

Project Management (PS)

Curriculum: Introduction to S/4HANA using Global Bike

Teaching material - Information

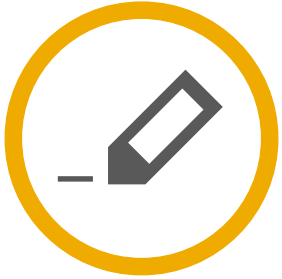


Teaching material - Version

- 4.2 (August 2023)
- Software used
 - S/4HANA 2022
 - Fiori 3.0
- Model
 - Global Bike
- Prerequisites
 - No Prerequisites needed



Module Information



Authors

- Martin Wassmann
- Bret Wagner
- Stefan Weidner
- Babett Ruß



Target Audience

- Beginner

Module Information



Learning Objectives

You are able to

- define the central organizational structures of the PS module.
- summarize the master data which is most important for the PS module.
- explain a standard process of the Project Management.

Agenda

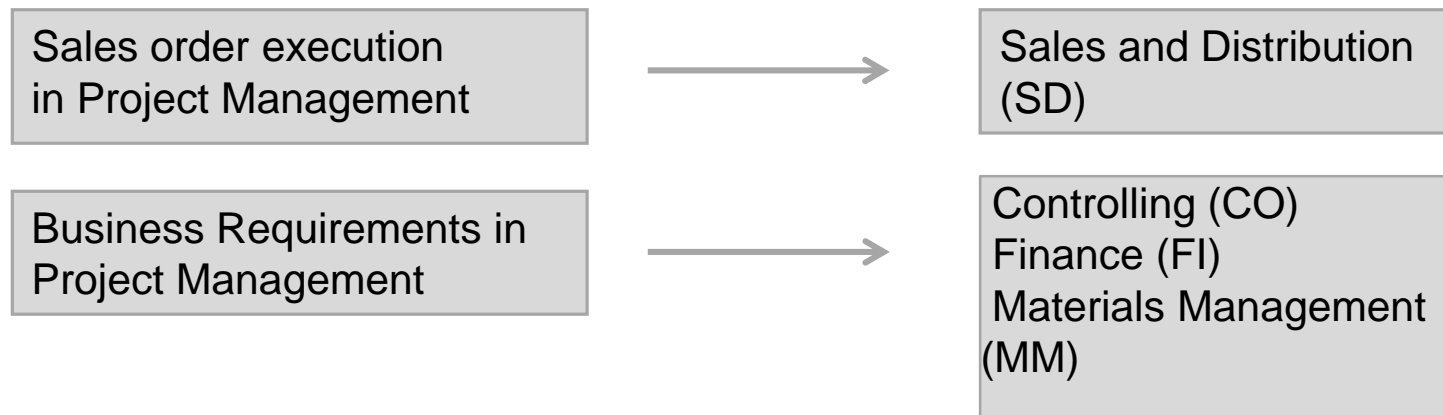
- PS Organizational Structure
- PS Master Data
- PS Processes
 - Project Planning
 - Project Execution
 - Project Closure

Agenda

- PS Organizational Structure
- PS Master Data
- PS Processes
 - Project Planning
 - Project Execution
 - Project Closure

PS Organizational Structure (Project Management)

- Organizational structure needs to be defined in order to define execution of project
 - Project system itself does not own its own organizational structure
 - PS inherits its organization structures via assignment into organizational units in the enterprise structure
 - The PS module is integrated to the modules Finance and Logistics
 - The productivity of this module is mainly created through the integration of other SAP modules

