Missile Defense Agency
Earned Value Management (EVM) Update

Presented to NDIA/PMSC

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MDA EVM Overview

- **11 Major Programs with EVM Requirements** (Aegis SM-3, GMD, THAAD, Targets & CM, C2BMC, Sensors, STSS; and Contractors - NG, LM, Raytheon, Boeing)
- **$31B in CBB; 37 EVM Analysts (**Includes Schedule Analysts)
- **Annual IBR Process**
- **EVM Key Component in**
  - **Director's Program Reviews (Quarterly Baseline Execution Reviews)**
  - **MDA Baseline Accountability Report – Annual Report to Congress**
  - **Monthly Performance Summary Report (PMs to MDA leadership)—Also Requested by GAO**
  - **Financial Execution Reviews (EVM and CFSR Data in Addition to Government Accounting Data)**

MDA EVM Overview

- **GAO Conducts Annual MDA Audit**
  - **Evaluates Data Reliability through Software Tools**
  - **Evaluates Contractor Timely Incorporation of Changes into PMB**
  - **Evaluates IBR Process to help assess MDA's cost and schedule visibility**
- **Overarching MOA with DCMA**
- **EVM Health Process (Gap Analysis and Best Practices) in following areas: Contractual Reqmts.; IBR; EVM Analysis/Integration; Scheduling Analysis; EVM Systems; DCMA; Training**
- **Develop and maintain excellent Training Modules**

