


Revised Department of Defense Earned Value Management Policy

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Agenda



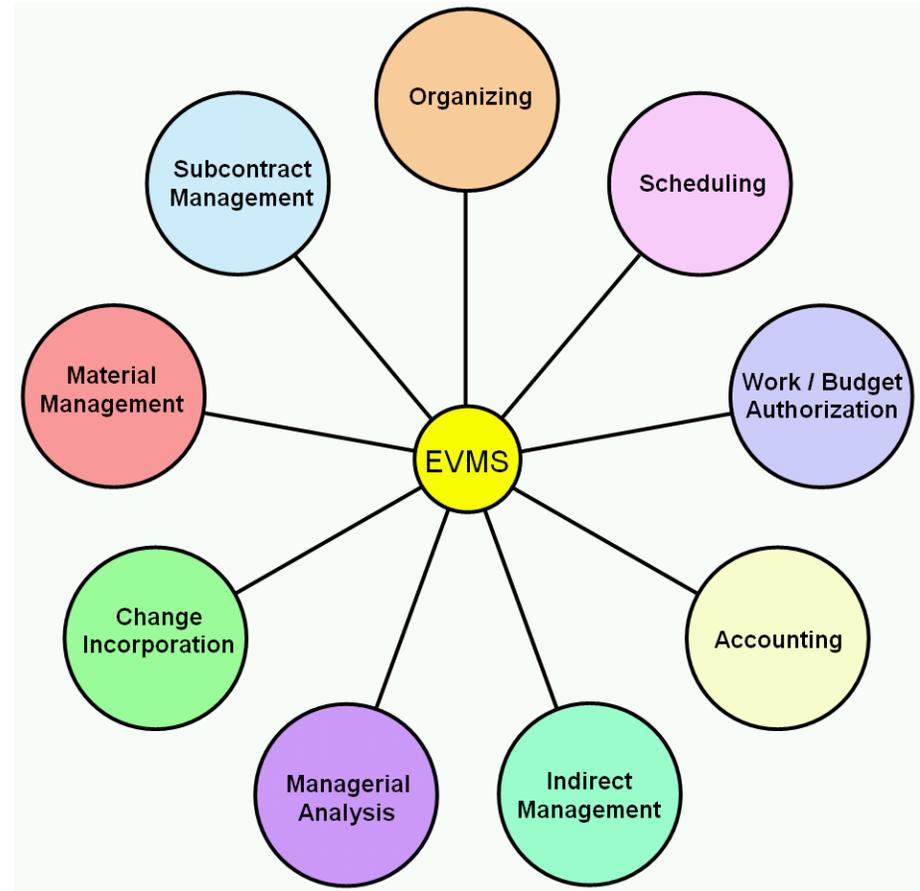
- About Earned Value Management (EVM)
- Impetus for Change
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 - Business Case Analysis
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About Earned Value Management



- EVM is the use of an integrated management system that coordinates work scope, schedule, and cost goals and objectively measures progress toward these goals
- EVM is a widely accepted industry best practice for project management in government and commercial sectors
- Governed by industry standard (ANSI/EIA-748)
- The 32 EVM system guidelines in ANSI/EIA-748 address nine management processes



A management control tool for program managers



Benefits of Earned Value Management



- Means to quantify and measure contract performance—provides cost and schedule visibility
- Early warning system for deviations from plan
- Sound and objective basis for considering corrective actions
- Mitigator of risk associated with cost and schedule overruns
- Forecast of final cost and schedule outcomes

Disciplined management approach is key to success



Impetus for Change



- Contemporary EVM is the product of a technique formalized by DoD in the 1960s
- Cost/Schedule Control Systems Criteria (C/SCSC) used in DoD for more than 35 years
 - 35 criteria (DoD 5000 series)
 - Government ownership
 - Financial orientation – a cost reporting tool
- 1996 - Transitioned from C/SCSC to EVM
 - 32 guidelines (ANSI/EIA-748)
 - Industry ownership
 - Program management orientation – an integrated management process
- 2003 - Concerns raised by industry and DoD and presented to Defense Acquisition Excellence Council (DAEC)
- OSD actions in response to concerns
 - Established EVM working groups
 - Developed revised EVM policy



