



WHY CHOOSE CBT WORKSHOP FOR EVMS SERVICES?

The CBT Workshop (CBTW) has an extensive number of associates with experience in all aspects of Earned Value Management Systems (EVMS). We can fill any of your EVMS resource requirements. From journeymen Program Planning and Control (PP&C) personnel that can augment your staff in the monthly preparation of all EVMS related reports, to senior staff that can step in and manage your PP&C, Business Operations, Contracts, Scheduling and Finance Departments. We also have EVMS Subject Matter experts that can help your organization prepare for any of your EVMS needs. Our experts have supported various EVMS requirements including Gap analysis, tools analysis, developed systems descriptions, desktop procedures, proposal preparation, implementations, training, Integrated Baseline Reviews (IBR) support, validations, re-baselines, Nunn-McCurdy breaches and corrective action request closeouts and surveillance. With this extensive range of EVMS resources, let the CBTW be your one stop source for any EVMS needs that your program, division, segment or company has. Provided below is a synopsis of many of the CBTW capabilities.

EVMS GAP ANALYSIS

Before any EVMS can be implemented, a Gap analysis should be performed. The CBT will perform a GAP analysis of your Program Management systems and procedures that support your EVMS.

An EVMS (Earned Value Management System) Gap Analysis is a review of a contractor's internal policies and procedures to gage their compliance with all 32 guidelines called out in by ANSI/EIA 748. On any new EVMS implementation the CBTW routinely performs a GAP Analysis.

An EVMS Gap Analysis answers the following four key questions:

1. How does the existing management processes comply with ANSI/EIA 748?
2. Are there policies and procedures in place and are personnel following the processes?
3. Do the supporting program management systems provide the data required to support ANSI/EIA 748?
4. If any of the above does not support ANSI/EIA 748, what must be done to bring them into compliance?

Before the CBTW performs a GAP analysis we have a detailed discussion with our customers EVMS focal point. This discussion will cover who are the key contacts that will be involved in the GAP analysis, what

EVMS GAP ANALYSIS (CONT)

existing program management documentation is available, and what program management systems (accounting, scheduling, ERP, etc) are being used. When possible we request that as much data is provided before the actual onsite visit so that the GAP analysis may be accomplished in the most expeditious manner. After reviewing the provided data and with the concurrence of the EVMS focal point we develop a plan and schedule for the actual onsite visit.

In order to perform a viable and reasonably complete EVM System Capability Analysis, the following data items or artifacts are typically requested:

- A copy of the current contract requiring EVMS
- Any contractual documentation delineating EVMS requirements
- Any attachments/Exhibits with FAR/DFAR paragraph call-outs
- A copy of all CDRL Item specifications (reporting requirements)
- What is the contract value (<\$20M or >\$50M)
- What are the program resources committed to EVMS
- How is the organization set up, IPT or projectized organization
- A copy of the program OBS
- What is the maturity and number of Control Account Managers?
- What is the PP&C staffing (Manager, Supervisors, FAs and SAs)?
- What is the maturity of EV tool suite?
- What is the history of EVMS at the site?
- Are there any prior contracts with EV requirements?
- Any past IBR results
- Any past ANSI 748 Compliance Reviews
- Copy of current contract cost and management proposal data
- Any System Surveillance Plan
- Any System Description Document (SDD)
- Latest EVMS data/artifacts submitted to the customer
- Copies of all CPR / VAR / MR / WADs developed to date
- Any Process Directives
- Any Desk top Procedures
- Any CAM Notebook (Virtual or Hardcopy)
- Other Artifacts as identified during off-site review

The actual onsite GAP analysis is a very intense period where the CBTW performs interviews and reviews existing data and compares the information with all the requirements of ANSI/EIA 748. The end result of the GAP analysis is a report that details how the customer's current systems, data and procedures meet the requirements of ANSI/EIA 748. If there are any deficiencies they are explained and the corrective actions are explained in detail.



EVMS TOOLS ANALYSIS

If you have not selected your EVMS tool set, the CBTW will review and analyze all current EVMS tools that have been used to validate recent government contractors. This analysis will include a description of each tool analyzed, including the advantages and disadvantages of using the tool at your company, with a final CBTW recommendation.

We typically avoid any tool that has not been validated in a Department of Defense environment. There are a few EVMS tools that are Excel based that are advertised as being ANSI/EIA 748 compliant. Upon a detailed analysis we find that they may marginally meet the requirement but have never been used in a validated DOD EVMS environment. The use of these tools to support a DOD validation is a risk that the CBTW would not recommend to any of our DOD EVMS customers. These are unproven tools and would increase the implementation, IBR and validation cost and schedule risk to our customer.

