



# **PMGlobal Governance and Controls Symposium April 10, 2013**

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**Washington, DC**

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# Agenda

- Introduction to the College of Performance Management (CPM)
- History & global status of Earned Value Management (EVM)
- Lessons Learned and Trends
- Summary & Questions

# Brief History of CPM

- 1986 founded as the Performance Management Association (PMA)
- Became a part PMI
  - 1999 College of Performance Management (CPM)
  - 2011 Earned Value Management Community of Practice
- 2012 emerged as an independent organization as the College of Performance Management (CPM)

# Overview of CPM

The College of Performance Management (CPM) is a global, non-profit, professional organization dedicated to developing and disseminating the principles and practices of earned value management and other project performance management techniques.

# CPM Mission and Vision Statement

- **Mission**

Share, promote, and advance the best of planning, control, and performance management for projects of all sizes and complexity.

- **Vision**

Be globally recognized as the world's authority on earned value management and other project performance management techniques.

# CPM Objectives

- To improve the professional status of all persons engaged in the practice of earned value management and other project performance management techniques.
- To provide a focal point for dissemination of earned value management and project performance management knowledge.

# CPM Objectives (continued)

- To promote global collaboration in project performance management practice, education, and research.
- To encourage government and industry support for research and educational programs that will improve earned value management and other project performance management techniques.

# CPM is Best Known For

- Two annual conferences related to EVM and Integrated Project Management (IPM)
  - International Integrated Performance Management (IPM) Conference – Each Fall in the Washington DC Area
  - EVM World – Each Spring (someplace warm)
- Global Outreach
- Research projects
- The Measurable News



# Current Initiatives

- Establish local CPM chapters within the US and globally
- Establish a internationally recognized multitier EVM certification program for EVM professionals, Control Account Managers (CAMs) and Program Managers (PMs)
- Deliver educational content through regularly scheduled webinars
- Facilitate outreach to seek knowledge, new ideas, and collaborate on a global basis



# Current Initiatives (Continued)

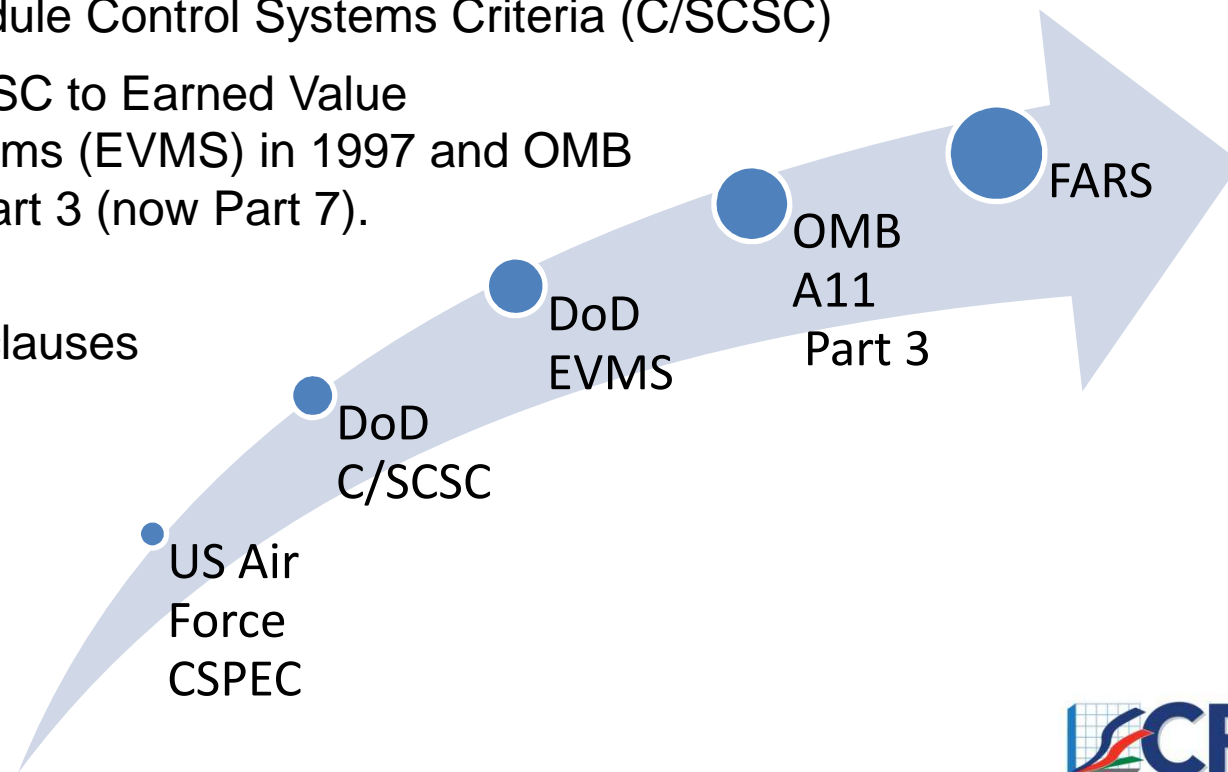
- Maintain, update and expand our current on-line reference library
- Sponsor research projects related to project planning & controls, earned value management, and other performance management techniques
- Build relationships with other professional organizations, industry leaders, and government agencies to foster the adoption of earned value management, and other performance management techniques



# **HISTORY & GLOBAL STATUS OF EARNED VALUE MANAGEMENT**

# Brief History of EVM in US Federal Government

- Air Force pioneers earned value techniques on the Minuteman program in the 1960s as Cost/Schedule Planning and Control Specifications (C/SPEC)
- Department of Defense (DoD) extends C/SPEC methodology agency wide as Cost/Schedule Control Systems Criteria (C/SCSC)
- DoD reforms C/SCSC to Earned Value Management Systems (EVMS) in 1997 and OMB follows with A-11 Part 3 (now Part 7).
- Federal Acquisition Regulation (FAR) clauses issued in 2006
- DFAR Business Systems clause issued in 2012