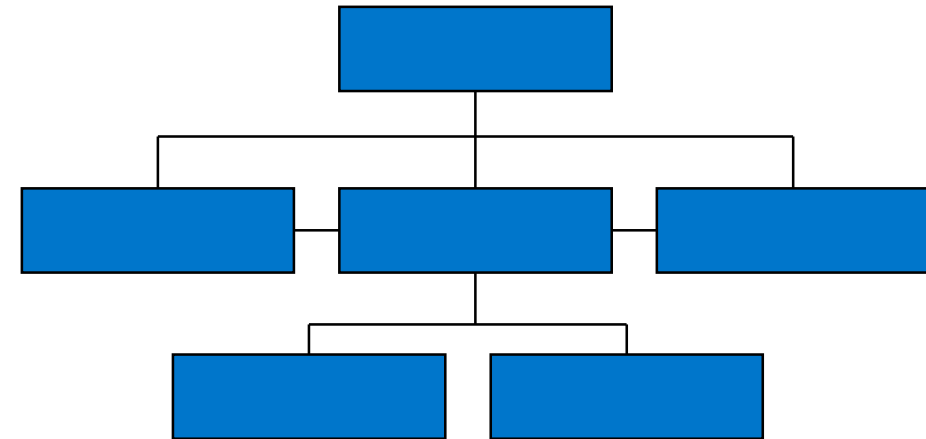


Agenda

- PS Organizational Structure
- PS Master Data
- PS Processes
 - Project Planning
 - Project Execution
 - Project Closure

PS Master Data

- Projects
- WBS-Elements (Project Structure Plan Elements)
- Sequences
- Milestones
- Work Data



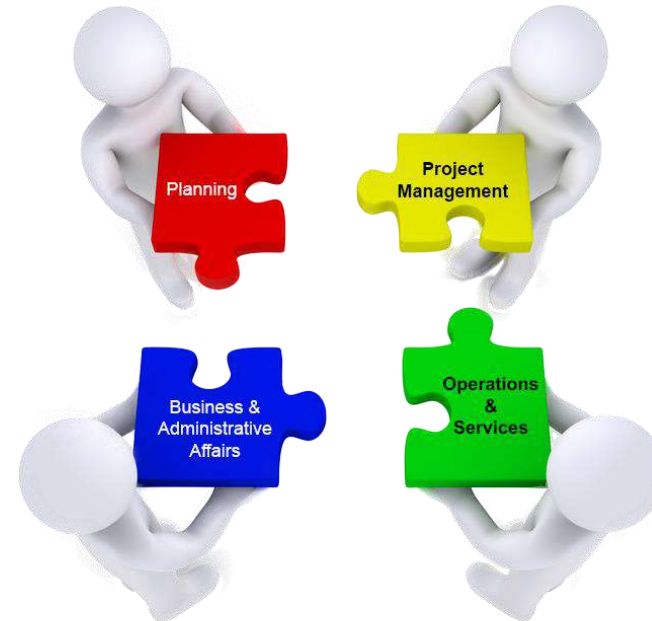
Projects

■ Characteristics of projects:

- Complex
- Unique
- High risk
- Goal oriented
- Limited in time, costly, high capacities needed
- Strategic meaning
- High quality standards

■ Project types:

- Customer projects
- Overhead cost projects
- Investment projects



Display Projects

Projects are complex tasks that can be found in several components in the SAP system:

- Sales and Distribution
- Controlling
- Finance
- Materials Management

Project Builder

- All data is prepared using one transaction
- Regularly performed projects can be re-used to the work of creating them.
- Scheduling of projects is based on networks

The screenshot displays the SAP Project Builder interface for Project P/9000. The top navigation bar includes the SAP logo and the title 'Project Builder: Project P/9000'. Below this, a toolbar offers various display options: 'Display <-> change', 'Hierarchy graphic', 'Mass change', 'Easy Cost Planning', 'Sales pricing', and 'More >'. The left sidebar, titled 'Project Structure: Description', shows a hierarchical tree of project components, including 'Development of Ultralight Bike (P/9000)', 'PH-000-1', 'Development of Ultralight 400000', 'Engineering', 'Prototype', 'Testing', 'Small series production', and 'Release to mass product P/9000-'. The main area, 'Identification and view selection', contains a search bar for 'WBS element' with the value 'P/9000' and a description 'Development of Ultralight Bike'. Below this, there are tabs for 'Basic Data', 'Dates', 'Assignments', 'Control', 'User fields', 'Administr.', 'Superior', 'Progress', and 'Long Text'. The 'Basic Data' tab is active, showing fields for 'Proj. type' (01 WBS element category A), 'Short ID' (P/9000), 'Priority', and 'Proj. summarization'. The 'Status' section includes 'System Status' (REL) and 'User status'. The 'Responsibilities' section has fields for 'Pers. Resp. No.', 'Applicant no.', 'Resp. cost ctr.' (EU00, EURD1000), 'Req. cost center', and 'Req. co. code'. The 'Operative indicators' section includes checkboxes for 'Planning Element', 'Acct asst elem', 'Billing Element', and 'Grouping WBS element'.

