to configuration management, including:

- a. Functions, responsibility, and authority of configuration control boards;
- b. Classification of changes, and the level of authority for change approval/concurrence;
- c. Processing of Class I Engineering Change Proposals (ECPs) and Value Engineering Change Proposals (VECPs);
- d. Processing of Class II ECPs;
- e. Processing of Requests for Deviations and Waivers; and
- f. Processing of Specification Change Notices (SCNs)

10. PREPARATION INSTRUCTIONS -- 10.2 CONTENT REQUIREMENTS (continued)

9.4 Configuration status accounting. This section shall describe the Contractor's procedures including:

- a. The Contractor's methods for collecting, recording, processing and maintaining data necessary to provide contractual status accounting information via reports and/or data base access;
- b. Description of reports/information system content related to, as applicable:
 - Identification of current approved configuration documentation and configuration identifiers associated with each CI;
 - Status of proposed engineering changes from initiation to implementation;
 - Results of configuration audits; status and disposition of discrepancies;
 - Status of requests for critical and major deviations and waivers;
 - Traceability of changes from baseline documentation of each CI; and
 - Effectively and installation status of configuration changes to all CIs at all locations.
- c. Methods of accessing the accounting information systems and/or frequency of reporting and distribution.
- d. Description of the tool used to accomplish status accounting.

9.5 Configuration audits. This section shall describe the Contractor's approach to meeting Statement of Work (SOW) requirements related to configuration management, including: plans, procedures, documentation, and schedules for functional and physical configuration audits; and format for reporting results of in-process configuration audits.

10. Quality Control, Performance Evaluation, and Contractual Compliance. This section shall discuss Contractor and major subcontractor(s) methods and concepts for continuous quality control, performance evaluation, and contractual compliance.

10.1 Special Boards, Teams, and Working Groups. Discuss the purpose and responsibilities of all special boards, teams, or working groups to be used by the Contractor to control technical or managerial performance.

10.2 Reviews and Reporting. Describe plans for all formal and informal reviews and reporting to the Government.

10.3 Systematic Improvement. Describe the approach to systematic improvement of products. Include in the discussion the approach to supplying quality products and making continuous improvement to critical processes controlled by the organization. Describe the tools and techniques which are used or planned for use on this contract. Include any discussion of relevant experience in the area of systematic improvement.

11. Production Management. This section shall discuss Contractor and major subcontractor(s) methods and concepts for employing facilities, tooling, and manpower resources to produce the system/equipment.

10. PREPARATION INSTRUCTIONS -- 10.2 CONTENT REQUIREMENTS (continued)

- 11.1 Manufacturing Methods and Production Flow. Provide a production flow utilizing a goes-into chart, tree chart or equivalent to detail the process for manufacturing and assembly in terms of key operations or assembly points showing individual and total lead times from the procurement of raw material to delivery of the end item.
- 11.2 Make or Buy. This section shall identify each item and rationale for all major make/buy decisions and identify single or sole source suppliers with a backup plan, long lead materials, any critical materials and vendor control.
- 11.3 Capability and Capacity. This section shall describe the data and information used to determine the Contractor and subcontractor(s) capability and capacity to meet schedule requirements. The Contractor shall provide data indicating ability to meet the production rate and quantity for the system. Manufacturing risks and the systems used to track suppliers' progress and to detect/correct potential delivery problems shall also be addressed. Provide a list of all subcontractors and major vendors indicating the services/materials to be supplied by each.