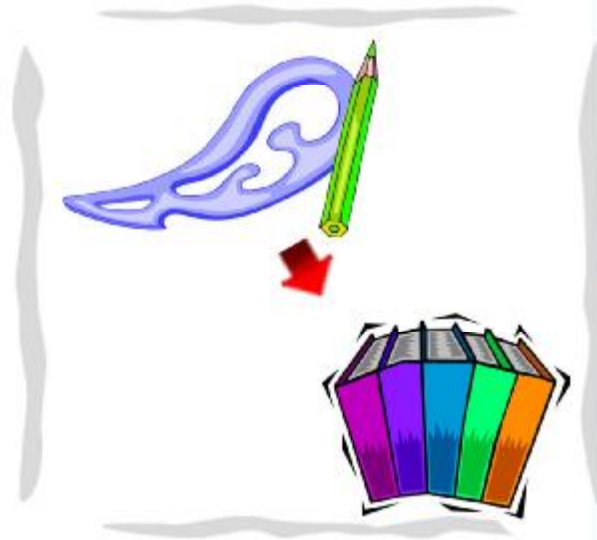


Smartwire



Template For a System Documentation Management Plan Version 2

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Introduction

Purpose of this Template and Revision

This template provides guidance for developing a System Documentation Management Plan to address documentation issues and satisfies **ISO/IEC 15288:2008, System Life Cycle Processes Sec 6.3.6 Information Management Process**. A Plan is an assessment of everything related to project documentation and provides a solid project foundation.

The Plan needs to contain enough information to ensure its persuasiveness, e.g., goal orientation, clearly understood figures and tables, and team orientation.

A Plan should be the first project artifact developed since it drives the format, style and documentation processes for all documentation. A contract may not require a Plan, but without a Plan other documentation will have quality and consistency risks and problems that will add resources, cost and time, plus customer concerns about the entity's ability to produce products and to meet expectations.

There is a saying that, "The job is not done until the paperwork is finished". This is especially true when dealing with government, or large and complex projects. Paperwork is essential in these situations to provide customers with assurance the final product is being built right (as required) and the final product is what the customer wants (as expected). Another reason for paperwork is to ensure only approved changes are implemented into the products.

How to Use this Documentation Plan Template

This template is designed to aid a person with limited knowledge of documentation requirements and methods to implement a sound Plan. The provided template may be applied to manual and electronic methods and can be easily managed by one person. It is applicable to small, large, critical and non-critical projects. There may be one or more initial, intermediate and final documents.

To use this template, the user must understand the following:

- This template is designed for projects: an activity that has a defined beginning and end. However, this template can easily be modified for non-projects.
- This template's coversheet (page 1) and the entire Introduction Section need to be deleted for the final Plan.
- Delete the underlined text, which provides information about how to use/implement this template.
- *Italic* text provides optional information (i.e., two or more suggestions) that may be deleted or used (after changing the italics to regular characters) to replace other information.
- Text that is not underlined or italicized denotes the recommended wording. As needed, this text can be modified or deleted to satisfy project requirements. Instead of providing examples, this technique makes the template easier to use by providing users with ideas on how to word the Plan.
- If a template section is not needed, the section can be deleted, or include the header with a statement explaining the reason for the deletion, e.g., Not required by the contract. Use of such explanations as "Not Applicable" or "Not Needed" should be avoided since this provides no information to a reader.
- This template assumes the user has a standard format for documents, e.g., covers, table of content, headers, footers, style and format (e.g., font, margins, justification and spacing between paragraphs). If required, the user may add a Preface, Forward or Index sections.

Support

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Mr. Magee is the past convener (1999-2002) of WG 7 (Life Cycle Management) for ISO/IEC-JTC1 SC 7 (Systems and Software Engineering) standards group. He was the convener when 15288 was initially

Introduction

developed. Stan has a web site devoted to 15288 news and products, the URL is www.15288.com. In 1994 he signed off the final version of ISO/IEC 12207 for the United States. Mr. Magee served as a U.S. delegate to the International Plenary meetings from 1986 to 2002. In 1995 he was elected to the IEEE Computer Society Golden Core of 500 people who have significantly served the IEEE Society in standards development over its 50-year history.