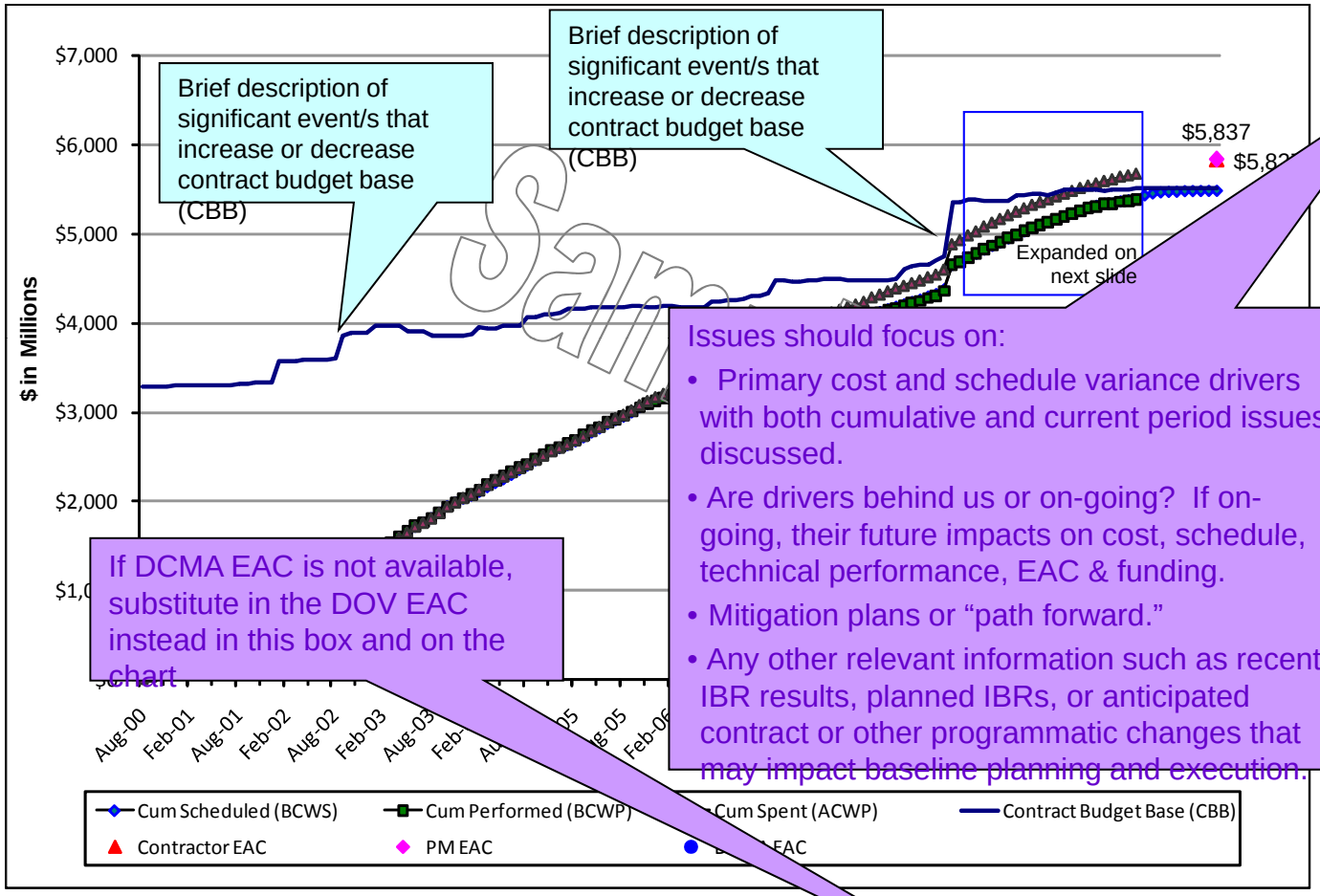
Director Emphasis on EVM

- **PM Responsible for EVM**
- **IBR Memorandum**
  - **Use of IBRs as an on-going process and at least annually.**
  - **Improve schedule "deep dives" and schedule risk assessments.**
  - **Review 100% of baseline. (Include level-of-effort)**
  - **Apply MDA IBR Best Practices**
  - **Make use of the MDA IBR Support Team (EVM analysts and schedulers) to facilitate consistent IBR planning and execution.**
- **PMs Required to Establish Plan for Annual Review of Baselines**
- **Minimize LOE**
- **Review any Requests for Single Point Adjustments**

MDA IBRs – Recent & Future

		Recent IBR Information			*Future IBR Information*		
Program	**Contractor**	**Date**	**Dollar Amount**	**Scope**	**Planned Date**	**Dollar Amount**	**Scope**
1	**A**						
2	**B**						
3	**C**						
4	**B**						

Program EVM Data – Part 1



If DCMA EAC is not available, substitute in the DOV EAC instead in this box and on the chart.

Issues should focus on:

- Primary cost and schedule variance drivers with both cumulative and current period issues discussed.
- Are drivers behind us or on-going? If on-going, their future impacts on cost, schedule, technical performance, EAC & funding.
- Mitigation plans or "path forward."
- Any other relevant information such as recent IBR results, planned IBRs, or anticipated contract or other programmatic changes that may impact baseline planning and execution.

Key Cost/Schedule Variance (CV/SV) Drivers

Cost: The cum CV: -95M *The unfavorable variance is driven primarily by…(include current and cumulative CV discussion)*

Schedule: The cum SV: -$10M *The unfavorable variance is driven primarily by….(include current and cumulative SV discussion)*

Impacts (cost, schedule, technical, funding)

