

# Earned Value Management System Acceptance Guide

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**Revision 3** 

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## Abbreviations and Acronyms

AAP Acquisition Analytics and Policy

CAIWG Civilian Agency Industry Working Group

CAM Control Account Manager
CAR Corrective Action Request

CER Compliance Evaluation Review

CPM College of Performance Management

DoD Department of Defense

EVM Earned Value Management

EVMS Earned Value Management System

FAR Federal Acquisition Regulation

IO Improvement Opportunities

IPMD Integrated Program Management Division

MOU Memorandum of Understanding

NDIA National Defense Industrial Association
OFPP Office of Federal Procurement Policy
OMB Office of Management and Budget

PAR Progress Assessment Review
PM Program (or Project) Manager

PMB Performance Measurement Baseline

RFP Request for Proposal

SAR Self-Assessment Review
WBS Work Breakdown Structure



#### 1 Introduction

#### 1.1 System Acceptance

System Acceptance is a formal process that involves the design, implementation, review, demonstration and approval of an Earned Value Management System (EVMS) that is used to manage capital asset projects and meets the intent of the 32 EVMS Guidelines embodied in the EIA-748 Standard for Earned Value Management Systems. The EVMS standard will be referred to throughout the remainder of this document as the "32 Guidelines."

The System Acceptance Guide provides guidance and a standard framework to prepare a contractor or a government agency, in the case where the EVM requirement is applied to the government work, to successfully demonstrate that the EVMS being used complies with the 32 Guidelines and will produce program/project performance data that will contribute to sound capital investment decisions.

#### 1.2 Background

The Office of Management and Budget (OMB) Circular A-11, and the Federal Acquisition Regulation (FAR) have increased the requirement on all federal government agencies to establish, maintain, and use an EIA-748 compliant EVMS on major capital asset acquisitions. This, in turn, has greatly expanded the number of suppliers who need to design, implement, and have approved EVM systems that provide timely, accurate, and auditable performance information for both the supplier and the customer during these acquisitions. This requirement has challenged both the government and supplier communities to establish a framework where multiple government agencies can recognize a supplier's EIA-748 compliant EVMS without unnecessary additional compliance reviews or impediments to contract start-up.

Recognizing the lack of an "EVMS Executive Agent" organization for the majority of the non-DoD agencies and departments, the National Defense Industrial Association (NDIA) Integrated Program Management Division (IPMD), with encouragement from OMB, developed a standard framework for developing and demonstrating EVMS compliance in support of customer verification for formal acceptance. It is the intent of the NDIA IPMD that this document sufficiently describes the compliance recognition framework and process for all stakeholders, both government and commercial customers, to reach an agreement supporting reciprocity with the goal of reducing duplication of reviews and to optimize the use of scarce resources and taxpayer dollars. Although this guide was developed with a focus on non-DoD agencies and their suppliers, the process contained within can and should be used by those DoD contractors who are preparing for an EVMS self-assessment in advance of a customer Compliance Evaluation Review (CER). In addition, the traditional supplier/customer relationship may not need to exist to initiate the process established in this guide. For example, a government agency may use this process to assess the appropriate use of EVM at the program level, that is, the work performed by the government, within the agency.

#### 1.3 Purpose of the Guide

The intent of this guide is to establish a process and provide guidance for the design, implementation, review, demonstration and formal acceptance of an EVMS used to manage capital asset programs/projects. This guide defines an evaluation and acceptance process whereby an EVM system owner/user (government or industry) with a first-time or subsequent requirement to comply with the 32 Guidelines can accomplish the following:

Understand the need for and effectively design an EVMS;



- Evaluate the EVMS User's capability to demonstrate compliance with the 32 Guidelines;
- Successfully implement the EVMS on the requiring capital asset projects;
- Prepare processes and provide substantiating implementation documentation for evaluation and implementation;
- Obtain EVMS compliance recognition to satisfy current and future requirements for an approved EVMS; and
- Perform self-evaluations to ensure readiness prior to a compliance evaluation review.

The following sections provide guidance to assist both the EVM system owner, system user, and the customer in fulfilling these responsibilities. However, this guide should not be interpreted as adding requirements that must be met in complying with the 32 Guidelines.

Users of this guide are encouraged to submit recommended revisions to the NDIA IPMD. The NDIA IPMD reviews and assesses the need for revisions to this guide every three years.

#### 1.4 Definitions

Acceptance Authority
(EVM System
Acceptance Authority)

An organization or party within a government agency or contractor organization responsible for recognizing a supplier's EVM system proposed for use on a prime or subcontract, or for in-house work, complies with the 32 Guidelines. Examples include the designated Agency EVM Focal Point(s) or Cognizant Contracting Officers within the Federal government, Cognizant Federal Agency, and EVM Executive Agents within contractor organizations.

## Compliance Evaluation Review (CER)

A formal process used to verify the EVMS system owner's proposed EVMS implemented on contract(s) complies with the 32 Guidelines, the system has been properly implemented by the system user in accordance with the requirements of the contract and system owner's policies, and the system produces reliable, timely, and actionable contract performance data.

#### Compliance Recognition Document

The generic title given to a document generated by the Acceptance Authority that communicates the formal recognition of the EVMS as having successfully demonstrated compliance with the 32 Guidelines on selected contracts within a corporation, division or facility or government agency.

#### Compliance

The characteristic of an EVMS that ensures the intent of the 32 Guidelines is embodied in the integrated processes and sub processes of a contractor's methods of operation that generate accurate and auditable program/project performance data.

#### Customer

The government or commercial organization or entity for which one or more programs/projects are being executed.

#### Earned Value Management (EVM)

A management methodology, which integrates a program's/project's technical scope, schedule, and resources with program/project risk in a baseline plan, against which progress is measured to provide metrics indicative of progress and performance trends useful for proactive management decision-making.



Earned Value Management System

(EVMS)

The integrated set of processes, applications, and procedures that conform with the guidelines in EIA-748 Standard for Earned Value Management Systems.

EIA-748 Accepted **EVMS System** 

An EVM system that has been formally accepted by the Acceptance Authority as compliant with the 32 Guidelines. This acceptance is typically documented by an EVMS compliance recognition document. Acceptance may be documented at a single geographic

location or for multiple locations. Multiple accepted systems may

also reside within a single geographic location.

**EVMS** Guidelines The 32 EVMS Guidelines contained in the EIA-748 Standard for

Earned Value Management Systems.

**EVM System Owner** The organization or party responsible for the design and

> maintenance of an EVMS compliant with the EIA-748. In addition, the system owner is responsible for establishing policies regarding the implementation and use of the EVMS. The system owner may also be referred to as the EVMS process owner. Examples of EVM system owners include contractors, subcontractors, government

program offices, and government activities.

**EVM System User** The organization or party responsible for the implementation and

use of the EVMS at the contract, program/project level.

Reciprocity A reciprocal arrangement or relationship which allows two or more

> groups to agree to the acceptance of another organization's EVMS, thereby reducing the burden of multiple reviews by individual

groups.

Self-assessment A contractor's or government agency's internal review (when

program level EVM is involved) of the design and implementation of

an EVMS to verify compliance with the 32 Guidelines.

Supplier/Vendor A government or commercial organization or entity from which

goods or services are required to complete a program/project.

## System Acceptance Process Overview

The decision to seek system acceptance is based on internal management desires, policies, contractual requirements, or all of the above. A high-level view of the steps involved in the process of moving from system design to system acceptance are shown in Figure 2.1 and described briefly in this overview section. Subsequent sections describe each of these steps in detail sufficient to allow execution by the EVM system owner/user. It should also be noted that these process steps might overlap as allowed by the available resources and capability within the EVM system owner, system user, the customer, or all three. All steps, except those in the "Acceptance" column, are necessary for an EVM system owner/user or government agency program office to implement an EVMS that complies with the 32 Guidelines.