EVMS SYSTEM DESCRIPTION

The EVM System Description provides a description of the system and the contractor's comprehensive plan for meeting the guidelines in ANSI/EIA 748-A. The document provides an understanding of each activity required to meet the EVMS standard. The document should briefly, but comprehensively, present the contractor's approach and schedule of internal activities to demonstrate that the system and processes meet the guidelines in the standard. The description should include the contractor's plan for implementation of, and activities leading up to, compliance review by the Customer. Contractor format is acceptable.

Because system descriptions encompass information on internal company processes, the descriptions are usually not released for general public use. There is no preferred format or content list. We also develop an ANSI/EIA 748 compliance matrix that shows the System Description reviewer where each section complies with ANSI/EIA 748. The CBTW will develop your System Description using ANSI/EIA 748 and our inventory of previously developed documents as a starting point.



EVMS DESKTOP PROCEDURES

CBT Workshop has a library of desktop operating procedures, program directives, flow diagrams and system descriptions that can be easily tailored to most companies' earned value requirements. We have over one hundred desktop procedures that bridge the gap between the system description and the specific software tool used to manage information. We will also review your company's existing procedures and suggest any modifications required to comply with the system description. CBTW has flow diagrams that support every section of a system description and that support the monthly CPR reporting cycle. These templates allow CBTW to work more efficiently and effectively saving our customer time and money.

EVMS IMPLEMENTATION

CBTW will provide the necessary resources to implement the initial performance measurement baseline (PMB) into your EVMS. This activity will include migrating the negotiated contract cost and schedule into a PMB that can be uploaded into the selected EVMS tool. The PMB will then be inserted into the EVMS tool so that the initial test and evaluation may take place.

After the PMB is uploaded into the EVMS tool the CBTW will begin to operationally test and evaluate the resulting EVMS data. The EVMS will be tested by insuring that the interfaces to the accounting and scheduling system are in place and performing properly and that the output Contract Performance Report (CPR) and required Formats are correct. In addition the Contract Funds Status Report (CFSR) will also be delivered. In addition the Integrated Master Schedule (IMS) must interface with the EVMS tool in such a way that the performance taken in the IMS is reported correctly in the EVMS tool. To facilitate this integration process we have developed a MS Project field assignment matrix that will insure that the schedule data correctly interfaces with all supporting EVMS software packages. To support the monthly submittal of the IMS we have developed a basis of assessment report that details all the changes to the IMS since the last submittal.

While performing the EVMS implementation the CBTW will perform hands on training of your personnel. We will also develop the procedures needed by your personnel to maintain the PMB and submit monthly reports. We have developed monthly reporting flows which list all of the monthly and weekly activities required to deliver the CPR.



INTEGRATED BASELINE REVIEW (IBR) SUPPORT

The CBTW has supported IBR's for our customers with total contract values ranging from \$20M to over \$2.5B in value. We have trained hundreds of CAMs in the IBR process. The CBTW has trained and prepared customers for their first IBR and with others, CBTW has been called in for additional support on IBRs when the company is already familiar with the process. We have also supported an IBR after a Nun McCurdy breach which prevented the program from being cancelled.

CBTW IBR support includes developing virtual CAM notebooks. These virtual notebooks allow the CAM to have on their desktop access of all relevant data that will help them through the IBR interview process. We perform detailed mock CAM interviews to prepare each CAM for their IBR interview. Included in the mock interview is a list of the most commonly asked questions and the correct answers. Our IBR training includes one on one CAM training, Executive and Program office IBR overview training, we also have IBR training that we have provided at Deltek and PMI CPM conferences.

In accordance with Department of Defense (DOD) acquisition policy, the customer must conduct IBRs on contracts with Earned Value Management (EVM) requirements. IBRs are intended to provide a mutual understanding of risks inherent in contractors' performance plans and underlying management control systems. Properly executed, IBRs are an essential element of a PM's risk management approach.

- The IBR Process benefits the customer and the contractor in the following ways:
- Lays a solid foundation for mutual understanding of project risks
- Provides an invaluable opportunity to compare the customer and the contractors' expectations, and to address differences before problems arise
- Provides project management teams with a thorough understanding of the project plan and its risks, allowing early intervention and the application of resources to address project challenges
- Increases confidence in the project PMB, which provides a powerful, proactive, program management capability to obtain timely and reliable cost and schedule projections.

Preparation is the foundation for a successful IBR. PMs need to ensure that the team is adequately prepared to focus the IBR on those risks that may impact the PMB. Preparation for the IBR should begin as soon as practical after determining the need for IBR. When required by policy, contract, or an obvious degree of project complexity, preparation for the IBR should be concurrent with development of the PMB. All managers are stakeholders in the success of the project. The time and effort involved in the IBR depend on the project. Principal factors that influence time and effort include project management and risk planning, the authorization/negotiation process, the number, type, and severity of the risks identified during preparation for and execution of the IBR, size and complexity of the project, and the number and experience level of the IBR.

