

CMM 2

RM		CM		PP		PT		QA		CMM	
Commitments											
Co.1	The project follows a written organizational policy for managing the system requirements allocated to software.	Co.1	The project follows a written organizational policy for implementing software configuration management (SCM).	Co.2	The project follows a written organizational policy for planning a software project.	Co.2	The project follows a written organizational policy for managing the software project.	Co.1	The project follows a written organizational policy for implementing software quality assurance (SQA).	The project follows a written organizational policy for implementing the KPA.	
				Co.1	A project software manager is designated to be responsible for negotiating commitments and developing the project's software development plan.	Co.1	A project software manager is designated to be responsible for the project's software activities and results.			A project manager is designated to be responsible.	
Responsibilities, resources, funding and training											
Ab.1	For each project, responsibility is established for analyzing the system requirements and allocating them to hardware, software, and other system components.	Ab.2	A group that is responsible for coordinating and implementing SCM for the project (i.e., the SCM group) exists.	Ab.2	Responsibilities for developing the software development plan are assigned.	Ab.2	The project software manager explicitly assigns responsibility for software work products and activities.	Ab.1	A group that is responsible for coordinating and implementing SQA for the project (i.e., the SQA group) exists.	Responsibilities are established.	
		Ab.1	A board having the authority for managing the project's software baselines (i.e., a software configuration control board - SCCB) exists or is established.								
Ab.3	Adequate resources and funding are provided for managing the allocated requirements.	Ab.3	Adequate resources and funding are provided for performing the SCM activities.	Ab.3	Adequate resources and funding are provided for planning the software project.	Ab.3	Adequate resources and funding are provided for tracking the software project.	Ab.2	Adequate resources and funding are provided for performing the SQA activities.	Adequate resources and funding are provided for the KPA. (Project has responsibility by acceptance)	
Ab.4	Members of the software engineering group and other software-related groups are trained to perform their requirements management activities.	Ab.5	Members of the software engineering group and other software-related groups are trained to perform their SCM activities.	Ab.4	The software managers, software engineers, and other individuals involved in the software project planning are trained in the software estimating and planning procedures applicable to their areas of responsibility.	Ab.4	The software managers are trained in managing the technical and personnel aspects of the software project.	Ab.4	The members of the software project receive orientation on the role, responsibilities, authority, and value of the SQA group. (SQA responsibility)	The software managers, software engineers, and other individuals involved in the KPA are trained, tuned to their areas of responsibility.	
		Ab.4	Members of the SCM group are trained in the objectives, procedures, and methods for performing their SCM activities.			Ab.5	First-line software managers receive orientation in the technical aspects of the software project.	Ab.3	Members of the SQA group are trained to perform their SQA activities.		
Plans are prepared, developed, made manageable, documented, used and revised											
		Ac.3	A configuration management library system is established as a repository for the software baselines.	Ac.1	The software engineering group participates on the project proposal team.					Preparation	
		Ac.7	Products from the software baseline library are created and their release is controlled according to a documented procedure .	Ac.2	Software project planning is initiated in the early stages of, and in parallel with, the overall project planning.						
				Ac.3	The software engineering group participates with other affected groups in the overall project planning throughout the project's life.						
				Ac.8	Software work products that are needed to establish and maintain control of the software project are identified .						
				Ac.14	Plans for the project's software engineering facilities and support tools are prepared .						
		Ac.1	A SCM plan is prepared for each software project according to a documented procedure .	Ac.6	The project's software development plan is developed according to a documented procedure .			Ac.1	A SQA plan is prepared for the software project according to a documented procedure . (Project responsibility)	A plan is prepared/developed	
				Ac.5	A software life cycle with predefined stages of manageable size is identified or defined .					Plan in manageable chunks	
Ab.2	The allocated requirements are documented .	Ac.2	A documented and approved SCM plan is used as the basis for performing the SCM activities.	Ac.7	The plan for the software project is documented .	Ab.1	A software development plan for the software project is documented and approved.			Things are documented.	
				Ab.1	A documented and approved statement of work exists for the software project. MS1: WS+PIF, MS2: TS, PC						
				Ac.15	Software planning data are recorded .	Ac.11	Actual measurement data and replanning data for the software project are recorded .			Planning data are recorded	
Ac.2	The software engineering group uses the allocated requirements as the basis for software plans, work products, and activities.	Ac.2	A documented and approved SCM plan is used as the basis for performing the SCM activities.	(none by definition)		Ac.1	A documented software development plan is used for tracking the software activities and communicating status.	Ac.2	The SQA group's activities are performed in accordance with the SQA plan. (SQA responsibility)	The plan is used	
				(none by definition)		Ac.2	The project's software development plan is revised according to a documented procedure .			The plan is revised	
		Ac.8	The status of configuration items/units is recorded according to a documented procedure .	Ac.9	Software engineering technical activities are tracked , and corrective actions are taken as necessary.					Tracking	
		Ac.9	Standard reports documenting the SCM activities and the contents of the software baseline are developed and made available to affected groups and individuals.			Ac.6	The SQA group periodically reports the results of its activities to the software engineering group . (SQA responsibility)			Reporting	
Actual workproducts											
		Ac.4	The software work products to be placed under configuration management are identified .					Ac.7	Deviations identified in the software activities and software work products are documented and handled according to a documented procedure .	The actual work products appear here	
