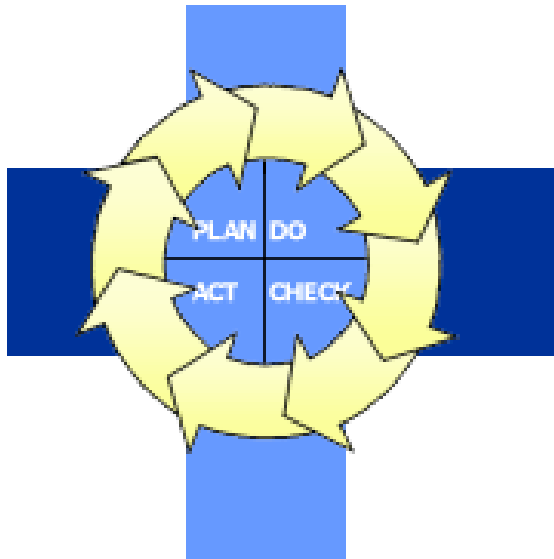


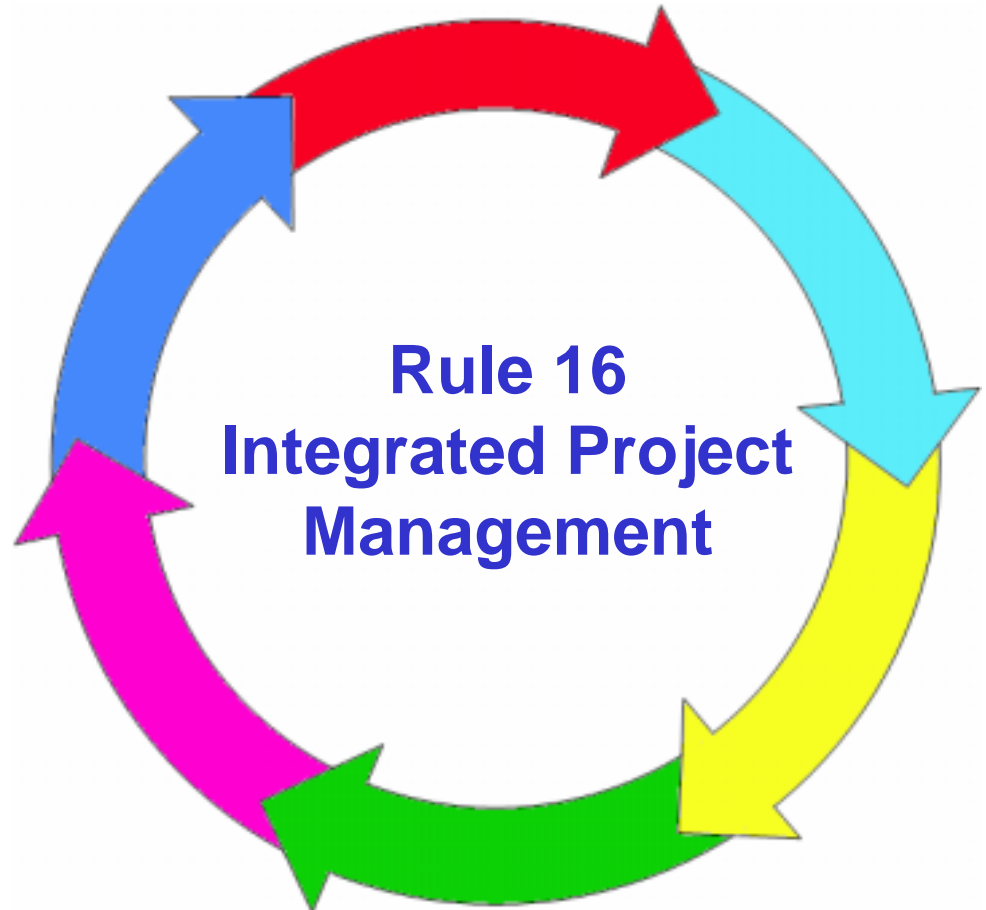


Software Process Training



Dr. Ernest Wallmüller
Wolfgang Höh

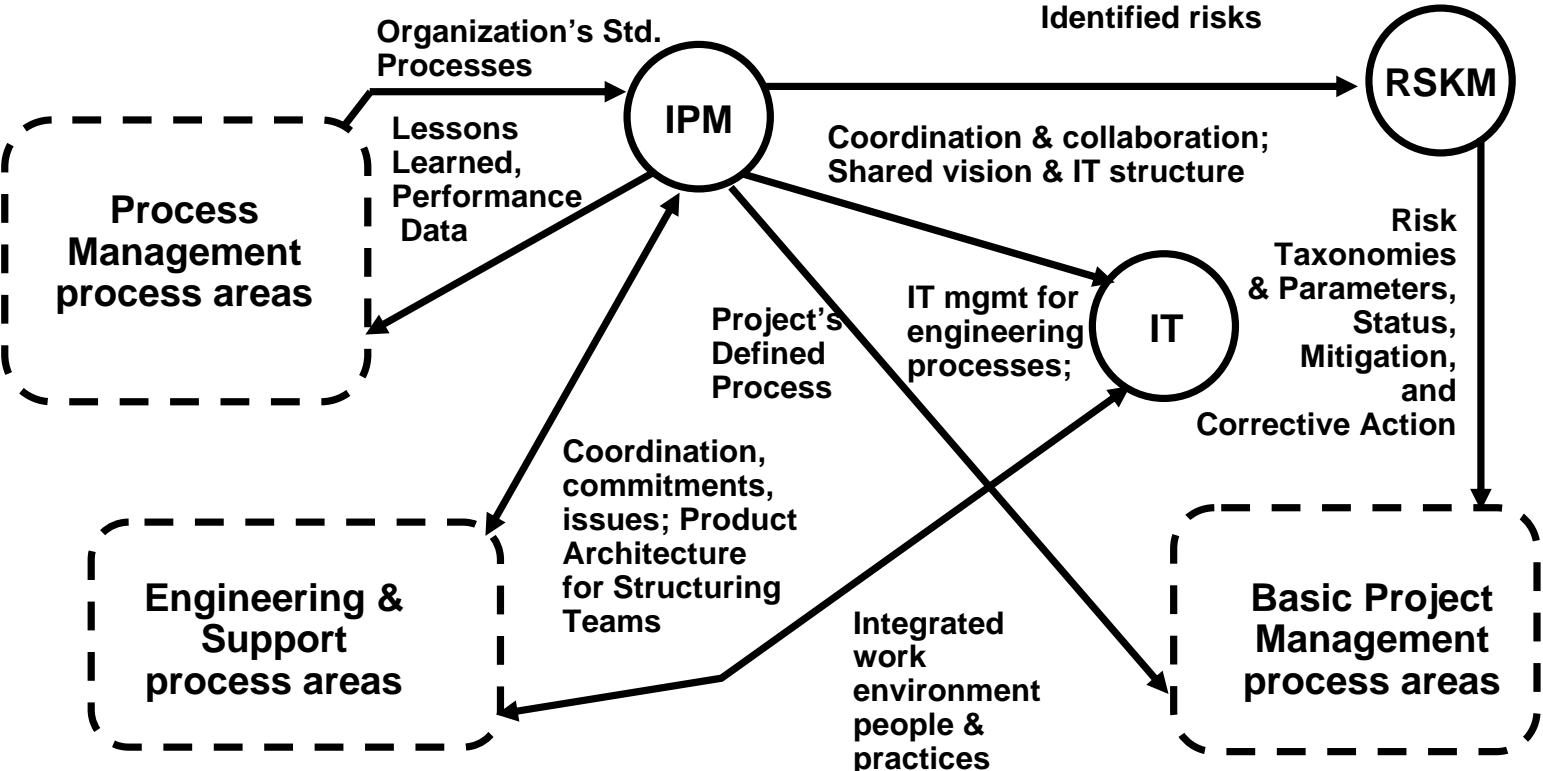
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IPM Process Context



- OPF
- OPD
- MA
- REQM
- PP
- RD
- PMC
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- PPQA
- SAM
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- REVIEW
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■ Policy

For AVL it is important to establish a project management which works according to defined processes. To improve the uniformity of project's defined processes these should be deviated from the organizational standard processes.

