

**AACE**  
INTERNATIONAL  
RECOMMENDED  
PRACTICE

**109R-19**

**SCHEDULE CHANGE MANAGEMENT –  
AS APPLIED IN CONSTRUCTION**

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## SCHEDULE CHANGE MANAGEMENT – AS APPLIED IN CONSTRUCTION

TCM Framework: 7.2 – Schedule Planning and Development

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## 1. INTRODUCTION

This recommended practice (RP) of AACE International provides guidelines for the schedule change management process for construction projects. The RP is intended to provide guidelines, not to establish a standard. Most practitioners would consider these guidelines as good and reliable practices.

Schedule change management refers to the process of managing project schedules resulting from any change to the scope of work or any deviation, performance trend or change to the control schedule. A control schedule is defined as: The most recent update to a project schedule including current progress status and accepted changes. This is the current schedule used to manage the project on regular basis as defined in the contract. This is distinct from a baseline schedule, which is fixed. Schedule change management helps ensure that the schedule addresses the time related requirements of both the project team and the customer. Poor management of schedule change may result in loss of control over planned project completion and inaccurate progress measurement including earned value assessment.

Deviations and changes are often identified during a project. The evaluation of these deviations are inputs to the change management process (see: TCM Framework Section 10.3 and RP 100R-19). [1][5] The time related issues must be addressed and resolved appropriately in the schedule change management process. Proper scheduling skills and knowledge are needed to successfully support the project management team in the schedule change management process. [2]

## 2. OVERVIEW

Schedule change management helps ensure that requirements for the time related elements of the project always address the customer (stakeholders) needs while maintaining a continuous control of project scope, time, and cost. This recommended practice relates to the following topics:

- a. Trend or variance analysis: Describes how schedule control concepts are applied in change management. [3]
- b. Time impact analysis (TIA): Describes the prospective analysis concept related to schedule change. [4]
- c. Corrective actions: Acceleration/recovery - Describes what these are and why they might be needed.
- d. Change control procedures: Describes ways that schedule change management findings and dispositions are recorded, reported, and incorporated in the project control plan (PCP). [5]

This recommended practice does not include guidelines for schedule acceleration, recovery (see: [6]), or re-baselining. Nor does this recommended practice cover management of schedule risk (see: [7]) or schedule contingency (see: [8]).

This recommended practice is oriented toward supporting critical path method (CPM) construction scheduling and is only applicable to schedule change management that takes place during the construction phase of a project. Principles presented here may be applicable to other types of scheduling and practices.

## 3. RECOMMENDED PRACTICE

### 3.1. Introduction

A project consists of a specific scope of work, a budget, a stated time period for performance, and its quality must be accomplished at an acceptable level. Any or all four of those elements can change during the life of a project. The project should have a clear and complete definition of the project scope, quality requirements, required resources, and estimated costs for the various tasks, incorporated within a well-developed project schedule. Without these four elements in place, the climate for cooperative change and the effectiveness of the schedule change process will be limited. The project team should establish the change management environment before beginning the project. Communication between all project participants (stakeholders): owner, architect/engineers, construction general contractor (GC), and subcontractors are important for the implementation of appropriate and timely changes.

This RP will focus on the discussion of potential impacts to the schedule and recommended practices for effective schedule change management. Successful implementation of an effective schedule change management process benefits both the project owner and the project team.

### 3.2. Project Change Drivers

In order to understand how changes can influence or affect the project schedule, it is important to understand the various elements of project change and their potential impacts. The causes of project changes are almost without limit. [5]

Of the four elements of a project (scope, quality, cost, or schedule), changes in scope is the single element that most often results in an approved change to the schedule and budget. A scope change is “a change in the defined deliverables or resources used to provide them.” [9]

It is recognized that project changes may originate from primary sources such as: client driven, regulatory driven, externally driven, or internally driven. These change drivers may have numerous subtypes: