

Plans for Peer Reviews

Standard checklist

The following table contains what the CMM describes as the recommended content of plans for peer reviews. These plans:

√	Recommended Content
	Identify the software work products that will undergo peer review. (L3-97, A1, 1) <input type="checkbox"/> The software work products selected include the set identified in the organization's standard software process. (L3-97, A1, 1.1)
	Specify the schedule of peer reviews. (L3-97, A1, 2)

Plan for Intergroup Commitments

Standard checklist

The following table contains what the CMM describes as the recommended content of a plan for intergroup commitments. This plan is:

√	Recommended Content
	The baseline for: (L3-88, A3, 1) <input type="checkbox"/> the project schedule, <input type="checkbox"/> the contractual and technical aspects of the project, and <input type="checkbox"/> the assignment of responsibilities to the engineering groups.
	Updated to incorporate all intergroup commitments and changes to these commitments. (L3-88, A3, 4)
	Updated as the work progresses to reflect progress and plan changes at the project level, particularly when major project milestones are completed and when plans change significantly. (L3-88, A3, 5)

Test Plan

Standard checklist

The following table contains what the CMM describes as the recommended content of the test plan (for system and acceptance testing):

√	Recommended Content
	The overall testing and verification approach. (L3-75, A7, 2.1)
	Responsibilities of the developing organization, subcontractors, customer, and end users, as appropriate. (L3-76, A7, 2.2)
	Test facility, test equipment, and test support requirements. (L3-76, A7, 2.3)
	Acceptance criteria. (L3-76, A7, 2.4)

Software Design Documentation

Standard checklist

The following table contains what the CMM describes as the recommended content of software design documentation:

√	Recommended Content
	The software components. (L3-71, A3, 8.1)
	The internal interfaces between software components. (L3-71, A3, 8.1)
	The software interfaces to other software systems, to hardware, and to other system components (e.g., humans). (L3-71, A3, 8.1)

Project's Defined Software Process

Standard checklist

The following table contains what the CMM describes as the recommended content of the project's defined software process:

√	Recommended Content
	Provisions are made for gathering, analyzing, and reporting measurement data needed to manage the software project. (L3-44, A4, 1)
	The activities for software estimating, planning, and tracking are tied to the key tasks and work products of the project's defined software process. (L3-44, A4, 2)
	Readiness and completion criteria are established, documented, and used to authorize initiation and determine completion of key tasks. (L3-44, A4, 3)
	Documented criteria are defined to indicate when to replan the software project. (L3-45, A4, 4)
	Technical and management lessons learned are documented and stored in the organization's library of software process-related documentation. (L3-45, A4, 5)
	Technical and management lessons learned from monitoring the activities of other projects in the organization are systematically reviewed and used to estimate, plan, track, and replan the software project. (L3-45, A4, 6)
	The staffing plan addresses the software project's needs for individuals with special skills and application domain knowledge. (L3-45, A4, 7)
	Training needs are identified and documented to fit the specific needs of the software project. (L3-45, A4, 8)
	The software plans and processes followed in interacting with other groups are adjusted to account for disparities with these groups and for other potential problems. (L3-45, A4, 9)

Organizational Standards for Training Courses

Standard checklist

The following table contains what the CMM describes as the recommended content of organizational standards for training courses. These standards requires that:

√	Recommended Content
	A description of each training course is developed. (L3-33, A4, 1)
	The materials for the training course are reviewed. (L3-33, A4, 2)
	The materials for the training courses are managed and controlled. (L3-33, A4, 3)

Organization's Training Plan

Standard checklist

The following table contains what the CMM describes as the recommended content of the organization's training plan:

√	Recommended Content
	The specific training needed within the organization and when it is needed. (L3-32, A3, 1)
	The training that will be obtained from external sources and training that will be provided by the training group. (L3-32, A3, 2)
	The funding and resources (including staff, tools, and facilities) needed to prepare and conduct or procure the training. (L3-32, A3, 3)
	Standards for instructional materials used in training courses developed by the training group. (L3-32, A3, 4)
	The schedule for developing and revising the training courses that will be developed by the training group. (L3-32, A3, 5)
	The schedule for conducting the training, based on the projected need dates and the projected number of students. (L3-32, A3, 6)
	The procedures for: (L3-33, A3, 7) <ul style="list-style-type: none"><input type="checkbox"/> selecting the individuals who will receive the training,<input type="checkbox"/> registering and participating in the training,<input type="checkbox"/> maintaining records of the training provided, and<input type="checkbox"/> collecting, reviewing, and using training evaluations and other training feedback.