								Ac.5	The SQA group audits designated software work products to verify compliance. (SQA responsibility)		
Estimation and tracking											
				Ac.9	Estimates for the size of the software work products (or changes to the size of software work products) are derived according to a documented procedure .	Ac.5	The size of the software work products (or size of the changes to the software work products) are tracked , and corrective actions are taken as necessary.			Size is estimated and tracked	
				Ac.10	Estimates for the software project's effort and costs are derived according to a documented procedure .	Ac.6	The project's software effort and costs are tracked , and corrective actions are taken as necessary.			Effort is estimated and tracked	
				Ac.12	The project's software schedule is derived according to a documented procedure .	Ac.8	The project's software schedule is tracked , and corrective actions are taken as necessary.			Schedule is estimated and tracked	
				Ac.11	Estimates for the project's critical computer resources are derived according to a documented procedure .	Ac.7	The project's critical computer resources are tracked , and corrective actions are taken as necessary.			Critical resources are estimated and tracked	
				Ac.13	The software risks associated with the cost, resource, schedule, and technical aspects of the project are identified , assessed , and documented .	Ac.10	The software risks associated with cost, resource, schedule, and technical aspects of the project are tracked .			Risks in cost, resource, schedule and technical aspects is estimated and tracked	
Change handling											
Ac.3	Changes to the allocated requirements are reviewed and incorporated into the software project.	Ac.5	Change requests and problem reports for all configuration items/units are initiated, recorded , reviewed , approved, and tracked according to a documented procedure .	(none by definition)		Ac.4	Approved changes to commitments that affect the software project are communicated to the members of the software engineering group and other software-related groups.	Ac.7	Deviations identified in the software activities and software work products are documented and handled according to a documented procedure . (SQA responsibility)		
		Ac.6	Changes to baselines are controlled according to a documented procedure .			Ac.2	The project's software development plan is revised according to a documented procedure .				
Reviews and audits (other than Ve)											
Ac.1	The software engineering group reviews the allocated requirements before they are incorporated into the software project.	Ac.2	A documented and approved SCM plan is used as the basis for performing the SCM activities.	Ac.4	Software project commitments made to individuals and groups external to the organization are reviewed with senior management according to a documented procedure .	Ac.3	Software project commitments and changes to commitments made to individuals and groups external to the organization are reviewed with senior management according to a documented procedure .	Ac.3	The SQA group participates in the preparation and review of the project's software development plan, standards, and procedures. (Project responsibility)	Reviews.	
						Ac.12	The software engineering group conducts periodic internal reviews to track technical progress, plans, performance, and issues against the software development plan.	Ac.4	The SQA group reviews the software engineering activities to verify compliance. (SQA responsibility)		
						Ac.13	Formal reviews to address the accomplishments and results of the software project are conducted at selected project milestones according to a documented procedure .	Ac.8	The SQA group conducts periodic reviews of its activities and findings with the customer's SQA personnel, as appropriate. (SQA responsibility)		
		Ac.10	Software baseline audits are conducted according to a documented procedure .					Ac.5	The SQA group audits designated software work products to verify compliance. (SQA responsibility)	Audits	
Measurements											
Me.1	Measurements are made and used to determine the status of the activities for managing the allocated requirements.	Me.1	Measurements are made and used to determine the status of the SCM activities.	Me.1	Measurements are made and used to determine the status of the software planning activities.	Me.1	Measurements are made and used to determine the status of the software tracking and oversight activities.	Me.1	Measurements are made and used to determine the cost and schedule status of the SQA activities.	Measurements are made and used to determine the status of the KPA activities.	
Verification											
Ve.1	The activities for managing the allocated requirements are reviewed with senior management on a periodic basis.	Ve.1	The SCM activities are reviewed with senior management on a periodic basis.	Ve.1	The activities for software project planning are reviewed with senior management on a periodic basis.	Ve.1	The activities for software project tracking and oversight are reviewed with senior management on a periodic basis.	Ve.1	The SQA activities are reviewed with senior management on a periodic basis.	The KPA activities are reviewed with senior management on a periodic basis. (SQA responsibility)	
Ve.2	The activities for managing the allocated requirements are reviewed with the project manager on both a periodic and event-driven basis.	Ve.2	The SCM activities are reviewed with the project manager on both a periodic and event-driven basis.	Ve.2	The activities for software project planning are reviewed with the project manager on both a periodic and event-driven basis.	Ve.2	The activities for software project tracking and oversight are reviewed with the project manager on both a periodic and event-driven basis.	Ve.2	The SQA activities are reviewed with the project manager on both a periodic and event-driven basis.	The KPA activities are reviewed with the project manager on both a periodic and event-driven basis. (SQA responsibility)	
Ve.3	The software quality assurance group reviews and/or audits the activities and work products for managing the allocated requirements and reports the results.	Ve.4	The software quality assurance group reviews and/or audits the activities and work products for SCM and reports the results.	Ve.3	The software quality assurance group reviews and/or audits the activities and work products for software project planning and reports the results.	Ve.3	The software quality assurance group reviews and/or audits the activities and work products for software project tracking and oversight and reports the results.			The software quality assurance group reviews and/or audits the activities and work products for managing the KPA and reports the results. (SQA responsibility)	
		Ve.3	The SCM group periodically audits software baselines to verify that they conform to the documentation that defines them.					Ve.3	Experts independent of the SQA group periodically review the activities and software work products of the project's SQA group.		

