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The Honorable Shalanda Young
Director
The Office of Management and Budget
725 17th Street, NW
Washington, DC 20503

Subj: Improve Effectiveness of OMB Circular A-11 and Questions for NDIA

Dear Director Young:

This is a revision to my letter dated February 21, 2022. It includes enhanced justifications to improve the effectiveness of OMB Circular A-11 (A-11). The revised justifications are within two updated white papers. It also includes questions that should be directed to the National Defense Industrial Association (NDIA) regarding the twelve EIA-748 EVMS guidelines that should be abandoned.

In my white paper, I asserted that those guidelines fail to meet objectives of A-11 or of the DoD EVMS Interpretation Guide (EVMSIG).

- A-11 objective: Rely on timely data produced by those systems for determining product-oriented contract status.
- EVMSIG objective: "Provide joint situational awareness of program status and to assess the cost, schedule, and technical performance of programs for proactive course correction."

Also, those guidelines are not commercial program/project management (P/PM) best practices. I have taught EVM to commercial IT companies in India and to Samsung in S. Korea. The courseware was product-oriented did not include those topics.

The recommendations below are applicable to all capital assets which require EVM but especially to software-intensive capital assets.

Compliance with EIA-748 Guidelines not Indicative of Meeting OMB/DoD Objectives

Per A-11, all major acquisitions with development effort will include the requirement for the contractor to use an EVM system that meets the guidelines in EIA-748 to monitor contract performance. However, a contractor's compliance with EIA-748 guidelines does not ensure that the EVM objectives of OMB and DoD will be met:

Evidence of the shortcomings of EIA-748 was first provided in my letter to former OMB Dep. Dir. Jeff Zients in 2009 (cited in previous letter to you).

A more recent assessment is included in the *Section 809 Report of the Advisory Panel on Streamlining and Codifying Acquisition Regulations*, Vol. 1, January 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 ... process in which the end user continuously verifies that the **product meets the requirement.**”

New Recommendation

This letter includes an additional recommendation which will eliminate an ambiguity in the *Capital Programming Guide* (Guide). The Guide is ambiguous and too lenient regarding the inclusion of technical objectives in the work breakdown structure (WBS).

A-11 states that “Earned value is a management technique that relates resource planning to schedules and to *technical*, cost, and schedule requirements.” However, the Guide’s language is inconsistent with that objective by using the “or” word with regard to “objectives.” The use of “or” in the Guide is equivalent to the EIA-748 guideline which states, “Identify physical products, milestones, technical performance goals, **or** other indicators that will be used to measure progress. “Or” gives contractor the option to ignore technical objectives or technical performance goals as base measures of earned value. So they don’t. The remedy for the Guide follows:

Is:

Using EVM, the contractor plans its work using a contractually specified WBS as the baseline. The objectives, tasks, services, **or** deliverables that must be produced by the organization are described in the WBS structure.

Should be:

Using EVM, the contractor plans its work using a contractually specified WBS as the baseline. The tasks, services, or deliverables that must be produced by the organization are described in the WBS structure. *The technical objectives must be described as a technical baseline in the WBS structure or in a referenced authoritative source of truth.*

Voluntary Consensus Standard

The following recommendations were in the previous letter:

(1) Adopt the Voluntary Consensus Standard (VCS) for Program/Project Management (P/PM) from the Project Management Institute (PMI), including American National Standards Institute (ANSI) ANSI/PMI 19-006-2019 in concert with PMBOK Guide.

(2) Replace EIA-748 in the Capital Programming Guide with ANSI/PMI 19-006-2019 in concert with PMBOK Guide.

Justification for this VCS change is provided in the white paper, *DOD Acquisition Reform: EVMS-lite to Program/Project Management*, Rev. 35 (EVMS-lite), in the section headed “Agencies Should Abandon Use of EIA-748 because it is Impractical.”

Regarding software-intensive capital assets, the recommendations regarding VCS support the new DOD Software Modernization Strategy which includes a caveat; “contracting policies, processes, and standards must not hinder, but empower the vision of this strategy.” EVMS-lite includes reasons that disqualify EIA-748 from being used as a VCS for software-intensive major capability acquisitions.

The requirement for contractors to comply with EIA-748 guidelines is a barrier to entry to potential contractors that use commercial best practices and widely-accepted standards for P/PM. Additional information about the Software Modernization Strategy and the shortcomings of EIA-748 is contained in another white paper, *Integrating the Embedded Software Path, Model-Based Systems Engineering, Modular Open Systems Approach (MOSA), and Digital Engineering with Program Management*, March 25, 2022.

Proposed Questions to NDIA

NDIA is currently working on the next version of EIA-748. The EIA-748-E draft retains the twelve guidelines that should be abandoned. NDIA stated the “management value” of those guidelines in its *NDIA EVMS EIA-748-D Intent Guide*. The following table is a variant of Table 2 in the white paper, *DOD Acquisition Reform: EVMS-lite to Program/Project Management*, Rev. 35, 3/30/2022. The table below includes the full text of the guidelines in EIA-748 and the purported “management value” per the *Intent Guide*.