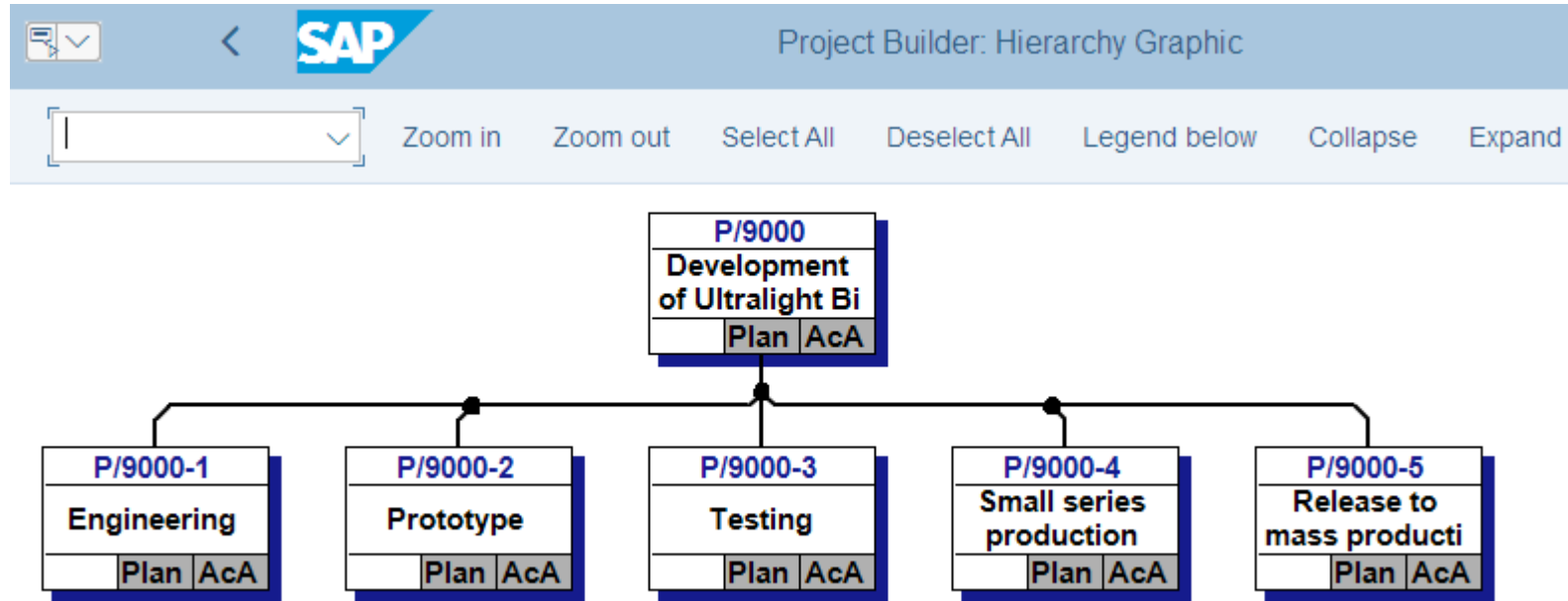
WBS-Elements

- The WBS-Element either describes a specific tasks or subtasks that can be further broken down in to work packages→ Work package
- Possible Status for WBS Elements
 - Released→ Entry of effective costs possible
 - Unlocked
 - Technically complete
 - Closed→ processes in Logistics and Finance
 - Deletion flag
 - Fully invoiced→ further invoices can be inhibited

Hierarchy Graphic (PSP)

- The Hierarchy Graphic forms the basis for planning:
 - Costs
 - Revenues
 - Payments
 - Budgets
 - Schedules
- Can be structured in phases, functions and objects like conceptual design, overall planning or permissions.
- Project phases are, for instance:
 - Conceptual design
 - Overall planning
 - Permission, etc.