■ Scope

All SW producing units in AVL SBU MES.

■ Purpose

The purpose of IPM is to establish and manage the project and the involvement of the relevant stakeholders according to an integrated and defined project's process, which is tailored from the organization's set of standard process rules.

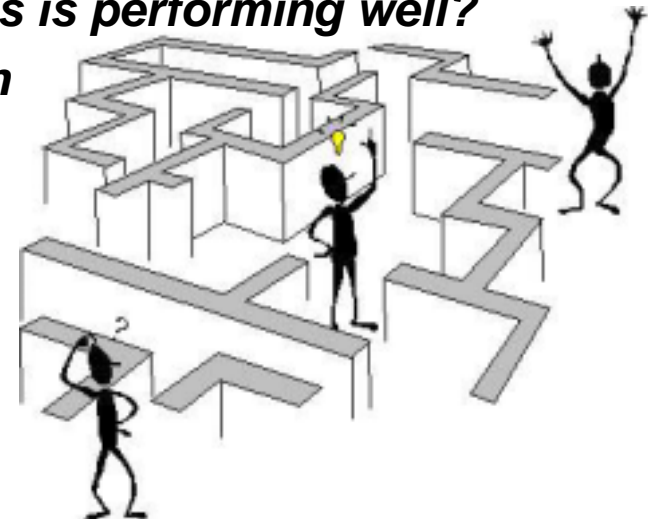
Exercise: Process Familiarization

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- **Method:** *Plenum*
- **Timing:** *20'*
- **Form:** *Brainstorming and discussion*
- **Documents:** *none*
- **Deliverable:** *Documentation on flipchart (trainer)*

- **Questions:**

- I. How do we know that the process is performing well?*
- II. Who of you has experiences with this process?
Which one?*
- III. What are the most relevant work products?*



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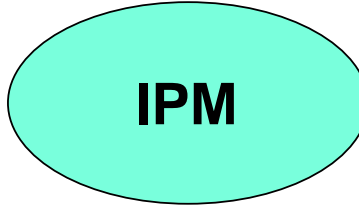
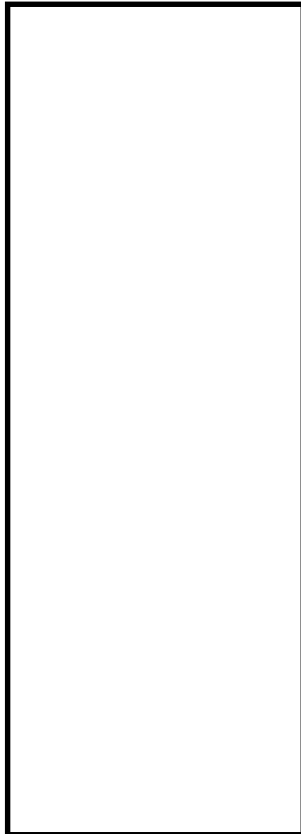
- **Method:** *Individual*
- **Timing:** *10'*
- **Form:** *Individual elaboration*
- **Documents:** *Process Rule 16; form: next foil*
- **Deliverable:** *Filled in form*

Question:

- I. *Based on your experience, the prior discussion and the IPM process definition list the involved roles, the performed activities, and the produced work products.*

