

Software Configuration Management (SCM) Policy

SCM policy checklist

The project follows a written organizational policy for implementing software configuration management (L2-72, C1). This policy typically specifies that:

√	Description	References
	Responsibility for SCM for each project is explicitly assigned. (L2-72, C1, 1)	
	SCM is implemented throughout the project's life cycle. (L2-72, C1, 2)	
	SCM is implemented for externally deliverable software products, designated internal software work products, and designated support tools used inside the project (e.g., compilers). (L2-72, C1, 3)	
	The projects establish or have access to a repository for storing configuration items/units and the associated SCM records. (L2-72, C1, 4)	
	The software baselines and SCM activities are audited on a periodic basis. (L2-73, C1, 5)	

SCM policy goals

Implementation of an effective software configuration management policy has the following results:

√	Results of Effectively Implementing SCM Policy	References
	Software configuration management activities are planned. (L2-72, G1)	
	Selected software work products are identified, controlled, and available. (L2-72, G2)	
	Changes to identified software work products are controlled. (L2-72, G3)	
	Affected groups and individuals are informed of the status and content of software baselines. (L2-72, G4)	

Software Quality Assurance (SQA) Policy

SQA policy checklist

The project follows a written organizational policy for implementing software quality assurance (L2-60, C1). This policy typically specifies that:

√	Description	References
	The SQA function is in place on all software projects. (L2-60, C1, 1)	
	The SQA group has a reporting channel to senior management that is independent of: (L2-61, C1, 2) <ul style="list-style-type: none"> <input type="checkbox"/> the project manager, <input type="checkbox"/> the project's software engineering group, and <input type="checkbox"/> other software-related groups. 	
	Senior management periodically reviews the SQA activities and results. (L2-61, C1, 3)	

SQA policy goals

Implementation of an effective software quality assurance policy has the following results:

√	Results of Effectively Implementing SQA Policy	References
	Software quality assurance activities are planned. (L2-60, G1)	
	Adherence of software products and activities to applicable standards, procedures, and requirements is verified objectively. (L2-60, G2)	
	Affected groups and individuals are informed of software quality assurance activities and results. (L2-60, G3)	
	Noncompliance issues that cannot be resolved within the software project are addressed by senior management . (L2-60, G4)	

Software Subcontract Management (SSM) Policy

SSM policy checklist

The project follows a written organizational policy for managing the software subcontract (L2-44, C1). This policy typically specifies that:

√	Description	References
	Documented standards and procedures are used in selecting software subcontractors and managing the software subcontracts. (L2-45, C1, 1)	
	The contractual agreements form the basis for managing the subcontract. (L2-45, C1, 2)	
	Changes to the subcontract are made with the involvement and agreement of both the prime contractor and the subcontractor . (L2-45, C1, 3)	

SSM policy goals

Implementation of an effective software subcontract management policy has the following results:

√	Results of Effectively Implementing SSM Policy	References
	The prime contractor selects qualified software subcontractors. (L2-44, G1)	
	The prime contractor and the software subcontractor agree to their commitments to each other. (L2-44, G2)	
	The prime contractor and the software subcontractor maintain ongoing communications. (L2-44, G3)	
	The prime contractor tracks the software subcontractor's actual results and performance against its commitments. (L2-44, G4)	

Software Project Tracking and Oversight (SPTO) Policy

SPTO policy checklist

The project follows a written organizational policy for managing the software project (L2-30, C2). This policy typically specifies that:

√	Description	References
	A documented software development plan is used and maintained as the basis for tracking the software project. (L2-30, C2, 1)	
	The project manager is kept informed of the software project's status and issues. (L2-30, C2, 2)	
	Corrective actions are taken when the software plan is not being achieved, either by adjusting performance or by adjusting the plans. (L2-30, C2, 3)	
	Changes to the software commitments are made with the involvement and agreement of the affected groups . (L2-30, C2, 4)	
	Senior management reviews all commitment changes and new software project commitments made to individuals and groups external to the organization. (L2-31, C2, 5)	

