***GUIDELINES FOR THE TEST PLAN CHECKLIST:***

This checklist is provided as part of the evaluation process for the Test Plan. The checklist assists designated reviewers in determining whether specifications meet criteria established in HUD’s System Development Methodology (SDM). The objective of the evaluation is to determine whether the document complies with HUD development methodology requirements.

Attached to this document is the DOCUMENT REVIEW CHECKLIST. Its purpose is to assure that documents achieve the highest standards relative to format, consistency, completeness, quality, and presentation.

Submissions must include the following three documents, and must be presented in the following order: (First) Document Review Checklist, (Second) the Test Plan Checklist, and (Third) the Test Plan.

Document authors are required to complete the two columns indicated as “AUTHOR X-REFERENCE Page #/Section #” and “AUTHOR COMMENTS” before the submission. Do NOT complete the last two columns marked as “COMPLY” and “REVIEWER COMMENTS” since these are for the designated reviewers.

Document reviewers will consult the HUD SDM and the SDM templates when reviewing the documents and completing the reviewer’s portions of this checklist.

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| AUTHOR REFERENCE (Project Identifier): |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Designated Reviewers:*** | ***Start Date:*** | ***Completed Date:*** | ***Area Reviewed:*** | ***Comments:*** |
| *1:* |  |  |  |  |
| *2:* |  |  |  |  |
| *3:* |  |  |  |  |
| *4:* |  |  |  |  |
| *Summary Reviewer:* |  |  |  |  |

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| **The Test Plan (Unit and Integration) establishes the tests which will be performed, establishes testing schedules, and identifies responsibilities for testing the system during development activities.**  |

**TABLE OF CONTENTS**

|  |  |
| --- | --- |
| 1.0 General Information1.1 Purpose1.2 Scope1.3 System Overview1.4 Project References1.5 Acronyms and Abbreviations1.6 Points of Contact1.6.1 Information1.6.2 Coordination2.0 Test Definition\*2.x [Test Identifier and Type]2.x.1 Requirements to be Tested2.x.2 Expected Results2.x.3 Test Hierarchy2.x.4 Extent of Test2.x.5 Test Data2.x.5.1 Test Data Reduction2.x.5.2 Input Test Data Control2.x.5.3 Output Test Data Control2.x.5.4 Data Recovery 2.x.5.5 Test Data Handling2.x.6 Input Commands2.x.7 Output Notification2.x.8 Support Software2.x.9 Error Handling2.x.10 Test Conditions2.x.11 Extent of Test2.x.12 Test Constraints  | 3.0 Test Execution3.1 Test Schedule3.2 Test Progression3.3 Test Criteria3.3.1 Tolerance3.3.2 Samples3.3.3 System Breaks3.4 Test Control3.5 Test Procedures3.5.1 Setup3.5.2 Initialization3.5.3 Preparation3.5.4 Termination3.5.5 Test Cycle Performance Activities\* Each test should be under a separate header. Generate new sections and subsections as necessary for each test from 2.1 through 2.x |

|  | **To be completed by Author** | **To be completed by Reviewer** |
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| **REQUIREMENT** | **AUTHOR X‑REFERENCE Page #/Section #** | **AUTHOR COMMENTS** | **COMPLY** | **REVIEWER COMMENTS** |
|  |  |  | **Y** | **N** |  |
| 1.0 GENERAL INFORMATION |  |  |  |  |  |
| 1.1 | **Purpose:** Describe the purpose of the Test Plan. |  |  |  |  |  |
| 1.2 | **Scope:** Describe the scope of the Test Plan as it relates to the project. |  |  |  |  |  |
| 1.3 | **System Overview:** Provide a brief system overview description as a point of reference for the remainder of the document, including responsible organization, system name or title, system code, system category, operational status, and system environment or special conditions. |  |  |  |  |  |
| 1.4 | **Project References:** Provide a list of the references that were used in preparation of this document. |  |  |  |  |  |
| 1.5 | **Acronyms and Abbreviations:** Provide a list of the acronyms and abbreviations used in this document and the meaning of each. |  |  |  |  |  |
| 1.6 | **Points of Contact:** |
|  | 1.6.1 **Information:** Provide a list of the points of organizational contact that may be needed by the document user for informational and troubleshooting purposes. |  |  |  |  |  |
|  | 1.6.2 **Coordination:** Provide a list of organizations that require coordination between the project and its specific support function. Include a schedule for coordination activities. |  |  |  |  |  |

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|  |  |  | **Y** | **N** |  |
| 2.0 TEST DEFINITION |  |  |  |
| 2.x | **[Test Identifier and Type]:** *(Each test in this section should be under a separate header. Generate new subsections as necessary for each test from 2.1 through 2.x.)* Provide a test name and identifier here for reference in the remainder of the section. Describe the type of test and objective. |  |  |  |  |  |
|  | 2.x.1 **Requirements to be Tested:** Describe the system and program requirements that will be tested with this particular test. |  |  |  |  |  |
|  | 2.x.2 **Expected Results:** Describe the expected results of the testing performed. |  |  |  |  |  |
|  | 2.x.3 **Test Hierarchy:** Describe the location of the test in the hierarchy of the testing to be performed. |  |  |  |  |  |
|  | 2.x.4 **Extent of Test:** Identify the software units and programs that are to be included in the test. Identify the program functions and interfaces that will be tested. |  |  |  |  |  |
|  | 2.x.5 **Test Data:** Identify the test data required for the particular test, and describe to the data field level. |  |  |  |  |  |
|  | 1. **Test Data Reduction:** Describe the technique to be used for manipulation of the raw test data into a form suitable for evaluation, if applicable.
 |  |  |  |  |  |