Software Project's Training Plan

Standard checklist

The following table contains what the CMM describes as the recommended content of a software project's training plan:

√	Recommended Content
	The set of skills needed and when those skills are needed. (L3-29, A1, 1)
	The skills for which training is required and the skills that will be obtained via other vehicles. (L3-29, A1, 2)
	The training that is required, for whom it is required, and when it is required. (L3-29, A1, 3)
	How training will be provided. (L3-30, A1, 4)

Tailoring Guidelines and Criteria

Standard checklist

The following table contains what the CMM describes as the recommended content of tailoring guidelines and criteria (for tailoring the organization's standard software process). These guidelines and criteria cover:

√	Recommended Content
	Selecting and tailoring the software life cycle for the project. (L3-19, A4, 1.1)
	Tailoring the organization's standard software process to accommodate the software life cycle and the project's characteristics. (L3-19, A4, 1.2)
	Standards for documenting the project's defined software process. (L3-20, A4, 1.3)

Software Process Element

Standard checklist

The following table contains what the CMM describes as the recommended content of a software process element:

√	Recommended Content
	The required procedures, practices, methods, and technologies. (L3-17, A2, 2.1)
	The applicable process and product standards. (L3-17, A2, 2.2)
	The responsibilities for implementing the process. (L3-18, A2, 2.3)
	The required tools and resources. (L3-18, A2, 2.4)
	Inputs. (L3-18, A2, 2.5)
	The software work products produced. (L3-18, A2, 2.6)
	The software work products that should undergo peer review. (L3-18, A2, 2.7)
	The readiness and completion criteria. (L3-18, A2, 2.8)
	The product and process data to be collected. (L3-18, A2, 2.9)

Organization's Standard Software Process

Standard checklist

The following table contains what the CMM describes as the recommended content of an organization's standard software process:

√	Recommended Content
	The process is decomposed into constituent process elements to the granularity needed to understand and describe the process. (L3-17, A2, 1)
	Each process element is described. (L3-17, A2, 2) [Refer to Level 3 Standards for additional information regarding software process elements.]
	The relationships of the process elements are described and address (L3-18, A2, 3): <input type="checkbox"/> the ordering, <input type="checkbox"/> the interfaces, and <input type="checkbox"/> the interdependencies.

Software Process Development and Improvement Plan

Standard checklist

The following table contains what the CMM describes as the recommended content of the plan for software process development and improvement. This plan:

√	Recommended Content
	Uses the action plans from the software process assessments and other organization improvement initiatives as primary inputs. (L3-7, A2, 1)
	Defines the activities to be performed and the schedule for these activities. (L3-7, A2, 2)
	Specifies the groups and individuals responsible for the (software process development and improvement) activities. (L3-7, A2, 3)
	Identifies the resources required, including staff and tools. (L3-7, A2, 4)

Action Plan

Standard checklist

The following table contains what the CMM describes as the recommended content of an action plan:

√	Recommended Content
	Which assessment findings will be addressed. (L3-6, A1)
	Guidelines for implementing the changes to address findings. (L3-6, A1)
	The groups or individuals responsible for implementing the changes. (L3-6, A1)

Overview, continued

In this section This section covers the following standards:

Standard	KPA	See Page
Action plan	OPF	L3-Standards-3
Software development and improvement plan	OPF	L3-Standards-4
Organization's standard software process	OPD	L3-Standards-5
Software process element	OPD	L3-Standards-6
Tailoring guidelines and criteria	OPD	L3-Standards-7
Software project's training plan	TP	L3-Standards-8
Organization's training plan	TP	L3-Standards-9
Organizational standards for training courses	TP	L3-Standards-10
Project's defined software process	ISM	L3-Standards-11
Software design documentation	SPE	L3-Standards-12
Test plan	SPE	L3-Standards-13
Plan for intergroup commitments	IC	L3-Standards-14
Plans for peer reviews	PR	L3-Standards-15

Level 3 Standards Checklists

Overview

Introduction This section describes the recommended content of selected work products in the CMM at maturity level 3.

Definition A *standard checklist* describes the content of a work product as recommended by the CMM.

Purpose The purpose of the standards checklists is to provide:

- Guidance in identifying the contents of standard work products that are recommended by the CMM at level 3.
- Criteria that an organization can use to evaluate its software standards to determine if they are consistent with the CMM at level 3.
- Information that can be used to develop software standards that are consistent with the CMM at level 3.

What the standards checklists are not The standards checklists contain only what is recommended by the CMM, and *are not complete standards in themselves*. For example, the standard for the software development plan (SDP) contains only content recommended by the CMM. Other sources for the content of a SDP should also be considered, such as ANSI/IEEE Std 1058.1-1987, DOD-STD-2167, DI-MCCR-80030, etc.

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