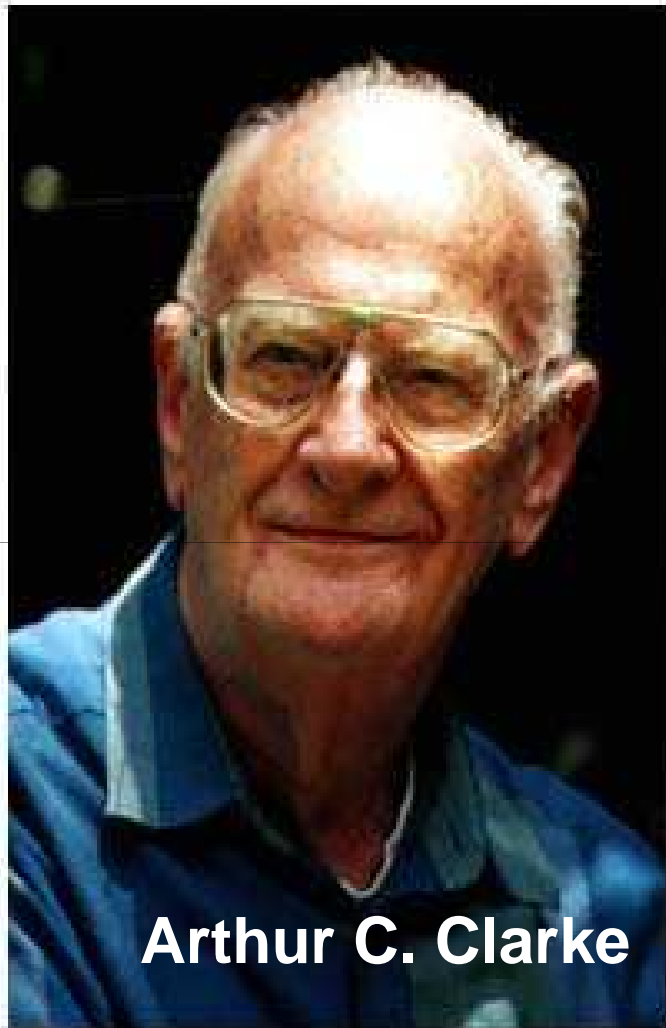
*The Civilian Agency Industry Working Group provides a forum for the open exchange of government and industry views on performance-based management systems, including Earned Value Management (EVM) systems.*

***Specific objectives include:***

- *Promoting the understanding and implementation of a process that integrates systems engineering, scope management, cost estimating, procurement, risk management and scheduling,*
- *Supporting the review and coordination of civilian agency EVM policies, guidance and practices,*
- *Serving as a resource for EVM issues and concerns with civilian agency EVM policy, procedures, and practices,*
- *Analyzing and identifying solutions related to EVMS on major issues,*
- *Identifying best practices which contribute to improved management of schedule and costs,*
- *Researching and/or providing best practices guidance and assistance to government and industry partners,*
- *Providing a consolidated response on NDIA guides, OMB issues and policies, and GAO issues and reports,*
- *Rendering decisions and issuing positions where appropriate.*