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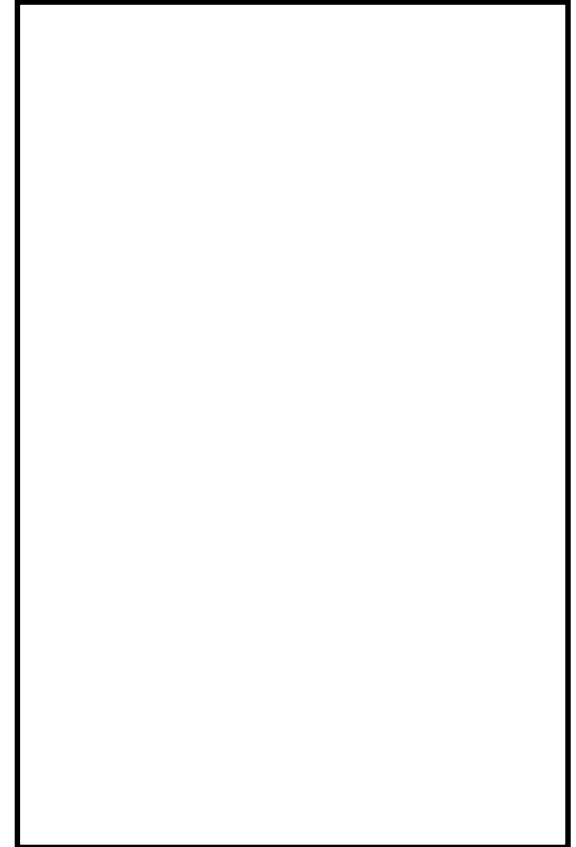
Roles



Activities



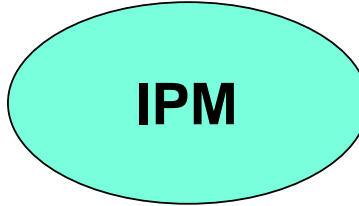
Work Products



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Roles

- PL-DP
- HOD
- Stakeholders



Activities

- Establish the Project's defined Process
- Use Organizational Process Assets for Planning Project Activities
- Integrate Plans
- Manage the Project using the Integrated Plans
- Contribute to the Organizational Process Assets
- Manage Stakeholder Involvement
- Manage Dependencies
- Resolve Coordination Issues

