DOD Acquisition Reform: *EVMS-lite* to Program/Project Management, Rev. 28

—Paul Solomon 10/10/21

> Note: This revision adds acquisition reforms that are necessary for EVMS to be consistent with DoDI 5000.88 procedures and DoD Digital Engineering Strategy to use the "digital authoritative source of truth" as the technical baseline to manage cost, schedule, performance, and risks.

More than 20 years ago, the founding fathers of the Earned Value Management System (EVMS) stated their visions for the then-pending EVMS Standard to replace the DOD document, "Cost/Schedule Control Systems Criteria," which had been used since 1967 for capital acquisitions.

Their visions, stated below, have not been realized. A path to effective, integrated Program/Project Management (P/PM) should include changes to regulations and policy to require that EVM be linked with systems engineering (SE), the product scope (features and functions), technical performance measurement (TPM) and risk management. The path should support current policy of the OMB and Office of Personnel Management (OPM) and meet the objectives of the Bogus Bonus Ban Act. The path should include elimination of the OMB policy and FAR/DFARS requirement for compliance with the EVMS Standard, EIA-748. Instead, ***DOD should revise, streamline, and transform the "DOD Earned Value Management System Implementation Guide" (EVMSIG) and impose it on contractors as a "Government-unique, internal standard."*** **Non-DOD agencies should do likewise.**

The path should start with the following DOD and OMB actions:

1. DOD tailors and streamlines the EVMS Interpretation Guide (EVMSIG) to incorporate recommendations provided below, called "EVMS-lite." Tailoring reduces the number of guidelines to be covered by compliance reviews from 32 to 20 and modifies five guidelines to emphasize technical performance and to augment "work scope" by adding the product scope including acceptance criteria, rework, and risk responses. This will result in significant cost savings.
2. DOD requests to OMB, through the National Institute of Standards and Technology (NIST), that EIA-748 be replaced with a DOD internal standard that is based on the tailored, streamlined EVMSIG
3. OMB approves DOD request to replace EIA-748 based on criteria in OMB Circular A-119 (Circular).
4. OMB revises Circular No. A–11 (2020), *Capital Programming Guide.* Currently, *Capital Programming Guide* cites the EVM standard, EIA-748. For example, it states "the other requirements for good project management, including the use of EVM in accordance with the EIA-748 standard are applicable for development efforts or multiple projects in a program." OMB should develop a plan to sunset the use of the EIA-748 standard and replace it with the proposed "Government-unique," internal standard, as discussed below.
5. DCMA discontinues compliance reviews of 12 EVMS Guidelines that are no longer value-added or cost-justified, as specified in EVMS-lite.
6. DOD issues policy and guidance to provide award fee incentives for contractors to link EV to TPM, product scope, and risk management, if they comply with the five tailored Guidelines in Table 3, below.
7. DOD issues policy and guidance to provide award fee incentives for contractors to achieve verified cost, schedule, and technical performance objectives and to prohibit payment of award fees when programs are over budget or behind schedule by pre-defined thresholds. The TPMs used for award fee determination shall include some of the specific, measurable, achievable, relevant, and

time-bound measures that are included in the SE Plan (SEP), the Defense Acquisition Guidebook (DAG), and DODI 5000.87.
8. DOD revises policies, directives, instructions, and guides to incorporate these recommendations.
9. Revise FAR and DFARS clauses regarding EVM to incorporate the Government-unique, internal standard that is proposed below.
10. DCMA develops policies and procedures to determine compliance with the Government-unique, internal standard. See recommendations in Appendix A.

Federal law, OMB policy, OPM policy, and recent DOD acquisition reform initiatives signal that the federal government and DOD have started down that path. However, the current law, policies and initiatives and plans are insufficient to integrate cost, schedule, technical performance, and risk management.

Failed Vision

The vision of the founding fathers was formulated in 1996 and translated into the acquisition reform objectives of Senators McCain, Collins, McCaskill, and Ernst, and HASC Chairmen Ike Skelton and Adam Smith.

The intended purpose of an EVMS was announced when DOD accepted industry guidelines for EVMS to replace similar DOD criteria in 1996. DOD encouraged industry to develop a *widely accepted industry or international standard*. Per the announcement, "It has been our vision of acquisition reform to":

- *Adopt … commercial practices in lieu of practices unique to the government.*
- *Rely on our contractors to maintain management control systems that protect the public interest.*
- *Shift responsibility from government to industry.*
- *Support the "insight, not oversight" philosophy underlying DOD acquisition reform initiatives.*

In 1999, Gary Christle, one of the founding fathers of EVM, stated his vision in terms of the following:

- The quality of a management system is determined not by the absence of defects, but by the presence of *management value*.
- *Integrate* cost, schedule, *technical performance*, and *risk management.*

In 2009, DOD submitted a report to Congress which assessed the use of EVM. The report was required by the Weapon Systems Acquisition Reform Act of 2009 (WSARA), introduced by Sen. McCain. The report, *DOD EVM: Performance, Oversight & Governance Report* (DOD Report) reiterated Christle's vision and augmented it with objectives regarding the quality of work performed and the integration of systems engineering processes and products with EVM.

In 2014, DOD published the 2014 PARCA Report which stated: "PARCA believes that earned value metrics and technical metrics such as TPMs should be consistent with program progress. Earned Value focuses on the completion of a set of tasks to mature the design. It should be consistent with the set of metrics that indicate the actual **design maturity."**

In April 2021, Stacy Cummings, Acting Asst. Undersecretary of Defense for Acquisition and Sustainment, stated to the Senate Armed Services Committee:

> "Congress removed the burden of resource-heavy reporting requirements of EVM in pilots, resulting in greater focus on delivering working product and value over documentation."

Today, the vision of the founding fathers, as clarified by the DOD and PARCA Reports, has still not been achieved. Focus on the **product** was recently augmented by Ms. Cummings. The vision is sharp and well-defined. However, industry and DOD have either obstructed or declined to take actions that will contractually require Integrated Program Management.

EIA-748 Not Widely Accepted as a Commercial Practice

A worldwide survey of EVM users by the PMI, in 2010, disclosed that the private sector has largely ignored EIA-748. When the use of EVM is voluntary and not a contractual mandate, only 17 percent of the respondents used EVM based on EIA-748.

Seventy percent of respondents to the *Grant Thornton 2016 Government Contractors Survey* stated they would not use EVMS if not required to do so. Twenty-eight percent reported having contracts that require use of EVMS. Of those using EVMS, only 37 percent believe it to be a cost-effective management tool and only 25 percent would adopt EVMS voluntarily.

Absence of Integrated Program Management

The failures of EIA-748 to link technical performance (Quality Gap), risk management, and product requirements (product scope or technical baseline) with EVM were first targeted in my Software Engineering Institute (SEI) Technical Note CMU/SEI-2002-TN-016, "Using CMMI to Improve Earned Value Management," October 2002. These issues were repeated in the November 2010 article in *Defense AT&L Magazine*, "Earned Value Management Acquisition Reform." A white paper that I submitted when a consultant to PARCA and HQ NAVAIR in 2012 includes recommended revisions to DOD instructions and guides and to DFARS. The white paper included the following Executive Summary.

