

Michael Esser

Investment Project Controlling with SAP®

- ▶ Your Practical Guide to SAP Project System (PS)
- ▶ Project Concepts, Roles and Different Scenarios
- ▶ Get an Overview of the SAP ERP Functionality Available
- ▶ Effective Planning and Reporting

Table of Contents

Preface	5
1 Introduction	7
1.1 SAP Modules “Landscape”	10
1.2 IM Structure	11
1.3 CAPEX funds	12
1.4 Budgetary Controls	14
1.5 Types of Projects	14
1.6 Project Builder	17
1.7 Project Numbering Convention	20
1.8 Project Process Overview	21
2 Project Process Overview	25
2.1 Roles & Responsibilities	25
2.2 Create master record data request	27
3 Project Process	29
3.1 Overview	29
3.2 Planning Phase	30
3.3 Design Phase	38
3.4 Execution Phase	46
3.5 Completion Phase	54
4 Project Scenarios	69
4.1 Use of projects	69
4.2 Maintenance work order types	70
4.3 GAME – TA (MX08) and project process (MX06)	71
4.4 TA work order – assignment to WBS	71
4.5 GAME – Statistical project (MX07) process	73

4.6	MX07 work order – assignment to WBS	73
4.7	Direct asset purchase process	74
4.8	Investment/ goodwill asset process	75
4.9	Joint Venture projects	76
4.10	JV project profile – 3 rd party managed	77
4.11	JV project process – 3 rd party managed	77
4.12	JV project profile – Entity managed	78
4.13	JV project process – Entity managed	79
4.14	Abandoned projects	79
5	Project Reporting	83
5.1	SAP R/3 project reports	83
5.2	OC1-Sheet	83
6	Wrap-up and conclusion	87
A	The Author	92
B	Definition of Terms & Acronyms	93
C	Disclaimer	97

2 Project Process Overview

In this chapter, I will explain the relevant roles and responsibilities and their set up in SAP. There are at least seven different roles available during the project process. I will list them first and then go through a detailed explanation.

2.1 Roles & Responsibilities

Manage and Control IM Budget

The incumbent can update the IM budget for the relevant class of business and manage the funding. He/she is able to run Business Warehouse reports on the program level. However, the incumbent cannot release the budget from IM to the project system (SAP-PS). This role will be mapped to global CAPEX planners who will manage the IM budgets per class of business. This role should not be mapped to project managers. The incumbent is the owner of the IM structure per class of business.

Plan and Rank Initiatives (budget holder)

A single Investment Management (IM) structure is created by Class of Business (global not country-specific). Each IM structure has a person assigned as agreed by the global CoB organization. The individual in this role receives an email request for the release of CAPEX to a project and will need to approve budget release via the SAP Portal. The approval done by the incumbent is the final release as all project / investment decision approvals should have happened prior to this stage outside of SAP. The funding process is completely carried out outside of SAP. The investment proposal, which briefly describes the scope of the project and also contains the economics, as well as possible alternatives, is a written document. This document is circulated within the authorized parties, which contains senior leaders only. Moreover this document contains a cash-flow forecast and brief visualization of the effects of the project on the profit and loss account and within the balance sheet. A capital project cannot incur actual expenditures or raise purchasing commitments unless budget has been allocated within the WBS structure.

Report Programs

The incumbent primarily reviews budget or actual reports at high level project or program levels (across projects, not detailed level within single projects). Typically, a management accountant is in charge of management information reporting. The role has access to both SAP R/3 and BW reports with focus on analysis rather than project operational support. The incumbents could be from any of the following organizations e.g. business finance, management accountant, fixed asset accountant, etc. (but not project managers). This role could be mapped to senior project or program managers who require reporting across multiple projects for a class of business (e.g. in a region).

Manage Project Reference Data

This role is mapped to global master record data focal points only (no local mapping). The incumbent maintains:

- ▶ WBS templates in SAP
- ▶ WBS spend types in SAP
- ▶ Global IM structures

The incumbent is the person responsible for the table, in line with the manual of authorities. The manual of authorities clarifies who has the authority to sign invoices and up to which amount. It is the basis for the enterprise on how segregation of duties is carried out within the organization.

The role reassigns level 1 WBS elements to different IM positions and is responsible for the processing of the IM first of the year tasks in SAP.

Maintain Project Structures

This is a typical project administrator role to support the project manager and project financial management. For example, a business finance role for direct asset purchasing, asset retirement obligation (ARO) projects, cost recovery and statistical projects or process cost reporting. This could also be used for 3rd Party access. This role does not have as much authorization as the project manager. The incumbent cannot release funds to a project from IM and assign REVEX budget to a project. The role is

allowed to raise purchase requisitions from the project and update the value of work done (VOWD) for the project.

Manage and Control Projects

This is a primarily a project manager role for project management and execution. The individual cannot release CAPEX budget to the project from IM to PS. They are able to make purchase requisitions from the project and to manage purchasing commitments. In addition, this role can update project plan values and copy plans between projects. Moreover, the person responsible is able to release the project structure once funds have been allocated to it (CAPEX). It is also possible to allocate the REVEX budget to REVEX WBS elements and update the project structures, latest estimate figures, and settlement rules, etc. So typically this role is assigned to either project managers or project engineers, corporate functions (IT / HR / CP / HSSE, Finance), GAME Turnaround project managers, or engineers.

