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December 9, 2019

Mr. Kevin Fahey  
Asst. Secretary of Defense for Acquisition, DOD

Subj: New *PMI Standard for Earned Value Management*: Comparison with EIA-748 and  
Recommendations to Reduce Costs of DCMA EVMS Compliance Reviews

Dear Mr. Fahey,

I reviewed the contents of the new *PMI Standard for Earned Value Management* and the document which it supports, *PMBOK® Guide*. A comparison of the PMI documents with the thirty-two guidelines in EIA-748, reveals acquisition reform challenges and opportunities for DOD. If OMB changes the *Capital Programming Guide* to cite the *PMI Standard* as a voluntary consensus standard (VCS) instead of EIA-748, as proposed in the referenced letter, DOD and all federal agencies will be challenged to consider how to assess a contractor's compliance with the new standard. Even if OMB does not change the *Capital Programming Guide*, DOD has an opportunity to reduce the costs of DCMA compliance reviews and improve the quality of contract performance information that is provided to program managers.

This letter augments the referenced letter to OMB Deputy Director Weichert. It provides a recommended template for future DCMA reviews of contractor compliance with the new *PMI Standard for EVM* when it is used in concert with the *PMBOK® Guide*. The template includes only those elements of the PMI documents for which no guidance is provided by EIA-748. This letter also includes opportunities to reduce DCMA costs, even if OMB policy is not changed and DOD retains the use of EIA-748.

### **Comparison of the Standards**

EIA-748 has 32 guidelines. The PMI documents are organized by sections. Consequently, I mapped EIA-748 guidelines to the corresponding PMI sections. I also identified content of the PMI documents that addresses four program and project management (P/PM) technical competencies needed to implement OMB/OPM guidance regarding the PMIAA.

The cross-mapping disclosed that some EIA-748 guidelines have no counterparts in the PMI documents. Likewise, there is relevant PMI guidance that should be used to improve the utility and effectiveness of EVM but has no counterpart in EIA-748.

Analysis of the EIA-748 guidelines that have no counterparts in the PMI documents reveals opportunities for DCMA cost savings. More importantly, inspection of the contents in the PMI documents that have no counterparts in EIA-748 reveals value-added content regarding the following P/PM technical competencies; Quality Management, Requirements Management, Risk Management, and Scope Management.

A template for future DCMA reviews of contractor compliance that cites key elements of the PMI documents is provided in Table 2. I hope that the following information and recommendations will be used to support a decision to abandon the use of EIA-748 as a VCS in favor of the PMI documents. Also, I believe that implementation of the recommendations to reduce the scope of compliance reviews will reduce DCMA costs, even if EIA-748 is retained.

**EIA-748 guidelines with no Counterparts in PMI Documents**

Eleven guidelines in EIA-748 have no counterparts in the PMI documents, as shown in Table 1.

<b>Table 1: EIA-748 guidelines (GL) with no counterparts in PMI documents and for which compliance reviews have costs but provide little or no management value</b>			
<b>GL #</b>	<b>GL Topic</b>	<b>In PMI?</b>	<b>Rationale to remove DCMA compliance review requirement</b>
2.1d	Control overhead (OH)	no	DCAA OH audits are sufficient; DCMA compliance review is redundant. This is a non-value-added regulatory requirement (NVARR).
2.1e	Measure performance by WBS or OBS	no	Data Item Description (DID) states requirements, if needed. No need for compliance review. Product, not work, orientation of PMI documents negates need for OBS reporting. NVARR
2.2d	Identify cost elements (labor, material etc.)	no	NVARR. Normally done by contractor to develop estimates and to enable effective variance analysis. No need for DCMA review. Contractor will normally identify these elements for meaningful variance analysis. NVARR.
2.2f	Control account budget = sum of work and planning packages	no	This is a data integrity check for which contractor normally has internal controls. No need for DCMA review. No significant impact on accuracy or utility of contract performance reports (CPR). (NVARR)
2.2h	Establish OH budgets	no	DCAA Forward Pricing audits are sufficient; DCMA compliance review is redundant. (NVARR)
2.2j	Target cost goal is reconciled with sum of internal budgets plus MR	no	This is a data integrity check for which contractor normally has internal controls. No need for DCMA review or significant impact on accuracy of CPR. (NVARR)
2.3c	Summarize direct costs into organizational elements	no	DID states requirements, if needed. No need for compliance review. Product, not work, orientation of PMI documents negates need for OBS reporting. NVARR

2.3d	Record indirect costs consistent with the OH budgets	no	DCAA audits are sufficient. May be needed for effective variance analysis. DCMA compliance review is redundant. (NVARR)
2.3e	Identify unit costs, equivalent unit costs, or lot costs	no	Not needed for development programs. (NVARR)
2.3f	Material accounting system provisions	no	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	no	DID states requirements, if needed. No need for compliance review. Product, not work, orientation of PMI documents negates need for OBS reporting. NVARR.

