

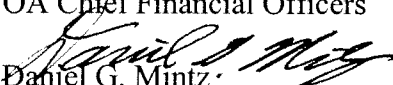


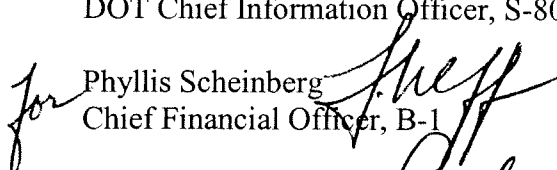
**U.S. Department of
Transportation**
Office of the Secretary
Of Transportation

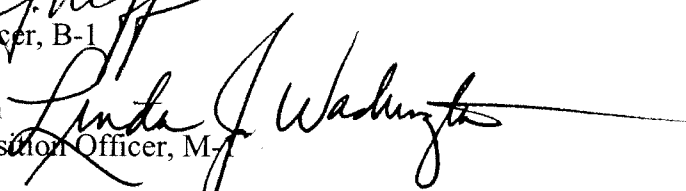
1200 New Jersey Ave., S.E.
Washington, DC 20590

JAN 14 2008

MEMORANDUM TO: Heads of Operating Administrations
Secretarial Officers
OA Chief Information Officers
OA Chief Acquisition Officers
OA Chief Financial Officers

FROM: 
Daniel G. Mintz
DOT Chief Information Officer, S-80

for 
Phyllis Scheinberg
Chief Financial Officer, B-1


Linda J. Washington
Deputy Chief Acquisition Officer, M-7

SUBJECT: **ACTION:** DOT Earned Value Management Policy

Earned Value Management (EVM) is a management best practice that improves our ability to effectively, manage and oversee the Department of Transportation's (DOT) many important programs and projects. The goal of EVM is to institute improved management practices across the Department by establishing a formal approach to tracking program performance. Specifically, it helps ensure that our programs and projects are being delivered within budget, on time, and to specifications. This policy will directly impact areas tangential to program management, requiring the acquisition community to increase the use of performance-based contracts, and providing the budget community with better information with which to make financial decisions. Because of the cross-functional nature of this policy, it has been authorized by the Chief Financial Officer, Chief Acquisition Officer, and the Chief Information Officer.

As the first phase of implementation, EVM in DOT is to be exclusively applied to IT projects and programs, and only to work performed under contract. Future policy updates will broaden the scope to include all programs and work performed by federal employees as well as contractors.

I. Purpose

This document establishes the policy for performing Earned Value Management (EVM) within the Department of Transportation (DOT) and establishes requirements, objectives,

responsibilities, and standards for managing information technology (IT) investments using EVM.

II. Cancellation

This policy immediately cancels and replaces the following DOT policies and related documents:

1. Implementation of Earned Value Management System (EVMS) in the Department of Transportation, Jan 3, 2006 Memorandum

III. Scope

This policy applies across DOT, including all Operating Administrations (OAs) and the Office of the Secretary (OST), and specifically applies to Information Technology (IT) investments, whether owned and operated by DOT, or operated on their behalf, which have total development/modernization/enhancement (DME) or operations and maintenance (O&M) (excluding level of effort) investment costs meeting pre-established thresholds. EVM is not required for "level of effort" operational investments. This policy shall be implemented in conjunction with the DOT EVM Implementation Guide (working draft, to be finalized Q2 FY 2008), DOT Capital Planning and Investment Control (CPIC) Implementation Guide (Q3 FY 2008), and the DOT EVM Handbook (for EVM practitioners) (Q3 FY 2008.)

IV. Authorities

1. Government Performance and Results Act of 1993
2. Federal Acquisition Streamlining Act (FASA) of 1994
3. Clinger-Cohen Act of 1996
4. OMB Circular A-11 (Part 7, Planning, Budgeting, Acquisition & Management of Capital Asset)
5. OMB Capital Programming Guide Supplement to the A-11 Part 7
6. OMB Memorandum M-04-24, "Expanded Electronic Government (E-Gov) President's Management Agenda (PMA) Scorecard Cost, Schedule and Performance Standards for Success"
7. OMB Memorandum M-05-23, "Improving Information Technology (IT) Project Planning and Execution"
8. American National Standards Institute/Electronic Industries Association (ANSI/EIA) Earned Value Management System (EVMS) Standard 748
9. Federal Acquisition Regulation (FAR,) Chapter 1, Title 48 CFR

V. Background

EVM is a tool that provides greater visibility into technical, cost, and schedule performance of a project. While it is used primarily by program managers (PMs), the outputs can be of value to a

wide variety of stakeholders requiring additional insight into the performance of DOT's programs. Implementation of an EVM system (EVMS) is widely recognized as a best practice in effective program management. An EVMS ensures that cost, schedule, technical, and risk management aspects of the project are truly integrated. An effective EVMS:

1. Indicates work progress against planned;
2. Relates time-phased budgets to specific contract tasks in the statements of work (SOW);
3. Relates cost, schedule and technical accomplishment;
4. Produces valid, timely, and auditable data;
5. Allows for statistical estimation of costs to complete the work;
6. Provides DOT and contractor managers with useful information at a practical level of summarization, derived from the same data used by the contractor(s) to manage the work; and
7. Provides an objective, quantifiable measurement of performance at defined periods of the project, which enhances the effectiveness of risk mitigation.