Documented procedures:

1	CM	Ac.7	Products from the software baseline library are created and their release is controlled according to a documented procedure .
2	CM	Ac.8	The status of configuration items/units is recorded according to a documented procedure .
3	CM	Ac.10	Software baseline audits are conducted according to a documented procedure .
4	CM	Ac.5	Change requests and problem reports for all configuration items/units are initiated, recorded , reviewed , approved, and tracked according to a documented procedure .
5	CM	Ac.6	Changes to baselines are controlled according to a documented procedure .
6	CM	Ac.1	A SCM plan is prepared for each software project according to a documented procedure .
7	PP	Ac.6	The project's software development plan is developed according to a documented procedure .
8	PP	Ac.9	Estimates for the size of the software work products (or changes to the size of software work products) are derived according to a documented procedure .
9	PP	Ac.10	Estimates for the software project's effort and costs are derived according to a documented procedure .
10	PP	Ac.12	The project's software schedule is derived according to a documented procedure .
11	PP	Ac.11	Estimates for the project's critical computer resources are derived according to a documented procedure .
12	PP	Ac.4	Software project commitments made to individuals and groups external to the organization are reviewed with senior management according to a documented procedure .
13	PT	Ac.2	The project's software development plan is revised according to a documented procedure .
14	PT	Ac.3	Software project commitments and changes to commitments made to individuals and groups external to the organization are reviewed with senior management according to a documented procedure .
15	PT	Ac.13	Formal reviews to address the accomplishments and results of the software project are conducted at selected project milestones according to a documented procedure .
16	QA	Ac.1	A SQA plan is prepared for the software project according to a documented procedure .
17	QA	Ac.7	Deviations identified in the software activities and software work products are documented and handled according to a documented procedure .

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