How to prepare for a DOE EVMS Certification

Instructor: Basil A. Soutos, Founder & Principal
Company: Samos Advisors LLC
(M) 703-409-5941
Email: bsoutos@samosadvisors.com
Website: www.samosadvisors.com
Learning Objectives

DOE EVMS Certification Requirements
- Review PM-30 EVMS Certification Requirements
- Discuss PM-30 EVMS Certification Practices e.g., Data Driven Model

Contractor EVMS Roadmap
- Discovery & Planning Phase
- Contactor Readiness Phase
- On-site Review & Closeout Phase

Best Practices & Final Thoughts
- Contactor Best Readiness Practices
- Future of EVMS Reviews e.g., Beyond the Data Driven Model
Founder & Principal Consultant

- Samos Advisors LLC is a leading provider of Project Management and EVM system consulting services serving the U.S. Government and industry clients dedicated to project management excellence
- 30+ years of Project Management and Earned Value Management System design, development, and implementation
- Held various leadership positions in industry and government assuring the implementation and use of Project Management and EVMS as part of effective program management process and reporting tool
- Recognized EVMS SME by the U.S. Department of Defense (DoD), DOE, U.S. Intelligence Community, HHS/CMS and Bio-Pharmaceutical industry
- Trained over 4,500+ acquisition professionals in EVMS basic and advance concepts, variance analysis reporting, & CAM training
- Prepared, trained, and facilitated more than 75+ Government / Industry EVMS reviews (e.g., Contract Implementation Review (CIR), EVMS Post Award Conferences, Integrated Baseline Review (IBR), EVMS Surveillance and EVMS Certification Reviews
DOE PM-30 EVMS Certification
(Background)

- **Policy**
  - “DOE Order 413.3B, Program and Project Management for the Acquisition of Capital Assets (in excess of $100Mil)”

- **Purpose**
  - “Verify if an integrated and compliant EVMS has been defined, implemented and is being maintained by the contractor for use on a capital asset acquisition projects”

- **Objective**
  - “DOE PM-30 will determine if compliance with the EIA-748 Standard as defined by the NDIA EVMS Intent Guide (see next slide), PASEG and GAO Guide”

- Typically, PM-30 requires a 15 month EVMS certification review cycle

Data Source: Contractor EVMS Certification Plan
DOE PM-30 EVMS Certification
(Data Source: NDIA EVMS Intent Guide)

Sample EVMS Certification Focus Areas

Sample EVMS Certification Focus Areas
DOE PM-30 Review Process

(Background)

- Determine Scope of Review & Agenda
- Weekly Contractor & PM-30 Conference Calls
- Use of NDIA EVMS Intent Guide and EVMS Attributes for each 32 EVMS guidelines as the basis for compliance
- Manual and Automated Data Driven Model
  - Complete Compliance Review Check List (CRC)
  - Established Testing Protocols & Reporting Thresholds
  - Submission of 3 Contractor “Data Calls”
  - Isolates [identify] Systemic Issues
  - Determine EVMS compliance with EIA-748
DOE PM-30 Review Process
(Background)

• PM-30 Area Team Leads document preliminary & final recommendations to the PM-30 Review Chief
  ✓ Prepare IFF (Interview Finding Forms)

• PM-30 On-Site Review Process
  ✓ Conduct Contractor / PM-30 In-briefs
  ✓ Review EVMS Documentation & Story Boards
  ✓ Conduct Interviews
    ✓ Follow “Data Driven” Review Approach / Complete IFFs
  ✓ Conduct Interviews / Daily Meetings
  ✓ PM-30 Interview & Summarization
  ✓ Review Director reviews preliminary PM-30 Outbrief with Contractor Site Project Director
Example Contractor EVMS Certification Readiness Roadmap

1. Discovery & Planning Phase
   - Independent Cost Estimate (ICE)
   - External Independent Review (EIR)
   - PM-30 Road Side Assist Visit (RSAV)
   - Contractor Certification Readiness Meetings

   Roles and Resp.
   - Project EVMS Sponsor/Owner
   - Certification Lead / Admin. Support
   - Corporate / EVMS SMEs
   - Develop “Plan for the Plan”

   EVMS Process
   - Policies/ EVM System Description
   - Procedures
   - Process Flow Charts
   - Job Aids / White Papers

   Tools & Training
   - E-CAM Notebook
   - On-line EVMS Training & Quiz
   - Data Analytics
   - Data Analysis Tools
   - Data Call Submissions 1-2-3

