



PARCA

DoD EVM Policy Initiatives

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► Topics to be Discussed

- PARCA
- Policy Initiatives
- Agile and EVM Guide Update
- Questions

**HOWDY
Y'ALL!**



Director, Performance Assessments and Root Cause Analyses (PARCA)

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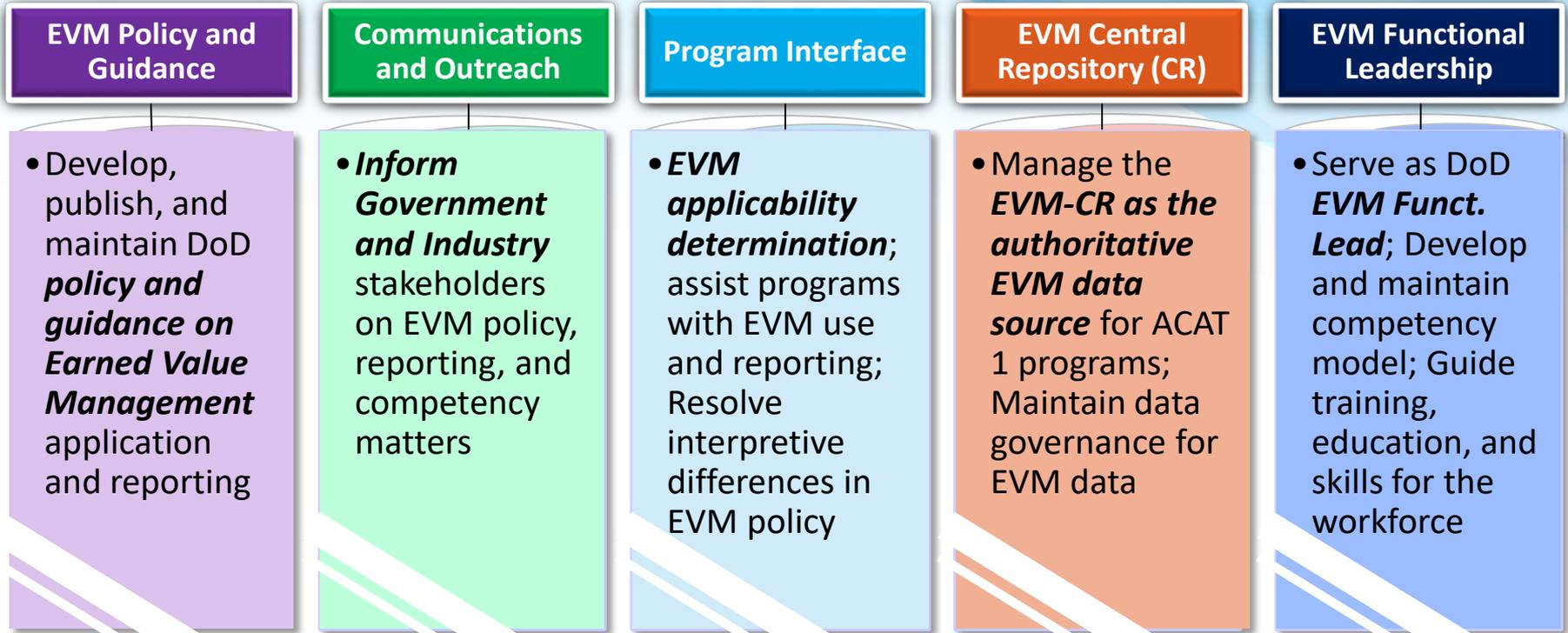
Dr. Danny Davis

**Deputy Director for
Acquisition Policy
Analysis Center**

*PARCA was brought into existence via the reforms in the
Weapon Systems Acquisition Reform Act (WSARA) of 2009*