Hierarchy Graphic



Functions:

Scheduling, Cost Determination, Classification in Entities

Project Structure in SAP S/4HANA

The screenshot displays the SAP Project Builder interface for Project P/9000. The left sidebar shows the project structure hierarchy, with the 'Small series production' element (P/9000-4) highlighted by a red box and a blue arrow. The main area shows the 'Identification and view selection' section, where the WBS element is set to 'P/9000-4' and the description is 'Small series production'. Below this, the 'Basic Data' tab is active, showing fields for 'Proj. type' (01 WBS element category A), 'Short ID' (P/9000-4), 'Priority', 'Status' (System Status: REL), 'Responsibilities' (Pers. Resp. No., Applicant no., Resp. cost cntr: EU00, EUPR1000, Production Costs), and 'Operative indicators' (Planning Element, Acct asst elem., Billing Element, Grouping WBS element).

Project Structure
Project + PSP
Elements

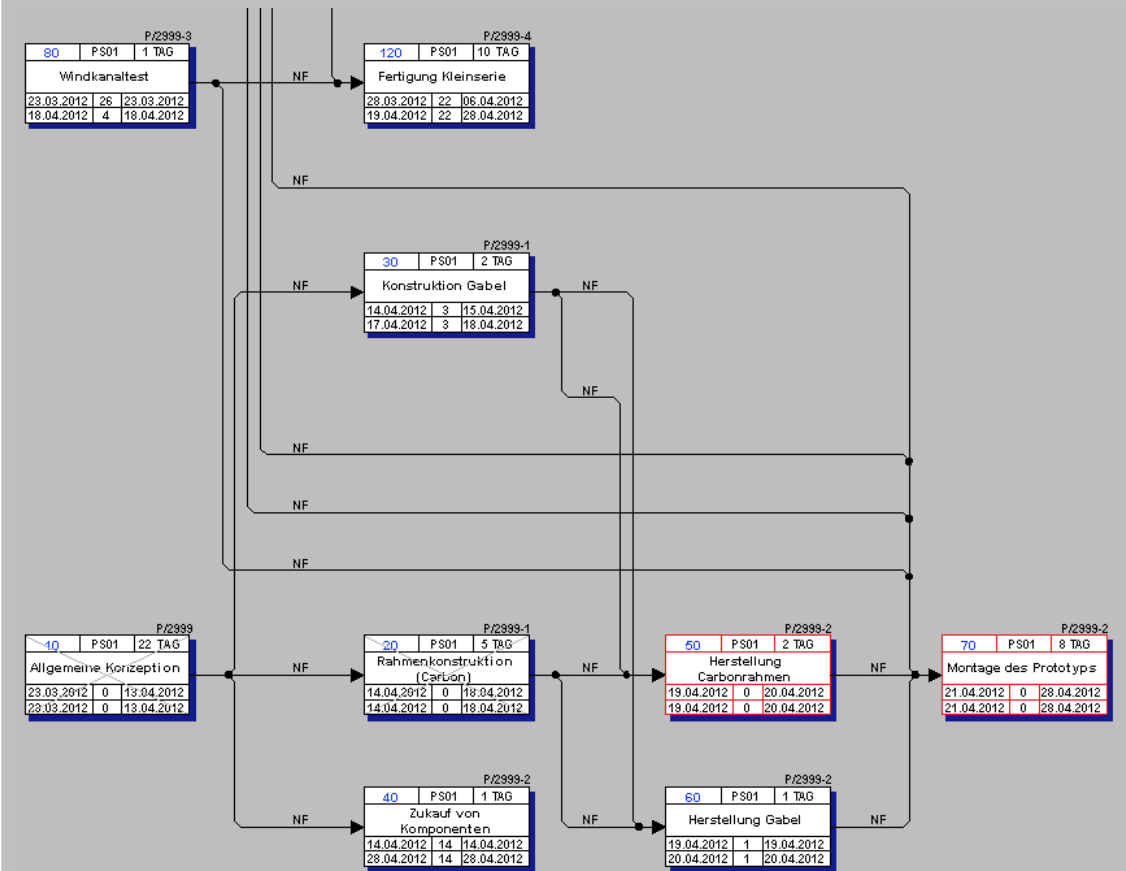
Activities

- The Project System distinguishes between the following types of activity:
 - Internally processed activities
 - Externally processed activities
 - General costs activities
- The German standard DIN 69 900 describes activities as "components of a process " with the following characteristics:
 - They have a duration.
 - They have a defined start and a defined finish.
 - They are processed without interruption.
 - Resources are needed to execute them.
 - They incur costs.

Hierarchy Graphic

- Consists of access sequences and relationships
- Possibility to create access sequences in external processing
- Change of internally processed activities to externally processed ones

Example Hierarchy Graphic



Relationships

- Relationships describe the chronological sequence in a network plan oder standard network. There can be dependencies of a technical or logical nature.

Normal series

From the end of one series to the beginning of another one.



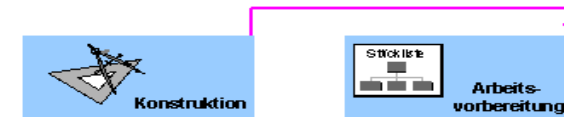
Start series

From the Beginning of one Series to the beginning of another one.



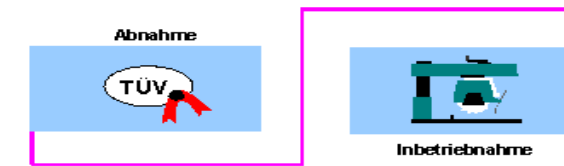
End series

Starting at the end of one series going to the end of another series.



Bounding series

From the beginning of one series to the end of another series.








Milestones

- Milestones are used to mark transitions between different phases or departments
- In the project system, they can be used for additional tasks and functions

