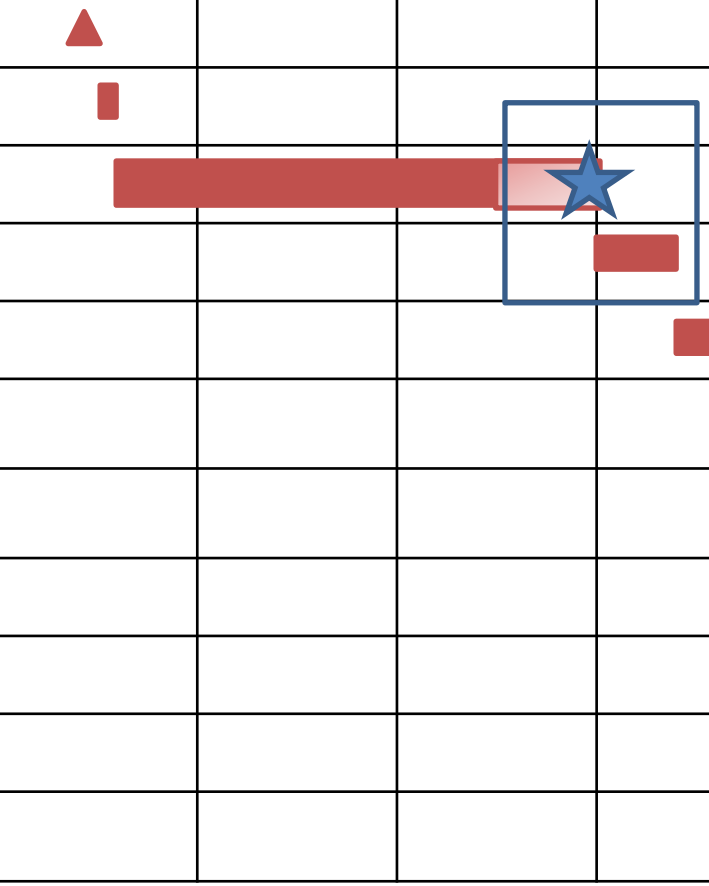
EIA-748 E Working Group

Shane Olsen, Joan Ugljesa, Russ Rodewald

September 2021

General Timeline

Activities	2019	2020	2021	2022	2023
Kickoff Working Group (April 2019)					
Establish working group plan					
Produce Draft A					
Complete comment and adjudication cycle					
Produce Draft B					
Complete comment, adjudication cycle, work with stakeholders re policy, process, procedure updates					
Final draft - publish finished, stable document content so all parties can prepare for transition					
Initiate reaffirmation cycle with SAE					
Complete SAE review, comment, and approval cycle					
SAE publishes Rev E – 2023					
Publish updated IPMD Intent Guide, Application Guide					



Summary of Approach

- **Focus on GL (Section 2) Streamlining and Modernization**
- **Improve flow of GLs through the process**
  - Ensure that GLs are sequential
- **Clarify intent, definitions and implementing requirements in Section 3**
- **Review/rewrite in Sections for internal draft**
  - Iterate through entire document for releasable draft
- **Open for global comments by <u>END OF 2021</u>**
  - Expect significant amount of commentary!
  - Will use IPMD Meeting sessions to outbrief adjudication

32 Guidelines Section 2

- 2.1 Organization
  a. (1) Define the authorized work elements for the program. A product-oriented work breakdown structure, tailored for effective internal management control, is commonly used in this process.
  b. (2) Identify the program organizational structure, including the major subcontractors, responsible for accomplishing the authorized work, and define the organizational elements where work will be planned and controlled.
  c. (3) Integrate the program work breakdown structure and organizational breakdown structure to identify management control points where responsibility is assigned to specific work scope.
  d. (4) Provide for the integration of the scheduling, budgeting, work authorization, and cost accumulation processes with each other, and, as appropriate, the program work breakdown structure and organizational structure to enable cost and performance measurement by elements of either or both structures.

32 Guidelines Section 2

- 2.2 Planning, Scheduling, and Budgeting
  a. (5) Schedule the authorized work in a manner that describes the sequence of work and identifies task interdependencies required to meet the requirements of the program.
  b. (6) Identify in the schedule the physical products, milestones, technical performance goals, or other objective indicators that will be used to measure progress.
  c. (7) Establish and maintain a time-phased budget baseline comprised of scope, schedule and budget at the control account level. Budget for far-term efforts may be held in higher-level accounts until an appropriate time for allocation at the control account level. Initial budgets established for performance measurement are based on either internal management goals or the external customer negotiated target cost including estimated for authorized but undefinitized work.
  d. (8) Authorize control account scope, schedule and budget comprised of elements of cost (labor, material, subcontractors, etc.) required to complete the effort.