**“Every revolutionary idea seems to evoke three stages of reaction. They may be summed up by the phrases...**

**(1) It’s completely impossible.**

**(2) It’s possible, but it’s not worth doing.**

**(3) I said it was a good idea all along.”**

# Google's EVM Snapshot

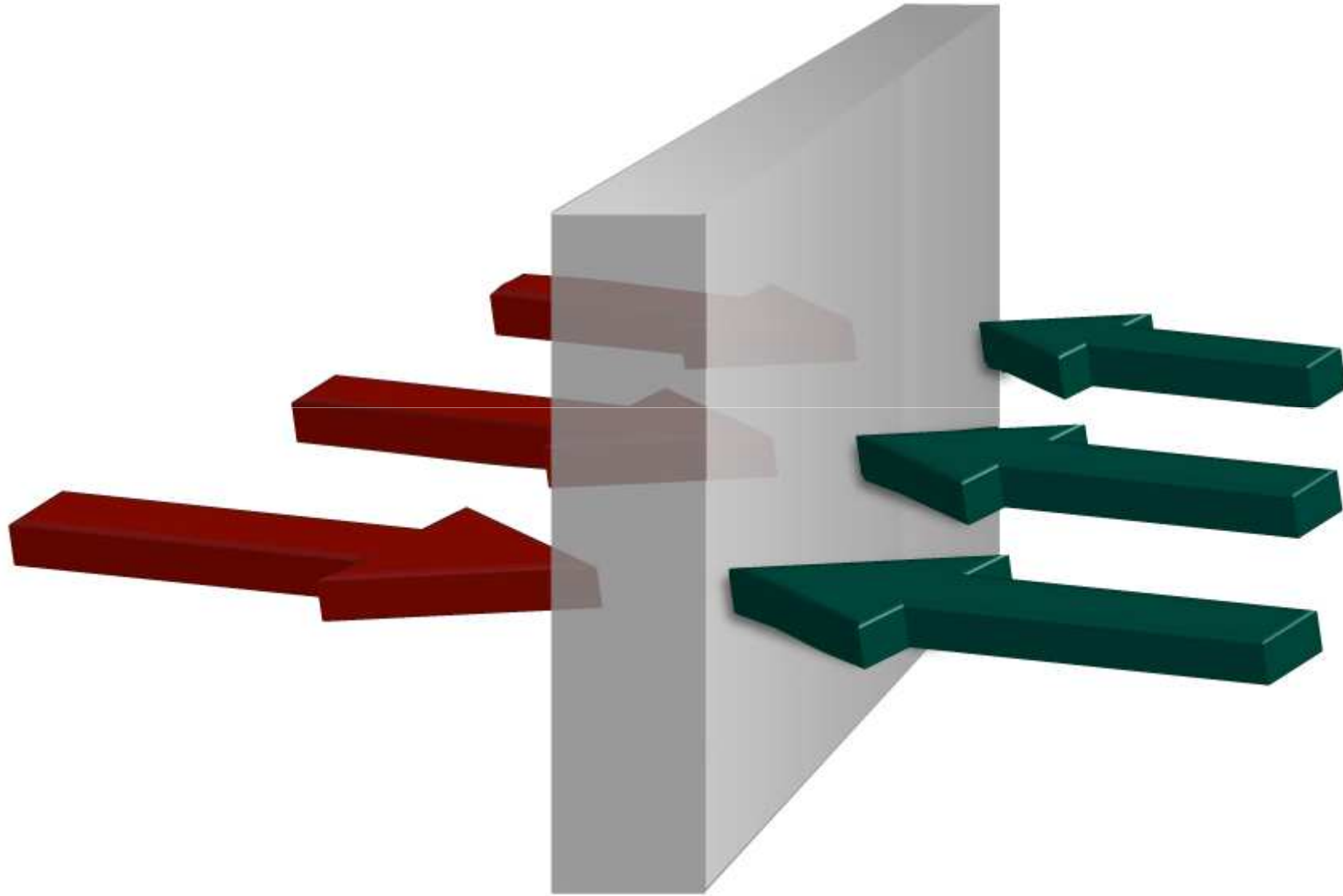
- |                                    |              |
|------------------------------------|--------------|
| 1. "Earned Value Management" (EVM) | A. 22,300    |
| 2. "EVM Training"                  | B. 1,720,000 |
| 3. "EVM Formulas"                  | C. 2,610,000 |
| 4. "EVM Jobs"                      | D. 2,080,000 |
| 5. "EVM Criticism"                 | E. 1,770,000 |
-



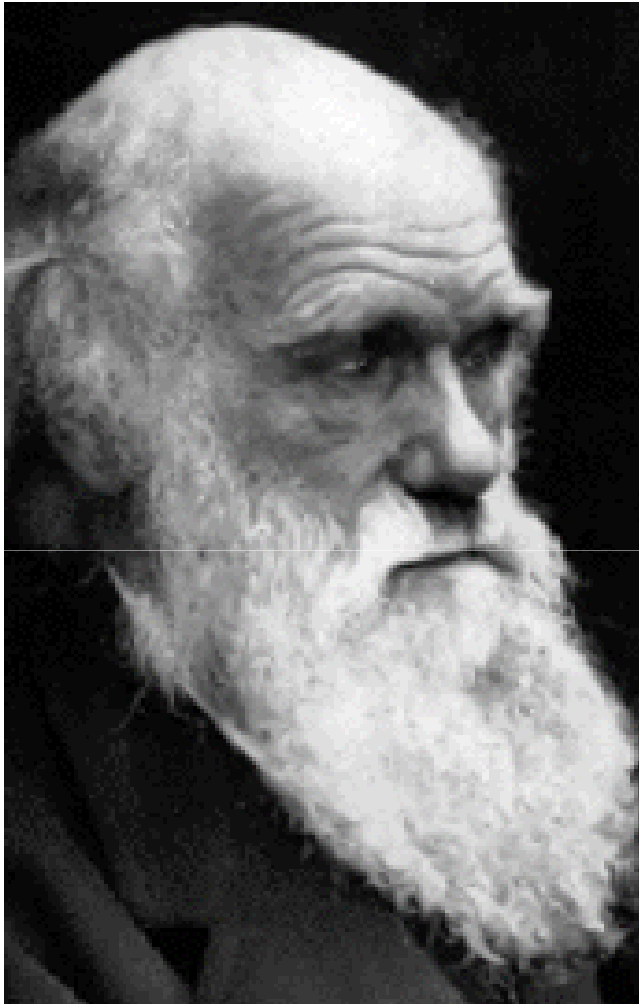
Courteously of Vice Admiral Joe Dyer, USN



# A DIFFERENT KIND OF “VECTOR ANALYSIS” OR FORCE BALANCE...



Courtesy of Vice Admiral Joe Dyer, USN



**“It is not the strongest of the species that survive, nor the most intelligent, but the one most responsive to change.”**

