



**PARCA
EVM**

PARCA EVM POLICY TRAINING

The Mystery of the 0.82 CPI

**Mr. John McGregor
PARCA Deputy Director for EVM**

**Mr. David Nelson
Mrs. Lynne Giordano**

**Ms. Karen Kostelnik
Mrs. Jen Horner**

10 December 2015



PARCA EVM

PARCA AGENDA – December 10

Time	Topic
8:00 – 12:00	EVM Policy, Data Requirements, and Reporting
<i>12:00 – 1:15</i>	<i>Lunch</i>
1:15 – 2:15	PARCA Performance Assessments
2:15 – 4:15	EVM Central Repository (EVM-CR)
4:15 – 4:30	Question and Answer



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EVMystery

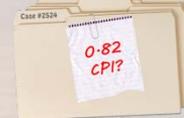
Case #2524

0.82
CPI?



PARCA EVM

EVMystery Case



Case #2524 Client Info...

- Requesting Party: Program Office, *Laser Optic Solution Team (LOST)*
- Contract Party: *Prototyping and Integration Decisions Company (PAID Co.)*
- Program Name: *Varied Array Detection Electron Radar (VADER)*

Case #2524 Notes...

- Due to change in direction, the Program Office has new staff and is unfamiliar with EVM or EVM metrics
- Case...how does one figure out a metric, from a report, that is part of a management methodology?
- Who, why, when, how, what where...



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EVMystery What is a CPI?

First thing...have to figure out what a "CPI" is...

AF Acronym Finder

Abbreviation to define

Examples: NFL, NASA, PSP, HIPAA

What does CPI stand for?

Your abbreviation search returned 151 meanings

Rank	Abbr.	Meaning
★★★★★	CPI	Communist Party of India (political party)
★★★★★	CPI	Consumer Price Index
★★★★★	CPI	Corruption Perceptions Index (US trade)
★★★★★	CPI	Characters Per Inch
★★★★★	CPI	Communications Power Industries (formerly Varian)
★★★★★	CPI	Comissao Parlamentar de Inquerito (Brazil)
★★★★★	CPI	Crisis Prevention Institute
★★★★★	CPI	Cost Performance Index
★★★★★	CPI	Continuous Process Improvement
★★★★★	CPI	Center for Public Integrity
★★★★★	CPI	Cycles Per Instruction

Seems close...

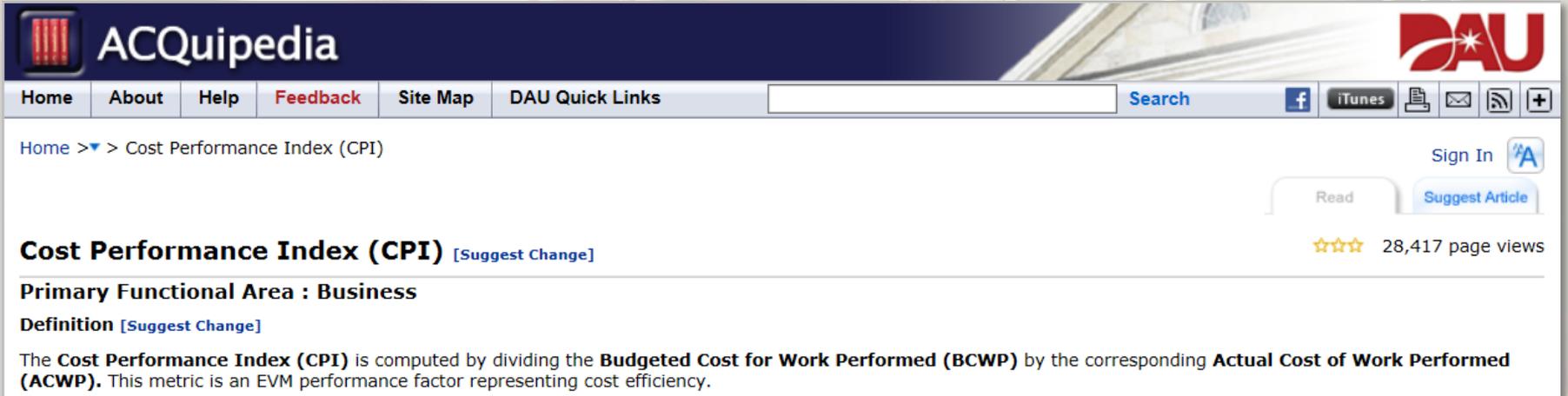




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EVMystery What is a CPI?

DAU...hmmnnn...



ACQuipedia 

Home About Help **Feedback** Site Map DAU Quick Links Search      

Home >> Cost Performance Index (CPI) Sign In 

Read [Suggest Article](#)

Cost Performance Index (CPI) [\[Suggest Change\]](#) ☆☆☆ 28,417 page views

Primary Functional Area : Business

Definition [\[Suggest Change\]](#)

The **Cost Performance Index (CPI)** is computed by dividing the **Budgeted Cost for Work Performed (BCWP)** by the corresponding **Actual Cost of Work Performed (ACWP)**. This metric is an EVM performance factor representing cost efficiency.

Better find out who owns this stuff...

Defense Acquisition Guidebook, Policies, Directives, Regulations, Laws [\[Suggest Change\]](#)

- [USD\(AT&L\) Memo: EVM Systems Performance, Oversight & Governance - PARCA, August 10, 2011](#)
- [USD\(AT&L\) Memo: Integrated Program Management Report \(IPMR\) Data Item Description \(DID\), June 19, 2012](#)



EVMystery Case Questions

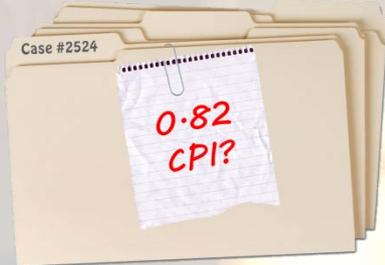
After some additional searching...

- ▶ **Who** – PARCA, DCMA, Service / Agency POCs
- ▶ **Why** – DFARS, EVMSIG, EVMS
- ▶ **When** – Applicability
- ▶ **How** – Reporting, IPMR, Tailoring
- ▶ **What** – Special Considerations
- ▶ **Where** – EVM-CR, DAMIR, PARCA PA



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EVMystery Who



Case #2524 Notes...

- *Case plan set...start with "who" and trace through the other questions*
- *Note to self...ask why these organizations like clothes so much... "PARCA"... "CAPE"...*



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EVMystery Who: Roles



EVM EARNED VALUE MANAGEMENT

Home Resources FAQs Issue Resolution Acc

PARCA EVM News
Click on the titles below to view more.

September 16, 2015
PMR DDD Update

September 15, 2015
EMIG Revisions

September 2, 2015
Cost Deviation - Earned Value Management System Threshold

April 29, 2015
PARCA EVM email distribution

Welcome
Performance Assessments and Root Cause Analysis (PARCA) Earned Value Management division in the Office of the Assistant Secretary of Defense for Acquisition serves as the Department of Defense (DoD) focal point for all policy, guidance and competency relating to EVM.

Earned Value Management (EVM) is one of DoD's and industry's most powerful program planning and management tools. The purpose of EVM is to ensure sound planning and executing of all tasks required for contract performance. It promotes an environment where contract execution data is shared between project personnel and government oversight staff and in which emerging problems are identified, presented and acted upon as early as possible. EVM provides a disciplined, structured, objective, and quantitative method to integrate technical work scope, cost, and schedule objectives into a single cohesive contract baseline plan called a Performance Measurement Baseline for tracking contract performance.

Vision
Contract value management is fully endorsed by the DoD. An effective

APPROVED FOR PUBLIC RELEASE DISTRIBUTION UNLIMITED: 16-S-0567, December 2, 2015; 16-S-0566, December 2, 2015; 16-S-0596, December 7, 2015



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PARCA



Director, Performance Assessments and Root Cause Analyses (PARCA)

Mr. Gary R. Bliss

**Deputy Director for
Earned Value
Management**

Mr. John S. McGregor

**Senior Advisor for
Root Cause Analyses**

Dr. D. Mark Husband

**Deputy Director for
Performance
Assessments**

Dr. Peter C. Egan

**Deputy Director for
Acquisition Policy
Analysis Center**

Dr. Philip S. Anton

**OSD EVM Policy
Holder**

**Nunn McCurdy
Breach Analysis**

**Program
Assessments and
DAES Selection**

Analysis Team

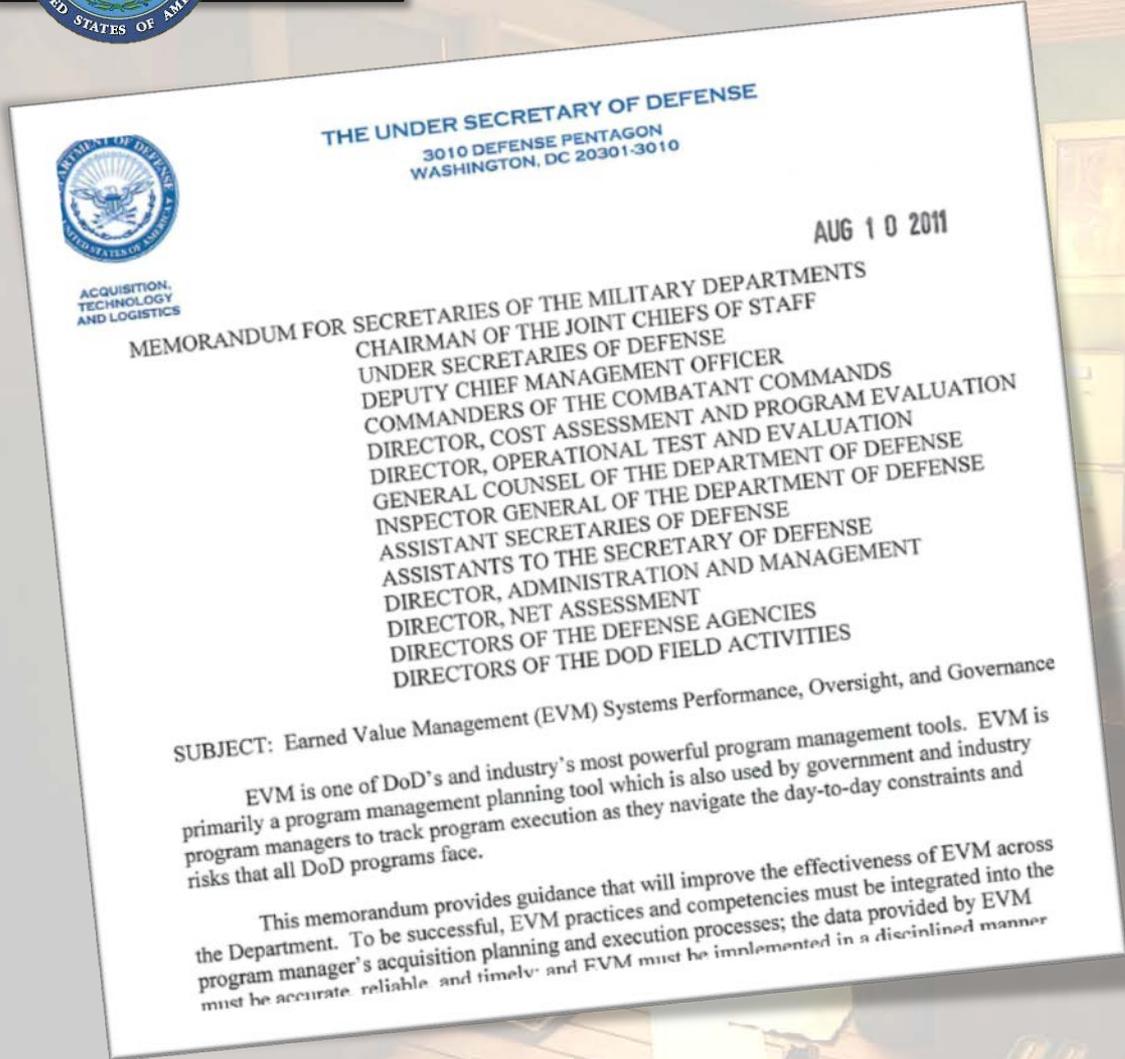
PARCA was brought into existence via the reforms called for by the Weapon Systems Acquisition Reform Act (WSARA) of 2009

As the central office for major defense authorization performance assessment, root cause analysis, and earned value management (EVM), PARCA advises AT&L on program execution status; and issues policies, procedures, and guidance to the Military Departments and the Defense Agencies to improve program management practices



PARCA EVM

EVM Application – PARCA’s Role



PARCA Authority Memo from 2011

- ▶ “Review and approve EVM data requirements for MDAP Programs ...in close coordination with the services and agencies”
- ▶ “Responsible for... interpretation of policy, practice and requirements among DoD Components”



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PARCA EVM



The EVM Division of PARCA is responsible and accountable for EVM performance, oversight, and governance across the Department

Policy and Guidance

EVM Competency

Program Interface

EVM Central Repository

Communications and Outreach

Develop, publish, and maintain DOD policy and guidance on EVM

Serve as DoD EVM Functional Lead to influence EVM competency requirements; Coordinate with Defense Acquisition University (DAU)

Review and approve EVM data requirements for MDAP programs in coordination with Services and Defense Agencies; Resolve interpretive differences in EVM policy, practice, and requirements

Responsible for the Earned Value Mgt Central Repository (CR) and maintenance of CR data alignment with the Acquisition Visibility framework; Report EVM data compliance, integrity, and quality to AT&L

Maintain communications with Government and Industry on EVM policy





PARCA EVM

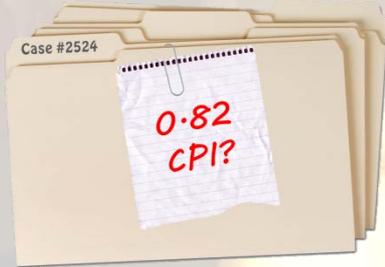
Organizations





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EVMystery Who



Case #2524 Notes...

- *PARCA owns policy*
- *Services and Agencies implement the policy*
- *0-82 CPI...where does the requirement to have it come from...*



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EVMystery Why: Policy



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SUBPART 234.2—EARNED VALUE MANAGEMENT SYSTEM
 (Revised December 7, 2011)

[234.201 Policy](#)
[234.203 Solicitation provisions and contract clause](#)

234.201 Policy.

(1) DoD applies the earned value management system requirement as follows:

(i) For cost or incentive contracts and subcontracts valued at \$20,000,000 or more, the earned value management system shall comply with the guidelines in the American National Standards Institute/Electronic Industries Alliance Standard 748, Earned Value Management Systems (ANSI/EIA-748).

(ii) For cost or incentive contracts and subcontracts valued at \$50,000,000 or more, the contractor shall have an earned value management system that has been determined by

EVM EARNED VALUE MANAGEMENT

[Home](#) [Resources](#) [FAQs](#) [Issue Resolution](#)

PARCA EVM News
 Click on the titles below to view more.

- September 16, 2015 **PMR DOD Update**
- September 15, 2015 **VMIG Revisions**
- September 2, 2015 **Joint Deviation - Earned Value Management System Threshold**
- April 29, 2015 **PARCA EVM email distribution**

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Contracting Policy



Office of Management and Budget (OMB)

Circular A-11 establishes policy for planning, budgeting, acquisition and management of Federal for information technology (IT) and other capital investments



Federal Acquisition Regulation (FAR)

Primary regulation for use by all Federal Executive agencies in their acquisition of supplies and services with appropriated funds



Defense Federal Acquisition Regulation Supplement (DFARS)

Supplement to the FAR providing DoD-specific acquisition regulations (note: services have additional supplemental guidance)





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DFARS

- ▶ Earned Value Management System (EVM) 234.201
- Cost of Acquisition (COA) component
- Cost of Performance (COP) determination EIA-748



OFFICE OF THE UNDER SECRETARY OF DEFENSE
3000 DEFENSE PENTAGON
WASHINGTON, DC 20301-3000

SEP 28 2015

In reply refer to
DARS Tracking Number: 2015-00017

MEMORANDUM FOR COMMANDER, UNITED STATES SPECIAL OPERATIONS
COMMAND (ATTN: ACQUISITION EXECUTIVE)
COMMANDER, UNITED STATES TRANSPORTATION
COMMAND (ATTN: ACQUISITION EXECUTIVE)
DEPUTY ASSISTANT SECRETARY OF THE ARMY
(PROCUREMENT)
DEPUTY ASSISTANT SECRETARY OF THE NAVY
(ACQUISITION AND PROCUREMENT)
DEPUTY ASSISTANT SECRETARY OF THE AIR FORCE
(CONTRACTING)
DIRECTORS OF THE DEFENSE AGENCIES
DIRECTORS OF THE DOD FIELD ACTIVITIES

SUBJECT: Class Deviation— Earned Value Management System Threshold

This class deviation rescinds and supersedes Class Deviation 2015-00015. Effective immediately, the Earned Value Management System (EVMS) compliance review threshold at DFARS 234.201(1)(ii), DFARS provision 252.234-7001, and DFARS clause 252.234-7002 is raised from \$50 million to \$100 million. In lieu of DFARS provision 252.234-7001, Notice of Earned Value Management System (APR 2008), and DFARS clause 252.234-7002, Earned Value Management System (MAY 2011), contracting officers shall use the attached DFARS

DFARS

must
(on)

must be
with the





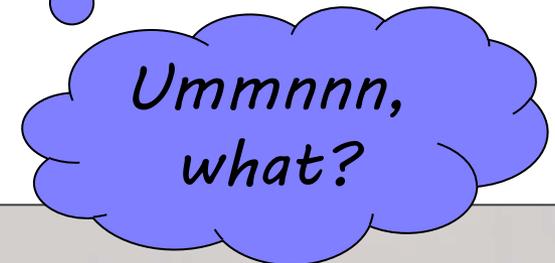
DFARS on Contract

- ▶ To apply the DFARS policy on contract, include the following
 - DFARS 252.234-7001 Notice of Earned Value Management System
 - DFARS 252.234-7002 Earned Value Management System
 - DFARS 252.234-7005 Contractor Business Systems



Business Systems

“Acceptable contractor business systems” means contractor business systems that comply with the terms and conditions of the applicable business system clauses listed in the definition of "contractor business systems"





- ▶ Accounting
- ▶ *Earned Value Management*
- ▶ Estimating
- ▶ Material Management and Accounting
- ▶ Property Management
- ▶ Purchasing



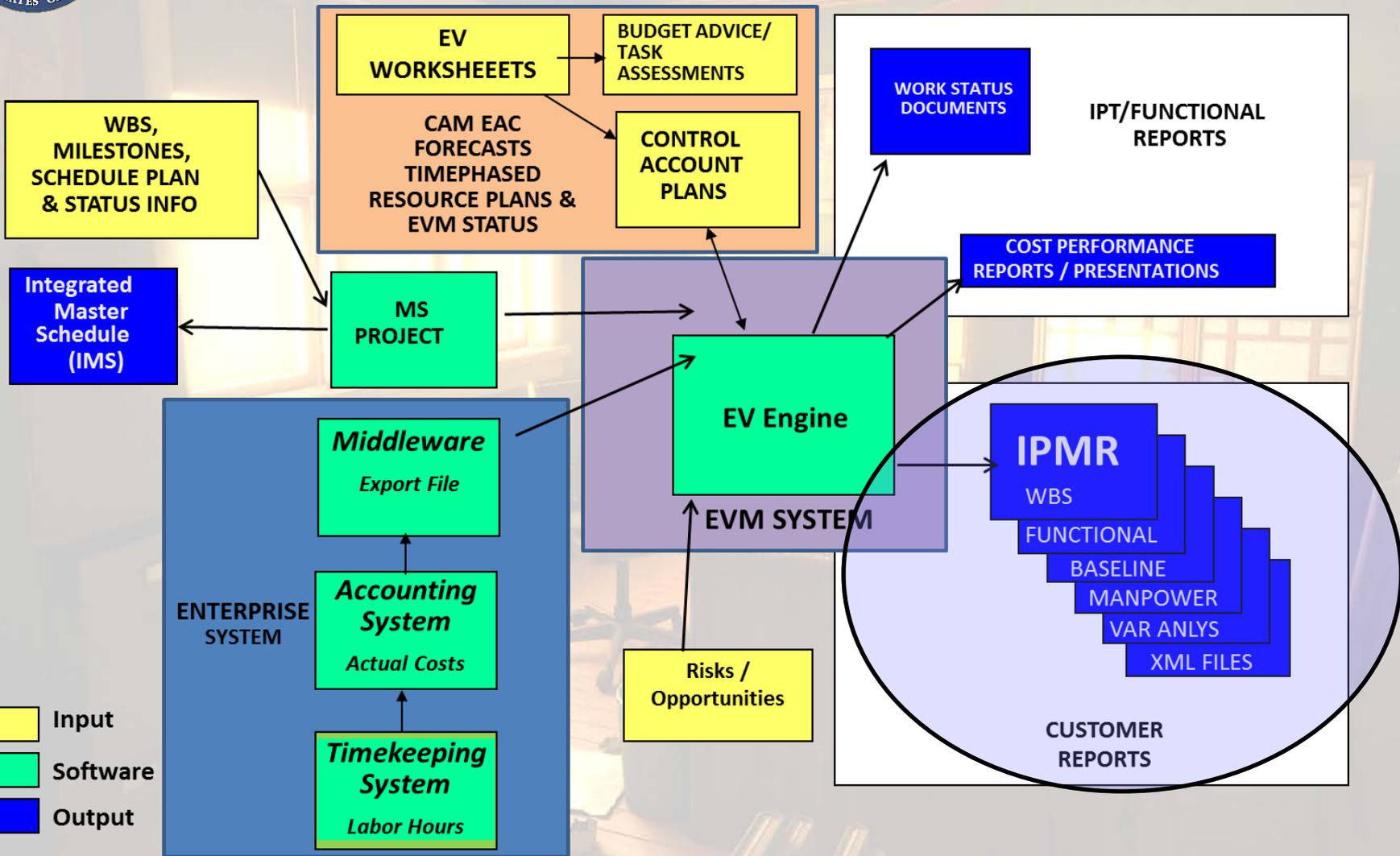
- ▶ *Case note... An EVM System (EVMS) is the management control system that integrates a program's work scope, schedule, and cost parameters for optimum program planning and control*

The EVM performance data generated by the EVMS must be timely, accurate, reliable, and auditable



PARCA EVM

Example of an EVMS



- Input
- Software
- Output



PARCA EVM

EVMS Guidelines

GL	GL Description	GL	GL Description
1	Define the Project Work Scope	17	Summarize direct costs by WBS elements
2	Define the Project Organization	18	Summarize direct costs by OBS elements
3	Integrate Subsidiary Processes	19	Record/allocate indirect costs
4	Identify Overhead Management	20	Identify unit and lot costs as needed
5	Integrate WBS/OBS to Create Control Accounts	21	Track and report material costs/quantities
6	Schedule with network logic	22	Calculate Schedule Variance & Cost Variance
7	Set measurement indicators	23	Identify significant variances for analysis
8	Establish the CBB/PMB	24	Analyze indirect Cost Variance
9	Budget by cost elements	25	Summarize information for management
10	Create work/planning packages	26	Implement corrective actions
11	Sum WP/PP budgets to the Control Account	27	Revise Estimate At Completion
12	Level of Effort planning	28	Incorporate changes in a timely manner
13	Set overhead budgets	29	Reconcile current to prior budgets
14	Identify MR and UB	30	Control retroactive changes
15	Reconcile CBB to target values	31	Prevent unauthorized revisions
16	Record direct costs	32	Document PMB changes



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EVM System Interpretation Guide




ASSISTANT SECRETARY OF DEFENSE
3600 DEFENSE PENTAGON
WASHINGTON, DC 20301-3600

MAR 09 2015

ACQUISITION

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS
CHAIRMAN OF THE JOINT CHIEFS OF STAFF
UNDER SECRETARIES OF DEFENSE
DEPUTY CHIEF MANAGEMENT OFFICER
COMMANDERS OF THE COMBATANT COMMANDS
DIRECTOR, COST ASSESSMENT AND PROGRAM EVALUATION
DIRECTOR, OPERATIONAL TEST AND EVALUATION
GENERAL COUNSEL OF THE DEPARTMENT OF DEFENSE
INSPECTOR GENERAL OF THE DEPARTMENT OF DEFENSE
ASSISTANT SECRETARIES OF DEFENSE
ASSISTANTS TO THE SECRETARY OF DEFENSE
DIRECTOR, ADMINISTRATION AND MANAGEMENT
DIRECTOR, NET ASSESSMENT
DIRECTORS OF THE DEFENSE AGENCIES
DIRECTORS OF THE DOD FIELD ACTIVITIES

SUBJECT: Issuance of Department of Defense Earned Value Management System Interpretation Guide

DEPARTMENT OF DEFENSE
EARNED VALUE
MANAGEMENT SYSTEM
INTERPRETATION GUIDE



GORDON M. KRANZ
Deputy Director, Earned Value Management
Performance Assessments and Root Cause Analyses



Earned Value Management (EVM) is one of DoD's and industry's most effective program management tools. Government and industry face similar challenges in joint situations on programs, and risks in the managing program. EVM is an authorized work tool. EVM pra

I thank you in advance for your support of this important initiative. My point of contact is Mr. Gordon M. Kranz, Deputy Director, EVM, Office of Performance Assessment and Root Cause Analyses at 703-697-3703 or Gordon.m.kranz.civ@mail.mil.



Katrina McFarland



EVMSIG Table of Contents



- ▶ Introduction
- ▶ EVMS Guidelines
 - Organization
 - Planning, Scheduling, and Budgeting
 - Accounting Considerations
 - Analysis and Management Reporting
 - Revisions and Data Maintenance
- ▶ Glossary
- ▶ References



EVMSIG Table of Contents



▶ Introduction

- Provides the purpose and use of the EVMSIG
- Discusses policies and roles in DoD EVM
- Explains the layout and format of the guide

▶ EVMS GL – Organization (Guidelines 1-5)

- Fundamental preparations for executing the program technical objectives to ensure effective management control of the program



EVMSIG Table of Contents



- ▶ **EVMS GL – Planning, Scheduling, & Budgeting (Guidelines 6-15)**
 - Plans and strategies to achieve the desired program cost, schedule, and technical objectives

- ▶ **EVMS GL – Accounting Considerations (Guidelines 16-21)**
 - All direct and indirect costs associated with accomplishing the complete scope of work are transferred to the EVMS at the level of detail required for performance analysis



EVMSIG Table of Contents



- ▶ **EVMS GL – Analysis and Management Reporting (Guidelines 22-27)**
 - Management use of the EVMS performance data for early detection of technical, schedule, and/or cost deviations from the Performance Measurement Baseline (PMB)

- ▶ **EVMS GL – Revisions and Data Maintenance (Guidelines 28-32)**
 - Maintaining an accurate and reliable Contract Budget Base (CBB) and PMB throughout the period of performance



EVMSIG Table of Contents



▶ Glossary

- Acronyms
- Definitions

▶ References

- List of internal and external references
- Examples: DFARS, IPMR, OTB Guide, etc.



