PARCA

DoD EVM Policy Initiatives

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Topics to be Discussed

- PARCA
- Policy Initiatives
- Agile and EVM Guide Update
- Questions
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 (R&E) Organizational Structure

DSB
- USD (R&E)
- DUSD (R&E)
  - Chief of Staff
  - Deputy CIO
  - All-Asset
  - For Operations

SCO
- DIUx
  - Missile Defense Agency
  - DARPA

Director of Defense
Research and Engineering
for Research & Technology
  - Principal Deputy Director
  - Strategic Intelligence
    - Analysis Cell

Assistant Director for
Microelectronics (MI)
  - Assistant Director for
    - Cyber
  - Assistant Director for
    - Quantum Science (QS)
  - Assistant Director for
    - Directed Energy (DE)
  - Assistant Director for
    - Machine Learning / Artificial Intelligence (ML/AI)

Director of Defense
Research and Engineering
for Advanced Capabilities
  - Principal Deputy Director
  - CCMD
    - Liaison Office

Not part of OSD

Lines of Authority, Direction, and Control
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
Office of Performance Assessments and Root Cause Analyses (PARCA)
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

EVM and Agile work together

Published April 2018
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?
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

Questions Contact Us

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

PARCA EVM Email:
osd.dodevm@mail.mil
Back-up

Just in Case
DFARS Update

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

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

Section C
- The SOO reflects a performance-based acquisition (PBA) and is best suited for an Agile acquisition
- “An Agile program tends to use technical reviews as opportunities for information” 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

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4 See AcqNotes, Acquisition Process, Performance-Based Acquisition, at http://acqnotes.com/acqnote/acquisitions/performance-based-acquisitions
Figure 3: Agile Development Pattern (Example 1)\textsuperscript{11}

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