Twelve EIA-748 Guidelines that should be abandoned		
Guideline #	Guideline Per EIA-748	Management Value per NDIA EVMS EIA-748-D Intent Guide
2.1b	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.	The Organizational Breakdown Structure (OBS) helps management focus on establishing the most efficient organization by taking into consideration the availability and capability of management and technical staff, including subcontractors, to achieve the project objectives.
2.1d	Identify the organization or function responsible for controlling overhead (indirect costs).	Visibility into direct and indirect costs is essential for successful management of a project. Therefore, it is important to have a documented process and organizations established specifically to manage and control indirect costs.
2.1e	Provide for integration of the program work breakdown structure (WBS) and the program organizational structure in a manner that permits cost and schedule performance measurement by	The careful establishment of the control account structure ensures the proper level of management is established based on the complexity of the work and the capability of the organization. It also establishes the lowest level of performance

	elements of either or both structures as needed.	measurement necessary for program management.
2.2d	Establish budgets for authorized work with identification of significant cost elements (labor, material, etc.) as needed for internal management and for control of subcontractors.	An essential part of project planning and establishing a performance measurement baseline is the establishment of budgets for all the authorized work. Identification of the budget elements of cost documents the required resources and places work scope with the performing organization.
2.2f	Provide that the sum of all work package budgets plus planning package budgets within a control account equals the control account budget.	The integrity of the performance measurement baseline requires that the budget of the control account equal the sum of its work package and planning package budgets. When the budget of the control account equals the sum of its work package and planning package budgets, it prevents duplicate recording of budgets.
2.2h	Establish OH budgets for each significant organizational component for expenses which will become indirect costs. Reflect in the program budgets, at the appropriate level, the amounts in overhead pools that are planned to be allocated to the program as indirect costs.	The overall value of establishing indirect budgets lies in the ability of company management to manage cost elements that cannot be directly assigned to individual cost objects (products). By comparing actual indirect expenses to established indirect budgets, the company can determine if the absorption of indirect expenses based on existing documented allocation schemes is on track or if allocation rates need to be adjusted. The accurate assignment of indirect expenses, therefore, ensures that each project only receive its fair share of indirect costs.
2.2j	Provide that the program target cost goal is reconciled with the sum of all internal program budgets and management reserves.	A project baseline that reflects the common agreement between the two parties, for example a customer and contractor, provides a common reference point for progress assessment. It provides recognition of contractual requirements and precludes unauthorized changes to the performance measurement baseline. The project target cost must be reconciled with the performance measurement baseline and management reserve.
2.3c	Summarize direct costs from the control accounts into the organizational elements without allocation of a single control account to two or more organizational elements.	Actual costs need to be available at all levels of the OBS to support project management with performance measurement data. Cost collection accounts mapped to the OBS, and the OBS roll-up structure containing no division/allocation of lower-level cost to multiple higher-level OBS elements, helps to ensure performance

		measurement data integrity when it is summarized by OBS.
2.3d	Record all indirect costs which will be allocated to the program consistent with the OH budgets.	Visibility into direct and indirect costs is essential for successful management of a project. Therefore, it is important to have a documented process and organizations established specifically to manage and control indirect costs.
2.3e	Identify unit costs, equivalent unit costs, or lot costs when needed.	A manufacturing accounting system capable of isolating unit and lot costs in a production environment should allow the flexibility to plan, measure performance, and forecast in a more efficient way when there are multiple projects in the same production line.
2.3f	For EVMS, the material accounting system will provide for: 1. Accurate cost accumulation and assignment of costs to control accounts in a manner consistent with the budgets using recognized, acceptable, costing techniques. 2. Cost recorded for accomplishing work performed in the same period that earned value is measured and at the point in time most suitable for the category of material involved, but no earlier than the time of actual receipt of material. 3. Full accountability of all material purchased for the program including the residual inventory.	The establishment of a valid comparison of planned material costs for completed work with the actual material costs for that work provides the basis for realistic evaluation of cost deviations and ultimately facilitates cost at complete projections. Residual inventory provides visibility into excess material for the current deliverables available for replacement of failures in the current project or future projects having similar deliverables. High value or critical material items may require special considerations for planning and measuring progress. Contracting methods should be considered that support objectives and promote the use of progress methods to meet the needs of integrated program management.
2.4d	Summarize the data elements and associated variances through the program OBS and/or WBS to support management needs and any customer reporting specified in the contract.	Understanding the relationship among scope, cost, schedule, and risk is critical to successful project execution. Variances provide an understanding of project conditions, allowing the project manager to properly address project issues, risks, and opportunities. They also identify significant problem areas coming from all levels of the organization and project scope of work, derived from the same data sources. Variances provide valuable management information. Note: Guideline 2.4b is "Identify, at least monthly, the significant differences between both planned and actual schedule performance and planned and actual cost performance and provide the reasons

		for the variances in the detail needed by program management.” Isn't 2.4d redundant?
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What You Can Do

Please request that NDIA prepare and submit cost/benefits analyses that:

- Justify retention of the twelve guidelines
- Explain how these guidelines meet the A-11 and *EVMS/IG* objectives.
- Provide evidence that they are commercial best P/PM practices.

Also, please consider implementing the other recommendations discussed above.

This and previous letters and the cited white papers may be downloaded from www.pb-ev.com at the “Acquisition Reform” tab. I have provided similar recommendations to senior DOD officials.



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cc:

Hon. Andrew Hunter, (PTDO USD(A&S))

Hon. Heidi Shyu, (USD(R&E))