

**AACE**  
INTERNATIONAL  
RECOMMENDED  
PRACTICE

**17R-97**

**COST ESTIMATE CLASSIFICATION  
SYSTEM**

**SAMPLE**

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## COST ESTIMATE CLASSIFICATION SYSTEM

TCM Framework: 7.3 – Cost Estimation and Budgeting

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**TABLE OF CONTENTS**

Table of Contents .....	1
1. Purpose .....	1
2. Introduction .....	2
3. Classification Methodology .....	2
4. Determination of the Cost Estimate Class .....	4
5. Definitions of Cost Estimate Characteristics .....	4
5.1. Maturity Level of Project Definition Deliverables (Primary Characteristic) .....	4
5.2. End Usage (Secondary Characteristic) .....	4
5.3. Estimating Methodology (Secondary Characteristic) .....	4
5.4. Expected Accuracy Range (Secondary Characteristic) .....	5
5.5 Effort to Prepare Estimate (Secondary Characteristic) .....	5
6. Relationships and Variations of Characteristics .....	5
6.1. Maturity Level of Project Definition Deliverables .....	6
6.2. End Usage .....	6
6.3. Estimating Methodology .....	6
6.4. Expected Accuracy Range .....	6
6.5. Effort to Prepare Estimate .....	7
7. Estimate Classification Matrix .....	7
8. Basis of Estimate Documentation .....	8
9. Project Definition Rating System .....	8
10. Classification for Long-Term Planning and Asset Life Cycle Cost Estimates .....	8
References .....	9
Contributors .....	10

SAMPLE

**1. PURPOSE**

As a recommended practice (RP) of AACE International, the *Cost Estimate Classification System* provides guidelines for applying the general principles of estimate classification to project cost estimates (i.e., cost estimates that are used to evaluate, approve, and/or fund projects). The *Cost Estimate Classification System* maps the phases and stages of project cost estimating together with a generic project scope definition maturity and quality matrix, which can be applied across a wide variety of industries.

This recommended practice has been developed in a way that:

- provides common understanding of the concepts involved with classifying project cost estimates, regardless of the type of enterprise or industry the estimates relate to;

August 7, 2020

- fully defines and correlates the major characteristics used in classifying cost estimates so that enterprises may unambiguously determine how their practices compare to the guidelines;
- uses the maturity level of project definition deliverables as the primary characteristic to categorize estimate classes; and
- reflects generally-accepted practices in the cost engineering profession.

An intent of this document is to improve communications among all the stakeholders involved with preparing, evaluating, and using project cost estimates. The various parties that use project cost estimates often misinterpret the quality and value of the information available to prepare cost estimates, the various methods employed during the estimating process, the accuracy level expected from estimates, and the level of risk associated with estimates.

This classification RP is intended to help those involved with project estimates to avoid misinterpretation of the various classes of cost estimates and to avoid their misapplication and misrepresentation. Improving communications about estimate classifications reduces business costs and project cycle times by avoiding inappropriate business and financial decisions, actions, delays, or disputes caused by misunderstandings of cost estimates and what they are expected to represent.

This document is intended to provide a guideline, not a standard. It is understood that each enterprise may have its own project and estimating processes, terminology, and may classify estimates in other ways. This guideline provides a generic and generally acceptable classification system that can be used as a basis to compare against. This recommended practice should allow each user to better assess, define, and communicate their own processes and standards in the light of generally-accepted cost engineering practice.

## 2. INTRODUCTION

An AACE International guideline for cost estimate classification for the process industries was developed in the late 1960s or early 1970s, and a simplified version was adopted as an ANSI Standard Z94.0 in 1972. Those guidelines and standards enjoyed reasonably broad acceptance within the engineering and construction communities and within the process industries. However, in the 1990s, empirical research on the correlation of the maturity level of project definition and cost growth and schedule slippage led to better understanding of project risks and the wide implementation of project phase or stage-gate scope development processes [3]. This recommended practice, in consideration of this research, improves upon the earlier standards by:

1. providing a classification method applicable across all industries;
2. unambiguously identifying, cross-referencing, benchmarking, and empirically evaluating the multiple characteristics related to the class of cost estimate; and
3. aligning with typical project gate project scope definition practices.

This guideline is intended to provide a generic methodology for the classification of project cost estimates in any industry and will be supplemented with recommended practices that will provide extensions and additional detail for specific industries.

## 3. CLASSIFICATION METHODOLOGY

There are numerous characteristics that can be used to categorize cost estimate types. The most significant of these are the maturity level of project definition deliverables, end usage of the estimate, estimating methodology, and the effort and time needed to prepare the estimate. The primary characteristic used in this guideline to define the classification category is the maturity level of project definition deliverables. The other characteristics are secondary.