2. Contractor Readiness Phase
   - Contractor / DOE Weekly Meetings (e.g., Data Call Concerns)
   - Round Tables
   - Grey Hats
   - Black Hats
   - Interview Notes
   - Action Item Data Base
   - Lessons Learned
   - Final Prep Meeting
   - Develop In-Briefs
   - Logistics / Security
   - Data Access
   - Central Repository

3. EVMS Certification Review & Closure Phase
   - On-site Review
   - Prelim / Final PM-30 Report (CARs, DRs and CIOs)
   - Contractor CAPs & PM-30 Approval
   - PM-30 Issues EVMS Credentials
   - Contractor Begins EVMS Self-Governance
Discovery and Planning Phase

DOE EVMS Certification Entry Criteria

- Independent Cost Estimate (ICE)
- External Independent Review (EIR)
- Achieve Critical Decision 2/3
  ✓ (Start Construction)
  ✓ PM-30 selects Review Director and Team Members to conduct EVMS Certification Review
  ✓ Selection of PM-30 review team members may come from another DOE facilities
Discovery and Planning Phase

Series of Contractor Kick-off Meetings

**Culture / Leadership**
- Project EVMS Sponsor / Owner
- Certification Lead / Admin. Support
- Corporate / EVMS SMEs
- Develop “Plan for the Plan”

**EVMS Process**
- Policies / EVM System Description
- Procedures or Desktop Procedures
- Process Flow Charts
- Job Aids / White Papers

**Tools & Training**
- E-CAM Notebook
- On-line EVMS Training & Quiz
- Data Analytics & Analysis Tools
- Data Call Submissions 1-2-3

**Success Criteria**

- Culture / Leadership
- Maturity of EVMS Processes, Implementation Practices & Management Use of EVMS Data
Contractor Readiness Phase

- Conduct “Joint” Leadership Teleconference Calls
- Contractor Interview Strategy
  ✔ Develop Certification Schedule & Strategy
    - 1 Page Cartoon Summary and Detail Schedule
    - e.g., Project Stakeholders, Project Director, Project Controls, CAMs
  ✔ Roundtable: Open Discussion Forum
    - Focus on critical project management and EVMS issues
    - Record & distribute action items, issues and/or concerns
  ✔ Grey Hats: Some Coaching / Simulate PM-30 Interviews
    - Review process and implementation practices (data traces)
    - Identify and resolve systemic issues
  ✔ Black Hats: No Coaching / Simulate PM-30 Interviews
    - Compliance Review Check List
    - Review Data Driven Results
    - Conduct Control Account Data traces
## DOE Attribute and Testing Protocols

### Sample Contractor Responses

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Test Method</th>
<th>X-Value</th>
<th>Y-Value</th>
<th>Artifact 1</th>
<th>Artifact 2</th>
<th>Threshold</th>
<th>Sample PM/CAM Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Does the IMS reflect all authorized, time-phased discrete work to be accomplished, including details for any significant subcontracted effort and High Dollar Value (HDV)/critical materials that could affect the critical path (CP) of the IMS?</td>
<td>Manual</td>
<td>$X = #$ of High Dollar Value/Critical Item (HDV/CI) materials listed in the HDV/CI material items list that are not found in the IMS</td>
<td>$Y =$ Total # of HDV/CI material items</td>
<td>HDV/CI Material Items List</td>
<td>IMS Flat File</td>
<td>$&gt;0%$</td>
<td>Demonstrate and discuss your HDV/CI material list. Do you understand why this list is important to critical path analysis? Are these items in the IMS? If they are not in the IMS explain why. Answer: Demonstrates traceability and integration of the EVMS system.</td>
</tr>
<tr>
<td></td>
<td>Automated</td>
<td>$X =$ Count of incomplete discrete WPs, PPs, and SLPPs found in the EVMS cost tool code that are not found in the IMS code</td>
<td>$Y =$ Total count of all incomplete discrete WPs, PPs, and SLPPs found in the EVMS cost tool</td>
<td>Cost Tool</td>
<td>IMS Flat File</td>
<td>$&gt;0%$</td>
<td>Demonstrate that incomplete WPs, PPs, and SLPPs found in Cobra are also found in the IMS. If the two do not agree explain why. Answer: Demonstrates traceability and integration of the EVMS system.</td>
</tr>
</tbody>
</table>

**Sample PM-30 CRC Check List**

**EVMS Attributes Maps back to NDIA EVMS Guide**
Contractor Readiness Phase
(Demonstrate How Project Stakeholders Use the EVM System)