> **"Executive Summary:**
>
> *This project was undertaken to improve the use of EVM within DOD. EVM can be a better program management tool if contractors revised their processes and reports to consistently integrate technical performance with cost and schedule performance and to utilize Systems Engineering (SE) best practices. However, there are no contractual requirements within the acquisition regulations or Data Item Descriptions (DID) to require the following enablers of Integrated Program Management:*
>
> 1. *Tie the technical baseline to the EV Performance Measurement Baseline (PMB) and*
> 2. *Tie technical progress to the Technical Performance Measures (TPM) of the program.*
>
> *This project was undertaken to address EVM challenges that were addressed in the DOD Report."*

Some of the recommendations to PARCA regarding TPM have been incorporated into DOD "guidance" (DODI 5000.02, DAG, and EVMSIG). However, contractors normally fail to link EVM to TPM when there is no contractual requirement to do so.

Evidence that the Quality Gap still exists was provided by the DCMA and by a DOD advisory panel.

In April 2016, DCMA reported a common, EVM finding of a lack of objective measures to assess performance, including **"**Measurement does not indicate technical accomplishment." Despite that report,

both the DCMA EVMS compliance procedures and the DCMA EVMS Compliance Metrics (DECM) are silent on technical performance.

The NDAA for FY 2016, Section 809, directed establishment of an advisory panel (Panel) with a view toward streamlining and improving the efficiency and effectiveness of the defense acquisition process and to make recommendations for the amendment or repeal of regulations. In 2018, the Panel reported that "another substantial shortcoming of *EVM* is that it *does not measure product quality.* A program could perform ahead of schedule and under cost according to EVM metrics but deliver a capability that is unusable by the customer…Traditional measurement using EVM provides *less value* to a program than an Agile process in which the end user continuously *verifies that the product meets the requirement*." (*Section 809 Report of the Advisory Panel on Streamlining and Codifying Acquisition Regulations*, Vol. 1, January 2018 (Section 809 Report).

NDIA Enables the EIA-748 Quality Gap and Misuse of Management Reserve (MR)

The NDIA permits the quality gap (between EVM, the product scope, and technical performance) in its guidance documents, the *NDIA EVMS EIA-748-D Intent Guide* (*Intent Guide*) and the *NDIA A Guide to Managing Programs Using Predictive Measures* (*Predictive Measures*). Furthermore, *Predictive Measures* provides false guidance that, if the program is behind schedule in meeting technical performance goals, "more work and ***more budgets*** will be needed to take corrective action."

Intent Guide

Compliance with EIA-748 guidelines does not provide assurance that the technical specifications (product scope) are part of integrated program management and the WBS. Excerpts from *Intent Guide*:

- Performance measures are one aspect of an integrated program management system as **other processes control the quality and technical content of the work performed.**
- The WBS Dictionary online form may be used to describe the scope of work for all WBS elements. This description ***should*** include, but is not limited to, specific details such as…***technical specifications***.

Predictive Measures

Compliance with EIA-748 guidelines does ***not ensure*** that reported cost and schedule variances reflect the true behind schedule condition or that ***MR will not be used*** to provide more budget to offset cost overruns and corrective actions.

Excerpts from *Predictive Measures*:

- For any Key Performance Parameter that is not within the allowed limits at a ***specific time*** in the program, more work and ***more budgets*** will be needed to take corrective action. As a result, the EVM metrics must be assessed to confirm that they reflect this *out-of-compliance* condition for the TPM.

  My comment: Meeting the technical objectives is behind schedule. That does not justify adding budget from MR.

- An example of using the TPM to make ***EVM adjustments*** is shown in Figure 36.

My comment: Negative EVM adjustments are appropriate.

- The TPM's technical compliance is then used to calculate a ***"TPM Informed"*** **BCWP**…This BCWP is ***not the one reported in the IPMR or the IPMDAR,*** but it is used to inform the program decision makers of the confidence in the IPMR or IPMDAR values.

  My comment: The "TPM Informed" BCWP should be formally reported to link EVM with technical performance and provide true variances.

Little Insight and Management Value

The EVM reports submitted by contractors who are compliant with EIA-748 provide little insight and management value to program managers, as discussed below.

2009

Per the DOD Report, the "utility of EVM has declined to a level where it does not serve its *intended purpose*" and contractors "keep EVM metrics favorable and problems hidden." Regarding the reliability of contractor's data, the reported stated, "If good TPMs are not used, programs could report 100 percent of EV even though behind schedule in validating requirements, completing the preliminary design, meeting the weight targets, or delivering software." The DOD Report also stated "the program manager should ensure that the EVM process measures the quality and technical maturity of technical work products instead of just the quantity of work performed."

2010

In the ''Information Technology Investment Oversight Enhancement and Waste Prevention Act of 2009'' House/Senate conference report, Sen. Susan Collins stated that the Government Accountability Office (GAO) observed that contractor EVM reporting lacks consistency and leads to inaccurate data and faulty application of the EVM metric. "In other words, garbage in, garbage out." Collins stated that "With improved EVM data quality, both the government and the contractor will be able to improve program oversight, leading to better acquisition outcomes." She concluded that "I believe this amendment (regarding EVM), Senator McCaskill, and I offer would help to strengthen the Department's acquisition planning, increase and improve program oversight, and help to prevent contracting waste, fraud, and mismanagement." WSARA directed DOD to submit a report to Congress which assessed the use of EVM.

HASC Chairman Ike Skelton marked up the NDAA for FY 2011 to require DOD to review acquisition guidance, including DOD Instruction 5000.02, to "consider whether measures of quality and technical performance should be included in any EVM system.

2018

The Section 809 Report concluded that "EVM has been required on most large software programs but has not prevented cost, schedule, or performance issues."

2021

In my opinion, DCMA EVMS compliance reviews provide false assurance that the contractor Integrated Program Management Reports convey valid, reliable information. A contractor may be found compliant with Guideline 7 if its progress assessment is based only on the *quantity* of work performed and *not technical performance*.

Contractors are reimbursed for costs incurred to perform the *work* scope regardless of progress towards achieving the acceptance criteria of the *product scope* because cost-reimbursement contract vehicles are "best efforts" contracts. The "best efforts" clause ensures that the government bears the risk that it will receive nothing for the costs expended except contractor's best efforts. Nonetheless, contractors should be required to report progress towards completing the product scope even if being reimbursed for all costs to perform the work.

The lack of focus on product in the procurement process was discussed in Volume 2 of the Section 809 Report. Per Volume 2, "The current system focuses on process, not product. Former ASN(RDA) Sean Stackley said this focus takes PMs' attention away from the fundamentals of cost, schedule, and performance, and is one of the major contributors to negative acquisition outcomes. This perspective is shared by many stakeholders with whom the Section 809 Panel met and was aptly described by one stakeholder as "mission becoming secondary to perfection of the contract."