Identification and view selection

WBS element: P/9000 Development of Ultralight Bike

Detail: ▲


Overview(s):     

Basic Data Dates Assignments Control User fields Administr. Superior Progress Long Text

Proj.type: 01 WBS element category A Short ID: P/9000

Priority: Proj. summarization: ☐

Status

System Status: REL 

User status:

Responsibilities

Pers.Resp.No.: Applicant no.: Resp. cost cntr: EU00 EURD1000 R&D Costs Req.cost center: Req. co.code:

Operative indicators



Planning Element: ☒ Acct asst elem.: ☒ Billing Element: ☒ Grouping WBS element: ☐


Milestones are created in the Project Builder for Single Elements






Milestones

- For preparation of business actions
- Functions:
 - Release of activities
 - Include standard schedule
 - Create hierarchy
 - Include parts of hierarchy
 - Start workflow tasks
 - etc.

Identification and view selection

WBS element:  

Detail: 

Overview(s):     

Basic Data Dates Assignments Control User fields Administr. Superior Progress Long Text

Word Data in the Activity

- Activity type: If you want to cost networks, you must define an activity type for internal processing and a formula key for calculating costs. When you enter an activity type you can display different costs for special qualifications or weekend work.
- Work: Here you specify the planned amount of work involved in carrying out the activity. For example, you can specify the engineering activity in hours or energy requirements in kilowatt hours. Using the value for work and the formula for calculating capacity requirements entered in the work center, the system determines the capacity requirements during scheduling. You can enter basic and forecast data for work in network activities.
- Number of Required Capacities: Here you specify how much capacity is required to do the work in the activity, for example, two people or three machines. This number refers to the capacity category, which is entered on the scheduling screen in the work center.
- Percent: With this value you specify the percentage of the work that is used in the activity. The percentage is only used when you let the system calculate duration, work, or the number of capacities using the calculation key. If you do not enter a percentage, the system will assume 100%.
- Calculation key: You can maintain the data for work, duration, and number of capacities required manually, or, you can let the system determine it using the calculation key.

