Lesson 20: Program Execution

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Program Execution

Summary EVM data from the Contract Performance Report (CPR) is often required in the documentation of service program reviews. For example, the Selected Acquisition Report (SAR) is submitted to Congress, and the Defense Acquisition Executive Summary (DAES) is submitted to the Office of the Secretary of Defense (OSD). The DAES is a major document which informs senior Department of Defense (DOD) executives of actual problems and advance indicators of potential problems prior to the program deviating from the approved Defense Acquisition Executive (DAE) Acquisition Program Baseline (APB). Unit Cost Reporting (UCR) and Unit Cost Exception Reporting (UCER) are a part of this program documentation process.

Download the document titled $\underline{\text{DOD }5000.2}$ for information regarding key program documentation and reports.

At the conclusion of this lesson you will be able to recognize the elements of the EVM (compliant) program.

Acquisition Reform

Recent acquisition reform initiatives have placed emphasis on a concept called **Cost as an Independent Variable (CAIV)**. The intention of CAIV and its link to EVM is to establish balance between cost, schedule and performance early in the acquisition process and manage to the cost objective. Inherent in the CAIV concept is the realization that risks are present and must be managed in order to achieve performance, schedule and cost objectives. An understanding of risk is essential to setting realistic cost objectives. It is important to understand CAIV. The DEFENSE ACQUISITION GUIDE BOOK also provides detailed information about CAIV.

DOD policy is to establish and maintain an internal acquisition information system that obtains timely, consistent, and reliable summary level information on technical, operation, and cost/schedule and technical performance of major defense acquisition programs.

Within the DOD, application of the functions of program management take place within the defense acquisition framework established in the DOD 5000 series directives. However, despite its political-military-industrial environment, and complex, state-of-the art, multi-billion-dollar products; program management is still, first and foremost, "management".

Successful Program Management

Successful program management is much more than an exercise in engineering excellence. Program management must rely on multi-talented individuals, capable of effectively dealing with problems in personnel management, business management, financial management, and technical management. They must be excellent communicators. Successful program management requires a broad focus, because failure to perform any of the management functions can spell disaster for the program.

A program phase begins with issuance of the Acquisition Decision Memorandum. As design details are completed and the system readied for production, the program will begin to consume enormous resources. During each phase, the PMO will confirm the system requirements with the user, develop the program acquisition strategy, and revalidate the system threat with the Defense Intelligence Agency.

The PMO will also perform such primary functions as:

- Develop a production baseline with updated program cost, schedule and performance objectives
- Develop a system configuration baseline
- Complete an environmental impact baseline
- Confirm that the life-cycle and annual operating costs are affordable
- Finalize and verify the system support concept
- Develop the basis for maintenance, training, and supportability
- Test the design under as realistic operational conditions as possible
- Refine the acquisition strategy and system cost estimate

Key Focus Areas

The EVM key focus areas for the PMO include:

- Preparation of funding profiles and documentation supporting the APB for approval through the Defense Acquisition Board (DAB) process (acquisition documents, i.e. the APB)
- Tailoring Contract Data Requirements Lists (CDRLs) to reflect EVM requirement for inclusion in the Request For Proposal (RFP) and Source Selection Process
- Installation and implementation of Scheduling Tools
- Cost/Schedule/Technical Analysis (i.e. analysis of contractor cost data)

Cost Reporting Summary

The PMO personnel will most likely know the value of and be able to read and understand the **Contract Performance Report (CPR)**.

They know that schedule and cost variances can be identified easily from these data and appropriate management attention can be devoted to specific areas of the contract. From previous lessons we know that schedule variances identify contract **Work Breakdown Structure (WBS)** elements in which work is indicated as ahead or behind schedule.

Cost variances are shown for areas where costs are higher or lower than planned for the work actually completed. This data is used to report program status up the PMO management chain.

Since procuring agencies call this report by different names, we will refer to it as the **Program Status Report (PSR)** in **Figure 20-1** (see next page).