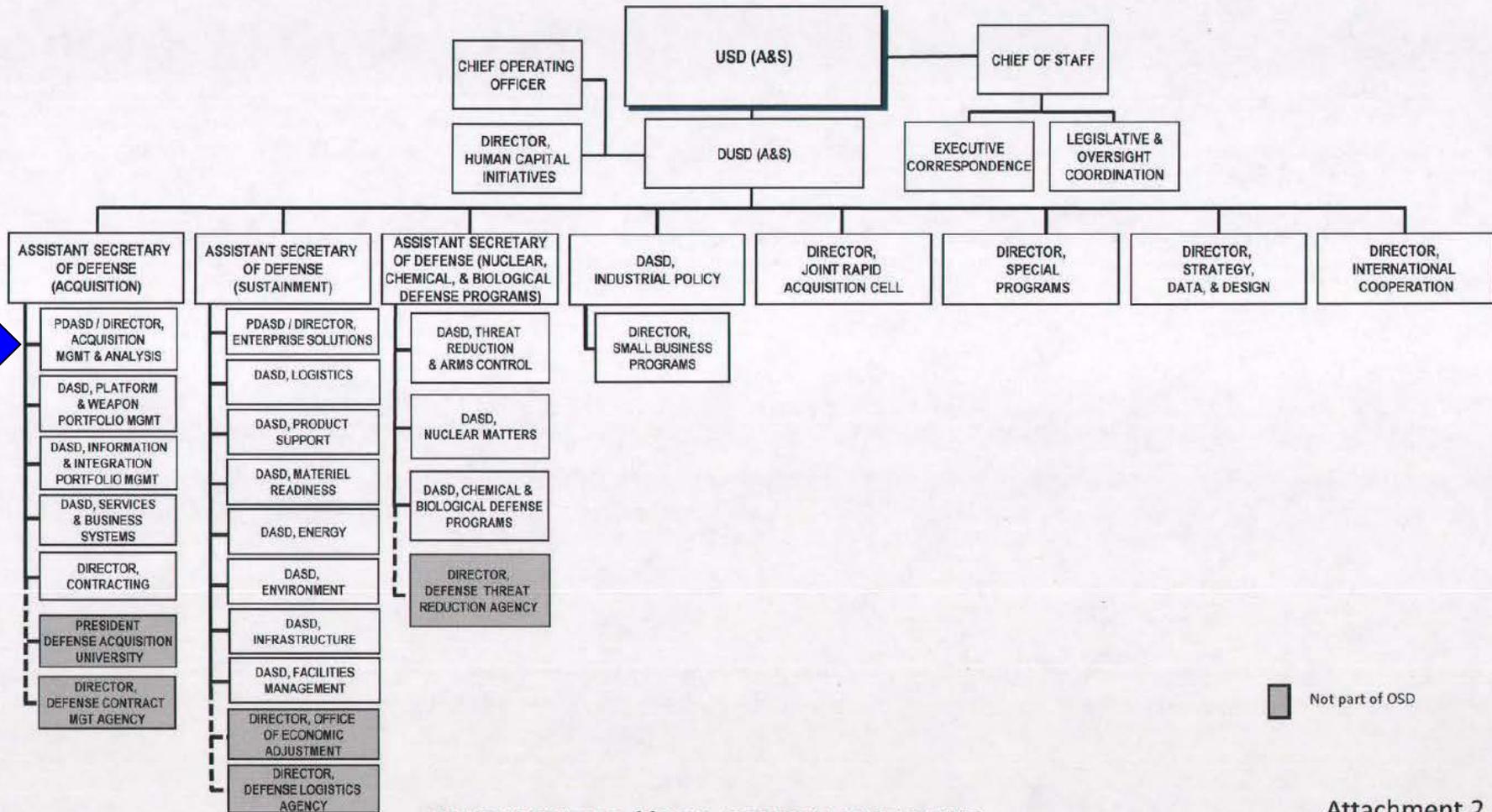
EVM, as a management discipline for making decisions, depends on governing the entire EVM value stream from Contractor to Government analyst