Industry and DoD Concerns



- **Industry Concerns**

- Erosion of avenues of communication and problem resolution
- Conflicting contractual requirements
- Duplicative management systems reviews
- Unique system surveillance oversight activities
- Proliferation of independent approaches
- Declining government experience and resources

- **DoD Concerns**

- Diverse implementation of EVM among and within companies
- Maturity of industry infrastructure to support “ownership” of EVM
- Lack of institutionalization of EVM as an integral program management process
- Varying levels of confidence in reported data
- DoD program managers taking actions in response to industry’s maturity issues



Previous EVM Policy/Guidance



- DoD Instruction 5000.2, Operation of the Defense Acquisition System, May 12, 2003 – EVM is a Regulatory Information Requirement (Enclosure 3, Table E3.T2)
 - Requirements
 - Implement EVM guidelines in ANSI/EIA-748 on contracts/agreements over designated dollar thresholds (RDT&E – \$73M, Procurement – \$315M)
 - Conduct Integrated Baseline Reviews
 - Policy changes have been submitted for incorporation into update currently in progress
- Defense Acquisition Guidebook, October 17, 2004 (replaced DoD Regulation 5000.2-R)
 - Contains “how to” guidance for previous policy (old thresholds, Cost/Schedule Status Report, etc.)
 - New EVM guidance has been submitted for publication
 - Will include supporting guidance (expectations, exclusions, etc.)



Revised EVM Policy/Guidance: Summary of Changes

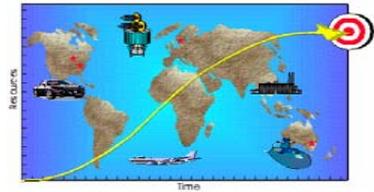


- Uniform requirements for compliance with industry EVM standard (ANSI/EIA-748)
- New application thresholds for cost/incentive contracts (no differentiation between development and procurement)
- Improved Cost Performance Report (CPR) - renamed “Contract” Performance Report
- Expanded use of Integrated Master Schedule (IMS) and linked to CPR
- Clarified requirement for Integrated Baseline Reviews (IBRs) (required when EVM required)
- Eliminated Cost/Schedule Status Report (C/SSR) and CPR-No Criteria

Changes not retroactive but are effective now on new cost/incentive contracts



Revised EVM Policy/Guidance: What Has Not Changed



- EVM still required on cost and incentive contracts
- EVM on Firm-Fixed Price (FFP) contracts continues to require waiver from Milestone Decision Authority (MDA)
 - Guidance in Defense Acquisition Guidebook and DoD Earned Value Management Implementation Guide (EVMIG)
- Responsibility and requirements for government surveillance of contracts remains unchanged
 - Based on effectiveness of contractor's implementation of internal management controls
 - Guidance in EVMIG
- Process for obtaining EVM system validation and acceptance remains unchanged
 - Guidance in EVMIG

***No change to DCMA's role as DoD
Executive Agent for EVM***



Revised EVM Policy/Guidance: New Application Thresholds



<u>Contracts</u>	<u>Thresholds</u>	<u>Requirements</u>
Cost or Incentive Equal to or Above Threshold	\geq \$50M	<ul style="list-style-type: none"> - Compliance with industry EVM standard - <u>Formal EVM system validation</u> - Contract Performance Report - Integrated Master Schedule - Integrated Baseline Reviews - Ongoing surveillance
Cost or Incentive Less Than Upper Threshold but Equal to or Above Lower Threshold	$<$ \$50M but \geq \$20M	<ul style="list-style-type: none"> - Compliance with industry EVM standard - No <u>formal EVM system validation</u> - Contract Performance Report (tailored) - Integrated Master Schedule (tailored) - Integrated Baseline Reviews - Ongoing surveillance
Cost or Incentive Less Than Threshold	$<$ \$20M	<ul style="list-style-type: none"> - EVM optional (risk-based decision) - Cost-benefit analysis required