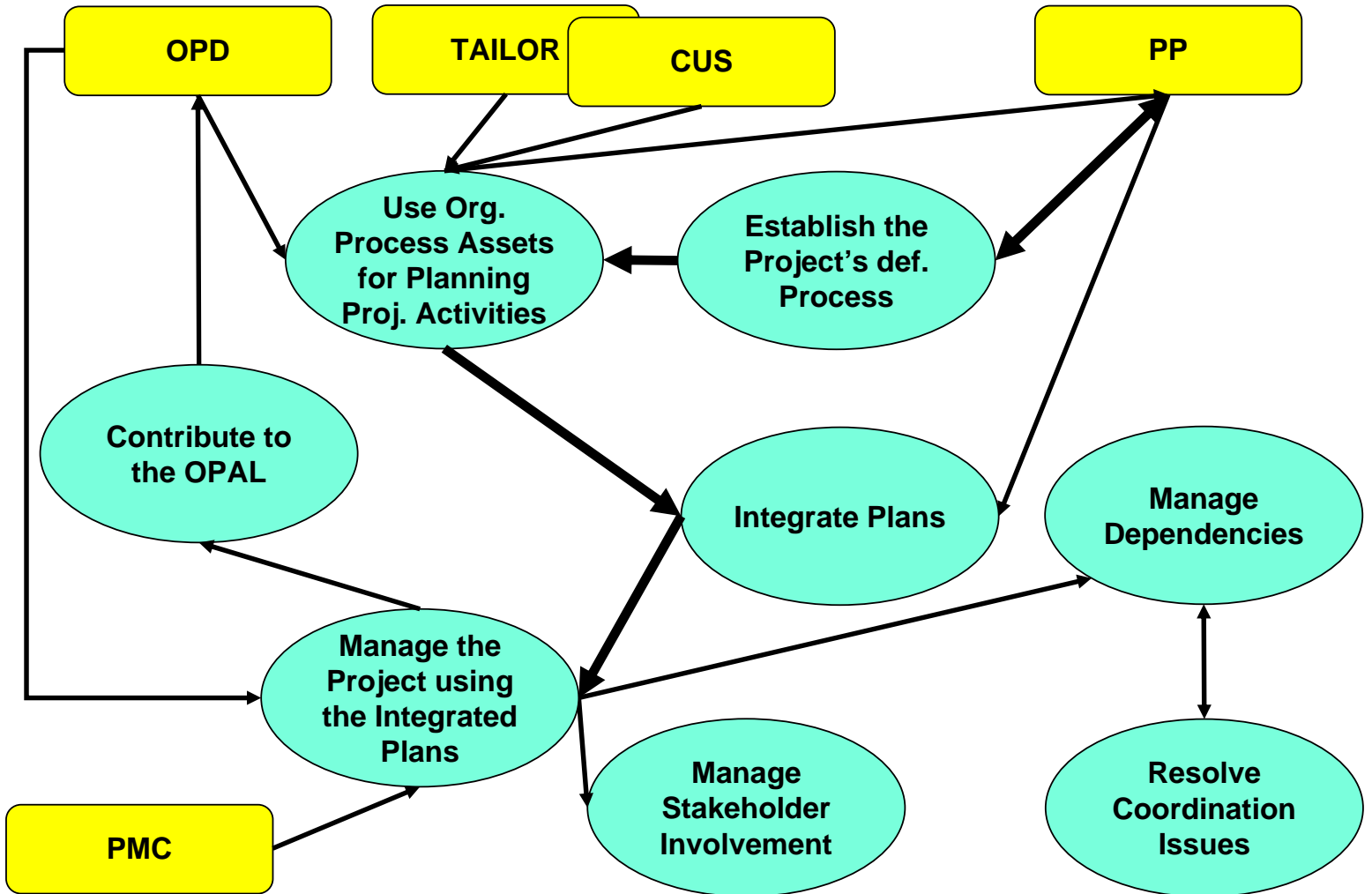
Work Products

- Project work product plan
- Lessons learned report
- Findings and actions list

IPM Process with Practices



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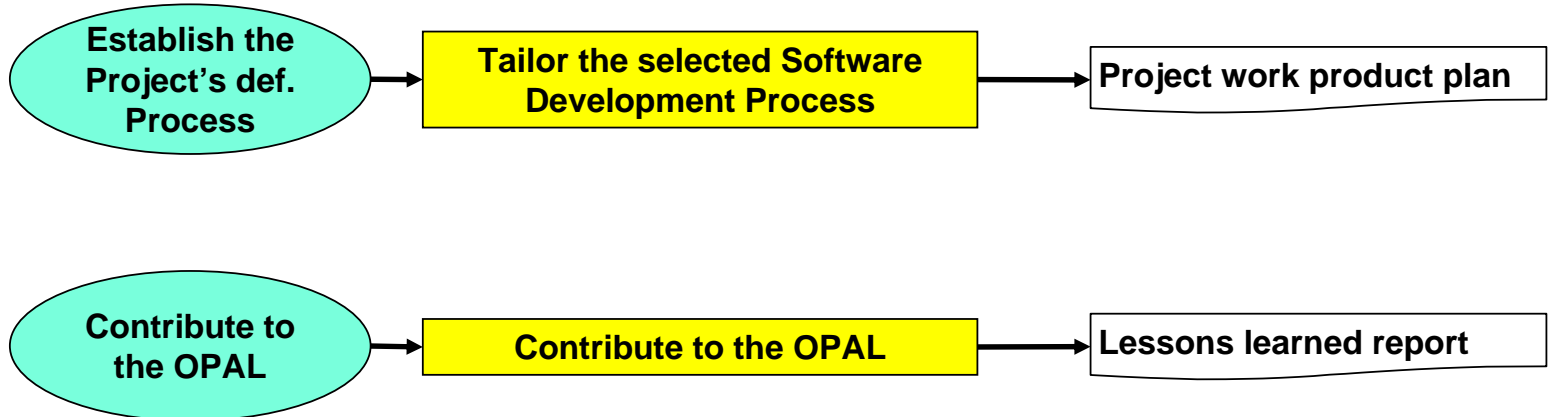
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Practice

