Internal Surveillance

A contract having **Earned Value Management System (EVMS)** requires the contractor to maintain an effective management control system consistent with EVM industry standards and responsive to internal and customer contract reporting.

Through an internal surveillance program, or by some other means, the contractor ensures its management control system continues to meet the EVMS guidelines, is implemented, and used correctly on all applicable contracts.

At the conclusion of this lesson, you will be able to identify key elements in EVMS Surveillance.

Certification Status Of The Contractors' Systems

Prior to engaging in any oversight or surveillance activities by government agencies at the contractors' operating facilities, certification status of the contractors' systems must be established. The status of contractor systems is either previously certified and currently under surveillance, or not previously certified and must demonstrate compliance and enter into surveillance agreement.

If not previously certified, the contractor has three options. First, they can request the government to perform a compliance review where the contractor demonstrates its EVMS much like industry did in the past under the old C/SCSC review process. Second, the contractor can perform a self evaluation with government participation in the process, which is the most widely used method today as industry transitions to the third alternative.

The third alternative is to have independent third party certification which is akin to the ISO9000 process in the quality function. Click on the link below to review the **Earned Value Management Implementation Guide (EVMIG)** for details on the evaluation criteria and review alternatives. Note that Section 2 of the EVMIG contains a description of the EVMS Guidelines.

- EVMIG Click on this link to go to the web site.
- EIA-748 Click on this link to download the pdf file.

The Surveillance Process

As discussed in lesson 16, the determination of certification for EVMS compliance by the government is initially made in the proposal evaluation process by the program IPT. Therefore, EVMS surveillance begins prior to contract award, continues through system compliance evaluation and acceptance (when required), and extends throughout the duration of the contract.

Surveillance must ensure that the contractor's management control system:

- Provides timely and reliable cost, schedule, and technical performance measurement information summarized directly from the contractor's internal management system
- Complies with the **EVMS Criteria (EVMSC**)
- Provides timely indications of actual or potential problems
- Maintains baseline integrity
- Provides information that depicts actual conditions and trends
- Provides comprehensive variance analysis at the appropriate levels including proposed corrective action in regard to technical, schedule, cost, and other problem areas.

For the life of the contract, surveillance should be based on recurring evaluation of internal management control practices and samples of internal and external reported data to ensure the validity of the contractor's performance data provided to the government. The surveillance activity should focus on major system activities and problem identification to ensure the greatest return for resources expended.

Primary Surveillance Responsibility

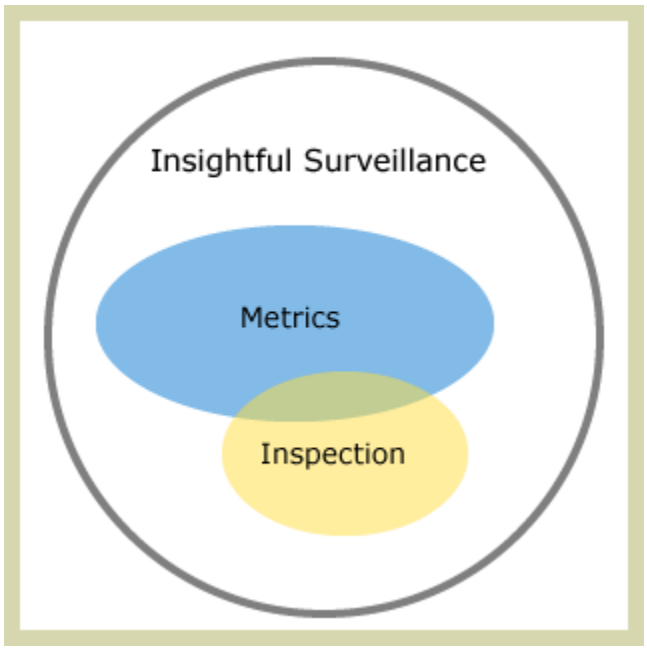
The **Defense Contract Management Agency (DCMA)** has overall responsibility for EVMS surveillance. Surveillance of contracts within each district is done either by a **Contract Management Office (CMO)** located at a contractor facility or a local area office servicing many contractors (e.g. DCMA Phoenix). The CMO has the primary responsibility for surveillance of the contractor's integrated management system as applied to all DOD contracts. However, close coordination between the prime CMO, major subcontractor CMOs or remote prime location CMOs, the **Program Manager (PM)**, the **Defense Contract Audit Agency (DCAA)** and the contractor, is required to ensure surveillance is performed in an effective manner that avoids duplication. For a brief summary of the roles of DCMA and PMO, see the presentation in the library titled, "DCMA PMO Roles".

