**Software Project Management Plan**

**for**

**<Project>**

**Prepared by**

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**<organization>**

**<date created>**

*This template is a simplified and revised version of IEEE Standard for Software Project Management Plans.*

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**Revision History**

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| --- | --- | --- | --- |
| **Name** | **Date** | **Reason for Changes** | **Version** |
|  |  |  |  |
|  |  |  |  |

# Overview

*This clause of the Software Project Management Plan (SPMP) shall provide an overview of the purpose, scope, and objectives of the project, the project assumptions and constraints, a list of project deliverables, a summary of the project schedule and budget, and the plan for evolution of the SPMP.*

## Purpose, scope, and objectives

*This subclause of the SPMP shall define the purpose, scope, and objectives of the project and the products to be delivered. This subclause should also describe any considerations of scope or objectives to be excluded from the project or the resulting product. The statement of scope shall be consistent with similar statements in the project agreement and other relevant system-level or business-level documents.*

*This subclause of the SPMP shall also provide a brief statement of the business or system needs to be satisfied by the project, with a concise summary of the project objectives, the products to be delivered to satisfy those objectives, and the methods by which satisfaction will be determined. The project statement of purpose shall describe the relationship of this project to other projects, and, as appropriate, how this project will be integrated with other projects or ongoing work processes.*

*A reference to the official statement of product requirements shall be provided in this subclause of the SPMP.*

## Assumptions and constraints

*This subclause of the SPMP shall describe the assumptions on which the project is based and imposed constraints on project factors such as the schedule, budget, resources, software to be reused, acquirer software to be incorporated, technology to be employed, and product interfaces to other products.*

## Project deliverables

*This subclause of the SPMP shall list the work products that will be delivered to the acquirer, the delivery dates, delivery locations, and quantities required to satisfy the terms of the project agreement. In addition, this subclause shall specify the delivery media and any special instructions for packaging and handling. The list of project deliverables may be incorporated into the SPMP directly or by reference to an external document such as a contract data requirements list (CDRL) or a product parts list (PPL).*

## Schedule and budget summary

*This subclause of the SPMP shall provide a summary of the schedule and budget for the software project. The level of detail should be restricted to an itemization of the major work activities and supporting processes as, for example, those depicted by the top level of the work breakdown structure.*

# References

*This clause of the SPMP shall provide a complete list of all documents and other sources of information referenced in the SPMP. Each document should be identified by title, report number, date, author, path/name for electronic access, and publishing organization. Other sources of information, such as electronic files, shall be identified using unique identifiers such as date and version number. Any deviations from referenced standards or policies shall be identified and justifications shall be provided.*

# Definitions

*This clause of the SPMP shall define, or provide references to, documents containing the definition of all terms and acronyms required to properly understand the SPMP.*

# Project context

## Product acceptance plan

*This subclause of the SPMP shall specify the plan for acquirer acceptance of the deliverable work products generated by the software project. Objective criteria for determining acceptability of the deliverable work products shall be specified in this plan and a formal agreement of the acceptance criteria shall be signed by representatives of the development organization and the acquiring organization. Any technical processes, methods, or tools required for product acceptance shall be specified in the product acceptance plan. Methods such as testing, demonstration, analysis and inspection should be specified in this plan.*

## Project organization

*This clause of the SPMP shall identify interfaces to organizational entities external to the project; describe the project’s internal organizational structure; and define roles and responsibilities for the project.*

### External interfaces

*This subclause of the SPMP shall describe the organizational boundaries between the project and external entities. This should include, but is not limited to, the following: the parent organization, the acquiring organization, subcontracted organizations, and other organizational entities that interact with the project. Representations such as organizational charts and diagrams may be used to depict the project’s external interfaces.*

### Internal structure

*This subclause of the SPMP shall describe the internal structure of the project organization to include the interfaces among the units of the software development team. In addition, the organizational interfaces between the project and organizational entities that provide supporting processes, such as configuration management, quality assurance, and verification and validation, shall be specified in this subclause. Graphical devices such as organizational charts or diagrams should be used to depict the lines of authority, responsibility, and communication within the project.*