EVMS Compliance

- ▶ Compliance; determined in 3 steps
 1. Assess whether the contractor's EVMS Description Document (EVMS DD) adequately documents how its system meets the intent of the 32 Guidelines
 2. Evaluate the contractor's ability to demonstrate their EVMS implementation as described in their EVMS DD and supplemental procedures
 3. Ensure the EVMS is providing timely, accurate, reliable and auditable data



EVMSIG Recent Discussion Topics

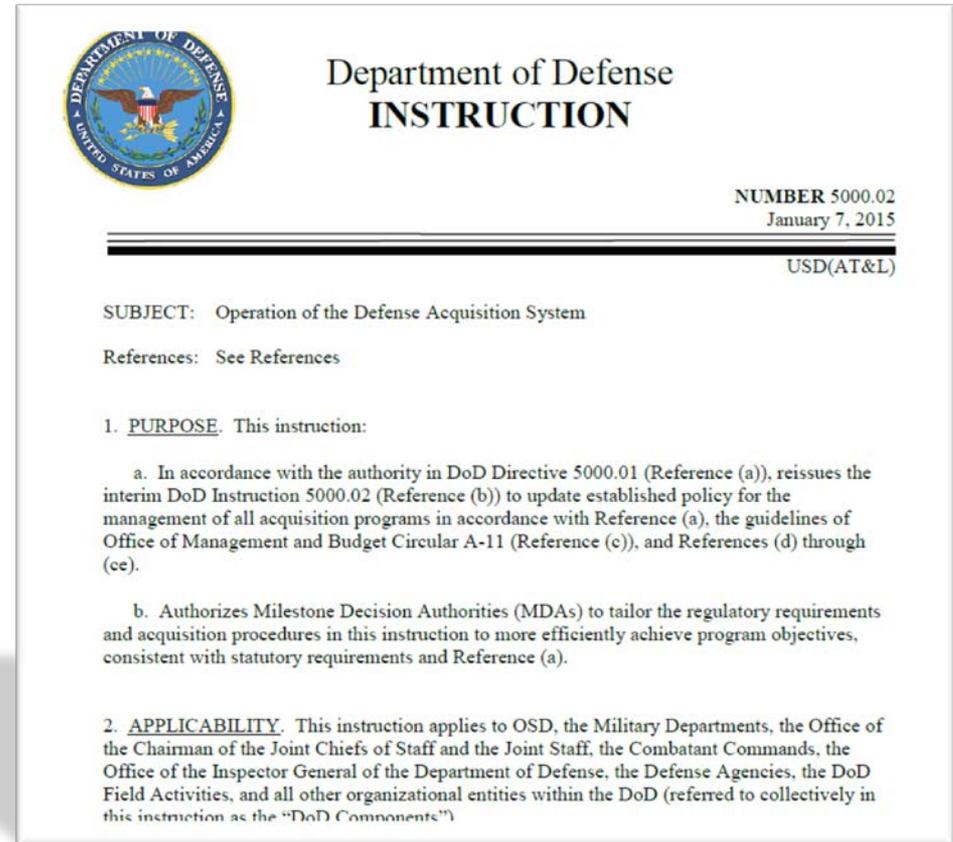
- ▶ WBS Flexibility / 881C
- ▶ Subcontractor flowdown
- ▶ “Freeze period”
- ▶ “Current period”
- ▶ MRP/ERP and the IMS
- ▶ Work Products (i.e., “general ledger”)



PARCA EVM

DoDI 5000.02

- ▶ DoD instruction written to PM's
- ▶ Policy for the management of all acquisition programs
- ▶ Reiterates EVM thresholds





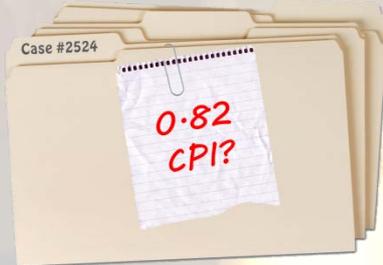
Reporting Requirements

- ▶ Integrated Program Management Report (IPMR)
 - The IPMR is used to obtain cost and schedule performance information
- ▶ Contract Funds Status Report (CFSR)
 - Applicable to contracts over 6 months in duration
 - No specific application thresholds are established, but application to contracts of less than \$1,000,000 (constant fiscal year (FY) 1990 dollars) should be evaluated
- ▶ EVM Central Repository (EVM-CR)



PARCA EVM

EVMystery Why



Case #2524 Notes...

- There is EVM System, EVM reporting, and other related policies
- EVMS is a DFARS business system
- *0.82 comes from the contractor's EVMS based on policy, but how do I know when EVM will best apply...*



PARCA EVM

EVMystery When: EVM Applicability

SUBPART 234.2—EARNED VALUE MANAGEMENT SYSTEM
(Revised December 7, 2011)

[234.201 Policy](#)
[234.203 Solicitation provisions and contract clause](#)

234.201 Policy.

(1) DoD applies the earned value management system requirement as follows:

(i) For cost or incentive contracts and subcontracts valued at \$20,000,000 or more, the earned value management system shall comply with the guidelines in the American National Standards Institute/Electronic Industries Alliance Standard 748, Earned Value Management Systems (ANSI/EIA-748).

(ii) For cost or incentive contracts and subcontracts valued at \$50,000,000 or more, the contractor shall have an earned value management system that has been determined by

EVM EARNED VALUE MANAGEMENT

Home Resources FAQs Issue Resolution

Welcome

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Vision

PARCA EVM email distribution

the application of the IPMR U/I formats is based on size. The table at Figure 1-1 defines the formats applicable based on contract value.

CONTRACT VALUE (\$)	APPLYING THE IPMR DID Based on Contract Value
≤\$100M	All IPMR formats required IPMR may not be tailored or reduced, except as defined in the DID or this document, without additional approvals
\$500M < \$100M	Formats 1, 5, 6 and 7 required Formats 2, 3, and 4 optional
>\$200M	No requirements Optional Application Formats 1 and 5 recommended Format 6 may be recommended

Figure 1-1 Applying the IPMR DID Based on Contract Value

(1) Consider all known options at contract award



Case note... Government and industry program managers use EVM as a program management tool to provide joint situational awareness of program status and to assess the cost, schedule, and technical performance of programs for proactive course correction



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5000.02 PM Responsibilities

Integrated Program Management

**Acquisition
Planning**

**Program
Planning &
Baseline
Development**

**Earned Value
Management**

**Risk
Management**

**Cost Control
and Should
Cost**

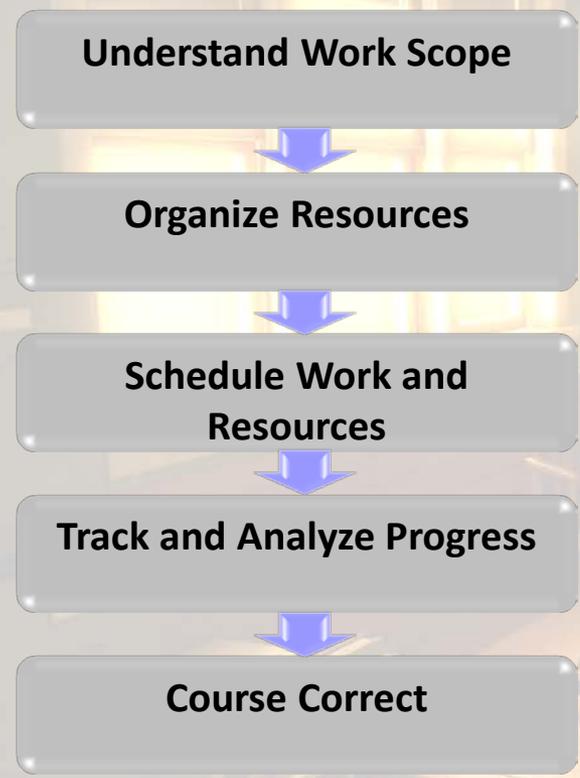
-- DoDI 5000.02, ENCLOSURE 2, Section 6. PROGRAM MANAGEMENT RESPONSIBILITIES



IPM and EVM



Integrated Program Management



Earned Value Management



The IPMR provides the mechanism to report performance status

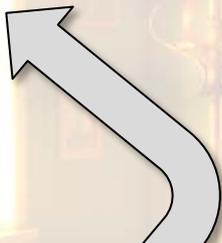


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EVM Supports Situational Awareness



Government PMO



**Program joint situational awareness
through EVM planning,
communication, and reporting**



Contractor PMO



EVM Supports Decision Making



Communication and coordination across the team

Early visibility into drivers of performance

Checks and balances for accountability



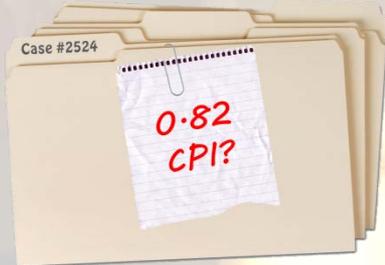
Application Special Topics

- ▶ The term “*Contracts*” includes contracts, subcontracts, intra-government work agreements, and other agreements
- ▶ For *Indefinite Delivery/Indefinite Quantity (IDIQ)* contracts, EVM is applied to individual task orders or group of related task orders
- ▶ EVM is required for *Fixed-Price Incentive Fee (FPIF)* development & integration contracts with discrete work scope
- ▶ For *full rate production (FRP) contracts* where EVM is not applicable, a tailored IPMR can be used for reporting
- ▶ Flow-down of the IPMR DID to the *subcontractors* is at the discretion of the program office



PARCA EVM

EVMystery When



Case #2524 Notes...

- *EVM is a PM tool and provides status into performance*
- *EVM applies based on work scope and policy*
- *0.82...EVM metrics are supposed to be on contract, but how are they reported...*



PARCA EVM

EVMystery How: Reporting and Tailoring

SUBPART 234.2—EARNED VALUE MANAGEMENT SYSTEM
(Revised December 7, 2011)

[234.201 Policy](#)
[234.203 Solicitation provisions and contract clause](#)

234.201 Policy.

(1) DoD applies the earned value management system requirements as follows:

(i) For cost or incentive contracts and subcontracts valued at \$500,000 or more, the earned value management system requirements of the National Standards Institute/Electronic Industries Alliance Management Systems (ANSI/EIA-748).

(ii) For cost or incentive contracts and subcontracts valued at less than \$500,000, the contractor shall have an earned value management system that meets the requirements of the contract.

DATA ITEM DESCRIPTION

Title: Integrated Program Management Report (IPMR)
Number: DI-WAMP-81961A
NSC Number: 99593
IC Applicable: No
Reporting Activity: OUSD (MPL) PARCA
Applicable Forms: Forms are available to the contractor as follows:

Form Number	Form No.
2734/1	2734/1
2734/2	2734/2
2734/3	2734/3
2734/4	2734/4
N/A	N/A
N/A	N/A

0. USE/RELATIONSHIP:

- IPMR Form
- IPMR Breakdown Structure
- Organizational Categories
- Reporting
- Planning
- Planations and Problem Analyses
- Integrated Master Schedule
- Electronic History and Forecast File

EARNED VALUE MANAGEMENT

Resources | Welcome | Issue Resolution

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CONTRACT VALUE (112)

CONTRACT VALUE (112)	APPLYING THE IPMR DID Based on Contract Value
≥\$100M	All IPMR formats required. IPMR may not be tailored or reduced, without additional approvals.
≥\$20 < \$100M	Formats 1, 5, 6 and 7 required. At discretion of Project/Program Manager (PM).
<\$20M	No requirements. Optional Application. Formats 1 and 5 recommended. Format 6 may be recommended.

Figure 1-1 Applying the IPMR DID Based on Contract Value

(1) Consider all known options at contract award.



IPMR Purpose

Case note... The IPMR's primary value is its ability to provide integrated, timely contract status that is trustworthy for trend analysis and decision making

- Integrates **cost and schedule** performance data with objective technical performance measures
- Allows **flexibility in tailoring**
- Provides basis for **communicating performance status**



PARCA EVM

Background

Cost Reporting (CPR)

DATA ITEM DESCRIPTION

TITLE: CONTRACT PERFORMANCE REPORT (CPR)
NUMBER: DI-MGMT-81466A
AMSC NUMBER: D7549
DTIC APPLICABLE:
PREPARING ACTIVITY: OUSD(AT&L)ARA/AM(SO)

APPROVAL DATE: 20050330
LIMITATION:
GIDEP APPLICABLE:

APPLICABLE FORMS: DD Forms are available and shall be used to submit required formats as follows:

CFR Format	DD Form Number	Sample Format No.
Work Breakdown Structure	2734/1	1
Organizational Categories	2734/2	2
Baseline	2734/3	3
Staffing	2734/4	4
Explanations and Problem Analyses	2734/5	5



DATA ITEM DESCRIPTION

TITLE: INTEGRATED MASTER SCHEDULE (IMS)
NUMBER: DI-MGMT-81650
AMSC NUMBER: D7544
DTIC APPLICABLE:
PREPARING ACTIVITY: OUSD(AT&L)ARA/AM(SO)

APPROVAL DATE: 20050330
LIMITATION:
GIDEP APPLICABLE:

APPLICABLE FORMS: None

USE/RELATIONSHIP: The Integrated Master Schedule (IMS) is an integrated schedule containing the networked, detailed tasks necessary to ensure successful program execution. The IMS is vertically traceable to the Integrated Master Plan (IMP) (if applicable), the Contract Work Breakdown Structure (CWS), and the Statement of Work (SOW). The IMS shall be used to verify attainability of contract objectives, to evaluate progress toward meeting program objectives, and to integrate the program schedule activities with all related components. This DID is applicable to development, major modification, and low rate initial production efforts; it is not typically used as part of user production efforts.

Schedule Reporting (IMS)

DATA ITEM DESCRIPTION

Title: Integrated Program Management Report (IPMR)
Number: DI-MGMT-81861A
AMSC Number: D9583
DTIC Applicable: No
Preparing Activity: OUSD (AT&L) PARCA
Approval Date: 20150916
Limitation:
GIDEP Applicable: No
Project Number: MGMT-2015-03
APPLICABLE FORMS: Forms are available to be used to submit required formats as follows:

IPMR Format	Form Number	Format No.
IPMR Format	2734/1	1
Work Breakdown Structure	2734/2	2
Organizational Categories	2734/3	3
Baseline	2734/4	4
Staffing	N/A	5
Explanations and Problem Analyses	N/A	6
Integrated Master Schedule	N/A	7
Electronic History and Forecast File	N/A	

1.0. USE/RELATIONSHIP:
 1. The IPMR contains data for measuring cost and schedule

Date: 20120620
DTIC Applicable: No
Submit required





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IPMR Application



- ▶ IPMR is placed on contract through the CDRL

CONTRACT DATA REQUIREMENTS LIST <i>(1 Data Item)</i>						Form Approved OMB No. 0704-0188			
<p>The public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0701-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DONOT RETURN your form to the above address. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.</p>									
A. CONTRACT LINE ITEM NO.		B. EXHIBIT A		C. CATEGORY: TDP _____ TM _____ OTHER <input checked="" type="checkbox"/>					
D. SYSTEM/ITEM			E. CONTRACT/PR NO. (Fill in when known)		F. CONTRACTOR (Enter Full name of Contractor)				
1. DATA ITEM NO. A0XXXX	2. TITLE OF DATA ITEM Integrated Program Management Report (IPMR)			3. SUBTITLE			17. PRICE GROUP		
4. AUTHORITY (Data Acquisition Document No.) DI-MGMT-81861			5. CONTRACT REFERENCE SOW PARA XXXX			6. REQUIRING OFFICE PROG/XXXX		18. ESTIMATED TOTAL PRICE	
7. DD250 REQ LT	9. DIST STATEMENT REQUIRED FOUO	10. FREQUENCY MONTHLY		12. DATE OF FIRST SUBMISSION SEE BLOCK 16		14. DISTRIBUTION			
8. APP CODE NO		11. AS OF DATE SEE BLOCK 16		13. DATE OF SUBSEQUENT SUBMISSION SEE BLOCK 16		a. ADDRESSEE			
16. REMARKS						EVM-CR		b. COPIES	
								Draft	
								Reg	
								01	

- ▶ Services and Agencies have CDRL examples



IPMR Content

- ▶ Contract value, fee, and budget
- ▶ Monthly and cumulative plan, actuals, and performance
- ▶ Cost and schedule variances with explanation
- ▶ Estimate and variance at completion
- ▶ Baseline and staffing plan
- ▶ Schedule



PARCA EVM

Tailoring of the IPMR



IPMR Implementation Guide

- ▶ “The IPMR should always be carefully tailored to meet the needs of each individual program and should reflect how the contractor is implementing the seven formats as a program management tool to manage the contract’s performance”



Specific IPMR Tailoring

1. **Cost and Schedule data delivery:** 12 working days; DID allows for as late as 17 where technical or other significant issues exist
2. **Historical performance & future ETC (Format 7):** Annual requirement; but PMO must choose the delivery time
3. **EVM-CR requirement:** Only for ACAT I programs with an EVM requirements on contract
4. **Alternate formats:** Formats 1-4 may be required in hours and/or human readable formats as optional items
5. **Level of WBS for Format 7:** Same as WBS (Format 1) level; can be down to the control account level

The risk inherent to the program should be the prime consideration for tailoring of the IPMR



Specific IPMR Tailoring Cont'd

6. **Significant baseline changes (Format 3):** Term “significant” not defined; example: Changes exceeding +/- 5%, between the PMB at the beginning and end of each specified period shall be explained in Format 5
7. **Format 3 future period columns:** PMO can select breakout of timeframe in the columns outside the 6-month window
8. **Staffing units (Format 4):** Specify if staffing is in hours, equivalent heads, or total headcount
9. **Significant staffing changes (Format 4):** Term “significant” not defined (see Format 3 example)
10. **Format 4 future period columns:** PMO can select breakout of timeframe in the columns outside the 6-month window





Specific IPMR Tailoring Cont'd

11. **Variance thresholds (Format 5):** Example given in CDRL; example threshold values are general default positions and should be evaluated by PMO based on program scope and risk
 12. **Schedule Risk Assessment (SRA) frequency:** SRAs required delivered prior to IBR and OTB; PMO can chose additional deliveries or timing
 13. **Integrated Master Schedule (IMS) reserve fields:** If PMO has specific special fields or flags needed in the schedule submission, they should be listed
- ▶ *Note...Services/Agencies may have additional tailoring restrictions or requirements than those listed in the briefing*



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Other Related Guidance

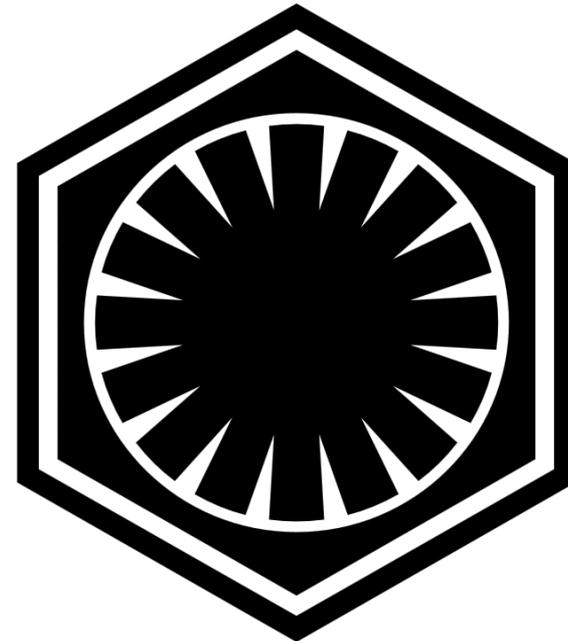
- ▶ IPMR Release Memo
- ▶ MIL STD 881C
- ▶ EVMSIG
- ▶ OTB / OTS Guide
- ▶ EVM-CR Documentation
- ▶ Service / Agency Guidance
- ▶ PARCA Policy Guidance and Interpretation



- ▶ *Case note... Anyone ever heard of this?*

UN/CEFACT XML

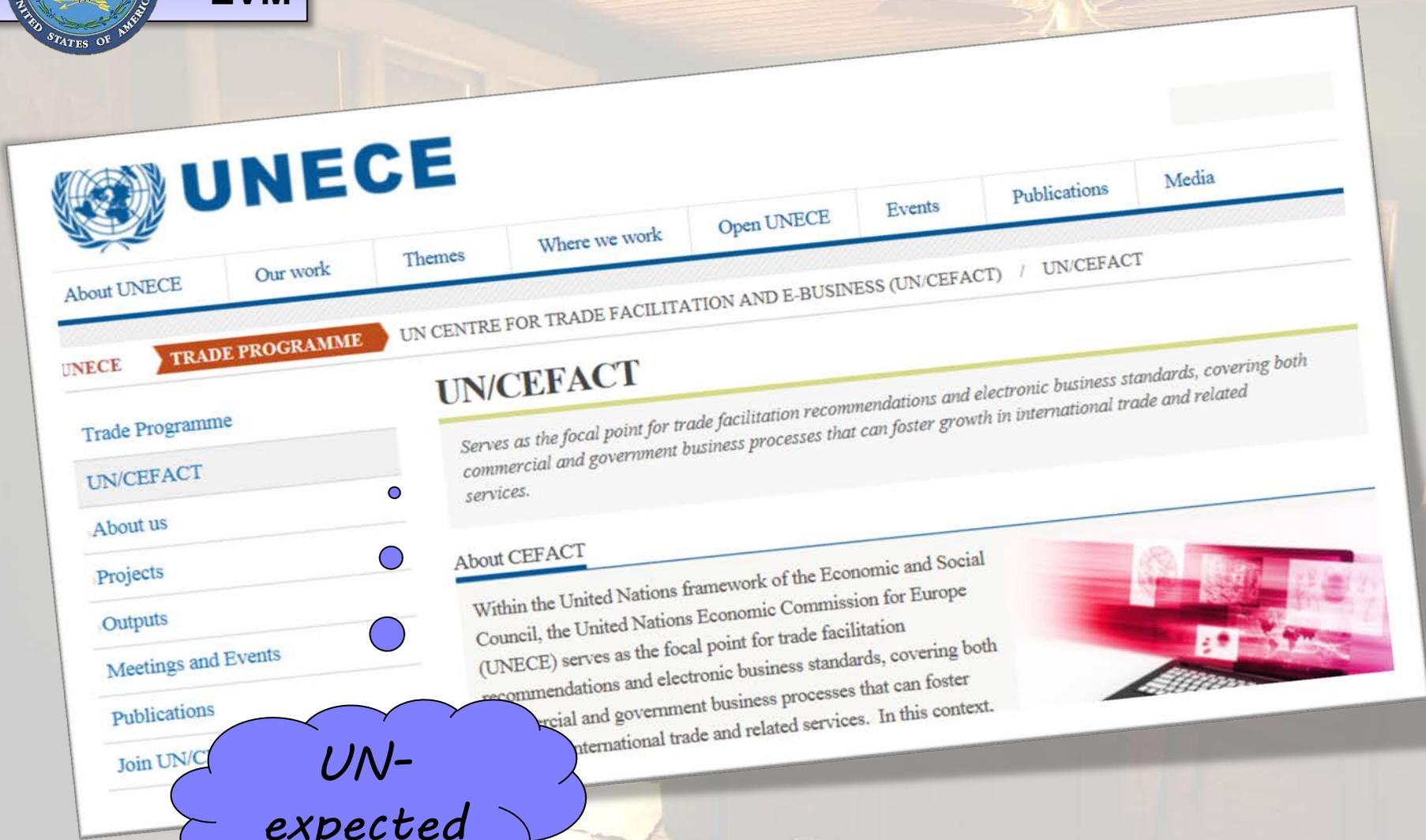
- ▶ *Ok, so how many of you know what this is?*





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UN/CEFACT* Standard



UN-
expected

*United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT)



UN/CEFACT XML & the IPMR

- ▶ IPMR data is required in UN/CEFACT XML
- ▶ UN/CEFACT XML is the current approved DoD XML standard
 - Provides means to exchange schedule, cost, and related auxiliary data in an industry recognized, standard, and software independent format
- ▶ XML exceptions in the IPMR
 - Variance analysis (Format 5) is in contractor format
 - Required schedule submission in native software format (ex. MS Project, Primavera, Artemis, Open Plan, etc.)



