3. DESCRIPTION/PURPOSE

3.1 The Consolidated Software Test Document (C-STD) is a single document encompassing the test planning, test cases and procedures, and test results for CSCI, CSCI integration, and software system testing, as applicable. It contains, in summary form, the contents of the Software Test Plan (STP), Software Test Description(s) (STDs), and Software Test Report(s) (STRs) for a project.

3.2 A C-STD is written as an alternative to the individual testing documents cited above. It is best suited to a project on which a single test document is most effective.
7. APPLICATION/INTERRELATIONSHIP

7.1 This Data Item Description (DID) contains the format and content preparation instructions for data generated under the work tasks described by paragraphs 5.1.2, 5.1.3, 5.10.1, 5.10.2, 5.10.6, 5.11.1, 5.11.2, 5.11.6, 5.12.1, 5.12.2, and 5.12.6 of MIL-STD-SDD.

7.2 This DID is an alternative to DI-xxxx-xxxxx (Software Test Plan), DI-xxxx-xxxxx (Software Test Description), DI-xxxx-xxxxx (Software Test Report), and DI-xxxx-xxxxx (Completely Consolidated Software Development Record). (See MIL-STD-SDD Appendix H)

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

7.4 This DID supersedes (TBD).
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<th>8. APPROVAL LIMITATION</th>
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| DATA ITEM DESCRIPTION | Form Approved  
OMB NO.0704-0188 |
10. PREPARATION INSTRUCTIONS
10.1 General instructions.

a. Automated techniques. Use of automated techniques is encouraged. The Contract Data Requirements List (CDRL, DD Form 1423) should specify whether the data are to be delivered on paper or electronic media; any requirements on the electronic representation (such as ASCII, CALS, or compatibility with a specified word processor or other support software); whether the data may be delivered in contractor format rather than in the format specified herein; and whether the data may reside in a computer-aided software engineering (CASE) or other automated tool rather than in the form of a traditional document.

b. Alternate presentation styles. Charts, tables, matrices, and other presentations styles are acceptable substitutes for text when data required by this DID can be made more readable using these styles.
10. PREPARATION INSTRUCTIONS (continued)

c. Title page or identifier. When data are delivered in the form of a traditional document, 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 preparing organization. For data delivered in an alternative form, this information shall be included on external and internal labels or by equivalent identification methods.
10. PREPARATION INSTRUCTIONS (continued)

d. Table of contents. When data are delivered in the form of a traditional document, 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 delivered in an 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.
10. PREPARATION INSTRUCTIONS (continued)

e. **Page numbering/labeling.** When data are delivered in the form of a traditional document, each page shall contain a unique page number and display the document number, including version, volume, and date, as applicable. For data delivered in an 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.
10. PREPARATION INSTRUCTIONS (continued)

f. Response to tailoring instructions. When data are delivered in the form of a traditional document, paragraphs that have been tailored out of the DID shall result in the corresponding paragraph number and title in the document, followed by "This paragraph has been tailored out." For data delivered in an 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.
10. PREPARATION INSTRUCTIONS (continued)

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.
1. **Scope.** This section shall be divided into the following paragraphs.

1.1 **Identification.** This paragraph shall contain a full identification of the system and the CSCIs to which this document applies, including, as applicable, identification number(s), title(s), abbreviation(s), version number(s), and release number(s).

1.2 **System overview.** This paragraph shall briefly state the purpose of the system and the software to which this document applies. It shall describe the general nature of the system and software; summarize the history of system development, operation, and maintenance; identify the project sponsor, generic user, developer, and support agencies; identify current and planned operating sites; and list other relevant documents.
1.3 Document overview. This paragraph shall summarize the purpose and contents of this document.

2. Referenced documents. This section shall list by document number and title all documents referenced in this document. This section shall also identify the source for all documents not available through normal Government stocking activities.
3. **Software test planning.** This section shall be divided into the following paragraphs to describe the contractor's plans for conducting CSCI, CSCI integration, and software system testing.