•Explain technical, cost, schedule, & contractual impacts

Current Funding Impact: Minimal

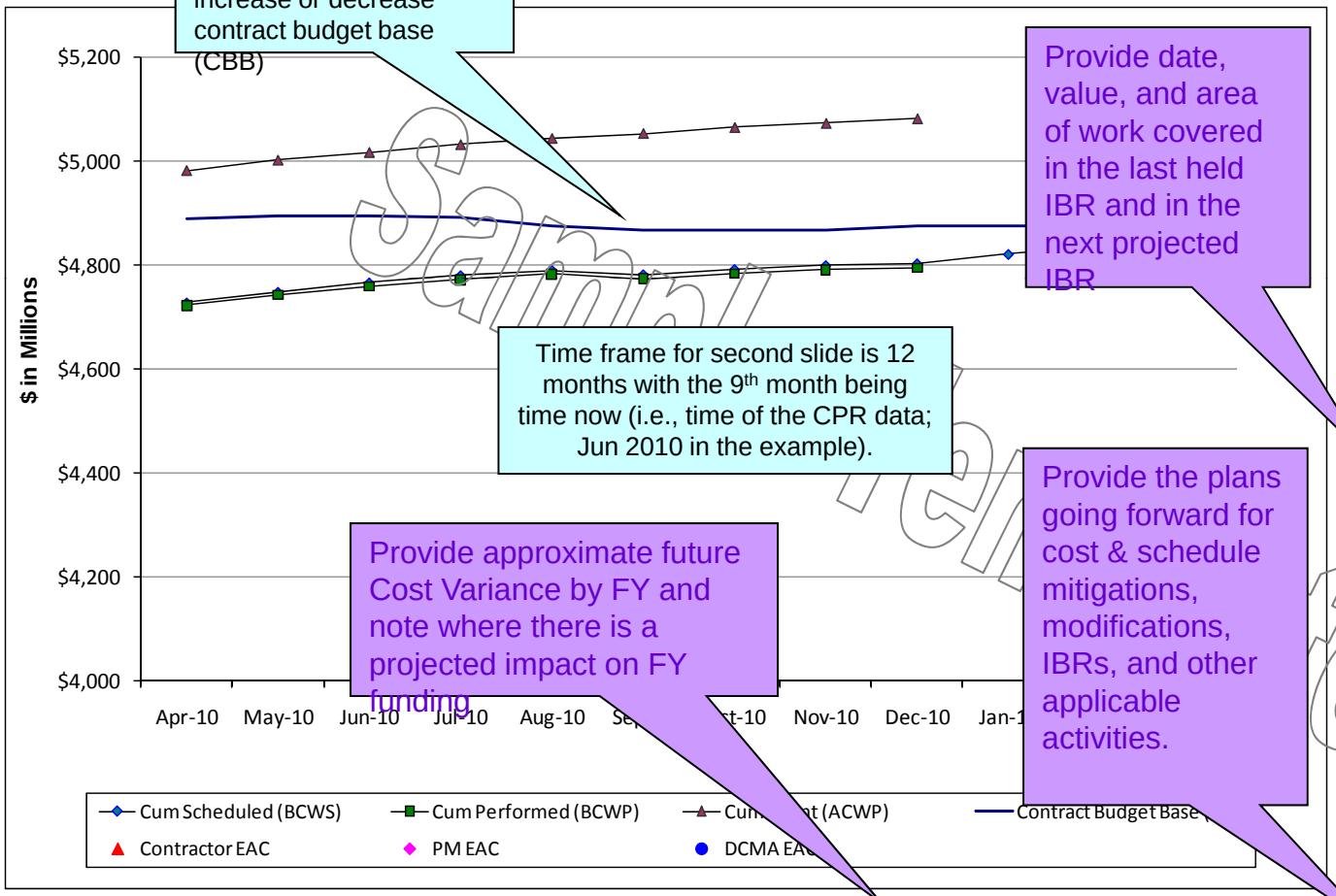
Continued on Next Slide

Prime Contractor	Contract Type	CBB	Variances	Cumulative		Current Month			EAC	VAC
Lockheed Martin	CPAF	$5,507	SV	-$7.8	-0.1%	-$0.4	-3.4%	PM	$5,837.5	-$330.3
Period of Performance	**Work Remaining**	**% Complete**	CV	-$287.1	-5.3%	-$7.1	-65.0%	KTR	$5,826.6	-$319.4
Aug 2000 - Aug 2011	$712	97.8%	Level of Effort (LOE) Percentage 12%					DCMA	$5,826.6	-$319.4

If LOE % is greater than 18% please include a backup slide explaining LOE value.