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|  |  |  | **Y** | **N** |  |
|  | 1. **Input Test Data Control:** Describe the manner in which input data are controlled to test the system with a minimum number of data types and values; exercise the system with a range of bona fide data types and values that test for overload, saturation, and other “worst case” effects; and test the system with bogus data and values that test for rejection of irregular input.
 |  |  |  |  |  |
|  | 1. **Output Test Data Control:** Identify the media and location of data produced by the test. Describe the manner in which output data are analyzed to detect whether an output is produced; evaluate output as a basis for continuation of the test sequence; and evaluate the test output against the required output to assess system performance.
 |  |  |  |  |  |
|  | 1. **Data Recovery:** Describe how original data will be recovered before and after test execution.
 |  |  |  |  |  |
|  | 1. **Test Data Handling:** Describe how test data will be identified, maintained, and version-controlled.
 |  |  |  |  |  |
|  | 2.x.6 **Input Commands:** Describe the manner in which input commands are used to control initialization of the test, to halt or interrupt the test, to repeat unsuccessful or incomplete tests, to alternate modes of operation as required by the test, and to terminate the test. |  |  |  |  |  |

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|  |  |  | **Y** | **N** |  |
|  | 2.x.7 **Output Notification:** Describe the manner in which output notifications (messages output by the system concerning status or limitations on internal performance) are controlled. |  |  |  |  |  |
|  | 2.x.8 **Support Software:** Identify external or existing programs needed to support the test. Include version and release numbers if appropriate. |  |  |  |  |  |
|  | 2.x.9 **Error Handling:** Describe procedures for reporting errors, test results, and reworking and retesting programs. |  |  |  |  |  |
|  | 2.x.10 **Test Conditions:** Indicate whether the test is to be performed using the normal input and database or whether some special test input is to be used. |  |  |  |  |  |
|  | 2.x.11 **Extent of Test:** Describe the extent of testing employed by this test, identify all test drivers and stubs, and discuss the rationale for adopting limited testing. |  |  |  |  |  |
|  | 2.x.12 **Test Constraints:** Describe any anticipated limitations imposed on the test because of system or test conditions (timing, interfaces, equipment, personnel). |  |  |  |  |  |

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|  |  |  | **Y** | **N** |  |
| 3.0 TEST EXECUTION |  |  |  |
| 3.1 | **Test Schedule:** Provide a listing or graphic depicting the locations at which the test will be scheduled and the timeframes during which the test will be conducted. |  |  |  |  |  |
| 3.2 | **Test Progression:** Include an explanation concerning the manner in which progression is made from one test to another so the cycle or activity for each test is completely performed. |  |  |  |  |  |
| 3.3 | **Test Criteria:** Describe the rules by which test results will be evaluated. |  |  |  |  |  |
|  | 3.3.1 **Tolerance:** Discuss the range over which a data output value or system performance parameter can vary and still be considered acceptable. |  |  |  |  |  |
|  | 3.3.2 **Samples:** Establish the minimum number of combinations or alternatives of input conditions and output conditions that can be exercised to constitute an acceptable test. |  |  |  |  |  |
|  | 3.3.3 **System Breaks:** Discuss the maximum number of interrupts, halts, or other system breaks which may occur because of non-test conditions. |  |  |  |  |  |
| 3.4 | **Test Control:** Indicate whether the test is to be controlled by manual, semiautomatic, or automatic means. |  |  |  |  |  |

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| **REQUIREMENT** | **AUTHOR X‑REFERENCE Page #/Section #** | **AUTHOR COMMENTS** | **COMPLY** | **REVIEWER COMMENTS** |
|  |  |  | **Y** | **N** |  |
| 3.5 | **Test Procedures:** |  |  |  |  |  |
|  | 3.5.1 **Setup:** Describe or refer to standard operating procedures that describe the activities associated with setup of the computer facilities to conduct the test, including all routine machine activities. |  |  |  |  |  |
|  | 3.5.2 **Initialization:** Itemize, in test sequence, the activities associated with establishing the testing conditions, starting with the equipment in the setup condition. |  |  |  |  |  |
|  | 3.5.3 **Preparation:** Describe, in sequence, special operations such as: inspection of test conditions, data dumps, instructions for data recording, modifications of the database, and interim evaluation of results. |  |  |  |  |  |
|  | 3.5.4 **Termination:** Itemize, in sequence, the activities associated with termination of the test. |  |  |  |  |  |
|  | 3.5.5 **Test Cycle Performance Activities:** Describe the step-by-step procedures to perform the activities in the test (run test, verify results and correct errors, rerun test). |  |  |  |  |  |