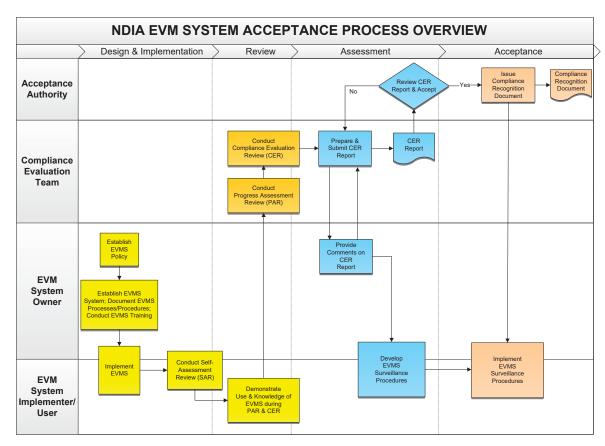


Figure 2.1 The System Acceptance Process involves the System Owner, the System User, the Compliance Evaluation Team, and Acceptance Authority.

The time required to execute each step depends on the following factors:

- EVM system owner's resource availability and capability.
- Size and complexity of the acquisition driving the need for compliance recognition.
- Maturity level of the organization implementing EVM.
- Commitment of the organization and senior management.
- Company or organization priority.
- Availability of independent parties (customer, consultants, in-house, etc.).

#### 2.1 System Design and Implementation Phase

The primary purpose for implementation of an EVMS is to support program/project management with a process that provides a reliable basis for objectively assessing performance, identifying issues, providing future performance trend data, and initiating corrective actions for making sound and timely management decisions. Thus, the EVMS is not simply a metric or a report, but is comprised of a number of management processes that form an integrated program/project management capability. To be effective, the EVMS must support an organization's management needs and reflect good business practices. Therefore, the establishment of an EVMS requires a structured process.

There is no single correct process for establishing an EVMS, but it typically involves the following efforts, discussed further in this section:



- Obtaining executive management commitment, as well as all levels of the organization to support EVM.
- Assessing where changes/enhancements to existing processes are needed to comply with the EVMS Guidelines described by the EIA-748.
- Documenting the final EVMS processes and procedures.
- Selecting, implementing, and training of program/project management tools to facilitate the organization's EVMS.
- Developing structured surveillance and training programs.
- Selecting a program, project, or contract for implementation and demonstration of the EVMS during the self-assessment, PAR, and CER.
- Receiving formal recognition that the EVMS complies with the 32 Guidelines.

#### 2.2 Review Phase

Once the policies, processes and procedures have been created, documented, and implemented on at least one contract or project, and the system user's program/project management staff (i.e., Program Managers (PMs), Control Account Managers (CAMs), and Program Control Analysts) have been properly trained, the daily usage of the EVMS begins. The continued usage of the EVMS leads to increased confidence and maturity of the project management team in the use and knowledge of the system as long as it is implemented correctly. The confidence and maturity exhibited by the program/project team is critical, not only to the successful preparation and to completion of the compliance evaluation review, but to the effective use of the EVMS throughout the life cycle of the project.

The activities associated with the Review Phase, as depicted in Figure 2.1, are closely linked with those of the Assessment Phase. In most cases, these activities, the Self-Assessment Review (SAR), the Progress Assessment Review (PAR), and the Compliance Evaluation Review (CER) could be addressed in either phase. However, for purposes of this guide, we will address the SAR and PAR, as processes for the preparation of the CER, in more detail in Section 4, System Review, and the CER in Section 5, System Assessment.

#### 2.3 Assessment Phase

The Assessment Phase provides an opportunity for the System Owner and System User to review progress toward implementing the EVMS, to resolve misunderstandings, and to assess the readiness to demonstrate an integrated EVM system. These assessments are achieved by conducting a SAR, a PAR, or, as typically is the case, both. They contribute greatly in assisting the System Owner/User in the preparation for the CER by familiarizing key team members with the fundamentals of the EVMS and how that system is implemented on the program/project under review.

The PAR, an option for the System Owner, may be conducted in a more formal fashion since members of the compliance evaluation team are typically involved. The primary goal of the PAR is to determine the System User's readiness to demonstrate its EVMS compliance. This on-site review, conducted prior to the CER, identifies both weaknesses and strengths, and usually combines a documentation review and discussions with EVM system users. Areas of noncompliance and potential problems are identified and recommendations are provided to the System Owner/User to assist with their preparation for the CER. The PAR also provides an



opportunity to develop an early dialogue between the review team and the System Owner/User on the CER process.

#### 2.4 Acceptance Phase

For the customer and the EVM system owner/user, the issuance of a compliance recognition document that recognizes acceptance of an EVMS is the culmination of the process that began with the issuance of an acquisition requirement containing the EVM clauses. This acceptance, as defined by the FAR clauses, is effected by the contracting officer for the customer. If an EVMS compliance recognition document is subsequently issued, it is normally signed by senior representatives of the EVM system owner and the customer.

Cross-agency acceptance, or reciprocity, among the civilian agencies is currently in use as evidenced by the NASA/FAA MOU, Appendix F. The expectation is that reciprocity agreements between various agencies and government branches will continue to grow in the future. More discussion regarding the future of reciprocity is included in Section 6.4. Reciprocity agreements allow agencies to accept a contractor's EVMS based on the acceptance process of another agency; thereby, reducing the burden of multiple EVMS acceptance reviews. Contractors with an EVMS requirement from multiple government agencies should verify whether reciprocity agreements are in force between the agencies to reduce the need for another EVMS acceptance review.

#### 3 System Design and Implementation

The system owner is typically the executive responsible for the design, guidance and oversight of the EVMS being developed. Responsibility for the implementation of the EVMS typically resides with the EVM system user. To ensure independence of action, neither the customer nor the Acceptance Authority requiring compliance participate in this phase of the system acceptance process.

During this phase, the EVM system owner establishes an EVMS policy that is endorsed and supported by the organization's executive management. This policy describes in general terms when and how the EVMS will be applied within the system owner/user's organization. EVMS policies usually include a reference to compliance, the type of programs required to use EVM, and the EVM system owner/user responsible for maintenance and surveillance. Establishment of the EVMS policy is then followed by the development and implementation of an EVM System. The EVM system owner, in conjunction with the system user, typically undertake the following actions to accomplish this phase of the system acceptance process:

- Establish a plan and schedule with appropriate resources identified to ensure proper and effective design, documentation, implementation, and maintenance of the EVMS.
- Compare existing project management processes and procedures to the 32 Guidelines using the NDIA IPMD Earned Value Management Systems Intent Guide as the primary reference.
- Identify areas where modification of current processes and procedures or creation of new ones is required to bring them in line with the 32 Guidelines. This process is typically referred to as performing a gap analysis.
- Document final processes and procedures ensuring compliance with the 32 Guidelines.
   This is typically achieved with the development of an EVMS process description document (see Section 3.3 for additional discussion). This documentation should be



provided to the acceptance authority as evidence of the EVMS that will be used during performance of the program /project.

- Select candidate contract(s), project(s), or program(s) for initial implementation and demonstration of the EVMS by a CER process.
- Train the entire program team on EVM and the organization's EVM system.
- Conduct a SAR and PAR to assess progress toward implementing the EVMS, to resolve misunderstandings, and to assess the project's readiness to demonstrate an integrated EVMS.

The period of performance for these activities typically ranges from 6 to 18 months depending on the organization's level of commitment and the resources dedicated to this effort.

#### 3.1 EVMS Design Considerations

Prior to implementing a new management system, the system owner should address several key factors that will eventually determine the effectiveness and timeliness of obtaining a formally recognized EVMS.