Figure 20-1: Cost Reporting Summary

	PMO	Cost IPT	Contractor Rpts		PMO Reports			
Customer	CCDR Plan	CCDR	CFSR	CPR	PSR	DAES	UCR	SAR
РМО	Prepares 60 days prior RFP		Quarterly cash flow	Monthly earned value	Prepares quarterly	Prepares quarterly	Prepares quarterly	Prepares annually
PEO					Program status & EV data			
Service					Program status & EV data			
OSD	CAIG approve	Historical cost estimating				Program status & EV data		
Congress							Unit cost EV	Status EV



Figure 20-1 identifies the cost reporting requirements in correlation with the responsible organizations. For report examples, see the tutorial titled <u>Reports</u> (Click <u>charts</u> to view the charts on version or <u>narrated</u> to view the Narrated version).

Long Description

Figure 20-1: Cost Reporting Summary is a table with six rows labeled Customer, PMO, PEO, Service, OSD, and Congress, with 8 columns labeled PMO, Cost IPT, Contractor Rpts (2 cols), and PMO Reports (4 cols). There are only 22 data entries for the 48 possible spots.

Reports

PowerPoint file that contains the following information

- Clarify the purposes of the CCDR Plan, CCDR, CFSR, Schedule Status Reports, CPR, C/SSR, UCR, SAR, and DAES.
- Compare the features of the Cost Performance Report and the Cost Schedule Status Report.
- Examine various methods to tailor the Cost Performance Report (CPR)

Considerations

It should be noted, however, that the CPR's are not designed to be real time substitutes for active program management. The greatest utility from these reports is obtained by using them to provide a framework for the status of each WBS element of the contract and for performing trend analyses.

No PM should wait for the cost/schedule report to be alerted to a problem. Initial warning should come from the industry PM, with the report providing confirmation and quantification. Progressive PMs are now receiving access to weekly earned value and scheduling data via a direct connection to the contractors' systems at web sites. Others have maximized the use of electronic data Interchange (EDI) to populate government systems on a routine and timely basis. This performance data is not strictly intended for the EVM monitor and PM, but should be shared with the IPT members responsible for managing the technical effort.

CMO surveillance personnel should then give additional insight as to specific problems. Further, it is important for a manager to step back and look at the overall picture periodically in order to evaluate trends and to determine the potential impact of problems on a total program basis.

Preparation for Formal Reviews

Preparation for formal reviews and preparation of supporting documents such as the SAR, DAES, UCR, etc., is one of the most time consuming tasks facing a PMO. A Milestone Review provides acquisition executives the information they need to approve a program's entrance into the next acquisition phase. The required documentation and the pre-review meetings require long hours of preparation, but provide a complete analysis of a program. Periodic reviews for the <u>Acquisition Executives</u> (PEO, SAE, or DAE) provide insight at regular intervals of a program's progress towards meeting its desired objectives, and constructive feedback from these meetings gives the program manager the guidance he requires to make day-to-day decisions.

The customer or user interaction must be strong. Customer/user inputs must be considered and reflected in the reviews and documentation. Customer representation aids the program manager in the decision making process, and ensures proper steps are taken to meet the formal need. **Program Management Reviews (PMRs)** are an essential element of government oversight. Program reviews are either technical or non-technical. PMRs are usually non-technical reviews.

The objective of contractor PMRs is to ensure that scheduled activities are completed, to highlight problem areas causing delays in the program, and to determine what courses of action are necessary to resolve problem areas. The PMR is an opportunity for face-to-face communication between the PMO and the contractor to promote common understanding of program requirements. The review provides a forum for an information exchange and allows the PM to evaluate contractor progress effectively.

Acquisition Executives

PEO = Program Executive Officer SAE = Service Acquisition Executive DAE = Defense Acquisition Exe

Preparation for Formal Reviews (Cont.)

The program review must cover, in summary form, past monthly reports, upcoming milestone plans and actions, and any unresolved and open areas of concern. The PM should insist that contractors present data satisfactorily supporting their conclusions. Any variance or discrepancy should be questioned. All action items for resolution should become part of the review minutes. The sequence and timing of reviews is at the discretion of the PM and is tailored to the system under development.

