CMMI for Development, V1.3





		Developine	IL, VII.	Create Evolve Perfect	d by Carnegie Mellon
1 CAPABI LEVEL 1 (PERFC			CAPABILITY LEVEL 3 (DEFINED)		
GENERIC GOALS AND PRACTICES GG1 Achieve Specific goa cess area are su process by transable input work identifiable outputs. GP1.1 Perform Specifi Perform the spe the process are work products a vices to achieve goals of the pro	Is of the pro- proported by the forming identifi- products into the work products, and providir GP2.1 Establish an Organizational Policy Establish an Maintain an organizational policy for planning and performing the process. GP2.5 Train People Train the people performing or GP2.6 Control Work Products Place selected work products or to develop and provide ser- to develop and provide Resources GP2.3 GP2.7 Identify and Involve Relevant: Indeptity of the process or Indeptity of the products or Indeptity of the process or Indeptity or		Institutionalize a Defined Process The process is institutionalized as a defined process. GP3.1 Establish a Defined Process Establish and maintain the description of a defined process. GP3.2 GP3.2 Collect Process Related Experiences Collect process related experiences derived from planning and performing the process to support the future use and improvement of the organization's processes and process assets.		
	2 MATURITY LEVEL 2 (MANAGED)		3 MATURITY LEVEL 3 (DEFINED)		4 MATURITY LEVEL 4 QUANTITATIVELY MANAGED) MATURITY LEVEL 5 (OPTIMIZING)
PROCESS AREAS	CONFIGURATION MEASUREMENT PROJECT MANAGEMENT AND ANALYSIS MONITORII AND CONT		DECISION INTEGRATED ORGANIZATIONAL ORGANIZATIONAL ORGANIZATIONAL PRODUCT REQUIREMENTS ANALYSIS AND PROJECT PROCESS PROCESS TRAINING INTEGRATION DEVELOPMENT RESOLUTION MANAGEMENT DEFINITION FOCUS	MANAGEMENT SOLUTION PF	RGANIZATIONAL QUANTITATIVE CAUSAL ORGANIZATIONAL ROCESS PROJECT ANALYSIS AND PERFORMANCE RESOLUTION MANAGEMENT
PURPOSE	The purpose of Configuration Management (CM) is to establish and maintain the integrity of work products using configuration control, configuration accounting, and configuration and configuration audits. The purpose of Measurement and Analysis (MA) is to develop and sustain a measurement capability used to support management information needs. The purpose of Proj Monitoring and Con (PMC) is to provide understanding of the project's progress of the project's progress of Monitoring and Con (PMC) is to provide understanding of the project's progress of Monitoring and Con (PMC) is to provide understanding of the project's progress of Monitoring and Con (PMC) is to provide understanding of the project's progress of Monitoring and Con (PMC) is to provide understanding of the project's progress of Monitoring and Con (PMC) is to provide understanding of the project's progress of Monitoring and Con (PMC) is to provide understanding of the project's progress of Monitoring and Con (PMC) is to provide understanding of the project's progress of Monitoring and Con (PMC) is to provide understanding of the project's progress of Monitoring and Con (PMC) is to provide understanding of the project's progress of Measurement and Analysis (PMC) is to provide understanding of the project's progress of Monitoring and Con (PMC) is to provide understanding of the project's progress of Monitoring and Con (PMC) is to provide understanding of the project's progress of Monitoring and Con (PMC) is to provide understanding of the project's progress of Monitoring and Con (PMC) is to provide understanding of the project's progress of Monitoring and Con (PMC) is to provide understanding of the project's progress of Monitoring and Con (PMC) is to provide understanding of the project's progress of Monitoring and Con (PMC) is to provide understanding of the project's progress of Monitoring and Con (PMC) is to provide understanding of the project's progress of Monitoring and Con (PMC) is to provide understanding of the project's progress of Monito	ontrol Planning (PP) is to Product Quality Assurance (PQA) is to provide staff and the plans that define project a so that activities. It is of that define project insight into processes and activities. It is of that define project insight into processes and associated work products. It is of that define project insight into processes and associated work products. It is of that define project insight into processes and associated work products. It is of that define project insight into processes and associated work products. It is of that define project insight into processes and associated work products. It is of that define project insight into processes and associated work products. It is of that define project insight into processes and associated work products. It is of that define project insight into processes and associated work products. It is of that define project insight into processes and