First, the system owner should consider a "make vs. buy" decision regarding the investment in acquiring the required expertise to design and oversee the implementation of a new integrated program management system. If the decision is to hire new staff, the selected personnel should have prior demonstrated experience in identifying and developing processes that will be consistent with the system owner's existing internal management practices, tools and management structure. Additionally, the new staff of subject matter experts should be knowledgeable as to how the proposed processes will properly address the management characteristics of the 32 Guidelines as delineated in the NDIA IPMD Earned Value Management Systems Intent Guide. If the decision is to out-source the EVMS expertise, care should be taken to avoid buying a turnkey process description that may not be applicable or reflective of the system owner's internal organization management practices and culture.

Second, the system owner may need to consider how and when the organization will be capable of demonstrating its EVMS to a CER team. This decision will have a direct bearing on identifying and acquiring the required resources, whether existing internal staff or consulting services, to support the development and implementation of the EVMS as well as the preparation for the CER. Therefore, the system owner may need to identify any staffing gaps and ensure sufficient budget is available to manage the EVMS development and acceptance process as well as to support the on-going EVMS surveillance operations following the formal acceptance of the EVMS.

Third, the decision of when to invest in the EVMS design and implementation resources and activities ideally should be determined before project initiation. The sooner the system owner determines the internal EVMS organization, the design and implementation budget and obtains the required expertise, the easier it will be to socialize this new management philosophy and approach to the new project management office(s) and other organization stakeholders.

Fourth, the system owner will need to determine the extent of the proposed EVM system's applicability and scalability to the entire organization, specific sites or facilities, and/or one or more programs/projects, respectively. Additionally, the system owner must clearly understand and define the organization's ultimate goals and objectives of the new management system beyond the mere attainment of a customer's compliance recognition document. If this is not clearly articulated to the system owner's senior leadership from the beginning, then it is likely that the implementation of the EVMS will be merely focused on completing the CER and



overlooks the significant benefits derived from an integrated program management system. The system owner's goal should include a well-defined EVMS Plan to be communicated with all organization stakeholders and customers. The EVMS Plan may be submitted by the supplier as part of the proposal's management and cost volumes or immediately after project initiation. The system owner's senior leadership will need to make an organizational commitment to the implementation of an effective management system that can be used on all applicable current and future programs/projects. Ultimately, the customer's formal system acceptance is the realization of an effective management system to achieve project cost, schedule, and performance objectives based upon a clearly defined organizational vision and goal.

Fifth, as this guide is intended for Civilian agencies who may be applying the FAR EVMS requirements in requests for proposals (RFPs), a customer's contracting officer should consider including applicable language in the Instructions to Offerors (Section L) and Evaluation Criteria (Section M) in the RFP. This information may be useful for offerors in formulating their response as they consider their competitive strategies for proposing and demonstrating a compliant EVMS in response to agency-specific acquisition needs.

#### 3.2 Policy Preparation and Approval

The EVMS process belongs to and is governed by the EVM system owner. Establishment of an EVMS policy by executive management is not mandatory, but is highly encouraged. It facilitates the commitment of resources to design, implement, and maintain an EVMS that meets the intent of 32 Guidelines. At a minimum, a policy statement should include the following items:

- Statement of commitment to the operation and maintenance of the EVMS.
- Reference to policies and standards, i.e., the 32 Guidelines.
- Definition of the type of programs, contracts and projects that will use the EVMS.
- Guidance on tailoring the EVMS to specific projects.
- Assignment of responsibility for the operation and maintenance of the EVMS.
- Definition of program management responsibilities for implementing and using EVM.
- Assignment of responsibilities to support organization.
- Requirement to conduct internal surveillance on the EVMS.

#### 3.3 System Documentation and Procedures

The guidelines contained in EIA-748 are high-level and goal-oriented. They state the qualities and operational considerations of an integrated program management system using EVM methods without mandating detailed system characteristics. These guidelines also enable implementation on large or small programs, projects, or contracts.

EVM system owners/users have sufficient flexibility within the 32 Guidelines to implement an EVMS in a manner that employs the most effective and efficient performance management methods and techniques. The application of the 32 Guidelines to a particular organization, program, or project is typically detailed in the system owner's system description document.

In developing the system documentation and procedures, an EVM system owner may use any of the methodologies delineated below in Section 3.3.1.

Before developing these documents, specific system design solutions should be formulated to address any gaps between current practices and the guidelines contained in EIA-748. One



method for identifying gaps is to conduct an assessment of current processes and practices related to each of the 32 Guidelines.

Use of the *NDIA IPMD EVMS Intent Guide* is recommended to verify compliance with the 32 Guidelines. Prior to receiving system acceptance, an organizational entity should prepare a compliance map documenting how its business processes complies with the 32 Guidelines. Section 3 of the *NDIA IPMD EVMS Intent Guide* provides an example compliance description for Guideline 1. The separate NDIA IPMD EVMS Intent Guide Appendix provides a compliance map template for the 32 Guidelines.

A compliance map provides several benefits during the system design and implementation process as well as for continuing maintenance of the EVMS. It can identify any process or procedure gaps that require closure to achieve compliance with the 32 Guidelines. Aligning EVMS processes and procedures with the applicable 32 Guidelines may also identify duplicate documentation that, when eliminated, typically results in process streamlining.

#### 3.3.1 Development of an EVMS Process Document

There are various approaches to documenting the processes involved in the structure of an EVMS:

- An industry best practice is a single document that describes how program management processes and procedures meet the intent of 32 Guidelines, typically referred to as a system description document.
- A series of detailed supplemental procedural documents that address specific elements of 32 Guidelines (e.g., a work breakdown structure (WBS) procedure or a procedure to establish program or project schedules).
- An integration of EVMS processes and procedures into existing functional procedures, such as engineering, production, and program management.

Regardless of the approach chosen, it is vital that, when completed, the EVM system owner has documented procedures to assure all 32 Guidelines of the EIA-748 are addressed and all processes are integrated into an effective approach for program management.

The NDIA IPMD EVMS Intent Guide and Appendix is meant to be used by the EVM system owner to complete a compliance map of the EVMS to the 32 Guidelines. This compliance map, which should be included as part of the system process documentation, verifies for both internal management and external customers or reviewers that the organization has done a comprehensive job of describing an EVMS that meets the intent of the 32 Guidelines.

#### 3.3.2 Documents that Define System Maintenance

In addition to developing an EVMS Policy and EVMS documentation, additional documents are recommended to address post acceptance responsibilities: an EVMS Surveillance Plan and an EVM System Revision Procedure.

Since the EVM system owner is also responsible for the maintenance of the system, the Surveillance Plan should describe how the organization will periodically monitor the compliance of its EVMS with 32 Guidelines. Use of the *NDIA IPMD Surveillance Guide* is recommend for developing and implementing an EVMS Surveillance Plan.

Because modifications to the EVMS may be required from time to time, a system revision procedure should be developed to document a formal change process. Should the customer's



compliance recognition document require it, system description changes may need approval from the certifying entity prior to implementation.

#### 3.4 Implementation and Review

Early in the system design and documentation activity, senior management should select at least one program, project, or contract for EVMS implementation if the customer has not already done so. The EVMS for this program/project will be the subject of the compliance evaluation review. Selection of the program for EVMS implementation includes the following considerations:

- A program/project with a contractual or government requirement to use an EVMS compliant with the 32 Guidelines.
- A diversified business base upon which the EVMS will be implemented such as:
  - o Development, modernization, enhancement;
  - Hardware production;
  - Software design and delivery; or
  - Multiple performing organizations (contractors, subcontractors, and government organizations).
- The number of locations at which the EVMS will operate.

Implementation of the EVMS occurs after the system design and documentation has been completed. As the processes are implemented, feedback on the effectiveness and accuracy of system documentation and procedures is important to ensure needed improvements are incorporated in a timely manner.

