

**EVMS Training Snippet Library:**  
**Contract Performance Report / Integrated Program**  
**Management Report: FPD Quick Check**



Office of Acquisition and Project Management (APM) MA-60  
U. S. Department of Energy  
July 2014



*Achieving Management and Operational Excellence*

This EVMS Training Snippet, sponsored by the Office of Acquisition and Project Management (OAPM), provides a “Quick Review” perspective for the Federal Project Director of formats 1-5 of the Contract Performance Report (CPR) or Integrated Program Management Report (IPMR).

# EVMS Data Reviews



Page 2

- **Monthly CPR / IPMR review of EVM data is important**
- **Approach can be:**
  - Risk-based
  - Defined process based on PARS II Analysis reports
    - For example, monthly assessments as described in OAPM's EVMS and Project Analysis Standard Operating Procedure
  - In-depth reviews such as EVMS Surveillance process
    - See OAPM's EVMS Surveillance Standard Operating Procedure
- **What if you are a Federal Project Director and want to get a feel for how things are going in a short amount of time?**
  - FPD Quick Check



While the Federal Project Director is responsible for monthly verifications that the data from the contractor's certified EVMS is accurately uploaded into PARS 2, the FPD or Federal staff should be conducting reviews of the data for accuracy and completeness and from a performance perspective. The degree in which the data is analyzed may be risk-based, a defined process assessment based on PARS 2 Analysis reports, or in-depth reviews such as EVMS surveillance.

The intent of this Snippet is to provide an FPD level 'Quick Check' of the CPR or IPMR reports primarily for accuracy, completeness, and understanding of monthly changes.

# Formats 1 – 4: Header Checks



<b>1. CONTRACTOR</b>		<b>2. CONTRACT</b>		<b>3. PROJECT</b>			
a. NAME		a. NAME		a. NAME			
b. LOCATION (Address and ZIP Code)		b. NUMBER		b. PHASE			
		c. TYPE	d. SHARE RATIO	c. EVMS ACCEPTANCE NO YES (YYYYMMDD)			
<b>5. CONTRACT DATA</b>							
a. QTY	b. NEGOTIATED COST	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK	d. TARGET PROFIT / FEE	e. TARGET PRICE	f. ESTIMATED PRICE	g. CONTRACT PRICE	h. ESTIMATED CONTRACT CEILING

Review the header information, blocks 1 – 5.  
 Are entries correct?  
 Are they consistent between Formats?



The header information of the Formats 1 – 4 contains the project level information. Ensure that the information is accurate on each of the Format headers. Errors left uncorrected can cause reconciliation issues in the future.

# Format 1 – EAC Checks



3. ESTIMATED COST AT COMPLETION		CONTRACT BUDGET												
MANAGEMENT ESTIMATE AT COMPLETION (1)		BASE (2)												
1. BEST CASE														
2. WORST CASE														
3. MOST LIKELY														
B. PERFORMANCE DATA														
ITEM (1)	CURRENT PERIOD				CUMULATIVE TO DATE				REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL COST		BUDGETED COST		ACTUAL COST		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)
	WORK SCHEDULED (2)	WORK PERFORMED (3)	WORK PERFORMED (4)	VARIANCE SCHEDULE (5)	WORK SCHEDULED (7)	WORK PERFORMED (8)	WORK PERFORMED (9)	VARIANCE SCHEDULE (10)						
a. WORK BREAKDOWN STRUCTURE ELEMENT														
b. COST OF MONEY														
c. GENERAL AND ADMINISTRATIVE *														
d. UNDISTRIBUTED BUDGET														
e. SUB TOTAL (Performance Measurement Baseline)														
f. MANAGEMENT RESERVE														
g. TOTAL														
B. RECONCILIATION TO CONTRACT BUDGET BASE														
a. VARIANCE ADJUSTMENT														
b. TOTAL CONTRACT VARIANCE														

Is block 6.c. Most Likely EAC the same as the Column 15 EAC Total line? If not, look for explanation in Format 5.