Revised EVM Policy/Guidance: Business Case Analysis



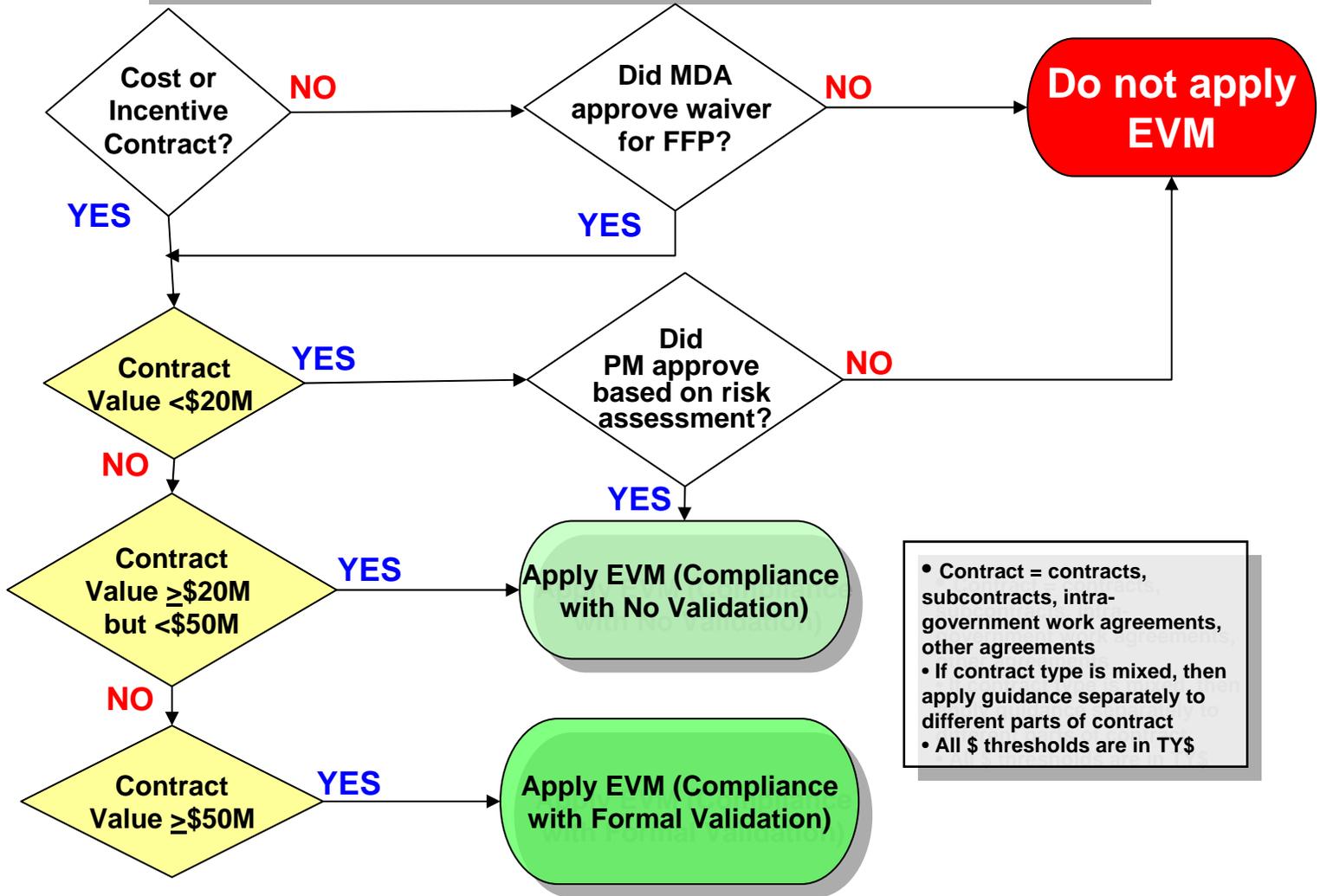
- Used contracts data supplied by DoD and industry; applied proposed new EVM application thresholds
 - Increase in lower threshold from \$6.3M to \$20M results in decrease in number of contracts requiring EVM (DoD data = 2,156; industry data = 1,297)
 - Decrease in upper threshold from \$315M/\$73M to \$50M results in increase in number of contracts requiring a CPR and validated EVM system (DoD data = 535; industry data = 261)
- Used incremental cost algorithm to establish equivalency between difference in level of effort for CPR, Tailored CPR (replacement for C/SSR), and C/SSR (C/SSR = 0.33 CPR; TCPR = 1.1 C/SSR)
 - DoD data – eliminate CPRs on 326 contracts
 - Industry data – eliminate CPRs on 235 contracts
- Conclusion
 - Policy changes will result in relatively significant cost avoidance; cost of eliminating C/SSRs more than offsets cost of additional CPRs
 - Few, if any, additional system validations will be required under the revised policy