Mr. Magee is co-author of the books, *Guide to Software Engineering Standards and Specifications*, Artech House Publishers, 1997, ISBN 0-89006-919-0 and *Guide to Standards and Specifications for Designing Web Software*, Artech House Publishers, 1998, ISBN 0-89006-819-4. In 1997 Mr. Magee was part of a “People to People” quality mission to China and lectured at Shanghai University on software quality standards. He gives seminars on meeting the requirements of international software standards for medical device firms. In 1994 he established a software business and quality system plan, for VNIPI Sport of Moscow, Russia for obtaining ISO 9001 certification. VNIPI is the privatized MIS section of the Russian Olympic Committee. In 2002, Mr. Magee established a plan for Thailand to become a major producer of software in the world market place by 2010. Mr. Magee has over 42 years experience in the software field and is considered an expert in the area of software life cycle methodology. He is active on many governmental, educational and professional boards, and holds a BS from the School of Engineering, Oregon State University and an MBA in International Business from the University of Puget Sound.

SYSTEM DOCUMENTATION MANAGEMENT PLAN

Version X.Y

Produced for:

Project Name and any other needed information

Security Classification _____

Produced by:

Company name

Address

Telephone: (XXX) XXX-XXXX, Ext XXXXX

E-mail: XXXX@XXXX.XXX

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System Documentation Management Plan

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System Documentation Management Plan

1 Documentation Plan Scope

This System Documentation Plan (i.e., Plan) was developed for Project XYZ and complies with company requirements for system documentation management. **NOTE:** “plan” (small “p”) refers to other plans.

This section identifies the policy; objective; purpose; assumptions, constraints, risks and dependencies; and overview of this Plan.

This section identifies for this Plan’s users the extent and limitations of the documentation management methodology and must contain a clear, concise description of the documentation management methodology. It is critical for readers of this Plan to clearly understand the terminology and methodology used.

This Plan must fit in with any other plans, e.g., Configuration Management and Project Management Plans.

Prior to, or as part of, writing this Plan, a set of clearly defined processes must be established. As defined later, it is recommended that this Plan make reference to these processes (rather than include them in this Plan) and provide a summary of the key processes. This is to minimize changes to this Plan if any process changes. Thus, try to be as comprehensive as possible, but some detailed information is better presented in a Reference Section/Appendix or made part of the referenced processes used to implement this Plan.

This Plan may be updated due to a change in planning, e.g., managed documentation or tools. As with any documentation, changes to this Plan follow the documentation change control process described in this Plan. The approved review results are documented in the Amendment History Section. As much as possible, figures and tables are used to provide documentation management information to help in the maintenance of this Plan.

2 Documentation Plan Objective

This Plan defines the required project documentation and the processes, resources, schedule, etc., needed to produce this Plan’s identified documentation (see the Section entitled Managed Plans, Documents and Reports for this Project), including change control and documentation maintenance. This Plan contains all the material or references needed for a person to understand the Project’s documentation management methodology. This Plan’s contents are based on user and Project requirements, standards and expectations. As the Project evolves, this Plan is evaluated by the Documentation Manager for consistency with Project changes and to ensure consistency with other Project plans.

This Plan emphasizes the users’ needs, and ensures the Plan’s objectives and purpose are consistent and complement Project requirements and other Project plans.

3 Documentation Plan Purpose

This template provides guidance for developing a System Documentation Management Plan to address documentation issues and satisfies ISO/IEC 15288:2008, *System Life Cycle Processes Sec 6.3.6 Information Management Process* and identifies and describes:

- a. What is managed, i.e., the system documentation under configuration control of this Plan.
- b. How to manage this controlled documentation, i.e., high-level description of the main processes and tools. References are given for process details.
- c. Documentation management roles and responsibilities.
- d. When key documentation milestones and activities occur.

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For this Plan, the term “product” includes all documentation prepared for delivery to a customer (e.g., hardcopies (paper), electronic copies and the final product) and documentation used internally (by the developing or maintaining organization) to build a user product.

Even for small projects, documenting what was done, is being done, or how to operate products, is not always completed in a timely or in a useful manner.

Another major concern is documentation change control. History has shown producers provide change control (even if weakly done) for the initial system products, but documentation changes are often after the fact and are poorly implemented. For instance, the template author has witnessed a situation in which engineers modified old, approved documentation amendment history information without going through any change-control process; even though the producing company said they implemented and enforced a change-control process.