When the EVMS design uses existing or modified existing business processes and procedures, implementation can be more efficient because the processes are largely consistent with those already in use. However, where the EVMS results from new process and procedure definition and documentation, additional training may be required. Implementation may also identify the need to modify new processes and procedures because issues weren't recognized until the design concepts were actually implemented.

#### 3.5 EVMS Training

In conjunction with design and implementation, training in both the basic concepts of EVM and the system owner's policies, processes, and procedures are critical to achieving system acceptance. EVM basic training focuses on the concepts embodied in the 32 Guidelines and the associated processes.

In addition, EVMS training should address the specific process elements of the EVM system owner/user's system. This includes unique project management aspects of the system, forms and or templates designed for implementation, and process-oriented interfaces with other internal systems.

Training should begin as early as possible during system implementation and should not be limited to a formal classroom environment. Experience has proven that small group mentoring and coaching sessions are invaluable. As system documentation is updated to reflect the feedback from implementation, system training should also be modified to reflect the documentation updates.



## 4 System Review

The EVM system owner/user may choose to conduct a self-assessment review or a PAR to prepare for the CER. These reviews, described below, provide an opportunity for the EVM system owner/user to assess overall readiness for the CER as well as to determine how effective the EVMS is in providing performance data to support timely decision-making.

#### 4.1 EVM System Self-Assessment Review (SAR)

The self-assessment review has four primary objectives:

- Assess compliance with the 32 Guidelines and identify areas of non-compliance or areas
  to improve, often referred to as a gap analysis. The self-assessment review should
  include CAM discussions to assess progress of the EVM system implementation.
- Develop a plan to prepare the system user's program/project team to conduct a CER.
- Provide members of the PAR/CER team with data to support the review.
- Develop a plan and schedule for future reviews, including proposed dates for the CER.

The EVMS system owner/user must ensure the program has implemented corrective actions that arise from the SAR to comply with the 32 Guidelines. The completed corrective actions plus the documenting of compliance with the 32 Guidelines in the formal CER format satisfies the completion of the CER process.

#### 4.2 Progress Assessment Review (PAR)

The PAR is optional at the discretion of the EVM system owner and is conducted after the SAR. The PAR is usually conducted by a contingent of the CER Team in preparation for the CER. The purpose of the PAR is to review progress toward implementing the EVMS, to resolve misunderstandings, and to assess the project's readiness to demonstrate an integrated EVMS. The PAR helps the system user prepare for the CER by familiarizing key team members with the fundamentals of the EVMS. The PAR is usually conducted by a small team that provides the EVM system owner/user with a readiness assessment for the CER and may include CAM discussions to assess the EVMS implementation. The PAR team does not institute changes to the EVMS, but provides sufficient information for the EVM system owner/user to understand non-compliance issues and to implement corrective actions necessary to meet the intent of the 32 Guidelines. This review is an opportunity for the EVM system owner/user to correct potential non-compliance issues prior to conducting the CER.

## 5 System Assessment

The CER is conducted following the SAR and/or PAR to verify that the system being reviewed meets the intent of 32 Guidelines and has been implemented in accordance with the organization's policies and guidelines. The specific purposes of the EVM system CER are to:

- Ensure senior management actively participates and accepts ownership of the EVM process.
- Verify the EVM system processes, procedures, systems, and practices comply with the 32 Guidelines as defined in the EVM system owner's EVMS process documentation and policies.



- Demonstrate the use of the EVMS and outputs by the EVM system user's project management team in making timely and effective management decisions.
- Ensure the data and reports produced by the EVM system are reliable and capable of being used for planning, risk mitigation, and corrective actions, and for forecasting schedule completion dates and at completion costs.
- Verify the EVM system produces performance data consistent with the program technical, schedule, and cost status.

The CER may occur prior to program/project approval or contract authority to proceed or may occur after these events in accordance with the implementation plan. When the CER occurs prior to a project approval or contract authority to proceed, a viable alternative process is to complete the *NDIA IPMD EVMS Intent Guide* Appendix template mapping the EVMS compliance with the 32 Guidelines. The system would then be reviewed and recognized as compliant with the 32 Guidelines by the organization requiring compliance. Implementation of the approved, compliant EVMS is verified and accepted by the contract or project customer through the EIA-748 EVMS joint surveillance process defined in the *NDIA IPMD Surveillance Guide*. The organization requiring compliance would issue a formal acceptance of the process, in the form of an EVMS compliance recognition document, at the conclusion of the joint surveillance.

There are numerous options concerning who conducts the EVM System CER depending on who imposes the EVMS requirement. If the customer has internal requirements and invokes a contract clause, the certifier is likely specified within the contract. However, if the customer makes a less formal request in a statement of work (SOW) or the supplier self-imposes EVMS, options may be broader. The options include:

- The acceptance authority;
- The customer;
- The EVM system owner (supplier) using in-house resources;
- The EVM system owner (supplier) using a combination of in-house, customer, and acceptance authority resources; and
- Independent subject matter experts.

#### 5.1 EVM System Acceptance Schedule

It is important to establish a schedule of activities that will be required to proceed from system design to completion of the CER. This schedule should provide a sufficient level of detail to ensure that all participants are aware of their particular role and responsibility. The schedule should also provide adequate time for an efficient review and assessment. While the review and assessment phases of the system acceptance process are not strictly defined, the high-level process flow illustrated in Figure 2.1 should be followed as closely as possible by all stakeholders involved in the process.

Coordination of the system acceptance schedule, depicted as a high-level notional schedule in Figure 5.1, with all participants provides assurance all stakeholders, i.e., the CER Team, the EVM system owner, the EVM system user, and the Acceptance Authority are in agreement as to when the CER will occur. When incorporating the activities depicted in this notional schedule there may be some overlap, depending on the maturity of the organization and availability of resources to complete these activities. The overall timeline for the system



acceptance schedule will change based on the situational decisions of the EVM system owner, system user, and CER Team.

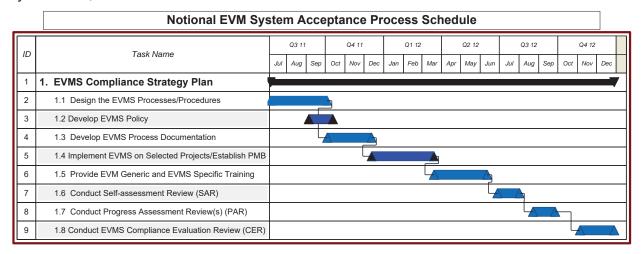


Figure 5.1 Notional System Acceptance Process Schedule

The self-assessment reviews and PARs, if scheduled, are normally conducted after the EVMS has been implemented on selected project(s), the project's performance measurement baseline (PMB) has been established, and the project's key personnel have been trained, as depicted in Figure 5.1.

#### 5.2 EVMS Compliance Evaluation Review Process

The CER verifies the:

- System, as documented, meets the intent of the 32 Guidelines as described by EIA-748.
- System, as documented, is fully implemented on the selected contract(s), project(s), or program(s).
- Implementation is successful and complies with the requirements of the system documentation /organization's EVMS procedures and (if appropriate) contract, project, or program unique procedures.
- System implemented provides timely, accurate, and auditable performance information used to facilitate day-to-day management decisions for both the EVM system owner's project management organization and the customer.

The CER process and its results are documented in a final report (see Section 5.5 and Appendix B) to provide to those who did not participate in the process and have a vested interest, the opportunity to understand the EVMS compliance with the 32 Guidelines.

The CER is intended to be an independent review that must be conducted by persons or organizations that complies with the following criteria:

Has no vested interest in the EVM system, program, project, or contract being reviewed.
The need for independence by the review team members from the project being
reviewed still remains in effect when a self-evaluation is conducted. That is, those
conducting the self-evaluation should not be directly associated with the project under
review.