XML

- ▶ *XML*: Extensible Markup Language (XML)
- ▶ *Markup Language*: modern system for annotating a document in a way that is syntactically distinguishable from the text

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE recipe PUBLIC "-//Happy-Monkey//DTD RecipeBook//EN"
"http://www.happy-monkey.net/recipebook/recipebook.dtd">

<recipe>

  <title>Peanut-butter On A Spoon</title>

  <ingredientlist>
    <ingredient>Peanut-butter</ingredient>
  </ingredientlist>

  <preparation>
    Stick a spoon in a jar of peanut-butter,
    scoop and pull out a big glob of peanut-butter.
  </preparation>

</recipe>
```

Replaced the previous ANSI X12 Electronic Data Interchange (EDI) transaction sets (806 and 839) with an XML equivalent



UN/CEFACT XML - Three Components



UN/CEFACT library of standard data components and **Base Schemas**

Minimal **mandatory** data elements for structure of valid XML instance files

Schema Instructions provide detailed specifics on schema data content requirements

Specifies **required** or **optional** data elements and **provides business rules**

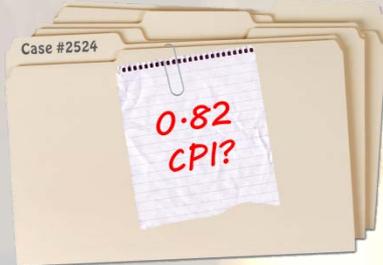
Result in **XML instance files** generated from toolset of choice that can be imported into other toolsets of choice

Source XML files are **read by software tools** and parsed into a variety of views



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EVMystery How



Case #2524 Notes...

- *The IPMR is the DOD mechanism to provide EVM data*
- *EVM reporting can be tailored*
- *0.82 CPI...what else should the PM know about...*



Case note... There appears to be “special” additional facts

- ▶ When does the Gov review the baseline plan?
- ▶ What if the baseline becomes non-executable?
- ▶ What happens to underruns?
- ▶ Can an IMS have reserve?
- ▶ Why care about the WBS?
- ▶ What happened to the EVMIG?



Special Considerations – IBR

When does the Government review the baseline plan?

- ▶ The Government reviews the baseline during the Integrated Baseline Review (IBR)
- ▶ The intent of the IBR is to provide the PMs with a mutual understanding of the PMB and to attain agreement on a plan of action for the identified risks



What if the baseline becomes non-executable?

- ▶ Formal Reprogramming through an Over Target Baseline (OTB) and / or Over Target Schedule
- ▶ The key benefits of a formal reprogramming are an executable and achievable baseline plan, renewed confidence and understanding from the program team, and meaningful performance indicators



Special Considerations – Harvesting

What happens to underruns?

- ▶ The term “Harvesting Underruns” is a disallowed EVM practice involving attempted redistribution of budget to new work when actual costs were less than planned
- ▶ EVM must maintain that budget = scope; however funding is separate and can be allocated according to DFARS contractual rules



Can an IMS have reserve?

- ▶ Schedule Margin is an optional scheduling management technique used for insight and management of schedule risks
- ▶ Provides a “buffer” that is placed in the schedule and used based on risk planning, avoidance, or realization



Why care about the WBS?

- ▶ The Work Breakdown Structure is a communication tool in the form of a product-oriented, hierarchical breakdown of the program requirements
- ▶ For EVM reporting purposes, the WBS should reflect the structure the contractor uses to manage (note, CSDR reporting must follow MIL-STD-881C)



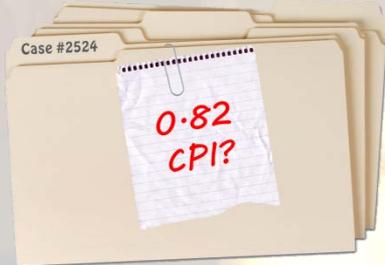
What happened to the EVMIG?

- ▶ The Earned Value Management Implementation Guide was cancelled in Nov 2015
- ▶ The topics from the EVMIG are covered in existing guidance; any gaps in guidance are being addressed by PARCA



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EVMystery What



Case #2524 Notes...

- The Government has the opportunity to review the plan at an IBR*
- There are various special topics that should be understood*
- 0.82 CPI...so where does this information go...and how is it received...who looks at it?*



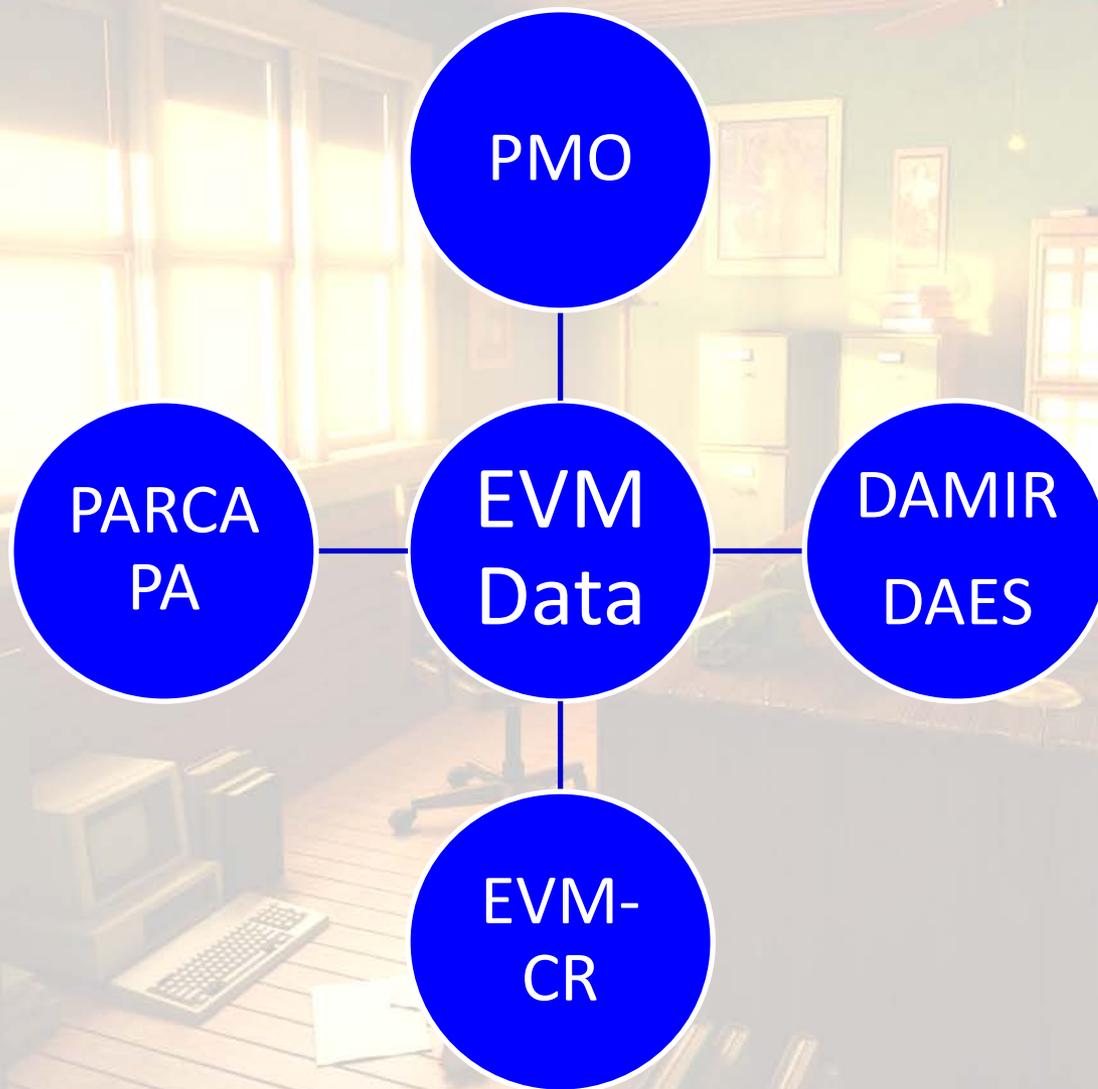
- ▶ IPMR Data...
 - Integrates cost and schedule performance
 - Links with objective technical measures of performance
 - Identifies the magnitude and impact of realized and potential performance problem areas
 - Provides valid, timely, and accurate contract status information to Government leadership

So the 0.82 is unfavorable performance but good information!



PARCA EVM

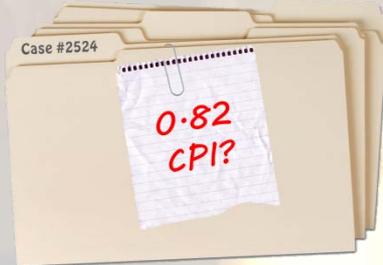
Data Handling





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EVMystery Where



Case #2524 Notes...

- *Subcase...review of OSD EVM data analysis*
- *0.82 CPI...so leadership does look at the information...*
- *Presented by*

*Lynne Giordano
OUSD(AT&L) PARCA PA
Lynne.M.Giordano.civ@mail.mil*



PARCA EVM

Outline

- ▶ The USD(AT&L) and EV
- ▶ What Happens to EV Data after the EVM-CR?
- ▶ Cost and Schedule Integration
- ▶ PARCA Analysis Examples



PARCA EVM

The USD(AT&L) and EV

- ▶ Mr. Kendall is an engineer, an MBA, and a lawyer, with experience in industry and government.
- ▶ He's been using EVM for decades. He knows it. He likes it.
- ▶ A sign on his door says, "In God we trust; all others must bring data."
- ▶ EVM supports Mr. Kendall's program oversight responsibility.

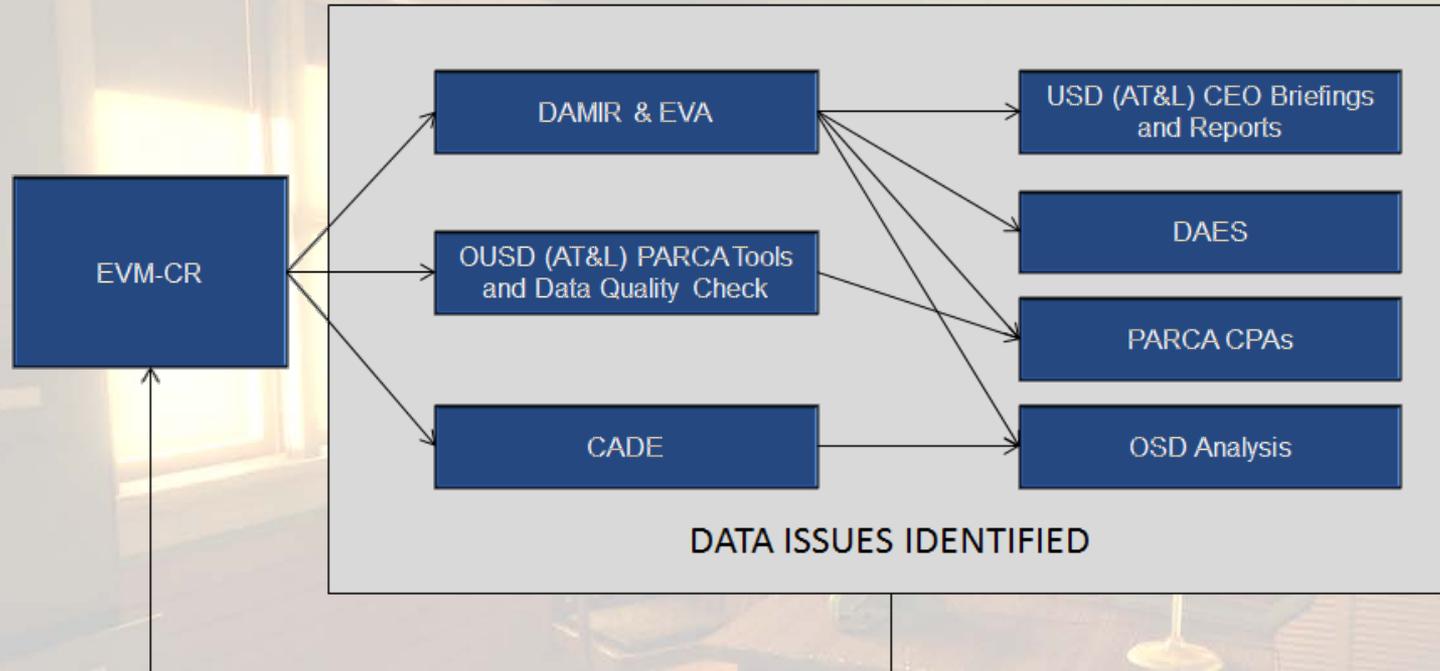


What Happens to EV Data after the EVM-CR?

- ▶ EVM-CR Data Interfaces
- ▶ How is the data used?
 - Performance of the Defense Acquisition System Annual Report
 - USD(AT&L) CEOs Meetings
 - Defense Acquisition Executive Summary (DAES)



EVM-CR Data Interfaces



- ▶ EV data is being used in various OSD systems & tools.
- ▶ In turn, OSD staff specialists use EV data to identify programmatic issues and inform senior level decisions and meetings.
- ▶ Potential data quality issues are communicated to the EVM-CR to address with the contractor and program management office.



**PARCA
EVM**

Performance of the Defense Acquisition System Annual Report



PERFORMANCE OF THE
DEFENSE ACQUISITION SYSTEM

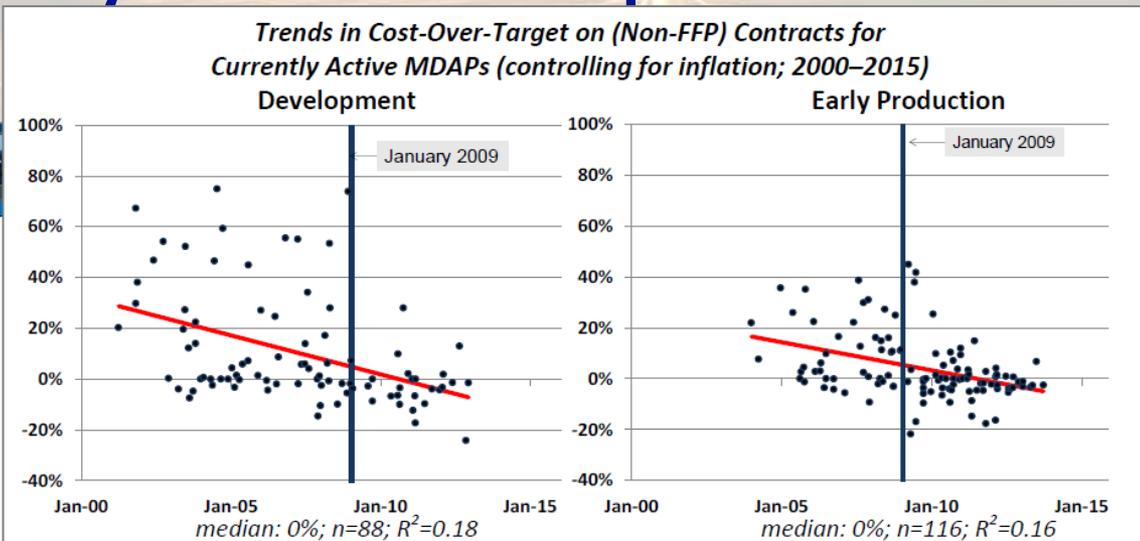
2015 ANNUAL REPORT



Approved
for Public
Release

SEPTEMBER 16, 2015

Approved for public release; distribution unlimited.



Price Growth Since Original Award on Early Production Contracts for Currently Active MDAPs by Commodity (adjusted for inflation; weighted by spending; 2000–2015)

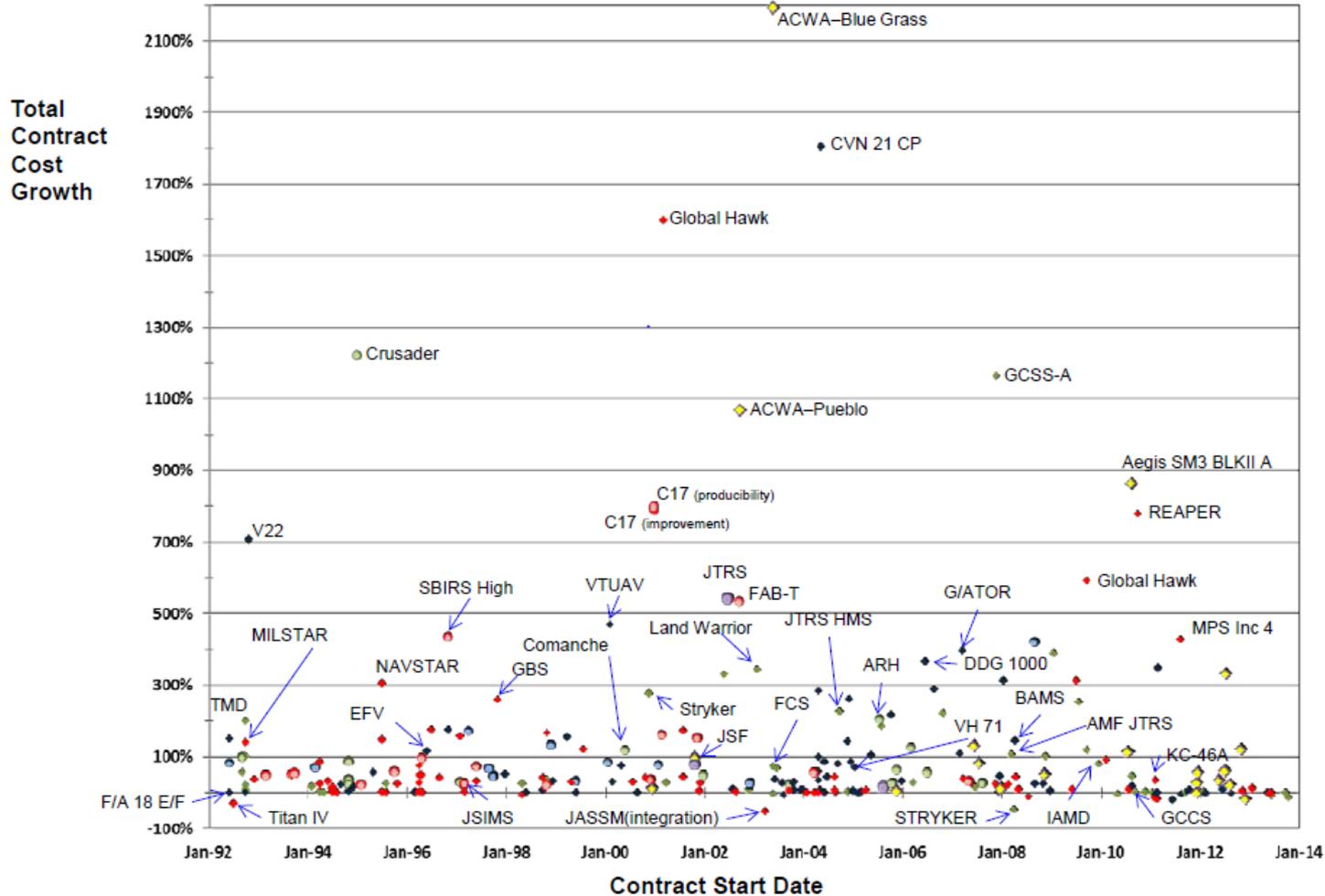
	Combined early production contracts	Aircraft	Ships	Space	C3I	Missiles	UAV
75th percentile	35%	36%	23%	188%	68%	-2%	20%
Median	7%	18%	2%	7%	24%	-7%	13%
25th percentile	-2%	-2%	-2%	-1%	10%	-9%	-1%
IQR (%-points)	37%	38%	25%	189%	58%	7%	21%
N	159	33	48	13	16	11	18
Relative Growth	—	—	Lower	Higher	Higher	—	Lower



PARCA EVM

Performance of the Defense Acquisition System Annual Report

DoD-Wide Development MDAP Major-Contract Total Cost Growth (1992–2015)



APPROVED FOR PUBLIC RELEASE DISTRIBUTION UNLIMITED: 16-S-0567, December 2, 2015; 16-S-0566, December 2, 2015; 16-S-0596, December 7, 2015



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Performance of the Defense Acquisition System Annual Report

Total Cost-Over-Target on Development Contracts for Currently Active MDAPs (controlling for inflation and maturity; dollar basis; 2000–2015)

	Combined development contracts	Huntington Ingalls	General Dynamics	Raytheon	Northrop Grumman	General Atomics	Boeing	Lockheed
75th percentile	62%	-5%	13%	32%	24%	39%	40%	66%
Median	30%	-7%	5%	5%	11%	24%	26%	62%*
25th percentile	6%	-7%	-4%	2%	-3%	-5%	1%	38%
IQR (% points)	56%	2%	17%	30%	27%	44%	39%	28%
N	102	5	14	18	16	6	11	32

*Driven largely by its F-35 SDD contract.

NOTE: Statistical outliers (both high and low) were removed to obtain more reliable measures of central tendency. These results do not control for commodity effects or potential biases in how the cost targets are set in the first place.

Total Cost-Over-Target by Prime Contractors on Early Production Contracts for Currently Active MDAPs (controlling for inflation and maturity; dollar basis; 2000–2015)

	Combined early production contracts	General Atomics	Raytheon	Boeing	Pratt & Whitney	Austal USA	General Dynamics	Lockheed	Huntington Ingalls	BAE Systems	Northrop Grumman
75th percentile	15%	2%	5%	1%	5%	9%	4%	11%	21%	25%	53%
Median	4%	-6%	-2%	0%	1%	1%	1%	4%	15%*	24%**	34%*
25th percentile	0%	-23%	-6%	-3%	-1%	1%	-4%	1%	11%	24%	0%
IQR (% points)	15%	24%	11%	3%	6%	8%	8%	10%	11%	2%	53%
N	140	12	12	19	6	5	19	36	13	5	13

* Driven largely by their LPD-17 ship contracts.

** Driven largely by its DDG 1000 Advanced Gun System (AGS) contract.

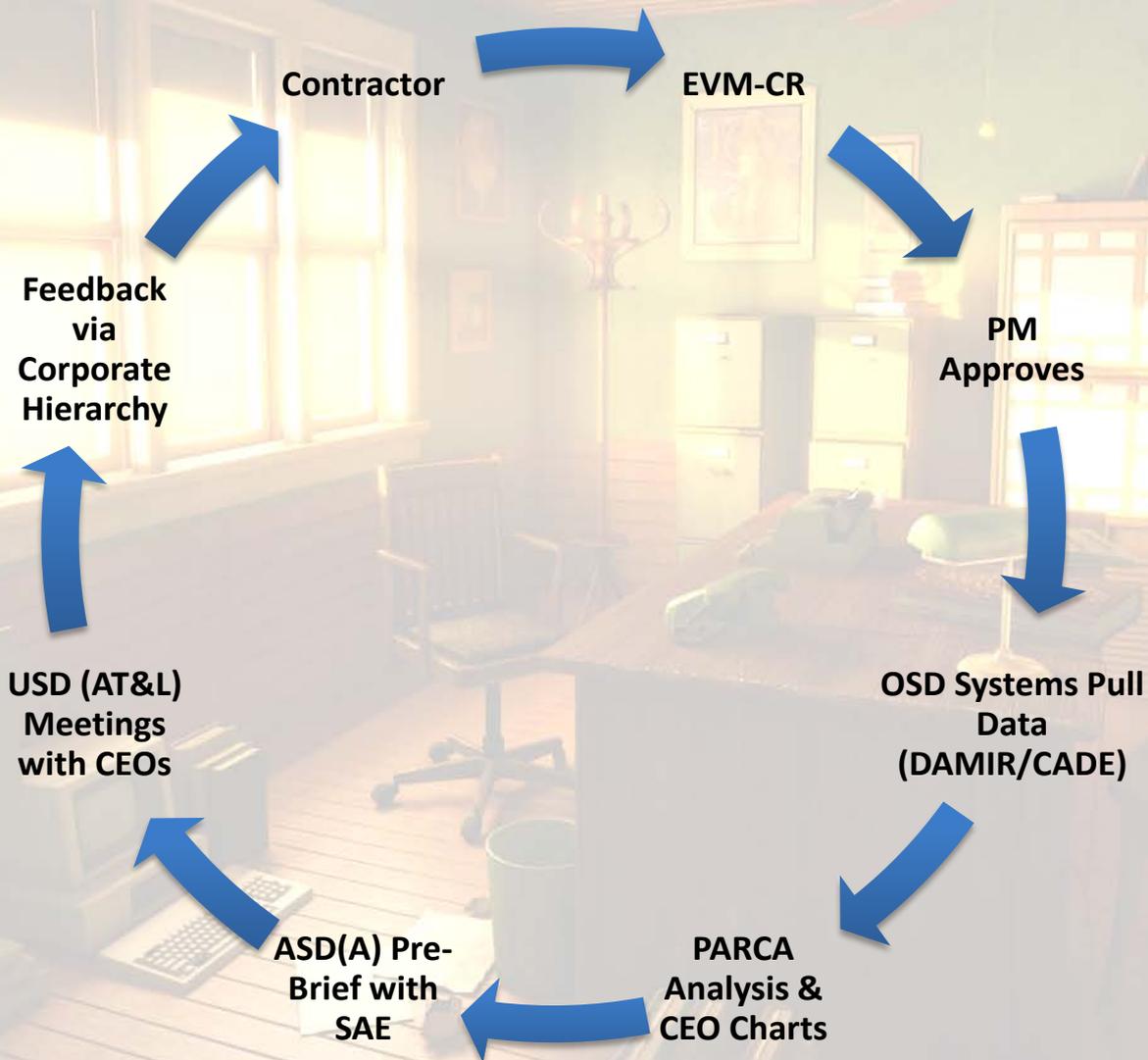
NOTE: Statistical outliers (both high and low) were removed to obtain more reliable measures of central tendency. These results do not control for commodity effects or potential biases in how the cost targets are set in the first place.





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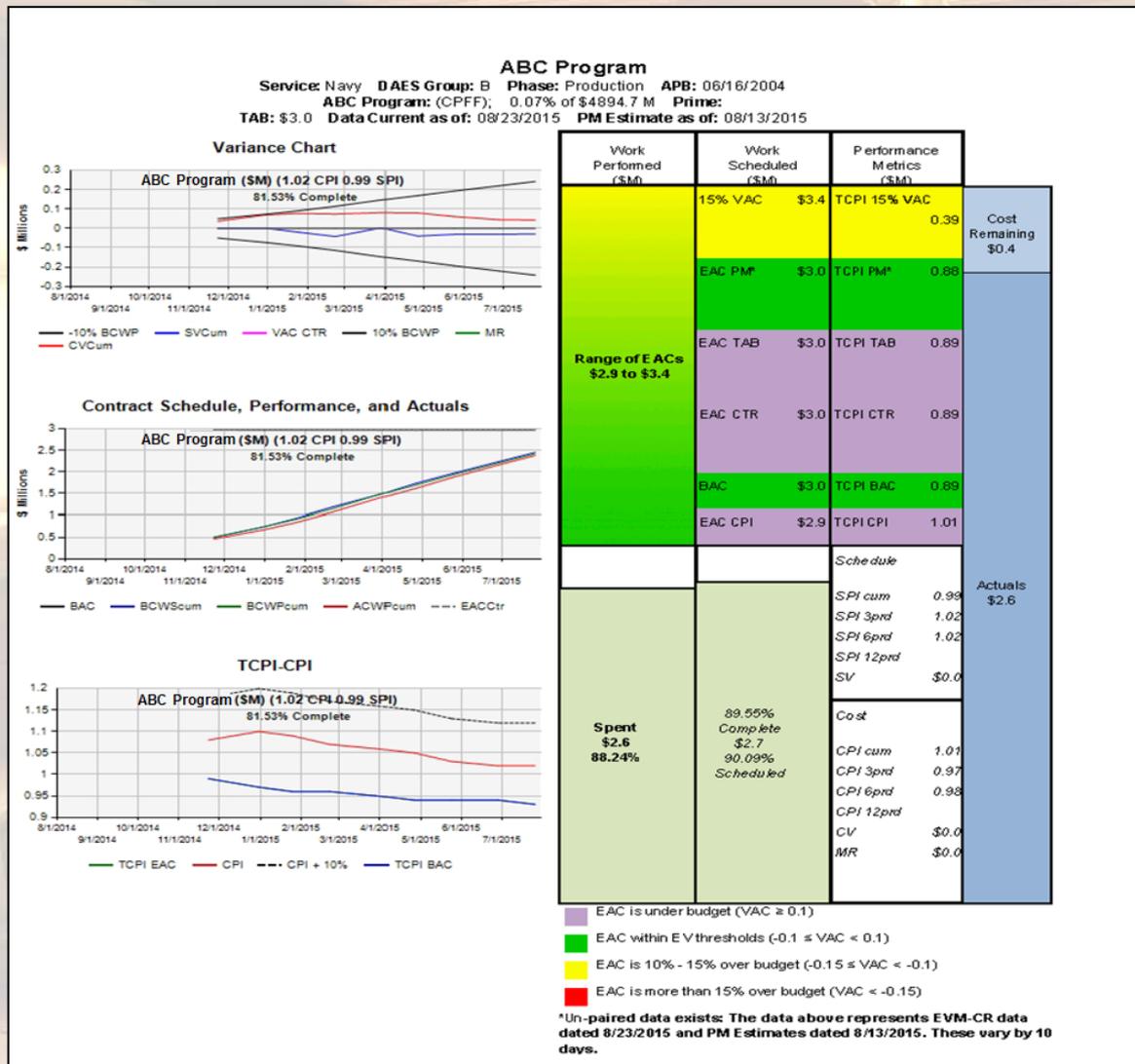
EV Data & CEO Briefings





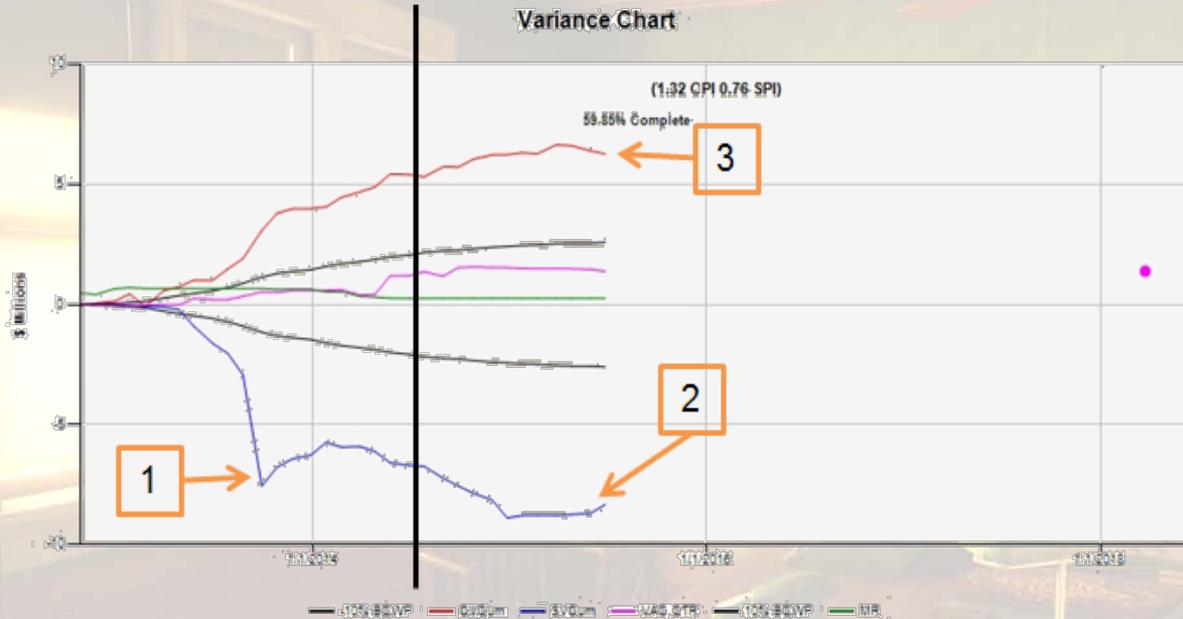
PARCA EVM

EV Data & CEO Briefings: EVA View





EV Data & CEO Briefings: Data Blips



- ▶ 09/29/2013: The SVcum of -\$7.5M is primarily due to lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.
- ▶ 06/28/2015: The SVcum of -\$8.3M is primarily due to lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.
- ▶ 06/28/2015: The CVcum of \$6.3M is primarily due to lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.



PARCA EVM

Defense Acquisition Executive Summary

- ▶ “The purpose of the DAES is to provide a venue to identify and address, as early as possible, potential and actual program issues which may impact the Department of Defense’s (DoD’s) on-time and on-schedule delivery of promised capabilities to the warfighter. The DAES is not just a report; it is a process...”
- ▶ DAES runs on a monthly cycle with several steps
 - Assessments
 - Program managers and OSD staff evaluate 1/3 of MDAP and MAIS portfolio each month
 - Data is submitted to DAMIR
 - Program Selection
 - Senior OSD officials decide which programs should make formal presentations to the DAES meeting
 - DAES meeting
 - Three or four PMs and PEOs brief USD(AT&L) and other senior leadership
- ▶ DAMIR (www.acq.osd.mil/damir) is OSD’s tool for viewing DAES information



PARCA EVM

DAES Assessments

- OSD and Program Managers assess programs in 11 categories:
 - Cost, schedule, performance, contract performance, management, funding, test, sustainment, interoperability, production, and international

	Cost	Sched	Perf	Fund	T&E	LCS	
PM	R	Y	G	Y	G	Y	1
OSD	R	Y G	Y G Y Y	Y R R	Y Y	Y	1
							2
							3
	Mgmt	Cont	Interop	Prod	IPA		
PM	G	G	G	Y			1
OSD	G Y R Y Y G	Y R	G G Y G	R Y	R		1
							2
							3

- Assessments document programs’ status and history, are stored on a shared website, and are read by all levels of staff and leadership.
- EV data is used in
 - Contract Performance: EVM and IMS data are the core of contract performance assessments
 - Management: Missing or erroneous EVM data or EVM systems problems can produce red or yellow management ratings
 - Cost: EVM data aggregated across contracts shows program cost status
 - Schedule: EVM data, integrated with IMS data and program milestones, is often part of schedule assessments



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PARCA Contract Performance Assessments

- ▶ PARCA examines available EV data for every contract on every program being reviewed each month.
 - 372 Assessments on 92 programs in the past 12 months
- ▶ Formal schedule analysis is becoming a larger part of the assessments.
- ▶ We have a formal process for examining the data and turning it into useful assessments.



Cost and Schedule Integration

- ▶ High management interest
- ▶ IPMR facilitates the process
- ▶ Tools lagged the policy
- ▶ Data conversion and historical data (IPMR vs CPR)
- ▶ Data Quality



PARCA Analysis Examples

- ▶ Contract Analysis
- ▶ Portfolio views
- ▶ Using contract data to predict program performance



PARCA EVM

Thermometer Chart

Work Performed (SM)	Work Scheduled (SM)	Performance Metrics (SM)		
Range of EACs \$1608.3 to \$1979.9	EAC PM* \$1979.9	TCPI PM* 0.54	Cost Remaining \$521.2	
	EAC CTR \$1879.9	TCPI CTR 0.65		
	15% VAC \$1849.6	TCPI 15% VAC 0.69		
	EAC CPI \$1718.1	TCPI CPI 0.94		
	EAC TAB \$1650.1	TCPI TAB 1.16		
	BAC \$1608.3	TCPI BAC 1.35		
Spent \$1358.7 84.48%	Work Remaining \$337.8 21.00%	Schedule	Actuals \$1358.7	
	79.00% Complete \$1270.5 81.32% Scheduled	SPI cum 0.97		Cost
		SPI 3prd 0.87		
		SPI 6prd 0.82		
		SPI 12prd 0.84		
		SV \$-37.3		
CPI cum 0.94	CPI cum 0.94			
CPI 3prd 0.52	CPI 3prd 0.52			
CPI 6prd 0.58	CPI 6prd 0.58			
CPI 12prd 0.66	CPI 12prd 0.66			
CV \$-88.2	CV \$-88.2			
MR \$41.8	MR \$41.8			

Cost	
<i>CPI cum</i>	<i>0.94</i>
<i>CPI 3prd</i>	<i>0.52</i>
<i>CPI 6prd</i>	<i>0.58</i>
<i>CPI 12prd</i>	<i>0.66</i>
<i>CV</i>	<i>\$-88.2</i>
<i>MR</i>	<i>\$41.8</i>

Work Scheduled (SM)	Performance Metrics (SM)
EAC PM* \$1979.9	TCPI PM* 0.54
EAC CTR \$1879.9	TCPI CTR 0.65
15% VAC \$1849.6	TCPI 15% VAC 0.69
EAC CPI \$1718.1	TCPI CPI 0.94
EAC TAB \$1650.1	TCPI TAB 1.16
BAC \$1608.3	TCPI BAC 1.35

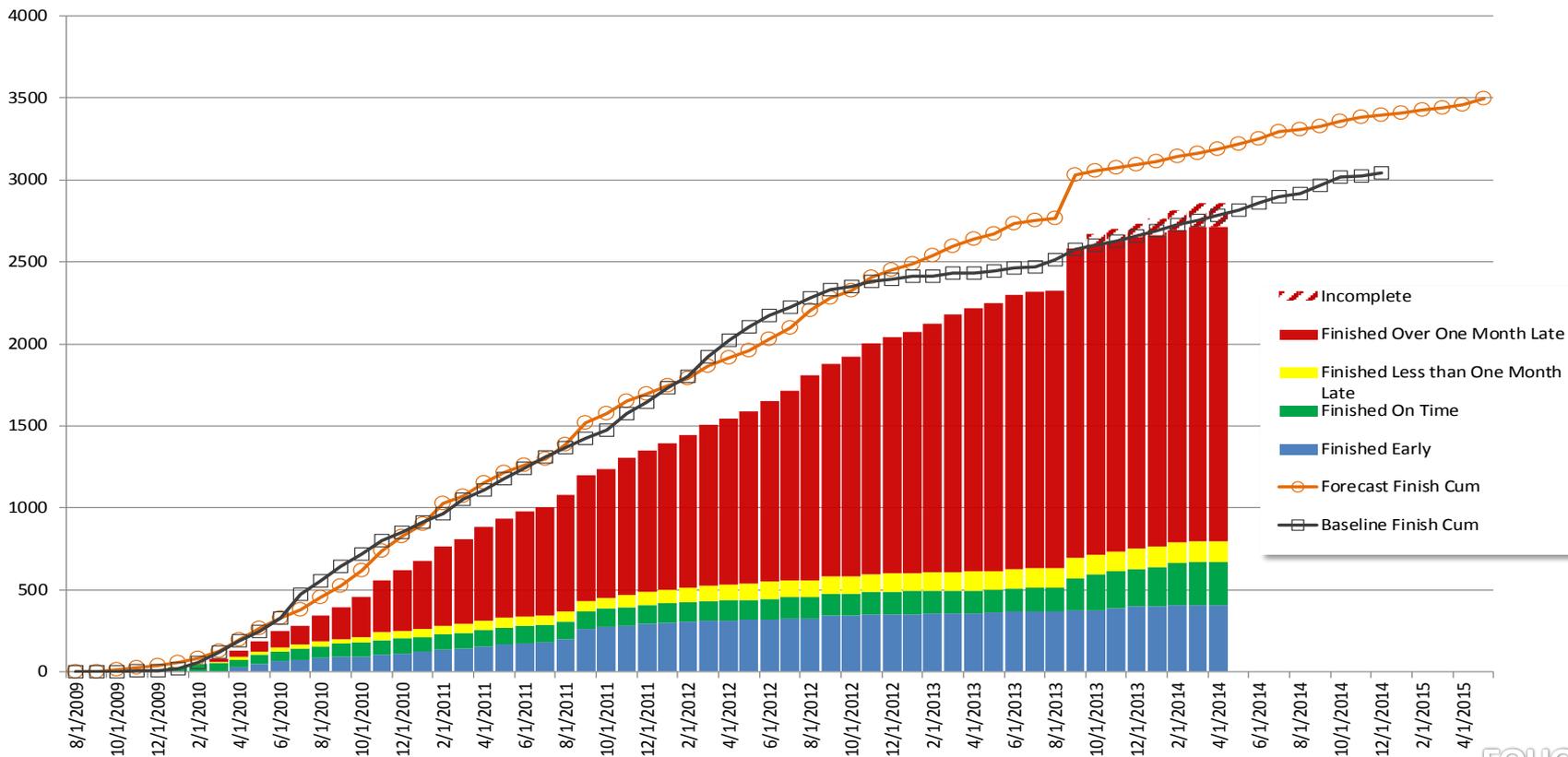


PARCA EVM

Schedule Analysis

IMS Rate Chart - Program X Status Date 25-Apr-14

90.5%
Complete of
Tasks



FOUO



PARCA EVM

Schedule "inchstones" Show a Program Falling Behind

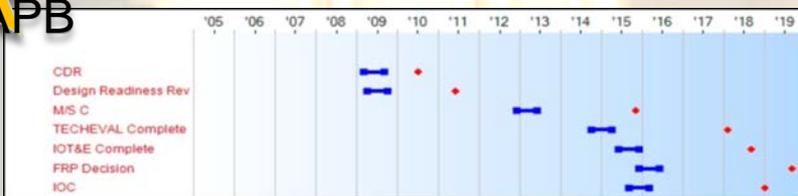
- ▶ THE GOAL: Evaluate progress to achieving long term schedule goals.
- ▶ THE APPROACH: Track progress to near term events that drive those future schedule goals.

EXAMPLE:

- ▶ The Program IOC milestone had slipped several years.
- ▶ The goal was to bring the IOC milestone back compressing time to First Flight and completing Test Article Assembly and IOT&E several months ahead of schedule.
- ▶ PARCA worked with the PO to identify 5 items in the IMS that were important to FF and Assy.
- ▶ Subsequent monthly progress on those items showed First Flight and Assembly falling behind.



APB



Program Schedule



IMS and Tracking Events (contract level)



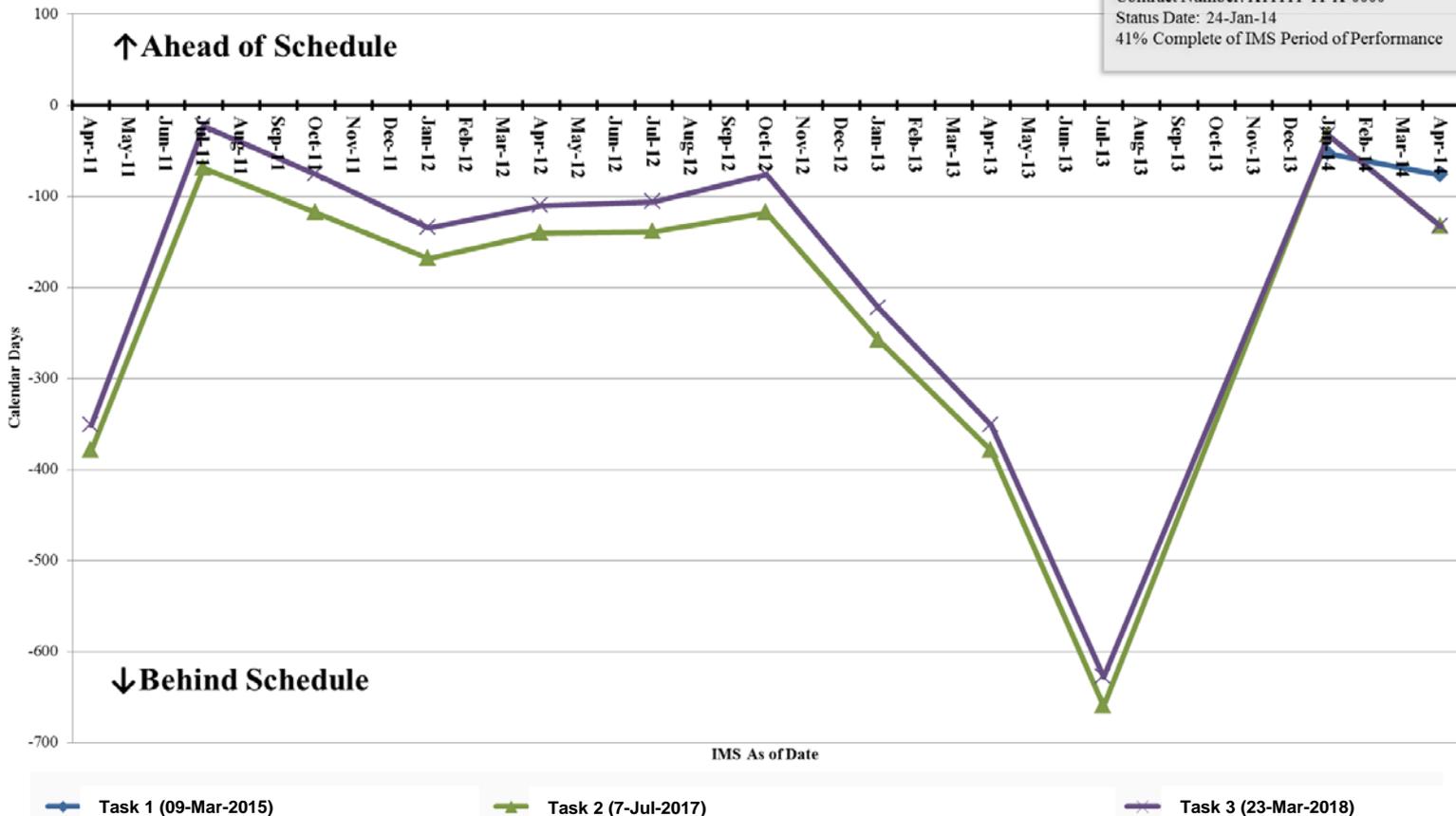


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Tracking Status With Each New IMS Submission

Variance To Baseline (Calendar Days)

Contract Information
 Program Name: ABC Program
 Contract Number: X11111-11-X-0000
 Status Date: 24-Jan-14