Routine day-to-day and month-to-month program status is normally determined through monthly written reports provided by the contractor. Evaluation of material in these reports usually depends on the interpretation and experience of the reader. The report should be supported by some other source of program progress evaluation, such as a plant visit or an area walk-through. Reviewing only monthly reports and other supplementary information may not provide the level of knowledge needed for control.

There should be a review of program risks, plans, and options. Research activities should include a review of the most recent monthly reports including progress, technical, test, cost, etc. The PM must ensure that the contractor will provide pertinent and complete information. The PM must assess the resource costs to the program for this oversight function and ensure that the frequency and depth of the review is consistent with program needs. The PM must also ensure that the contractor is under contract to support program reviews and provide requested information on an as-required basis.

Conditions for Program Reviews

The PM must approach the review as a chance to exchange information and communicate with the contractor. An understanding of the review requirements and the need for preparation are paramount for a successful program review. The PM, staff, and contractor need to do their preparation before participating in a program review. The following is a list of conditions upon which program reviews should be based.

- <u>Identify the objective and purpose</u> of the meeting in terms of integrating cost, schedule, and technical performance information for the PMR.
- <u>Identify the players</u>. Invite only those who will contribute to meeting the objectives. Ensure that required specialists are available. Lack of one key player may hamper obtaining objectives.
- <u>Publish an agenda</u>. The agenda is usually developed jointly by the PMO and the contractor to ensure that both parties have their subjects included. The final agenda is subject to PM approval.
- Select the meeting place to fit the needs of the participants.

Program Management Reviews are also held to keep DOD acquisition executives—the Program Executive Officer, Service Acquisition Executive, Defense Acquisition Executive, and others—informed of program status. The general nature and content of these briefings are generally dictated by the requesting executive and normally cover the status of issues that affect a program's cost, schedule, or technical performance.

Identify the Objective and Purpose

- Focus on cost objectives
- Schedule drivers and "float" in the contract master schedule
- Identify risk factors mitigated and additional risk factors incurred to date or anticipated in the future
- Establish performance trends and their impact to completing the contract on time and at what cost
- Determine the effect of performance on program funding and, inversely, funding impacts that may result in a contract modification to re-scope remaining tasks
- Assess technical achievement or challenges

Identify the Players

Keep participation to the minimum necessary. Too often attendees are simply observers and never challenged.

- Many problems are not surfaced to the government team's attention until they become show stoppers. Encourage your functional/IPT representatives (i.e., test, configuration, logistics, program control) to highlight areas that they know are sensitive in order to surface these problem areas.
- The PM should ensure that a financial analyst attends all kick-off meetings and program reviews. The financial analyst can identify events that cannot occur due to funding restrictions in certain time frames. He/she can also provide guidance to the contractor as to how cost reporting can be accomplished as the problem is being discussed.

Publish an Agenda

- Program review agendas should be prepared for every review that is conducted.
- All attendees must know the time allotted and subjects to be covered. Distribute the agenda to all attendees prior to the meeting.
- Another addition for PMRs is the "Top Ten" list. This list, when briefed at PMRs, allows focus on the ten most pressing problems the PMO and contractor face and leads to recovery plans being implemented and problems tracked until resolved. PMRs should be issue-oriented. Informationonly briefings should be minimized.
- Ensure that sufficient time is planned into reviews to allow all views to be heard. A lean team of representatives to present all views in the time allotted should provide a quality review

Select the Meeting Place

Consider:

- Environment
- Size
- Location
- Seating
- Acoustics
- Visual aids capability

Program Execution Knowledge Review

Which of the following is not an element or principle of EVM program management?

- Program Management Reviews (PMR) of the risks, plans, and options, CAIV trade-off considerations, funding, get well plans and actions.
- Program Management Reviews (PMR) focus on cost objectives, schedule drivers, performance trends, funding, technical achievement.
- Hold all Program Management Reviews (PMR) at the contractor's facility to ensure the best environment for discussing Government plans of action.
- Contractor Program Management Reviews (PMR) to ensure scheduled activities are completed, highlight problem areas, take actions to resolve problem areas

Correct. This is not an element or principle of EVM program management.

End of Lesson

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