- Is recognized as being knowledgeable and competent in the area of EVM systems implementation or surveillance (see Appendix A for guidance on CER team member experience and independence).
- Uses the NDIA IPMD EVMS Intent Guide to evaluate EVM systems for compliance with 32 Guidelines.

The EVM system owner may choose to prepare for the CER either by conducting a self-evaluation review using internal resources, hiring an independent party, or engaging the customer to jointly establish the evaluation team. As stated above, it is imperative that the review team members, regardless of their origin, maintain their independence from the project under review. It may be necessary for non-supplier team members to complete non-disclosure statements.

A CER report is prepared by the compliance evaluation team. This report, discussed in Section 5.5 and Appendix B, is an iterative document resulting from a process that allows the compliance evaluation team to consider the EVM system owner/user's responses to any of their findings prior to finalizing the CER report and providing it to the applicable acceptance authority.

#### 5.3 Compliance Evaluation Team Membership

CER team members should possess the experience and independence identified in Appendix A, Compliance Evaluation Reviews Team Selection Guidelines. Resumes of CER Team members, included as part of the CER Report, should reflect the appropriate level of EVM experience and provide clear evidence a potential conflict of interest does not exist. The CER team lead assigns responsibilities to the team members based on the five categories defined in EIA-748: Organization, Planning, Scheduling and Budgeting, Accounting Considerations, Analysis and Management Reporting, and Revisions and Data Maintenance.

CER team members should be independent, should not be advocates of the EVM system owner, and should not have participated in the design and implementation of the system.

Once the CER team has been established, training is conducted. Team members must meet stringent qualifications, with training requirements varying based on their experience with conducting CERs. A training program should include the process for evaluating EVMS compliance with the 32 Guidelines and the effectiveness of its implementation. This process includes the approach to conducting the review, discussion concepts, documentation requirements, and the forms and formats to be used during the course of the review.

Appendix C, Review Execution Considerations, is provided to encourage a well-conducted review resulting in a supportable final report that is acknowledged to be valid by all the participants in the review.

### 5.4 EVM System Compliance Evaluation Review (CER)

The purpose of the EVMS CER is to determine if the implementation of a documented EVMS is compliant with the 32 Guidelines and the system owner's policies and processes and the system is being used by project's and organization's management team for decision-making. An overview of the CER process is illustrated below in Figure 5.2.



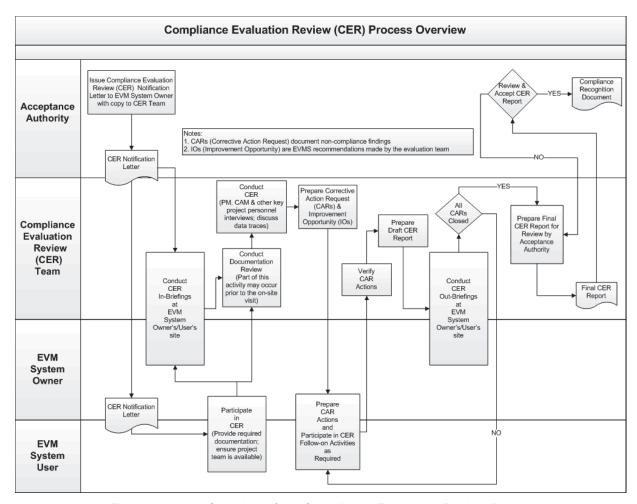


Figure 5.2 Overview of the Compliance Evaluation Review Process

The CER team will review the EVM system owner/user's working papers and documents to ascertain compliance with the 32 Guidelines. The EVM system owner/user will make available to the CER team the documents used in the implementation. In addition, the system user will make available to the CER team the project's key personnel for discussions/interviews. Appendix A of the NDIA IPMD EVMS Intent Guide provides examples of the types of documentation that can be reviewed. The team should verify that the documentation is current and accurate. The EVM system user will demonstrate to the team how the EVMS is structured and used in actual operation including a detailed data trace discussion.

The following activities will be performed to the extent necessary prior to and during the CER:

- Letter of Notification start of process.
- A kick-off meeting with key CER participants to discuss and agree on roles, responsibilities, and a schedule of required activities for the CER, including pre- and post-CER on-site activities.
- An overview briefing by the EVM system owner/user will familiarize the CER team with the implemented EVMS, identifying any changes that have occurred since the most recent self-assessment review and PAR(s) (if conducted).



- An overview briefing by the CER team lead will discuss the goals and objectives of the review and how the review will be conducted. In addition, the CER Team members will be introduced.
- A sample of the documentation that establishes the initial baseline plan for the program
  will be reviewed, as well as records for subsequent changes to the baseline plan. This
  will include work authorizations, schedules, budgets, resource plans, and change
  records (including management reserve and undistributed budget records). The
  purpose is to verify that the EVM system user has established and is maintaining a valid,
  comprehensive, integrated baseline plan for the contract.
- A sample of the reported cost and schedule performance will be reviewed against the
  baseline plan, along with documented analyses of problems and a projection of future
  costs. Also, a trace of the summarization of cost/schedule performance data from the
  lowest level of formal reporting (normally the control account level) to the level
  designated for internal management and (if applicable) the external performance
  measurement reports. The purpose of this activity is to verify the adequacy of system
  controls and the accuracy of the resulting management information.
- Discussions with a selected sample of members of the EVMS users, including CAMs, as well as functional representatives or other work teams, and project managers will take place. These discussions will verify that the EVMS is fully implemented and is being used to manage the project by having the organization's personnel conduct a walkthrough of the information data flow to confirm their understanding of the EVMS. Discussions should be held to small groups with CER Team Members and the Organization's Team. The environment for the discussion should be conductive to properly house the team discussions and ensure the IT equipment available for the organization's representative to properly conduct a data review.
- The sample data reviewed should be sufficient to verify implementation and compliance
  with the EVMS. While it may not be necessary to review 100 percent of all
  documentation and program personnel, a sample that is too small may not provide
  sufficient visibility into possible system problems. Samples should be selected to focus
  on the areas of greatest risk or highest value control accounts. If significant problems
  are found, the sample size, and, if necessary, the duration of the review, should be
  extended.
- Findings that require corrective action should be documented as corrective action requests (CARs) with resulting system changes documented in a corrective action plan and implemented within a reasonable timeframe based on agreement among the affected parties. Identified corrective actions require resolution prior to issuance of an acceptance recognizing compliance. The CER review team may also recommend optional process improvement opportunities.
- An exit briefing covering the team's findings will be held. During this briefing, any open system compliance discrepancies should be discussed in regard to the EVM system owner's corrective action plan, which should establish responsibility and a timeframe for all required corrective actions. It is not intended to be the forum to resolve the CARs or debate compliance with the 32 Guidelines.



#### 5.5 Compliance Evaluation Review Report

At the conclusion of the CER, the review team prepares a report documenting the activities of the review, as well as the results. The content of the report will reflect, as completely as possible, how the team verified compliance with the 32 Guidelines and that the documented system was properly and effectively implemented on the project or projects under review. Appendix B contains an example format for the CER report. The CER report should be finalized within a reasonable timeframe based on agreement among the affected parties of the CER exit briefing.

### 6 System Acceptance

EVMS compliance acceptance represents the formal recognition by an acceptance authority that an EVM system owner's EVMS is compliant with the 32 Guidelines. This means the acceptance authority has reviewed the EVMS CER report and made the following determinations:

- The EVM system complies with the 32 Guidelines.
- The contract, project, or program under review has successfully demonstrated the EVMS has been properly implemented and is being used effectively.

The information provided in the CER report should be evaluated by the customer for completeness. The EVM system owner/user should provide documentation all corrective actions for compliance issues have been completed before a final decision is made to issue a system compliance recognition document.