After the contractor has satisfied the government's requirement to validate compliance with the EVMS Criteria (per EIA-748), a concept of surveillance or oversight to ensure continued system compliance is applied in the administration of the contract. Surveillance is a major part of the overall **Contract Administrative Services (CAS)** performed by the government.

There are **two major types of surveillance:**

1. **Overall EVM system surveillance**
2. **Specific program/contract surveillance**

Figure 18-1: System Surveillance



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System surveillance is monitoring the consistency and effectiveness of the contractor's EVMS procedures and discipline across the Enterprise. Within the CMO, the **EVM Monitor** must ensure that the contractor's system continues to operate as accepted, and that any proposed or actual changes comply with contractual requirements and are reflected in the contractor's procedures. Although the EVM Monitor has the primary responsibility, a team approach must be used. This approach should emphasize manufacturing and engineering involvement. Input from the **Program Integrator (PI)** and from other CMO functional elements as well as the PM and DCAA should be used. **Figure 18-1**, illustrates EVMS system surveillance transition from detailed "inspection" methods to "Insight" methods that rely on contractor participation to control its management processes through metrics and share the data with government and on-site personnel.

Long Description

Figure 18-1: System Surveillance is a Venn diagram. A circle, labeled "Insightful Surveillance" contains two intersecting ovals, a larger one labeled "Metrics" and a smaller one labeled "Inspection."

Figure 18-1

System Surveillance is conducted according to a surveillance plan that is prepared and implemented by the CMO, IAW guidelines published by the Defense Contract Management Agency (DCMA).

Program/Contract Surveillance

Under contract surveillance, the CMO/PI, acting for the PM, examines and assesses contractor performance through a combination of on-site surveillance and independent analyses. All EVMS should have the capability to isolate cost and schedule variances and identify the factors causing the variances.

Such capability will enable contractor personnel to develop alternative solutions and implement corrective actions. The EVM Monitor ensures that the contractor's statements are accurate and timely, and that any proposed corrective actions are feasible and reasonable and within the scope of the contract. The EVM Monitor should verify, trace and evaluate the information contained in the reports submitted to DOD activities.

Cost, schedule, and technical performance data provides an effective integrating tool for PM's and other **Program Management Office (PMO)** personnel. Therefore, EVMS data should be presented and discussed at project meetings and CMO reviews. The Monitor should assist the PI and **Program Support Team (PST)** members in properly relating EVMS information to performance issues.

Figure 18-2: Program/Contract Surveillance

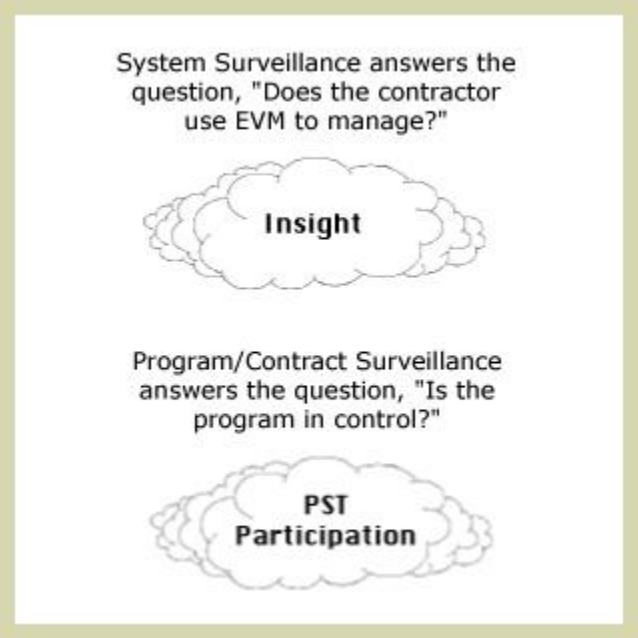

Figure 18-2, contrasts insight method of system surveillance with program/contract surveillance.

In contract surveillance, DCMA plays an integral role in supporting the PM.

For more resources, visit the links in the DCMA GuideBook.

It is uniquely positioned to gather, analyze, and integrate contractor and contract performance information for the PM. The primary output and value of program integration lies in the provision of information, analysis, early insight, and problem identification/resolution for the PM throughout the life cycle of the program.