Task

Work Products

Use the Project's defined Process



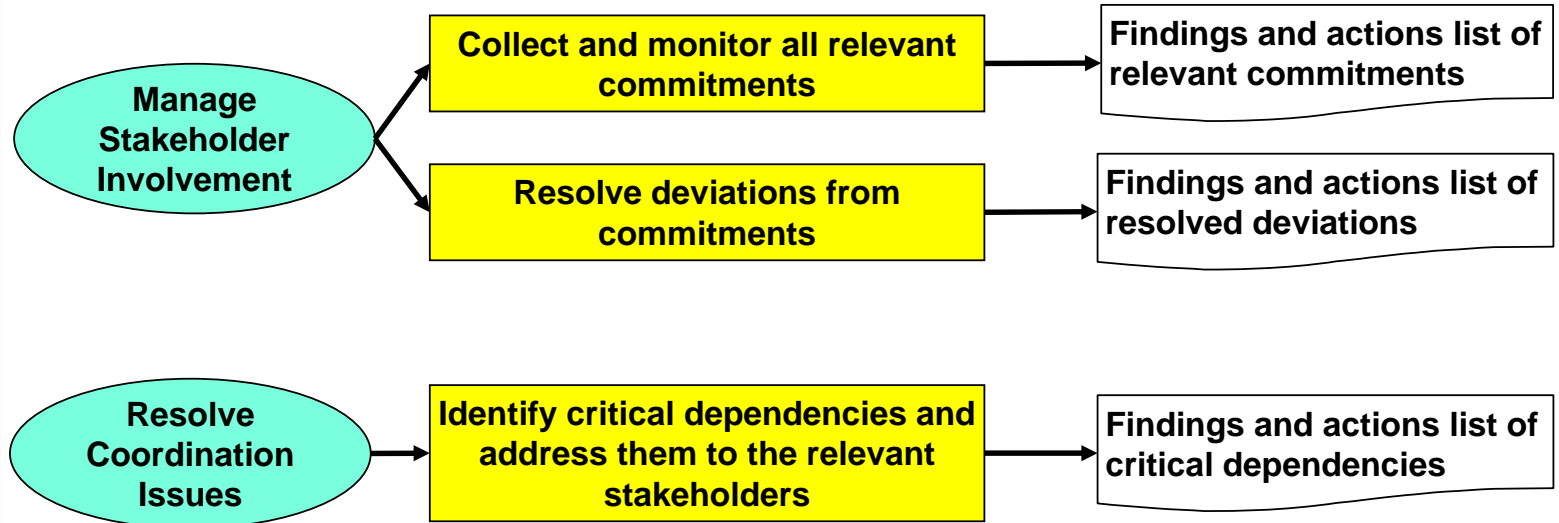
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Practice

Task

Work Products

Coordinate and Collaborate with Relevant Stakeholders



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- **Method:** *Group work*
- **Timing:** *30' group work, 15' presentation & discussion (comparative discussion of group results)*
- **Form:** *Group elaboration*
- **Documents:** *Process Rule 16: IPM
Process Rule 23: TAILOR
Process Rule 27: CUS*
- **Deliverable:** *Task description on flipchart*
- **Question:**
 - I. *Describe the selected task*
IPM_T01 'Tailor the selected Software Development Process according to the tailoring guidelines' using the presented description technique (→ next foil).

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Input

-

ID	Task Name
Description	
Roles	
Tools	
Method/Technique	

Output

-

Task Details 'Tailor the selected Software Development Process'



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Input

- OPAL
- Customer requirements
- Organizational process needs and objectives
- Operational environment
- Business environment