**Charles Darwin**

Courteously of Vice Admiral Joe Dyer, USN

# MOVE TO THE RIGHT TO REDUCE RESISTANCE...



**Compliance**

**Value Added Tool**

Courteously of Vice Admiral Joe Dyer, USN

# MOVE TO THE RIGHT TO REDUCE RESISTANCE...

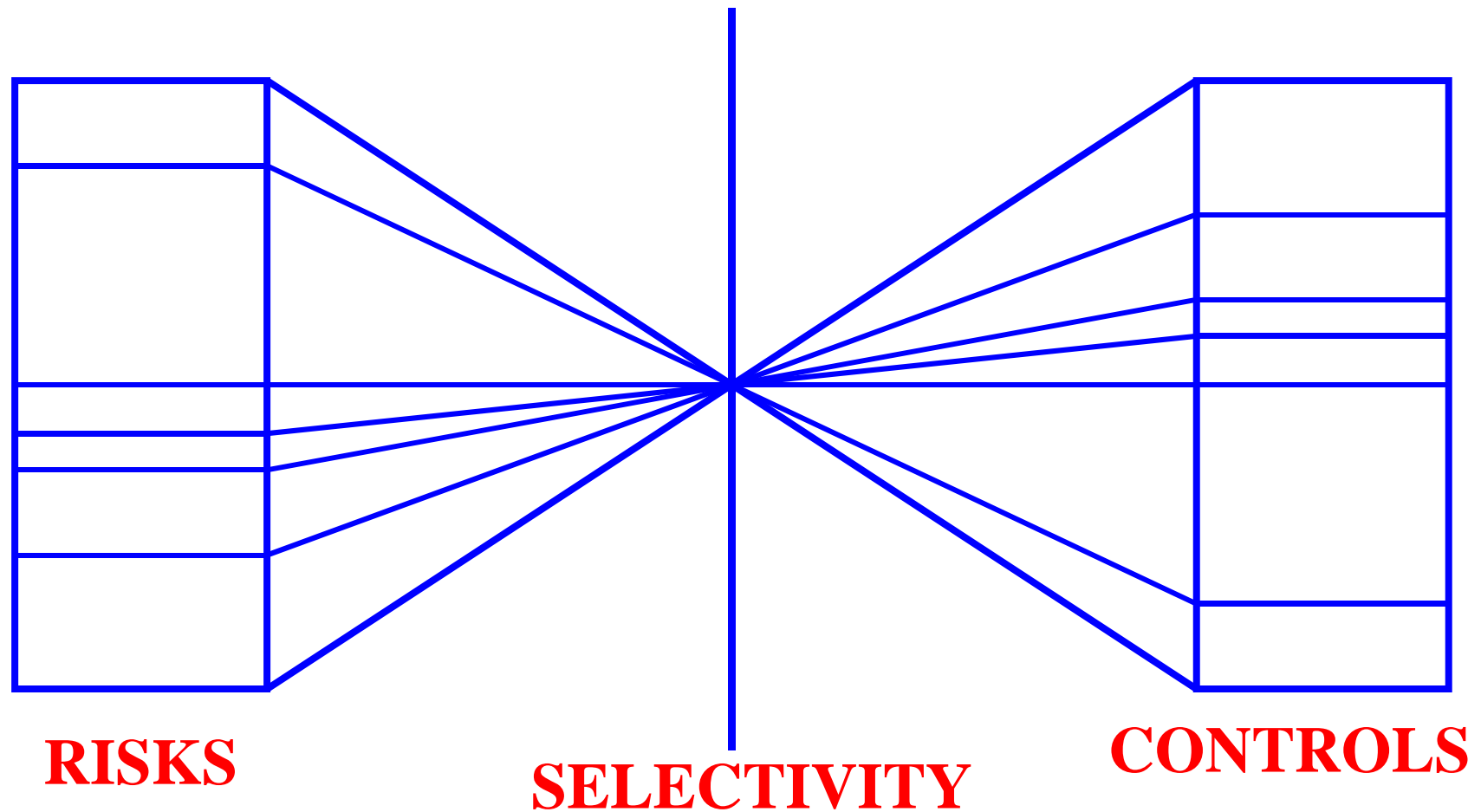