EVM is costly but has never been validated as cost-effective. *JSCC*, released by DOD on October 3, 2017, was a research effort to identify EVM cost drivers and value and to investigate the cost premium of additional Government requirements associated with EVM. Per Figure 30 of *JSCC*, 27 % of all survey data points identified a High to Medium cost premium to comply with Government EVM Standards. Of those respondents that identified a High to Medium cost premium, 48% were Government Program Management stakeholders.

Industry Warnings of Poor Contractor Behavior and EVM Metrics

Even the defense industry has warned that contractors may provide unreliable EVM metrics. A NDIA Letter to DOD, May 11, 2007, with its attached position paper, "Award Fee Incentive Provisions Using EVM Reporting," admitted that:

"in recent years, some defense contracts have misused these incentives (to achieve program contractual outcomes) by tying achievement of certain EVM cost and schedule metrics to award and incentive fees and thereby ***sacrificing objective program status reporting*** in favor of ***"making the number."***…A greater risk posed by the use of these monthly incentives is that they can provide the wrong focus (i.e., ***management of data and reports***). Managing a program using these data outcomes could cause contractors to …taking other ***actions that might be less than optimal in order to maintain high ratios between budgeted cost and schedule and actuals***…EVM will reveal the truth about a program but meanwhile at-completion projections become constrained and ***project managers will not receive reliable information on contract status throughout most of the Program.***"

A similar warning was issued by Council of Defense and Space Industry Associations (CODSIA) in a letter to DOD, Ref: DOD Report to Congress on Implementation of EVM: Request for Industry Input, July 2, 2009. CODSIA warned that incentivizing contractors based on performance data could promote "poor behavior." The pertinent CODSIA excerpt follows:

"In addition, inappropriate contractual incentives, such as focus on incentivizing or penalizing contractors based on performance data, ***promote poor behavior*** in the establishment of program baselines and EVMS implementations. An example would be the continuing use of incentives based on reported performance metrics, such as the cost performance index (CPI) and/or schedule performance index (SPI).

Law: Project Management Standard

Legislation to require the use of a project management standard was the Program Management Improvement and Accountability Act of 2016 (PMIAA). It requires OMB to:

- Adopt and oversee implementation of government-wide standards, policies, and guidelines for P/PM for executive agencies;
- Establish standards and policies for executive agencies *consistent with* **widely accepted standards for program and project management** (P/PM) *planning and delivery*;
- Establish a 5-year strategic plan for program and project management.

Senator Joni Ernst, one of the sponsors of the PMIAA, expressed her legislative intent in a November 2015 press release. "This bipartisan legislation puts our federal government back on track by streamlining efforts and outlining strategies to correct widespread deficiencies, lax oversight and unnecessary cost overruns incurred by preventable delays in meeting stated program goals and deadlines. By adopting ***widely accepted*** management standards that are ***often used in the private sector***, these commonsense reforms ensure that taxpayer dollars are safeguarded by increasing accountability throughout the federal government. I'm delighted that my colleagues in the Senate recognize the epidemic of mismanagement that's eating away at the effectiveness of our federal government." Clearly, it was *not* her legislative intent to continue the mandate for EIA-748, a standard that is not used in the private sector.

Although neither Sen. Ernst nor PMIAA cite a particular standard, statements by the GAO indicate that the *PMBOK® Guide* is the only standard that qualifies as ANSI-accredited, widely accepted, and often used in the private sector.

The GAO report, GAO-20-44 *Improving Program Management*, provides additional, compelling information to justify a change to OMB policy regarding EVM. The report cites PMI documents, including *PMBOK® Guide*, as:

- Widely accepted standards for P/PM
- Utilized worldwide
- Generally recognized as leading practices for P/PM
- Approved by ANSI.

Also, in 2015, per Senate report 114-162, Sen. McCain showed his interest by offering an amendment to require the GAO to "issue a report examining the effectiveness of the legislation on improving Federal P/PM in conjunction with the annual GAO High Risk list."

I have taught EVM to commercial IT companies in India and South Korea for use on fixed-price, product development IT contracts. Their EVM processes and best practices were based on PMBOK® Guide, the only ANSI-accredited project management standard that includes the "product scope" (technical baseline). EIA-748 includes only the "work scope" and is silent on product requirements and risk

management. Pertinent IT companies' best practices are described in my article in *The Measurable News*, "Performance-Based EV in Commercial IT Projects," 2010 Issue No. 2.

The best practices of one of these companies, Samsung SDS, include:

- Defining the requirements baseline for each planned product release
- Tracing the requirements baseline to the schedule and work packages
- Tracking status of each requirement
- Monitoring technical performance with meaningful variance analysis
- Accounting for deferred functionality
- Planning and measuring rework
- Making negative adjustments to EV for accurate status

Applicability to DOD

PMIAA gave a potential waiver to DOD by stating it is not applicable to DOD "to the extent that the provisions…are substantially similar to or duplicative of…policy, guidance, or instruction of the Department related to program management.''

However, current DOD policy, guidance, and instruction related to program management and EVM are *not similar* to or consistent with the ANSI-accredited guide for P/PM, *PMBOK® Guide.* Part 2 of the *PMBOK® Guide* is accredited by the ANSI and must be updated every four to five years. The assertion of dissimilarity was made in the November-December 2015 *Defense AT&L* article, "A Contract Requirements Rule for Program Managers (PM)." A PM's needs that are covered by the *PMBOK® Guide* but are not mentioned in EIA-748 include the technical or product baseline, requirements management and traceability, risk management, and project procurement management.

PMBOK® Guide includes standards and principles that meet the needs of P/PM but are *absent* from EIA-748 (Table 1).

PMBOK® Guide covers traditional EVM topics including scheduling (including network diagrams), Performance Management Baseline, control accounts, work packages, earned value, variance analysis, estimate at completion, and management reserve.

Table 1. *PMBOK® Guide* Standards and Principles that are Absent from *EIA-748*

Standard or Principle	Description
Product scope description	**Documents the characteristics of the product that the project will be undertaken to create. Progressively elaborates the characteristics of the product.**
Product scope	**The features and functions that characterize a product.**
Requirements Documentation	**Requirements baseline; unambiguous (measurable and testable), traceable, complete, consistent, and acceptable to key stakeholders. Components include, functional requirements, non-functional requirements, quality requirements, and acceptance criteria.**
Requirements	**Requirements become the foundation of the WBS. Cost, schedule, quality planning, and procurement are all based on these requirements.**
Requirements Management Plan	**Include…product metrics that will be used.**
WBS Dictionary	**Includes quality requirements, acceptance criteria.**
Scope Baseline	**Includes product scope description, project deliverables, and defines product user acceptance criteria.**
Control Scope	**The process of monitoring the status of the project and *product* scope and managing changes to the scope baseline. Completion of the *product scope* is measured against the product requirements.**
Requirements Traceability Matrix	**Includes requirements to project (including *product*) scope/WBS objectives, product design, test strategy and test scenarios.**
Conduct Risk Management	**Including planning, identification, risk analysis, response planning, and monitoring risk.**
Risk Responses in Baselines	**Schedule baseline. Changes in the schedule baseline are incorporated in response to approved changes in schedule estimates that may arise from agreed-upon risk responses.** **Cost baseline. Changes in the cost baseline are incorporated in response to approved changes in cost estimates that may arise from agreed-upon risk responses.**
Project Procurement Management	**Project documents that can be considered as inputs to this process include:** • **Requirements documentation may include…technical requirements the seller is required to satisfy, and** • **Requirements traceability matrix…links product requirements from their origin to the deliverables that satisfy them.** • **Work Performance Data contains seller data on project status such as technical performance activities that have started, are in progress, or have completed; and costs that have been incurred or committed.** • **Work Performance Information includes information on how a seller is performing by comparing the deliverables received, the technical performance achieved, and the costs incurred and accepted against the SOW budget for the work performed.**

Finally, the PMI maintains a certification program for expert use of the *PMBOK® Guide*. The experts receive the Project Management Professional (PMP) certification. Per PMI, "there are more than 1,000,000 PMP certification holders worldwide. They've earned universally recognized knowledge."