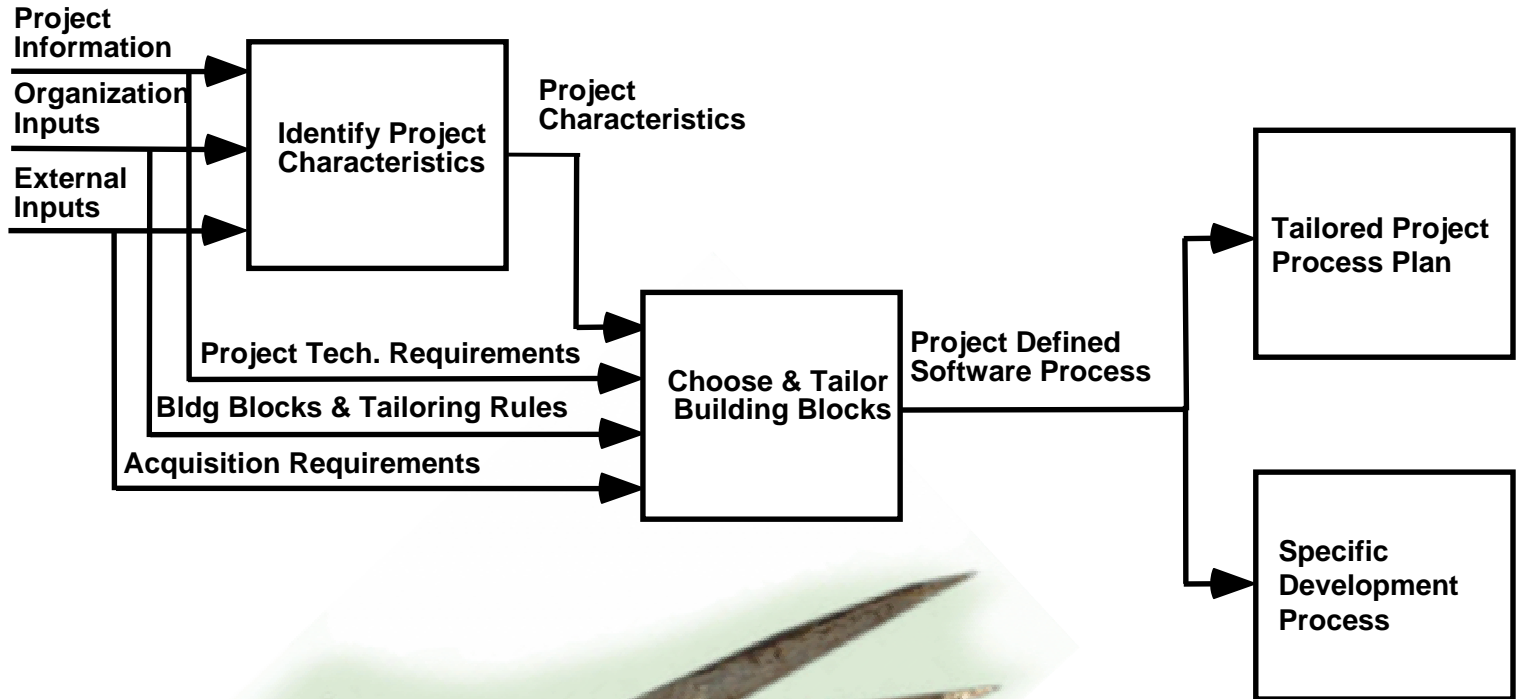
IPM_T01	Tailor the selected Software Development Process
Description Document the project's defined process: <ul style="list-style-type: none"> • The "Project work product plan" documents which parts of the Software Development Processes are used and which are not. Project specific agreements and definitions are made. 	
Roles PL-DP: Responsible for task IPM_T01	
Tools Template Template_PP_Project_WorkProduct_Plan.xlt	
Method/Technique Base on PIP (ev. adapted to Rule 27 CUS) Rule 23 TAILOR Best Practices/Lessons-learned/...	

Output

- Project work product plan (accepted Project's defined Process)

The TAILORing Process

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Characteristic	Quantification	Process Area	Effect on Task/WP
Software Project Effort	< 20 MW	RD PMC	URS, SRS: URS/SRS in a simple form, eg. descriptive text in CQ Entry or a simple Word document PIP is omitted Monitoring is done in project status meetings and documented in Meeting Reports
Project Type	Further Release	RD	PIP DR1 and DR2 are not necessary.
Number of Interfaces (External)	0	RD	Interface document (SID) no necessary
Project Type Software Project Effort Project Risk	Further Rel. < 5 MY Low	RD	PIP DR4 is omitted
Project Type	Further Release with dynamic Requirement Set	RD PMC	URS in ClearQuest PIP DR4 is omitted PIP DR Protocols can be tailored Monitoring of requirements progress and efforts