VI. Definitions

ANSI/EIA Standard 748 establishes 32 guidelines with which an EVMS should comply to be consistent with industry best practices. These guidelines are grouped by 5 major categories as follows: Organization; Planning, Scheduling & Budgeting; Accounting; Analysis and Management Reports; Revisions and Data Maintenance.

Earned Value Management (EVM) is a methodology that integrates a program's (or contract's) work scope, schedule, and resources with risk management, thereby providing government and contractor managers with objective visibility into progress on their programs and the ability to manage effectively. By reliably identifying trends and problems early, EVM helps program/project managers effectively plan, control, and manage programs so they can take corrective action and re-plan the work, if necessary. Systematic implementation of EVM throughout the organization facilitates consistent insight of program/project performance, enabling managers to make better-informed decisions.

Earned Value Management System (EVMS) is the integrated set of processes, applications and practice that follow the guidelines in ANSI/EIA-748, "Earned Value Management Systems." The ANSI/EIA-748 guidelines describe the attributes of an effectively integrated cost, schedule and technical performance management system.

Integrated Baseline Reviews (IBR) is a government-led review that is intended to ensure the government and contractor mutually understand program scope, schedule, resources, inherent risk, and management approach, and to ensure early and adequate planning. The IBR identifies risk items that naturally become part of the risk management plan. An IBR provides an opportunity for parties to review the Performance Measurement Baseline (PMB) and to reach agreement on the PMB's: (1) scope of work; (2) schedule; (3) resources requirements; (4) risks; and, (5) assigned EV recognition methods.

Development/Modernization/Enhancement (DME) means the program/project cost for new investment, changes or modifications to existing systems to improve capability or performance, changes mandated by the Congress or agency leadership, personnel costs for investment management, and direct support. For major IT investments, this amount should equal the sum of amounts reported for planning and acquisition in the Exhibit 300.

Mixed Life-Cycle Investment means an investment having both development/modernization/enhancement (DME) and steady state components. For example, a mixed life-cycle investment could include a prototype or module of a system that is operational with the remainder of the system in DME stages; or, a service contract for steady state on the current system with a DME requirement for system upgrade or replacement.

Management-in-Use (Steady State) means a program/project or a part of an investment with a delivered component performing the mission. Investments in the management-in-use phase are required to conduct an annual operational analysis (or as-needed) to determine how well the program/project supports its customers, the strategic and business goals, as well as the financial objectives.

Performance Measurement Baseline (PMB) is a time-phased budget plan against which program/project performance is measured. Budgets assigned to the scheduled control accounts and to higher level Contract Work Breakdown Structure (CWBS) elements, applicable indirect budgets, and undistributed budgets form the PMB budget plan.

Rebaselining is the process by which a program revises its total cost, completion date, and/or scope. (see DOT IT Program Rebaselining Policy)

VII. Policy

1. EVM is a requirement for all IT (per Clinger-Cohen definition) investments meeting pre-established criteria (see Tier classifications in #2 below);
2. The degree to which EVM is applied to IT investments will vary depending on the size and complexity of the IT investment, as follows:
 - a. **Tier I:** IT investments with total DME life-cycle acquisition costs equal to or greater than \$20 million, and/or those on the OMB High Risk List. Tier I investments must implement an EVMS that fully complies with ANSI/EIA Standard 748 EVMS Guidelines.
 - b. **Tier II:** IT investments with total DME life-cycle acquisition costs equal to or greater than \$3 million but less than \$20 million (excluding level of efforts tasks). Tier II investments must apply EVM principles for tracking investment cost, schedule, and technical performance, but need only comply with a subset of ANSI/EIA Standard 748 Guidelines, as detailed in the DOT EVM Implementation Guide.
 - c. **Tier III:** IT investments with total DME life-cycle acquisition costs of less than \$3 million (excluding level of efforts tasks). Tier III investments must apply EVM principles to track investment cost, schedule and technical performance, but are not required to comply with the ANSI/EIA-748 Guidelines. The extent to which EVM is required for each Tier III investment will be determined by the

risk, dollar amount and complexity of the investment, as detailed in the DOT EVM Implementation Guide.

3. EVM is to be applied to contractor work, regardless of contract type. In certain cases it may also be applied to Federal work. Refer to EVM Implementation Guide for details;
4. Where applicable, EVM requirements must be clearly indicated in the investment's solicitation and the resulting contract. The Contracting Officer shall insert requirements provided by the PM/COTR into the contract for IBR's for Tier I and Tier II investments, and for Tier III investments, as deemed necessary by the Contracting Officer and Program/Project Manager. The Contract Data Requirements List (CDRL) must provide that EVM data for these investments be submitted via the Contract Performance Report (CPR.)
5. EVM implementation shall be consistent with all DOT IT Governance processes and related procedures.
6. Waivers to this policy are to be submitted by the PM/CO in writing to the OA CIO, prior to submission to DOT CIO for approval. Processing of waivers is detailed in the DOT EVM Implementation Guide. Grant of waivers in no way implies exemption from sound and rigorous management practices, or from continuous monitoring of program/project cost, schedule, and technical performance.