associated work products. It is of that define project insight into processes and associated work products. It is of that define project insight into processes and acquisition of products and services from suppliers. It is of that define project insight into processes and associated work products. It is of that define project insight into processes and acquisition of products and services from suppliers. It is of that define project insight into processes and acquisition of products and product components and to ensure alignment (REQM) is to management (REQM) is to manage ment (REQM) is to manage ment (REQM) is to manage the requirements of the project's products and product components and to ensure alignment between those products are product and product components and to ensure alignment between those project's products and product components and to ensure alignment between those project's products and product and product components and to ensure alignment between those project's products and product an	is to analyze possible decisions using a formal decisions using a formal evaluation process that relevant stakeholders according alternatives against process that organization's set of standard process that the involvement of evaluation and the involvement of evaluation assets, work environment attemptives against organization's set of standard process that is tailored from the process that is tailored from the product analyze, and destablish organizational process organization	Management (RSKM) is to identify potential problems before they occur so that risk handling activities can be planned and invoked as needed across the life of the product or project to mitigate adverse impacts on achieving objectives. Solution (TS) is to select, design, and implement solutions to requirements. Solutions, designs, and implementations and implementations encompass products, product or project to mitigate adverse impacts on achieving objectives. Solution (TS) is to select, design, and implement solutions to product or product or product or product or product in its intended environment. The product or product or product or product or product or project to mitigate adverse impacts on achieving objectives. Solution (TS) is to select, design, and implement solutions to product or product	the purpose of Organizational rocess Performance (OPP) is to stablish and maintain a suantitative understanding of the performance of selected rocesses in the organization's et of standard processes in upport of achieving quality and rocess performance objectives, and to provide process erformance data, baselines, and models to quantitatively manage the organization's rojects. The purpose of Causal Analysis and Resolution (CAR) is to identify causes of selected outcomes and take action to improve process performance. Organizational Performance of Organizational Performance organiz
SPECIFIC GOALS AND PRACTICES	Baselines of identified work products are established. CM.SP1.1 Identify Configuration Items Identify configuration items, components, and related work products to be placed under configuration management. CM.SP1.2 Establish a Configuration Management System Establish and maintain a configuration management and change management system for controlling work products. CM.SP1.3 CM.SP1.3 CM.SP1.3 CM.SP1.3 CPL.2 Specify Measures Create or Release Baselines Create or Release	parameters are established and maintained. Adherence of the performed process and associated work products to applicable process descriptions, standards, and procedures is objectively evaluate selected performed process and associated work products are identified. Establish a top-level work breakdown structure (WBS) to estimate PP.SP.1.2 Establish a top-level work breakdown structure (WBS) to estimate PP.SP.1.2 Establish a top-level work breakdown structure (WBS) to estimate PP.SP.1.2 Establish Estimates of Work Product and Task Attributes plan. Establish and maintain estimates of work products SEAM.SP.1.2 Develop an understanding with the requirements providers on the meaning of the requirements. PP.SP.1.2 Establish and maintain estimates of work products SEAM.SP.1.2 Determine Acquisition Type Determine Acquisition SAM.SP1.3 Establish acquirements Acquisition Type Determine Acquisition Type D	Decisions are based on an evaluation of alternatives using establish and maintain the organization set of standard processes. DAR.SP1.1 Establish and maintain guidelines to determine which issues are subject to a formal evaluation process. DAR.SP1.2 Establish and maintain criteria DAR.SP1.2 Establish and maintain criteria or evaluation grideria and maintain criteria or evaluating alternatives and maintain criteria or evaluating alternatives and maintain criteria or evaluating alternatives and maintain criteria for evaluating alternatives and the