## 6.1 Initial System Compliance Recognition

The EVMS compliance recognition is a formal document, typically in the form of a letter that clearly indicates that the system reviewed complies with the 32 Guidelines. If specific guidelines are not applicable to the program/project(s) reviewed in the CER, this document should clearly specify which guidelines are not applicable for compliance based on the type of acquisition involved.

The EVMS compliance recognition document can take several forms. The style and content of the document is at the discretion of the acceptance authority, but it should contain as a minimum the following information:

- Title of the document.
- EVM system Acceptance Authority name and organization and CER team members.
- EVM system owner's name and the organization(s) for which the certification is applicable.
- Title given to the EVMS by the EVM system owner (i.e., Program Management Control System (PMCS), etc.) and the date approved.
- Name and contact information for the person or persons signing the document.
- A statement that, as a result of CER, the system under review was found to be in compliance with the 32 Guidelines.
- For those EVMS acceptances that have certified only a portion of the guidelines, an identification of those guidelines that were not included in the compliance and the reason(s) why they were not included.



 Disclosure of all revisions to the EVMS prior to implementation to the applicable approval authority.

The signed EVMS compliance recognition document should then be forwarded to the EVM system owner and all other parties involved in the process. An example of an EVMS compliance recognition document is provided in Appendix E.

When the acceptance authority is a government organization, the EVMS compliance recognition document for a contractor or government organization is usually issued by a government official, i.e., EVM Focal Point, acceptance authority, or a contracting officer or designee. Where the acceptance authority is a contractor, the EVMS compliance recognition document is usually issued by a contractor official, i.e., contracting officer or designee or an EVM Focal Point.

#### 6.2 EVM System Owner Responsibilities

The issuance of the EVMS compliance recognition document to the EVM system owner completes the EVM system owner's activities for the initial system acceptance process. The EVM system owner/user is required to maintain the system and implement EVM in accordance to its documented and approved processes on additional programs or projects. If the EVM system owner revises the EVM policy, process, procedures, or practices, the acceptance authority issuing system compliance recognition document should be notified. In some cases, changes to the compliant EVMS may require approval by the customer prior to implementation. Continued EVMS compliance is determined through EVMS surveillance, a shared responsibility of the system owner, system user, and approving authority.

EVM system owners should maintain documentation of all reviews, acceptance notification, advance agreements, system description, and other EVMS products to ensure that they adequately demonstrate compliance with the 32 Guidelines.

For additional contracts with EVM requirements, the EVM system owner may be asked to furnish (generally with its proposal) the following documentation:

- EVMS System compliance recognition document;
- Compliance evaluation report if compliance recognition has not yet been issued;
- A plan for implementation of the EVMS; and
- EVM system description documentation.

To be consistent with EVMS compliance recognition documents that provide waivers for prior approval (assuming they exist), the EVM system owner should notify the applicable acceptance authority of EVMS revisions and provide updates to the EVMS compliance map discussed in Section 3.3.

#### 6.3 EVM System User Responsibilities

After the EVM system has been designed and the associated policies and processes have been documented, it is the responsibility of the system user to implement this system on contracts that have an EVMS requirement. In some cases the system owner, system user, and system implementer may be the same organization or party. As discussed above, the implementation effort, based on the decision of the system owner, may be accomplished with the organization's internal resources or with the assistance of consulting services. Regardless, the system user is ultimately responsible for the implementation and for demonstrating during a SAR, PAR, and the CER the EVMS under review has been properly implemented and is being used as an integrated program management system that meets the intent of the 32 Guidelines.



Specific responsibilities of the system user during the CER are discussed in Section 5.4, EVM System Compliance Evaluation Review, and Appendix C, Review Execution Considerations.

Once an EVMS compliance recognition document has been issued to the system owner, the system users, who have implemented this system on their contracts, have the responsibility to maintain that system to ensure continued compliance with the 32 Guidelines and the system owner's policies and processes. Maintenance of the EVMS is accomplished through a rigorous EVMS surveillance system as discussed in Section 3.3.2.

#### 6.4 Acceptance Authority Responsibilities

After acceptance and recognition of an EVM system's compliance with EIA-748, the acceptance authority may engage in EVM surveillance to verify the approved system is being maintained and used by the system owner/user.

As discussed in Section 2.4, several alternative methods can accomplish cross-agency acceptance. These include:

- The establishment of reciprocal agreements between agencies and organizations to mutually recognize EIA-748 compliant EVMS acceptance or recognition documents.
   This is considered to be the best alternative.
- Acceptance of another agency's EVMS acceptance following an extensive surveillance review or CER based on the standards described in the NDIA IPMD Surveillance Guide.
- Acceptance following review of the documentation from the EVMS CER.
- Cross-Agency participation in the CER.

Should agencies choose to conduct independent surveillance, agencies are encouraged to share their surveillance results with cross-agencies to avoid duplication and promote consensus.

Cross-agency EVMS acceptance, or reciprocity, between the civilian agencies, the target audience for this guide, have been discussed for many years, facilitated, in part, by the NDIA Civilian Agency Industry Working Group (CAIWG). The CAIWG efforts have resulted in the first reciprocity memorandum of understanding (MOU) between NASA and the FAA (see Appendix F).

With the support from the Office of Management and Budget (OMB) Office of Federal Procurement Policy (OFFP) and the DoD's Acquisition Analytics and Policy (AAP), the CAIWG efforts are being expanded to include a new initiative that would establish a Cross Federal Agency Steering Board. In concept, this Board would consist of a single member from each participating Federal organization or agency. The initial goals of this Board would be to:

- 1. Establish a single source for interpretation of the 32 Guidelines.
- 2. Proactively identify potential reciprocity opportunities.
- 3. Facilitate, as necessary, reciprocity agreements.



## Appendix A Compliance Evaluation Review Team Selection Guidelines

This statement of qualifications was prepared in cooperation with the College of Performance Management (CPM), and is intended to serve as a guide only. This statement does not imply endorsement by CPM, NDIA, or any of their components. This is intended to serve as a standard for voluntary compliance by independent company personnel, independent certifying companies, or government agencies. As such, CPM, NDIA, and their components are not liable for any misapplication, misinterpretation, or any legal action resulting from the application of this voluntary standard from any affected parties. It is used with joint permission of CPM and NDIA IPMD.

The CER team consists of experienced individuals who are conversant with EVMS and the processes being reviewed. The team leader is appointed by the EVMS organization responsible for conducting the CER. To ensure independence, team members must not be individuals assigned to the contract under review or functioning in the direct line of contract or project supervision. At a minimum, CER teams must include the company/site EVM system owner representatives who meet the attributes described below. Observers may be included from the contract or project under review to facilitate communication and aid early problem resolution.

A CER team needs to include participants with experience, independence, and key general attributes defined below.

- Members need to be independent of the management chain of the contract or project organization. This ensures the evaluation will be objective.
- Team members must possess multi-discipline knowledge and experience. This is crucial to understanding the dynamics of effective implementation. It also enables the team to develop a comprehensive perspective of the overall process and recommend successful practices.
- Members need to have practical experience using an EVMS.
- Strong team-work skills are required.

Specific guidelines for the CER team and individual members include the following:

#### Team Lead

- o Understanding of the development and design of an EVMS.
- A minimum of 10 years of experience in applying and using EIA-748. This
  criterion may be supplemented by extensive EVM surveillance experience at
  multiple sites and with multiple customers.
- Experience using assessment techniques and documents (i.e., examining, questioning, evaluating, and reporting).
- Knowledge and understanding of the review process to meet compliance.
- o Previous experience as a team member of EVM compliance evaluation reviews.

#### Team Member

- Knowledge and understanding of EIA-748.
- Sufficient EVM experience in both the implementation and use of EVM as determined by the Team Leader.



