

DOCUMENT PRODUCTION SYSTEM TECHNICAL DIRECTION DOCUMENT

1.0 Purpose. The purpose of the Document Production System (DPS) Technical Direction Document (TDD) is to provide direction for the ongoing DPS software operations and sustainment effort.

2.0 Requirements. DPS is required by Strike Warfare Directorate's Combat Plans Division (ST12) to provide OPLAN mission data reports to field components and outside agencies, as directed by the JSCAP. The DPS Software developer shall maintain and integrate the following Computer Software Components (CSCs) that compose the Document Production System:

2.1 Document Production System (DPS). The DPS supports Air Room Document Production Activities. DPS produces several types of documents/reports that are distributed to United States Strategic Command (USSTRATCOM) components and outside agencies. Additionally, the DPS Viewer is a Power Soft Reports (*.psr) viewing utility bundled with the DPS application.

2.2 Block Transmit (BKXMIT). The BKXMIT software application takes any ASCII-formatted file and converts the file into the JANAP-128 message format for electronic transmittal. It is used to prepare DPS reports for transmittal to field components.

2.3 Reserve Force Target List Data Viewer (RFTLVWR). The RFTLVWR application is distributed to field units and used for display, print, and search capabilities of the targeting data flat files produced by DPS.

3.0 Objectives/Justification. This TDD is to be used as a guideline for ongoing development, maintenance, and system support of the DPS effort. DPS, as part of ISPAN, will be managed as a WBS project within the overall Program effort. It is desired to merge DPS work into the overall contract effort where and when beneficial to the government to achieve Program objectives and cost efficiencies.

3.1 References.

- 3.1.1 USSTRATCOM Systems Architecture Document (SAD)
- 3.1.2 USSTRATCOM Technical Architecture Document (TAD)
- 3.1.3 ISPAN Production Schedule
- 3.1.4 Testing and Evaluation Master Plan (TEMP)
- 3.1.5 System Engineering Master Plan (SEMP)

4.0 Specific Tasks.

4.1 Software Engineering and System Integration. The main focus of the software developer team is to deliver software that satisfies the functional requirements detailed by the Program Manager. The software development contractor shall accomplish this by developing, maintaining, and integrating the Computer Software Components

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(CSCs) that compose the Document Production System as stated in section 2.0 of this TDD.

4.2 Maintenance Activity Tasks. The following is a list of the maintenance activities to be performed by the software developer. The software developer:

- 4.2.1 Performs integration and Formal Qualification Testing (FQT) of the DPS CSCs and shall provide support for DPS Operational Acceptance Testing activities performed by the government.
- 4.2.2 Includes, in the maintenance process, provisions to maintain reusability features of the DPS CSCs.
- 4.2.3 Ensures the DPS software delivery schedule facilitates the actual production use of the software within the planning process.
- 4.2.4 Maintains the DPS software by performing routine adaptive, corrective, and perfective maintenance.
- 4.2.5 Provides one-on-one training or classroom training for delivered DPS software.
- 4.2.6 Presents all potential maintenance needs and activities to the Data Services (DS) Integrated Product Team (IPT) for validation and prioritization.
- 4.2.7 Proposes recommended software delivery schedules that meet USSTRATCOM production and support requirements, for approval of the IPT.
- 4.2.8 The software developer shall maintain DPS and provide development utilities and tools required to support the DPS CSCs in section 2.0 of this TDD.

4.3 Corrective maintenance.

- 4.3.1 The software developer shall provide ongoing corrective software engineering to eliminate program deficiencies and errors uncovered by program users, testers, or developers. Any deficiencies or errors uncovered by users or government testers shall be coordinated for Program Manager approval before correction.
- 4.3.2 The software developer shall provide technical assistance in trouble shooting existing programs.