relative teaching of these criteria. DAR.SP1.3 DAR.SP1.3 DAR.SP1.3 DAR.SP1.3 DAR.SP1.3 DAR.SP1.3 DAR.SP1.3 DECISION STANDARD AND AND AND AND AND AND AND AND AND AN	Preparation for risk management is conducted. RSKM.SP.1.1 Determine fisk Sources and Categories. RSKM.SP.2 Develop Alternative Solutions and Selection Criteria. TS.SP.1.2 Select Product Component Solutions and selection criteria. Select products and product component solution methods to be used. VAL.SP.1.3 Establish and maintain the environment needed to support validation. VER.SP.1.2 Establish and maintain the strategy to be used for risk management. Preparation for validation is conducted. VER.SP.1.1 Select Work products for Verification is Select Work products for Verification methods to be used. VER.SP.1.2 Establish the Validation Environment needed to support validation. PERSIANSPI.3 Establish and maintain the environment needed to support validation. VER.SP.1.3 Establish Verification Procedures and Criteria Establish and maintain procedures and Criteria Establish and maintain procedures and criteria for validation. Orderia Develop Alternative Solutions and selection criteria. VAL.SP.1.2 Establish the Validation Environment needed to support validation. VER.SP.1.3 Establish Verification Procedures and Criteria Establish verification procedures and criteria for the selected work products. Orderia Establish and maintain procedures and criteria for the selected work products.	PPSG1 stablish Performance Baselines and fooles which charac-risc the expected process performance of the organization's set of tandard processes, are established and maintained. PPSP11 stablish Quality and Process Performance of the organization's set of standard processes, are established and maintain the project's Objectives Establish and maintain the grapitation of quantitative techniques to understand processes performance objectives. Sablish and maintain the grapitation of quantitative objectives for quality and process performance, which are accepted to business objectives. Supp. SP12 select Processes OpM.SP12 Compose the offined Process Using statistical and other quantitative techniques to understand process performance objectives. Using statistical and other quantitative techniques compose a defined process that enables the project to achieve its quality and process performance adjactions process performance adjactions process performance analyses to be included in the organization's process performance analyses to be included in the organization's process performance analyses to be included in the organization's process performance analyses to be included in the organization's process performance analyses to be included in the organization's process performance analyses to be included in the organization's process performance analyses to be included in the organization's process performance analyses to be included in the organization's process performance analyses to be included in the organization's process performance analyses to be included in the organization's process performance analyses to be included in the organization's process performance analyses to be included in the organization's process performance analyses to be included in the organization's process performance analyses to be included in the organization's process performance analyses to be included in the organization's process performance analyses to be included in the organization's process performance analyses to be includ
	CM.SG2 Track and Control Changes Changes to the work products under configuration management are tracked and controlled. CM.SP2.1 Track Change Requests CM.SP2.1 Track change requests for con- Obtain specified measurement data. Conduct Milestone Revie Review the project's accord ments and results at select milestones. PMC.SG2 Manage Corrective Action sure Corrective actions are man closure when the project's mance or results deviate sign from the plan. PMC.SP2.1 Analyze Issues	pP.SG2 Develop a Project Plan A project plan is established and maintained as the basis for managing the project. PP.SP2.1 Establish the Budget and Schedule. PP.SP2.1 Establish and maintain the projects budget and schedule. PP.SP2.2 Identify Project Risks Identify and analyze project risks. PP.SP2.2 Identified PP.SP2.3 Plan Data Management of project data. Establish and maintain the project data. PP.SP2.3 Plan Data Management of project data. Establish and maintain the project data. Establish Records Ensure Transition of Products SAM.SP2.3 Ensure Transition of Products	DARS.PJ.6 Select Solutions from alternatives based on evaluation criteria. IPM.SPJ.6 Establish and maintain teams. OPD.SPJ.7 Contribute to Organizational Process Assets Contribute process related experience set or organizational process Assets Contribute process related experience set organizational