SOFTWARE QUALITY & SYSTEMS ENGINEERING PROGRAM

Project Planning 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 preparing project planning activities. The checklist reflects recognized project planning activities to be performed throughout the information systems project life cycle.

Project planning is generally characterized as a process for selecting the strategies, policies, programs, and procedures for achieving the objectives and goals of the project.

The objectives of project planning for information systems projects are summarized as the following:

- User's environment is analyzed.
- Project objectives and scope are defined.
- High-level functional requirements are estimated.
- Feasibility of the project is determined.
- The project plan is developed and approved.

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

Planning Checklist	SEM Reference	Comments
❒ The project team participates as part of the task planning.	Chapter 3 Analyze User Environment Define Project Objectives Define Project Scope Develop High-level Project Requirements Establish Communication with Functional Areas Determine Project Feasibility Develop Project Plan	
❒ Software project planning is initiated in the early stages of, and in parallel with, overall project planning.	Chapter 2 Lifecycle Model Chapter 3 Develop Project Plan	
❒ The project team participates with other affected groups in overall project planning throughout the project life.	Chapter 3 Establish Communications with Functional Areas Develop 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 Project Tracking and Oversight	
❒ Functional Area Representatives have been included in the project schedule to participate in all stages of the lifecycle and in the Stage Exit process.	Chapter 3 Establish Communications with Functional Areas	
❒ A project lifecycle with predefined stages of manageable size is identified or defined.	Chapter 2 Lifecycle Model Chapter 3 Develop Project Plan	

Planning Checklist	SEM Reference	Comments
❒ Software and hardware alternatives have been investigated.	Chapter 3 Determine Project Feasibility Investigate Software Alternatives Investigate Hardware Alternatives	
❒ Platform options have been formulated.	Chapter 3 Formulate Platform Options	
❒ A Feasibility Review has been conducted.	Chapter 3 Conduct Feasibility Review	
❒ A Feasibility Study has been developed as appropriate.	Chapter 3 Develop Feasibility Study	
❒ An approved project plan exists.	Chapter 3 Develop Project Plan	
❒ Work products needed to establish and maintain control of the project are identified.	Chapter 3 Develop Project Plan Develop Configuration Management Plan	
❒ Work products size (or changes to the size of work products) are derived according to a documented procedure.	Chapter 2 Project Sizes Adapting the Lifecycle Chapter 3 Develop Project Plan	
❒ The estimates for the project effort and cost are derived according to a documented procedure.	Chapter 3 Conduct Analysis of Benefits & Costs Develop Project Plan (Develop the Project Estimates)	

Planning Checklist	SEM Reference	Comments
❒ The estimates for the project critical computer resources are derived according to a documented procedure.	Chapter 3 Develop High-Level Project Requirements Develop Project Plan Chapter 4 Define Project Requirements	
❒ More than one estimation methodology was used for comparison and verification.	Chapter 3 Develop Project Estimates	
❒ The project's schedule is derived according to a documented procedure.	Chapter 3 Develop Project Plan Develop Project Schedule	
❒ The risks associated with the cost, resource, schedule, and technical aspects of the project are identified, assessed, and documented.	Chapter 3 Conduct a Feasibility Review Develop Project Plan	
❒ Plans for systems engineering facilities and support are prepared.	Chapter 3 Conduct Feasibility Review Develop Project Plan Chapter 4 Define Implementation Requirements	
❒ Planning data is recorded.	Chapter 3 Develop Project Plan	
❒ Measurements are made and used to determine project planning status.	Chapter 3 Planning Stage	
❒ Project planning activities are reviewed with senior management on a periodic basis.	Chapter 3 Develop Project Plan	

Planning Checklist	SEM Reference	Comments
❒ The activities for project planning are reviewed with the project manager on both a periodic and event-driven basis	Chapter 3 Develop Project Plan	
❒ The quality assurance staff reviews and/or audits the activities and work products for project planning and reports the results.	Chapter 3 Develop Quality Assurance Plan	
❒ A centrally maintained project file has been created to be used as the repository for all project information gathered during the planning stage and for all work products developed throughout the project lifecycle.	Chapter 3 Analyze User Environment	
❒ The work products from the planning stage have been placed in the project file.	Chapter 3 Analyze User Environment Define Project Objectives Define Project Scope Develop High-Level Project Requirements Establish Communications with Functional Areas Determine Project Feasibility	

REFERENCES

The following resources can be referenced for additional information on project planning 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 Planning 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.