Software Project Management Plan Specification

The Software Project Management Plan (SPMP) shall have nine major elements, in the order specified below. The format can be of your choosing, but must be neat, professional, and consistent with other team produced documents.

*“A project plan should contain enough information so that the team and stakeholders understand the scope, size, time, effort, methodologies, requirements, and risks of the project. The plan should be amenable to change as the project progresses. Much like the requirements specification, it should become more specific and elaborate as the project progresses.”* **[Henry, 2004]**

The SPMP structure presented below is a meld of the plan presented in the same source and the IEEE Standard for Software Project Management Plans. **[IEEE, 1998]**

**Elements of the Software Project Management Plan**

Cover page

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Appendix A – Glossary

Other Appendices as necessary

**Cover Page**

The cover page shall contain:

* Document name (Software Project Management Plan)
* Authors
* Team Name
* Date

**Revision History**

The revision history shall be a table with four columns:

* Name (of the person making the revision)
* Date
* Reason for Change
* Document Version

**Table of Contents**

The table of contents shall have the title (Table of Contents) centered at the top of the page.

The table of contents shall have a line for each section and first level subsection in the document.

The table of contents shall have a dot-leader from the section heading to the page number.

**Introduction**

The Introduction shall provide an overview of the project and the product, and a list of project deliverables

**Project Overview**

The project overview shall provide a concise summary of the product goals, the product to be delivered, major milestones, required resources.

**Project Deliverables**

The project deliverable shall contain a list of all items to be delivered to the customer, the delivery dates, delivery locations, and quantities to be delivered.

# Project Organization

The Project Organization shall define the project process model, describe the developer’s organizational structure, and the responsibilities for each element of the structure.

**Process Model**

The Process Model shall define the software development lifecycle model.

**Organizational Structure**

The Organizational Structure shall define the management staffing of the developer’s organization. The use of hierarchical charts and matrices is encouraged. The technical staffing shall consist of a description of the specific information on the software engineering roles and the personnel assigned to those roles.

**Management Process**

Management Process shall specify management objectives and priorities; projection assumptions, dependencies, and constraints; risk management plan; and the staffing plan.

**Management Objectives and Priorities**

Management Objectives and Priorities shall describe the style, goals and priorities for management activities in the projects. This may include frequency and methods of reporting, priority among requirements, budget and schedule, and the extent to which exiting software or purchased software will be used.

**Assumptions, Dependencies, and Constraints**

Assumptions, Dependencies, and Constraints shall state the assumptions upon which the project is based, any external events driving the project, and constraints under which the project must operate.

**Risk Management**

Risk Management shall identify and quantify the project risks; present the plan for risk monitoring and mitigation. This section should be written by the Risk Management Officer and updated according to the reporting frequency defined in Management Objectives and Priorities.

**Project Staffing**

Project Staffing shall consist of a description of the specific information on the software engineering roles and the personnel assigned to those roles.

**Technical Process**

Technical Process shall describe the technical methods, tools, and techniques chosen for the project. It shall also describe the quality assurance, configuration management, and the verification and validation activities supporting the project.

**Methods, Tools, and Techniques**

Methods, Tools, and Techniques shall specify the development platform, development methodology, team structure, programming language, and other tools, techniques, and methods to be used to develop and maintain the project deliverables.

**Software Documentation**

Software Documentation shall specify the documentation requirements, and the milestones, reviews, and sign-offs for software documentation. It may also contain a

style guide, naming conventions and documentation formats. The documentation plan shall provide a summary of the schedule and resource requirements for the documentation effort.

**Project Support Function**

Project Support Function shall contain, either directly or by reference, plans for the supporting functions for the project. These functions may include, but are not limited to, configuration management, software quality assurance, and verification and validation .

**Schedule and Budget**

Schedule and Budge shall specify the resource requirements, and establish a project schedule.

**Schedule**

Schedule shall provide a detailed description of the project activities, milestones and events, together with the associated due dates / durations. This section shall also identify any assumptions that have an impact on the schedule.

**References**

References shall include a list of all documents referenced elsewhere in the SPMP. References shall identify each document by title, author, report number, date and publisher and specify the sources for any non-commercial documents.

**References**

[Henry, 2004] J. Henry, 2004, *Software Project Management*, Addison-Wesley.

[IEEE, 1998] IEEE Standards Board, 1998, *IEEE Std. 1058-1998 IEEE Standard for Software Project Management Plans*, IEEE.