If there is a difference between the Most Likely and the Best Case or the Worst Case estimates at completion reported in Format 1 Blocks 6.a.1, 6.b.1, or 6.c.1, the assumptions, conditions, and methodology underlying the estimates must be explained in Format 5. It is concerning if they all are equal. Risks should be considered in the worst case and opportunities in the best case. If there is a difference between the Most Likely and the Column 15 EAC, those differences must also be explained in Format 5 in terms of risk and opportunities and senior management knowledge of current or future contract conditions.

# Format 1 – Retroactive Change Check



8. PERFORMANCE DATA					
ITEM (1)	CURRENT PERIOD				
	BUDGETED COST		ACTUAL COST	VARIANCE	
	WORK SCHEDULED (2)	WORK PERFORMED (3)	WORK PERFORMED (4)	SCHEDULE (5)	COST (6)
a. WORK BREAKDOWN STRUCTURE ELEMENT					

Are there negative values in the current month for Budgeted Cost for Work Scheduled, Budgeted Cost for Work Performance, or Actual Cost of Work Performance?

If so, investigate the reason for the retroactive change.

Look at the data in columns 2, 3 and 4 of Block 8. Negative values in the current period for BCWS, BCWP, and ACWP are an indication of a retroactive change, that is something previously reported is being changed, possibly corrected. They are also identified in the PARS 2 Retroactive Change Indicator (6-Mo, PMB Level) report. That report also identifies when a change was made to history rather than represented by a negative value in the current period. These should be checked monthly, and if found, the FPD should ask why. While these kinds of changes may be acceptable when done in compliance with the ANSI/EIA-748 Guideline 30, an excessive amount may indicate the system lacks discipline.

Questions to ask when changes have been identified include:

Why was budget removed? Was scope removed? Does the rationale meet Guideline 30, e.g. correction of errors, routine accounting adjustments, effects of customer or management directed changes, or to improve the baseline integrity and accuracy of performance measurement data? Why was the change made to history rather than in the current period? Also see if the adjustments brought cumulative variances to zero. If so, why was there a single point adjustment, and was it approved by DOE?

# Format 1 – Potential OTB Indicator



6. ESTIMATED COST AT COMPLETION											7. AUTHORIZED CONTRACTOR REPRESENTATIVE				
MANAGEMENT ESTIMATE AT COMPLETION (1)				CONTRACT BUDGET BASE (2)			VARIANCE (3)				a. NAME (Last, First, Middle initial)				
b. BEST CASE							c. SIGNATURE				d. DATE SIGNED (YYYYMMDD)				
b. WORST CASE															
c. MOST LIKELY															
B. PERFORMANCE DATA															
ITEM (1)	CURRENT PERIOD						CUMULATIVE TO DATE						AT COMPLETION		
	BUDGETED COST		ACTUAL COST		VARIANCE		BUDGETED COST		ACTUAL COST		VARIANCE		BUDGETED	ESTIMATED	VARIANCE
	WORK SCHEDULED (2)	WORK PERFORMED (3)	WORK PERFORMED (4)	SCHEDULE (5)	COST (6)		WORK SCHEDULED (7)	WORK PERFORMED (8)	WORK PERFORMED (9)	SCHEDULE (10)	COST (11)		(14)	(15)	(16)
a. WORK BREAKDOWN STRUCTURE															
<div style="background-color: yellow; padding: 5px;">                     Is the Column 15 EAC significantly greater than the Block 6.(2) Contract Budget Base (typically more than 20%)?                      If so, consider OTB.                 </div>															
b. C															
c. G															
d. U															
e. S															
f. N															
<b>g. TOTAL</b>															
9. RECONCILIATION TO CONTRACT BUDGET BASE															
a. VARIANCE ADJUSTMENT															
b. TOTAL CONTRACT VARIANCE															

When the EAC reported in Column 15 is significantly greater than the Contract Budget Base reported in Block 6 Column 2, this could indicate a need for an Over Target Baseline. Typically the difference would be 20% or more. It should also trigger an assessment of contingency funds by the FPD, and whether there is a chance of breaching the Performance Baseline Total Project Cost. In that case, not only is an OTB up for consideration, but serves as a flag to the FPD that additional funding via a Baseline Change Proposal may be required for the project.