Currently, most contractors obtain specialized training for their employees to implement or maintain the narrowly used EIA-748 or hire consultants. The transition to a widely accepted standard may increase the supply of resources, reduce the training and salary costs for DOD EVM process specialists, and reduce program management costs.

Consequently, a plan to migrate to a Government-unique standard that is consistent with the PMI documents and includes a tailored set of EVMS guidelines is recommended. For federal agencies other than DOD, the first step down that path was the PMIAA mandate to OMB to establish standards and policies for executive agencies consistent with widely accepted standards for P/PM planning and delivery. For DOD, the Section 809 Panel took the first step down that path with its recognition that EVM does not measure product quality.

EIA-748 Is No Longer a Voluntary Consensus Standard per OMB Circular Criteria

The EVMS Standard was originally developed to be a Voluntary Consensus Standard (VCS), as defined by *OMB Circular, Federal Participation in the Development and Use of VCSs and in Conformity Assessment Activities* (Circular). If EIA-748 is to be considered for P/PM or even to continue to be used by federal agencies in their regulatory activities, it must be a VCS per the criteria of Circular. There are three reasons why EIA-748-D is disqualified from being a VCS, as follows:

1. The standard must be "***effective*** and otherwise suitable for meeting agency regulatory, procurement, or program needs."
2. Circular stipulates that "all federal agencies must use VCSs in lieu of government-unique standards in their procurement and regulatory activities, ***except*** where inconsistent with law or ***otherwise impractical.***"

Per Circular, in evaluating whether to use a standard…an agency should consider the following:

(1) Whether the standard is ***effective*** and otherwise suitable for meeting agency regulatory, procurement, or program needs, including as applicable:

(h) the ***prevalence of the use of the standard*** in the national and international marketplaces;
(i) the problems addressed by the standard and ***changes in the state of knowledge*** and technology ***since the standard*** was prepared or ***last revised***;

EIA-748 is no longer a VCS because it is "***otherwise impractical***." It fails to serve DOD's procurement and program needs. It is not prevalently used in the national and international marketplaces. It is a *de facto* government standard. Most importantly, EIA-748 does not address the state of knowledge and technology since it was last revised. It is still silent on the product or technical baseline, risk management, and on tracing the requirements baseline to the schedule and work packages. The Quality Gap has not been closed.

ANSI vs. EIA

The new *PMI Standard for EVM* is accredited by ANSI. It was approved as *ANSI/PMI 19-006-2019* on 10/29/2019. Per the ANSI web site, accreditation by ANSI signifies that the procedures used by the standards body in connection with the development of American National Standards meet the Institute's essential requirements for openness, balance, consensus, and due process.

In contrast, EIA-748, was approved by SAE International (SAE). SAE was formerly the Society of Automotive Engineers. Per SAE, an SAE standard is a technical report, documentation of broadly accepted ***engineering practices or specifications for a material, product, process, procedure or test method***. Think about the SAE grade of your motor oil. Major acquisitions that cost over $100 M should be governed by a higher standard. The NDAA provision, when passed, requires a higher, ANSI-accredited standard.

In my letter to Margaret Weichert, Deputy Director for Management, OMB, augments a previous recommendation for OMB to revise the *Capital Programming Guide* requirement to use an EVMS that meets the guidelines in EIA-748. The letter, dated Dec. 16, 2019 , Subj: Recommendations to Improve Program Management and EVM, includes the following excerpts:

The following recommendations, if implemented, will fix the VCS problem in the *Capital Programming Guide* and help to close the GAO findings discussed above:

> (1) Adopt the VCSs for P/PM from the PMI, including ANSI/PMI 19-006-2019 in concert with *PMBOK® Guide*, instead of OMB-developed standards and
>
> (2) Replace EIA-748 in the Capital Programming Guide with ANSI/PMI 19-006-2019 in concert with *PMBOK® Guide*

The bottom line: EIA-748 is not effective or suitable to meet the regulatory, procurement, or program needs of DOD and the other federal agencies.

OMB Memo: Improving the Management of Federal Programs and Projects through Implementing the PMIAA, June 25, 2018

On June 25, OMB issued a memo which establishes initial implementation guidance to begin a coordinated and Government-wide approach to strengthen P/PM practices in Federal agencies and improve Government performance. The memo identified a provisional set of principle-based program management standards that should be applied to internal management processes and be incorporated or aligned with existing program management policies and processes. Appendix 4, Table 1 of the memo included "Initial Program Management Standards and Principles" that should be considered when developing program implementation plans. These standards and principles are in the areas of Contracting and Acquisition Management (regarding product scope), Project Management (especially keying in on the OMB definition of project which includes "product"), Requirements Management, and Risk Management. The *PMBOK® Guide* includes these same standards and principles, as described in Table 1 (of this white paper) ***PMBOK® Guide* Standards and Principles that are Absent from *EIA-748***.

The language in the OMB memo is also less stringent than that of Circular. Circular also includes requirements that the agency determine if the standard is practical and effective. It is recommended that OMB and DOD resolve this discrepancy with the concurrence of the appropriate legislative oversight committees.

If the less stringent language in the OMB memo is retained, then agencies may utilize standards developed internally for managing agency programs, but they must generally align and be equivalent to the standards and principles described in Appendix 4, Table 1 of the OMB memo. In that case, agencies may develop internal management processes that utilize a tailored, streamlined EVMSIG that is transformed into an Government-unique, internal standard. The transformed EVMSIG internal standard is based on principles derived from the *PMBOK® Guide*, such as those in Table 1, above.

OPM/OMB Memo: PMIAA P/PM Competencies

Finally, on April 5, 2019, OPM, in consultation with the OMB and the Program Management Policy Council, issued a memo which defined "P/PM competencies to select, assess, and train program and project management talent for the 21st century." The memo included four technical competencies which are absent from EIA-748:

1. Quality Management - Knowledge of the principles, methods, and tools of quality assurance, quality control, and reliability used to ensure that a project, system, or product fulfills requirements and standards.
2. Requirements Management - Knowledge of the principles and methods to identify, solicit, analyze, specify, design, and manage requirements.
3. Risk Management - Knowledge of the principles, methods, and tools used for risk assessment and mitigation, including assessment of failures and their consequences.
4. Scope Management - Knowledge of the strategies, techniques, and processes used to plan, monitor, and control project scope; includes collecting requirements, defining scope, creating a work breakdown structure, validating scope, and controlling scope to ensure project deliverables meet requirements (i.e., features, functions).