 41% Complete of IMS Period of Performance

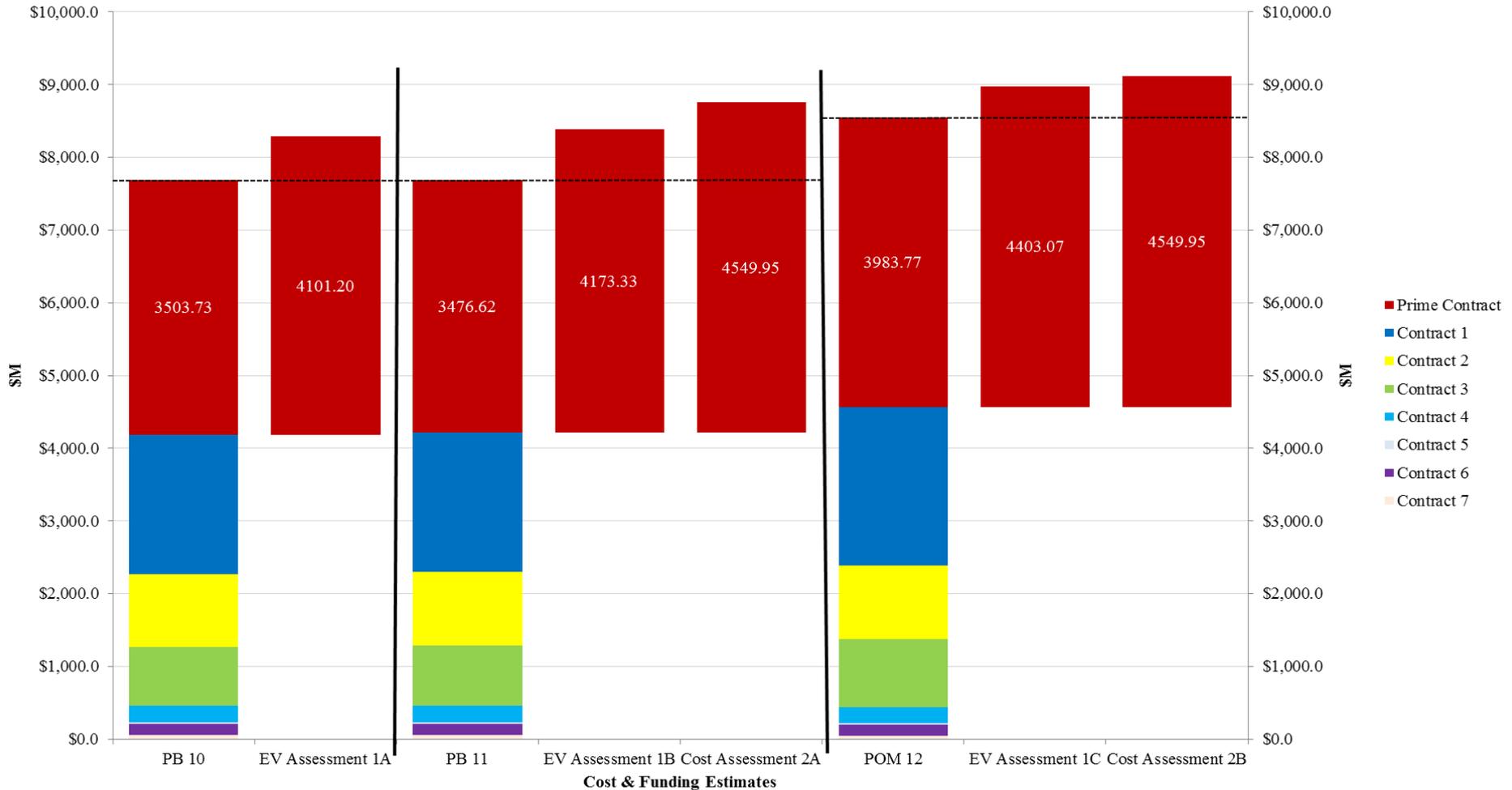


ROUO



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Program Not Funded to Actual Performance



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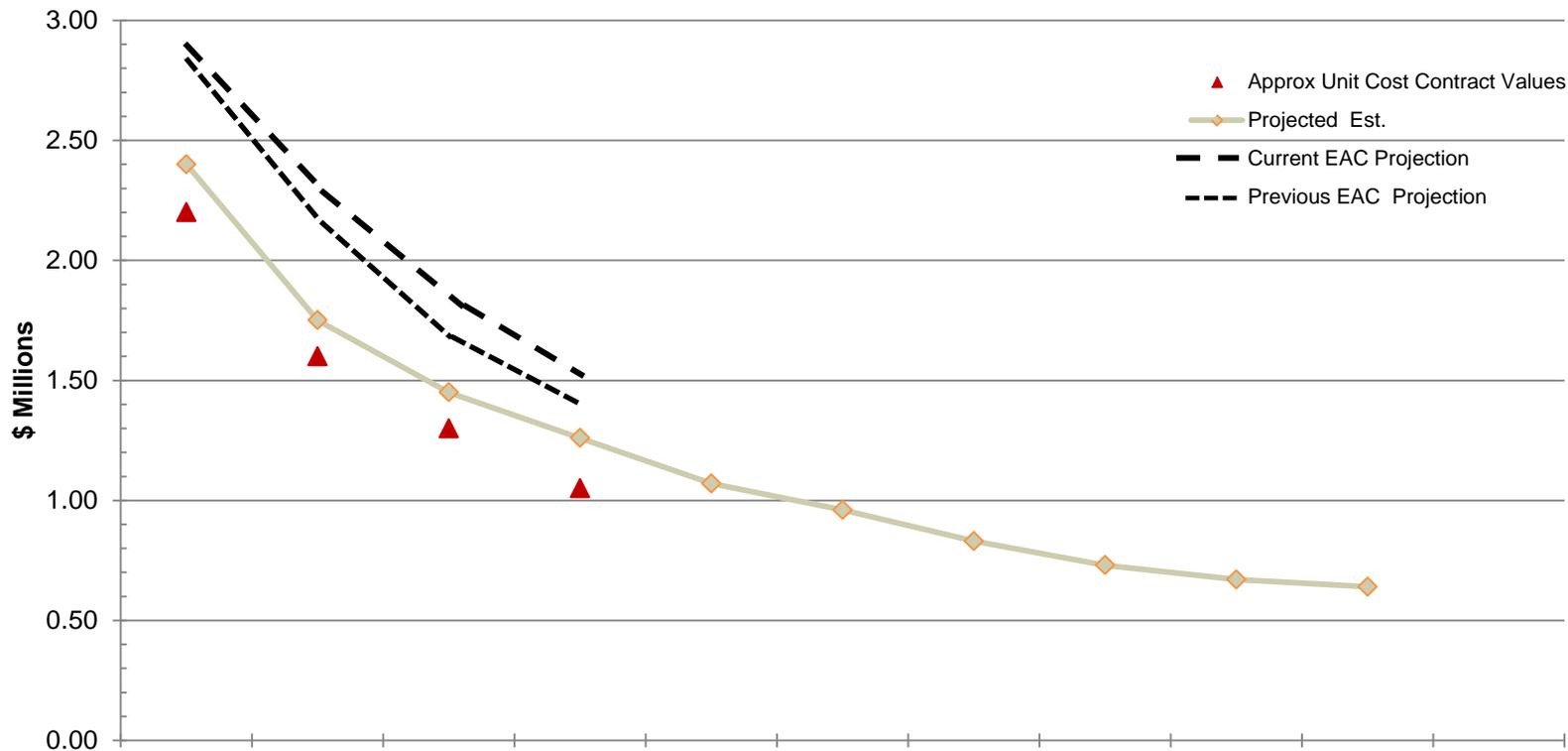


**PARCA
EVM**

Analysis Example - Using Earned Value Data to Show Implications of LRIP Costs

Notional Data

Estimated Average URF Price by Lot



Contract Type	LRIP 1	LRIP 2	LOT 1	LOT 2	LOT 3	LOT 4	LOT 5	LOT 6	LOT 7	LOT 8
Quantity	2	12	17	32	42	53	104	157	207	
Contract % Complete	100%	100%	60%	20%						

EAC projection based on CUM Current Period CPR



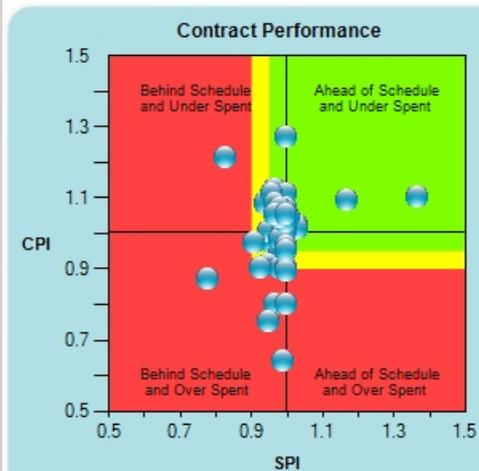
PARCA EVM

Contract Dashboard



Drag a column header and drop it here to group by that column

Program	Contract	Svc	Contractor	St	Target	SPI	CPI	Rpt
Program X	XX-00-X-0000	Air Force	CTR A					
Program X	XX-00-X-0000	Air Force	CTR A	CA	1801.2			
Program Y	XX-00-X-0000	Air Force	CTR B	CA				Mar 2014
Program Y	XX-00-X-0000	Air Force	CTR B	CA	5653.3	1.00	1.03	Mar 2014
Program Y	XX-00-X-0000	Air Force	CTR A/B	CA	1598.7	1.00	1.03	Mar 2014
Program Z	XX-00-X-0000	Army	CTR C	VA	887.8	0.98	0.99	Mar 2013
Program Z	XX-00-X-0000	Air Force	CTR C	VA	92.9			



- Contractor A
- Contractor B
- Contractor C
- Contractor D
- Contractor E



*Contracts with an SPI or CPI below 0.5 or above 1.5 are being suppressed

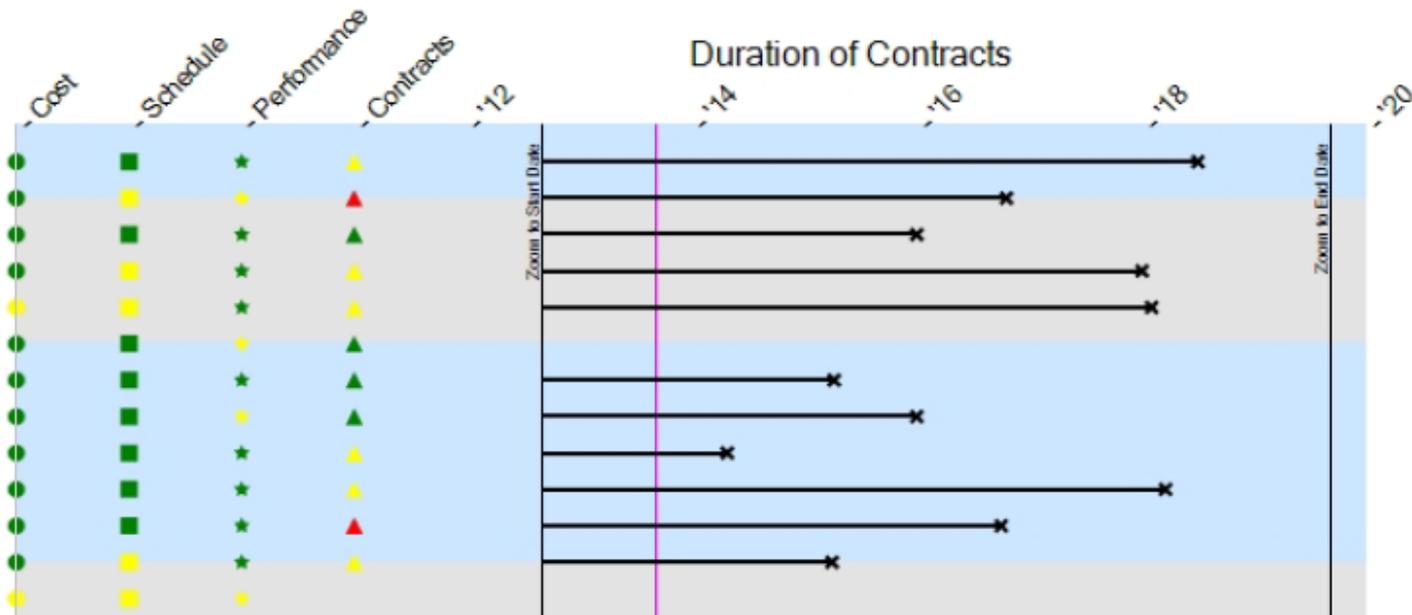


PARCA EVM

Significant Acquisition Watchlist (SAW)

Options Selected

Portfolio: DAE
 Source: DAE
 Quarter: Apr/1
 Year: 2013
 Filter by Program: [ALL]
 Filter by Contractor: [ALL]
 Filter by DAES Group: A
 Filter by Commodity Type: [ALL]
 Filter by Service: [ALL]
 Filter by Program Type: [ALL]
 View Contracts: False
 Data Age Threshold (in Days): 30
 Data Submitted Within: 6 Mo
 Zoom to Date Range: True
 Start Date: 9/6/2
 End Date: 9/6/2





Summary

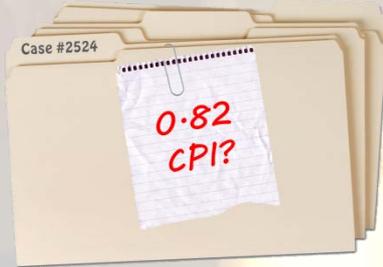
- ▶ Your EV data is reviewed at the highest levels in OSD
- ▶ EV data is a critical element of routine program monitoring, formalized by DAES
- ▶ The data is used beyond DAES for analysis and decision making
- ▶ PARCA is responsible for both EV Policy and for using the data to help decision-makers

In God we trust; all others must bring data



PARCA
EVM

EVMystery Where



Case #2524 Notes...

- *Subcase...review of the EVM Central Repository*
- *0-82 CPI...so this is where it's kept...*
- *Presented by*

*Jen Horner
OUSD(AT&L) PARCA EVM-CR
jhorner@tecolote.com*



**PARCA
EVM**

EVM-CR OVERVIEW

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PARCA EVM

EVM Central Repository

- The purpose of the EVM-CR is to establish a source of authoritative EVM data for the Department and to provide timely access for the PMOs, Services, OSD and DoD Components
 - Managed by OUSD(AT&L) / PARCA
 - Hosted on DCARC servers; separate from CSDR information

EVM-CR
Earned Value Central Repository

PARCA PERFORMANCE ASSESSMENTS AND ROOT CAUSE ANALYSES

Enhancing DoD Cost Analysis

Home Contact Us

DCARC Portal

[Portal Login](#)

Access to EVM-CR, Visual Display

[Request Portal Access](#)

[Registration Instructions](#)

EVM Central Repository Overview

The EVM Central Repository (EVM-CR) is a joint effort between DCARC and OUSD/AT&L, managed by PARCA, that provides:

- Centralized reporting, collection, and distribution for Key Acquisition EVM data
- A reliable source of authoritative EVM data and access for OSD, the Services, and the DoD Components
- Houses Contract Performance Reports (CPRs), Contract Funds Status Report (CFSR), and the Integrated Master Schedules (IMS) submitted by contractors (and reviewed and approved by Program Management Offices) for ACAT 1C & 1D (MDAP) and ACAT 1A (MAIS) programs
- Approximately 80 ACAT 1A, 1C, and 1D programs and 210 contracts and tasks reporting data

EVM-CR



EVM-CR Requirement

- ▶ ACAT 1A, 1C and 1D program/contracts with EVM reporting requirements are required to submit to the EVM-CR
 - Cost and schedule data expected monthly (IPMR)
 - Contract Funds Status Report (CFSR) expected quarterly
 - OUSD(AT&L) / PARCA has offered other ACATs access to submit
 - Reporting location information documented on contract CDRL(s)

NOTE: Using the IPMR does not require reporting to the EVM-CR



**PARCA
EVM**

EVM-CR Data Reporting By Service & Commodity Group

Service	Programs	Contracts	Tasks
AIR FORCE	35	64	122
ARMY	20	43	44
DOD	8	32	35
MDA	12	27	48
NAVY	35	126	178
Total	110	292	427

Mil-Standard	Programs	Contracts	Tasks
AIRCRAFT	23	98	144
BMDS	1	1	1
ELECTRONIC/AUTOMATED SOFTWARE	27	43	53
MISSILE	16	46	64
ORDNANCE	1	1	1
OTHER	9	18	29
SHIP	12	29	64
SPACE	10	23	25
SPACE, MISSILES, MUNITIONS	1	2	2
SURFACE VEHICLE	5	6	6
SYSTEM OF SYSTEMS	3	3	3
UAV	5	22	35
Total	113	292	427

The term "Task" is a general term for IPMR deliverables required on a contract. Reporting could be required by CLIN or Task Order and each of these would be considered a "Task" within the EVM-CR.





**PARCA
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EVM-CR REPORTING COMPLIANCE AND DATA QUALITY

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- ▶ **Reporting Compliance Management Activities**
 - PARCA prepares monthly compliance reports for services
 - Prepare compliance reports for selected corporations and hold corporate meetings to review
 - Active spot-checking of monthly reporting compliance

- ▶ **Data Quality Management Activities**
 - Proactive Program Data Quality reviews in sync with DAES reporting.
 - Automated process for reporting data quality issues
 - Continued to extend EVM-CR real-time reporting of data quality checks during submit and review process



Reporting Compliance – Formats Delivered

- ▶ Formats Delivered Compliance Report
- ▶ This report compares formats requirements defined in reporting streams with formats the contractor has delivered.

Format Requirements and Delivery

Program Filters

Service: Military Handbook:

DAES Group: ACAT: Contractor:

Program:

Year: Month:

Legend	
Color	Format Requirement/Delivery Status
■	Required & Delivered
■	Not Required, but Delivered
■	Required & Not Delivered
■	Not Required & Not Delivered
* IPMR requirements imply UN/CEFACT	

EVM-CR Format Reporting Performance

Program	Contract Number	Contract Task	Effort Number	Fmt 1	Fmt 2	Fmt 3	Fmt 4	Fmt 6	Fmt 7	IPMR Cost	IPMR Sched
CSCC COMMON SYSTEMS COMMAND AND CONTROL SYSTEM	1	■	■	■	■				



Data Quality Issues

- ▶ How Would You Find A Data Issue?
 - Review the CPR Data Report
 - Review “Business Rule” Errors in Single Submission
- ▶ What Are Some Of The Root Causes?
 - Bad/Incomplete XML File
 - File Tagged Wrong (Component V.S. Total)
 - Submitted Against Wrong Contract Task
- ▶ Reporting An Issue Inside the EVM-CR



Data Quality – CPR Data Report

Data Quality Features From Contract Details Page

For currently selected contract task

[View CPR Data Report](#)

[Performance Over Time view](#)

[Report Data Quality Issue](#)

[View Data Quality Issues](#)

[View Analyst Packages](#)

- Report shows data extract from XML files over multiple time periods
- Review data for single periods and compare to previous periods (trends)

Program: Death Star Program (Testing Purpose) **Task:** Y-Wing

(Cost values are in dollars)

Year	Month	ReportDate	ReportFrom	StartDate	DefinitizationDate	ReportTo	ECD	BudgetCompletionDate	Quantity	ShareAbove	ShareBelow	OriginalNCC	NCC
2014	7	7/24/2014	6/26/2014	1/1/2014	1/1/2014	12/31/2015	12/31/2015	12/31/2015				85,542,000	86,962,000
2014	4	4/25/2014	3/26/2014	1/1/2014	1/1/2014	12/31/2015	12/31/2015	12/31/2015				85,542,000	86,962,000
2014	5	5/24/2014	4/26/2014	1/1/2014	1/1/2014	12/31/2015	12/31/2015	12/31/2015				85,542,000	86,962,000
2014	9	9/24/2014	8/26/2014	1/1/2014	1/1/2014	12/31/2015	12/31/2015	12/31/2015				85,542,000	86,962,000
2014	10	10/31/2014	10/1/2014			3/26/2014	3/26/2014						54,572,466,900

← Issue to report. →



Data Quality – Performance Over Time

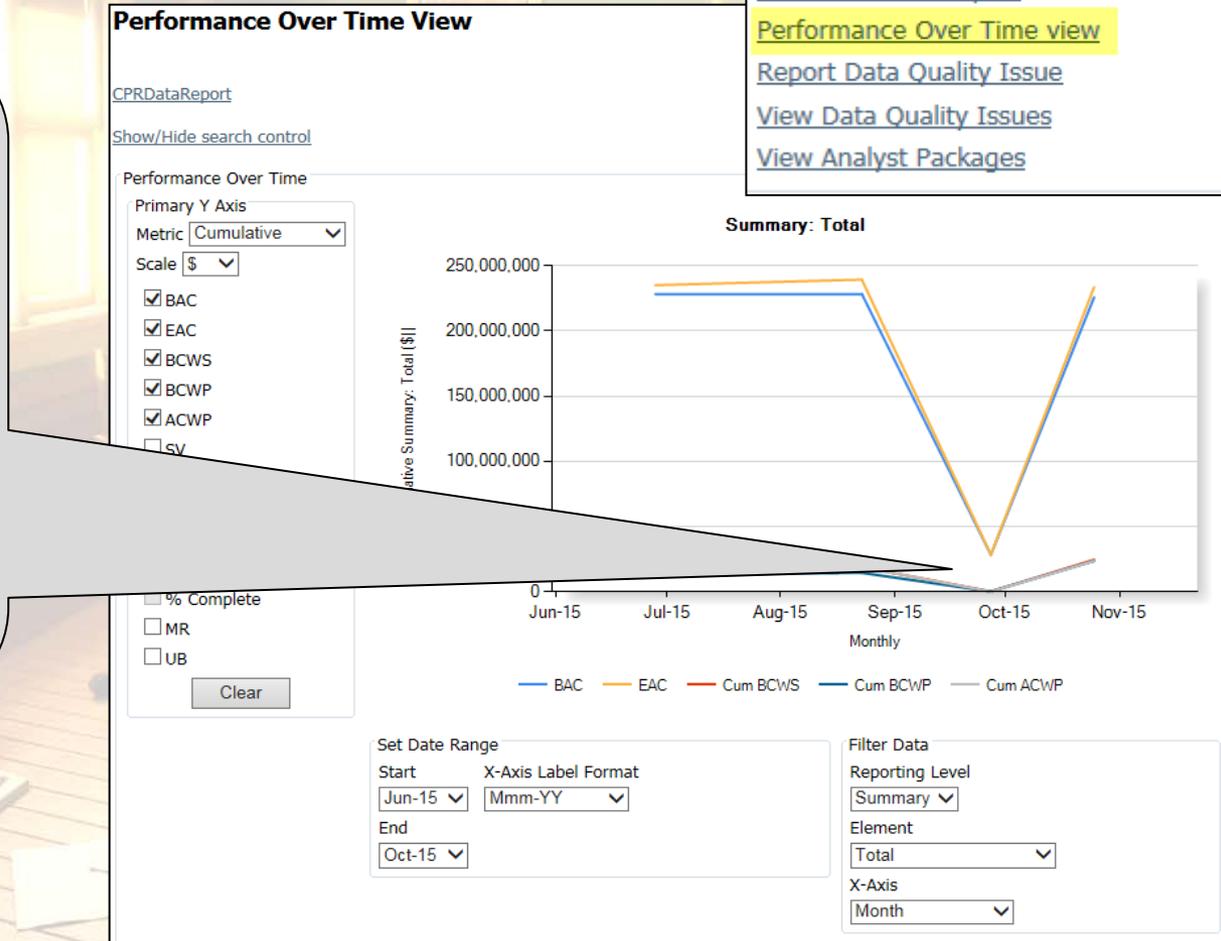
Data Quality Features From Contract Details Page

Chart shows data extract from XML files over multiple time periods

- This view shows a dip in the BAC and EAC for a single time period
- Data Quality Issue to report

For currently selected contract task

- [View CPR Data Report](#)
- [Performance Over Time view](#)
- [Report Data Quality Issue](#)
- [View Data Quality Issues](#)
- [View Analyst Packages](#)





Reporting A Data Quality Issue

Contract Detail

- **Data Quality Should Be Reported Within the EVM-CR**
 - Report from the Contract Detail Page
 - Report from CPR Data Report pages

Contract Detail

Program: Reporting Contractor: Division: Services: NAVY

Contract Number: Contract Type: Services: NAVY

Contract Summary | Reviewers & Submitters | Received Submissions | Contract Attachments | Reporting Stream | Comments

Contract Summary:

DAU Gold Card Metrics by Contract Task (Single Dollars):

Contract Task	Effort Number
60%	
60%	
60%	
60%	
60%	
60%	

DoD Tripwires Value

CPI

SPI

Key Metrics

BCWP

BCWS

ACWP

BAC

EAC (reported)

EAC (cpi)

EAC (composite)

Variances Values

Cost Variance

Schedule Variance

Variance at Complete

CV %

SV %

Metric Name Values

% Schedule Complete

1.4

1.2

1.0

0.8

0.6

0.4

0.2

0

1/1/2015 4/1/2015 7/1/2015 10/1/2015

CPI

1.2

1.0

0.8

0.6

0.4

0.2

0

1/1/2015 4/1/2015 7/1/2015

SPI

For currently selected contract task

[View CPR Data Report](#)

[Performance Over Time view](#)

[Report Data Quality Issue](#)

[View Data Quality Issues](#)

[Analyst Packages](#)

CPR Data Report

Tasks - Current Contract:

Contract Task Name	Effort Number	Start Date	End Date	First Period	Last Period	Run Report
		2/27/2011	2/26/2017	2/27/2011	12/28/2014	➔
		10/27/2002	12/28/2014	10/27/2002	12/28/2014	➔

Download to Excel Prepare TRN Package **Report Data Issue**

Program: AEHF – Advanced Extremely High Frequency (AEHF) Satellite Program Contract: F04701-02-C-0002 Task: Production

(Cost values are in dollars)

Year	Month	ReportDate	ReportFrom	StartDate	DefinitizationDate	CompletionDate	ECD	BudgetCompletionDate	Quantity	ShareA
2011	2									
2011	3									
2011	4									
2011	5									

For currently selected contract task

[View CPR Data Report](#)

[Performance Over Time view](#)

[Report Data Quality Issue](#)

[View Data Quality Issues](#)

[View Analyst Packages](#)



PARCA EVM

Reporting A Data Quality Issue

Provide as much information as possible when reporting your DQ issue. Upload a file to illustrate the issue if complicated issue/difficult to explain.

- For currently selected contract task
- [View CPR Data Report](#)
- [Performance Over Time view](#)
- [Report Data Quality Issue](#)
- [View Data Quality Issues](#)
- [View Analyst Packages](#)

Report Data Quality Issue

View Data Quality Issue Status

Data Quality Issue

Program: [Death Star Program \(Testing Purposes\)](#) Reporting Contractor: Rambo Systems Contract Type: CPAF EDI Required?: Yes

Service: DOD Contract Number: N0000-00-0002 Sub Contract Number: Start Date: 5/1/2013 End Date: 5/1/2014 Reporting Stopped?: No

Reporting Periods: To End Date same as the Start Date

Field(s):

Description of Issue:

Maximum Upload File Size is 4mb

Attach Document:

View Data Quality Issue

Program: [Death Star Program \(Testing Purposes\)](#) Reporting Contractor: Rambo Systems Contract Type: CPAF EDI Required?: Yes

Service: DOD Contract Number: N0000-00-0002 Sub Contract Number: Start Date: 5/1/2013 End Date: 5/1/2014 Reporting Stopped?: No

Status	User	Began On	Finished On	Problem	
New	jhorner	1/26/2015		Report appears to be for another contract/task	View

Selected Issue

User: jhorner Status: New

Began On: 1/26/2015 Finished On:

Attached File:

Problem:

Comment:

Click to view status/details



**PARCA
EVM**

REPORTS & METRICS

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Reports & Metrics

- **Available from the EVM-CR Reports & Metrics tab:**
 - **CPR Data Report**– The CPR Data Report allows you to view contract CPR Data for all available periods in a grid form
 - **Performance Over Time** – Chart shows key metrics and allows you to choose your own adventure by selecting dates, reporting level and metrics to chart
 - **EVM-CR Reporting Compliance and Data Quality Assessment Report** – This report displays a snap-shot view of assessments for all programs
 - **Packaged Submission Documents** – Analysts can request a bulk download of submissions and retrieve it here
 - **Program Status** – This report provides status of EVM-CR submissions
 - **Formats Delivered** – Shows the various IPMR formats received for a given contract task



Reports & Metrics - Program Status

- ▶ PARCA provides the status of EVM-CR deliveries each month to various stakeholders:
 - Service Leads
 - Corporate Focal Points
 - Government Program Office
- ▶ Delivery status and associated data quality metrics are part of the information reviewed at OSD in the DAES process
- ▶ EVM-CR does not reject files for data quality issues but denotes them for analyst understanding
 - Files that fail XML schema validation are not accepted



PARCA EVM

WHAT DOES THE PSR TELL YOU?

Electronic Cost on Time

Electronic Cost Compliance

Human Readable Cost on T

Format 6 on Time

Format 6 Compliance

Native Schedule on Time

CF SR on Time

Format 7 on Time

Format 7 Compliance

Aug-15



PARCA EVM

Performance Over Time Chart



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Reports & Metrics: Reporting Compliance and Data Quality Assessments Report

- Report displays results of quarterly EVM-CR Program Reviews performed by the PARCA office. Includes ratings by Program for:
 - Reporting Compliance
 - Data Quality

<i>EVM-CR Reporting Compliance and Data Quality Program Reviews</i>																						
Program	PNO	DAES Group	ACAT	Title	Finalized Date	Overall Review Score	Reporting Compliance	Cost	Electronic Cost	UN/CE Fact	Business Rules	Human Readable Cost	CFSR	Schedule	Native Schedule	IPMR Schedule	Format 7	History	Data Quality	Cost	Schedule	
					11/5/2015	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
					9/16/2015	Yellow	Green	Green	Green	Green	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Yellow	Green
					7/14/2015	Yellow	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
					7/15/2015	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