The CBTW IBR preparation includes planning that identifies key responsibilities, required technical expertise, training, review dates, review scope, risk evaluation criteria, documentation needs, disposition of findings, and procedures for risk identification, documentation, and incorporation into project risk management planning.

Call the CBTW as soon as possible after you know that you are going to have an IBR.



PROPOSAL SUPPORT

CBTW Associates have supported major DOD proposals with values exceeding \$1 billion dollars. We have provided direct support to Cost, Management and Technical Volumes as well as providing Volume Managers for both Cost and Management Volumes. We have provided compliant cost and pricing support to very complex RFPs with detailed EVMS and Cost requirements resulting in a seamless transition from proposal to contract and IBR.

The CBTW proposal team includes, depending on the specific customer requirements, Cost and Management Volume leads/managers, Integrated Master Plan (IMP) and IMS experts, IMS tool experts, Estimating/Pricing tool experts, EVMS and EVMS tool experts, FAR contract experts and CAS disclosure experts. If you have a upcoming proposal and are short key resources call the CBTW and we can help you fill the gap.

TRAINING

The CBT Workshop has been providing EVMS training for over 14 years. We have existing Control Account Manager (CAM) training courses that reflect the latest changes to the ANSI/EIA - 748 standards for EVMS. Our latest EVMS training materials are delivered via our state of the art online Learning Center. Our Learning Center delivers fully narrated, interactive, self-paced, training on demand. Each of our customers have designated a training administrator who receives 24/7 access to student progress and test results. The CBTW also has IBR classroom training that has been given at PMI CPM and Deltek conferences, individual one CAM training for IBRs and Executive training for Validation reviews. The CBTW can tailor our training to meet your specific EVMS needs.

STAFF AUGMENTATION

We have earned-value professionals who can work with you as long as necessary, providing support for all of the earned value-related software packages. This staff augmentation service gives you short or long-term support to meet all of your resource requirements. Our staff is familiar with all EVMS and IMS software. We can step in and quickly deliver all required monthly (CPR & IMS) and quarterly (CFFR) documentation. If you find that you cannot fill EVMS resource needs in a timely manner or have lost key resources and need to backfill until internal resource can be found call the CBTW. We can meet these needs using our staff of EVMS professionals. These professionals are available on a as needed basis weekly, monthly or as long as your EVMS needs remain.

EVMS SURVEILLANCE

The CBTW will assist your company in meeting their responsibility for developing and implementing an EVMS compliant with the 32 ANSI/EIA-748 EVMS guidelines. As part of this implementation the CBTW will help to ensure that the companies EVMS is implemented on a consistent basis that it is used effectively on all applicable government contracts, and that EVMS clauses are flowed down to subcontractors when required. To do this the CBTW will develop an EVMS surveillance plan. EVMS surveillance consists of essentially two parts:

1. Effective supplier implementation and maintenance of documented processes, procedures, instructions, use of tools in the EVMS process and techniques over time; and Surveillance results are documented and communicated to all stakeholders in a timely manner.
2. Interviews with PM, CAM(s), and other key team members are an essential part of ensuring continued guideline compliance. The surveillance plan should continuously verify that your company management personnel are using the EVMS to identify problems, develop solutions, and implement corrective actions where necessary. The surveillance plan will specify system surveillance on a periodic basis and assess all 9 processes and 32 ANSI/EIA-748 EVMS guideline.

The plan will reflect the process(es) and guidelines to be examined periodically, the programs/contracts involved, and the frequency of the reports. If deficiencies are found during the course of the surveillance process it is the surveillance team's responsibility to issue a written Corrective Action Request (CAR)

The surveillance review process is established for the following reasons:

1. Assess the company's commitment and ability to implement the EVMS as an integral part of its management process and to ensure that cost and schedule reports provide the customer with:
 - Timely and reliable cost, schedule, and technical performance measurement data and information that depicts actual conditions
 - Data and information derived from the same database as that used by the supplier for the management of the program
 - Data and information that is auditable
 - Timely indications of actual or potential problems
 - Comprehensive variance analysis and corrective action reporting regarding cost, schedule, technical, and other problem areas, as well as proposed date(s) for cost and schedule recovery
 - Insights on actions taken to mitigate risks to the program.
2. Ensure that companies EVMS continues to be compliant with the 32 ANSI/EIA-748 EVMS guidelines by:
 - Training designated program personnel in the use of the EVMS
 - Accomplishing early, comprehensive planning to provide a quality baseline ready for examination in the Integrated Baseline Review (IBR) process
 - Integrating cost, schedule, and technical planning into a single, well-controlled performance measurement baseline.
 - Establishing clear lines of authority and responsibility for accomplishment of work elements

EVMS SURVEILLANCE (CONT)

- Using information early, and continuously, to formulate corrective actions and work around plans to mitigate significant variances from the baseline plan
- Providing valid and timely management information
- Ensuring for the integration of management systems

3. Encourage continuous improvement and innovation of the EVMS to include people, processes, tools, and techniques.

4. Maintain a disciplined process using EVM, including effective teamwork between the government and supplier.

5. Effectively communicate surveillance findings and results, including areas where the supplier demonstrates ineffective use of the EVMS.