One of the major problems this Plan assists a project with is the minimization of review cycles. Each unplanned review increases cost, can greatly impact schedules, ties up valuable resources and impacts team morale. The management of this Plan may only require one person. The key is the development of quality documentation with the help of the entire Project team, not just the documentation management group.

This Plan describes the processes used to manage the identified documentation, including the development, maintenance and retirement of the documentation. This Plan takes precedence over any documentation, process, etc., dealing with documentation management that may affect this Project.

This Plan consolidates the methodology, requirements and processes used to manage the development, packaging, delivery and maintenance of documentation, including documentation change control. As a result, the documentation management methodology is organized to provide proper control of information development, dissemination, changes and retirement.

This Plan provides management with visibility on documentation status and cost; including a clear picture of future documentation management needs. This Plan helps control documentation scope creep and documentation expectations.

For this Plan, the term “documentation” includes processes, delivered documentation, any data placed under documentation management control, and the internal documentation used to help produce delivered documentation, or used to manage the Project.

The term “management” is used since this Plan includes how to manage and develop useful documentation while maintaining a system for uniquely identifying the documentation and related changes. At the same time, the Documentation Manager manages the related resources and schedules.

This Plan addresses the documentation that is covered. It is critical that a Plan delineate what will **not** be covered, e.g., the change control process may use the Configuration Management change control process or some documentation may not be controlled by Documentation Management. Consideration must be given to factors affecting how to go about working on a project, any specific concerns needing to be addressed for the stakeholders (e.g., users, management and Project sponsor) and what is needed to make the documentation useful.

4 Documentation Plan Overview

Identify the major sections of this Plan and briefly describe the purpose of each major section. Ensure the identified sections are listed in the same order as presented in this Plan.

The developers of this Plan worked closely with the customers and developers of other Project plans to ensure consistency of terms, schedule, use of resources and content. This Plan is divided into the following major sections:

System Documentation Management Plan

- Documentation Management Scope
- Documentation Plan Objectives
- Documentation Plan Purpose
- Documentation Plan Overview
- Documentation Management Policy
- Documentation Assumptions, Constraints, Risk and Dependencies
- Managed Plans, Documents and Reports for this Project: this Plan addresses covered items
- Documentation Processes: a list and summary of key documentation processes
- Documentation Management Tools and Aids: list of key tools and aids used to create, manage and maintain documentation, along with a brief description of each tool or aid
- Documentation Management Organization and Key Team Personnel: description of how the company, Project and Documentation Management organizations relate, along with a list of key positions involved with Documentation Management and where they fit within the Project
- Documentation Management Schedule: the Documentation Management Schedule is introduced
- Documentation Management Budget: a description of the Documentation Management budget and cost accounting system as it applies to documentation
- Amendment History for this Documentation Plan: a summary of when and what changes were made to this Plan
- Appendix A: References: list of standards and requirements relevant to this Plan
- Appendix B: Definitions and Abbreviations: definition of key terms and a list of abbreviations and their meaning

5 Documentation Management Policy

The following is the policy for managing documentation: Insert the company documentation policy here. This policy should be signed at the highest company level possible, e.g., Vice President of Product Assurance.

“It is the policy of company/project name that the Documentation Manager is responsible for the implementation of this policy and all documentation that will:

- Be managed, produced and maintained to ensure the highest quality possible.
- Satisfy the requirements and defined expectations of the customers and users.”

6 Documentation Assumptions, Constraints, Risks and Dependencies

This section identifies perceived documentation problems areas and plans to resolve the problems. Include what obstacles users may face in terms of implementing this Plan.

The following assumptions (for planning purposes, are considered to be true, real or certain) are made:

- Over time, customer documentation expectations change. This could impact previously published documentation.
- Over time, product requirements change, thus impacting documentation contents.

The following constraints (application restrictions affecting the Project’s performance) are made:

- The user quickly accepts this Plan.
- Coordination between the user and the Project team is timely, open and documented.
- There are no more than two customer reviews prior to the documentation being published as final and baselined.
- The Documentation Plan and Schedule are updated for the customer’s review on a schedule set by the Project Manager.