VIII. Responsibilities

DOT Chief Information Officer (CIO)

The DOT CIO is responsible for oversight of the development, implementation and management of the DOT EVM policy and all EVM-related processes and guidance. The DOT CIO:

- Provides appropriate rigor to ensure EVM is fully integrated into the CPIC process,
- Ensures underlying investments accurately capture the necessary EVM data,
- Analyzes EVM data and provides recommendations on the future of investments,
- Recommends approval of revised IT investment PMBs and forwards to OMB for approval,
- Ensures that DOT and OA EVM policies meet OMB requirements.

DOT Chief Acquisition Officer (CAO) / Senior Procurement Executive (SPE)

The DOT CAO/SPE is responsible for defining requirements for inclusion of EVM policy in the Transportation Acquisition Regulation (TAR) and the Transportation Acquisition Manual (TAM).

DOT Chief Financial Officer (CFO)

The CFO is responsible for providing timely and actual financial information using the Departmental financial system.

OA/OST CIO

The OA CIO oversees the development, implementation and management of OA EVM policy, procedures, and processes in accordance with DOT CPIC and EVM policies and procedures, as well as other policies and guidance. The OA CIO serves as a member of the DOT CIO Council.

OA/OST CFO

The OA CFO is responsible for providing timely and actual financial information using the Departmental financial system.

OA CAO

The OA CAO/Head of Contracting Activity (HCA) is responsible for ensuring requirements for inclusion of EVM are incorporated into contracts within their OAs.

OA IRB

The OA IRB is responsible for recommending approval of the initial and all subsequent PMBs for the same investment.

OA CPIC Coordinator

The OA CPIC Coordinator works with the OA IT Program Managers, the OA CIO and the DOT OCIO to ensure that the required EVM processes are developed, implemented and executed for IT development investments at the OA; that the EVM information is used effectively in the OA CPIC process; and that the EVM results and reports are provided to DOT to forward to OMB in accordance with DOT deadlines.

OA Contracting Officer (CO)

The OA IT Investment Contracting Officer (CO) shall ensure that the investment's solicitation and contract include all regulatory references that apply to EVM reporting, as well as regulatory references that directly affect the technical content of the work program. The CO, in partnership with the IT Program Manager, is responsible for ensuring that all contract deliverables (e.g., Integrated Master Schedule, CPRs) have been delivered by the contractor on time and are in compliance with the contract's requirements. For IT investments supporting Tiers I & II DME efforts, each OA CIO, CO and IT PM are jointly responsible for participating in the conduct of IBRs.

OA Contract Officer Technical Representative (COTR)

The COTR is responsible for ensuring that EVM requirements are met for the contract. The COTR and the IT Program Manager may be the same person for some investments.

OA IT Program Manager

The IT Program Manager acts as the Government's point of contact with the contractor's project management team. He/she responsible for the success of the investment, ensuring that project management principles are applied to his/her investment(s), including the appropriate use of EVM. The IT Program Manager has the primary responsibility of ensuring that the data used to support EVM is accurate, the analysis of EVM data is timely, the reporting of EVM information is current, and the investment's EVM results are reported to the appropriate persons responsible

for oversight. The IT Program Manager, in conjunction with the Contracting Officer, works directly with the project management team to ensure that the contractor incorporates EVM into its management practices. The IT Program Manager also:

- Establishes appropriate cost, schedule, and performance baselines;
- Collects and analyzes EVM data regarding performance against those baselines;
- Prepares corrective action plans or re-baseline proposals, as necessary, when cost, schedule, or performance exceeds acceptable tolerances; and
- Provides required EVM reports as established by the OA, the Department, or OMB.

IX. Procedures

- For investments meeting thresholds requiring review by the DOT CIO, IT Program Managers shall submit the EVM PMB and any associated changes to the DOT CIO for review and approval. For investments that do not meet Departmental threshold for review, IT Program Managers shall submit the EVM PMB and any associated changes to the PMB to the OA IRB for review and approval. Submissions shall address the rationale and driving factors leading to the new investment EVM PMB or any changed PMB.
- Any new major investment EVM PMB or PMB changes agreed to by the DOT CIO will be forwarded to OMB for final approval. Unless specific instruction is given to stop work on the investment, work may continue while any proposed changes to the PMB are under review. Any new major investment EVM PMB, or associated changes not approved by DOT or OA IRB/JRC, will be returned to the IT Program Manager for appropriate action.
- To ensure that there is mutual understanding of risks inherent in the investment's performance plans and underlying management control systems, Integrated Baseline Reviews (IBRs) shall be documented in the project plan and shall be conducted as early as possible, but no later than 90-120 days after contract award.

X. FAA Applicability

Although the FAA has its own EVM policy and is therefore exempted from this policy, FAA is not exempted from sound and rigorous management practices or from monitoring and reporting its program/project cost, schedule and technical performance. FAA will report on its programs/projects to DOT as requested.