					7/15/2015	Yellow	Yellow	Yellow	Yellow	Red	Green	Yellow	Green	Green	Green	Green	Green	Green	Red	Green	Green	Green
					7/14/2015	Yellow	Yellow	Yellow	Yellow	Green	Green	Green	Green	Green	Yellow	Yellow	Green	Green	Green	Green	Green	Green
					7/14/2015	Yellow	Yellow	Yellow	Yellow	Green	Green	Green	Green	Yellow	Yellow	Green	Green	Green	Red	Yellow	Yellow	Green
					7/14/2015	Yellow	Yellow	Yellow	Yellow	Green	Green	Green	Green	Yellow	Yellow	Green	Green	Green	Yellow	Green	Green	Green
					7/14/2015	Yellow	Yellow	Yellow	Yellow	Red	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
					7/14/2015	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green



Reports & Metrics: CPR Data Report

Report displays a grid view of data extracts from the monthly Electronic Cost submissions and/or History file submission.

- Use Search/Filter options to navigate to your desired contract task
- Results can be exported to Excel

CPR Data Selector

Search/Filter Programs

Program: Contract #: Commodity Group:
 Submission ID: Service: DAES Group: ACAT:

Program: **Contract:** **Task:**

(Cost values are in dollars)

Year	Month	ReportDate	ReportFrom	StartDate	DefinitizationDate	CompletionDate	ECD	BudgetCompletionDate	Quantity	ShareAbove	ShareBelow	OriginalNCC	NCC	MostLikelyEAC	Bes
2014	1	1/26/2014	12/30/2013	5/12/2012	10/31/2013	1/3/2020	1/3/2020	1/3/2020	2	40	80				
2014	2	2/23/2014	1/27/2014	5/12/2012	10/31/2013	1/3/2020	1/3/2020	1/3/2020	2	40	80				
2014	3	3/30/2014	2/24/2014	5/12/2012	10/31/2013	12/31/2020	12/31/2020	12/31/2020	2	40	80				
2014	4	4/27/2014	3/31/2014	5/12/2012	10/31/2013	12/31/2020	12/31/2020	12/31/2020	2	40	80				
2014	5	5/25/2014	4/28/2014	5/12/2012	10/31/2013	12/31/2020	12/31/2020	12/31/2020	2	40	80				
2014	6	6/29/2014	5/26/2014	5/12/2012	10/31/2013	12/31/2020	12/31/2020	12/31/2020	2	40	80				
2014	7	7/27/2014	6/30/2014	5/12/2012	10/31/2013	12/31/2020	12/31/2020	12/31/2020	2	40	80				
2014	8	8/31/2014	7/28/2014	5/12/2012	10/31/2013	12/31/2020	12/31/2020	12/31/2020	2	40	80				
2014	9	9/28/2014	9/1/2014	5/12/2012	10/31/2013	12/31/2020	12/31/2020	12/31/2020	2	40	80				
2014	10	10/26/2014	9/29/2014	5/12/2012	10/31/2013	12/31/2020	12/31/2020	12/31/2020	2	40	80				
2014	11	11/30/2014	10/27/2014	5/12/2012	10/31/2013	12/31/2020	12/31/2020	12/31/2020	2	40	80				



Data Access

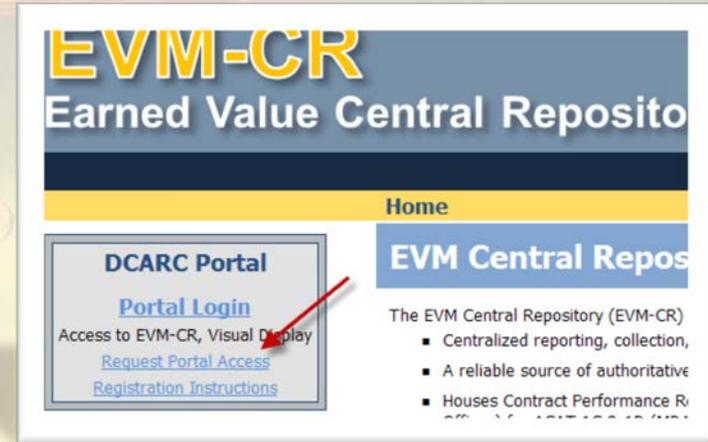
- ▶ Only the DoD and DoD support contractors have access to the information provided to the EVM-CR
 - Gov Service members with Analyst role, have access to all contracts within their assigned services
- ▶ Performing Contractors team members have access only to the data on contracts they are associated with
- ▶ Summary data extracted by OSD DAMIR system for use in DAES process



Requesting Data Access

- Data access must be requested via the Knowledge Portal

<http://cade.osd.mil/Default.aspx>



- Authorized personnel must have a valid Common Access Card (CAC) or be able to obtain a valid ECA Client Certificate to request an account
 - Requires a Gov civilian or military confirmation/approval
- Performing contractors (submitters) must have a valid ECA Client Certificate to request an account



PARCA EVM

Knowledge Portal Home

Provides Common Access to EVM, CSDR and CADE Applications

Knowledge Portal
DCARC
CAPE
FOR OFFICIAL USE ONLY /
PROPRIETARY DATA

PORTAL HOME
MY DASHBOARD
ADMIN
REPORTS
SEARCH
MY ACCOUNT
CONTACT US

Knowledge Portal Home

CSDR Applications

- cPet Web
- CSDR-SR
- 1921-3 & FPR
- DACIMS

EVM Applications

- EVM Reporting Dashboard
- EVM

Dashboard

- ▶ EVM: Submissions For Review 0
- ▶ EVM: Reporting Requirements 3
- ▶ EVM: Unfinished Submissions 0

News Items

EVM Central Repository

EVM Central Repository
Effective May 14, 2015

The Upload Home area of EVM CR has been updated to improve the submission process.

[\(more...\)](#)

CSDR Submit-Review

CSDR Submit-Review
Effective December 22, 2014

jcspahen Please close this window to log out



General Roles

▶ *EVM-CR Analyst*

- As an EVM-CR Analyst you have access to published reports (no access to Rejected, Pending or Submitting reports)
- Access to various reporting tools

▶ *Submitter*

- Performing contractor personnel who upload data files

▶ *Reviewer*

- PMO team member that reviews submitted files
- Lead reviewer has authority to approve or reject files in submission



Defining Data Reporting Requirements

- ▶ **Submit Contract/Task Initialization Info. From Program Office**
 - Coordinate with Program and Service Rep to define Effort Numbers
 - Coordinate as needed with CSDR stakeholders
- ▶ **Submit and Review Contract Task CDRL Documents**
 - CDRLS reviewed by EVM-CD Support staff to determine reporting requirements
- ▶ **Initialize Contract/Task Reporting**
 - Establish Contract/Task Data Reporting Stream
 - Assign Initial Users Based on Program Office inputs



Lead Reviewer: Program Setup

- ▶ For a submission of data to occur, the Lead Reviewer must provide contract detail and reporting requirement information to the Help Desk in order to establish the Contract(s) in the EVM-CR
 - Ensure program, contracts, and tasks are defined
 - Provide program description information including contract numbers, task names, etc.
 - Provide copies of EVM CDRLS for review
 - Define/Maintain Reviewer Team
 - Define/Maintain Submitter Team
 - Keep EVM-CR IT team informed of any changes to reporting or to the EVM CDRLs



New Contract Request

To begin a new request:

1. Choose the Request New Contract Reporting option from the Account Actions Menu (Portal Home)
2. Click Create New Contract Reporting Request
3. Choose the EVM radio button and click Next

1

Account Actions

- [Change your password](#)
- [Update your profile](#)
- [Request application roles](#)
- [Request new contract reporting](#)
- [Transfer file\(s\) to the DCARC Help Desk](#)

2

Contract Reporting Request

Instructions for requesting new contract reporting: [EVM-CR](#) [CSDR-SR](#)

Click the link immediately below this line if you wish to begin a request for new contract reporting.

[Create New Contract Reporting Request](#) +

3

Contract Reporting Request

Create a new request for contract reporting by first selecting either EVM or CSDR for your reporting requirement. Then click "Next".

EVM (Earned Value Management) CSDR (Cost and Software Data Reporting)



PARCA EVM

New Contract Request

The screen shot shows all items that can be entered when making a request. Required section for EVM-CR reporting are:

- Contract Summary
- Prime Contractor
- Lead Reviewer
- Contract Task Info.
- Contract CDRLs

NOTE: CDRL documents that must be submitted are form DD-1423 or equivalent for IPMR/CFSR (Any that are required)

▶ Summary	Not Started
▶ Contractor	Not Started
▶ Lead Reviewers	Not Started
▶ Contract Reviewers	Optional
▶ Contract Submitters	Optional
▶ Contract Task	Not Started
▶ Contract Data Requirements Lists (CDRLs)	Not Started



PARCA EVM

Contract Summary Info.

All Contract Summary Information is required:

- Program Name
- Contract Number
- Weapon System Type
- Contract Type
- Mil-Standard
- Service
- Phase
- Program Manager

Summary Not Started

Summary Information

The following items will search as you type. Select the item in the list that is displayed. If you enter a new item, also select it from the list.

Program Name:

Contract Number:

Weapon System Type:

Contract Type:

Select from the dropdown lists

Mil Standard:

Service:

Phase:

Type in the name of the program manager for this contract reporting.

Program Manager:



PARCA EVM

Contractor Information

Provide performing contractor name, division and location.

NOTE: If Sub-Contractor reporting is required, provide this information in a separate request.

Contractor		Not Started
Prime Contractor Information		
Type a few letters to find the contractor and select from the list. If the contractor cannot be found, type in the full name for the contractor and select it in the list that appears as you type up to add it.		
Contractor:	<input type="text"/>	
To see all existing divisions, type in the name of the contractor you selected above. You may also type a division name, city, or the 2-letter state abbreviation. If the division is not found, enter the full name of the division and also enter the location field below (example: San Diego, CA).		
Division:	<input type="text"/>	
Location:	<input type="text"/>	
Sub Contractor Information		
Note: A subcontractor may be indicated for CSDR reporting. It is rare for EVM reporting to involve a subcontractor, except for cases where a joint venture is involved.		
Type a few letters to find the contractor and select from the list. If the contractor cannot be found, type in the full name for the contractor and select it in the list that appears as you type up to add it.		
Contractor:	<input type="text"/>	
To see all existing divisions, type in the name of the contractor you selected above. You may also type a division name, city, or the 2-letter state abbreviation. If the division is not found, enter the full name of the division and also enter the location field below (example: San Diego, CA).		
Division:	<input type="text"/>	
Location:	<input type="text"/>	



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Lead Reviewer Information

- A single Primary Lead Reviewer is required.
- Optionally provide an Alternate Lead on this screen.

When populating this request, all Reviewer and Submitter information can be entered but it is not required.

▼ Lead Reviewers Not Started

Lead Reviewer Information

Lead reviewers are responsible for reviewing submissions on their assigned contracts. They are the only users who have the capability of publishing a submission. Lead reviewers are also responsible for managing the reviewers and submitters for their assigned contracts.

Set the primary lead reviewer by typing a few characters of the last name to find him/her in the system. If you do not find the person you are searching for, enter their full name.

Primary Lead Reviewer:

Email:

Phone:

Optionally add alternate lead reviewers in the same manner as the primary lead reviewer above.

Alternate Lead Reviewer:

Email:

Phone:



PARCA EVM

Contract Task Information

Contract Task Information must be provided for each IPMR Reporting Requirement.

- Task Name
- Effort Number
- Start Date
- End Date

▼ Contract Task Not Started

Contract Task Information

Enter up to 3 task names (e.g. LRIP, DO 1234, CLIN 2, etc...) for this EVM reporting requirement. If more than 3 tasks are needed, they can be added later by contacting the help desk. The effort number should be a number from 1 to 999 as shown in the DAMIR system. The start and end dates should match what is indicated in the CDRL for each task.

Task Name:

Effort Number: Start Date:  End Date: 

Task Name:

Effort Number: Start Date:  End Date: 

Task Name:

Effort Number: Start Date:  End Date: 

- ***NOTE:** Effort Number refers to the DAMIR Effort Number. This is needed for aligning EVM-CR Data with DAMIR/DAES. If you do not know it, the Help Desk will work with your Service Lead to determine what this number should be.
- ****NOTE:** Effort Number requirement doesn't apply for MDA contracts as the data is not sent forward to DAMIR



**PARCA
EVM**

Uploading CDRL Documents

Click Select a File option to upload CDRL documents for IPMR and/or CFSR

▼ Contract Data Requirements Lists (CDRLs) Not Started

Contract Data Requirements Lists (CDRLs)

Upload all CDRLs associated with this contract reporting requirement. To submit a file, first select a file to upload, enter a description for the file, and then click "Submit CDRL". There is a 100mb file size limit.

File: Select a file

Description:

Submit CDRL Cancel

NOTE: The term “CDRL” refers to the for DD-1423 or equivalent which defines IPMR or CFSR reporting requirements



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Reporting Requirements – CDRL Review

CDRL documents reviewed by EVM-CR System Administrator to determine requirements:

- Formats Required
- Frequency
- Submit days (number of days after close of accounting before submission is due)

CONTRACT DATA REQUIREMENTS LIST <i>(1 Data Item)</i>												Form Approved OMB No. 0704-0188			
<p>The public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0701-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to the above address. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.</p>															
A. CONTRACT LINE ITEM NO.			B. EXHIBIT A			C. CATEGORY: TDP _____ TM _____ OTHER <u>X</u>									
D. SYSTEM/ITEM					E. CONTRACT/PR NO. (Fill in when known)			F. CONTRACTOR (Enter Full name of Contractor)							
1. DATA ITEM NO. A0XXXX		2. TITLE OF DATA ITEM Integrated Program Management Report (IPMR)					3. SUBTITLE			17. PRICE GROUP					
4. AUTHORITY (Data Acquisition Document No.) DI-MGMT-81861				5. CONTRACT REFERENCE SOW PARA XXXX				6. REQUIRING OFFICE PROG/XXXX		18. ESTIMATED TOTAL PRICE					
7. DD250 REQ LT		9. DIST STATEMENT REQUIRED FOUO		10. FREQUENCY MONTHLY		12. DATE OF FIRST SUBMISSION SEE BLOCK 16		14. DISTRIBUTION							
8. APP CODE NO		11. AS OF DATE SEE BLOCK 16			13. DATE OF SUBSEQUENT SUBMISSION SEE BLOCK 16			a. ADDRESSEE		b. COPIES					
16. REMARKS								Draft		Final		Reg		Repro	
								<p>The Contractor shall provide monthly IPMRs per DID DI-MGMT-81861; modified per the following:</p> <ol style="list-style-type: none"> Block 12 - Date of First Submission. The first submission of Formats 1-6 is due 12 working days after the end of the second full accounting period following Authorization to Proceed (ATP). Block 13 - Date of Subsequent Submissions: Subsequent submissions containing Formats 1 through 6 shall be provided within 12 working days¹ after the close of the contractor's monthly or periodic accounting cycle. Format 7 is due annually on [add date]². Final submissions are due when the last significant milestone/deliverable as defined by the contract has been achieved and remaining risk areas have been mitigated. Block 14 - Distribution and addresses: <ol style="list-style-type: none"> All formats shall be submitted electronically in accordance with the DoD-approved XML schemas and guidelines located at the EVM Central Repository (EVM-CR) http://dcarc.cape.osd.mil/EVM/Uncefact.aspx. All IPMR files must be electronically forwarded to the EVM-CR³ at the DCARC Web site at http://cade.osd.mil/EVM/Uncefact.aspx. Formats 1-4 shall be submitted using the DoD-approved XML schema and cost guideline. Format 5 shall be submitted in contractor format. Format 6 shall be submitted using the DoD-approved XML schema and schedule guideline. Format 6 shall also be submitted in contractor native format⁴. Format 7 shall be submitted using the DoD-approved XML schema and time-phased cost guideline. 							