# Format 1 – Accuracy of OTB Reporting



5. CONTRACT DATA											
a. QUANTITY	b. NEGOTIATED COST	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK	d. TARGET PROFIT/ FEE	e. TARGET PRICE	f. ESTIMATED PRICE	g. CONTRACT CEILING	h. ESTIMATED CONTRACT CEILING	i. DATE OF OTB/OTS (YYYYMMDD)			
6. ESTIMATED COST AT COMPLETION			7. AUTHORIZED CONTRACTOR REPRESENTATIVE		8. DATE SIGNED (YYYYMMDD)						
MANAGEMENT ESTIMATE		CONTRACT BUDGET	VARIANCE	a. NAME (Last, First, Middle Initial)	b. TITLE						
<p><b>Is there an OTB on this project?</b>  <b>If so, is it correctly reported in Blocks 5.i, Block 8, Columns (12a), (12b), and (13), and Block 9.a. and b?</b>  <b>If not, question the contractor.</b></p>											
9. RECONCILIATION TO CONTRACT BUDGET BASE											
a. VARIANCE ADJUSTMENT											
b. TOTAL CONTRACT VARIANCE											

  

REPROGRAMMING ADJUSTMENTS											
VARIANCE		AT COMPLETION									
SCHEDULE (10)	COST (11)	COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)				

If an OTB has been approved, it needs to be reported accurately on the Format 1. The FPD should check the areas highlighted, that is blocks 5.i, Block 8 Columns 12a, 12b, and 13, and Blocks 9.a. and b. If these are not completed properly, the FPD needs to notify the contractor that corrections are required.

# Format 1, 2, & 3 - MR Value Agreement



8. PERFORMANCE DATA																
ITEM	CURRENT PERIOD					CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL COST	VARIANCE		BUDGETED COST		ACTUAL COST	VARIANCE		COST VARIANCE	SCHEDULE VARIANCE	BUDGET	ESTIMATED	VARIANCE	
	WORK SCHEDULED	WORK PERFORMED	WORK PERFORMED	SCHEDULE	COST	WORK SCHEDULED	WORK PERFORMED	WORK PERFORMED	SCHEDULE	COST	(12a)	(12b)	(13)	(14)	(15)	(16)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12a)	(12b)	(13)	(14)	(15)	(16)
a. WORK BREAKDOWN STRUCTURE ELEMENT																
b. COST OF MONEY																
c. GENERAL AND ADMINISTRATIVE *																
d. UNDISTRIBUTED BUDGET																
e. SUB TOTAL (Performance Measurement Baseline)																
<b>f. MANAGEMENT RESERVE</b>																

Identify Format 1 Column 14 of Block 8.f. MR value (as shown above).  
 Does it agree with Format 2 Column 14 of Block 5.f?  
 Does it agree with Format 3 Column 16 of Block 7?  
 Note: Locations of MR value on Formats 2 and 3 are in a similar location as shown.



Accuracy in reporting Management Reserve is also important. The FPD should look at Format 1, Column (14) of Block 8.f for the total amount of budget identified as MR as of the end of the current reporting period. The value shown as MR in Formats 1, 2, and 3 must all agree so the next step is to compare the Format 1 MR value to the Format 2, Column (14) of Block 5.f. Also compare the value to Block 6.b of the Format 3. Lastly, check whether any MR was allocated to WBS elements during the reporting period. If there were allocations, these must be explained in Format 5?

# Format 3 – OTB/OTS Checks



INTEGRATED PROGRAM MANAGEMENT REPORT FORMAT 3 - BASELINE				Dollars IN _____		PENDING UPDATE TO OMB No. 0704-0188
<b>5. CONTRACT DATA</b>						
a. ORIGINAL NEGOTIATED COST	b. NEGOTIATED CONTRACT CHANGES	c. CURRENT NEGOTIATED COST (a. + b.)	d. ESTIMATED COST OF AUTHORIZED UNPRICED WORK	e. CONTRACT BUDGET BASE (c. + d.)	f. TOTAL ALLOCATED BUDGET	g. DIFFERENCE (e. - f.)
h. CONTRACT START DATE (YYYYMMDD)	i. CONTRACT DEFINITIZATION DATE (YYYYMMDD)	j. PLANNED COMPLETION DATE (YYYYMMDD)		k. CONTRACT COMPLETION DATE (YYYYMMDD)	l. ESTIMATED COMPLETION DATE (YYYYMMDD)	

Is the value of Block 5.g. > 0? Was an OTB approved by the Government?