System Documentation Management Plan

The following risks have been identified:

- **Risk:** documentation Authors are technically qualified, but do not know how to write readable documentation. **Resolution:** the Documentation Manager provides writing-training classes, has highly-qualified editors and has established processes and checklists to help authors. The established review cycle emphasizes quality, readability and content accuracy and consistency.
- **Risk:** inconsistency between documentation. **Resolution:** terms, abbreviations, strategies, figures, tables, etc., are pre-defined, as much as possible. As requirements or information change, this is distributed to all authors, authors' manager and the Documentation Manager - for distribution to the appropriate Documentation Editor.
- **Risk:** a key Project person is not available (e.g., death or leaving the Project) to continue the documentation effort. **Resolution:** work is identified through the use of Work Requests (to start a task) and a recording process, which includes documentation, recommendations, issues, etc. This allows for new and replacement people to quickly "get up to speed" on their new assignments.

This Plan has the following dependencies:

- Documentation Management Schedule is dependent on the Project Schedule.
- Project plans depend on each other for consistency and accuracy.
- Adequate resources at the scheduled time to ensure documentation stays on schedule and within budget.

7 Managed Plans, Documents and Reports for this Project

Tables 1A, 1B, and 1C identify the documentation (managed plans, documents and reports respectively) delivered or used by the Project. Only documentation listed in those tables are within scope of this Plan. As needed, the Documentation Manager updates this list, which is based on ISO/IEC 15288:2008, as denoted in the tables.

A table is beneficial if there is a need to identify the purpose, provide a summary description or goal of each item of documentation. It may be advisable to group this documentation by some logical schema, e.g., stage.

Table 1A, 1B, and 1C considerations:

- General:
 - Examine the given list to ensure it matches the appropriate documentation for this Plan.
 - Ensure compliance with the standards, processes, etc., identified in this Plan.
- Identifier: enter the Project schema for uniquely identifying each item of documentation. It is recommended that the listed documentation relate to the Project's Work Breakdown Structure (WBS).
- Title: Enter the unique title for each document. See the notes at the beginning of each table explaining the genesis of the documentation items.
- Description: provide a brief documentation description. Do not assume the template provided descriptions are valid for the subject project.
- Stage: enter the lifecycle stage where the documentation is to be first baselined. For this template, the sequence of stages is: concept, development, production, utilization, support and then retirement. Do not assume the template provided stages are valid for the subject project.
- Prime developing group: identify the group lead in the development of the documentation. Do not assume the template provided groups are valid for the subject project. At times, the template listed groups are at a high level, e.g., Engineering represents engineering for hardware, systems, software, etc.

System Documentation Management Plan

It may be helpful to readers if a “documentation tree” is provided, e.g.:

- The Project Management Plan is based on the Project Charter, Contract, schedule, availability of resources, WBS and company processes.
- All plans are based on the Project Management Plan, this Plan and the Contract. A plan may relate to other plans.
- All documentation is based on this Plan and other related plans, documents and reports.

Consideration should be given to add a column to Tables 1A, 1B and 1C to show documentation dependences, e.g., Documentation xxx depends on Documentation yyy (e.g., the Implementation Plan depends on the Installation and Training Plans). Another consideration is documentation hierarchy, especially if documentation has duplication of information, delineate which documentation has precedence if one or more of the documentation has erroneous information due to project evaluation, i.e., to minimize updating.

Tables 1A, 1B, and 1C were developed from the view of a system seller or producer. Change the wording if a buyer’s view is required.

For Tables 1A, 1B, and 1C:

- Sort plans, documents, reports alphabetically by title
- A plan describes the “what, when and how” a task/activity will be performed.
- A document contains information on a particular subject.
- A report provides the status or history of the subject topic. As such a “report” may consist of a set of records.

System Documentation Management Plan
Table 1A – Project Managed Plans

7.1 Project Managed Plans

NOTE 1: “*” indicates documentation required by ISO/IEC 15288:2008.

NOTE 2: “**” indicates documentation suggested by ISO/IEC 15288:2008.