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Reporting Streams

CDRL Requirements Captured In EVM-CR Reporting Stream

Search Contract | **Reporting Streams** | Attachments

Program: [Example](#) Reporting Contractor: TBD Contract Type: Unknown EDI Required?: Yes

Service: DOD Contract Number: N0000-00-N-0000 Sub Contract Number: Start Date: End Date: Reporting Stopped?: No

Task 1 | Test Task 2 | Test Task 3

TASK NAME Task 1
 TASK ID 874
 TASK START DATE 3/12/2011
 TASK END DATE 3/12/2015 Save Task Dates

Stream ID: 335 Effective Date: 3/12/2013

CPR/IPMR COST	CPR FORMATS REQUIRED	IMS	FORMAT 7	CFSR	HISTORY
FORMATTED COST REQUIRED <input checked="" type="checkbox"/>	FORMAT ONE REQUIRED <input checked="" type="checkbox"/>	NATIVE SCHED REQUIRED <input type="checkbox"/>	FORMAT 7 REQUIRED: <input type="checkbox"/>	CFSR REQUIRED <input checked="" type="checkbox"/>	HISTORY REQUIRED <input checked="" type="checkbox"/>
IPMR COST REQUIRED <input checked="" type="checkbox"/>	FORMAT TWO REQUIRED <input checked="" type="checkbox"/>	IPMR SCHEDULE REQUIRED <input checked="" type="checkbox"/>			
FREQUENCY <input type="text" value="Monthly"/>	FORMAT THREE REQUIRED <input checked="" type="checkbox"/>	<input type="text" value="Monthly"/>	<input type="text" value="Annual"/>	<input type="text" value="Quarterly"/>	<input type="text" value="Annual"/>
SUBMIT DAYS <input type="text" value="30"/>	FORMAT FOUR REQUIRED <input checked="" type="checkbox"/>	<input type="text" value="30"/>	<input type="text" value="30"/>	<input type="text" value="30"/>	<input type="text" value="30"/>
SUBMIT DAY TYPE <input type="text" value="CalendarDay"/>	FORMAT FIVE REQUIRED <input checked="" type="checkbox"/>	<input type="text" value="CalendarDay"/>	<input type="text" value="NotSet"/>	<input type="text" value="WorkingDay"/>	<input type="text" value="CalendarDay"/>
SOURCE	UNCEFACT REQUIRED <input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Identifies Which IPMR Cost Formats Are Required

*** Performed by the EVM-CR System Administrator ***



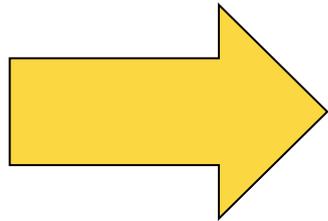
PARCA
EVM

New Contract/Task– Effort Numbers

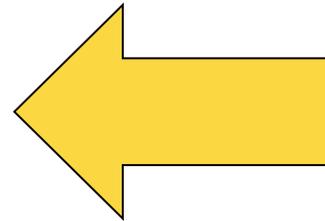
Effort Numbers should align across systems



Service System



DAMIR



EVM-CR

Service Representative verifies effort number alignment

Sample report sent to Service Representative

ContractNumber	ServiceName	ReportingContractorName	ReportingDivisionName	ContractTaskName	EffortNumber	TaskInsertDate
ABC000-13-A-0123	AIR FORCE	Contractor A	Missile Systems	SDD	3	1/5/2015
ABC000-13-A-0124	AIR FORCE	Contractor B	Space Systems	RDT&E	5	2/10/2015
ABC000-13-A-0125	AIR FORCE	Contractor C	Surveillance Systems	LRIP 1	8	2/10/2015



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New Contract/Task– Effort Numbers

EVM-CR View Contract:F04701-02-C-0002

Knowledge Portal PARCA EVM Central FOR OFFICIAL USE ONLY

PORTAL HOME EVM REPORTING DASHBOARD CONTACT US

Back | Previous | Contract Details

Program: AEHF – Adv Service: AIR FORCE

Contract Task	Effort Number
Production	2
SDD	1

Contract Attachments EDI Waiver Contract Events Comments

DAMIR View Contract:F04701-02-C-0002

DAU Gold Card Metrics by Contract Task (Single Dollars):

Variances Values

DAMIR Portal > Production

Select A Contract

AEHF Historical

Production	F04701-02-C-0002/2
SDD	F04701-02-C-0002/1

Current

Name	Number	Type	Last Report
Production	F04701-02-C-0002/2	FFP/CPAF	12/28/2014
SDD	F04701-02-C-0002/1	FFP/CPAF	03/30/2014



Level One Data Fields

Format 1 Data fields

4.a	Report From	6. (2)	CBB
4.b	Report Date	5.c	AUW
5.a	Quantity	5.i	OTB Date
3.d or Format 3 or 5	Share Above	8.e (10)	Cumulative Schedule Variance
3.d	Share Below	8.e (11)	Cumulative Cost Variance
5.b	NCC	8.g (10)	Total Schedule Variance
6.c	Most Likely EAC	8.g (11)	TAB
6.a	Best Case EAC	8.e (14)	BAC
6.b	Worst Case EAC	8.g (2)	BCWS
5.e	Target Price	8.g (3)	BCWP
5.f	Estimated Price	8.g (4)	ACWP
5.g	Ceiling Price	8.g (12a)	BAC Adjustment
5.h	Estimated Ceiling Price	8.g (12b)	SV Adjustment
6. (3)	VAC	8.g (13)	CV Adjustment

- Blue highlights the Format 1 information
- Gray highlights the information from Format 3

Format 3 Data fields

5.h	Start Date
5.i	Definitization Date
5.k	Completion Date
5.l	Estimated Completion Date
5.a	Original NCC



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EVM-CR SUBMIT & REVIEW PROCESS

APPROVED FOR PUBLIC RELEASE DISTRIBUTION UNLIMITED: 16-S-0567, December 2, 2015; 16-S-0566, December 2, 2015; 16-S-0596, December 7, 2015



Submitter Responsibilities

- ▶ Verify requirement to submit to EVM-CR
 - Not based on CSDR reporting
- ▶ Register with EVM-CR (EVM Submitter role)
- ▶ Request access to contracts via Upload Home
- ▶ Verify contract details in EVM-CR
- ▶ Submit against correct submission stream



PARCA EVM

Submitter Contract Access Request

Submitters have the ability to request access to a contract in the EVM-CR via the website. Lead Reviewer team will receive a notification and will review and approve/deny.

Upload Home

(*** EVM Data Only, No CSDR Data ***)

Submit

Task Submission Status

Assign

Please select your desired contract and submit request

<input type="checkbox"/>	Program	Prime Contract Number	Contract Task
<input type="checkbox"/>	Example	N0000-00-N-0000	None

Submit Request

Cancel Request

Contract Summary

Reviewers & Submitters

Received Submissions

Contract Attachments

ED

Contract Reviewers:

Reviewer Name	Organization	Role
Eric Guerber	SPSG - Tecolote Research Inc.	Lead Reviewer
Jen Horner	Tecolote Research, Inc. (SPSG)	Lead Reviewer
Burt LeClercq	Tecolote Research, Inc. (SPSG)	Reviewer

[Manage Contract Reviewers](#)

Contract Submitters:

Submitter Name	Organization	Request
Limited Analyst	Tecolote Research, Inc.	
David Augsburger	Tecolote Research, Inc. (SPSG)	
Eric Guerber	SPSG - Tecolote Research Inc.	
Jen Horner	Tecolote Research, Inc. (SPSG)	+ X
James Kirst	Tecolote Research, Inc. (SPSG)	
Burt LeClercq	Tecolote Research, Inc. (SPSG)	
John McGahan	Tecolote Research, Inc. (SPSG)	
Charlotte McIntosh	Tecolote Research, Inc. (SPSG)	

[Manage Contract Submitters](#)

Contact the Help Desk at DCARCSupport@Tecolote.com if you cannot locate your contract



Start Submission

Upload Home

(*** EVM Data Only, No CSDR Data ***)

Submit

Task Submission Status

Assigned Contracts

Submission History

Contract Request

Continue Existing Submissions

No submissions in submitting.

Start New Submission on Task

Program	Contract	Task	
Example	X0000-15-A-0001	Task 1	Start Submission



▶ A single link to begin a submission

- Click Start Submission to begin any EVM Submission
- Cost, CFSR & Schedule files with same report date can be uploaded on one submission

▶ **Reminder:** Verify the submission is on the correct contract/task



Auto-Detection of Machine Readable Files

Back | Cancel Submission

Upload Submission

Program: **Example**
 Contract Number / Task: **X0000-15-A-0001 / Task 1**
 Report: **Electronic Cost, Human Readable Cost** Month, Year: **Mar, 2015** Submission ID: **24416**

Upload | IPMR File Data | Review & Submit

Next Step

Unclassified Documents Only

Select a file to Upload
 Caution: The total size of each file must be less than 300 mb

[no files selected] File Comments:

Uploaded Files

	File Name	File Type	File Comment	Actions
	Formatted Cost Test File.pdf	Formatted Human Readable CPR		
	IPMR Cost.xml	Machine Readable CPR		
	IPMR Schedule.xml	Machine Readable IMS		

Next Step

- The system can detect machine readable file types and will label them appropriately. This includes XML (Cost), XML (Format 6), XML (Format 7) and WSA (History)
- The submitter must identify all human readable file types.



PARCA EVM

Verification of Data - Cost

Back Cancel Submission

Upload Submission

Program: Example
 Contract Number / Task: **N0000-00-N-0000 / Test Task 3**
 Report: **Electronic Cost** Monthly, Year: **Oct, 2015** Submission ID: **54717**

Upload **IPMR File Data** Review & Submit

When uploading an Electronic Cost file, the system will parse out the level one data and display as shown here for your review.

Selected File Data

File Details

File Name	File Type	File Level

Current Period Information

Current Period Report From: 9/26/2015 To: 10/30/2015 **Processed Date** Processed: 12/2/2015

Report Information

Program Name	Phase	Contract Number	Contract Type
Contractor	Maximum WBS Level	CPR ID	Final CPR

CPR Header Dollars in Thousands

Quantity	Share Above	Share Below	Original NCC	NCC
CBB	TAB	AUW	Contract Ceiling	Estimated Ceiling
Best Case EAC	Worst Case EAC	Most Likely EAC	Target Price	Estimated Price

Variances

At Complete	Cumulative Schedule	Cumulative Cost	Total Schedule	Total Cost

CPR Dates

Contract Start	Contract Definition	Planned Completion	Contract Completion	Estimated Completion

Performance Measurement Baseline (PMB)

MR	BAC	EAC	BCWS	BCWP	ACWP	CPI	SPI

Over Target Baseline (OTB)

OTB Date	BAC Adjustment	SV Adjustment	CV Adjustment	MR Adjustment

^ Calculated Fields

DAMIR Validation Failures
 There are no DAMIR validation failures in this submission.

Data Validation Warnings
 Further warnings detected within the data.

- 1 out of 373 WBS element leaf nodes report Cumulative ACWP less than 0
- 1 out of 373 WBS element leaf nodes report EAC less than 0
- 65 out of 373 WBS element leaf nodes report Cumulative BCWP but not Cumulative ACWP
- 65 out of 373 WBS element leaf nodes report BAC but not EAC

Navigate File Periods

View Report To Final CPR

View	Report To	Final CPR
001	10/30/2015	

Report Links
[Data Quality Validation](#)
[Chart Links](#)
[Performance Over Time](#)

Data Quality Validation Report and Performance Over Time Chart

- Submitters should:
- Review Data Extract
 - Review Data Validation Warnings
 - View Data Quality Validation Report
 - View Performance Over Time Chart



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Verification of Data - Data Quality Validation Report

Links from IPMR Data tab

Report Links

[Data Quality Validation](#)

Chart Links

[Performance Over Time](#)

This report displays a description of all data quality validation checks that are run on each Electronic Cost file and provides and indication of whether this file passed or failed each check

Submission Data Quality Validation Reports

[Download Report](#)

Data Validation Report

Description	Source	Passed	Failed
Share Above (Contractor Share) between 0 and 100	DAMIR	X	
Share Below (Contractor Share) between 0 and 100	DAMIR	X	
Report Period From is required	DAMIR	X	
Report Period From must be on or before Report Period To	DAMIR	X	
Completion Date must be on or After Start Date	DAMIR	X	
Estimated Completion Date Must be on or After Start Date	DAMIR	X	
Planned (Budget) Completion Date must be on or after Start Date	DAMIR	X	
OTB Date must be on or before Report Period To (or report created date)	DAMIR	X	
Management Reserve must be greater than or equal to 0	DAMIR	X	
Quantity must be greater than or equal to 0	DAMIR	X	
BAC must be less than or equal to TAB	DAMIR	X	
Contract Ceiling price must be greater than or equal to TargetPrice	DAMIR	X	
Estimated Contract Ceiling must be greater than or equal to Estimated Price	DAMIR	X	
Target Price must be greater than or equal to NCC	DAMIR	X	
Best Case EAC must be less than or equal to Most Likely EAC	DAMIR	X	
Worst Case EAC must be greater than or equal to Most Likey EAC	DAMIR	X	
Best Case EAC must be less than or equal to Worst Case EAC	DAMIR	X	
PMB Cumulative BCWS must be less than or equal to BAC	DAMIR	X	
PMB Cumulative BCWS must be less than or equal to TAB	DAMIR	X	



PARCA EVM

Verification of Data - Performance Over Time Chart

Links from IPMR Data tab

Report Links

[Data Quality Validation](#)

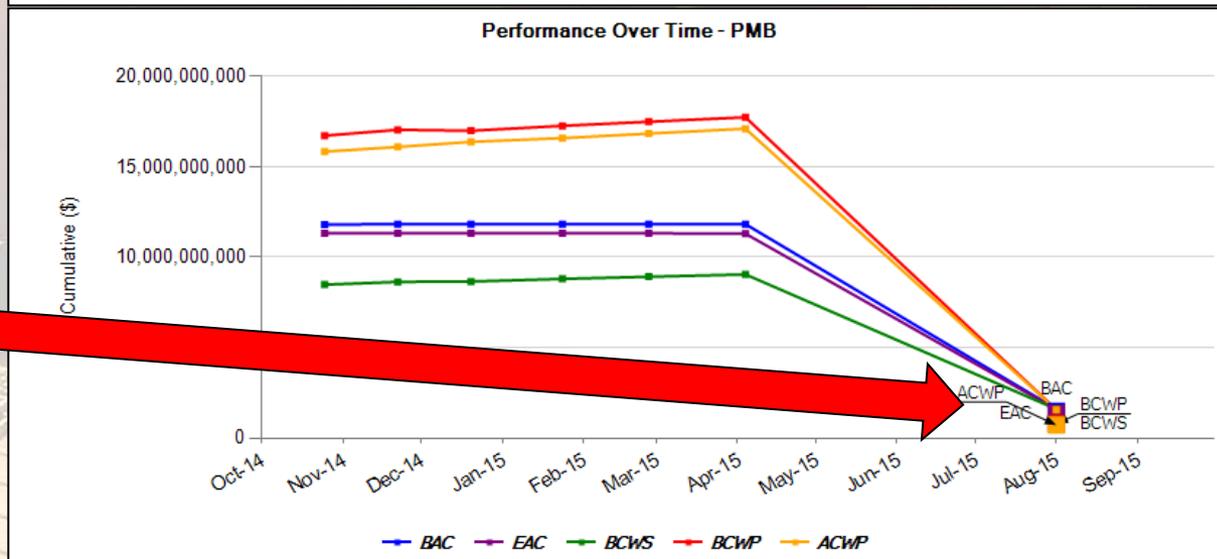
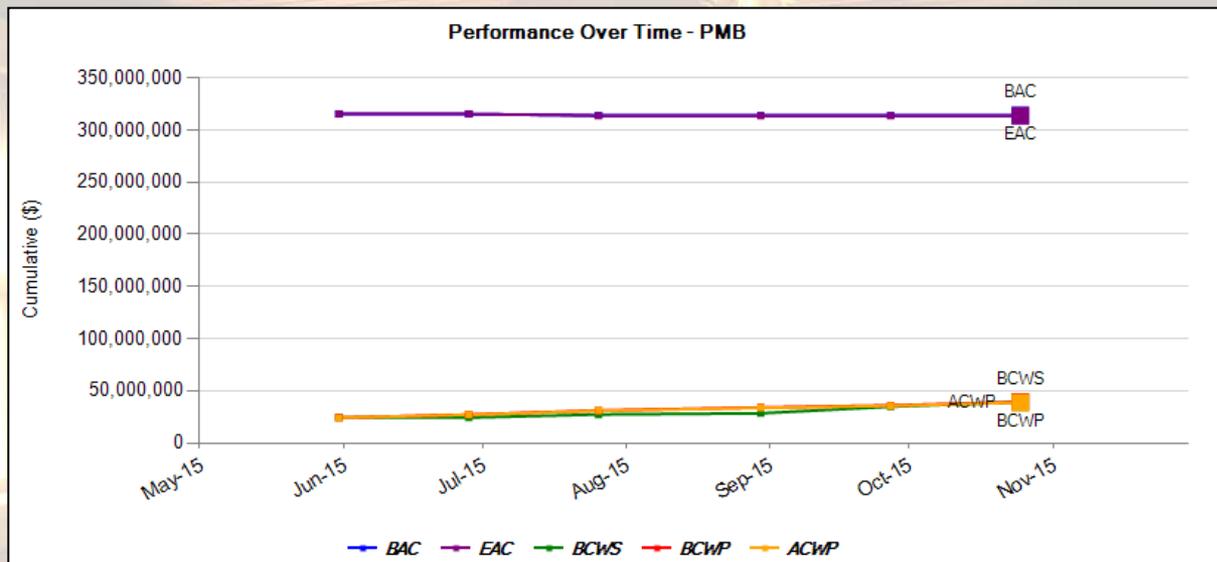
Chart Links

[Performance Over Time](#)

Shows PMB values for the contract task. The large squares at the far right represent the current file.

A chart like the one shown here indicates a drop in all PMB values since the last time period.

- Perhaps this is a component file?
- Was submission uploaded against an incorrect task?





PARCA EVM

Uploading Format 5

- Submitters are presented with a selection box for any files that are not machine readable.
- Identify the appropriate file type and click to continue.
- If the Formatted Cost file contains Format 5 data, check the box to indicate.

[Back](#) | [Cancel Submission](#)

Upload Submission

Program: **Example**
Contract Number / Task: **X0000-15-A-0001 / Task 1**
Report: Month, Year: **Apr, 2015** Submission ID: **24416**

Upload

Processed File

Submission Options

File type could not be autodetected. Please choose an option from the following before continuing.

Mark File as "Other" type

File is Native Schedule

File is CFSR

File is Formatted Cost Contains Format 5 Data

Delete and upload a different file

[Continue](#)



PARCA EVM

Review & Submit

Submission Details

Report Date: 3/27/2015

Is Draft:

Comment: (Max 256 chr.)

Point of Contact Information

Name: Jen Horner

Phone: 253-564-1979

Fax:

Email: jhorner@tecolote.com

[Update Contract Task POC](#)

Uploaded Files

Cost

File Name	File Type	File Level	Mark as Final
Formatted Cost Test File.pdf	Formatted Human Readable CPR		
IPMR Cost.xml	Machine Readable CPR	<input type="radio"/> Component <input checked="" type="radio"/> Total	<input checked="" type="checkbox"/>

Schedule

File Name	File Type	File Level	Mark as Final
IPMR Schedule.xml	Machine Readable IMS	<input type="radio"/> Component <input checked="" type="radio"/> Total	<input checked="" type="checkbox"/>

Format 7

No format 7 files have been uploaded for this submission.

Contract Funds Status Report

No CFSR files have been uploaded for this submission.

Other

No Other files have been uploaded for this submission.

- The Review & Submit tab shows all files broken out by report type.