**“One Size Fits All”**

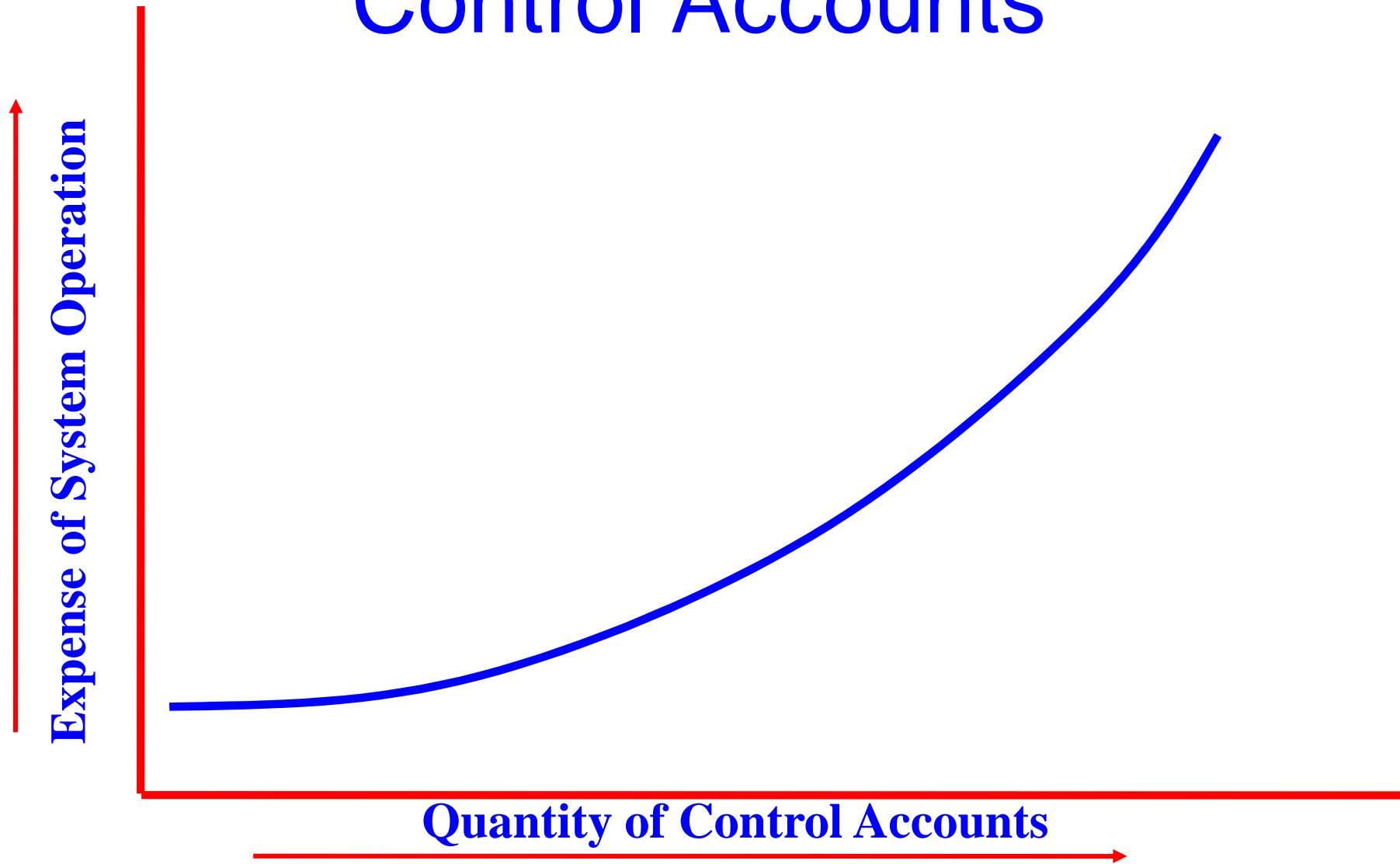
**Tailor for...**

Courteously of Vice Admiral Joe Dyer, USN

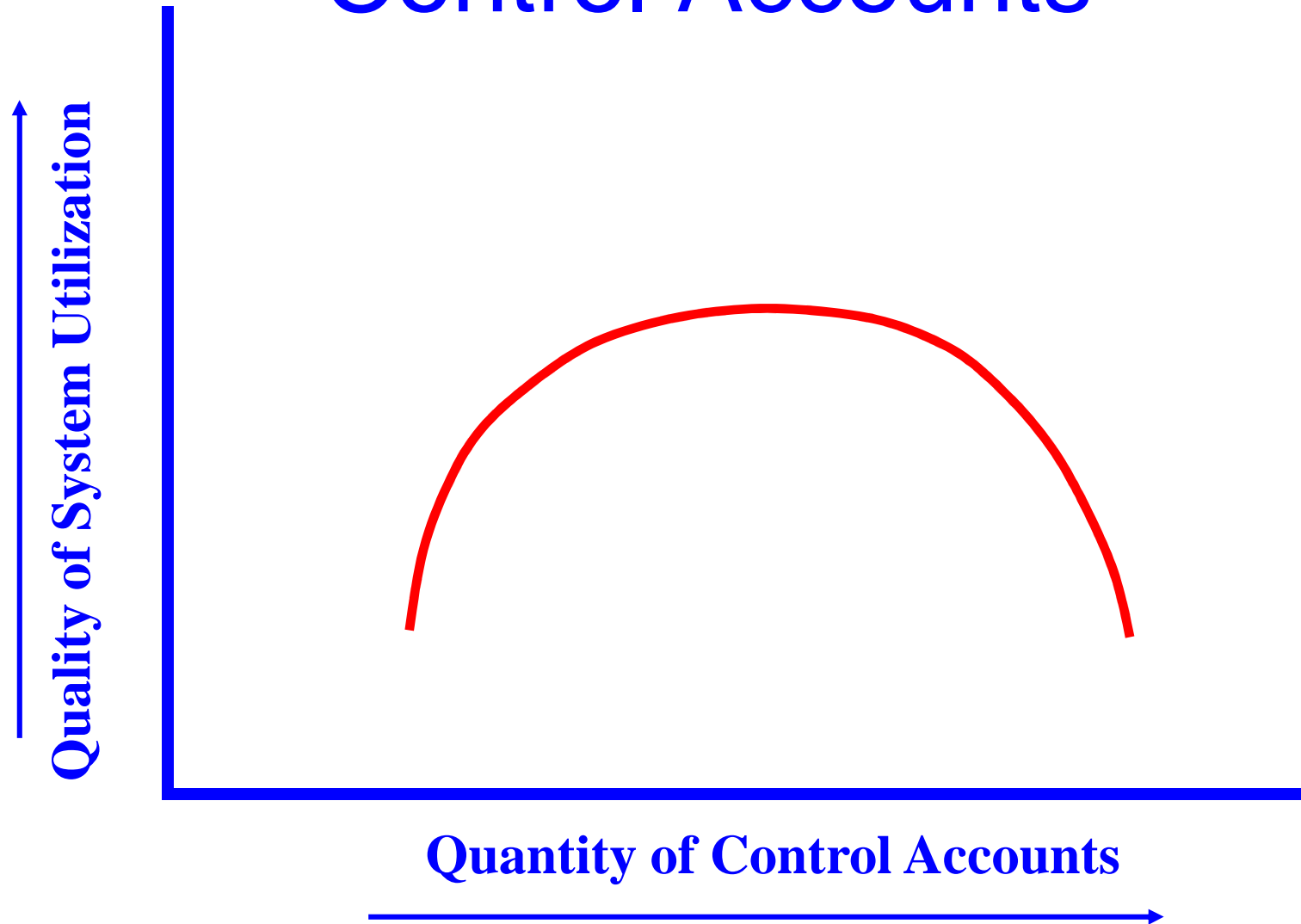
# Risk Analysis And Selective Controls



# Expense Versus Number Of Control Accounts



# Quality Versus Number Of