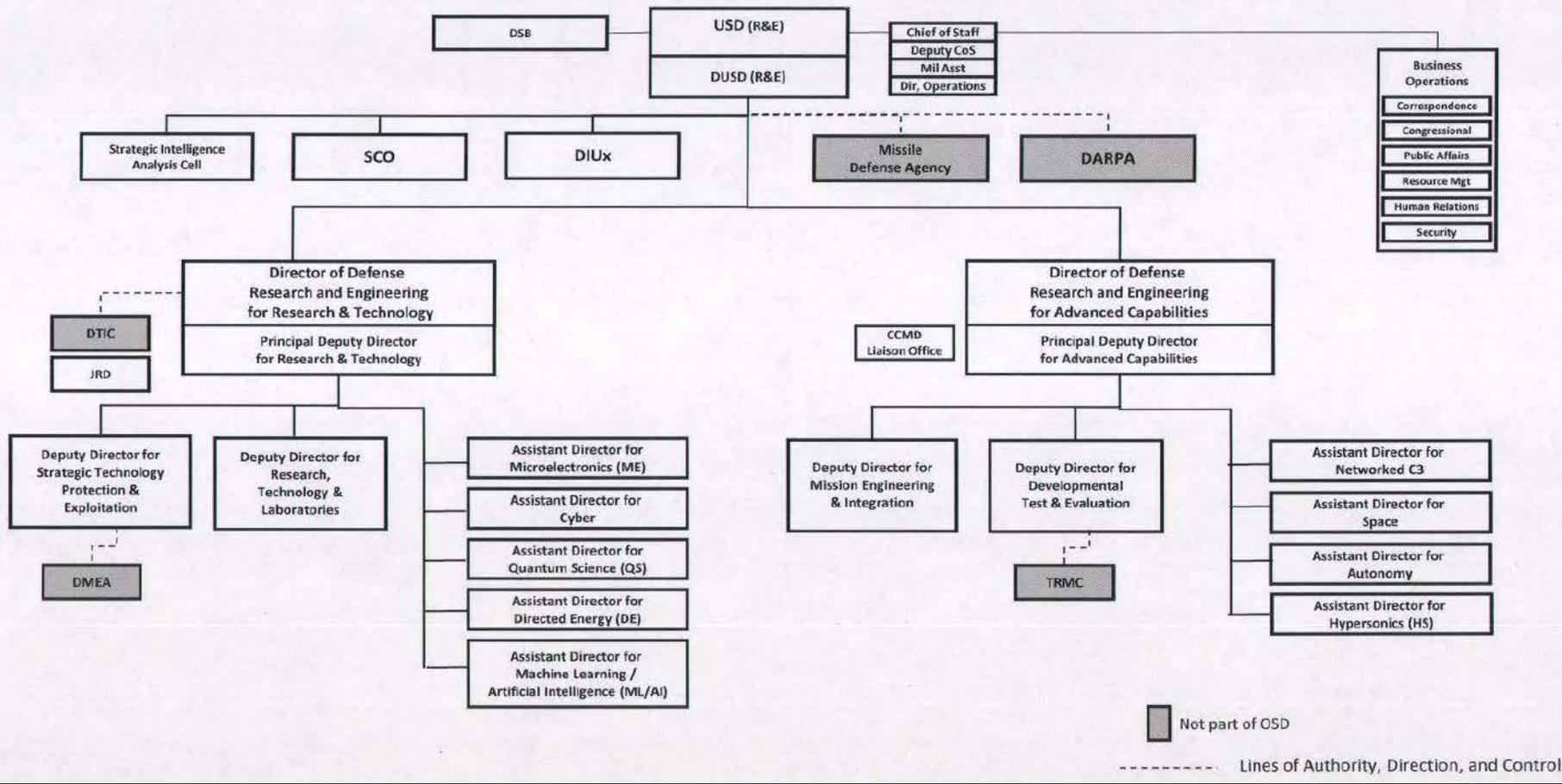
“To be successful, EVM practices and competencies must be integrated into the program manager’s acquisition planning and execution processes”

- PARCA Authorities Memo, Aug 2011

OUSD (A&S) Organizational Structure



OUSD (R&E) Organizational Structure



► Strategic partnerships across the EVM Value Stream

PARCA works across DoD Services/Agencies, Federal Agencies, and Industry



Working to facilitate the effectiveness of EVM for joint situational awareness and program decision making



PARCA EVM Policy

Status of EVM Policy Initiatives



▶ **DoD EVMSIG**

- Basis for the DoD to assess compliance to the 32 EVMS Guidelines
- Published February 2018

▶ **MIL-STD-881**

- Presents direction for effectively preparing, understanding, and presenting a Work Breakdown Structure
- Published April 2018