4.4 Adaptive maintenance.

- 4.4.1 Under the CL15 Program Manager (PM) direction, the software developer shall modify the DPS functions on an as-required basis and adapt DPS CSCs to support the Strike Warfare Division operations.
- 4.4.2 Ongoing adaptive maintenance consists of the following activities:
 - 4.4.2.1 Reviewing and analyzing EDB modifications, to include out of cycle change forms, and incorporating changes into the software as necessary.

- 4.4.2.2 Incorporating any format or delivery method changes specified by ST12 and driven by production requirements.
- 4.4.2.3 External interface incorporation and maintenance
- 4.4.2.4 The software developer shall incorporate guidance updates to support OPLAN 8044.
- 4.4.2.5 The software developer shall design delivery schedules to meet STRATCOM production and support requirements.

4.5 Perfective maintenance.

- 4.5.1 The software developer shall provide ongoing perfective software engineering to optimize the functionality of existing software as directed by the DS IPT to meet program users' needs.
 - 4.5.2 The perfective maintenance shall also include specific user requested interface enhancements.
 - 4.5.3 The perfective maintenance shall also include 'ease of use' enhancements.
 - 4.5.4 In order to provide the government with the highest quality software, the perfective maintenance shall include any code optimizations that would increase the speed or efficiency of the application, or would conform to good coding standards/practices.
 - 4.5.5 **New Functionality.** The software developer routinely provides the addition of major enhancements, which are outside the normal maintenance activities, to the DPS. These items will be directed by the CL15 PM and will be accomplished by a government priority. Functional enhancements may include:
 - 4.5.5.1 Support the transition from Sybase to Oracle.
 - 4.5.5.2 Incorporate any other new mission requirements that may be needed to support Unified Command Plan Change 2 (UCP CH2) missions.
- 4.6 New Functionality.** Although not currently programmed, changes to the ISPAN system may drive requirements for new functionality in DPS. Such requirements will be validated, prioritized, and, if necessary, funded, prior to the contractor obtaining responsibility for them.
- 4.7 IPT Support.** The software development staff shall participate in the DS and EDB IPT. The DS IPT shall be the primary means by which DPS planning issues are managed, addressed, and resolved. At regularly scheduled DS IPT meetings, the software developer should be prepared to discuss issues relating to planning functions, schedule changes, potential program modifications, risks, and coordination with other Government agencies.
- 4.8 Software Requirements Analysis.** The software developer develops and delivers software requirements. This is accomplished prior to the beginning of each new software version coding effort.

4.9 Optional tasks. The following is a list of optional tasks to be performed by the software developer during the performance period of this contract:

- 4.9.1 Develop reports to support the dissemination of conventional and non-kinetic mission data.
- 4.9.2 Develop reports to support the dissemination of Global Strike sorties and targets.
- 4.9.3 Develop reports for Integrated Missile Defense planning data.
- 4.9.4 Develop reports for Information Operations planning data.
- 4.9.5 Migrate DPS from Power Builder to a TBD environment.
- 4.9.6 Incorporate web-based technology into DPS, to include user input and mission output.

4.10 Performance period. The initial performance periods for each of the extant products begins 1 October, 2004. This is a delayed start, thereby making the extant product CLIN a contract option. The period of performance for each option year will end 31 January, with the following optional period of performance beginning 1 February, throughout the life of the contract.

4.11 Product deliverables.

4.11.1 Documentation. The software developer develops and delivers documentation in accordance with the contract Exhibit A, Contract Deliverables Requirements List (CDRL). Those items not included in Exhibit A may be provided in a contractor format acceptable to the government. The software developer may suggest the tailoring (or elimination) of any document to the government in coordination with the DS IPT, coordinated through the Systems IPT. Recommended actions, as agreed upon by the CL15 Program Management Office, the IPT, and the Contractor, shall be implemented. The CDRL items required for the DP software subsystem are listed below. Each shall be delivered separately from the program CDRL, until such time as the contractor proposes, and the government agrees, to incorporate them into equivalent program (framework function) CDRLs.