Control Accounts



# Industry Sector & Motivation

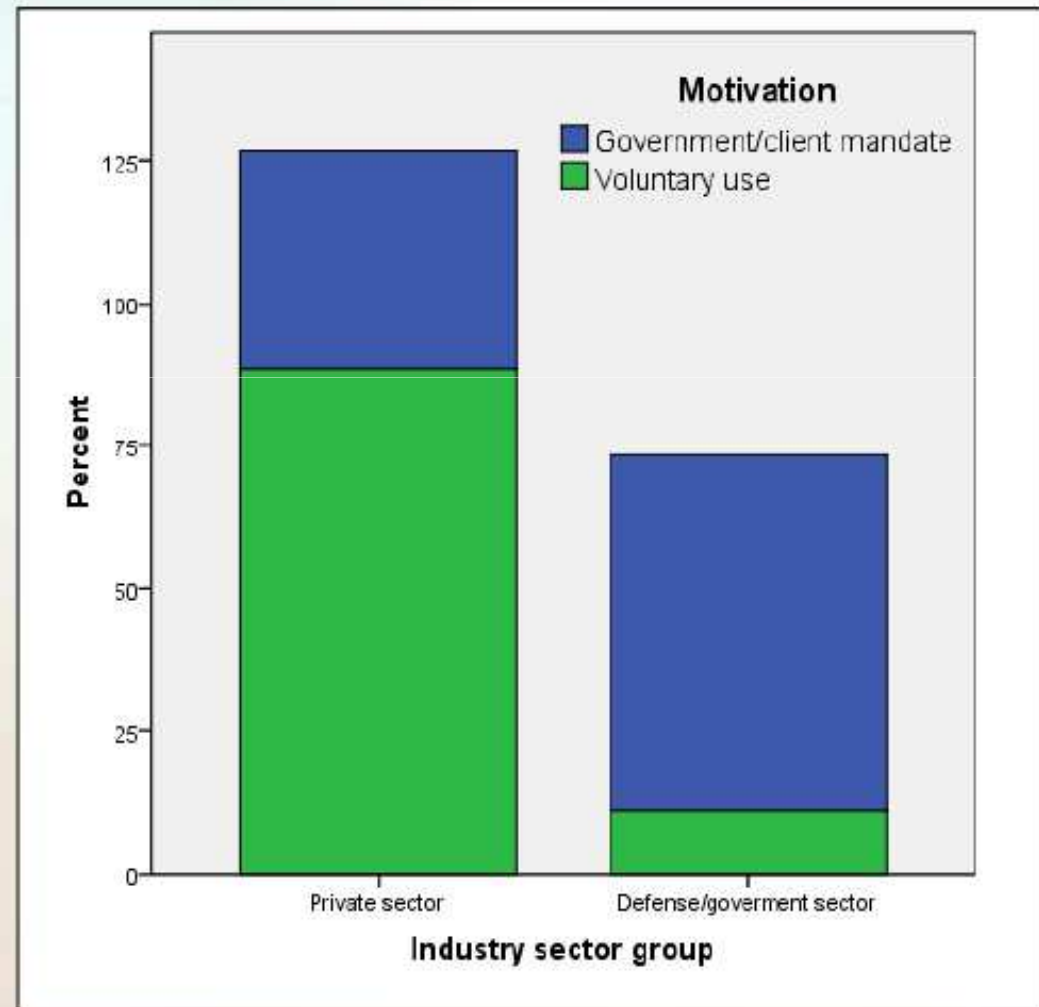
## Overall

- 69% voluntary use
- 31% mandatory use

## By industry

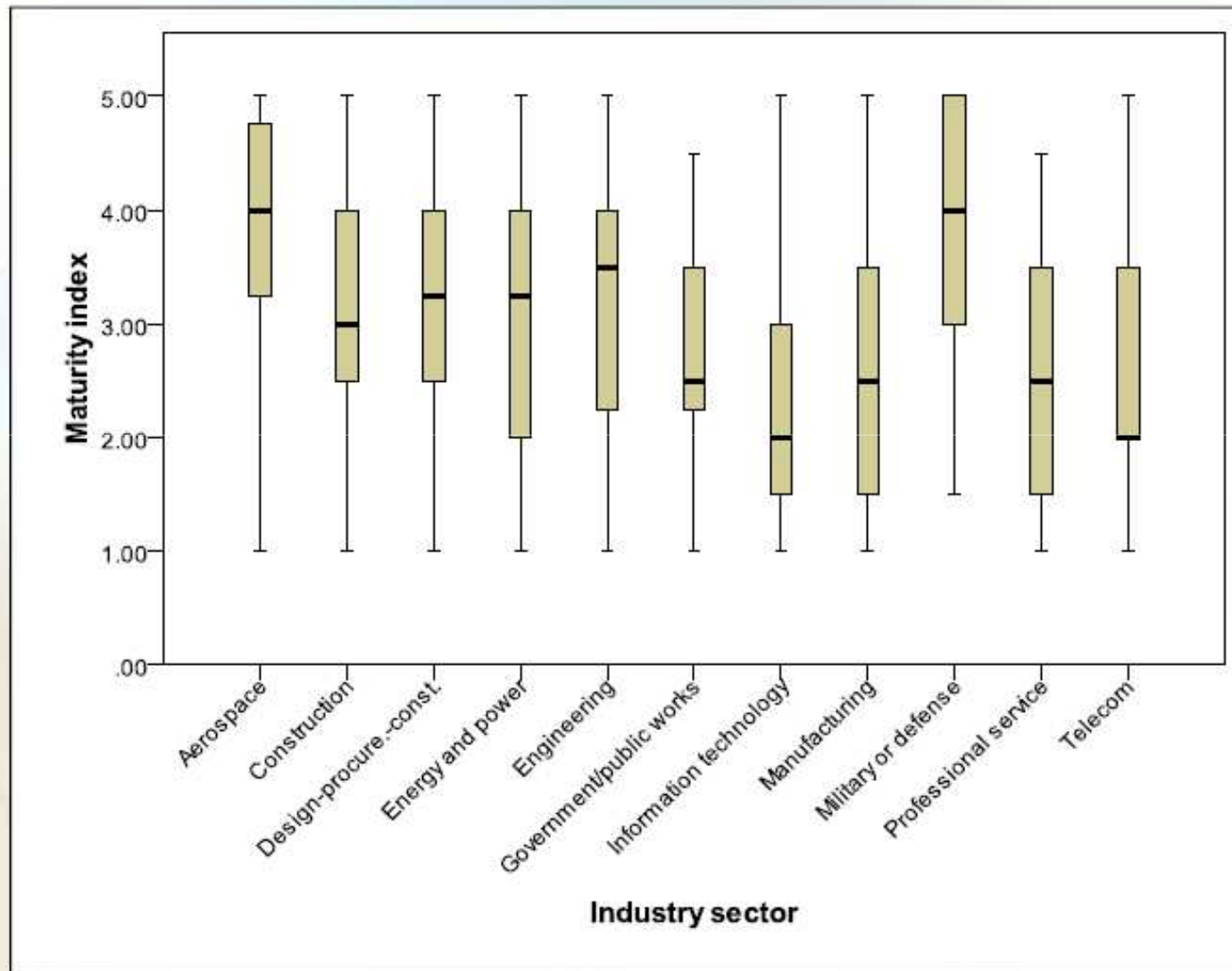
- 71% mandatory use in defense/government
- 84% voluntary use in private industry