- Be sure one Total file has a checkmark in “Mark as Final” (Machine Readable file that contains all data for the contract task for the time period).

NOTE: If the submission does not include a machine readable file, the submitter will need to identify the Report Date and click “Save Submission” to continue.



PARCA EVM

Government Review Process

- ▶ Review team notified of submission
- ▶ Reviewers access, assess, “vote”, and comment
 - Unconditionally accept
 - Conditionally accept
 - Reject
- ▶ Lead Reviewer Publishes or Rejects submission
 - Automatically published after 10 calendar days
 - Optionally can notify Managerial Oversight Reviewers of submission prior to publish/reject decision



Review Submissions

▶ *Submission Review Home*

- Submissions: All submission (that require action)
- Task Submission Status: Displays current delivery status ratings for assigned tasks
- Contracts: Review role authority assigned
- Submission History: Prior submissions available across all contracts assigned to reviewer

Submission Review Home

Submissions

Task Submission Status

Contracts

Submission History

Pending Submissions

Submissions Filtered By My Review Decisions:

<u>Submission ID</u>	<u>Prime Contract Number</u>	<u>Report Category(s)</u>	<u>Contract Task</u>	<u>Program Name</u>	<u>Report Date</u>	<u>Submitter Name</u>	<u>Submitted Date</u>	<u>Role</u>
23537	N0000-00-N-0000	IPMR Schedule	Task 1	Example	8/23/2014	Damon Eckert	9/1/2014	Lead Reviewer



Review Submission

Submission Detail

Program: [Example](#)

Contract Number: N0000-00-N-0000

Submission ID: 23468

Contract Task: Task 1

Contract

Submission

Files

Reviewers

Comments

Submission Files

	File Name	File Type	File Level	File Comment
	CPR Sample - RANGE Errors.xml	IPMR Cost	Total	

[View Submission CPRs](#)

Review level 1 CPR data to confirm correct data from EDI/XML submissions

Reviewer Files

There are no reviewer files uploaded for this submission.

Select a file to Upload

Caution: The total size of each file must be less than 300 mb.

File Comment:



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Review Submission - Details

Submission Detail

Program: [Example](#)

Contract Number: N0000-00-N-0000

Submission ID: 23468

Contract Task: Task 1

[Contract](#) [Submission](#) **[Files](#)** [Reviewers](#) [Comments](#)

Submission Files

File Name	File Type	File Level	File Comment
CPR Sample - RANGE Errors.xml	IPMR Cost	Total	

[View Submission CPRs](#)

Reviewer Files

There are no reviewer files uploaded for this submission.

Select a file to Upload

Caution: The total size of each file must be less than 300 mb.

File Comment:

Selected File Data

File Details

File Name	File Type	File Level

Current Period Information

Current Period		Processed Date
Report From:	9/26/2015 To: 10/30/2015	Processed: 12/2/2015

Report Information

Program Name	Phase	Contract Number	Contract Type
Contractor	Maximum WBS Level	CPR ID	Final CPR

CPR Header

Dollars in <input type="text" value="Thousands"/>				
Quantity	Share Above	Share Below	Original NCC	NCC
CBB	TAB	AUW	Contract Ceiling	Estimated Ceiling
Best Case EAC	Worst Case EAC	Most Likely EAC	Target Price	Estimated Price

Variances

At Complete	Cumulative Schedule	Cumulative Cost	Total Schedule	Total Cost

CPR Dates

Contract Start	Contract Definition	Planned Completion	Contract Completion	Estimated Completion

Performance Measurement Baseline (PMB)

MR	BAC	EAC	BCWS	BCWP	ACWP	CPI	SPI

Over Target Baseline (OTB)

OTB Date	BAC Adjustment	SV Adjustment	CV Adjustment	MR Adjustment

Calculated Fields

DAMIR Validation Failures

There are no DAMIR validation failures in this submission.

Data Validation Warnings

Further warnings detected within the data.

- 1 out of 373 WBS element leaf nodes report Cumulative ACWP less than 0
- 1 out of 373 WBS element leaf nodes report EAC less than 0
- 65 out of 373 WBS element leaf nodes report Cumulative BCWP but not Cumulative ACWP
- 65 out of 373 WBS element leaf nodes report BAC but not EAC

Navigate File Periods

1 of 1

View	Report To	Final CPR
	10/30/2015	

Report Links

[Data Quality Validation](#)

[Chart Links](#)

[Performance Over Time](#)

Data Quality Validation Report and Performance Over Time Chart



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EVM**

Review Submission – DQ Validation Report

Links from Submission CPR page

Report Links

[Data Quality Validation](#)

Chart Links

[Performance Over Time](#)

This report displays a description of all data quality validation checks that are run on each Electronic Cost file and provides an indication of whether this file passed or failed each check.

Submission Data Quality Validation Reports

[Download Report](#)

Data Validation Report

Description	Source	Passed	Failed
Share Above (Contractor Share) between 0 and 100	DAMIR	X	
Share Below (Contractor Share) between 0 and 100	DAMIR	X	
Report Period From is required	DAMIR	X	
Report Period From must be on or before Report Period To	DAMIR	X	
Completion Date must be on or After Start Date	DAMIR	X	
Estimated Completion Date Must be on or After Start Date	DAMIR	X	
Planned (Budget) Completion Date must be on or after Start Date	DAMIR	X	
OTB Date must be on or before Report Period To (or report created date)	DAMIR	X	
Management Reserve must be greater than or equal to 0	DAMIR	X	
Quantity must be greater than or equal to 0	DAMIR	X	
BAC must be less than or equal to TAB	DAMIR	X	
Contract Ceiling price must be greater than or equal to TargetPrice	DAMIR	X	
Estimated Contract Ceiling must be greater than or equal to Estimated Price	DAMIR	X	
Target Price must be greater than or equal to NCC	DAMIR	X	
Best Case EAC must be less than or equal to Most Likely EAC	DAMIR	X	
Worst Case EAC must be greater than or equal to Most Likey EAC	DAMIR	X	
Best Case EAC must be less than or equal to Worst Case EAC	DAMIR	X	
PMB Cumulative BCWS must be less than or equal to BAC	DAMIR	X	
PMB Cumulative BCWS must be less than or equal to TAB	DAMIR	X	



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Review Submission - Performance Over Time Chart

Links from Submission CPR page

Report Links

[Data Quality Validation](#)

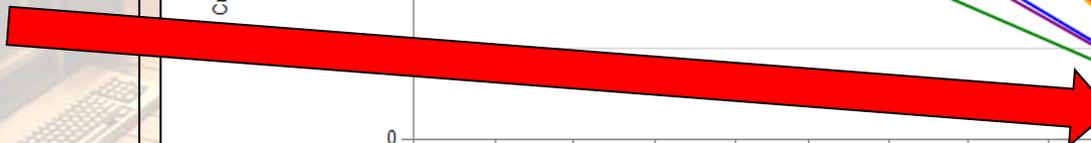
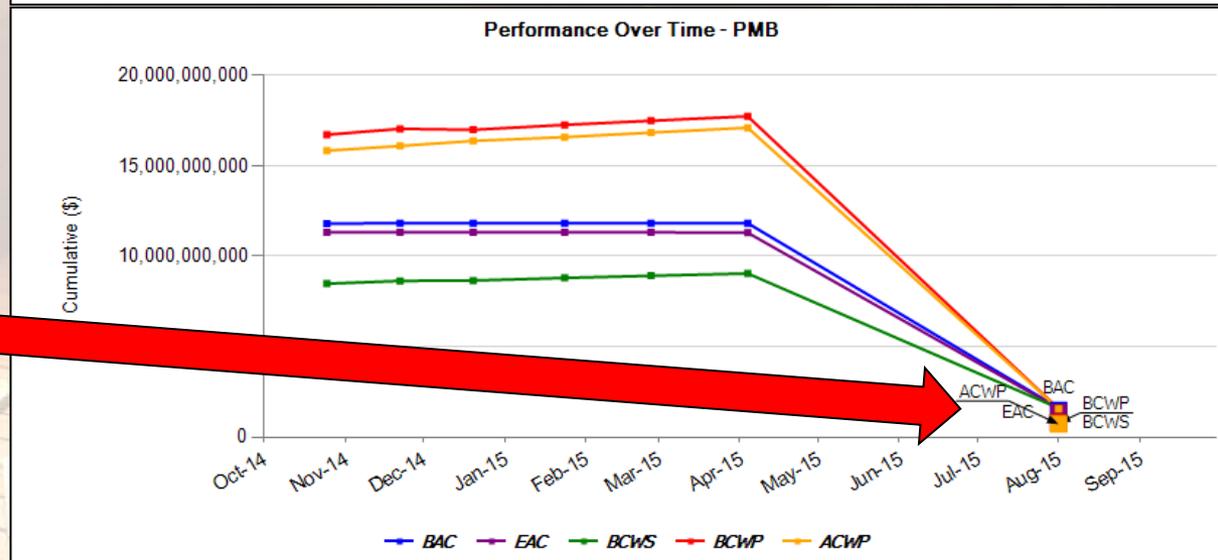
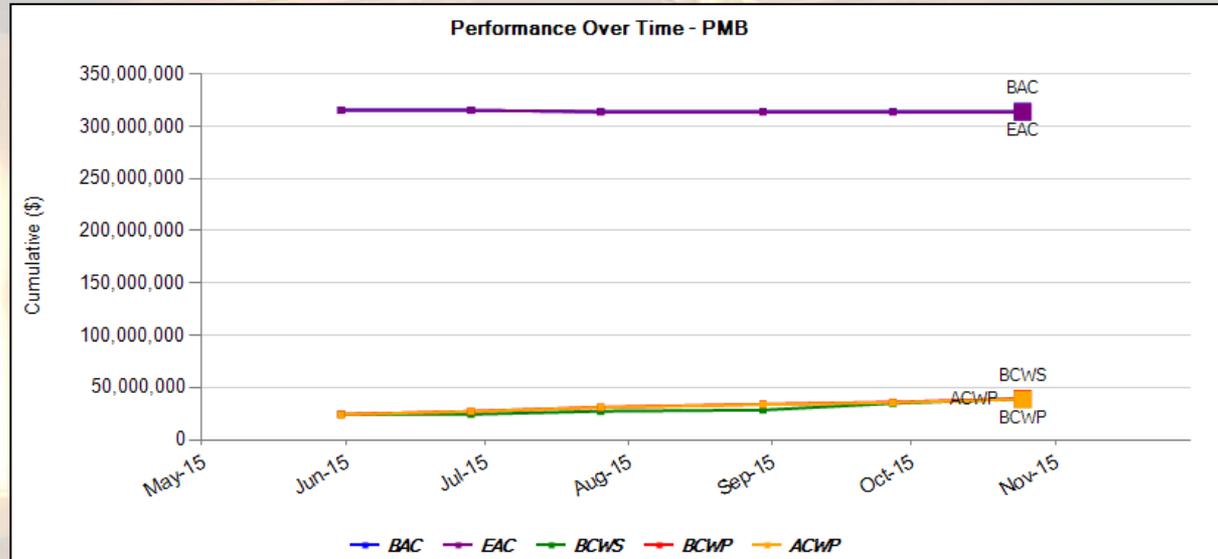
Chart Links

[Performance Over Time](#)

Shows PMB numbers for the contract task. The large squares at the far right represent the current file.

A chart like the one shown here indicates a drop in all PMB values since the last time period.

- Perhaps this is a component file?
- Was submission uploaded against an incorrect task?





Reviewing a Submission

Record decision and make comments.

Contract Submission Files **Reviewers** Comments

Submission Reviewers

Reviewer	Organization	Role	Status	Status Date	Comment
David Augsburg	Tecolote Research	Lead Reviewer	Pending		
Damon Eckert	TEcolote	Lead Reviewer	Pending		
Reviewer EVM	DCARC	Lead Reviewer	Pending		
Eric Guerber	SPSG - Tecolote Research Inc.	Lead Reviewer	Pending		
Jen Horner	Tecolote Research, Inc.	Lead Reviewer	<input type="radio"/> Approved <input type="radio"/> Conditionally Approved <input type="radio"/> Rejected <input checked="" type="radio"/> Pending		
Burt LeClercq	Tecolote Research, Inc	Lead Reviewer	Pending		

Save

Lead Reviewer can change status of submission

Lead Reviewer Actions

- Set Status to Submitting
- Alert Managerial Oversight
- Publish Submission
- Reject Submission

Days To AutoPub: 10



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QUESTIONS ?

EVM CR Support:

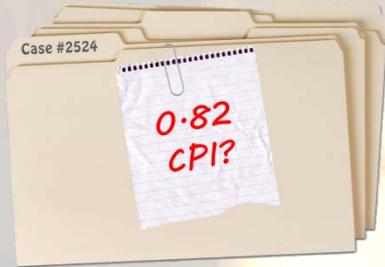
Jen Horner: 253-564-1979 ext. 4910
jhorner@tecolote.com

Debbie Buck: 253-564-1979 ext. 1
dbuck@tecolote.com



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EVMystery Final Notes



Case #2524 Notes...

- *EVM provides awareness into program performance*
- *EVM reporting is supported by policy and rules around a EVM System*
- *0.82 CPI...while the performance is unfavorable, having the information allows the Government to make decisions*



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EVMystery

SUBPART 234.2—EARNED VALUE MANAGEMENT SYSTEM
(Revised December 7, 2011)

234.201 Policy

234.201 Policy.

(1) DoD applies the earned value management system

(i) For cost or incentive contracts and the earned value management system shall be in accordance with the National Standards Institute/Electronic Management Systems (ANSI/EIA)

(ii) For cost or incentive contracts and the contractor shall be in accordance with the

DIRECTOR, ADMINISTRATION AND MANAGEMENT
DIRECTOR, NET ASSESSMENT
DIRECTORS OF THE DEFENSE AGENCIES
DIRECTORS OF THE DOD FIELD ACTIVITIES

SUBJECT: Guidance for Integrated Baseline Review

Earned Value Management (EVM) is one of DoD's and industry's most powerful program management tools. Government and industry program managers use EVM to gain a joint situational awareness of program status, to assess cost, schedule, and performance risks in the performance of programs, and to support proactive decision-making and risk management.

CASE CLOSED

Form No. 2734/1
2734/2
2734/3
2734/4
N/A
N/A
N/A

0. USE/RELATIONSHIP:

VM EARNED VALUE MANAGEMENT
Resources
Welcome
Performance Assessments and Root Cause Analyses (PARCA) Earned Value Management division in the Office of the Assistant Secretary of Defense for Acquisition serves as the Department of Defense (DoD) focal point for all policy, guidance and competency relating to EVM.

CONTRACT VALUE (\$)	REQUIREMENTS
2500M	All IPMR formats required
2500 < \$100M	IPMR may not be tailored or reduced, except as defined in the DID or this document, without additional approvals
< \$20M	Formats 1, 5, 6 and 7 required
	At discretion of Project/Program Manager (PM)
	No requirements for Formats 2, 3, and 4 optional
	Optional Application
	Formats 1 and 5 recommended
	Format 6 may be recommended

Figure 1-1 Applying the IPMR DID Based on Contract Value

(1) Consider all known options at contract award



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Thoughts? Questions?

PARCA EVM Website:
<http://www.acq.osd.mil/evm/>

PARCA EVM Email:
osd.dodevm@mail.mil

Thank you!



PARCA EVM

Government Acquisition Exchange Program

<http://www.acq.osd.mil/evm/aep.program.html>

What is it?

The Performance Assessments and Root Cause Analyses (PARCA) Acquisition Exchange Program (AEP) provides a unique career-development experience for high-caliber individuals in acquisition and acquisition-related career fields.

Objective

The AEP provides experience in the Department's executive-level MDAP decision process and implementation of DoD-wide acquisition policies. The assigned projects offer selected applicants the opportunity to enhance acquisition and senior-level policymaking skills, develop managerial and leadership skills, and prepare for future positions within the acquisition community.

Application Process





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Backup



PARCA EVM

Major IPMR Cost Data Elements

- ▶ Planned Value (BCWS): How much work (person-hours) you planned to have accomplished at a given point in time (this is from the WBS in your plan)
- ▶ Actual Cost (ACWP): How much work (person-hours) you have actually spent at a given point in time
- ▶ Earned Value (BCWP): The value (person-hours) in terms of your base budget of what you have accomplished at a given point in time (or, % complete X Planned Value)
- ▶ Budget At Completion (BAC): The total amount of scope as represented in dollars
- ▶ Estimate At Completion (EAC): The estimate for the cost of the work to be performed
- ▶ Cost Variance (CV): Difference between earned value and actual costs
- ▶ Schedule Variance (SV): Difference between earned value and planned value
- ▶ Variance Analysis Report (VAR): Analysis of cost and schedule issues, risks, and other programmatic information



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IPMR Data Item Description (DID)

- ▶ The IPMR contains data for measuring cost and schedule performance on Department of Defense (DoD) acquisition contracts. Its primary value is in reflecting current contract status and projecting future contract performance.
- **Format 1**
 - Defines cost and schedule performance data by product-oriented Work Breakdown Structure (WBS)
 - **Benefit:** Provides a snapshot of EVM performance at the detail and summary level
- **Format 2**
 - Defines cost and schedule performance data by the contractor's organizational structure (e.g., Functional or Integrated Product Team (IPT))
 - **Benefit:** Enables analysis of EVM performance at organizational elements



IPMR Data Item Description (DID) cont.

■ **Format 3**

- Defines time phased changes to the Performance Measurement Baseline (PMB)
- Also provides estimated and original contract completion dates
- **Benefit:** Enables analysis to track shifts in PMB

ITEM (1)	BCWS CUMULA- TIVE TO DATE (2)	BCVS FOR REPORT PERIOD (3)	BUDGETED COST FOR WORK SCHEDULED (BCWS) (Non-Cumulative)											UNDS- TRIBUTED BUDGET (15)	TOTAL BUDGET (16)	
			SIX MONTH FORECAST						ENTER SPECIFIED PERIODS							
			+1 (4)	+2 (5)	+3 (6)	+4 (7)	+5 (8)	+6 (9)	(10)	(11)	(12)	(13)	(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																

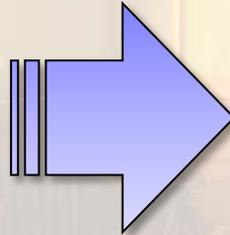
■ **Format 4**

- Defines staffing forecasts through program lifecycle
- **Benefit:** Enables tracking and analysis to determine accuracy of labor estimates



PARCA EVM

Focused Variance Analysis



Just getting all variances can lead to piles of unused information and/or information that's too hard to wade through

New language intended to reduce burden and focus on the significant risks to the program



IPMR Data Item Description (DID) cont.

■ Format 5

- Narrative report used to provide variance analysis of data contained in Formats 1-4 and 6 and corrective actions (15 WBS items)
- Links information in the schedule to the cost status
- **Benefit:** Analysis provides PM with information to make informed decisions

■ Format 6 (Previously was a separate DID)

- Defines and contains the contractor's Integrated Master Schedule (IMS)
- **Benefit:** Enables analysis to predict milestone and program completion dates



Major IPMR Schedule Data Elements

- ▶ Standard scheduling fields (duration, start date, end date, relationships, task description, etc.)
- ▶ Justification for Leads, Lags and most constraints