The absence of these GLs in the PMI documents indicates that the PMI authors, in establishing a voluntary consensus, either did not consider the guidelines or found insufficient management value to include them. A closer look reveals common characteristics:

1. Three GLs cover OH costs. Control Account managers (CAM) have no control of OH costs. Consequently, there is no need for DCMA compliance reviews regarding the PMI documents.
2. Three GLs cover OBS topics. CAMs are product-oriented, not work-oriented or organization-oriented. Consequently, there is no need for DCMA compliance reviews regarding the OBS.
3. Two GLs are data integrity checks for which the contractor normally has internal controls. There is no need for DCMA to review for compliance. The elimination of compliance reviews will have no significant impact on the accuracy or utility of contract performance reports (CPR).
4. One GL requires identification of cost elements. A contractor will normally identify cost elements to develop estimates and to enable effective variance analysis. The contractor will normally identify these elements for meaningful variance analysis. There is no need for DCMA to verify that the contractor identifies these elements.
5. Two GLs are concerned with DOD-unique issues and are unnecessary for effective project management of a product development contract. Unit costs, equivalent unit costs, and lot costs are irrelevant. Similarly, the material accounting guideline is unnecessary and irrelevant for effective project management.

### **Content of PMI documents with no Counterparts in EIA-748**

The PMI documents include content that is product-oriented not work-oriented. This content is absent from EIA-748. EIA-748 is silent on the product scope or technical baseline and, instead, is oriented to the statement of work. The PMI documents also include guidance for incorporating risk mitigation plans into the cost and schedule baselines. Risk mitigation is absent from the EIA-748 GLs. The PMI content is needed for effective, integrated P/PM in DOD programs.

In developing procedures for reviews of contractor compliance with the PMI documents, DCMA should include the PMI elements in Table 2 in addition to the traditional EVM elements such as EVM measurement techniques, variance analysis and EAC.

<b>Table 2. Selected Elements of PMI Documents that Should be Included in DCMA Compliance Reviews</b>				
<b>EIA-748 GL</b>	<b>Guideline text</b>	<b>EVM Sec.</b>	<b>PMBOK Sec.</b>	<b>DCMA Assess Contractor Compliance with the Following</b>
none		3.2		Develop the integrated management plan to include the scope management plan, 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 commonly used in this process.	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 defines the 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.	3.2.4, 3.2.6		The project team develops a responsibility assignment matrix (RAM) that tracks WBS (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.	3.3, 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, schedule, risk, and cost are associated at a common level across the baselines (either CA, WP, or activity) with an established 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.		<b>6.2.2.1</b>	The project WBS, deliverables, and acceptance criteria documented in the 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.	3.2.2.2		Determine the measurement method, technique or criteria to be used for progress evaluation of the activity types within a WP. Determine an approach for measuring the scope accomplishment for each CA.
none			1.2.4.7	Collect work performance data... including reported percent of work physically completed, quality and technical performance measures, etc.
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		3.3.3	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:

				<ul style="list-style-type: none"> <li>• Product scope description. Progressively elaborates the characteristics of the product described in the requirements documentation.</li> <li>• 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.</li> <li>• Acceptance criteria. A set of conditions that is required to be met before deliverables are accepted.</li> </ul>
none			3.2.5	Establish the process for determining how the work for <b>risk responses</b> is included in the baselines and integrate risk management into the development of the risk-based cost and schedule estimates, including cost and schedule risk analysis.
none			5.2.3.2	Track (product) requirements throughout the project life cycle, helping to ensure that requirements approved in the requirements documentation are delivered at the end of the project. Include current <i>status</i> (such as, approved, assigned, completed), and status date.

### Cost Savings

It is recommended that DCMA cease to perform compliance reviews regarding the 11 EIA-748 GLs in Table 1. In my opinion, it was no accident or lack of diligence when the authors of these documents reached voluntary consensus to exclude those topics from the approved documents. They are not needed for effective P/PM. Furthermore, the inclusion of these GLs is evidence that EIA-748 is a *de facto* government standard, not a widely-accepted standard.

Also, I believe that the regulatory requirement to comply with these DOD-unique GLs has a consequence (intended or not) of discouraging new, potential commercial competitors from responding to solicitations.

My opinions are based on experience with U.S. defense contractors and with commercial IT companies in India and South Korea. Also, I am an author of both the original EVMS standard in 1998 and the predecessor of the *PMI Standard for EVM*, the *PMI Practice Standard for EVM*. In my opinion, EIA-748 is like my first car, a 1954 stick-shift Chevy. In contrast, the *PMI Standard for EVM* is a Tesla.

Please contact me for further assistance or clarification.

A handwritten signature in blue ink that reads "Paul J. Solomon". The signature is written in a cursive style with a horizontal line extending from the end of the name.

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Ref: Letter to Deputy Director for Management Margaret Weichert, Subj: Improve Training for Program and Project Management and New Voluntary Consensus Standard for Earned Value Management, December 4, 2019

cc:

Deputy Director for Management Margaret Weichert, OMB

Sen. Joni Ernst, SASC

Sen. Kamala Harris, Homeland Security and Governmental Affairs Committee