## Industry sector & motivation





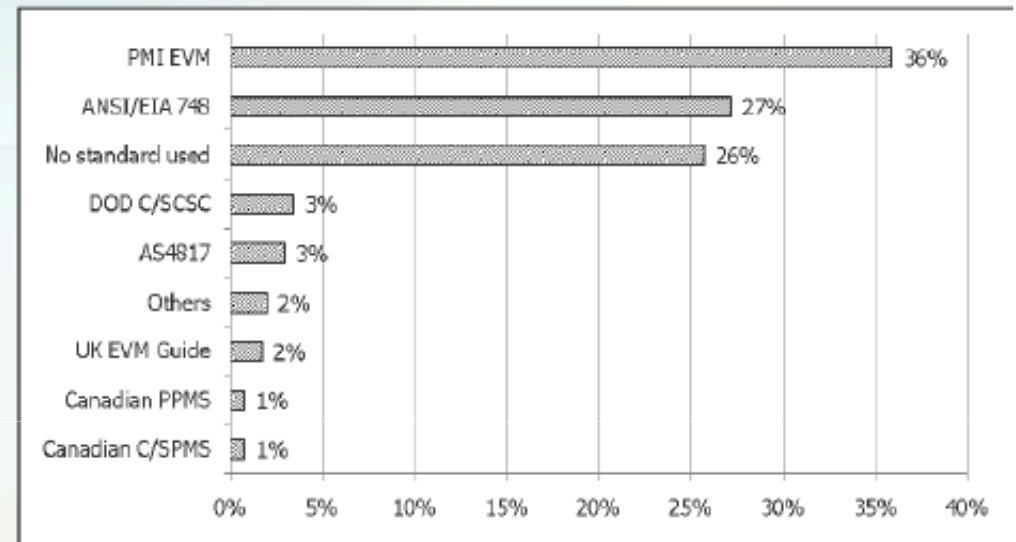
# Comparison – EVM Maturity (3/3)



### 3. EVM Practice Standards (1/2)

- **Criteria-based EVM standard**

- Use a criteria-based philosophy
- Specify criteria that an EVM system must meet
- E.g. ANSI/EIA 748, AS4817, UK EVM Guide



- **Broad-based EVM guide**

- For broad-based project-management community rather than a compliance requirement document
- Focus on essentials of EVM and its integration with other project management process
- PMI's *Practice Standard for Earned Value Management*

# Lessons Learned

- Must have top management support to implement and maintain an EVMS
- Start each project with clearly defined scope and an accurate/realistic cost estimate
- Use timely Integrated Baseline Reviews (IBR's) to validate the baseline and identify risk
- Standardize processes, tools, and training to make implementations on new projects quicker, cheaper, and ultimately more cost effective to the enterprise

# Lessons Learned (Continued)

- Scale the management system based upon project size and risk
- Balance the data analysis needs with the level at which control accounts/work packages are established
- Data quality is “self cleansing” if the data is used by management to make decisions

# Trends

- More emphasis on network schedules and the scheduling discipline/process
- Closer integration of the schedule with
  - Integrated Master Plan (IMP)
  - Earned Value tool
  - Risk Management system
- More Emphasis on root cause analysis & corrective action tracking
- Utilization of Earned Schedule (ES) for additional schedule performance insight

# Trends (Continued)

- Senior managers are demanding more accurate, more timely and more reliable information to support data driven decisions
- System validations & surveillance activities are becoming more data driven
- Performance Management systems are becoming more common place on projects of all sizes

# Summary

- Earned Value is a scalable /tool which can be used on complex projects of all sizes
- Earned Value is alive and growing on a global basis
- CPM seeks knowledge from around the globe
- Is committed to providing the collaborative hub for project planning & controls, earned value management, and other performance management techniques



Questions?





# Backup Slides

# Global EVM Implementations

- Australia
- Canada
- Sweden
- Italy
- Germany
- Spain
- United Kingdom
- United States
- Russia
- Japan
- Israel
- Greece
- Middle East
- Switzerland

# Google: “Performance-Based Management”

- “Performance-based management requires that cost, schedule and performance goals be established ....”
- “Establishing strategic performance objectives; measuring performance; collecting, analyzing, reviewing, and reporting performance data; and using that data to drive performance improvement.”
- “Traditionally, these constraints have been listed as "scope," "time," and "cost. A further refinement of the constraints separates product "quality" or "performance" from scope, and turns quality into a fourth constraint.”