The *PMBOK® Guide* Standards and Principles in Table 1 are consistent with OPM/OMB objectives.

Recommended Five Step Plan for Acquisition Reform

It is recommended that DOD, OMB, and GAO implement the following fiver step, sequential plan.

Step 1: DOD actions:

a. DOD review its policy, guidance, and instructions to determine if PMIAA is applicable to DOD because its provisions, regarding a widely accepted standard for program and project management, are *not* substantially similar to or duplicative of…policy, guidance, or instruction of the Department related to program management.
b. DOD tailor EVMSIG and transform it into an internal, Government-unique standard that incorporates EVMS-lite recommendations. The internal standard will be based on a subset of EIA-748 guidelines and is tailored to accomplish the following objectives:
    - Link EVM with systems engineering planning and execution, product scope, technical performance measurement (TPM) and risk management.
    - Reduce DCMA compliance review costs.
    - Reduce contractor compliance costs.
c. DOD request to OMB, through the NIST, that EIA-748 be replaced with the DOD internal standard.

d. DCMA discontinue compliance reviews of 12 EVMS Guidelines that are no longer value-added or cost-justified, as specified in EVMS-lite.
e. DOD issue policy and guidance to provide award fee incentives for contractors to link EV to the product scope, TPM, and risk management by complying with the five tailored Guidelines in Table 3, below and/or by utilizing the award fee guidance and criteria in DAG, as follows:

> **DAG CH 3–2.7 SE Role in Contracting**
>
> Another area to which incentives are tied is the EVMS. The PM should ensure that the EVMS, tied to any incentive, measures the quality and technical maturity of technical work products instead of just the quantity of work. If contracts include EV incentives, **the criteria should be stated clearly and should be based on technical performance**. EV incentives should be linked quantitatively with:
>
> - TPM
> - Progress against requirements
> - Development maturity
> - Exit criteria of life-cycle phases
> - Significant work packages and work products

f. When using Agile methods, DOD issue policy and guidance to provide award fee incentives for contractors to exceed the Minimum Viable Product, reduce the product backlog, and reduce technical debt.
g. DOD revise policies, instructions, and guides to incorporate these recommendations.

Step 2: GAO actions:

1. Verify that DOD completed above actions.
2. As required by PMIAA, examine the effectiveness of the following on improving Federal program and project management: (1) The standards, policies, and guidelines for P/PM issued under section 503(c) of title 31, United States Code, as added by subsection (a)(1).
3. Include the results of its examinations in its "GAO Report on Effectiveness of Policies on Program and Project Management," in conjunction with the High Risk list.

Step 3: OMB approve DOD request to replace EIA-748 with the transformed, EVMSIG standard.

Step 4: DOD establish a 5-year strategic plan for P/PM that is consistent with PMIAA and OMB objectives and leads to use of standards and policies that are in accordance with *PMBOK® Guide* and *ANSI/PMI 19-006-2019*.

Step 5: OMB revise *Capital Programming Guide* to sunset the use of EIA-748 and substitute an interim Government-unique standard based on a tailored, streamlined EVMSIG. The tailored EVMSIG standard will be based on *PMBOK® Guide* in concert with *ANSI/PMI 19-006-2019*.

EVMS-lite

The rationale for and implementing details of *EVMS-lite* were first included in my letter to Chairman Thornberry, 11/17/13, Subj: Expanded NDAA Defense Acquisition Reform - EV. The letter included recommendations that will result in a net *reduction* of costs for capital acquisitions by reducing regulatory

(DFARS) requirements. Currently, contractors are required to comply with 32 guidelines in EIA-748. The recommendations in this document, if implemented, will *eliminate* twelve guidelines.

It is also recommended that DOD regulations be revised to require contractor compliance with five *amended* or *tailored* EVMS guidelines. However, compliance with the five tailored guidelines will not increase acquisition costs because contractors are already required to perform the tasks that are newly cited in those guidelines. Also, DOD program managers now need to obtain the information that will be submitted with the tailored guidelines to comply with recent AAF reforms in DOD Directive 5000.01, The Defense Acquisition System (DAS) and DOD Instruction 5000.88, *Engineering of Defense Systems.* The assertions regarding net cost reductions are augmented below.

Eliminate Mandate to Comply with 12 Guidelines

The rationale for eliminating compliance with twelve guidelines includes:

- Control and reporting by Work Breakdown Structure (WBS) is sufficient. There is no need for reporting by organization.
- DCAA audits are sufficient; DCMA compliance review is redundant
- Compliance adds cost but no management value

The following twelve guidelines should be tailored for development programs (Table 2).

Table 2: Eliminate mandate to comply with 12 EIA-748 guidelines		
Guide-line #	**Guideline Topic**	**Rationale to remove compliance requirement**
2.1b	Identify organizational structure	Control by organization (OBS) is not cost-effective(a). Control by product (WBS) is sufficient. This guideline is a non-value added regulatory requirement (NVARR).
2.1d	Control overhead (OH)	DCAA audits are sufficient; DCMA compliance review is redundant. (NVARR)
2.1e	Measure performance by WBS or OBS	Control by product (WBS) is sufficient(a). (NVARR)
2.2d	Identify cost elements (labor, material etc)	(NVARR)
2.2f	Control account budget = sum of work and planning packages	(NVARR)
2.2h	Establish OH budgets	DCAA audits are sufficient; DCMA compliance review is redundant. (NVARR)
2.2j	Target cost goal is reconciled with sum of internal budgets plus MR	(NVARR)
2.3c	Summarize direct costs into organizational elements	(NVARR)
2.3d	Record indirect costs consistent with the OH budgets	DCAA audits are sufficient; DCMA compliance review is redundant. (NVARR)
2.3e	Identify unit costs, equivalent unit costs, or lot costs	Not needed for development programs. (NVARR)
2.3f	Material accounting system provisions	DCAA Material Management and Accounting System (MMAS) audits are sufficient. DCMA compliance review is redundant. (NVARR)
2.4d	Summarize variance analyses by OBS and/or WBS	Control by product (WBS) is sufficient(a). (NVARR)
(a) Three of the guidelines in Table 2 pertain to the OBS, a NVARR. Per *JSCC*, the utility of EVM Data by OBS was rated unfavorably with 62% of the respondents being detractors and a Net Promoter Score of -46%.		

Tailor Five Guidelines

Five guidelines that should be tailored to close the Quality Gap and to add risk management are in Table 3. The tailoring will increase focus on technical requirements, requires use of TPMs, and add "product scope" including rework, acceptance criteria (technical baseline) and risk responses to the authorized baseline.

