Crosswind
Learning

Version 6.1 Updated for the 2021
Project Management Professional (PMP)® Exam

Crosswind Success Series:
PMP® Exam Bootcamp Manual

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Version 6.1 aligned with the Project Management Institute, *A Guide to the Project Management Body of Knowledge, (PMBOK® Guide) - Sixth Edition*, Project Management Institute Inc., 2017

	Crosswind "Must Knows" For Project Schedule Management
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	Key Inputs, Tools & Techniques, and Outputs for Plan Schedule Management
	Key Inputs, Tools & Techniques, and Outputs for Define Activities
	Key Inputs, Tools & Techniques, and Outputs for Sequence Activities
	Key Inputs, Tools & Techniques, and Outputs for Estimate Activity Durations
	Key Inputs, Tools & Techniques, and Outputs for Develop Schedule
	Key Inputs, Tools & Techniques, and Outputs for Control Schedule
	Concepts of rolling wave planning, control accounts, and planning packages
	Characteristics of the four dependencies (mandatory, discretionary, internal, and external)
	Principles of a network diagram, how to draw a diagram based on a word problem, and how to analyze a diagram from a pop-up screen using either the precedence diagramming method (PDM) or arrow diagramming method (ADM)
	Differences between the precedence diagramming method (PDM) and the arrow diagramming method (ADM)
	Concepts of the GERT (Graphical Evaluation Review Technique) diagramming method
	Four predecessor types (finish-to-start, finish-to-finish, start-to-start, and start-to-finish)
	Definitions of lead and lag
	Characteristics of the estimating methods: analogous, bottom-up, parametric, and computerized
	Concepts of the PERT estimating method and that PERT stands for Program Evaluation Review Technique
	How to recognize a critical path and why it is important
	Characteristics of free slack (free float), total slack (total float), and project slack (project float)
	Concepts of CPM (critical path method) estimation
	How to do a forward pass and a backward pass substitution technique on a network diagram
	Characteristics and benefits of "crashing" and "fast tracking"
	Characteristics of a logic bar chart (Gantt chart)
	Characteristics of a milestone schedule including its zero duration
	Characteristics of a summary schedule

Although helpful, this list is not all-inclusive in regard to information needed for the exam. It is only suggested material that, if understood and memorized, may increase your exam score.

11.1. Plan Schedule Management (Planning Process Group)

The plan schedule management process is used to create the schedule management plan, which can be formal or informal and provides guidance for creating an appropriately detailed schedule, **establishing control thresholds**, and **updating/modifying the schedule as necessary**. The schedule management plan is part of the project management plan.
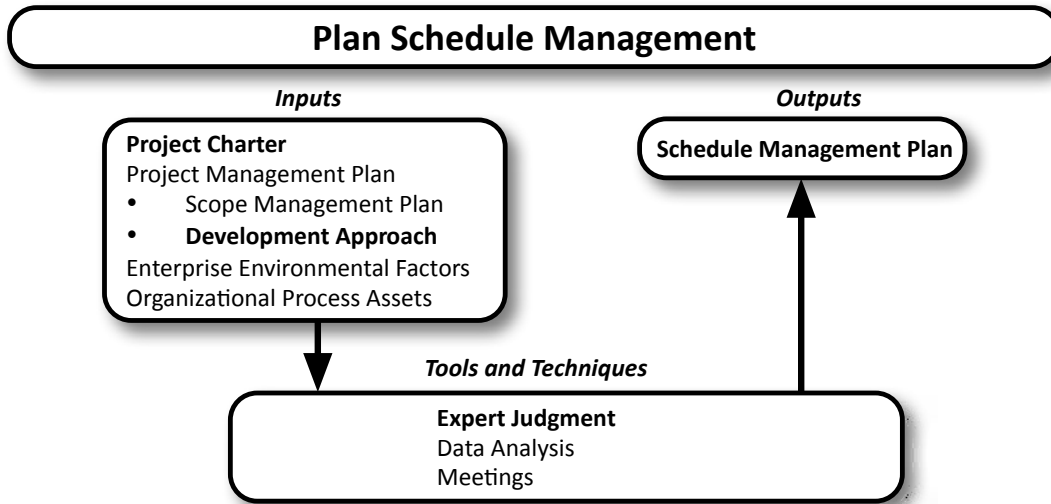
Know the Key Inputs, Tools & Techniques, and Outputs for Plan Schedule Management.