Program EVM Data – Part 2

Brief description of significant event/s that increase or decrease contract budget base (CBB)



Time frame for second slide is 12 months with the 9th month being time now (i.e., time of the CPR data; Jun 2010 in the example).

Provide date, value, and area of work covered in the last held IBR and in the next projected IBR

Provide approximate future Cost Variance by FY and note where there is a projected impact on FY funding

Provide the plans going forward for cost & schedule mitigations, modifications, IBRs, and other applicable activities.

Impacts continued

Last IBR		
Date	**$**	**Scope**
Mar-10	$100.0	Software Follow-on CLIN

Next IBR		
Date	**$**	**Scope**
Oct-10	TBD	Rolling Wave

Baseline Budget Remaining $885M

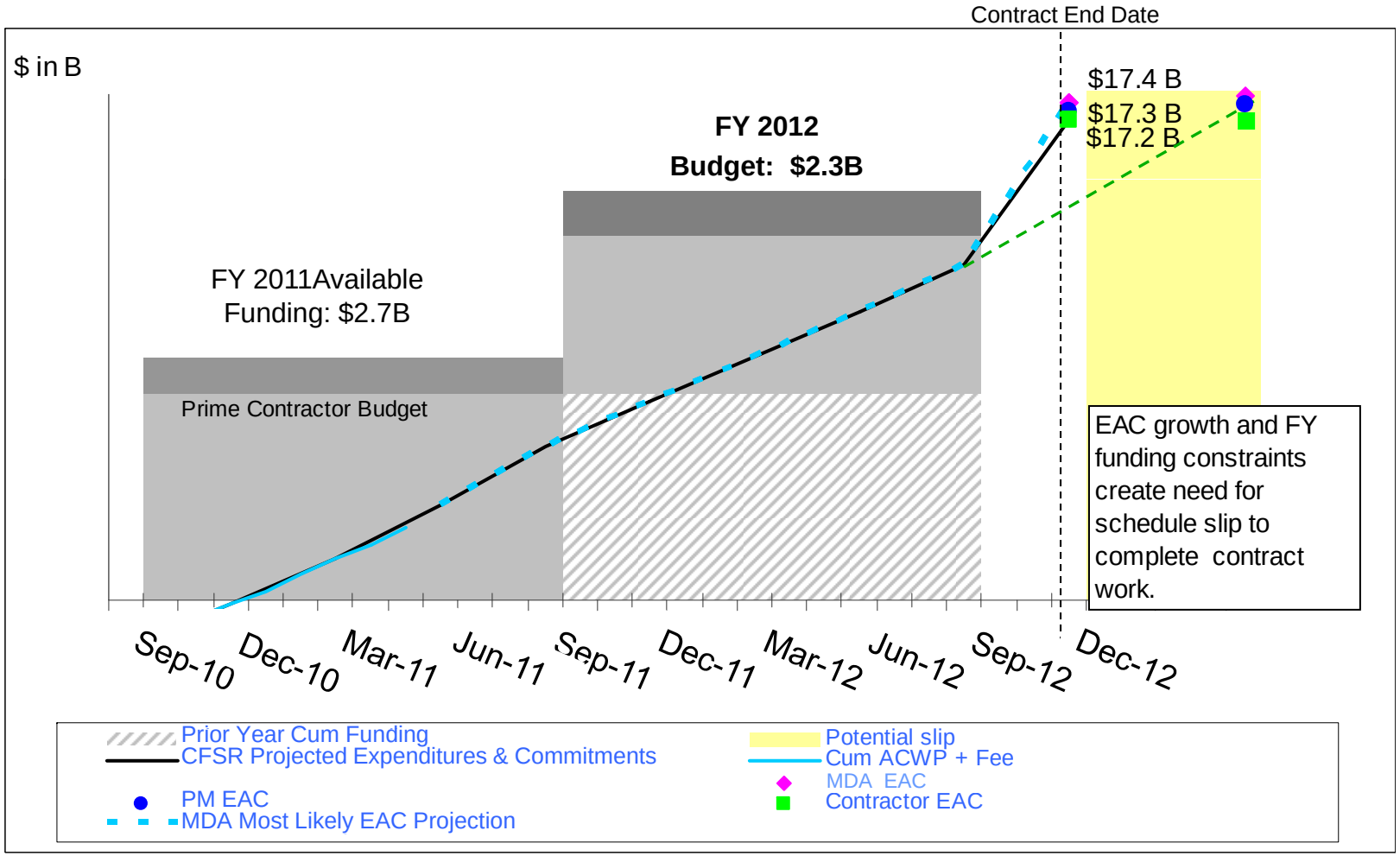
Path Forward

Prime Contractor	Cum CV	VAC
Lockheed Martin	-$287.1	-$330.3
Period of Performance	**Prior FY CV**	**To-Go CV**
Aug 2000 - Feb 2011	-$275.3	-$43.2

Future Cost Variance (VAC - CVcum) by FY	FY 11	FY 12	FY 13 & Out
	-$25.0	-$12.4	-$2.3
	Funding impact discussion…	Funding impact discussion…	Funding impact discussion…

MDA EV / Budget Integration

- **Analysis of time-phased (FY) ETCs (burn rates) vice FY Budgets and Impact on Schedule--Additional time needed (BCWR vice Avail FY Funds)**



MDA EVM Health Metrics

EVM Contract Requirements	Performance Measurement Baseline		Scheduling	Analysis / Integration	EVM Systems	DCMA	Training
	Annual IBR Process (next 12 mos)	Baseline Maintenance					
YELLOW	GREEN	GREEN	YELLOW	GREEN	GREEN	YELLOW	GREEN
GREEN	GREEN	GREEN	YELLOW	GREEN	GREEN	GREEN	GREEN
GREEN	GREEN	GREEN	GREEN	YELLOW	GREEN	YELLOW	GREEN
GREEN	GREEN	GREEN	YELLOW	YELLOW↓	YELLOW↑	GREEN	GREEN