- 4.11.1.1 Software Design Description (SDD)
- 4.11.1.2 Software Development Plan (SDP)
- 4.11.1.3 Operations Concept Document (OCD)
- 4.11.1.4 Software Requirement Specification (SRS)
- 4.11.1.5 Interface Requirements Specification (IRS)
- 4.11.1.6 Interface Design Document (IDD)
- 4.11.1.7 Software Test Description (STD)
- 4.11.1.8 Software Test Plan (STP)
- 4.11.1.9 Software Test Report (STR)
- 4.11.1.10 Software Version Description (SVD)
- 4.11.1.11 Software User Manual (SUM)
- 4.11.1.12 Training Materials

4.11.2 Software. The software developer shall deliver the application software as identified in section 5.0 of this TDD. The following items shall be delivered IAW Exhibit A, CDRL A018. The DPS data shall be delivered separately, until such time as the contractor proposes, and the government agrees, to incorporate them into equivalent program (framework function) CDRLs.

- 4.11.2.1 Executables
- 4.11.2.2 Source code
- 4.11.2.3 Windows
- 4.11.2.4 On-line help files
- 4.11.2.5 Data

4.11.3 Reviews. The software developer shall accomplish the following reviews during the development cycle for each product. These reviews will include representatives from the developer team, the Program Management, Functional Management and end users. Review names are descriptive; the equivalent from the contractor's integrated processes may be substituted.

- 4.11.3.1 System Requirements Review (SRR)
- 4.11.3.2 System Design Review (SDR)
- 4.11.3.3 Requirements Joint Technical Review (JTR)
- 4.11.3.4 Preliminary Design Review (PDR)
- 4.11.3.5 Critical Design Review (CDR)
- 4.11.3.6 Design JTR
- 4.11.3.7 Test Readiness Review (TRR)
- 4.11.3.8 Production Readiness Review (PRR)

4.11.4 Earned Value Management System (EVMS). The software developer shall, on a monthly basis, deliver DPS-specific EVMS data to the CL15 Program Management Office. That data should be incorporated into the program CDRL A013, unless the contractor can provide a best-value rationale for providing it separately. The data includes, at minimum:

- 4.11.4.1 Budgeted Cost of Work Scheduled (BCWS)
- 4.11.4.2 Budgeted Cost of Work Performed (BCWP)
- 4.11.4.3 Actual Cost of Work Performed (ACWP)
- 4.11.4.4 Budget at Completion (BAC)

4.12 Program events and milestones. Schedule milestones shall be provided in the program IMP/IMS. The contractor may also incorporate them as separate deliverable items. Schedule details will be worked with CL15 Program Office following the SDIP process, which may be tailored for this project. DPS is dependent on the Enterprise Data Base (EDB) business process which currently provides production deliveries approximately twice a year (June/Dec). DPS will have at minimum two deliveries each year to coincide with the EDB. An integrated baseline review schedule that includes the tasks and milestones to support all specified deliverables should be included. Dependencies, resources, should be identified as well as the critical path.

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5.0 Manpower/resources estimates. The DPS project has historically utilized approximately 8.1 FTEs to provide the functionality described, with a ramp-down to approx. The historical and projected funding for this project is as outlined in Table 5.1, provided for informational purposes only. (Note the ramp down to a stabilized funding stream with a real decrease over the life of the contract in FY2005 and beyond. This decrease is expected to result from total life cycle cost efficiencies.)

Table 5.1

2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1.166	1.191	1.215	1.106	1.106	1.106	1.106	1.106	1.106	1.106	1.106	1.106

6.0 Critical dependencies. DPS is dependent on the EDB, currently transitioning from Sybase 12 to Oracle 9i.

7.0 Risks. A risk management plan, which may be incorporated into program CDRL A006, should provide real time access to the contractor's risk items, their status, mitigation strategies, OPRs, and related information.