### Roles and responsibilities

*This subclause of the SPMP shall identify and state the nature of each major work activity and supporting process and identify the organizational units that are responsible for those processes and activities. A matrix of work activities and supporting processes vs. organizational units may be used to depict project roles and responsibilities.*

# Project planning

*This clause of the SPMP shall specify the work activities, schedule, resources, and budget details for the software project.*

## Project work plans

*This clause of the SPMP shall specify the work activities, schedule, resources, and budget details for the software project.*

### Work activities

*This subclause of the SPMP shall specify the various work activities to be performed in the software project. A work breakdown structure shall be used to depict the work activities and the relationships among work activities. Work activities should be decomposed to a level that exposes all project risk factors and allows accurate estimate of resource requirements and schedule duration for each work activity. Work packages should be used to specify, for each work activity, factors such as the necessary resources, estimated duration, work products to be produced, acceptance criteria for the work products, and predecessor and successor work activities. The level of decomposition for different work activities in the work breakdown structure may be different depending on factors such as the quality of the requirements, familiarity of the work, and novelty of the technology to be used.*

### Schedule allocation

*This subclause of the SPMP shall provide scheduling relationships among work activities in a manner that depicts the time-sequencing constraints and illustrates opportunities for concurrent work activities. Any constraints on scheduling of particular work activities caused by factors external to the project shall be indicated in the work activity schedule. The schedule should include frequent milestones that can be assessed for achievement using objective indicators to assess the scope and quality of work products completed at those milestones. Techniques for depicting schedule relationships may include milestone charts, activity lists, activity Gantt charts, activity networks, critical path networks, and PERT.*

### Resource allocation

*This subclause of the SPMP shall provide a detailed itemization of the resources allocated to each major work activity in the project work breakdown structure. Resources shall include the numbers and required skill levels of personnel for each work activity. Resource allocation may include, as appropriate, personnel by skill level and factors such as computing resources, software tools, special testing and simulation facilities, and administrative support. A separate line item should be provided for each type of resource for each work activity. A summary of resource requirements for the various work activities should be collected from the work packages of the work breakdown structure and presented in tabular form.*

### Budget allocation

*This subclause of the SPMP shall provide a detailed breakdown of necessary resource budgets for each of the major work activities in the work breakdown structure. The activity budget shall include the estimated cost for activity personnel and may include, as appropriate, costs for factors such as travel, meetings, computing resources, software tools, special testing and simulation facilities, and administrative support. A separate line item shall be provided for each type of resource in each activity budget. The work activity budget may be developed using a spreadsheet and presented in tabular form.*

### Communications plan

*This subclause of the SPMP shall provide an appropriate approach and plan for project communications activities based on the information needs of each stakeholder or group, available organizational assets, and the needs of the project. The key benefit of this process is a documented approach to effectively and efficiently engage stakeholders by presenting relevant information in a timely manner.*

## Project assessment and control

*This subclause of the SPMP shall specify the metrics, reporting mechanisms, and control procedures necessary to measure, report, and control the project schedule and budget.*

### Schedule control plan

*This subclause of the SPMP shall specify the control mechanisms to be used to measure the progress of work completed at the major and minor project milestones, to compare actual progress to planned progress, and to implement corrective action when actual progress does not conform to planned progress. The schedule control plan shall specify the methods and tools that will be used to measure and control schedule progress. Achievement of schedule milestones should be assessed using objective criteria to measure the scope and quality of work products completed at each milestone.*

### Budget control plan

*This subclause of the SPMP shall specify the control mechanisms to be used to measure the cost of work completed, compare planned cost to budgeted cost, and implement corrective action when actual cost does not conform to budgeted cost. The budget control plan shall specify the intervals at which cost reporting will be done and the methods and tools that will be used to manage the budget. The budget plan should include frequent milestones that can be assessed for achievement using objective indicators to assess the scope and quality of work products completed at those milestones. A mechanism such as earned value tracking should be used to report the budget and schedule plan, schedule progress, and the cost of work completed.*

# Product delivery

*This subclause of the SPMP shall contain plans for delivery of the project's product(s), and specify the product delivery approach:*

* *the required information flow both internal to the project and to all external organizations required to support the delivery,*
* *the packaging and physical delivery plans,*
* *all associated customer documentation such as operation manuals, maintenance manuals and training materials.*