Setting up a Project Management System
Drafting and Releasing a Project Management Plan

What it is about
Every Project Team is an organizational entity that should work efficiently and communicate appropriately with its outside world. To do so, as from the beginning of the Study phase and based on the Project Roadmap (see [2]), the Project Team shall design and develop a project management system, task that consists among others to draft and release a Project Management Plan (PMP). This document is then updated as often as required, but at least at the beginning of each of the remaining phases.

The aim of this key project management document is two-fold: ensuring that the Project Participants agree upon and share a common framework for organizing their project; giving the Project Board the assurance that the project expectations are well understood and that everything is done to ensure the operational success of the project.

Three approaches to draft and release a PMP are proposed in the present brochure. There are suited to projects of different sizes and Project Teams of different project management maturity levels. In sake of effectiveness, the present brochure shall be read in conjunction with the document entitled openSE Framework (see [1]).

1 Simple approach
This simple approach is rather suited to projects of a small size or to newcomers to project management.

1.1 Editorial process
Even if the PMP is considered as the outcome of a team exercise, it is likely that its drafting is initiated by the Project Manager, then complemented, commented and corrected by all the Key Project Participants.

From a quality assurance point of view, this document is:
- authored by the Project Manager and a few Key Project Participants;
- verified (i.e. cross-checked) by some others Key Project Participants, and when available, by some project management experts;
- validated and released by the Project Manager.

The PMP is not expected to be validated by the Project Board. However, the Project Board members should receive all released versions of this document. They are not expected to acknowledge its receipt and no response from them shall be understood as a tacit endorsement of the document. If some members of the Project Board feel that the PMP does not address the project expectations as they have been communicated to the Project Team by means of the Project Roadmap, the Project Manager may be asked to improve the PMP until this document provides all guarantees or at least sufficient guarantees to the Project Board that the project expectations can be achieved.

The typical editorial process is featured on the simplified process diagram of Figure 1. Further revisions of the PMP follow a similar process (see also [8]).

1.2 Typical content
The typical content of a PMP is threefold.

Section 1. Overview. This section is a brief reformulation of the Project Roadmap. The project purpose and objectives are recalled, the key milestones and deliverables are
listed, so the assumptions, dependencies and constraints that may influence the completion of the project from the three usual perspectives: scope, schedule and budget. All key documents that are of prime importance to understand what are the project expectations (including the Project Roadmap) are referenced in this first section. The Master Schedule of the project, the Project Budget and the Project Risk Registry, if not stand-alone documents, shall be included in this first section.

Figure 1. Simplified process diagram for drafting and releasing the first version of the Project Management Plan.

Section 2. Project Organization. The membership of the Project Board is given in this section, as well as that of the Project Team and its organization: name of the Project Manager, Key Project Participants and other Project Participants. When applicable, all potential project stakeholders (e.g. key users of the project deliverables) may also be listed in this second section.

Section 3. Project Management Processes. The third section aims at providing insights on the various managerial processes (that of the PMBoK [9] for instance):

3.1. Scope Management. This subsection explains how the project is or will be broken down into phases, Work Packages, Work Units, activities, etc. (see [5]) and how they will be managed and monitored, including the location where this information is kept available.

3.2. Time Management. This subsection explains how the various schedules (Master, Coordination Schedules, see [3] and [6]) are or will be prepared, managed and monitored, including the location where they are or will be kept available.

3.3. Resource and Cost Management. This subsection provides insights on how human resources are or will be managed: project enrollment procedure, job descriptions, etc. It shall also explain how the Project Budget is set up (see [4]), how it is or will be broken down, managed, monitored and periodically reviewed.

3.4. Quality Management. This subsection explains which measures are or will be set up to ensure the consistency of documents (see [8]) and more broadly of all deliverables released in the framework of the project. The description of the document management framework as well as that for configuration management and change management are typically found in this subsection. Additionally, this subsection may provide insights on the organization of reviews, the naming/coding standards, etc.

3.5. Communication Management. This subsection explains how the Project Team communicates or will communicate inside itself, towards the Project Board and the various stakeholders and, if required, towards the general public.

3.6. Risk Management. This subsection explains how risks, whether they are perceived as threats or opportunities, are or will be managed, i.e. identified, assessed, treated and monitored (see [7]).

3.7. Procurement and Contribution Management. Finally, this subsection explains how procurement (by means of commercial orders and contracts) and contributions (by means of collaboration agreements), if any foreseen, are or will be managed, which activities are to be outsourced and what are the specific policies and processes to follow.

1 This subsection refers to the human resource management and cost management knowledge areas of the PMBoK.

2 This subsection also addresses the integration management knowledge area of the PMBoK.
2 Intermediate approach

This intermediate approach is suited to rather challenging projects or to Project Teams that are already somehow experienced.

2.1 Editorial process

To ease the handling of the PMP by staging its released for instance, this key project management document may be broken down into a head-document and a few subdocuments. Each of them follows a drafting and releasing process that is identical to that of the parent document but not necessarily synchronized. A project management document list is then established to keep track of the applicable released versions of the head- and subdocuments of the PMP.

2.2 Typical content

The content of the PMP is basically that outlined in § 1.2 above. Subdocuments can typically be:

- a Project Scope Management Process addressing the topics of subsection 3.1;
- a Project Time Management Process addressing the topics of subsection 3.2;
- a Project Cost Management Process addressing part of the topics of subsection 3.3;
- a Project HR Management Process addressing part of the topics of subsection 3.3;
- a Project Quality Management Process addressing the topics of subsection 3.4;
- a Project Communication Management Process addressing the topics of subsection 3.5;
- a Project Risk Management Process addressing the topics of subsection 3.6;
- a Project Procurement Management Process addressing part of the topics of subsection 3.7;
- a Project Contribution Management Process addressing part of the topics of subsection 3.7.

Dedicated subdocuments can also be considered for specific processes. In addition, key project management documents such as:

- the Project Master Schedule;
- the Project Coordination Schedule(s);
- the Project Budget;
- the Project RACI Matrix;
- the Project Risk Register;

shall be considered as stand-alone subdocuments.

3 Advanced approach

This approach is suited to complex projects of a substantial size. It can only be implemented by rather experienced project management professionals.

3.1 Editorial process

The editorial process of the simplified process diagram of Figure 1 is also suited for an advanced approach to drafting and releasing the PMP and its associated subdocuments.

3.2 Typical content

In this context, the PMP is necessarily a head document that refers to several subdocuments. Subdocuments will be groups in several families of PMP subdocuments:

- the subdocuments that define the processes (see § 2.2);
- the subdocuments that define the generic and specific roles of Project Participants;
- the subdocuments that define the specific project standards, including definitions and document templates.

These subdocuments can be assembled in a so-called Project Management File.

Key project management documents such as:

- the Work Breakdown Structure and Work Package and Work Unit Description Datasheets;
- the Project Master, Coordination and Detailed Schedule(s);
- the Project Budget;
- the Project RACI Matrix;
- the Project Risk Register, the Risk Analysis Documents, the Contingency and Continuity Plans;

shall necessarily be considered as stand-alone versionable documents.

Terminology

The following terms are assumed to be equivalent:

Project Roadmap ≡ Project Mandate; Project Charter; Project Mission Statement

Project Management Plan ≡ Project Quality Plan; Project Quality Manual; Project Quality Assurance Plan (a.k.a. Project QAP)

Project Management File ≡ Project Management Portfolio; Project Management Folder; Project Management Dossier.

References


All openSE documents are freely downloadable from cern.ch/openSE.

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