|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **1.0 SOFTWARE information** | | | | | | |
| Software Name |  | | Current Version | |  | |
| Software Description |  | | | | | |
| Software Owner & Org |  | | | | | |
| SO RLM (SRLM) & Org |  | | | | | |
| Software Grade  Determination  (Form 2033) | Safety Software | SSS  SHADS  SMACS | | SRL | | 1  2  3 |
| Non-safety Software | Risk Significant (RS) | | SRL | | 1  2  3 |
| Non-safety Software | Commercially Controlled (CC) | | n/a | | |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **2.0 Software Requirements TRACEABILITY MATRIX** | | | | | | |
| SWTM source documents | | Document name and revision | | | |
| Software Requirements Specification (SRS) | |  | | | |
| Software Design Document (SDD) | |  | | | |
| Software Test Plan/Procedure (SWTP) | |  | | | |
| Software Test Cases (STCs) | |  | | | |
| Requirement Source | Software Requirement (No. and Title) | | Design (No. and Section) | Code Location | Test Case Number(s) |
|  |  | |  |  |  |
|  |  | |  |  |  |
|  |  | |  |  |  |
|  |  | |  |  |  |
|  |  | |  |  |  |
|  |  | |  |  |  |
|  |  | |  |  |  |
|  |  | |  |  |  |
|  |  | |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **3.0 SWTM Review & Approval** | | | |
| As the Software Owner (SO), I have completed and approve this SWTM for conformance to traceability requirements and approve it for the subject software. | | | |
|  |  |  |  |
| Software Owner (SO) Name and Organization (print) | Z Number | Signature | Date |
| As the SO Responsible Line Manager (SRLM), I approve this SWTM for conformance to traceability requirements and approve it for the subject software. | | | |
|  |  |  |  |
| SRLM Name and Organization (print) | Z Number | Signature | Date |

|  |  |  |
| --- | --- | --- |
| **4.0 SWTM REVISION HISTORY** | | |
| Revision No. | Date | SWTM Revision Description and Reason |
| 0 |  | Initial issue |
|  |  |  |

**General**

This template may be used to implement the software requirements traceability per P1040, *Software Quality Management*. Use of this template is not mandatory; other templates or formats may be used. Enter N/A for fields that are not applicable. Remove these instruction pages prior to finalizing the SWTM.

The SWTM is a required part of the software baseline. Whenever information in the SWTM changes, this form must be revised, and the baseline updated accordingly.

For additional information on the software requirements traceability matrix, see P1040, R13, Sections 3.6, 3.7, and 3.9, or contact an SQA representative at [p1040@lanl.gov](mailto:p1040@lanl.gov).

**HEADER**

* Enter the Document ID (e.g., number or letter) and Revision Number for the SWTM, per the governing document control process.
* Enter the document Effective Date.

**1.0 SOFTWARE INFORMATION**

* Enter the name of the software.
* Enter the current version number of the software.
* Enter the software description including primary functions and intended use.
* Enter the Software Owner (SO) and organization.
* Enter the SO Responsible Line Manager (SRLM) & organization.
* Select the software type/category from Form 2033.
* Select the SRL from Form 2033.

**2.0 TRACEABILITY MATRIX**

* Enter the name(s) and revision number(s) of the Software Requirements Specification (SRS) document(s).
* Enter the name(s) and revision number(s) of the Software Design Document (SDD) document(s).
* Enter the name(s) and revision number(s) of the Software Test Plan/Procedure (SWTP) document(s).
* Enter the name(s) and revision number(s) of the Software Test Cases (STCs).
* Enter the requirement source. Sources are typically documented in a software requirements specification (SRS), however, examples of other documented sources include contractual (i.e., Prime Contract) requirements, Documented Safety Analysis (DSA) requirements, and Technical Safety Requirements (TSRs).
* Enter the software requirement number and title from the requirement source (e.g., software requirements specification (SRS), procurement documents). The requirement number must be unique to each requirement. The title is a brief description that summarizes the requirement area (e.g., Software Reports, Emergency Shutoff, Error Notifications).
* Enter the software design document (SDD) number and section that address the associated requirement (e.g., Software Design Description, Section x.x.x).

***Note:*** This field does not apply to acquired software where design or revisions are not applicable. Enter N/A or delete this column if this field is not applicable.

* Enter the location in the computer program code (e.g., block title, unit title) where the associated requirement is implemented.

***Note:*** This field does not apply to acquired software where design or revisions are not applicable. Enter N/A or delete this column if this field is not applicable.

* Enter the test case number(s) used to verify the associated requirement. Each requirement must have at least one test case. However, one requirement may have multiple test cases and one test case may address multiple requirements.

**3.0 SWTM REVIEW & APPROVAL**

* The Software Owner (SO) completes and approves the SWTM. Approval line includes SO name, organization, Z number, electronic signature, and date.
* The SO Responsible Line Manager (SRLM) reviews and approves the SWTM. Approval line includes SRLM name, organization, Z number, electronic signature, and date.

**4.0 REVISION HISTORY**

* As required, revise the SWRR per the governing document control procedure. Enter the SWRR revision number (or letter). Retain prior revision numbers (or letters).
* Enter the effective date of the revision.
* Enter a summary description of the SWRR revision and reasons for the revision.