6. Document those findings on corrective action requests.

7. Follow-up on the contractor's corrective action to assure the current and any foreseeable problems are eliminated.

8. Maintain metrics to determine the effectiveness of the EVMS and to distinguish between systemic and non-systemic problems.

9. Reduce the cost of surveillance by combining resources to achieve common goals.

Contact the CBTW with your EVMS Surveillance needs, we are ready to support.

EVMS VALIDATION REVIEW

CBTW has assisted companies in preparing for government Validation Reviews by ensuring that their system documentation is in compliance with ANSI/EIA-748. Items included in EVMS validation preparation process include, but are not limited to the following:

- Development of EVMS System Description, Program Directives, and Desktop Operating Procedures
- Conducting EVMS training and CAM training
- Review and assessment of performance measurement baseline, integrated master schedule
- Conduct data traces to ensure the program baseline change and controls are in place
- Guidance and assistance on story board preparation and in briefing.

The Validation Reviews begins as soon as practicable following the implementation of the EVMS and completion of a IBR. The review consists of system documentation reviews, data traces, and interviews with contractor personnel. The contractor's EVMS is assessed against each guideline contained in ANSI/EIA-748. The review should be organized to follow the system approach taken by the contractor, i.e., orientation by ANSI/EIA-748 grouping or a process approach. The contractor should have a current, approved written system description available. Applicable procedures also need to be available at the contractor's operating levels as necessary to demonstrate a consistent approach. The review team examines the contractor's working papers and documents to ascertain compliance and to document its findings. The documentation needs to be current and accurate. The contractor demonstrates to the review team how the EVMS is structured and used in actual operation. The Validation Reviews includes, but is not limited to, the following activities:

- An overview briefing by the contractor to familiarize the review team with the proposed EVMS. The overview should identify any changes which have occurred since the most recent PAV.
- A review, of the documentation that establishes and records changes to the baseline plan for the contract. This includes work authorizations, schedules, budgets, resource plans, and change records including management reserve and undistributed budget records.
- A review, on a sample basis, of the reporting of cost and schedule performance against the baseline plan, along with appropriate analyses of problems and projection of future costs. Also, a trace is conducted to summarize the cost/schedule performance data from the lowest level of formal reporting (normally the control account level) to the external performance measurement report. This trace is often referred to as a EVMS Storyboard.
- Interviews with a selected sample of CAMs, functional and other work teams, and PMs to verify that the contractor's EVMS is fully implemented and being used in the management of the contract.
- An exit briefing covering the team's findings. During this briefing, any open system discrepancies should be discussed along with the contractor's corrective action plan, which establishes responsibility and a time-frame for corrective action.

The CBTW is familiar with all of the Validation Review requirements. We can help you company through a successful EVMS validation process. If your company is planning on a validation call the CBTW, we are ready to make you successful!



OUR CUSTOMER LIST

- AM General
- Northrop Grumman
- ITT
- General Dynamics Land Systems
- General Dynamics Robotics
- Sensis
- IBM
- L-3 Communications
- Moog
- Honeywell
- Battelle
- National Security Agency
- Parsons
- Bell Helicopter
- Michael Baker Corporation
- ViaSat
- NASA
- Litton
- Rolls Royce
- SRA International
- and more...

OUR REFERENCES

EVMS Implementation, Desktop Procedures, Training and Staff Augmentation – AM General, Lavonia, MI – Ron Symanski – (734) 523-8974

EVMS Startup Implementation and IBR Support – L-3 Electronic Systems, Muskegon, MI – Chuck Nauman – (231) 206-8057

IBR, Staff Augmentation and current preparation for re-validation and certification - General Dynamics, Woodbridge, VA – Margaret Dane (703) 490-7589

IBR DCAA reviewed; Prepared for Validation non DoD - Michael Baker Corporation, Alexandria, VA - Flood Map Modernization (Map Mod) Program for FEMA – Spencer Wiley (703) 801-3598

Validation and IBR - Honeywell, Colorado Springs, CO, U.S. Air Force Satellite Control Network Contract – Tom Wilke (410) 544-6599

IBR – Bell Textron, Ft. Worth, TX , Armed Reconnaissance Helicopter Program – Barry Kohler (817) 200-2260