Plan Schedule Management

Inputs

Project Charter
Project Management Plan
- Scope Management Plan
- **Development Approach**
Enterprise Environmental Factors
Organizational Process Assets

Outputs

Schedule Management Plan

Tools and Techniques

Expert Judgment
Data Analysis
Meetings
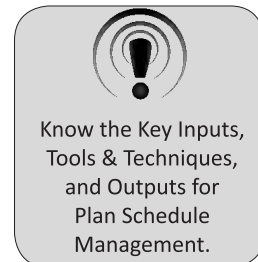
Figure 11-2: Plan Schedule Management Data Flow Diagram
The source for the above figure is the Project Management Institute, *A Guide to the Project Management Body of Knowledge*, (*PMBOK® Guide*) – Sixth Edition, Project Management Institute Inc., 2017, Figure 6-3, Page 179

Plan Schedule Management (Planning)		
Key Inputs	Project Charter	The project charter is the document that provides authorization for the existence of the project and gives the project manager the power to use organizational resources to execute the project. The project charter typically lists the key deliverables, the milestones, and the preliminary roles and responsibilities of the project. Note that the project charter delineates the purpose of the project, high-level project description, requirements, assumptions, and constraints. The project charter delineates the summary milestone schedule that impacts the schedule management processes.
	Development Approach	The development approach delineates the method (iterative, agile, waterfall, or hybrid) used for scheduling, the techniques and tools used for estimation and scheduling, and the techniques used for controlling the schedule.
Key Tools & Techniques	Expert Judgment	Expert judgment is judgment based on expertise acquired in a specific area. It is important to consider expertise related to schedule evolution, scheduling methods (predictive or adaptive life cycle), the industry that will utilize the product, service or result of the project, and scheduling software.

Plan Schedule Management (Continued)		
Key Outputs	Schedule Management Plan	The schedule management plan is a component of the project management plan that details the delineation, evolution, monitoring, and control of the schedule. It includes the methods for evolving and maintaining the project schedule model, controlling the duration of releases and iterations, determining degrees of accuracy and metric units, using the WBS as the framework for the schedule management plan, establishing variance thresholds, and determining performance measurement rules.

Situational Question and Real World Application

Failure to effectively perform the Plan Schedule Management process can lead to the creation and modification of a schedule without controls or guidance and inconsistency would likely define the project. If program/portfolio management is also performed, the inconsistency would impact the relationship between the project and other projects or programs.

11.1.1. Schedule Management Plan

The schedule management plan establishes:

- The project schedule model development and maintenance practices
- The level of accuracy that will be required for activity duration estimates
- The units of measure (time and quantity) that will be used for each resource
- Organizational procedures links based on the WBS
- Control thresholds for monitoring schedule performance

Using the schedule management plan, the project manager and team can then:

- Decompose work packages (deliverables) into activities and milestones
- Establish the network diagram
- Determine the durations for the activities
- Integrate all activity components into a schedule
- Manage schedule changes and updates

The source for the above text is the Project Management Institute, *A Guide to the Project Management Body of Knowledge*, (*PMBOK® Guide*) – Sixth Edition, Project Management Institute Inc., 2017, Pages 179-182

11.2. Define Activities (Planning Process Group)

Define Activities is the process of determining and listing the activities required to create the deliverables of the project.

Note that the list is created without regard to necessary resources, start dates, or completion dates.

Know the Key Inputs, Tools & Techniques, and Outputs for Define Activities.