

Project Management Institute

***Practice Standard
for Scheduling***

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Contents

Preface	vii
Chapter 1—Introduction	1
1.1 Why Scheduling?	1
1.2 Overview	1
1.3 Purpose	2
1.4 Applicability	2
Chapter 2—The Schedule Development Process	5
2.1 Schedule Development Process Overview	5
2.2 The Scheduling Method	8
2.2.1 Critical Path Method	8
2.3 The Scheduling Tool	9
2.4 The Schedule Model	9
2.4.1 Schedule Risk Analysis Process	9
2.5 The Project Schedule	10
2.6 Maintenance	11
Chapter 3—Schedule Model Good Practices Overview	13
3.1 Purpose of the Schedule Model	13
3.2 Designing the Schedule Model	14
3.3 Elements of Developing a Good Schedule	14
3.3.1 Developing the Scheduling Framework	15
3.3.1.1 Determining How the Schedule Model will be Developed	15
3.3.1.2 Understand the Full Scope of the Project	15
3.3.1.3 Identify the Project and Schedule—Project Schedule ID	15
3.3.1.4 Establish Project Calendars and Work Periods	15
3.3.1.5 Establish the Optimum Project Update Cycle	15
3.3.1.6 Designing an Effective Activity Coding Structure	16
3.3.1.7 Determining Resource Planning Requirements	17
3.3.2 Developing the Baseline Schedule	17
3.3.2.1 Define Milestones	17
3.3.2.2 Design the Project’s Activities	17
3.3.2.3 Design the Project’s Logic	18
3.3.2.4 Determining the Duration for Each Activity	19
3.3.2.5 Analyzing the Schedule Output	19
3.3.2.6 Approving the Schedule	20
3.3.2.7 Baselining the Schedule	20
3.3.2.8 Maintaining the Schedule	21
Chapter 4—Scheduling Components	23
4.1 How to Use the Components List	23
4.1.1 Component Name	23
4.1.2 Required or Optional Use	23
4.1.3 Manual or Calculated	23
4.1.4 Data Format	24
4.1.5 Behavior	24
4.1.6 Good Practices	24
4.1.7 Conditional Note/Associated Component	24
4.1.8 Definition	24

4.2 Components: Categorized List	24
4.3 Components: Alphabetized List	45
Chapter 5—Conformance Index	67
5.1 Conformance Overview	67
5.2 Conformance Assessment Process	68
Appendix A—Guidelines for a PMI Practice Standard	69
Appendix B—Evolution of PMI's <i>Practice Standard for Scheduling</i>	71
Appendix C—Contributors and Reviewers for the <i>Practice Standard for Scheduling</i>	75
Appendix D—Conformance Scoring	79
Glossary	
Common Acronyms and Terms	83
Terms and Definitions	86

Preface

The *Practice Standard for Scheduling* has been developed as a complement to *A Guide to the Project Management Body of Knowledge (PMBOK® Guide—Third Edition)* in the Knowledge Area of Project Time Management. This practice standard describes the methods related to scheduling that are generally recognized as good practice for *most projects most of the time*. Good practice means that there is general agreement that the correct application of these skills, tools, and techniques can enhance the chances of success over a wide range of different projects. Good practice does not mean that the knowledge described should always be applied uniformly on all projects; *the project management team is responsible for determining what is appropriate for any given project*.

The project management community has strongly voiced the need for a standard to promote the development of sound schedules. In addition, the community asked for the capability to assess the adequacy of their schedules.

This practice standard is designed to provide project management practitioners, who are familiar with the *PMBOK® Guide—Third Edition*, with a summary of the benefits and advantages of a well-developed and maintained schedule model. This practice standard describes the hallmarks of a sound and effective project scheduling methodology, as well as providing quantifiable means for assessing the application of the provisions of this standard to a schedule model.

One of the most significant developments in the creation of this practice standard centered upon the clarification of the term *schedule*. It became apparent through the discussion process and the community feedback that there is significant support for the clarification of this terminology. For example, the legal precedence surrounding the term *schedule* results in this term having multiple meanings. However, the community requires the clarity that discrete terms provide.

The primary distinction that had to be made was between the tool that is commonly employed in schedule development and the output or product of the schedule development effort. Common practice has been to refer to a schedule as both: the whole program and database that is used to create a schedule; and the output of that process, namely the schedule itself. The *Practice Standard for Scheduling* defines the meaning of a schedule as two distinct terms, *project schedule* and, the newly added, *schedule model*. The terms *scheduling method*, and *scheduling tool* were introduced to link the process areas in the *PMBOK® Guide—Third Edition* with the high level process flow of schedule development. These terms are further developed in Chapter 2 and defined in the Glossary.

Thus, schedule development flows from the selection of an appropriate *scheduling method* followed by selection and use of a *scheduling tool*. Next, project-specific data is entered into the *scheduling tool* to produce the *schedule model*. From there, instances

of *project schedules* are produced for a wide range of uses. With these discrete terms, project management practitioners have the ability to trace the process areas from the *PMBOK® Guide—Third Edition* to the finished product.

This practice standard is consistent with the *PMBOK® Guide—Third Edition*. It also includes information from accepted project management practices from many industries. The Project Management Institute standards program will periodically update this standard as part of the overall planned evolution of PMI standards documents. Comments from project management practitioners are both requested and welcome. Within this standard, italicized words are defined in the Glossary or are used to identify other documents.

Chapter 1

Introduction

1.1 Why Scheduling?

Projects are generally complex endeavors and a plan is essential to guide the execution of the project. As progress is recorded on a project, the remaining work requires reassessment in light of the new information. Rarely does the execution of a project proceed as initially planned. In a typical project climate, a defined and refined scheduling process is required to predict, recognize, and address those factors and issues potentially affecting project performance.

The purpose of scheduling is to provide a “roadmap” that represents how and when the project will deliver the products defined in the project scope and by the project team. The dynamic nature of a project’s execution is best served by a tool that allows for *modeling* of the plan and analysis due to the impact of progress and unforeseen developments.

The key to project success is to apply knowledge, experience, and intuition to a project plan, and then attempt to execute according to the plan. Scheduling is one of the basic requirements of project management planning and strategic analysis. Its main objective is to establish the time required for a project.

This supports the project in arranging funds on required dates, the mobilization of resources in a most cost efficient and cost saving manner, in establishing coordination within the project and with other projects, in the early detection of problems so that required actions can be implemented as necessary to achieve project strategic goals as planned. Also from a contractual point of view, the schedule is an important document used to record all delays and to analyze extensions of time and financial loss claims. Another objective is to provide a tool for what if analysis.

1.2 Overview

This *Practice Standard for Scheduling* describes schedule components and generally recognized good practices for schedule development. The proper use of the components and their practices will result in a schedule useable for planning, executing, monitoring, and communicating the delivery of the project scope to its stakeholders.

The purpose of scheduling is to represent the delivery of the project scope over time as defined by the project team. The schedule development process includes selecting a *scheduling method* and *scheduling tool*, followed by incorporating project