process Assets Contribute process related experience set organizational process assets. Coordinate and collaborate with relevant stakeholders Coordination and collaboration between the project and relevant stakeholders in the project. IPM.SP1.7 Coordination and collaboration between the project and relevant stakeholders in the project. IPM.SP2.2 Manage Stakeholder Involvement IPM.SP2.2 Manage Dependencies IPM.SP2.2 Manage Dependencies IPM.SP2.3 Assess Training for individuals to perform their roles effectively is provided. Training for individuals to perform their roles effectively is provided. Training for individuals to perform their roles effectively is provided. Training for individuals to perform their roles effectively is provided. The product component interface compatibility The product component interface on the product component requirements. The product component interface on the product component requirements. The product component interface on the product component requirements. The product component interface on the product component requirements. The product component interface on the product component requirements. The product component requirements on the product component requirements. The product component requirements on the product component requirements. The product component requirements on the product component requirements. The product component requirements on the product component requirements. The product component requirements or effectiveness of the organization process action plans. The product component requirements or each product component requirements.	RSKM.SG2 Identify and Analyze Risks Develop the Design Product or product component designs are developed. RSKM.SP2.1 Identify Risks RSKM.SP2.1 Identify Risks RSKM.SP2.1 Design the Product or Product Component in ponent i	OPM.SP2.1 Monitor the Performance of Selected Subprocesses Amongs Project Performance Manage the project using statistical and other quantitative techniques. OPM.SP2.2 Manage Project Performance Manage Project Performance Manage Project Performance Manage Project Deformance Manage Project Performance Manage Project Deformance Manage Project Selected Deformance Manage Project De
	CM.SG3 Establish Integrity Integrity of baselines is established and maintained. CM.SP3.1 Establish Configuration Management Records Establish and maintain records describing configuration items. CM.SP3.2 Perform Configuration Audits Perform configuration audits to maintain the integrity of configuration baselines.	PP.SG3 Obtain Commitment to the Plan Commitments to the project plan are established and maintained. PP.SP.3.1 Review Plans That Affect the Project Review all plans that affect the project to understand project commitments. PP.SP.3.2 Reconcile Work and Resource Levels Adjust the project plan to reconcile available and estimated resources. PP.SP.3.3 Obtain Plan Commitment Obtain commitment from relevant askeholders responsible for performing and supporting plan execution.	Assets and Incorporate Experiences Verified product components are assembled and the integrated, verified, and validated product is delivated proporated into organizational process related experiences are incorporated into organizational process assets. OFF.SP3.1 Deploy Organizational Process Assets Opposes Assets Deploy organizational process aconsess the organization assets across the organization. OPF.SP3.2 Deploy Standard Processes OPF.SP3.2 Deploy Standard Processes OPF.SP3.2 Deploy Standard Processes Assets OPF.SP3.2 Deploy Standard Processes OPF.SP3.2 Deploy Standard Processes And Deliver the Product components are analyzed and validated. The requirements are analyzed and validated. Candinate Concepts and Scenarios. Confirm, prior to assembly, that each product component required to assemble the product that been properly identified, behaves according to its description, and that the product component interfaces the product component interfaces.	pacts on achieving objectives. RSKM.SP3.1 Develop Risk Mitigation Plans Develop a risk mitigation plan in accordance with the risk manage- cordance with the risk manage- components. MER.SP3.1 Perform Verification Perform verification on selected work products.	OPM.503 Deploy Improvements to the organization's processes and technologies are deployed and evaluated using statistical and other quantitative techniques. OPM.5P3.1 Plan the Deployment Establish and maintain plans for deploying selected improvements. OPM.5P3.2 Manage the Deployment Manage the Deployment Manage the Deployment Establish and maintain plans for deploying selected improvements. OPM.5P3.2 Evaluate improvement of selected improvements. OPM.5P3.3 Evaluate improvement Effects Evaluate the effects of deployed improvements on quality and process performance using statistical and other quantitative techniques.