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Systems Engineering Management Plan (SEMP)

<Project name and number>

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# Revisions

| Rev. | Date | | Init. | | Description | |
| --- | --- | --- | --- | --- | --- | --- |
| 0.1 |  | |  | | Initial version | |
|  |  |  | |  | |

# Tailoring approval log

| Role | Init | Approved version | Date |
| --- | --- | --- | --- |
| SPI Management | xxx | x.y | dd-mm-yyyy |
|  |  |  |  |

*Note: SPI Management must approve SEMP updates anytime new process tailoring is added during project execution.*

# Definitions and abbreviations

<List project specific definitions and abbreviations in alphabetical order.>

|  |  |
| --- | --- |
| **Definition/Abbreviation** | **Description** |
|  |  |
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# Purpose

The SEMP provides the communication bridge between the project management team and the technical implementation team. It also facilitates effective communication within the technical teams. Even when all functions are collocated, the SEMP facilities delegation of work and responsibility.

Project tailored methods must be documented in this document.

Every member of the technical team must read this document.

# Introduction

<Refer to the available Organisational management plans for overall guidelines to the content of this plan and rules for tailoring.>

This is the Systems engineering management plan for software project: <Insert project number and name>

## Applicable documents

<References to the project documentation i.e. portal page>

# Technical system solution

<This section contains an executive summary describing the system to implement by this software project.

Overview of technical solution with system components e.g. CSC, MES, SAC and external systems

Example of drawing showing system components and interfaces:



>

## Interfacing systems

See Interface management process [IFMGRPROC].

<Interfaces to other products, external systems including humans, with which the system products will interact physically, functionally or electronically.>

## Usage of standard system components

<BEUMER standard software products that will be used in the project. Discussions should include a list of the products and their use, the rationale for using them, if any certifications for the planned environments will be conducted, and any analysis performed to ensure their compatibility.>

## Alternative Solutions

See Technical solution process [TECHPROC].

<Link to or description of alternative solutions that already have been evaluated but not chosen in this project>

## Development environment

<Link to or description of the development environment>

## Test environment

<Link to or description of the test environment>

# Integration

## Integration strategy

<Describe the project integration strategy e.g. continuous integration, continuous delivery, continuous deployment etc.>

## Branching strategy

<Describe the branching strategy used in the project e.g. commit of features to the software respository is done to a twig or branch, commit is done to the main trunk etc.>

# Software development approach

The BEUMER software development model is used for this project:

<Insert ref. to software development model>

## Requirement development

See Scope process [SCOPEPROC].

<Insert ref. to RD plan>

### Tailoring

See Organisational Scope Management Plan [REQDEVTAIL].

<Describe tailoring of the requirement development process >

## Technical solution

Consider alternative solutions as described in the Technical solution process [TECHPROC].

List all interfaces that must be monitored and controlled as described in the Interface management process [IFMGRPROC].

### Tailoring

<Describe any deviations from the Technical solution process [TECHPROC]>

## Implementation

See Implementation process [IMPLPROC].

### Code review

Define the level of code review. <Describe strategy for code review: e.g. code review of all project developed code, no formal code review of project code, only review of critical project code etc.>

### System Component test

Define the testing strategy for the system component testing. <Describe strategy for system component testing: e.g. test setup criteria, logical/physical setups, level of regression testing, automatic vs. manual testing etc.>

< Because the development is feature driven the testing strategy should also be feature driven in order to provide continuous integration in the projects..>

### Tailoring

<Describe any deviations from the Implementation process [IMPLPROC], e.g. no unit testing of software test tools etc.>

## Test

<Ref. to SW project test management plan for System test, FAT and SAT>

## Commissioning

< Ref. to SW project test management plan showing e.g. planned on-site level 2 tests, host test etc.>

## Critical technology

<Does the project involve use of critical technology or technology which requires specialized knowledge of one or more third part or non BEUMER products?>

## Reliability/Availability

<Does the project include special demands for reliability and/or availability?>

## System safety and security

<Description of the approach and methods of conducting safety analyses and assessing the hazards to operators, the system, the environment, and the public.>

# References

[IFMGRPROC] Interface management process  
*SPITSE Portal*

[IMPLPROC] Implementation process  
*SPITSE Portal*

[SCOPEPROC] Scope process  
SPITSE Portal

[REQDEVTAIL] Org. Scope Management Plan  
SPITSE Portal

[TECHPROC] Technical solution process  
SPITSE Portal

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