SPTO policy goals

Implementation of an effective software project tracking and oversight policy has the following results:

√	Results of Effectively Implementing SPTO Policy	References
	Actual results and performances are tracked against the software plans. (L2-30, G1)	
	Corrective actions are taken and managed to closure when actual results and performance deviate significantly from the software plans. (L2-30, G2)	
	Changes to software commitments are agreed to by the affected groups and individuals. (L2-30, G3)	

Software Project Planning (SPP) Policy

SPP policy checklist

The project follows a written organizational policy for planning a software project (L2-12, C2). This policy typically specifies that:

√	Description	References
	The system requirements allocated to software are used as the basis for planning the software project. (L2-12, C2, 1)	
	The software project's commitments are negotiated between: (L2-12, C2, 2) <input type="checkbox"/> the project manager , <input type="checkbox"/> the project software manager , and <input type="checkbox"/> the other software managers .	
	Involvement of other engineering groups in the software activities is negotiated with these groups and is documented. (L2-13, C2, 3)	
	Affected groups review the project's: (L2-13, C2, 4) <input type="checkbox"/> software size estimates, <input type="checkbox"/> effort and cost estimates, <input type="checkbox"/> schedules, and <input type="checkbox"/> other commitments.	
	Senior management reviews all software project commitments made to individuals and groups external to the organization. (L2-13, C2, 5)	
	The project's software development plan is managed and controlled. (L2-13, C2, 6)	

SPP policy goals

Implementation of an effective software project planning policy has the following results:

√	Results of Effectively Implementing SPP Policy	References
	Software estimates are documented for use in planning and tracking the software project. (L2-12, G1)	
	Software project activities and commitments are planned and documented. (L2-12, G2)	
	Affected groups and individuals agree to their commitments related to the software project. (L2-12, G3)	

Requirements Management (RM) Policy

RM policy checklist

The project follows a written organizational policy for managing the system requirements allocated to software (L2-2, C1). This policy typically specifies that:

√	Description	References
	The allocated requirements are documented. (L2-3, C1, 1)	
	The allocated requirements are reviewed by: (L2-3, C1, 2) <input type="checkbox"/> the software managers , and <input type="checkbox"/> other affected groups .	
	The software plans, work products, and activities are changed to be consistent with changes to the allocated requirements. (L2-3, C1, 3)	

RM policy goals

Implementation of an effective requirements management policy has the following results:

√	Results of Effectively Implementing RM Policy	References
	System requirements allocated to software are controlled to establish a baseline for software engineering and management use. (L2-2, G1)	
	Software plans, products, and activities are kept consistent with the system requirements allocated to software. (L2-2, G2)	

Level 2 Policy Checklists

Overview

Introduction This section describes the explicit policies found in the Capability Maturity Model at maturity level 2.

Purpose The purpose of the policy checklists is to provide:

- Guidance in identifying which policies are recommended by the CMM at level 2.
- Criteria that an organization can use to evaluate its software policies to determine if they are consistent with the CMM at level 2.
- Information that can be used to develop software policies so that they are consistent with the CMM at level 2.

Checklist description Each checklist contains two subsections: the KPA policies and the KPA goals. The table below describes these two subsections of a policy checklist.

Subsection	Description
Policy checklist	This subsection contains criteria that the organizational policy can be evaluated against. These criteria must be addressed by organizational policy to be consistent with the CMM.
Policy goals	This subsection is a reminder to policy designers and evaluators to keep in mind the KPA goals when developing the policies for each KPA. The goals can be thought of as the results of implementing an effective policy.

In this section This section covers the following policies:

Policies	See Page
Requirements management policy	L2-Policy-2
Software project planning policy	L2-Policy-3
Software project tracking and oversight policy	L2-Policy-4
Software subcontract management policy	L2-Policy-5
Software quality assurance policy	L2-Policy-6
Software configuration management policy	L2-Policy-7