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Long Description

Figure 18-2: Program/Contract Surveillance is a chart showing two clouds. The top cloud, labeled "Insight," is under a caption that reads "System Surveillance answers the question, "Does the contractor use EVM to manage?"" The bottom cloud, labeled "PST Participation", is under a caption that reads "Program/Contract Surveillance answers the question, "Is the program in control?""

Figure 18-3: Surveillance Results

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The CMO team, in conjunction with DCAA, should ensure that the contractor is consistent in the methods used to review and revise their **Estimate At Completion (EAC)** and that the EACs developed are reliable estimates based on factors such as work remaining, impact of cost/schedule changes, etc.

The CMO's surveillance role begins immediately following contract award. The team, normally composed of CMO and contractor personnel, monitors the use of the EVMS in accordance with the agreement documents and the formal plans.

The intention is to efficiently employ resources to manage risk as illustrated in **Figure 18-3: Surveillance Results**.

Long Description

Figure 18-3: Surveillance Results graphic has the Insightfull Surveillance Venn diagram (Figure 18-1: "Metrics" oval overlapping "Inspection" oval) above text that reads: Teaming (right arrow) Understand the System/Process (right to left arrow, pointing down, labeled "Risk" pointing at) a line of text along the bottom of the graphic that reads "Measure-Analyze-Adjust Management Focus."

Major Documents and Reports

These are major documents and reports used to manage the surveillance process.

The **Advance Agreement (AA)** documents the terms and conditions of government acceptance of a contractor's EVMS. This document may be on a division, group, or corporate level rather than on an individual program. The AA sets the basis of the Joint Surveillance Plan and defines the requirements and actions necessary for the contractor to retain system acceptance.

The **Memorandum of Agreement (MOA)** is a negotiated agreement between the PM and the CMO and covers various organizational responsibilities. The MOA describes the relationships and responsibilities between the PM and the CMO for performing EVMS surveillance. The MOA identifies specific surveillance actions, priorities, and reporting requirements. It may also include those contract administration duties not normally delegated to the CMO. The MOA can specify several others types of reports as needed for specific situations such as bottoms-up EAC support and other special requirements.

The **Joint Surveillance Plan (JSP)** augments the AA. The "Joint" in JSP refers to a contractor that is willing to be part of the surveillance team. The ratio or percentage of how jointly the process is shared between the government and a contractor varies. It can be 0/100. The JSP specifies how the agreements in the AA will be carried out. As soon as possible after EVMS acceptance, the plan should be implemented. The surveillance plan should also be consistent with the MOA and establish procedures for accomplishing EVMS surveillance.

Monthly Reports

The Program Integrator (PI) at the CMO should report monthly (or as specified in the MOA) to the PM on their EVMS surveillance activities and results. This report should also include DCAA audit reports which document deficiencies and reports which contain significant findings.

In addition, the DCMA receives customer satisfaction reports which usually contain overall system-wide and contract performance concerns or credits.

DCAA reports audit findings and deficiencies, and recommendations for corrective action.

Key Players in Surveillance - The PMO

Three key players perform joint surveillance. The Program Management Office (PMO) is part of the team that monitors the contractor's ongoing management processes. The CMO, primarily DCMA, performs ongoing surveillance, with an emphasis on insight into the contractor's internal management process and disciplined controls. The contractor is fully responsible for establishing and maintaining their internal management processes.

At times the DCMA is not a player at a contractor or government plant. Special organizations within the Services perform the surveillance mission. When the US Navy builds and repairs ships, the Supervisor of Shipbuilding (SUPSHIPS) performs the joint surveillance function instead of DCMA.

The US Army has a similar situation when acquiring its ordnance material. It provides on-site personnel at each munitions plant worldwide. Both of the organizations mentioned above are responsible for performing the same surveillance duties typically performed by DCMA. Any reference to DCMA responsibilities regarding surveillance apply to other organizations that may be performing that function in place of DCMA.

The responsibilities of the PMO, in connection with EVMS surveillance, include entering into CMO initiated negotiations and updating of the MOA with the CMO. The PMO should keep the CMO informed of actions and matters which could affect EVMS surveillance, and also assist in resolving problems cited in surveillance reports by providing support to the EVM Monitor, and by reviewing, evaluating, and analyzing contractor performance reports.

Key Players in Surveillance - The CMO

Another important responsibility of the PMO is apprising the PI and the EVM monitor of the adequacy and usefulness of the surveillance reports, and where necessary, stating required changes to reporting practices. Finally, obtain assistance from the procuring agency's staff support organization or the DCMA EVMS Center in resolving post acceptance EVM system problems.