▶ **DoD EVM and Agile Guide**

- Resource for DoD personnel who encounter programs on which Agile philosophies and EVM are applied
- IBR and Metrics chapters published April 2018
- Current update includes contracts and data; publish Spring 2019

▶ **DFARS**

- In rulemaking process
- Added to the Unified Agenda, no definitive timeframe for release for public comment

▶ **5000.02**

- PARCA delegation for EVM applicability reviews
- Change version 4 in process

▶ **EVMIG Replacement**

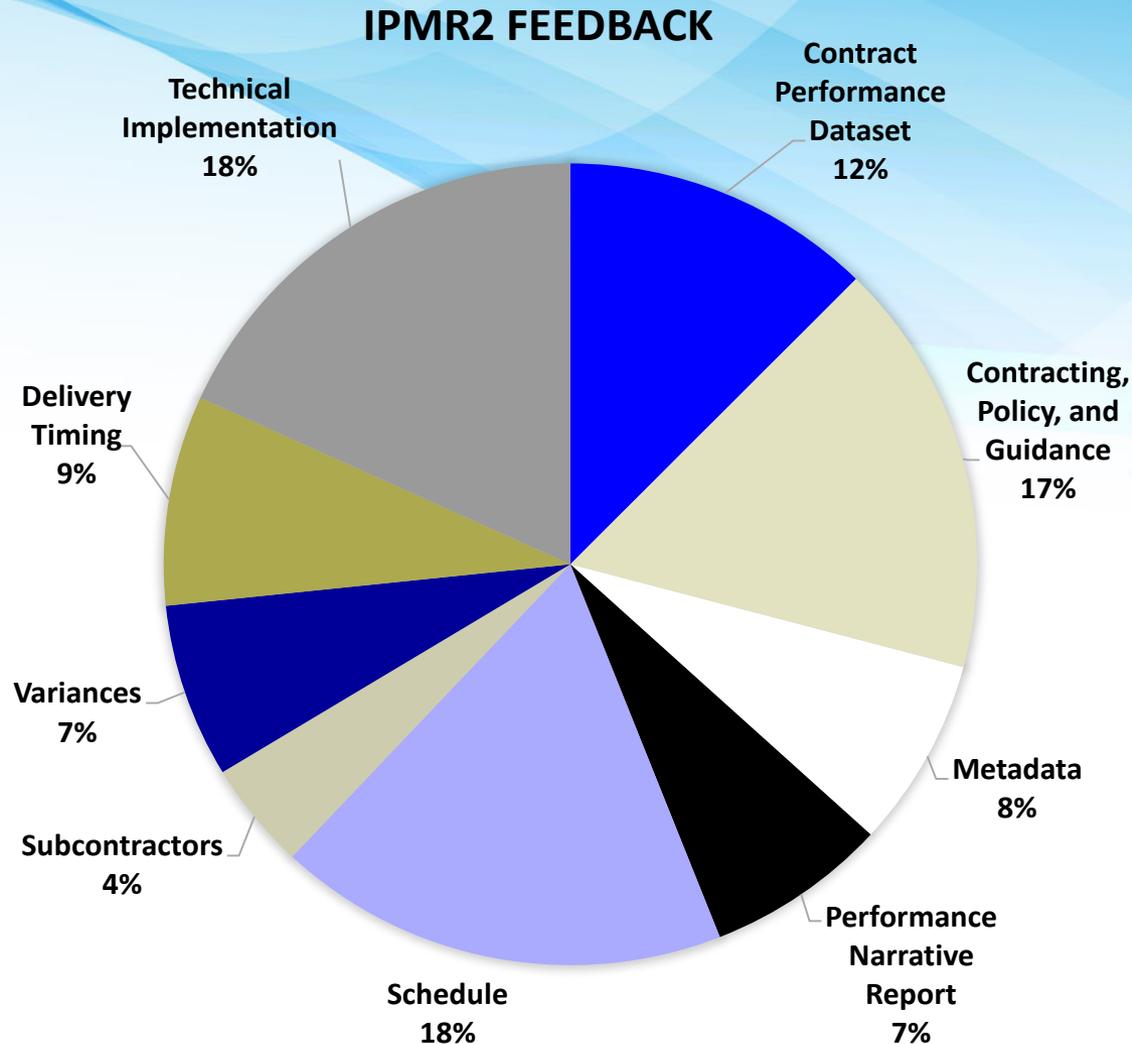
- Single document that contains disparate EVM policy application guidance
- In final review; publish late summer 2018