3.1 **Software test environment.** This paragraph shall be divided into subparagraphs as needed to describe the software test environment at each intended test site. Reference may be made to the software engineering environment described in the software development plan for those resources that are used in both environments.

3.1.x *(Name of generic test site(s)).* This paragraph shall identify one or more generic test sites to be used for the testing, and shall describe the software test environment at the site(s). The description of each test environment shall include the following:
a. Name/identifier and version of software items (e.g., operating systems, compilers, communications software, databases, test drivers, preprocessors, other special test software), including the purpose of each, any security and privacy considerations, and which are to be provided by the site.

b. Name/model/serial number and version of hardware and firmware items (e.g., computer hardware, interfacing equipment, communications equipment, test message generators, test timing devices, etc.), including the purpose of each, any security and privacy considerations, and which are to be provided by the site.

c. Other materials needed for the testing (e.g., manuals, listings, the software to be tested, data to be used in the tests, sample outputs, test worksheets, etc.).
including the purpose of each, any security and privacy considerations, and which are to be provided by the site.

d. The proprietary nature and Government rights associated with each item of the software test environment.

e. Plans for installation, testing, and control of the software test environment.

f. The organizations that will participate in the testing.

g. The number and skill types of personnel required during the test period, and the dates and time they will be needed.
h. Plans for any orientation and training to be given before and during the testing

i. The tests to be performed at the site(s), indicated by references to paragraph 3.2
3.2 Test identification.

3.2.1 General information. This paragraph shall provide the following general information about the testing to be performed:

a. Levels of tests of be performed (e.g. CSCI, CSCI integration, system)

b. Types or classes of tests to be performed (e.g., stress tests, timing tests, erroneous input tests, maximum capacity tests)

c. Any test requirements that apply to all, or a group of, tests (e.g., "Tests of type x shall use live data")
d. Extent of testing to be performed (e.g., specified sampling of possible inputs) and rationale for the extent selected

e. Planned sequence or progression of tests

f. The data recording, reduction, and analysis procedures to be used during and after the tests
3.2.2 Planned tests.

3.2.2.x (Item(s) to be tested). This paragraph shall identify a CSCI, group of CSCIs, subsystem, system, or other entity by name and project-unique identifier, and shall be divided into the following subparagraphs to provide an overview of the tests planned for that item. (Note: "tests" are collections of test cases. There is no intent to describe each test case in this paragraph.)

3.2.2.x.y (Test name and identifier). This paragraph shall identify a test by name and project-unique identifier, and shall be divided into subparagraphs as needed to specify:

   a. Test objective
   b. Test level (using the test levels defined above)
   c. Test class (using the test classes defined above)
d. Qualification method(s) specified in the associated requirements specification(s)
e. Cross reference to the software requirements addressed by this test
f. Any special test requirements
g. Type of data to be recorded
h. Type of data recording/reduction/analysis to be employed
i. Assumptions and constraints
j. Any security and privacy considerations
3.3 **Test schedules.** This paragraph shall contain or reference the schedules for conducting the tests identified in this plan. The schedules shall include:

a. Time frame for testing at each test site
b. Test schedule for each test site, including pretest activities, preparation of test inputs and databases, any orientation or training associated with the testing, the testing itself, and any period for review/approval of test results
4. **Software test descriptions.** This section shall be divided into the following paragraphs to describe the test cases and test procedures to be used for CSCI, CSCI integration, and software system testing.

4.x (Item(s) to be tested). This paragraph shall identify an item to be tested and shall be divided into the following subparagraphs to describe the tests for that item.
4.x.1 Test preparations. This paragraph shall be divided into the following subparagraphs to describe test preparations. Security and privacy considerations shall be included as applicable.