Services

- Planned
 - Related to activities that are collected in a service master
- Non-Planned
 - Related to activities that cannot be specified because it is not known, which individual specifications they comprise.
- For preparation of externally processed tasks, the corresponding control key must be entered in the network activity.

Agenda

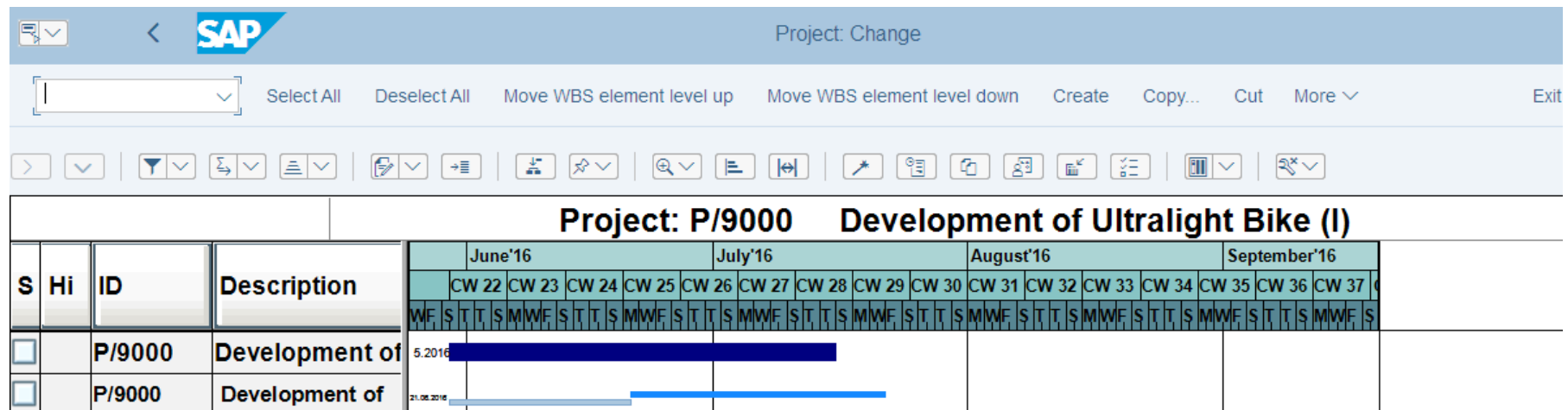
- PS Organizational Structure
- PS Master Data
- PS Processes
 - Project Planning
 - Project Execution
 - Project Closure

PS Processes

- Project Planning
- Project Execution

Project Planning – Project Planning Board

- Graphical interface for creation and preparation of projects
- Function:
 - Termination (of resources)
 - Coordinate work
 - Check capacities
 - Calculate costs



Project Execution

- Project execution comprises several steps (e.g. purchase process)
- When goods receipt of services is executed, times are recorded
- Sales orders are generated automatically using the hierarchy
- With the execution of services, liabilities and costs for items that were planned using Easy Cost Planning are entered

Project Execution: Easy Cost Planning

Easy Cost Planning enables cost planning based on amounts and characteristics. It is executed on the level of project structures. Main advantages of these is a fast, easy and clearly arranged data acquisition.

- Possible entries with Easy Cost Planning:
 - Internal accounting for services
 - Direct process accounting
 - Reservations
 - Goods issue
 - Purchase requisition
 - Sales order

Period Closing

- In general, one time per period executed in background
- To execute billing, rules are necessary
- Costs are given by customer bills and supplier bills etc.; are given to FI and other modules

Direct settlement
Each object is settled directly to the external cost object (examples: cost center, profitability segment)

Multi-level settlement
You settle individual objects in the project to the higher-level WBS element first. This then settles the costs collected to the external receiver.

Information system

- The information system is used to evaluate key performance indicators within a project.
- Provides the user with available reports and graphs
- Overview over performance, schedule and costs
- Report types:
 - Structure-based
 - Cost-oriented
 - Item reports
 - Summarised reports



Thank you!