ID #	Title*	Description and Purpose	Example (specific) Contents	Phase	Intended Audience	Prime Responsible Group
1.	Acquisition of Material and Services From Outside the Project Plan*	Describes what when and how material and services will be procured from outside the project.	<ul style="list-style-type: none"> • What <ul style="list-style-type: none"> - Acquisition requirements from outside the projects • When <ul style="list-style-type: none"> - Acquisition schedule & milestones • How <ul style="list-style-type: none"> - Roles & responsibilities - Acquisition strategy - Decision criteria for procurement from outside of the project - Change management 	Concept	<ul style="list-style-type: none"> • Customer • Management • Project Manager • QA Manager • Senior Technical (O) • Senior Management (O) 	Project Management Office (PMO)
2.	Acquisition Plan**	Describes the what, when and how to acquire resources. This includes the “make or buy” issue.	<ul style="list-style-type: none"> • What <ul style="list-style-type: none"> - Acquisition requirements • When <ul style="list-style-type: none"> - Acquisition schedule & milestones • How <ul style="list-style-type: none"> - Roles & responsibilities - Acquisition strategy - Decision criteria - Change management 	Concept	<ul style="list-style-type: none"> • Customer • Management • Project Manager • QA Manager • Senior Technical (I) 	Project Management Office (PMO)

System Documentation Management Plan
Table 1A – Project Managed Plans

ID #	Title*	Description and Purpose	Example (specific) Contents	Phase	Intended Audience	Prime Responsible Group
3.	Audit Plan**	Describes the what, when and how audits are performed.	<ul style="list-style-type: none"> • What <ul style="list-style-type: none"> - Audit requirements • When <ul style="list-style-type: none"> - Audit schedule • How <ul style="list-style-type: none"> - Roles & responsibilities - Audit process - Audit reporting - Audit action closure 	Planning	<ul style="list-style-type: none"> • Customer • Management • Project Manager • QA Manager • Senior Technical (I) 	Quality Assurance (QA)
4.	Configuration Management (CM) Plan**	Describes the what, when and how to manage configuration items.	<ul style="list-style-type: none"> • What <ul style="list-style-type: none"> - CM requirements • When <ul style="list-style-type: none"> - CM schedule • How <ul style="list-style-type: none"> - Roles & responsibilities - CM scope - CM item identification - CM status accounting - CM configuration control - CM baselines - CM audit 	Planning	<ul style="list-style-type: none"> • Management • Project Manager • QA Manager • Senior Technical (I) 	Configuration Management
5.	Corrective Action for Quality Management Goals Plan*	Describes what when and how quality management goals will be corrected if required	<ul style="list-style-type: none"> • What <ul style="list-style-type: none"> - Correction of quality management goals • When <ul style="list-style-type: none"> - Schedule to correct quality management goals • How <ul style="list-style-type: none"> - Roles & responsibilities - Method to use 	Concept	<ul style="list-style-type: none"> • Project Manager • QA Manager • Senior Technical (I) 	Project Management Office (PMO)

System Documentation Management Plan
Table 1A – Project Managed Plans

ID #	Title*	Description and Purpose	Example (specific) Contents	Phase	Intended Audience	Prime Responsible Group
6.	Disposal Plan**	Describes the what, when and how disposal will take place. Either the entire system or a component.	<ul style="list-style-type: none"> • What <ul style="list-style-type: none"> - Disposal requirements - Effects of disposal • When <ul style="list-style-type: none"> - Disposal schedule • How <ul style="list-style-type: none"> - Roles & responsibilities - Disposal decision criteria - Disposal arrangements - Disposal reporting 	Maintenance	<ul style="list-style-type: none"> • Management • Project Manager • QA Manager • Senior Technical (I) 	Maintenance
7.	Documentation Plan*	Describes what, when and how the process or end items will be documented	<ul style="list-style-type: none"> • What <ul style="list-style-type: none"> - Documentation requirements • When <ul style="list-style-type: none"> - Documentation schedule • How <ul style="list-style-type: none"> - Roles & responsibilities - Documentation scope - Documentation types - Documentation process - Review & approval cycle - Storage and archiving 	Planning	<ul style="list-style-type: none"> • Management • Project Manager • QA Manager • Senior Technical (I) 	Documentation Management
8.	Functional Specification Plan**	Describes what, when and how the plan for functional specification will be documented	<ul style="list-style-type: none"> • What <ul style="list-style-type: none"> - Functional requirements • When <ul style="list-style-type: none"> - Development schedule • How <ul style="list-style-type: none"> - Roles & responsibilities - System functions - Sub system functions process - Review & approval cycle 	Planning	<ul style="list-style-type: none"> • Management • Project Manager • System Engineering Manager • Senior Technical (I) 	System Engineering