Report Projects

This role has access to SAP R/3 and BW reports for plan / actual, budget, and commitment project reporting. Access to line item reporting for detailed analysis purposes is also included.

This role is assigned to all project managers and project administrators and may be required by project or program accountants.

2.2 Create master record data request

Figure 2.1 shows the process flow for the master data request. This process is mainly carried out in shared services because they are responsible for creating new record data. The red pillars are processed as workflows in an application called universal work list (UWL). Blue pillars represent manual process parts, and the orange pillar is carried out directly in SAP.

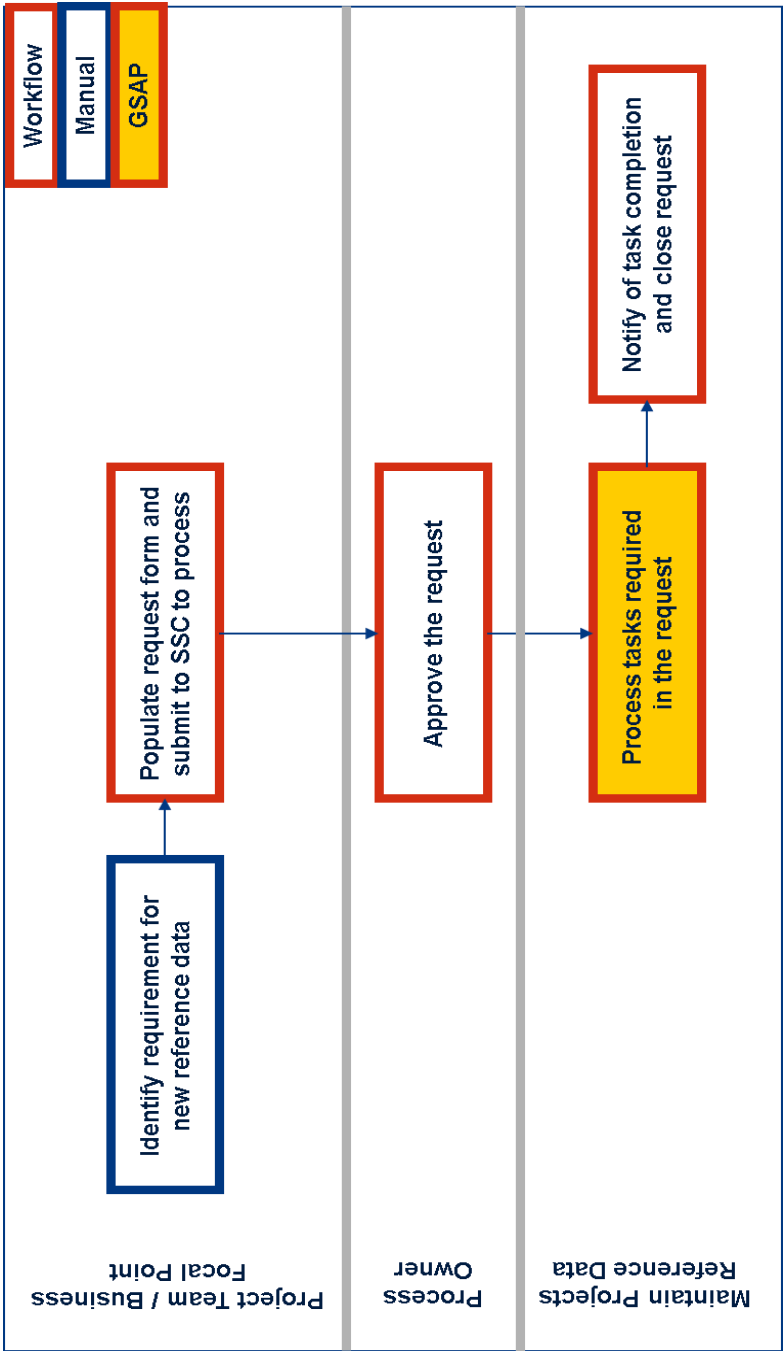


Figure 2.1: Process flow for master data request

3 Project Process

The project process was illustrated in Figure 1.10. Now I will explain this process in more detail.

3.1 Overview

First I would like to repeat the four standard phases characteristic for the project process. In chronological order:

- ▶ Planning phase
- ▶ Design phase
- ▶ Execution phase
- ▶ Completion phase

For each phase, we will discuss the activities and relevant SAP transactions along with their impact on controlling activities. Starting with a brief glance at the setup of the process and the roles and responsibilities as stated in Section 2.1 – here are some more assumptions. This setup has an important impact on project engineers responsible for the operational and system part of the projects. This requires proper technical skills in the business.

Furthermore the controlling piece on investment, which is a classical finance task, is increasingly being shifted towards the business side.

Currently project structure (WBS) is set up late in the process, i.e. once CAPEX approval is available.

Create projects in SAP early



To avoid hiccups it is necessary to create projects in SAP in the very early stages to capture REVEX / CAPEX on the project level.