Revised EVM Policy/Guidance: Applying the Policy



Decision Process for EVM Application



- Contract = contracts, subcontracts, intra-government work agreements, other agreements
- If contract type is mixed, then apply guidance separately to different parts of contract
- All \$ thresholds are in TY\$



Revised EVM Policy/Guidance: Reporting Requirements



- CPR and IMS reports put on contract via CDRL; requirements in DIDs
- Reports can and should be tailored within bounds of policy
 - Tailoring options are limited for contracts \geq \$50M
 - Most aspects are tailorable for contracts $<$ \$50M
- Consider all risk factors when tailoring CPR and IMS
 - Type of contract (determined by cost risk)
 - Technology
 - Schedule
 - Past contractor performance
- Tailor to reflect internal management – should always reflect how projects are managed on a daily basis (not just a “customer report”)
- Ask for only what is really needed – should not be seen as a cost driver
- Dialogue with industry
- Apply common sense!

Do what makes sense within bounds of policy



Revised EVM Policy/Guidance: Tailoring Guidance



- Guidance for tailoring CPR and IMS for cost or incentive contracts $< \$50\text{M}$ but $\geq \$20\text{M}$
- Considerations when making a risk-based decision to require EVM on cost or incentive contracts $< \$20\text{M}$; guidance for tailoring reporting (program manager approval required)
- Factors to consider if applying EVM on a FFP contract and guidance for tailoring reporting (MDA approval required)

***Tailoring guidance resides in DoD Earned Value
Management Implementation Guide***



Revised EVM Policy/Guidance: Status Overview



- **Actions Completed**

- Released policy changes for government and industry comment (April 2004)
- Prepared business case analysis (November 2004)
- Formally coordinated policy changes within DoD (December 2004)
- Obtained USD(AT&L) approval; issued interim policy memorandum (March 7, 2005)
- Published approved data item descriptions (CPR and IMS) and revised CPR forms (March 30, 2005)
- Published new EVMIG (April 7, 2005)
- Completed update of Work Breakdown Structure (WBS) Handbook (July 30, 2005)
- Published revised EVM guidance in Defense Acquisition Guidebook (October 26, 2005)

- **Actions in Progress**

- Revising DoD Instruction 5000.2
- Revising Defense Federal Acquisition Regulation Supplement (DFARS) clauses
- Revising EVMIG

Much has been accomplished in past two plus years



Revised EVM Policy/Guidance: WBS Handbook



- Contract effort completed to update MIL-HDBK-881A
 - Incorporated changes to DoD acquisition policy/guidance
 - Added/improved upon WBS definitions (with assistance of government/industry working groups)
 - Clarified how WBS is used with newer terms/processes
 - Ensured WBS is characterized as an acquisition tool
 - Integrated with program management, systems engineering, contracts, and cost estimating documents
 - Improved user friendliness and web accessibility
- Changes fully coordinated with OSD, Military Services, and industry
- Common work breakdown structure that follows MIL-HDBK-881A required for CPR, IMS, and Contractor Cost Data Report (CCDR)
- WBS Handbook addresses mandatory procedures for programs subject to DoDI 5000.2; also provides guidance to industry on extending contract work breakdown structures

