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

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.

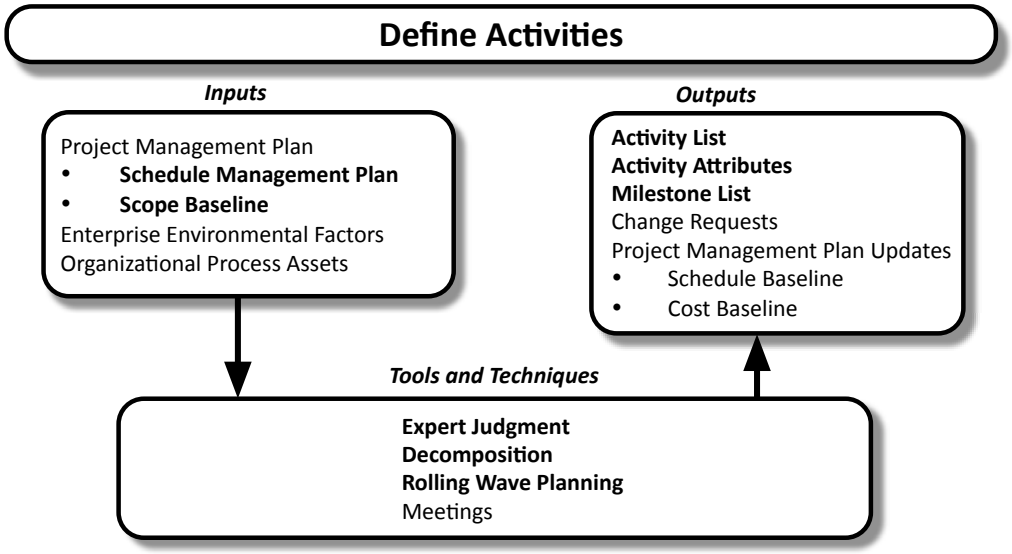

Figure 11-3: Define Activities Data Flow Diagram

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 6-5, Page 183

Define Activities (Planning)		
Key Inputs	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 delineates the manner in which reserves are to be used and the schedule is to be controlled. The plan also establishes the frequency of updates to the schedule.
	Scope Baseline	The scope baseline is the authorized version of the scope statement, WBS (to the level of work package with individual identification codes) and WBS dictionary. The scope baseline is expressly considered while delineating activities.
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 knowledge of the industry or area of application and experience with previous projects similar to the current project.

Define Activities (Continued)		
Key Tools & Techniques (Cont.)	Decomposition	Decomposition breaks down the project scope and deliverables into manageable components. The work breakdown structure decomposes the work into work packages, the smallest components that can be managed and estimated in terms of schedule and budget. Decomposition generally involves determining and evaluating the deliverables and related work, constructing and organizing the WBS, decomposing upper-level components by subdividing the work for each deliverable into its most basic components, creating and assigning identification codes to WBS components, verifying that the decomposition of deliverables has been done appropriately.
	Rolling Wave Planning	Rolling wave planning is an iterative technique where upcoming work is carefully itemized and future work is generalized. It is a form of progressive elaboration used with work packages, planning packages, and release planning.
Key Outputs	Activity List	The activity list enumerates each schedule activity stipulated for the project, including its identifier and scope description sufficiently detailed to ensure an understanding of the work by each team member. It is a component of the schedule, but NOT of the WBS. A rule of thumb is to break down the activity list to the point where the activities are **4-80 hours in duration**. Project managers commonly call activities "tasks," but the term "activities" is generally more appropriate according to Project Management Institute, Inc. standards. If rolling wave planning or agile is used, the list must be reviewed regularly and updated as necessary.
	Activity Attributes	Activity attributes clarify an activity by identifying multiple components related to the activity. The components evolve during the project: during the initial stage, they include a singular activity identifier, a WBS identifier, and an activity label; when completed they typically include a description of the activity, predecessor and successor activities, logical relationships, leads and lags, resource needs, constraints, assumptions, and exact dates. They are used to evolve the schedule and clarify reporting.
	Milestone List	The milestone list enumerates the most consequential points or events in the project and indicates if the milestone is required or optional. A milestone has a duration of zero.

Situational Question and Real World Application

Failure to effectively perform the Define Activities process can result in work products taking longer than expected, significantly inaccurate activity duration estimates, and the introduction of out-of-scope items into the project. Activities discovered after this process can lead to significantly inaccurate time and cost estimates.

Rolling Wave Planning	Rolling wave planning is a **concept that utilizes the progressive elaboration concept in planning**. It defines a low level of detail on the WBS for the immediate work being accomplished while the work to be done in the future is only at a high level of decomposition in the WBS until it is soon-to-be-started.
Control Accounts	Control accounts are **specific points in the work breakdown structure (WBS) where the project scope, budget, actual cost, and schedule are combined** in order to establish performance measurements. This allows tracking progress at appropriate levels of detail throughout the work breakdown structure (WBS). See Figure 10-7: WBS Process Components in the Scope chapter.
Planning Package	The planning package is a **piece of the work breakdown structure (WBS) above the work package.** It is used to plan work that has been scoped but lacks sufficient work package level details. See Figure 10-7: WBS Process Components in the Scope chapter.

Know the concepts of rolling wave planning, control accounts, and planning packages.

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 183-186

11.3. Sequence Activities (Planning Process Group)

During Sequence Activities, the focus is on the order of the activities: **the arrangement of activities in the most efficient and effective order.**

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