

**AACE**  
INTERNATIONAL  
RECOMMENDED  
PRACTICE

**79R-13**

**LEVEL OF EFFORT PLANNING AND  
EXECUTION ON EARNED VALUE  
PROJECTS - WITHIN THE  
FRAMEWORK OF EIA-748**

**SAMPLE**

**AACE**  
INTERNATIONAL



AAACE® International Recommended Practice No. 79R-13

## LEVEL OF EFFORT PLANNING AND EXECUTION ON EARNED VALUE PROJECTS – WITHIN THE FRAMEWORK OF ANSI EN-748

TCM Framework: 9.1 – Project Cost Accounting  
9.2 – Progression Performance Measurement  
10.1 – Project Performance Assessment

Rev August 13, 2020

Note: As AAACE International Recommended Practices evolve over time, please refer to [web.aacei.org](http://web.aacei.org) for the latest revisions.

Any terms found in AAACE Recommended Practice 10S-90, *Cost Engineering Terminology*, supersede terms defined in other AAACE work products, including but not limited to, other recommended practices, the *Total Cost Management Framework*, and *Skills & Knowledge of Cost Engineering*.

### **Contributors:**

*Disclaimer: The content provided by the contributors to this recommended practice is their own and does not necessarily reflect that of their employers, unless otherwise stated.*

### **August 13, 2020 Revision:**

Noah J. Ashbaugh (Primary Contributor)  
Dave Ingalls, EVP (Primary Contributor)

Dan Melamed, CCP EVP

### **October 24, 2014 Revision:**

Thomas W. Jaeger, EVP (Primary Contributor)  
Dan Melamed, CCP EVP

Robert Loop, EVP PSP  
Richard C. Plumery, EVP

Copyright © AAACE® International

AAACE® International Recommended Practices

Single user license only. Copying and networking prohibited.

This document is copyrighted by AAACE International and may not be reproduced without permission. Organizations may obtain permission to reproduce a limited number of copies by entering into a license agreement. For information please contact [editor@aacei.org](mailto:editor@aacei.org)

AACE® International Recommended Practice No. 79R-13  
**LEVEL OF EFFORT PLANNING AND EXECUTION ON  
 EARNED VALUE PROJECTS – WITHIN THE  
 FRAMEWORK OF EIA-748**



TCM Framework: 9.1 – Project Cost Accounting  
 9.2 – Progress and Performance Measurement  
 10.1 – Project Performance Assessment

August 13, 2020

**TABLE OF CONTENTS**

Table of Contents .....	1
1. Introduction .....	2
2. Recommended Practice .....	2
2.1. Nature of LOE Work in Relation to Other Project Work .....	2
2.2. LOE Planning .....	3
2.3. Measurement of LOE Performance .....	4
2.4. LOE in Project Schedules .....	5
2.5. Revisions to LOE Tasks .....	5
2.6. LOE on Service Work.....	5
2.7. LOE Performance Masking – Two Examples.....	6
2.7.1. SPI and CPI Metrics: .....	6
2.7.2. LOE Replanning:.....	7
2.8. LOE Best Practices – Summary .....	8
2.8.1. Best Practice 1: Reserve LOE Method for tasks that are not measurable .....	8
2.8.2. Best Practice 2: Avoid mixing LOE and discrete activities .....	8
2.8.3. Best Practice 3: Recognize performance masking impacts during Planning and Evaluation Phase .....	9
2.8.4. Best Practice 4: LOE may be included in the Integrated Master Schedule (IMS) when needed for visibility, but should NOT be included in Critical Path .....	9
2.8.5. Best Practice 5: Investigate opportunities to utilize Apportioned Effort technique.....	9
2.8.6. Best Practice 6: Owner and Contractor (also called Customer and Supplier Mutually assess approach to LOE at the Integrated Baseline Review (IBR) .....	9
References.....	9
Contributors .....	10

August 13, 2020

## 1. INTRODUCTION

This recommended practice (RP) describes the purpose, application, measurement and control of level of effort (LOE) work in projects that operate with an earned value management system. It provides explanations of use and management of LOE work as it pertains to EVM implementations that may not be contained in the *Total Cost Management (TCM) Framework*.

This RP is intended to provide guidance for planning, managing and reporting performance of LOE tasks that most EVM practitioners would consider to be sound practice for managing and claiming performance related to work that is not considered to be measurable. The target audience for this RP is project managers, control account managers (CAMs), and project staff responsible for planning projects and managing and measuring project performance. It is also considered to be beneficial to EVM analysts who want a clearer understanding of LOE task management and measurement.

This RP is aligned with the *TCM Framework*, as well as the *Electronics Industries Alliance (EIA) - 748 Earned Value Management Systems (EVMS)* guidelines. (Guideline 12, parts of Guidelines 6 and 7 regarding task planning and scheduling, and parts of Guidelines 30 and 31 regarding revisions and change control.) This document provides further explanation of the intent and application of LOE that is not contained in the EIA-748 standard and the *National Defense Industries Association (NDIA) Earned Value Management System Intent Guide*.

This document is not intended to be a standard but provides further clarification of recommended EVM practices as they apply to planning, implementing, and reporting LOE work being performed under the EIA-748 standard.

## 2. RECOMMENDED PRACTICE

LOE activities are tasks of a general or support nature that have no measurable product or output. LOE work is defined as: “Support effort (e.g., supervision) that does not readily lend itself to measurement of discrete accomplishment. It is generally characterized by a level of support over a specific period of time.”<sup>[8]</sup>

### 2.1. Nature of LOE Work in Relation to Other Project Work

All contract direct costs fall within one of three categories:

- **Discrete Effort** – Discrete effort is defined as “Tasks that have a specific measurable end product or end result”<sup>[8]</sup>. Discrete work has definable end products that is budgeted by element of cost (e.g. labor, material, other direct cost) and is scheduled, to the day, when it starts, finishes, and identifies all interim milestone dates. Discrete work is measurable and can be broken into steps or measurable tasks, each of which can be budgeted based on resources required to complete the work, and it can be objectively determined how much work is accomplished.
- **Apportioned Effort** – Apportioned effort is defined as: “An earned value technique in which status is assessed consistent with a base task (s). The earned value percent complete of the base effort is used to status the apportioned effort work package. Apportioned effort is technically related and time-phased proportionally to the based unit designated”<sup>[8]</sup>. As the rate of completion is considered fixed between apportioned effort and its related discrete effort scope element, the performance claimed for the apportioned effort aligns to the percent completion of the associate discrete effort. This is appropriate in situations when apportioned effort cannot be independently scheduled or stasured, but you may gain an advantage on performance visibility or that scope would not appropriately be considered LOE. An example would be a work package consisting of the effort required to provide management or oversight to a specific