***New WBS Handbook is available on the
OSD web site and the ASSIST web site***



Revised EVM Policy/Guidance: Defense Acquisition Guidebook



- Chapter 11 – Program Management Activities
- EVM Contents
 - 11.3. Integrated Program Management
 - 11.3.1. EVM Defined
 - 11.3.1.1. EVM Applicability
 - 11.3.1.2. EVM Requirements
 - 11.3.1.3. Integrated Baseline Reviews (IBRs)
 - 11.3.1.4. Contract Performance Management Reporting (CPR and IMS)
 - 11.3.1.5. EVMS Compliance, Validation, and Surveillance
- Guidance to support policy in DoDI 5000.2
- Important “how to” information at intermediate level of detail (less detail than EVMIG)

***Revised EVM guidance is now available in
the Defense Acquisition Guidebook***



Revised EVM Policy/Guidance: DoD Instruction 5000.2



Cost/incentive contracts¹ \geq \$50 million²

- Compliance with ANSI/EIA-748³
- EVM system formally validated and accepted by cognizant contracting officer
- Contract Performance Report (DI-MGMT-81466A)
- Integrated Master Schedule (DI-MGMT-81650)
- Integrated Baseline Reviews

Cost/incentive contracts¹ $<$ \$50 million but \geq \$20 million²

- Compliance with ANSI/EIA-748³
- No formal EVM system validation
- Contract Performance Report (DI-MGMT-81466A) (tailoring recommended)
- Integrated Master Schedule (DI-MGMT-81650) (tailoring recommended)
- Integrated Baseline Reviews

Cost/incentive contracts¹ $<$ \$20 million²

- EVM optional based on risk assessment
- Requires cost-benefit analysis
- Requires program manager approval

Firm-fixed price contracts¹

- EVM discouraged regardless of dollar value
- Requires business case analysis
- Requires milestone decision authority approval

***In process in DPAP;
publication
expected by the
end of 2006***

Refer to Defense Acquisition Guidebook and DoD Earned Value Management Implementation Guide for supporting guidance.

¹Contracts = contracts, subcontracts, intra-government work agreements, and other agreements.

²Application thresholds are in then-year dollars.

³ANSI/EIA-748 = American National Standards Institute/Electronic Industries Alliance Standard 748, *Earned Value Management Systems*.



Revised EVM Policy/Guidance: DFARS Clauses



- New DFARS clauses are in process (Case Number 2005-D006); clauses are compatible with forthcoming EVMS FAR clause
 - EVM System Validation Requirement (contracts \geq \$50M)
 - Solicitation provision: 252.242-7001
 - Contract clause: 252.242-7002
 - EVM System Compliance Requirement (contracts \geq \$20M but $<$ \$50M)
 - Solicitation provision: 252.242-7005
 - Contract clause: 252.242-7006
- Interim guidance
 - Apply existing clauses (252.242-7001 and 252.242-7002) directly on contracts \geq \$50M
 - Include the following paragraph in statement of work for contracts \geq \$20M but $<$ \$50M
 - “In regards to DFARS 252.242-7001 and 252.242-7002, the contractor is required to have an Earned Value Management System that complies with ANSI/EIA-748; however, the government will not formally accept the contractor’s management system (no compliance review).”*
- Handle EVM non-compliance same as any other contractual problem

***Next steps...adjudicate public comments;
final rule some time in 2006***



Revised EVM Policy/Guidance: EVMIG



- Maintained by DCMA as the Executive Agent for EVM
- New version reflecting revised EVM policy approved by DCMA Director in April 2005 – commitment made to update again at appropriate time
- DCMA is currently working on this update
 - Two rounds of DoD comments received and incorporated as appropriate (June and September)
 - Out for formal DoD coordination with suspense of May 31
- Notable improvements
 - Has been substantially rewritten and reformatted
 - Expanded guidance on IMS
 - Added change request form

Publication expected in June 2006



Revised EVM Policy/Guidance: Sources of Information



- OSD EVM web site
- EVM Community of Practice (AT&L Acquisition Community Connection web site)
- Defense Contract Management Agency web site
- ASSIST web site
- DoD Forms Program
- National Defense Industrial Association web site



Closing Thoughts



- OSD continues to make EVM a priority and plans to stay actively engaged
- EVM working groups will continue to work issues, share improvement ideas, and recommend and implement solutions
- Goal = to ensure performance management processes are effective, consistent, and reflective of industry best practice



Working together is the key to success!