4.x.1.y (Test name and identifier). This paragraph shall identify a test by name and identifier, and shall be divided into subparagraphs as needed to provide the following information:

a. Test schedule, if updated or more detailed than that given in paragraph 3.3
b. Pre-test procedures for hardware preparations
c. Pre-test procedures for software and data preparations
d. Other pre-test preparations
4.x.2 **Test descriptions.** This paragraph shall be divided into the following subparagraphs to provide test descriptions for the item(s) under test. Security and privacy considerations shall be included as applicable.

4.x.2.y *(Test name and identifier).* This paragraph shall identify a test by name and project-unique identifier and shall be divided into the following subparagraphs.

4.x.2.y.z *(Test case name and project-unique identifier).* This subparagraph shall identify a test case by name and project-unique identifier and shall provide the following information for the test case:

a. Purpose/traceability: cross-reference to the software requirements addressed by the test case
b. Means of control to be used: manual, semi-automatic, or automatic insertion of inputs and control of test sequence

c. Prerequisite conditions that must be established: hardware/software initialization or other initialization

d. Test inputs: description, source, real vs simulated, timing/sequence, means of control

e. Expected results, both intermediate and final, as applicable

f. Criteria for evaluating the results: acceptable limits for tolerances, sample sizes, durations, number of breaks, severity of problems, status indicators
g. Test procedure: numbered steps to be followed in initiating, carrying out, and analyzing the results of the test case, including, as applicable, alternative actions, expected results, and evaluation criteria for each step

h. Any assumptions or constraints applicable to the test case
5. **Software test report.** This section shall be divided into the following paragraphs to describe the results of CSCI, CSCI integration, and software system testing.

5.x *(Item(s) tested).* This paragraph shall identify an item under test and shall be divided into the following subparagraphs to describe the results of the tests for that item.
5.x.1 Test overview.

5.x.1.y (Test name and identifier). This paragraph shall identify a test by name and project-unique identifier and shall be divided into subparagraphs as needed to provide the following information:

a. A summary of test results, including the completion status of the test (for example, "all results as expected," "problems encountered," "deviations required") and, when the completion status is not "as expected," a summary of the problems or deviations that occurred and reference Section to 5.x.2 for details.

b. Reference to a figure, appendix, or other presentation of a chronological record of test events, including dates, times, locations, hardware and software.
configurations used, activities, and test performers and witnesses, as applicable

5.x.2 Detailed test results. This paragraph shall be divided into the following subparagraphs to describe the detailed results of each test.

5.x.2.y (Test name and identifier). This paragraph shall identify a test by name and project-unique identifier and shall be divided into subparagraphs as needed to provide the following information:

a. The completion status of each test case associated with this test (e.g., "all results as expected," "problems encountered," "deviations required")
b. A description of each problem encountered, including the test case and test procedure step where it was encountered and reference to the associated problem report(s)

c. A description of each deviation from the documented test cases/test procedures, including test case and test procedure step where the deviation occurred, nature of the deviation, rationale, and an assessment of its impact on the validity of the test case
5.x.3 Evaluation and recommendations. This paragraph shall be divided into the subparagraphs as needed to provide:

a. An overall assessment of each item under test, summary of remaining deficiencies or limitations, impact if the deficiencies/limitations are not corrected, and impact to correct them

b. An assessment of the manner in which the test environment may be different from the operational environment and the effect of this difference on the capabilities tested

c. Any recommended improvements in the design, operation, or testing of the item(s) under test (optional)
6. **Notes.** This section shall contain any general information that aids in understanding this document (e.g., background information, glossary). This section shall include an alphabetical listing of all acronyms, abbreviations, and their meanings as used in this document and a list of any terms and definitions needed to understand this document.

A. **Appendixes.** Appendixes may be used to provide information published separately for convenience in document maintenance (e.g., charts, classified data). As applicable, each appendix shall be referenced in the main body of the document where the data would normally have been provided. Appendixes may be bound as separate documents for ease in handling. Appendixes shall be lettered alphabetically (A, B, etc.).