Compare the dates in Blocks 5.j. and 5.k.  
If the date in 5.j. is later than 5.k., was an Over Target Schedule (OTS) approved?



A difference between blocks 5.e - the CBB, and 5.f - the total allocated budget, is reported in Block 5.g. (outlined in yellow). This difference reflects an Over Target Baseline which would be reported on other formats as well. Without an OTB there should be no difference so the FPD should report any inaccuracies to the contractor for correction. Also note block 5.j Planned Completion Date, outlined in green. In the case of an Over Target Schedule or 'OTS', the planned completion date would exceed or be later than the contract completion date reported in block 5.k.

# Format 3 – EAC Check



INTEGRATED PROGRAM MANAGEMENT REPORT						PENDING UPDATE TO
FORMAT 3 - BASELINE						OMB No. 0704-0188
5. CONTRACT DATA						Dollars in _____
a. ORIGINAL NEGOTIATED COST	b. NEGOTIATED CONTRACT CHANGES	c. CURRENT NEGOTIATED COST (a. + b.)	d. ESTIMATED COST OF AUTHORIZED UNPRICED WORK	e. CONTRACT BUDGET BASE (c. + d.)	f. TOTAL ALLOCATED BUDGET	g. DIFFERENCE (e. - f.)
h. CONTRACT START DATE (YYYYMMDD)	i. CONTRACT DEFINITION DATE (YYYYMMDD)	j. PLANNED COMPLETION DATE (YYYYMMDD)			k. CONTRACT COMPLETION DATE (YYYYMMDD)	l. ESTIMATED COMPLETION DATE (YYYYMMDD)

Is there a difference between Blocks 5.k. and 5.l.?

Block 5.l. is the planned completion date consistent with the EAC.



On the Format 3, the FPD should check the contract and estimated completion dates. Is there a difference between Blocks 5.k. and 5.l.? Block 5.l. is the planned completion date consistent with the EAC. If there is a significant schedule variance on the project, the FPD should expect to see an estimated completion date later than the contract completion date.

# Format 3 – PMB Change Check



FORMAT 3 - BASELINE															
BUDGETED COST FOR WORK SCHEDULED (BCWS) (Non-Cumulative)														UNDIS-TRIBUTED BUDGET (15)	TOTAL (16)
ITEM (1)	BCWS CUMULATIVE TO DATE (2)	BCWS FOR REPORT PERIOD (3)	SIX MONTH FORECAST						ENTER SPECIFIED PERIODS						
			+1 JAN (4)	+2 FEB (5)	+3 MAR (6)	+4 APR (7)	+5 MAY (8)	+6 JUN (9)	+7 Jul (10)	+8 Aug (11)	+9 Sep (12)	+12 Oct-Dec (13)	+13 TC (14)		
a. PERFORMANCE MEASUREMENT BASELINE (Beginning of Period)															
b. BASELINE CHANGES AUTHORIZED DURING REPORT PERIOD															
c. PERFORMANCE MEASUREMENT BASELINE (End of Period)															
7. MANAGEMENT RESERVE															
8. TOTAL															

Check Block 6.b of the Format 3 to see what changes to the PMB were made during the reporting period. If so, were they explained in Format 5?



While the IPMR Format 3 is the same basic structure as the CPR Format 3, there are two significant differences; notice the red arrows. The first is in Block 6.b. The area is not shaded from Column 2 through Column 15, as it was in the CPR Format 3 (see double headed arrow). The contractor is now required to list all significant baseline changes that have occurred during the reporting period in the respective column. This list should specify any contract changes, authorized unpriced work transactions, transactions involving Management Reserve, Undistributed Budget, and any significant PMB re-time phasing. Also, all significant authorized baseline changes should be listed individually, whether priced or unpriced, and all other changes should be summarized and titled “other.” The term “significant” may be defined by the Government or determined by the contractor if undefined. While listed here in Format 3, the reasons for any of these changes must still be discussed in Format 5.