- ▶ Schedule Risk Assessment (SRA)
- ▶ Schedule Margin & Schedule Visibility Tasks (SVTs)
- ▶ Critical & Driving Paths
 - Tasks with “0” or negative total float are not by default the critical path
 - Driving path and interim milestones defined
- ▶ Other fields as required by the PMO



PARCA EVM

IPMR Data Item Description (DID) cont.

■ Format 7

- Defines the annual reporting of time-phased historical and forecast cost submission
- **Benefit:** Enhances Govt analysis beyond information in Format 1 or 5

**The Format 7 specifically does not have “reporting format”
– it is designed as a data delivery that can be used for analysis
in any tool**



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Reports & Metrics: Contract Task Files by Time Report (man behind the curtain)

- Used to map submission “files” into reporting and analysis functions
- The file ID shown in green represents the file that is the authoritative source for the time period

Program: 06-01-0000-0000 Contract Number: 060101-001-0000
 Report: 0000 - All Subtasks: 00
 Task: 0000000
 Task ID: 00000000000000000000

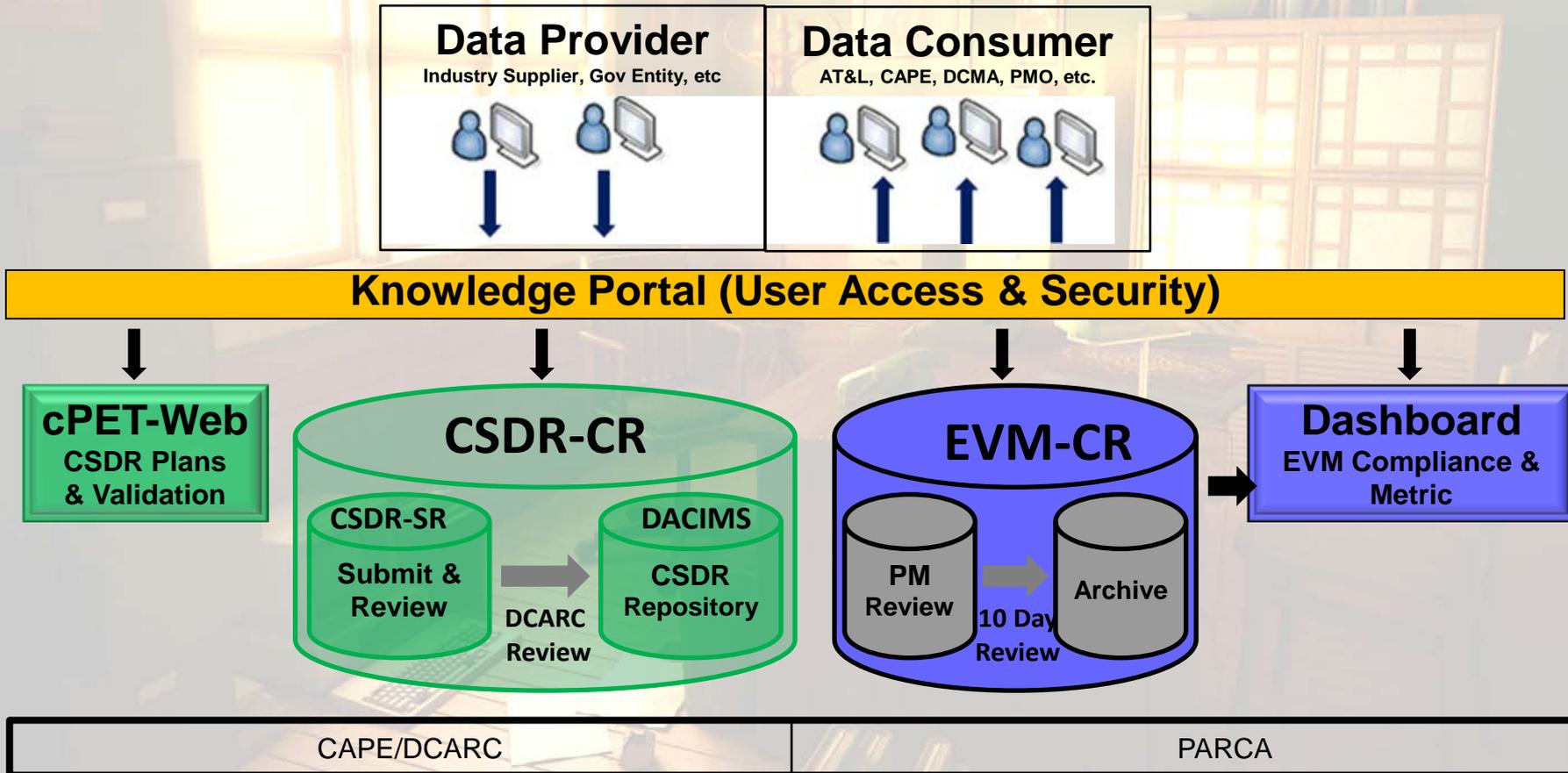
Show only files contributing to the Task Period CPR picture

Task Files															
Periods/Submission ID	16208	16523	17475	17795	18121	20172	20496	20888	21349	21864	22289	22920	23439	23440	23989
10/02/2011	311642												311230*		
10/28/2011		311633											311231*		
11/25/2011													311232*		
12/31/2011			311576										311233*		
01/27/2012				311575									311234*		
02/24/2012					311573								311235*		
03/30/2012													311236*		
04/27/2012													311237*		
05/25/2012													311238*		
06/29/2012						311515							311239*		
07/27/2012							311505						311240*		
08/31/2012								311501					311241*		
09/28/2012									311485				311242*		
10/26/2012										311468			311243*		
11/30/2012											311459		311244*		
12/31/2012												311450	311245*		
01/25/2013													311246	311196	
02/22/2013															311176
03/29/2013															
04/26/2013															
05/31/2013															
06/28/2013															



System Architecture Overview

Core CSDR and EV Applications Within Portal





System Architecture Overview

- ▶ Submitters: What happens to your submission files after upload?
- ▶ Reviewers: What happens after you review and accept a submission?

Who Is This Guy?

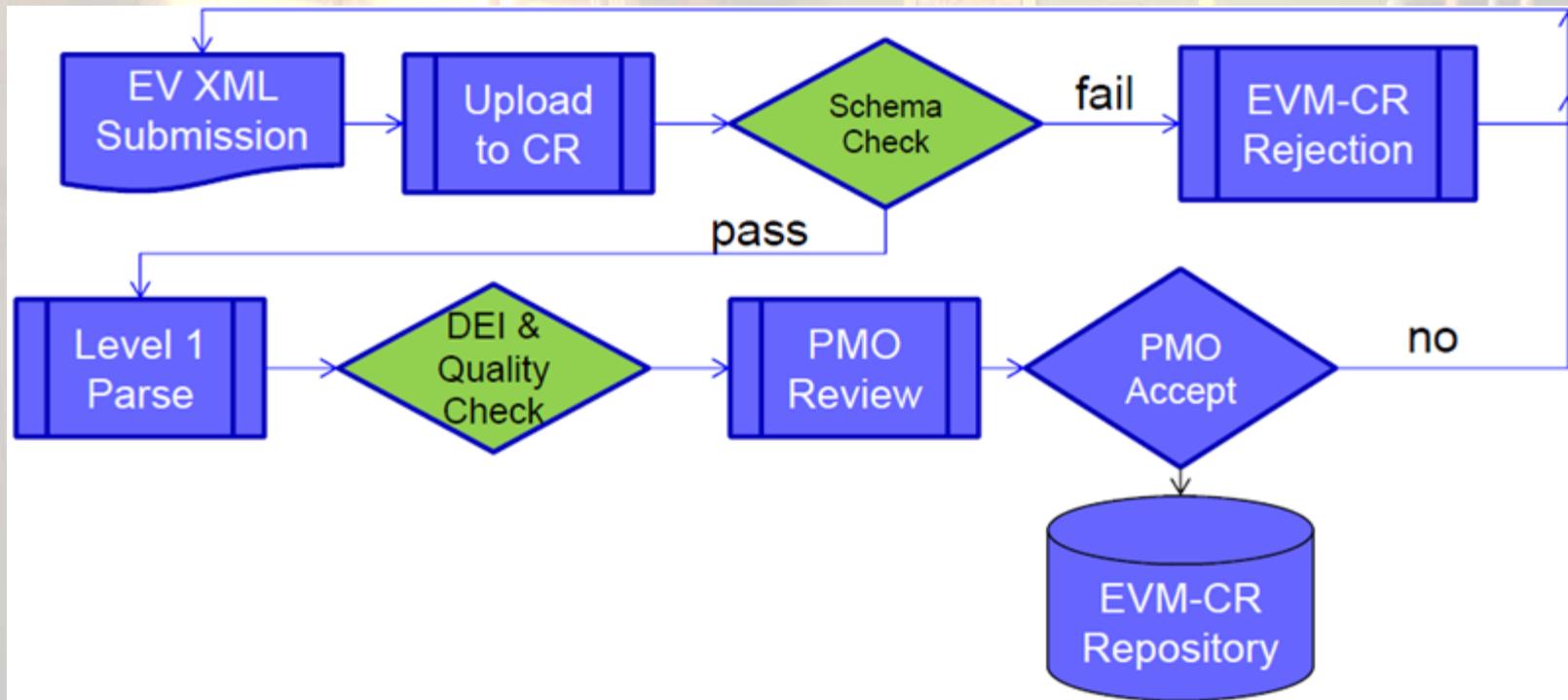


Let's Look Behind The Curtain



System Architecture Overview

Handling Machine-Readable Files

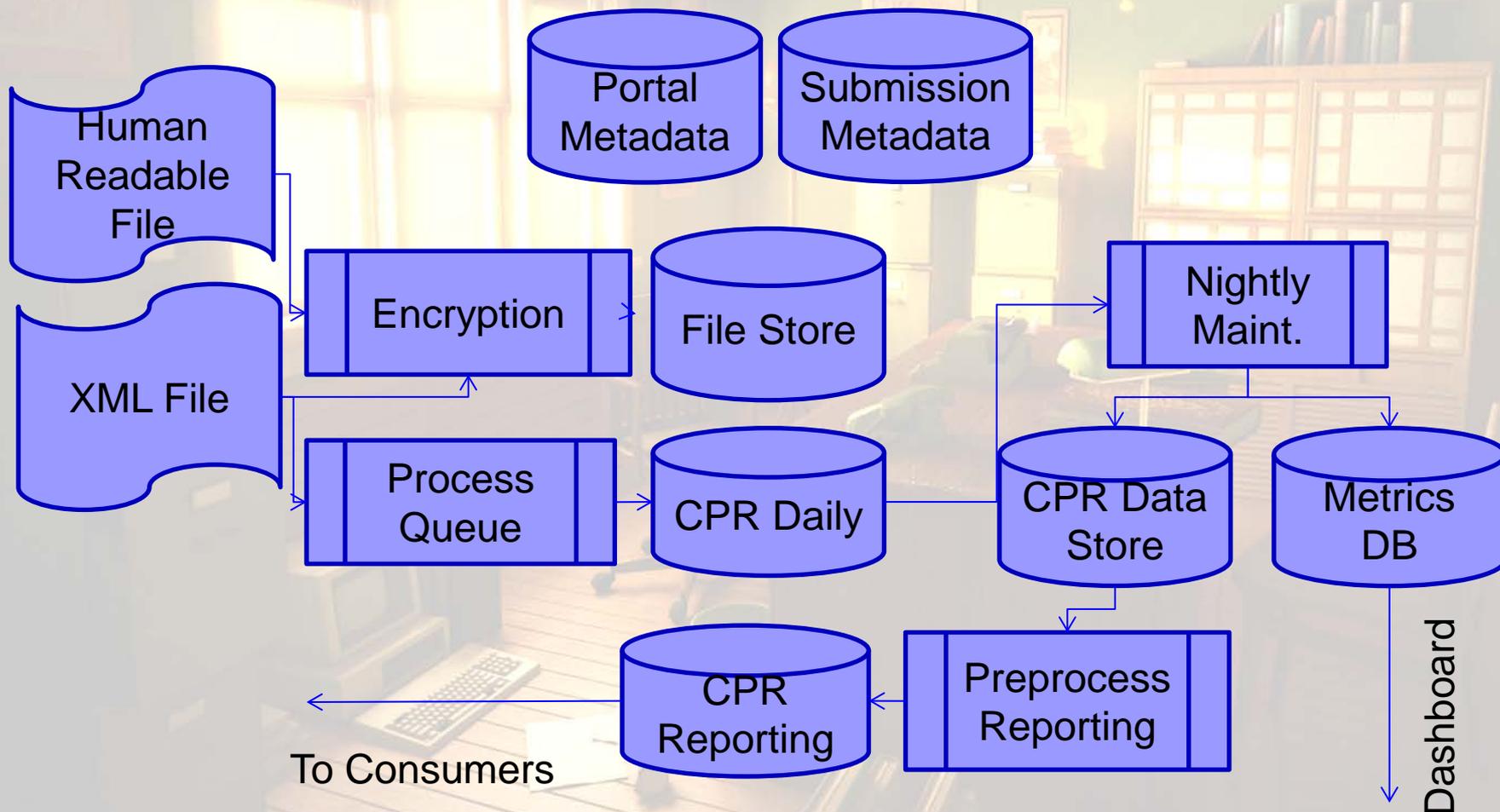


If this is all we do, what does a user do to get data?



System Architecture Overview

Processing data to prepare for reporting & charting





Data Access Via Web Services

- ▶ What is a Web Service?
 - ▶ What are they used for?
 - ▶ How do you use them today in everyday life?
- A Browser, Website or Web Application Enables Information Exchange Between Machine and Human
 - A Web Service Enables Information Exchange Between Machines



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Example Web Services Usage

Desktop Application With Secure, Real-Time EV Data Access

The screenshot shows the 'FDR Client' application window. At the top, there are tabs for 'Program', 'Contract', 'Task', and 'WBSNode'. A 'Chart WBS Element' button is located to the right. Below these is an 'Authentication' section with sub-tabs for 'Echo', 'Data', 'Element Performance', and 'Errors'. The 'Data' tab is selected. In the center, there is a 'Server:' dropdown menu with the value 'https://service.cade.osd.mil/DCARCServicesHost/'. To the right of this is a 'Status:' label. Below the server dropdown is a 'Choose Certificate' button and a text field containing '[None]'. A 'Login' section contains two input fields: 'User name' and 'Password:'. Below these fields are four buttons: 'Login with User name and Password', 'Login with CAC', 'Get Data', and 'Logout'.



Browse Available Programs & Contracts

FDR Client

Death Star Program (Testing Purposes) -> Contract -> Task WBSNode

Chart WBS Element

Authentication Echo Data Element Performance Errors

Programs Contracts Tasks WBS Node Dates Header Summary Cost Data

ProgramName	PNO	ProgramGroup	DaesGroupNam	AcatName	NumContracts	NumContractsWi
DDG 51- ARLEIGH BURKE CLASS Gu...	180	MDAP	C	IC	3	0
Death Star Program (Testing Purposes)	001	MDAP	A	ID	6	5
DIMHRS (Defense Integrated Military ...	M26	MDAP			1	0
DTS (Defense Travel System)	M49	MAIS			1	0
E-2D AHE - E-2D Advanced Hawkeye	364	MDAP	A	ID	3	0
EA-18G - Airborne Electronic Attack var...	378	MDAP	C	ID	2	0

Authentication Echo Data Element Performance Errors

Programs Contracts Tasks WBS Node Dates Header Summary Cost Data

ContractNumber	SubContractNurr	ProgramName	MilHandbookNa	WeaponSystemTypeName
N0000-00-0001		Death Star Program (Testing Purposes)	SPACE	OTHER
N0000-00-0002		Death Star Program (Testing Purposes)	SPACE	OTHER
N0000-00-0004		Death Star Program (Testing Purposes)	AIRCRAFT	Aircraft



Example Web Services Usage

Select Contract/Task & View WBS

Authentication		Echo	Data	Element Performance	Errors		
Programs	Contracts	Tasks	WBS Node	Dates	Header	Summary	Cost Data
	Name		EffortNumber	StartDate	EndDate		
▶	Death Star Construction		0	1/1/2008	9/24/2010		

Authentication		Echo	Data	Element Performance	Errors		
Programs	Contracts	Tasks	WBS Node	Dates	Header	Summary	Cost Data
	Nodelevel	CodeAndName					
▶	1	1: Weapon System					
	2	11: All Up Ons (AUO) Space Vehicle					
	3	111: DeathStar Stuff					
	4	1110: Spaceframe Structure					
	5	1110X: Spaceframe Structure					
	5	1110XA1CG: Spaceframe Design NRE					
	5	1110XA1CH: Spaceframe Design RE					
	5	1110XA1CI: Interconnect Design NRE					
	5	1110XA1CJ: Interconnect Design RE					
	3	112: Guidance Electronics Unit (ZZZ)					
	4	1120: Guidance Electronics Unit (ZZZ)					



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Example Web Services Usage

Browse Available Data By Task

Death Star Program (Testing Purposes) -> N0000-00-0001 -> Death Star Construction -> 11: All Up Ons (AUO) Space Vehicle

Chart WBS Element

Authentication	Echo	Data	Element Performance	Errors									
Programs	Contracts	Tasks	WBS Node	Dates	Header	Summary	Cost Data						
ReportPeriodDat	ElementType	RowType	Units	BudgetAtComple	EstimateAtComp	Reprogramming	Reprogramming	Reprogramming	VarianceAtComp	CumulativeActua	CumulativeBudg	CumulativeBudg	
10/21/2007	SubTotal	Merged	Dollars	\$79,155,699	\$83,572,234	\$0	\$0	\$0	(\$4,416,535)	\$26,731,339	\$27,275,691	\$29,920,737	
10/21/2007	Total	Merged	Dollars	\$85,541,990	\$83,572,234	\$0	\$0	\$0	\$1,969,756	\$26,731,339	\$27,275,691	\$29,920,737	
5/24/2009	SubTotal	Merged	Dollars	\$100,558,635	\$124,900,452	\$15,112,700	\$0	\$0	(\$24,341,817)	\$95,759,416	\$77,546,932	\$83,066,461	
5/24/2009	Total	Merged	Dollars	\$102,312,207	\$124,900,452	\$15,112,700	\$0	\$0	(\$22,609,245)	\$95,759,416	\$77,546,932	\$83,066,461	

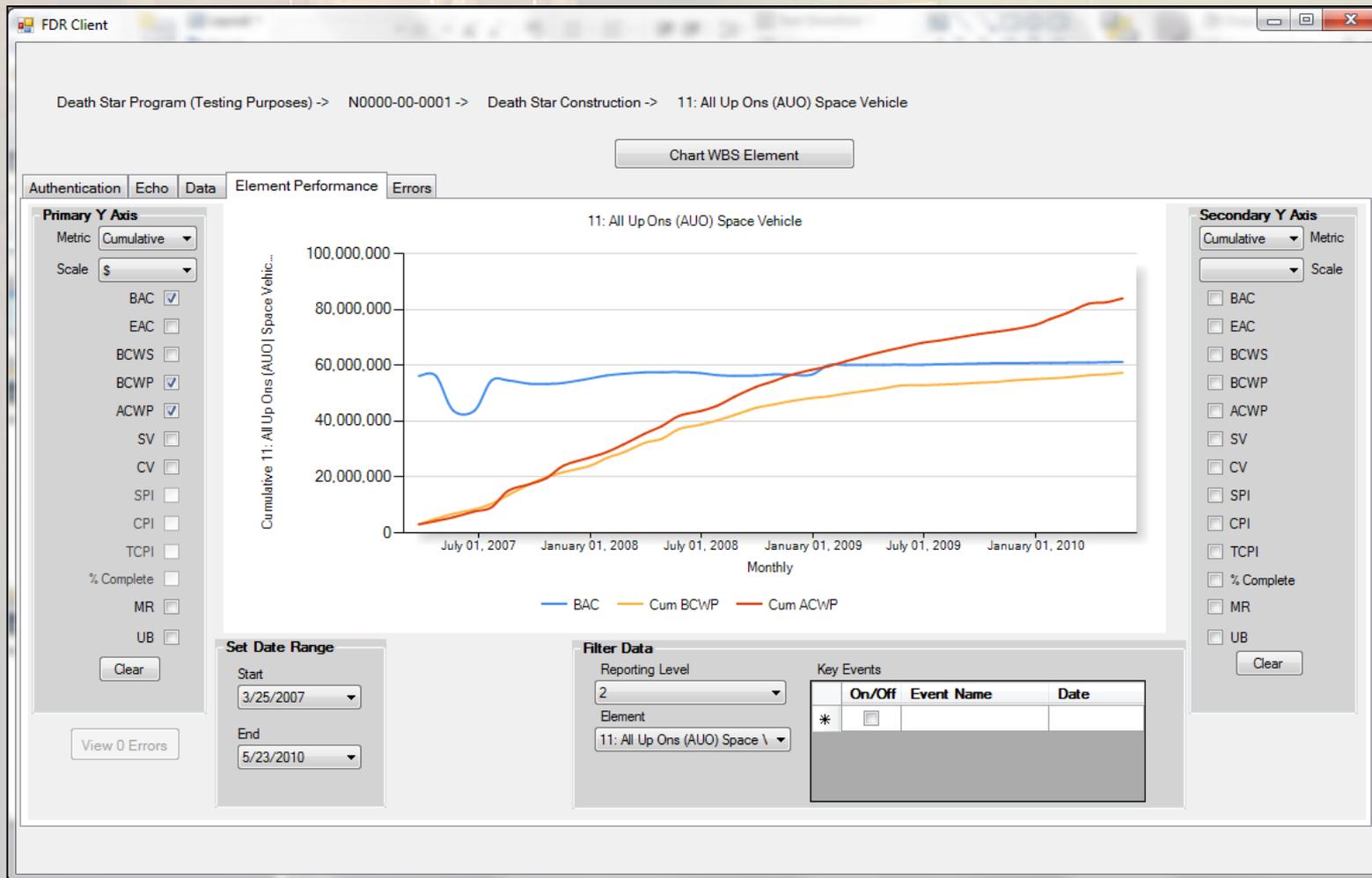
Authentication	Echo	Data	Element Performance	Errors								
Programs	Contracts	Tasks	WBS Node	Dates	Header	Summary	Cost Data					
ReportPeriodDat	RowType	Units	BudgetAtComple	EstimateAtComp	Reprogramming	Reprogramming	Reprogramming	VarianceAtComp	CumulativeActua	CumulativeBudg		
12/28/2008	Merged	Dollars	\$56,644,466	\$75,283,388	\$0	\$0	\$0	(\$18,638,922)	\$58,380,354	\$48,281,200		
4/22/2007	Merged	Dollars	\$56,203,930	\$56,203,930	\$0	\$0	\$0	\$0	\$4,226,877	\$5,022,989		
6/28/2009	Merged	Dollars	\$60,222,359	\$78,320,931	\$3,358,900	\$0	\$0	(\$18,098,572)	\$68,066,733	\$52,846,339		
8/24/2008	Merged	Dollars	\$56,283,582	\$73,568,824	\$0	\$0	\$0	(\$17,285,242)	\$48,737,290	\$42,196,196		
11/22/2009	Merged	Dollars	\$60,807,991	\$84,390,084	\$3,358,900	\$0	\$0	(\$23,582,093)	\$72,828,831	\$54,589,879		
8/19/2007	Merged	Dollars	\$54,545,908	\$58,015,737	\$0	\$0	\$0	(\$3,469,829)	\$15,105,008	\$13,533,953		
2/21/2010	Merged	Dollars	\$60,952,807	\$87,106,292	\$3,358,900	\$0	\$0	(\$26,153,485)	\$78,763,846	\$55,712,861		
2/28/2010	Merged	Dollars	\$60,963,207	\$87,366,600	\$3,358,900	\$0	\$0	(\$26,402,293)	\$82,082,000	\$56,452,745		



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Example Web Services Usage

Real-Time Visualization Through Web Services

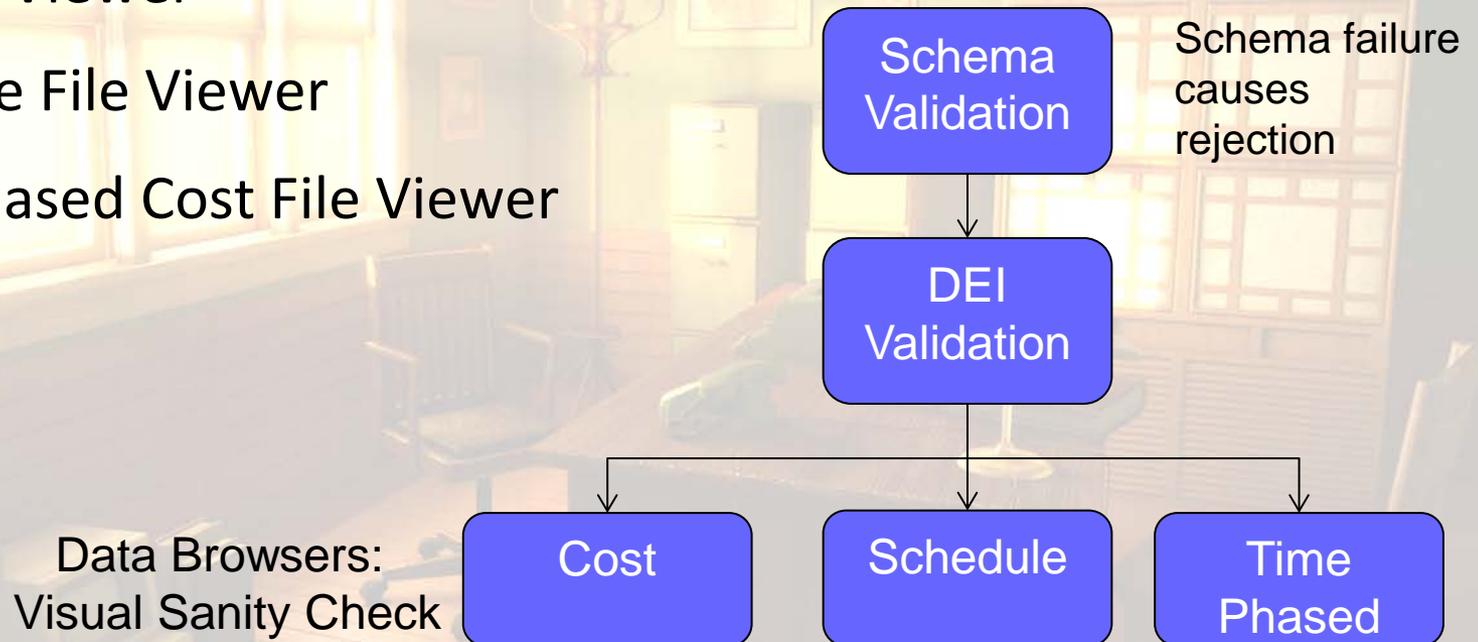


APPROVED FOR PUBLIC RELEASE DISTRIBUTION UNLIMITED: 16-S-0567, December 2, 2015; 16-S-0566, December 2, 2015; 16-S-0596, December 7, 2015



IPMR XML File Utilities Overview

- ▶ Schema/DEI Compliance Validator
- ▶ CPR File Viewer
- ▶ Schedule File Viewer
- ▶ Time-Phased Cost File Viewer



Encapsulate software libraries used by EVM-CR

*** Currently available for external test team ***



Schema / DEI Validator

IPMR XML DEI Compliance Validator

File
CPR Sample - DEI Compliance Error - BusinessTypeCode.xml

Status
Errors found. The file does not validate against the model of IPMR XML DEI compliance implemented by this tool. Specific errors are listed below.

Errors

XML Schema IPMR DEI

ProjectOrganization/BusinessTypeCode: Invalid value: DODAAC. Allowed valu...	1	Line 11, position 10
--	---	----------------------

Error Details
Line 11, position 10
ProjectOrganization/BusinessTypeCode: Invalid value: DODAAC. Allowed values are: DUNS, DUNS+4, CAGE.

Version Reference Date: 4/7/2014

- ▶ Validates against:
 - UN/CEFACT XML schema
 - IPMR XML DEI
- ▶ Implements model of DEI compliance:
 - Model comprises rules inferred from DEI
 - Model is not definitive or exhaustive
 - Model will be updated over time



PARCA EVM

IPMR Data Viewers: Cost

CPR File Viewer

File Navigate Options Help

Open Files EVM Validity Checks Browse File Views Custom Views Export to Excel

(F1) Header (F1) WBS Elements (F1) Summary Elements (F3) Baseline (F4) Staffing

ReportDate	Element Name	Element ID	Reporting Level	Cum CPI	Cum SPI	Cum BCWS	Cum BCWP
2010-06-23	Weapon System	1	2	0.725	0.955	88,403,104	84,401,916
2010-06-23	All Up Ons (AUO) Space Vehicle	11	3	0.683	0.946	60,652,325	57,381,444
2010-06-23	DeathStar Stuff	111	4	0.825	1.00	2,032,020	2,032,020
2010-06-23	Spaceframe Structure	1110	5	0.825	1.00	2,032,020	2,032,020
2010-06-23	Spaceframe Structure	1110X	6			0	0
2010-06-23	Spaceframe Design NRE	1110XA1CG	6	0.825	1.00	2,031,682	2,031,682
2010-06-23	Spaceframe Design RE	1110XA1CH	6				
2010-06-23	Interconnect Design NRE	1110XA1CI	6	0.282	1.00	338	338
2010-06-23	Interconnect Design RE	1110XA1CJ	6				
2010-06-23	Guidance Electronics Unit (ZZZ)	112	4	0.698	0.941	34,308,362	32,276,075
2010-06-23	Guidance Electronics Unit (ZZZ)	1120	5	0.449	0.904	7,911,061	7,154,889
2010-06-23	Guidance Electronics Unit (ZZZ)	1120X	6	0.67	0.889	1,290,138	1,146,498
2010-06-23	ZZZ Algorithm Development (GNC)	1120XA1DM	7	0.67	1.00	1,146,498	1,146,498
2010-06-23	CLIN 3 ZZZ Software	1120XA2DH	7			143,640	0
2010-06-23	Space Vehicle Electrical Support	1120XA1CF	6	1.687	1.00	373,386	373,386

WBS Element Select Options
Filter by reporting level: 2 (2), 3 (6), 4 (11), 5 (12), 6 (94)
Total WBS Rows: 148

Cumulative CPI and SPI Thresholds
Small variation - highlight yellow and bold values that vary from 1 by more than: .05
Large variation - highlight red, bold, and underline values that vary from 1 by more than: .1
Default Highlight Freeze element name column

Element Count: 148 of 148
Summary EAC: \$143,665,020

Choose a file: CPR Sample.xml Choose a period: 2010-06-23

Version 1.0.3.4 Help (F1) Exit

Program Name: DeathStar Contract Number: N0000-00-N-0000 CPR Sample.xml



IPMR Data Viewers: Schedule

IPMR XML IMS File Viewer

Open Files | Browse File Data | About

IMS Sample.xml

Export To Excel: Current Table | All Tables

Report | Project | Calendars | **Tasks** | Task Outline | Resources | Resource Assignment

Row	ID	Name	Description	Task Type	Pre (by
1	1	Sea System Sch...		Summary Task	
2	2	Contract Mileston...		Summary Task	
3	3	Contract Award		Milestone	
4	4	CWBS Index and...		Milestone	3FS
5	5	Initial Report		Activity	4FS
6	6	Interim Report 1		Activity	5FS
7	7	Interim Report 2		Activity	6FS
8	8	Interim Report 3		Milestone	7FS
9	9	Final Report		Milestone	17F
10	10	Production Milest...		Summary Task	
11	11	Start of Construct...		Milestone	
12	12	Begin Keel Laying		Milestone	
13	13	Begin Main Engin...		Milestone	
14	14	Launch Readine...		Milestone	
15	15	Initial Operation C...		Milestone	
16	16	Start Final Outfit		Milestone	
17	17	Final Contract Tri...		Activity	16F

Task

Row: 1

ID: 1

Name: Sea System Schedule

Description:

Task Type: Summary Task

Predecessors (by row):

Successors (by row):

WBS Data Node ID:

IMP Data Node ID:

OBS Data Node ID:

SOW Data Node ID:

SUB Data Node ID:

Risk Level Description:

Calculated Completion Pe: 0%

Assessed Completion Per: 0%

Priority Ranking:

Earned Value Method:

Milestone Level:

Free Float Duration: 0 days

Total Float Duration: 0 days

Milestone Weight:

Total Duration: 1,308 days

Remaining Duration: 1,303.24 days

Critical Path Indicator: True



IPMR Data Viewers: Time Phased Cost

IPMR XML Time-Phased Cost File Viewer

Open Files | Browse File Data | About

TPC Sample.xml

Header | Summary Costs | WBS Costs

By Period | By Element

Units: Dollars

Name	End Date	WBS Code	Name	BCWS	BCI
Historical Period	03/25/2007	1	Weapon System		
Historical Period	04/22/2007	11	All Up Ons (AUO) Space Vehicle		
Historical Period	05/20/2007	111	DeathStar Stuff		
Historical Period	06/24/2007	1110	Spaceframe Structure		
Historical Period	07/22/2007	1110X	Spaceframe Structure		
Historical Period	08/19/2007	1110XA1CG	Spaceframe Design NRE	346,201	
Historical Period	09/23/2007	1110XA1CH	Spaceframe Design RE		
Historical Period	10/21/2007	1110XA1CI	Interconnect Design NRE	338	
Historical Period	11/18/2007	1110XA1CJ	Interconnect Design RE		
Historical Period	12/31/2007	112	Guidance Electronics Unit (ZZZ)		
Historical Period	01/27/2008	1120	Guidance Electronics Unit (ZZZ)		
Historical Period	02/24/2008	1120X	Guidance Electronics Unit (ZZZ)		
Historical Period	03/30/2008	1120XA1DM	ZZZ Algorithm Development (GNC)		
Historical Period	04/27/2008	1120XA2DH	CLIN 3 ZZZ Software		
Historical Period	05/25/2008	1120XA1CF	Space Vehicle Electrical Support	22,784	
Historical Period	06/29/2008	1120XA1CK	Power Development NRE	46,161	
Historical Period	07/27/2008	1120XA1CL	Power Development RE		
Historical Period	08/24/2008	1120XA1DA	Time Port Development	189,374	
Historical Period	09/28/2008				