The EAC guideline is modified to incorporate four elements:

1. The Agile methods elements, “product backlog” and “technical debt,” which did not exist when the first EVMS standard was published.
2. “Risk responses,” which is absent from EIA-748.
3. “Rework” which is absent from EIA-748.

Contractors are already required to perform the following tasks in their statements of work. Requirements for systems engineering and risk management already cite the following:

- “Product scope” is already referred to as “technical baseline”
- “Acceptance criteria” are required by systems engineering requirements such as the SEP and the Integrated Master Plan (IMP)
- “Risk responses” are required by systems engineering requirements
- “Rework” is a normal task of engineering development and cost estimates. The proposed change only requires it to be broken out.
- “Technical performance measures” are already in the guidelines. The proposed change only makes the use of TPMs mandatory, not optional.

Table 3: Modify language of 5 EIA-748 guidelines with regard to contractor compliance

Guide-line #	Guideline Topic	Tailored Guideline
1	Define the authorized work.	Add, “Including the work necessary to produce the product scope of the program, including rework and risk responses. The product scope is the technical baseline and includes the features and functions that characterize a product or result and acceptance criteria.”
6	Scheduling the work	….requirements of the program. Add “including the product scope (including acceptance criteria), rework, and risk responses.”
7	Identify physical products, milestones, technical performance goals, or other indicators that will be used to measure progress.	Add, “All technical performance measures that have been identified at major technical reviews shall be used to measure progress in appropriate work packages.”
27	Develop revised estimates of cost at completion based on performance to date, commitment values for material, and estimates of future conditions.	Add, “Estimates of future conditions include rework, risk responses, and, when using Agile methods, technical debt and the product backlog.”
30	Control retroactive changes.	Add, “Retroactive changes to earned value, including negative adjustments to correct cumulative earned value so that it is consistent with achieved vs. planned technical performance, must be made to improve the accuracy of performance measurement data.”

My recommendation to implement EVMS-lite were included in a white paper submitted as a consultant to PARCA in 2012. The white paper was the basis of an article in *CrossTalk, the Journal of Defense Software Engineering*; "Basing Earned Value on Technical Performance," Jan. 2013.

Cost Estimate for *EVMS-lite* (Lower Costs)

In my opinion, there will be a significant reduction in recurring, compliance review costs if *EVMS-lite* is implemented with elimination of compliance reviews for twelve EVMS guidelines offset by the additional costs for compliance reviews of the five tailored guidelines. Also, will be a net cost decrease to contractors and subcontractors by eliminating the requirement to comply with 12 EVMS guidelines. Of course, the most important consideration is that program managers will have better insight into program cost, schedule, and technical performance by receiving valid, reliable information.

Program managers expect contractors to utilize SE and risk management practices per AAF directives and guides DoDD 5000.01, DoDD 5000.02, DoDI 5000.87, and DoDI 5000.88. These are not new tasks for contractors. These SE and risk management practices and related work products, including technical performance parameters, although elements of AAF directives and guides, are either absent from or not required by EIA-748. However, they are elements of *PMBOK® Guide* Standards and Principles that are in Table 1.

Table 4 also cites the DoD Digital Engineering Strategy, June 2018. Goal 2 of this Strategy is to provide an enduring, authoritative source of truth. Excerpts follow.

> **Use the authoritative source of truth as the technical baseline**
>
> Stakeholders should use the authoritative source of truth to make informed and timely decisions to manage ***cost, schedule, performance, and risks***. For example, contract deliverables should be traced and validated from the authoritative source of truth. This will allow stakeholders at various levels to respond knowledgeably to the development…of the system, thereby avoiding technical and management barriers to mission success.
>
> **Use the authoritative source of truth to produce digital artifacts, support reviews, and inform decisions**
>
> As the technical baseline matures…Stakeholders will generate digital artifacts.

Pertinent excerpts from these documents are included in Table 4.

Table 4: Elements of AAF Directives and Guides Needed in Tailored Guidelines

AAF Document	Section	Excerpt Note: parenthesized comments are not in document)
DoDD 5000.01	1.2.a	Deliver Performance at the Speed of Relevance.
DoDD 5000.01	1.2.a.(1)(e)	Actively Manage Risk.
DoDD 5000.01	1.2.g.	Employ a Disciplined Approach.
DoDD 5000.01	1.2.g.(2)	Program goals for cost, schedule, and **performance parameters** (or alternative quantitative management

		controls) **will** describe the program over its life cycle. Approved program baseline parameters **will** serve as control objectives. Deviations from approved acquisition program baseline parameters and exit criteria will be documented, recorded, and reported to the Milestone Decision Authority (MDA) or Decision Authority.
DoDD 5000.01	1.2.k	Employ Performance Based-Acquisition Strategies. "Performance-based strategy" means a strategy that supports an acquisition approach structured around the ***results to be achieved*** (technical baseline or product scope) as opposed to the manner by which the ***work*** is to be performed (statement of work).
DoDD 5000.02	4.1.b.(6)	Establish a risk management program to ensure program cost, schedule, and performance objectives are achieved, and to communicate the process for managing program uncertainty.
DoDI 5000.87	3.3.b(2)	Programs will…actively manage technical debt.
DoDI 5000.87	3.3.b(3)	Develop and maintain program backlogs that identify detailed user needs in prioritized lists.
DoDI 5000.88	3.4 Program Technical Planning and Management a. Systems Engineering Plan	(3) For MDAPs, ACAT II, and ACAT III programs, the SEP will contain these elements, unless waived by the SEP approval authority: (b) The engineering management approach to include ***technical baseline management; requirements traceability; CM***; ***risk***, issue, and opportunity management; and technical trades and evaluation criteria. (c) The software development approach to include architecture design considerations; software unique risks; software obsolescence; inclusion of software in technical reviews; ***identification, tracking, and reporting of metrics for software technical performance,*** process, progress, and quality; software system safety and security considerations; and software development resources. (g) ***Specific technical performance measures and metrics, and SE leading indicators to provide insight into the system technical maturation relative to a baseline plan.*** Include the maturation strategy, assumptions, reporting methodology and maturation plans for each metric with ***traceability of each performance metric to system requirements and mission capability characteristics.*** (k) The timing, conduct, and ***entry and exit criteria for technical reviews***. (l) A ***description of technical baselines*** (e.g., concept, functional, allocated***, and product***), baseline content, and the technical baseline management process.

DODI 5000.88	3.4.b Technical Baseline Management	If practicable, the PM will establish and manage the ***technical baseline*** as a ***digital authoritative source of truth***.
DODI 5000.88	3.4.c Configuration and Change Management	(3) Provide for ***traceability of mission capability to*** system requirements to ***performance*** and execution ***metrics.***
DODI 5000.88	3.4 f. Risk, Issue, and Opportunity Management.	(2) Risk management plans will address risk identification, analysis, mitigation planning, mitigation implementation, and tracking. ***Technical risks and*** issues will be reflected in the program's IMP and Integrated Master Schedule (IMS).
Digital Engineering Strategy	2.3 Use the authoritative source of truth across the lifecycle	As the ***technical baseline*** matures…stakeholders will generate ***digital artifacts***. Use the authoritative source of truth to: • ***produce digital artifacts***, support reviews, and inform decisions • make informed and timely decisions to manage ***cost, schedule, performance, and risks***.