GREEN	GREEN	GREEN	GREEN	YELLOW↑	YELLOW↑	GREEN	GREEN
GREEN	GREEN	GREEN	Not Assessed	YELLOW	YELLOW	N/A	GREEN
GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN
GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN
GREEN	GREEN	YELLOW↑	Not Assessed	GREEN	GREEN	GREEN	GREEN
GREEN	GREEN	GREEN	GREEN	GREEN	YELLOW↑	GREEN	GREEN
GREEN	Assessment Pending	Assessment Pending	GREEN	GREEN	GREEN	GREEN	GREEN

Rationale is provided below primarily for blue (best practice), green (down arrow), yellow, and red color coding and for change in arrows. (Up arrow indicates slight improvement; down arrow indicates slight deterioration)

DCMA / MDA Collaboration

- **Overarching MOA with DCMA**
  - **Validate LOE Work**
  - **Develop Independent EAC**
  - **Reconcile CPR & CFSR**
  - **Support Rigorous IBR Planning Process**

- **MDA Support of EVM Surveillance**
  - **Original Target Areas (Schedule Integration, Managerial Analysis, Change Incorporation)**
  - **New Process Being Implemented (Target Surveillance on MDA Programs as Problems Identified and/or Continue to Occur)**

Conclusion

- **EVM role at MDA**
  - **Implement Integrated Project Management Processes (EVM)**
  - **Plan and facilitate a thorough Integrated Baseline Review Process in all MDA programs**
  - **Develop reliable independent Estimates at Completion (EACs) on all contracts**
  - **Ensure analyses of time-phased EACs with FY budgets and funding**
  - **Ensure EVM cost data and variance trends are integrated with scheduling analysis**
  - **Assist PMs and BFMs use of EVM as a planning, execution, and performance measurement process**
  - **Maintain EVM , Schedule Analyst, and PM Staff Skill Levels**

QUESTIONS?

Comments?

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