 Knowledge of assessment techniques (i.e., examining, questioning, evaluating, and reporting). This criterion may be supplemented by extensive EVM surveillance at multiple sites and with multiple customers.

When a joint CER is conducted, the customers (independent of the contract or project) should be members of the team. It is recommended that agreement on roles and responsibilities be reached with the customer prior to executing the CER.



## Appendix B Example CER Report Outline

#### **Executive Summary:**

Summarize the review results and provide an overview of the CER process.

#### Introduction:

Summarize the EVM system owner implementation. Topics include the following:

- Customer and/or contract requirements;
- EVM policies;
- Description of Program(s) implementing the EVMS;
- · Applicability of the system being reviewed; and
- CER methodology.
- · CER team.

#### Purpose:

Describe the purpose of the report.

#### Team formulation:

Summarize how the CER team was formed and why it is qualified to conduct the CER. Team resumes may be included in this section.

#### Findings:

Include the key CER team findings of compliance, strengths, and improvement opportunities. This section should address (a) how the system description satisfies the intent of the 32 Guidelines; (b) how the system is implemented on the program(s), and (c) how the team verified the accuracy of the implementation on the program(s).

Findings should include actions that are required prior to obtaining certification of compliance. The CAR reports and disposition should be included in the CER report. This section should also include a list of all CARs (including the closure verification) and Improvement Opportunities (IOs).

#### **Conclusions:**

Provide the CER team's overall assessment and recommendation of compliance. This section also includes open actions.

#### **Exhibits and Appendixes:**

Provide documentation and examples used in support of both the findings and the conclusions.



### Appendix C Review Execution Considerations

#### Overview

Reviews are structured to facilitate the exchange of information about the EVM system compliance expectations and the EVM system owner/user implementation. These reviews are structured to identify compliance or non-compliance with the 32 Guidelines. Open and honest communication is facilitated by the:

- Following a code of conduct demonstrating respect for the EVM system owner/user team.
- Conducting an out-briefing and discussion of potential findings before a report is generated.

#### **Code of Conduct Considerations**

The following suggestions are provided to encourage the review team to conduct a respectful review:

- The program in-briefing or orientation introduces team members and foster understanding of review expectations, agenda, schedule, and process.
- The review team lead provides advanced notification of the review agenda and request for documentation.
- Documentation reviews are typically conducted prior to arriving at the EVM system owner/user facility in an effort to minimize the amount of time spent at the facility.
- The review process and expectations are described, and the EVM system owner/user has an opportunity to comprehend and respond.
- The review is conducted in a professional manner and in the spirit of constructive assessment and discovery.
- If there are proprietary data issues of limited disclosure, the team may request assistance from outside independent auditors to verify indirect, accounting, and material systems.

The EVM system owner/user can contribute to a well conducted review. Following are suggestions for the EVM systems owner/user:

- Coordinate with the review team leader to ensure that program personnel required for the review meet the selection guidelines and are available to participate.
- Understand and accommodate the review team's administrative and logistical needs such as security considerations, working space, and office equipment requirements, etc.
- Ensure documentation and policies are available to the review team sufficiently in advance of the review to allow for meaningful analysis.
- Respond to corrective action requests as quickly as possible.
- Provide explanations and illustrations in the context of demonstrating compliance with the 32 Guidelines.



• Provide information used by the EVM system owner/user in the normal course of business and avoid providing exhibits created solely for the purpose of the review.

#### **Out Briefing and Discussion Considerations**

During the review, pertinent issues, concerns, and findings will be discovered by the review team. During the period of review and leading up to the final report and out briefing, clear communications and avoidance of miscommunication can contribute to a well conducted review. Suggestions for maintaining good communications and a meaningful out-briefing include the following:

- EVM system owner/user personnel should seek clarification to fully understand questions and data requests.
- To avoid conflicting assessments, the review team leader is solely responsible for the final disposition of findings and concerns.
- The review team should discuss issues and concerns prior to documenting a finding.



## Appendix D Examples of Documentation Subject to Review

Upon request of the CER team, the EVM system owner/user will make available to the team the documents used in the design and implementation of the EVMS under review. The review team should verify that the documentation provided is current and accurate.

Examples of the types of documentation that may be reviewed are:

- 1. System owner's EVMS process document (System Description)
- 2. System owner's EVMS policies
- 3. Documentation of unique processes or procedures used by the system user
- 4. Work Breakdown Structure (WBS)
- 5. WBS Dictionary
- 6. Statement of Work (SOW)
- 7. Project Plan or Project Implementation Plan (PIP)
- 8. Project Organizational Chart
- 9. Organizational Breakdown Structure (OBS)
- 10. Dollarized Responsibility Assignment Matrix (RAM)
- 11. Integrated Master Plan (IMP)
- 12. Integrated network schedules including master, intermediate, and detail level schedules (or Integrated Master Schedule (IMS), e.g., IPMR Format 6)
- 13. Subcontractor Schedules
- 14. Schedule Analysis outputs
- 15. Schedule Margin plan and basis
- 16. Management Reserve (MR) plan and basis
- 17. Updated schedule task status including forecast completion dates
- 18. Manufacturing Requirements Planning (MRP) or Enterprise Requirements Planning (ERP) Operational Schedules (if applicable)
- 19. Bill of Materials (BOM)
- 20. Material System reports
- 21. Control Account Plans (CAP) including
  - a. Time phased budgets and resources
  - b. Identification of work packages and planning packages
  - c. Breakdown by element of costs
  - d. Identification of Earned Value Techniques
- 22. Basis of Estimates (BOE)
- 23. Work Authorizations
- 24. Cost Accounting Standards (CAS) Disclosure Statement
- 25. Chart of Accounts
- 26. Indirect cost policies and procedures
- Finance Organization structure identifying personnel and organizations responsible for maintaining indirect costs
- 28. Forward pricing schedule including sales forecast and business base projections
- 29. Internal company indirect budget and performance reports



- 30. Indirect cost variance analysis
- 31. Reconciliation of project costs with accounting system including WBS/Cost collection mapping
- 32. Reconciliation of subcontracted reported actual costs to subcontract payments
- 33. Internal and External Performance Reports for Subcontractors
- 34. Project Control Logs including Undistributed Budget, Management Reserve, Performance Measurement Baseline and Contract Budget Base
- 35. Integrated Program Management Report (IPMR) Formats 1 through 7, or Contract Performance Reports (CPR) Formats 1 thru 5, as appropriate.
- 36. Variance Analysis Reports including root causes, impacts and management actions
- 37. Corrective Action Item Log
- 38. Evidence the To Complete Performance Index (TCPI) and Independent Estimate at Completions (IEAC) are being used
- 39. Evidence that earned value metrics (Cost Variance (CV), Schedule Variance (SV), Variance at Completion (VAC), SPI, CPI) is being used to manage performance
- 40. Estimate at Completion (EAC) documentation
- 41. Risk Management Plans including identification, mitigation and opportunities
- 42. Contractual Change Documents
- 43. Notification to customer of an Over Target Baseline (OTB) or Over Target Schedule (OTS)
- 44. Baseline Change Request (BCR) or other change control process document requiring approval
- 45. Percent of LOE Control Accounts vs. Discrete
- 46. EVMS cost tool outputs for other data needs



## Appendix E Example of a Compliance Recognition Document

## EVMS Compliance Recognition Agreement between

[Acceptance Authority]

and

[Supplier]

for the

Implementation and Surveillance

of

**Earned Value Management System** 

This document establishes an EVMS compliance recognition agreement between the [Acceptance Authority] and [Supplier] regarding the implementation and surveillance of the Earned Value Management System (EVMS) across the company.