► IPMR Update

- Move from XML to **JSON** standard – modern and more flexible
- Delivery of contract **performance data** at Control Account/Work Package Level allows for **user-specific analysis**; tools can generate traditional reporting formats if desired
- Data Delivery Submittal Requirements
 - Submitted electronically in accordance with their applicable DoD-approved file format specifications and data exchange instructions (DEI) -- **Contract Performance Dataset and Schedule Dataset**
 - Submitted in contractor's specified electronic file format -- **Performance Narrative Report**
 - Submitted in contractor's native scheduling software electronic file format native format -- **Integrated Master Schedule (IMS)**

Goal is to reduce time to receive actionable data; Support DCMA compliance activities

- ▶ Feedback for the IPMR collected
 - Almost 1,000 comments received
- ▶ Feedback topics include:
 - **Delivery timing requirements**
 - **Variance analysis**
 - **Tailoring options**
 - **Level of reporting**
 - Software change from UN/CEFACT to JSON
 - Reporting of dollars and hours
- ▶ Will hold adjudication meetings for comment review with Govt and Industry



Have the Conversation...

... Traditional Acquisitions

... Middle Tier Acquisitions

... Other Transaction Authorities

... Agile Development Methods

If not EVM, then how will you manage?





PARCA EVM Policy

Status of EVM and Agile Desk Guide Update



- ▶ **OMB has recognized that Agile and EVM complement each other and co-exist**

“EVM is not tied to any specific development methodology and does not prevent the use of other risk management techniques such as agile development. EVM and agile development are complementary and can be used on the same project. Agile development can be used to incrementally deliver functionality to the customer while EVM provides a standard method for measuring progress.”

▶ A resource for DoD personnel who encounter programs on which Agile philosophies and Earned Value Management are applied

1. Agile and EVMS System Compliance



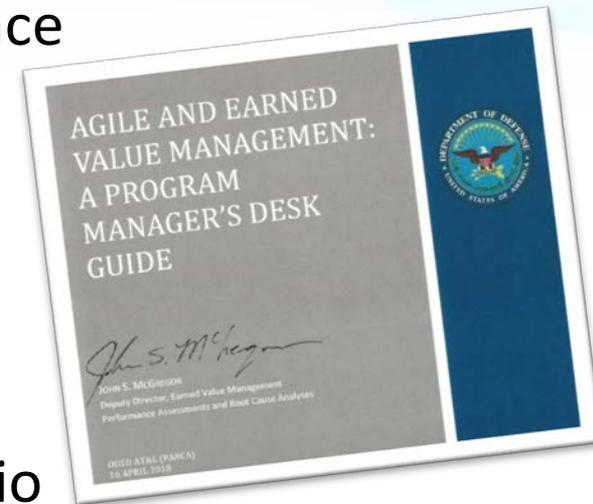
2. Integrated Baseline Review



3. Reports, Metrics, and Analysis



▶ Appendix: Agile and EVM Scenario



Published April 2018

EVM and Agile work together

▶ Purpose

- Gather information on the practice of Agile and EVM
 - Contracting Nuances / Concerns
 - Focus on data requirements through the program life cycle

▶ Other Objectives

- Feedback on current version of Guide
- Feedback on what the guide should address

▶ **Contracts**

- Contract Type, \$ Value
- Was Agile an RFP Requirement?
- Were the Agile development methods reviewed during source selection?
- How much of the program is Agile? Describe the type of work scope being done using Agile.
- Did the USG receive Agile training on contractor's methods? If so, was it requested as part of the RFP?

▶ **Data**

- What CDRLs are used to collect Agile data for Status, Specifications, Design, Cost, Schedule, Metrics?
- What informal Agile data is being jointly discussed between USG and contractor (e.g. Monthly PMRs, informal technical interchanges, etc.)?
- What status and progress data is naturally available from the Agile tools and processes used internally and externally by the teams, management, and customer?