# US Federal Agencies

Agency	EVM Requirements	IBR	Schedule Reporting	Cost Reporting	System Validations <sup>[1]</sup>	Policy URL
Social Security Administration	Major initiatives that require a separate Exhibit 300 Smaller high risk projects (as defined by OMB Memo M-05-23) Programs with large amount of development, new design concepts, and/or new technologies that present a risk to operations or management objectives Projects > \$20M over the life of the project	Within 180 days after contract award				
Transportation	Based on DME life cycle acquisition costs. Tier I: = or > \$20M, uses 32 Guidelines Tier II: = or > \$8M and < \$20M, uses 26 Guidelines Tier III: < \$8M, uses 21 Guidelines	Tier I and II As needed for Tier III			Not defined, will accept FAA validations	
Treasury	External validation required on contracts = or > \$50M. Self validation required on contracts = or > \$20M and < \$50M. "Core" EVM requirements (10 guidelines) on contracts <\$20M.	Occur within 3-6 months of contract award			MOU with DCMA. Per the NDIA PMSC Surveillance Guide	<a href="http://www.irs.gov/pub/irs-procure/tj-attachment13-evmguidev2.0.pdf">http://www.irs.gov/pub/irs-procure/tj-attachment13-evmguidev2.0.pdf</a>
Veteran Affairs	EVM policy has been rescinded					

# US Federal Agencies

Agency	EVM Requirements	IBR	Schedule Reporting	Cost Reporting	System Validations <sup>[1]</sup>	Policy URL
Agriculture	Compliance for all major IT investments for which agencies are planning to spend DME dollars					<a href="http://www.ocio.usda.gov/directives/doc/DR3130-006.htm">http://www.ocio.usda.gov/directives/doc/DR3130-006.htm</a>
Commerce	Required on IT projects = or > \$25M					<a href="http://ocio.os.doc.gov/ITPolicyandPrograms/Capital_Planning/ssLINK/PROD01_002091">http://ocio.os.doc.gov/ITPolicyandPrograms/Capital_Planning/ssLINK/PROD01_002091</a>
Defense	Required on cost or incentive contracts = or > \$20M. May be applied to cost or incentive contracts < \$20M if high risk. Validation required on cost or incentive contracts = or > \$50M.	Within 180 days after contract award, exercise of options, and major modifications	DID DI-MGMT-81650 (2005) – Integrated Master Schedule (IMS)	DID DI-MGT-81466A (2005) – Contract Performance Report (CPR) DID DI-MGMT-81468 (1998) – Contract Funds Status Report (CFSR)	DCMA performs all validations. Will accept only DCMA validations.	<a href="https://acc.dau.mil/CommunityBrowser.aspx">https://acc.dau.mil/CommunityBrowser.aspx</a>
Energy	Compliance required for contracts = or > \$20M; validation required for > \$50M			DID DI-MGT-81466A (2005) – Contract Performance Report (CPR)	DOE (OECM) or contracted third party performs validations. Will also accept FAA system validation.	<a href="https://www.directives.doe.gov/directives/current-directives/directives-current-400-series">https://www.directives.doe.gov/directives/current-directives/directives-current-400-series</a> See DOE Order 413.3B, also DOE Guides 413.3-5A and 413.3-10
FAA (also see DOT)	Required on contracts = or > \$10M	Within 90 to 180 days after contract award and 90 to 180 days after program baseline is established by the Joint Resources Council	IMS required for programs and major program contracts > \$10M. DID DI-MGMT-81650 (2005) – Integrated Master Schedule (IMS).	CPR required for major program contracts > \$10M. DID DI-MGT-81466A (2005) – Contract Performance Report (CPR)	FAA performs validations. Will also accept DoD system validation.	<a href="http://fast.faa.gov/">http://fast.faa.gov/</a> Select Measurement & Analysis under the Acquisition Practices topic, then select Earned Value Management topic

Source: NDIA Program Management Systems Committee (PMSC) Rev 021412

# US Federal Agencies

Agency	EVM Requirements	IBR	Schedule Reporting	Cost Reporting	System Validations <sup>[1]</sup>	Policy URL
Health & Human Services	Compliance required for contracts = or > \$10M; validation required for contracts = or > \$25M	Within 90 days after contract award. May conduct pre-award IBR if warranted.				<a href="http://www.hhs.gov/policies/hhsar/subpart334.html">http://www.hhs.gov/policies/hhsar/subpart334.html</a>
Homeland Security	Compliance required for contracts = or > \$20M; validation required for contracts = or > \$50M; discretionary between \$5M and \$20M	Within 90 days after contract award			MOU with DCMA	<a href="http://www.dhs.gov/xopnbiz/regulations/">http://www.dhs.gov/xopnbiz/regulations/</a> Select the Homeland Security Acquisition Manual topic, see Subchapter 3034.2
Housing and Urban Development	Required for major IT investments = or > \$5M					<a href="http://www.hud.gov/offices/cpo/evms.cfm">http://www.hud.gov/offices/cpo/evms.cfm</a>
Intelligence Community	Follows DoD requirements	Same as DoD	Same as DoD	Same as DoD	May perform system validation independent of DCMA.	Same as DoD
Interior	All contracts = or > \$20M	All contracts			Accepts any validation	
NASA	Compliance required for contracts = or > \$20M; validation required for contracts = or > \$50M			NASA Form (NF) 533 M (Monthly) or Q (Quarterly). 533M required if > \$500K and POP > 1 year or > \$1M. 533Q required if > \$1M and POP > 1 year.	MOU with DCMA	<a href="http://evm.nasa.gov/">http://evm.nasa.gov/</a>