SOFTWARE QUALITY & SYSTEMS ENGINEERING PROGRAM

Project Tracking Checklist

The following checklist is intended to provide system owners, project managers, and other information system development and maintenance professionals with guidance in identifying and planning project tracking activities. The checklist reflects recognized project tracking activities to be performed throughout the information system (IS) life cycle.

Tracking of information systems projects is generally characterized as a process for establishing and communicating the status of actual activity against planned activity.

Within this context, the objectives of software project tracking are summarized as the following:

- Tracking and reviewing actual software accomplishments and results against documented estimates, commitments and plans.

- Revising the project plan to reflect actual accomplishments and re-planning the remaining work to be done and/or taking action to improve the performance.

- Providing visibility into the actual progress so that management can make corrective actions when project performance deviates significantly from the original software plans.

Note: The level of detail will vary depending on project size.

Project Tracking Checklist	SEM Reference	Comments
☐ A documented project plan has been used for tracking the software activities and communicating status.	Chapter 3 Software Project Tracking and Develop Project Plan	
☐ The project's project plan has been revised to reflect the actual accomplishments and replanning the remaining work to be done and/or taking actions to improve the performance	Chapter 3 Software Project Tracking and Chapter 4, 5, 6, 7, 8, 9 Revise Project Plan	
☐ 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.	Chapter 3 Software Project Tracking and	
☐ Approved changes to commitments, which affect the project, are communicated to the members of the project team and other related groups.	Chapter 3 Software Project Tracking and Chapter 4 Revise Project Plan	
☐ The sizes of the software work products (or sizes of the changes to the software work product) are tracked, and corrective actions are taken as necessary.	Chapter 3 Software Project Tracking and Chapter 4 Establish Functional Baseline Chapter 6 Develop System Design Chapter 7 Establish Development Baseline	
☐ Project software effort and costs are tracked, and corrective actions taken as necessary.	Chapter 3 Software Project Tracking and Develop Project Plan Chapter 4 Revise Project Plan	

Project Tracking Checklist	SEM Reference	Comments
☐ The projects critical computer resources are tracked, and corrective actions taken as necessary.	Chapter 3 Software Project Tracking and Develop Software Configuration	
☐ Project software schedule is tracked, and corrective actions taken as necessary.	Chapter 3 Software Project Tracking and Develop Project Plan	
☐ Software engineering (Project team's) technical activities are tracked, and corrective actions taken, if needed.	Chapter 3 Software Project Tracking and Develop Project Plan	
☐ Software risks associated with cost, resource, schedule, and technical aspects of the project are tracked.	Chapter 3 Software Project Tracking and Determine Project Feasibility Develop Project Plan	
☐ Actual measurements data and re-planning data for the software project are recorded.	Chapter 3 Software Project Tracking and Develop Project Plan	
☐ Measurements are made and used to determine the status of the software tracking and oversight activities	Chapter 3 Software Project Tracking and	
☐ The project team conducts periodic internal reviews to track technical progress, plans, performance, and issues against the Project Plan.	Chapter 3 Software Project Tracking and Oversight; Conducting Structured Walkthroughs (guide); In-Stage Assessment Process (guide); Stage Exit Process (guide)	

Project Tracking Checklist	SEM Reference	Comments
☐ Formal reviews to address project accomplishments and results are conducted at selected project milestones according to a documented procedure.	Chapter 3 Software Project Tracking and Stage Exit Process (guide)	
☐ The activities for software project tracking and oversight are reviewed with senior management on a periodic basis.	Chapter 3 Software Project Tracking and Oversight	
☐ The activities for software project tracking and oversight are reviewed with the project manager on both a periodic and an event-driven basis.	Chapter 3 Software Project Tracking and Oversight	
☐ The software quality assurance group reviews and/or audits the activities and work products for project tracking and oversight and reports the results.	Chapter 3 Software Project Tracking and Oversight	
☐ A Software Quality Assurance Plan has been developed.	Chapter 3 Develop Software Quality Assurance Plan	
☐ A Software Configuration Management Plan has been developed.	Chapter 3 Develop Software Configuration Management Plan	

REFERENCES

The following resources can be referenced for additional information on software project tracking practices and procedures. Note: This checklist is in compliance with Software Engineering Institute guidance and most standards.

Systems Engineering Methodology

Software Engineering Institute's Software Capability Maturity Model (SEI CMM)
Software Project Tracking is a Key Process Area in Level 2 of the Model.

Institute of Electrical and Electronic Engineers (IEEE)
The IEEE Standard for Developing Software Life Cycle Processes

National Institute of Standards and Technology (NIST)

Organization for Standardization (ISO)
ISO 9001.