Additional information on lowering costs is provided in Appendix B, Letter to Kevin Fahey, Subj: Enhance AAF by Publishing a "Government-unique standard" for Earned Value Management Systems, dated Dec. 2, 2020.

Implementation of alignment with or adoption of *PMBOK® Guide* and *PMI EVM Standard*

To be cost effective, it is important to specify which elements of *PMBOK® Guide* and the *PMI EVM Standard* should be cited and reviewed for incorporation into P/PM policies and processes. I recommend that the scope be narrow and be focused on the topics in Table 3 plus requirements traceability, risk management, and procurement management.

The specific recommended actions follow:

1. Replace requirement to comply with EIA-748 guidelines with requirement to comply with the tailored, streamlined EVMSIG standard to be developed based on the *PMBOK® Guide*.
2. Acquisition Data and Analytics shall develop compliance guidelines based on the *PMBOK® Guide* and shall publish the new guidelines in a transformation of the EVMSIG. The transformation will be renamed "DOD Program and Project Management Internal Standard (P/PMIS)."
3. The PPMIS should be based on the following:
    i. The PPMIS equivalent of 20 EIA-748 earned value guidelines remaining after eliminating the 12 guidelines in Table 2.
    ii. The tailored guidelines in Table 3.
    iii. Guidelines to be developed that incorporate the standards and principles of Table 1.
4. DCMA will revise its compliance review procedures and metrics to cover compliance with the P/PMIS (Appendix C).
5. DCMA will retrain or augment its compliance review staff to add the systems engineering skills necessary to review compliance with the topics in the guidelines to be developed that incorporate the standards and principles of Table 1.

It is important to note that the use of the "product scope" is optional in the PMBOK® Guide. Therefore, the wording of the new guidelines and the P/PMIS should unambiguously require use of the product scope to preclude contractors from continuing to exploit the "Quality Gap" loophole.

Conclusion

DOD should discontinue use of EIA-748 because it is impractical and ineffective. It fails to serve DOD's procurement and program needs. It has failed to keep current with changes in the state of knowledge and technology and is less useful than the PMBOK® Guide. The end of the path should be a set of internal management processes and/or a VCS for P/PM, as required by the PMIAA, and OMB/OPM policy. *PMBOK® Guide* is the most widely accepted P/PM VCS and its components should be included in the internal management processes.

The recommendations above are needed to fulfill the visions of EVM's founders, to implement the acquisition reforms and legislative intentions of senators and congressmen, to halt systemic findings like those in the DOD Report, to comply with the PMIAA and to reduce costs.

EIA-748 focuses on the ***statement of work***, not the results to be achieved. In contrast, the *ANSI Standard for Project Management*, included as Part II of PMBOK® Guide, states "The success of the project is measured against the **project objectives and success criteria**." In other words, **Buy Products that Work, not Statements 0f Work**."

The next iteration of AAF should include sufficient contractual requirements to implement the vision for Integrated Program Management.

Note: All articles and references, except the PARCA white paper, are available at www.pb-ev.com.

Appendix A Selected Elements of PMI Standards that Should be Included in DCMA Compliance Reviews Mapped to Comparable EIA-748 Guidelines (GL) and DODI 5000.88					
EIA-748 GL	**EIA-748 Guideline text**	**DODI 5000.88 Reference**	**PMI EVM Std. Section**	**PMBOK Guide Section**	**DCMA Assess Contractor Compliance with the Following**
none		3.4.d.(1) Integrated Management Plan (IMP) 3.4.i. **Product baseline**	3.2		Develop the IMP to include the scope management plan (including ***product scope***), requirements management plan, schedule management plan, cost management plan, quality management plan, …, risk management plan, and procurement management plan.
1	Define the authorized work elements for the program. A work breakdown structure (WBS), tailored for effective internal management control, is	3.4.c. Configuration and Change Management 3.4.c.(1) ***functional, physical, and performance***	3.2.1, 3.2.4	5, 5.3.3.1	The WBS is used as the single structure that integrates the product scope, schedule, and cost baselines together at a common level. The WBS decomposes the scope of work to be carried out by the project team, and a WBS dictionary

Appendix A Selected Elements of PMI Standards that Should be Included in DCMA Compliance Reviews Mapped to Comparable EIA-748 Guidelines (GL) and DODI 5000.88					
	commonly used in this process.	***characteristics of the system design.***			defines the scope (including product scope) of work for each WBS component. The product scope is the ***features and functions*** that characterize a product, service, or result.
2	Identify the program organizational structure, including the major subcontractors, responsible for accomplishing the authorized work, and define the organizational elements in which work will be planned and controlled.	3.4.a.(b) ***requirements traceability*** 3.4.a.(g) ***Specific technical performance measures and metrics***.. with ***traceability of each performance metric to system requirements and mission capability characteristics.***	3.2.4, 3.2.6		The project team develops a responsibility assignment matrix (RAM) that tracks the scope (including product scope) to the responsible organization (OBS) in which all work scope and resources or cost under the EVM approach are mapped to control accounts. For procurement planning, the project team determines whether to use EVM for any procurements…, how the vendors will integrate EVM data into the overall project's EVM data and how performance management periods will be aligned. If EVM is flowed down to vendors/subcontractors, then plans should be adjusted to acknowledge the need to develop how Schedule, Cost, Risk, and other Project Management Knowledge Areas are fed from input provided by the vendors/subcontractors.
3	Provide for the integration of the planning, scheduling, budgeting, work authorization, and cost accumulation processes with each other, and, as appropriate, the program work breakdown structure and the program organizational structure.	3.4.f.(2) ***Technical risks and issues will be reflected in the program's IMP and IMS.***	3.3, 3.3.1.2		In creating the PMB, five Knowledge Areas (Project Scope Management, Project Schedule Management, Project Cost Management, ***Project Risk Management***, and Project Resource Management) need to be integrated in such a manner that the scope (including product scope), schedule, ***risk***, and cost are associated at a common level across the baselines (either CA, WP, or activity) with an established

Appendix A Selected Elements of PMI Standards that Should be Included in DCMA Compliance Reviews Mapped to Comparable EIA-748 Guidelines (GL) and DODI 5000.88					
					performance measurement method.
6	Schedule the authorized work in a manner which describes the sequence of work and identifies significant task interdependencies required to meet the requirements of the program.	3.4(k) The timing, conduct, and ***entry and exit criteria for technical reviews***.		**6.2.2.1**	The project WBS, deliverables, and ***acceptance criteria*** documented in the scope (including product scope) baseline are considered explicitly while sequencing activities.
7	Identify physical products, milestones, ***technical performance*** goals, or other indicators that will be used to measure progress.	3.4.a.(b) ***Software technical performance*** 3.4.a.(g) ***Specific technical performance measures and metrics***	3.2.2.2		Determine the measurement method, technique or criteria to be used for progress evaluation of the activity types within a WP. Measure progress towards achieving the scope (including product scope) and technical performance goals for each CA.
none		3.4.a.(g) ***Specific technical performance measures and metrics***		1.2.4.7	Collect work performance data… including reported percent of work physically completed, quality and technical performance measures, etc.
none		none	3.3.1.2		Whenever work and budget moves into, out of, or within the project, one or more CAs change. Any change should always be reflected on the RAM and authorized through change control.
none		3.4.a. SEP (3).k , (3).l	3.3.3	6.2.1.1, 5.3.3.1	Align the scope baseline, comprised of the project scope statement, WBS, and WBS dictionary, with work and planning packages. The detailed project scope statement, either directly or by reference to other documents, includes the following:

Appendix A Selected Elements of PMI Standards that Should be Included in DCMA Compliance Reviews Mapped to Comparable EIA-748 Guidelines (GL) and DODI 5000.88					
					• ***Product scope*** description. Progressively elaborates the characteristics of the product described in the requirements documentation. • Deliverables. Any unique and verifiable product, result, or capability to perform a service that is required to be produced to complete a process, phase, or project. • ***Acceptance criteria***. A set of conditions that is required to be met before deliverables are accepted.

Appendix B, Letter to Mr. Kevin Fahey, Asst. Secretary of Defense for Acquisition, dated 12/2/20

Subj: Enhance AAF by Publishing a "Government-unique standard" for Earned Value Management Systems

Dear Mr. Fahey:

This letter augments my previous letter, Subj: New PMI Standard for Earned Value Management: Comparison with EIA-748 and Recommendations to Reduce Costs of DCMA EVMS Compliance Reviews, dated Dec. 9, 2019.

It includes a recommendation that you can initiate now to:

1. Reduce the costs of Major Capability Acquisitions
2. Provide a practical and contractual vehicle to meet the objectives of the Adaptive Acquisition Framework (AAF).
3. Implement a "Government-unique standard" for Program/Project Management (P/PM) that is "in accordance with standards accredited by ANSI," as specified in the pending NDAA for FY 2021.

Recommendation

The following recommendation is derived from the attached white paper, "DOD Acquisition Reform: EVMS-lite to P/PM, Rev. 19."

Recommendation: DOD revise, streamline, and transform the "DOD Earned Value Management System Implementation Guide" (EVMSIG) and impose it on contractors as a "Government-unique standard" in lieu of EIA-748.

Compared with the current 32, regulatory Guidelines in EIA-748, the new standard will have 12 fewer guidelines (lower costs) and 4 tailored guidelines. The tailored guidelines will not cause costs to increase. Although revised, the tailored guidelines impose no additional requirements. They just explicitly cite the "technical baseline" and "risk mitigation actions" which are already in EVMSIG.

Additional Support, not in white paper

New, contractual requirements to use the tailored and streamlined guidelines will decrease, not increase, costs. Contractors have been expected to link EVM with risk mitigation actions and TPMs actions per the DOD EVMSIG. Excerpts from Guidelines 1, 6, 7 , and 32 follow.

EVMSIG

"Risk responses" are included in Guidelines 1 and 6 in the proposed DOD-unique standard for EVMS.

The "technical baseline" and/or Technical Performance Measures (TPM) are included in Guidelines 1, 7 and 32.

Guideline 1: Define the Authorized Work Elements

Management Value: Using a disciplined, systematic change control process to document PMB changes assures that all program stakeholders are using the same cost, schedule, and technical baselines to measure contract performance.

Guideline 6: Scheduling Work

Intent of Guideline:
Scheduling status process shall include the following:
• Incorporation and progress of risk management activities and mitigation actions.

Guideline 7: Identify Products and Milestones for Progress Assessment

Management Value: A key feature of the vertically and horizontally integrated network schedule is that it establishes and maintains the relationship between technical achievement and progress statusing through time. …Identifying objective criteria, linked to technical progress indicators, ensures performance assessments reflect the true technical performance of the program.

Intent of Guideline: Using objective technical acceptance criteria and performance indicators that are consistent with the work scope contained in the Work Breakdown Structure (WBS) will facilitate meaningful assessments of program accomplishment. Objective technical performance goals and measures are incorporated throughout the schedule hierarchy based on the completion criteria developed for each increment of work, in order to limit subjective measurement of work accomplished. Objectively measured performance data that accurately reflects technical accomplishment of the work provides program management visibility into program progress and credible early indications of program problems and the need to take corrective action.

Attributes: • Objective completion criteria aligned with the accomplishment of the program's technical requirements and goals are determined in advance, documented, and used to plan and measure the progress of program milestones and events.

Guideline 32: Document PMB Changes

Management Value: Using a disciplined, systematic change control process to document PMB changes assures that all program stakeholders are using the same cost, schedule, and technical baselines to measure contract performance.

AAF/Kevin Fahey Tailoring Guidance

This recommendation supports AAF guidance, as provided at the "Tailoring Guidance" tab of the AAF website, in the following excerpts:

1. In addition, PMs will:
   - "Tailor in" the regulatory information requirements that will be used to describe the management of the program
   - Statutory requirements will not be waived unless a statute permits.
2. Link to your DAU article, "DoD's Transformational Adaptive Acquisition Framework," 11/5/19

   "the most transformational change to acquisition policy in decades that will embrace the delegation of decision-making, tailor program oversight to ***minimize unnecessary bureaucratic processes***, and actively manage risk based on the unique characteristics of the capability being acquired.".

NDIA Strategy

The current National Defense Strategy includes "Deliver Performance at the Speed of Relevance." Implementation of this recommendation will augment that strategy by enabling DOD to "Buy Products that Work, not Statements of Work."

Please contact me for additional information or support.

Paul J. Solomon
paul.solomon@pb-ev.com

cc:

Mr. Andrew Hunter, Biden-Harris Transition Team
Sen. Kamala Harris, Homeland Security and Governmental Affairs Committee
Chairman Adam Smith, HASC

Appendix C

Excerpts from Letter to DCMA Director LTG Bassett, Subj: DCMA EVMS Compliance Procedures and Metrics Ignore TPM, dated May 16, 2021

Both the DCMA EVMS compliance procedures and the DCMA EVMS Compliance Metrics (DECM) are silent on technical performance. Consequently, there is no assurance that the DCMA EVMS Center can

accomplish its mission of "assessing contractor effectiveness which provides stakeholders with expectations of future performance and potential impacts on individual contractors and/or programs."

OMB and DOD Needs for Effective Technical Performance Measurement (TPM)

The need for TPM, integrated with EVM, is stated in OMB and DOD guides, as follows.

- The OMB Capital Programming Guide provides guidance for contractors to "achieve integrated cost, schedule, and technical performance management using EVM during systems acquisitions."
- The DOD EVMS Implementation Guide (EVMSIG) states:
    - "Objective technical performance goals and measures are incorporated throughout the schedule hierarchy based on the completion criteria."
    - "Technical progress indicators, ensures performance assessments reflect the true technical performance of the program."

Please expand the scope of DECMs and DCMA EVMS compliance reviews to include the effective use of TPMs. Support OMB and DOD needs for integrated TPM and EVM.