Whereas the [Acceptance Authority] did review and accept the [Supplier's] EVMS process description, [Name/Version], dated [Mo/Yr] as an EIA-748 (current version) compliant earned value management system, then the above parties agree that:

- 1. The [Supplier's] [System description number], "[System description name]," shall be maintained and implemented on all [Acceptance Authority] contracts that require EVMS. [Supplier] shall apply an EVMS [Policy Number], "[Policy Name]," as company best business practices.
- 2. [Supplier] shall provide written notification to the [Acceptance Authority] at least 30 days prior to the effective date of implementation of any proposed revisions to [System description number].
- 3. [Supplier] and [Acceptance Authority] will jointly pursue consistent EVMS implementation and practices in accordance with company EVMS [Policy number] utilizing [Supplier] self-assessments and joint surveillance plans and reviews.
- 4. The [Supplier] EVM System process owner will ensure the maintenance and health of the company's EVMS with effective implementation, surveillance and control revisions to policies, procedures, and practices.
- 5. Inquiries from [*Acceptance Authority*] on EVMS compliance capability will be coordinated directly with the [*Supplier*] EVM Point of Contact (POC).



- 6. Systemic and/or unresolved issues as a result of the Joint Surveillance and/or other EVMS reviews will be elevated for resolution, by either party to the joint undersigned members of this agreement.
- 7. This EVMS compliance recognition agreement will remain in effect indefinitely, subject to modifications by the written mutual agreement of the parties. Either party may terminate this agreement by providing thirty (30) days written notice to the other party.

Name	Name
Title	Title
Organization Name	Organization Name
Date:	Date:



## Appendix F Example of a cross agency EVMS Reciprocity Agreement

#### MEMORANDUM OF UNDERSTANDING CONCERNING RECIPROCAL RECOGNITION OF A SUPPLIER'S EARNED VALUE MANAGEMENT SYSTEM

#### **PREAMBLE**

The National Aeronautics and Space Administration (NASA) and the Federal Aviation Administration (FAA) (herein individually referred to as a "Participant" and collectively referred to as the "Participants"):

NOTING the requirements of Federal Acquisition Regulation (FAR) Part 34 (Major System Acquisition), NASA FAR Supplement Part 1834 and the NASA EVM Implementation Handbook for NASA, the Acquisition Management System (AMS) for FAA, and Office of Management and Budget (OMB) Circular A-11 (Preparation, Submission and Execution of the Budget) for development of major acquisitions, to have an Earned Value Management System (EVMS) that has been determined to be in compliance with the current version of Electronic Industries Alliance (EIA) Standard 748 (hereinafter called "EIA-748"), and the Presidential Memorandum, *Reducing the Burden of Certifying Earned Value Management Systems*, dated October 23, 2015, encouraging agencies to enter into reciprocal agreements;

DESIRING to eliminate unnecessary or duplicative processes;

DESIRING to increase efficiency and reduce costs;

DESIRING to reduce barriers and burdens to contracting with the Federal Government;

HAVE ARRANGED as follows:

#### **SECTION 1 – Authorities**

NASA enters into this Memorandum of Understanding (MOU) in accordance with 51 U.S.C. § 20113. FAA enters into this MOU in accordance with 49 U.S.C. § 106 (f)(2)(A) and 106(*l*) and (m). This MOU is nonbinding on the Participants. Any activity that requires a binding obligation will be negotiated and entered into using a separate agreement, in accordance with the respective Participants' policies and processes.



#### **SECTION 2 - Definitions**

For the purpose of this MOU, the definitions in the FAR Part 34, to the extent those definitions are consistent with AMS, OMB Circular A-11, and the current version of EIA-748, apply.

#### **SECTION 3 - Purpose**

Earned Value Management (EVM) is a program management technique for measuring program performance and progress in an objective manner. EVM provides a disciplined approach to managing programs through the use of an integrated EVMS to plan and control authorized work to achieve cost, schedule, and technical objectives. To achieve compliance certification, the EVMS processes must be documented and integrated into the contractor's acquisition decision-making processes; the EVMS data must be accurate, reliable and auditable; and the EVMS must be implemented in a disciplined manner consistent with the 32 Guidelines in the EIA-748. Depending on the rigor of the compliance review and other variables, a contractor that achieves certification for its system at one agency may not be recognized by other agencies as having a compliant system and may be required to complete yet another certification process. Recognition of another agency's certification, as appropriate, eliminates duplicative compliance reviews and results in cost savings for both the contractor and the taxpayer. This MOU intends to eliminate duplicative EIA-748 compliance reviews by establishing the mutual recognition or reciprocity of these reviews between the Participants.

#### **SECTION 4 - Implementation and Management**

Program implementation will be executed in accordance with each agency's procedures.

#### General principles include:

If a supplier demonstrated compliance of its EVMS with all EIA-748 guidelines to a Participant (e.g., approval by the Cognizant Federal Agency [CFA] in accordance with agency procedures or the Contracting Officer in the absence of a CFA), the other Participant will recognize the supplier's EVMS as EIA-748 compliant, provided that the system is continuously maintained. Typical evidence of system maintenance is EVMS Surveillance Plans and Reports, and EVM System Revision Procedures.

If a supplier demonstrated compliance of its EVMS with only certain appropriate EIA-748 guidelines to a Participant, the other Participant will recognize the supplier's EVMS compliance with the specified EIA-748 guidelines, provided that the system is continuously maintained by the organization cited in the compliance recognition documentation. In this case, before recognizing the supplier's EVMS as fully compliant, another Participant will only require a supplier to demonstrate compliance with any remaining relevant criteria.

A supplier's EVMS compliance with the EIA-748 guidelines will be determined by a Participant in accordance with the standards established in one of the following, FAA Earned Value Management System Acceptance Guide, Department of Defense EVMS



Interpretation Guide, and/or National Defense Industrial Association (NDIA) EVMS Intent Guide and the NDIA EVMS Acceptance Guide. In addition, the FAA EVMS Surveillance Guide and/or NDIA EVMS Surveillance Guide will be used to determine the continued maintenance of the supplier's EVMS.

To further the goal of increasing the number of Federal agencies which participate in EVMS reciprocity arrangements, Participants will make this MOU readily available to other agencies and share any relevant documentation, best practices and lessons learned.

#### **SECTION 5 – Financial Obligations**

There will be no transfer of funds between the Participants under this MOU and each Participant will fund its own participation, subject to the availability of appropriated funds.

#### **SECTION 6 - Data Rights-Free Exchange of Data**

The Participants agree that the information and data exchanged in furtherance of the activities under this MOU will be exchanged without use and disclosure restrictions unless required by national security regulations (e.g., classified information) or agreed to by the Participants for specifically identified information or data (e.g., information or data specifically marked with a restrictive notice).

#### **SECTION 7 - Duration, Amendment and Termination**

This MOU becomes effective upon the date of the last signature below ("Effective Date") and shall remain in effect until the completion of all obligations of the Participants hereto, or five years from the Effective Date.

Any modification to this MOU shall be executed, in writing, and signed by an authorized representative of the Participants.

Either Participant may unilaterally terminate this MOU by providing thirty (30) calendar days written notice to the other Participant.

#### **SECTION 8 - Points of Contact**

The following personnel	are designated	as the Points	of Contact be	etween the Par	ticipants in the
performance of this MO	U.				

NASA:	<u>FAA:</u>
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#### **SECTION 9 - Dispute Resolution**

All disputes concerning questions of fact or law arising under this MOU shall be referred by the claimant in writing to the appropriate person identified in this MOU as the "Points of Contact." The persons identified as the "Points of Contact" for the Participants will consult and attempt to resolve all issues arising from the implementation of this MOU. If they are unable to come to agreement on any issue, the dispute will be referred to the signatories to this MOU, or their designees, for resolution.

**SECTION 10 – Signatures and Dates**