The CMO is responsible for EVMS surveillance IAW the DCMA Guidebook.

The CMO is the primary working-level organization for performing the surveillance process. The CMO monitors contractor progress toward demonstrating that their EVMS meets the criteria. The CMO also provides assistance in pre-award system evaluations. The **Administrative Contracting Officer (ACO)** assigned to each contract represents the CMO with the PM. During contract performance, the CMO evaluates the contractor cost performance measurement reports, reviews contract cost and financial data and evaluates the effectiveness of the contractor's procedures for controlling systems and baseline changes, management reserve and undistributed budget.

The ACO is designated as the agent of the government responsible for assuring the contractor complies with contract requirements. The ACO is a member of the Program Support Team (PST).

The EVM Monitor

The CMO surveillance responsibilities are carried out by the EVM Monitor and the Program Integrators. The EVM Monitor is assigned overall responsibility for accomplishing the total EVMS surveillance program within the CMO and therefore plays a critical role in surveillance. The EVM Monitor leads a multi-functional surveillance team.

The EVM Monitor should meet regularly with all surveillance team members to discuss items of interest and plan surveillance activities. Full cooperation of all surveillance personnel is imperative for an effective surveillance program.

A multifunctional team works within the CMO Program Support Team (PST). Basic CMO delegated functions deal with the review of contract earned value and financial data and evaluating contractor's procedures for controlling changes, management reserve, and undistributed budget. But other groups deal with specific areas of contractor performance.

Program Support Team (PST)

This is the Program Integration function and the group is called the Program Support Team (PST) consisting of various functional experts. The PI/Subcontract Program Integrator (SPI) appointed by the CMO Commander serves as the CMO focal point on major program contracts (or designated major/critical subcontracts).

The PI leads a PST and is responsible for integrating all aspects of contract administration to achieve program-specific objectives. The PI is also responsible for developing the MOA for overall program surveillance between the CMO and the PMO. PI is the primary contact with the PM and integrates the requirements of the program within the activities of the other PST's in the group.

IAW the MOA, the PI provides the PM and procuring activities with evaluation of required reports, contract cost, schedule, and technical performance and any current or potential problems (their impact and corrective action(s)) to the overall program.

DCAA

The DCAA has responsibility for evaluating contractor accounting systems, financial data and financial policies and procedures. This responsibility exists independent of whether EVMS criteria apply to a contract. The DCAA audit review can provide useful data for surveillance efforts.

It becomes quickly apparent that DCAA has a wide range of authority and access that can be of value during post-contract-award surveillance. In fact, DCAA responsibility for surveillance of contractors' procedures and practices is inherent in relation to most DOD contracts, whether or not covered by the EVMS Criteria. Each of these areas affects Government contracts whether or not they contain an EVMS clause and appropriate data reporting. Information reported through surveillance may be derived from any aspect of the DCAA audit review.

The contractor has the following surveillance responsibilities:

- To maintain their EVMS as required in the AA.
- To provide access to all pertinent records and data requested by the EVM Monitor for the purpose of government surveillance.
- To apply surveillance provisions as required to all appropriate subcontracts.

Figure 18-4: Contractor Corrective Actions

It is important to follow up with the contractor on any issues identified in the surveillance process to insure the proposed corrective actions actually occur.

Figure 18-4: Contractor Corrective Actions illustrates this circular relationship.

Surveillance is a complex process relying on a team approach from various organizations including the contractor. **Lesson 19, Surveillance Plan Execution** details how that process is put into practice.

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Long Description

Figure 18-4: Contractor Corrective Actions shows two circular arrows (clockwise) at the right and left, with text at the top that reads, "Say what you do & improve process", and text at the bottom that reads "Do what you say!!".

Surveillance Process Knowledge Review

What are the two major types of EVM surveillance?

- Overhead surveillance (monitor the accounting system), and direct surveillance (verify the validity of actual costs to a specific contract.)
- System surveillance (monitor the purchasing system), and CAM surveillance (ensure economic lot quantities are used where possible.)
- (•) System surveillance (monitor contractors' internal procedures), and contract surveillance (verify the validity of contract information contained in performance reports).
- On-site surveillance (monitor the program manager's decisions), web-based surveillance (monitor the use of Management Reserve).

Correct. The two major types of EVM surveillance are system surveillance and contract surveillance.

End of Lesson

You must click the **Next** button in order to receive credit for this lesson.