An Iterative Process Used Throughout the Life of a Program or Project
Contractor Readiness Process
(Example Organization for Project Management Data Trace)

1. Contract & Modifications
2. State of Work Statement
3. WBS
4. WBS Dictionary
5. OBS
6. RAM (WBS/OBS)
7. P6/Cobra Integration

Key
OBS – Organizational Breakdown Structure
RAM – Responsibility Assignment Matrix
PWS – Performance Work Statement
WBS – Work Breakdown Structure

Update OBS as required (New CAM assignment)

WBS
- Summary Definition
- Approved Baseline Changes
- Detail Work Statement
- Methodology
- Assumptions
- Exit Criteria
- WBSD Pointers

Validate CAM Span of Control
Contractor Readiness Phase

• Conduct Contractor EVMS Self Assessment
  ✓ “Self-disclosures” vs. “Avoidance”
• Final Contractor Prep Meeting
  ✓ Consistency in contractor responses to client
• Develop In-Brief
  ✓ Reference contractor EVMS compliance plan
  ✓ Provide CAMs with support / information regarding systemic and/or project-wide issues
• Other Items
  ✓ Meeting Space / Security [Building Access] / Internet Connectivity / Logistics [transportation and lunch]
  ✓ Data Access / Avoid Paper Copies / Scribes
  ✓ Central Data Repository
EVMS Onsite Review / Post Certification Closure Cycle

On-site Certification Review
- Conduct Interviews
- Setup central depository for client data requests
- Track PM-30 Action Item responses
- Daily Outbriefs / Open Discussions / Resolve Compliance Issues
- Document Best Management Practices

Preliminary / Final PM-30 Reports
- PM-30 / Contractor conducts Factual Accuracy
- Corrective Action Reports (CAR)
- Defect Reports (DR)
- Continuous Improvement Opportunity (CIO)

Contractor CAPs & PM-1 / PM-30 Approval
- PM-30 and Contractor PMO Collaboration for Resolving Material, Systemic, and Repeatable Compliance Issues

DOE Issues Contractor EVMS Credentials

Contractor Begin EVMS Self-Governance

2018 EVMP Forum – August 22nd & 23rd
Key Takeaways

• Best Practices

✓ Overall Contractor Readiness: Schedule all certification readiness activities well in advance and no longer than 1 hour in duration

☐ Conduct readiness activities along side of EVMS business rhythms calendar (e.g., Schedule Status, CAM ETC/ EAC Reviews, Management VAR Reviews)

☐ Let the Program Manager, Project Controls, and CAMs de-conflict their work schedules in support of EVMS certification readiness activities

☐ Assign Central POC for scheduling all Round Table, Grey and/or Black Hat Interviews

☐ Provide Immediate “Feedback” to project stakeholders
Key Takeaways

• Tips & Tricks

✓ EVMS Certification Interviews: Must demonstrate use of EVMS processes, management implementation practices, tools and use of EVMS data to make timely, accurate and predictable management decisions.

- Listen! Ask Auditors to Repeat Question!
- Tell Me! Show Me! Demonstrate EVM System Integration!
- Use of Job Aids and Process Flow Charts!
- Be Organized! E-CAM Notebook! File Management!
- PM and CAM Data Traces
  - Show CAM “Fast Fact Sheet”
  - Demonstrate integration of PMO and EVMS Calendars
  - Perform forward and backward control account data traces
  - Resolve concerns and issues from Data Driven Results
Presenter Final Thoughts!
EVMS Certification Reviews

• **First Stage:**
  ✓ C/SCSC (Cost/Schedule Control system Criteria)
  ✓ “Cumbersome Reviews”

• **Second Stage:**
  ✓ ANSI-748 / EIA-748 EVMS Standard
  ✓ Lack of “Review Standards”

• **Third Stage**
  ✓ Alliances between Government and Industry to form EVMS Standardization Practices; e.g., NDIA, CPM, EFCOG: GAO, Working Groups, etc.,

• **Fourth Stage (Current State)**
  ✓ DCMA / DOE Data Driven Reviews (Standardization of Reviews)
  ✓ Review Focus: Isolate and discuss “EVMS Systemic Issues”

• **Fifth Stage (Future State)**
  • Improve upon data collection process and Data Driven Model “Techniques”
  • Government moves toward “Team Focus” reviews versus solely “CAM Focus”
  • e.g., Conduct “Joint EVMS Team Reviews” involving the contractor CAM as well as applicable Government and Contractor project stakeholders