TAILOR Process Tasks

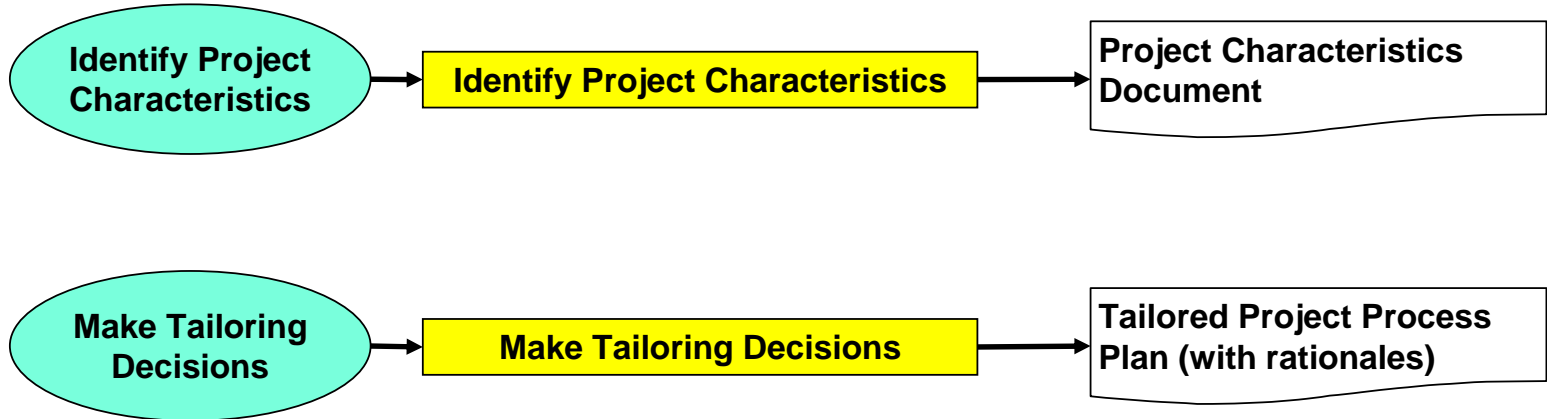


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Practice

Task

Work Products



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WP Id	Type	Description	Resp.	Link to Template
TAILOR_W01	M	Project Characteristics Document	PL-DP	Template_TAILOR_Project_Characteristics.xlt
TAILOR_W02	M	Tailored Project Process Plan	PL-DP	Template_PP_Project_WorkProduct_Plan.xlt

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There are 4 ways to develop/deliver SW is for a customer project:

- a) Customer projects gets one or more **already released SW product(s)**
- b) **Customer specific extensions** in addition to **standard SW products** are required and developed with an upcoming SW development project (PIP for main- or subrelease)
- c) **Customer specific extensions** in addition to **standard SW products** are required, they are developed in a **separate development environment** (CSE branch in source code management system); **Results are merged into the next subrelease/mainrelease** of the affected product in order minimize future maintenance effort

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- a) **Customer specific extensions** in addition to **standard SW products** are required, they are developed in a **separate development environment** (CSE branch in source code management system); **Results are NOT merged into the next subrelease/mainrelease** of the affected product. In this case, maintenance is done by the team, who developed the CSE branch during warranty and if the customer ordered specific maintenance

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WP Id	Type	Description	Task Id	Resp.	Link to Template
IPM_W01	M	“Project work product plan”	IPM_T01	PL-DP	Template_PP_Project_WorkProduct_Plan.xlt
IPM_W02	M	Lessons Learned Report	IPM_T02	PL-DP	Template_IPM_Lessons_learned_and_best_practices.xls
IPM_W03	M	Findings and Actions List	IPM_T03, IPM_T04, IPM_T05	PL-DP	Template_PP_PIP_Projects_Action_List.xlt

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*What was important for
you concerning this
Process Rule?*



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