▶ **Best Practices / Lessons Learned**

- Is management able to track Agile progress? If so, how? If not, what is missing?
- Have you experienced any contracting barriers? Formal change request process?
- What reporting concerns do you have (e.g. EVM, Agile visibility, etc.)?
- What are you doing from Agile perspective that you like and would recommend for others?

- ▶ **Apply method based on work being done – what’s being built!**
- ▶ **Agile and EVM Contracting Considerations**
 - Govt provide SOO, let contractor write SOW
 - Source Selection - Evaluation Criterion set up around how the contractor will communicate with the customer, to establish objectives, review progress, and coordinate and approve changes
 - Data requirements to support the IBR process
 - Communications plan (reference previous chapter) – Customer engagement
 - Training on Agile methodology to be implemented (Customer and Contractor)
- ▶ **Contract Execution - Reporting and change management**
 - Real-time status - Govt access to backlog
 - Agile reports – burn-up/burn-down, velocity (planned vs completed), sprint plan, incidents/changes
 - Variance reporting on agile metrics – address root cause
 - Notion of Real-time IPMR?
 - Support for Schedule Risk Assessment

- ▶ **Schedule for Current Guide Update**
 - Site Visits through October 2018
 - Writing November 2018
 - Comments December 2018 through mid January 2019
 - Adjudication February 2019
 - Publish in Spring 2019

- ▶ **Next Chapters???**



**ARE THERE
ANY OTHER
POLICY OR
GUIDANCE
QUESTIONS?**

Questions Contact Us

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

PARCA EVM Email:
osd.dodevm@mail.mil

PARCA AEP Program

PARCA Acquisition Exchange Program (AEP) provides a unique career-development experience for high-caliber Government civilians or military personnel interested in acquisition and/or EVM.

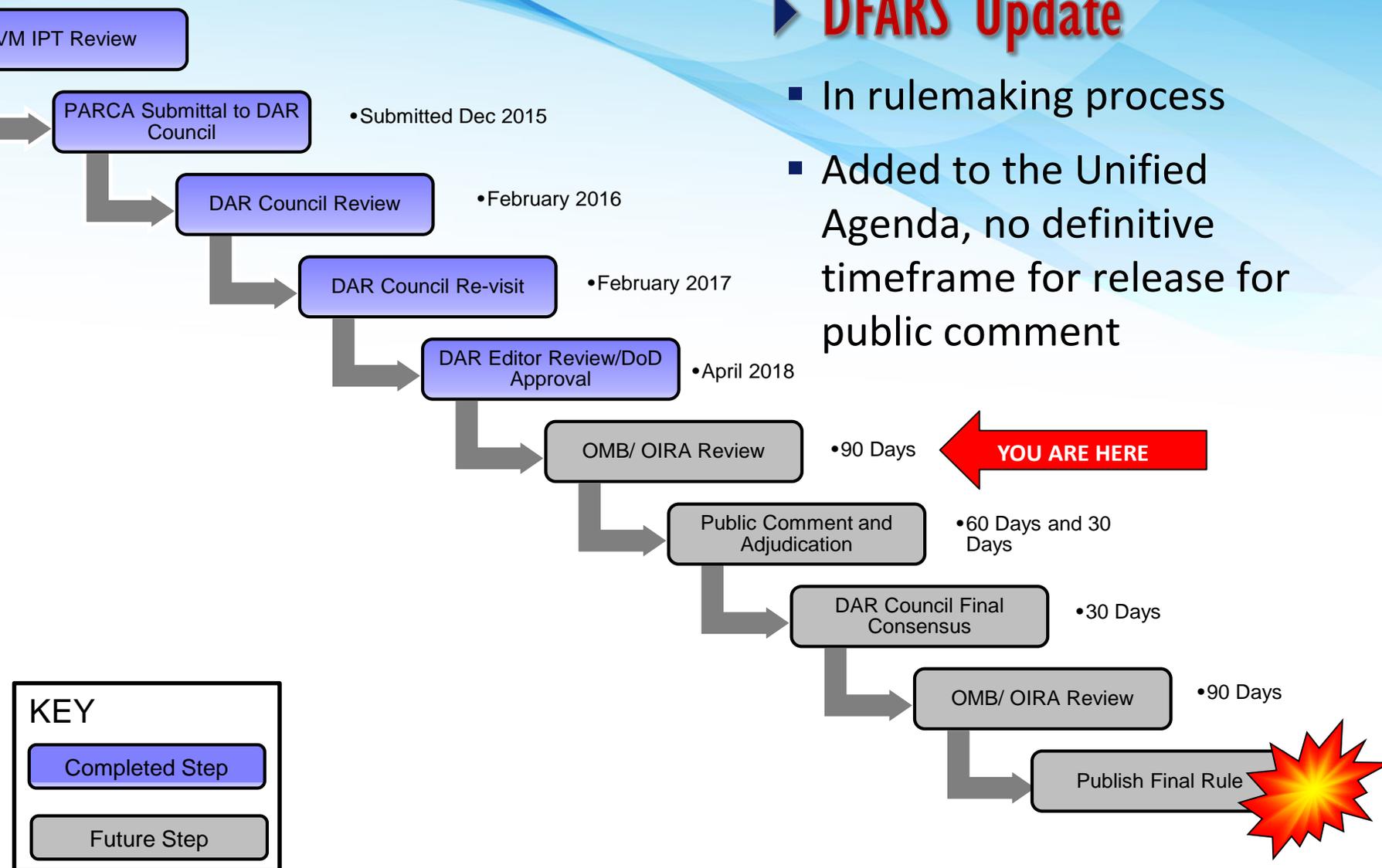
<http://www.acq.osd.mil/evm/aep.program.html>