The second difference -- or change in Format 3 is that Block 6.c, Column 3, is not shaded (see single headed arrow). Consequently, any PMB change in the current period will be clearly noted. A current month BCWS change needs to be discussed in Format 5. Otherwise, it could be viewed as a “Freeze Period” violation.

The information on this report is very helpful for the FPD to monitor how the baseline plan is changing every month. If any MR was applied to any WBS elements during the report period, verify whether it was explained in the Format 5 narrative as required.

## Format 5 Checks



Page 12

- **Do the variance narratives**
  - Address Root Cause?
  - Address Impacts?
  - Address Corrective Action including dates and accountability?
- **Is the content and use of UB explained?**
- **Are current period MR applications identified in Format 3 explained?**
- **Are differences in reported EACs explained along with assumptions?**



Many items are required to be addressed in the Format 5. Key areas to review include:

The Variance narratives; do they address the root cause, impacts, and corrective action including dates and accountability for actions taken and planned? The variances and corrective actions are essential pieces of information in making predictions of future performance. If they are not explained to your satisfaction, discuss this with the contractor and request better details. Lack of sufficient information is a common finding when EVMS surveillance is conducted.

Next, is the content and use of undistributed budget explained? If allocation of undistributed budget is reported in the Format 3 for the current period, is it thoroughly explained in Format 5 including the control accounts receiving the scope and budget? Are current period uses of MR identified in the Format 3 explained in the Format 5?

Lastly in this quick check, it is essential that the FPD understand the contractor's Estimates at Completion. Recall if there is a difference between the Most Likely and the Best Case or the Worst Case amounts reported in Format 1 Blocks 6.a.1, 6.b.1, or 6.c.1, the assumptions, conditions, and methodology underlying the estimates must be explained in Format 5. If there is a difference between the Most Likely and the Column 15 EAC, those differences must also be explained in Format 5 in terms of risk and opportunities and senior management knowledge of current or future contract conditions. Review these entries and look for changes since the prior period and how they are explained. If you are aware of issues that are occurring and they are not reflected in the EAC's, question the contractor.

**DOE OAPM EVM Home Page**

Page 13

**ENERGY.GOV**  
Office of Management

SERVICES OPERATIONAL MANAGEMENT MISSION

About Us OFFICES

Home » Operational Management » Project Management » Earned Value Management

## EARNED VALUE MANAGEMENT

Aviation Management  
Executive  
Correspondence  
Energy Reduction at  
HQ  
Facilities and  
Infrastructure  
Freedom of Information  
Act  
Financial Assistance  
Information Systems  
Procurement and  
Acquisition  
**Earned Value**  
Lessons Learned  
Reviews and  
Validations  
Documents and  
Publications  
RCA and CAP

Earned Value Management (EVM) is a systematic approach to the integration and measurement of cost, schedule, and technical (scope) accomplishments on a project or task. It provides both the government and contractors the ability to examine detailed schedule information, critical program and technical milestones, and cost data.

- EVMS Surveillance Standard Operating Procedure (ESSOP) - 26 Sep 2011 (pdf)
- EV Guideline Assessment Templates - (MS Word)
- DOE EVMS Cross Reference Checklist - (pdf)
- DOE EVMS Risk Assessment Matrix - (MS Word)
- Formulas and Terminology "Gold Card" - Sep 2011 (pdf)
- Slides from the OECM Road Show: Earned Value (EV) Analysis and Project Assessment & Reporting System (PARS II) - May 2012 (pdf)
- DOE EVM Guidance

### EVM TUTORIALS

**Module 1 - Introduction to Earned Value** (pdf 446.86 kb) July 17, 2003

This module is the introduction to a series of online tutorials designed to enhance your understanding of Earned Value Management. This module's objective is to introduce you to Earned Value and outline the blueprint for the succeeding modules. This module defines Earned Value management. It looks at the differences between Traditional management and Earned Value management, examines how Earned Value management fits into a program and project environment, and defines the framework necessary for proper Earned Value management implementation.

<http://energy.gov/management/office-management/operational-management/project-management/earned-value-management>

Career Development  
Program  
Real Estate  
History

This concludes the FPD Quick Check review. For information relative to EVMS procedures, templates, helpful references, and training materials, please refer to OAPM's EVM Home page. Check back periodically for updated or new information.

Thank you