Back-up Just in Case

▶ DFARS Update

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- ▶ **Agile capabilities and features are part of the WBS**
- ▶ **Capabilities and features are decomposed to stories for implementation and time-phasing**
 - Progress is measured by the completion of stories rolled up to feature progress
 - Feature progress contained in the IMS; Progress from IMS rolled into EVMS
 - Baseline Mgt is done at Feature and above

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▶ **Emphasis on incremental process**

- Agile Release or Program Increment Planning consistent with traditional Rolling Wave planning

▶ **Incremental Process is natural part of program execution**

- IBR Preparation – Joint Training
- Management Processes – Pulling Thread from WBS through Agile Product Backlog to establish common understanding of plan and risk
- PMB Assessment – Every planning increment establish joint agreement on plan going forward

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► Understanding of EVM & Agile Metrics

- Overview of typical Agile metrics and how they are used
- Agile metrics relationship to EVM metrics and analysis
 - BCWS, BCWP, ACWP, CV, SV, CPI, SPI, TCPI
- Using a sample scenario to show side by side examples of what the Agile and EVM metrics might look like over a series of four sprints
- Highlight the use of Agile metrics to track progress and to support forecasting

▶ DoD Defense Science Board “Design and Acquisition of Software for Defense Systems” February 2018:

https://www.acq.osd.mil/dsb/reports/2010s/DSB_SWA_Report_FINALdelivered2-21-2018.pdf

▶ Three Findings and Seven Recommendations

- Finding: Continuous Iterative Development for the DoD
 - Discusses continuous vice traditional methods
 - Defines notion of SW Factory
 - Describes program types that warrant continuous and iterative and which do not
 - Identifies that there is only anecdotal evidence that Agile is better than traditional
- Finding: Commercial, The DoD, and its partners: Case Studies
- Finding: Acquisition Strategies and Contracting Approaches

- ▶ Software Engineering Institute Carnegie Mellon “RFP Patterns and Techniques for Successful Agile Contracting” November 2016
- ▶ Section C
 - The SOO reflects a performance-based acquisition (PBA) and is best suited for an Agile acquisition⁴
 - “An Agile program tends to use technical reviews as opportunities for information”⁵ sharing, face-to-face coordination, and confidence building
- ▶ Section L and M – Use three Sub-Factors
 - Subfactor 1 – Agile Development Process
 - Subfactor 2 – Systems Engineering Practices
 - Subfactor 3 – System Test and Delivery

⁴ See *AcqNotes*, Acquisition Process, Performance-Based Acquisition, at <http://acqnotes.com/acqnote/acquisitions/performance-based-acquisitions>
⁵ Software Engineering Institute Carnegie Mellon “RFP Patterns and Techniques for Successful Agile Contracting” November 2016



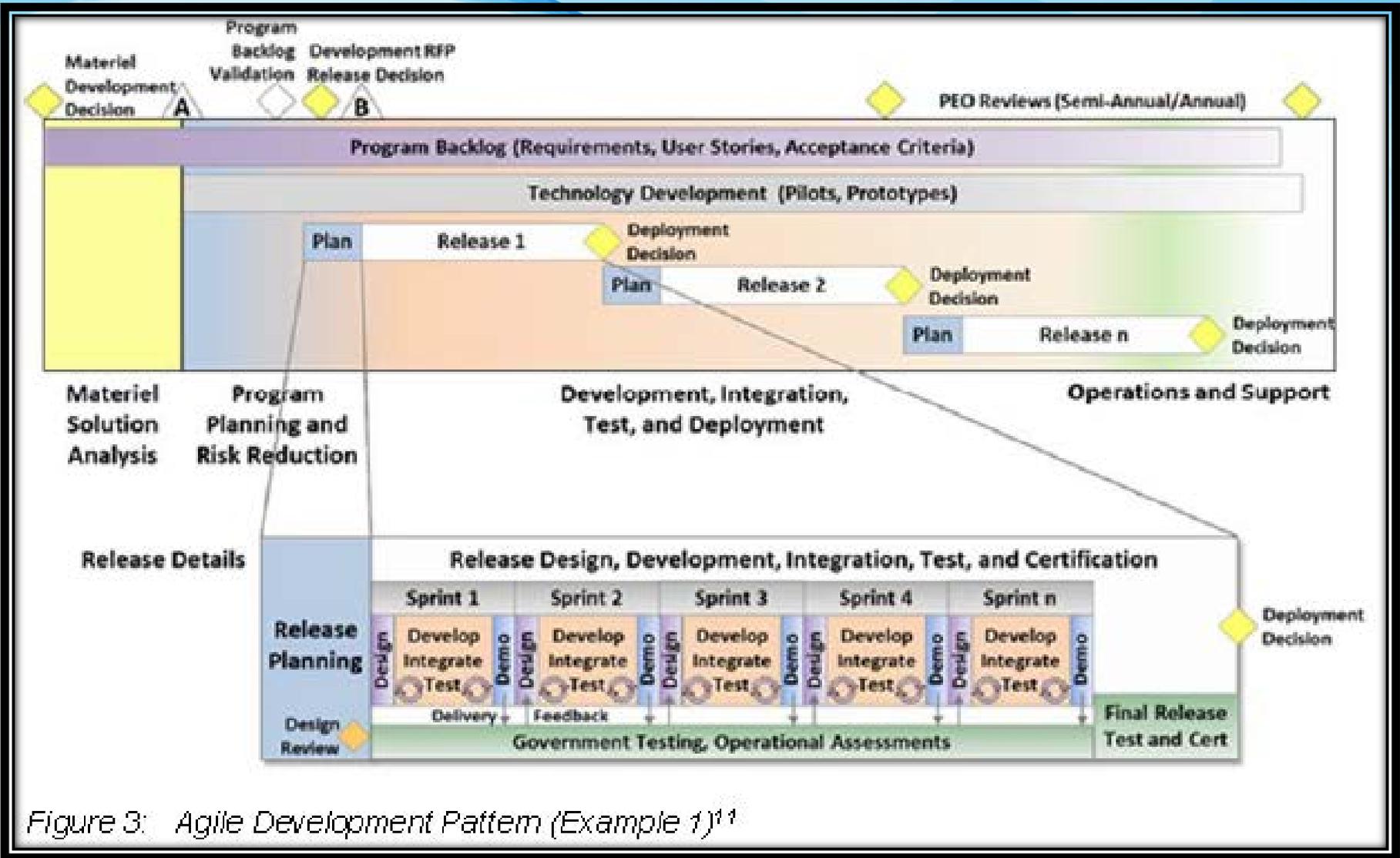


Figure 3: Agile Development Pattern (Example 1)¹¹

11. Graphic provided by the MITRE Corporation (<https://www.mitre.org/publications/technical-papers/defense-agileacquisition> guide-tailoring-dod-it-acquisition-program).