32 Guidelines Section 2

- 2.2 Planning, Scheduling, and Budgeting
  - e. (9) Plan the authorized scope, schedule and budget into work packages and/or planning packages. Determine budgets in terms of dollars, hours, or other measurable units such that the sum of all work package and planning package budgets equal the control account budget.
  - f. (10) Establish objective performance measurement criteria for each work package consistent with the way work is expected to be accomplished. Only that effort which is not measurable is identified as level of effort.
  - g. (11) Apply indirect rates, developed by the responsible organizations, to the program's direct resource budgets, at the applicable level, to determine the indirect budgets that support the establishment of the performance measurement baseline.
  - h. (12) Identify any undistributed budget or management reserve.
  - i. (13) Provide that the program target cost is reconciled with the sum of all internal program budgets and management reserve.

32 Guidelines Section 2

- 2.3 Progress Assessment and Data Collection
  a. (14) Using predefined performance measurement criteria, status the schedule and assess physical progress to determine budget earned. Earned Value for material items may not be credited earlier than the actual receipt of the material nor later than the consumption of the item.
  b. (15) Collect actual costs (direct and indirect), by elements of cost, from a formal system controlled by the general books of account for comparison to corresponding budgets in the EVMS. Where actual costs are not available for comparison, estimated costs will be entered into the EVMS.
  c. (16) Account for all purchased material, for which earned value has been calculated, that will be residual to the project.

32 Guidelines Section 2

- 2.4 Analysis and Management Reports
  a. (17) At least on a monthly basis, generate the following information for the control account and higher levels, as necessary for management control, using actual cost data from or reconcilable with the accounting system:
     1. Comparison of the amount of planned budget and the amount of budget earned for work accomplished. This comparison provides the schedule variance.
     2. Comparison of the amount of the budget earned and the actual (applied where appropriate) direct costs for the same work. This comparison provides the cost variance.
  b. (18) Identify and evaluate, at least monthly for each control account, the significant differences between both planned and actual schedule performance and planned and actual cost performance, analyze and provide the reasons for the variances in the detail needed by program management.
  c. (19) Evaluate indirect cost variances and the impact of indirect cost performance on individual program performance.

32 Guidelines Section 2

- 2.4 Analysis and Management Reports
  - d. (20) Using the results of control account variance analysis and indirect performance evaluations, update the control account estimates at completion to reflect future resource requirements to complete the remaining authorized work and, by comparing to budgets, calculate the variance at completion.
  - e. (21) Summarize, review and evaluate the data elements and associated variances through the program organization and/or work breakdown structure to support management needs and any customer reporting specified in the contract.
  - f. (22) Implement managerial actions taken as the result of earned value information
  - g. (23) Develop a revised estimate of cost at completion for all authorized work based on performance to date, estimates of future resource requirements, and an evaluation of program risks and opportunities . Compare this estimate with the contract budget base to identify variances at completion to support internal management needs, applicable customer reporting, and funding requirements.

32 Guidelines Section 2

- 2.5 Revisions and Data Maintenance
  a. (24) Incorporate customer directed changes in a timely manner, documenting and reconciling the effects of such changes in scope, schedule and budget. When incorporating a customer directed change prior to negotiation, plan the work based on the estimated value of the scope.
  b. (25) Document and reconcile changes to current scope, schedule and budgets as a result of internal replanning.
  c. (26) Control retroactive changes to records pertaining to work performed that would change previously reported amounts for actual costs, earned value, or budgets. Adjustments are made only for correction of errors, routine accounting adjustments, effects of customer or management directed changes, including implementation of a single point adjustment.
  d. (27) When necessary, propose, document, and establish a total project budget greater than the contract budget base (over target baseline) and/or a total project schedule exceeding the contractual period of performance (over target schedule), to support management of the remaining authorized work. Advance notification must be provided to the customer prior to implementation.

Section 3: EVMS Process Discussion

- **Section 3 Provides for "amplifying information relative to the guidelines"**
  - EVMS Process Discussion that takes the GL from a criteria to application within Integrated Program Management practices
  - This is defined by the Government and Industry Users as the "Intent" of the Guidelines

Section 3: EVMS Process Discussion

- **Section 3 Example (GL1):**

Intent: The primary goal of performance measurement is to provide an assessment of progress at any point in time. The key to achieving this goal is decomposing the program's work scope to a manageable level where there is a clear understanding of the technical requirements and completion criteria so that schedule and cost estimates can be developed. A product-oriented WBS is commonly used for this purpose.

The WBS should be extended to the level necessary for management action and control. The level to which the WBS is extended may vary based upon the complexity of the work scope, as well as the needs for effective management control of the program's technical, schedule, and cost parameters. Following the 100% rule for WBS development, where the next level of decomposition of a WBS element (child level) represents 100% of the work applicable to the next higher level (parent level) of the WBS, facilitates the establishment of a well-defined framework for scope management. A WBS dictionary defines and communicates the technical requirements and work scope such as specifications, assumptions, dependencies, or what is included and excluded.

As a program progresses from one phase to another, it is normal to reassess the WBS. For example, the product breakdown during the development phase for a program may be different from the product breakdown, or the assembly sequence, used for the program in the production phase. Should program requirements change, the WBS evolves with the program. When the work scope can only be defined in general terms such as when an exploratory phase is required to define the full extent of the work, it is necessary to understand the additional risks this creates because of the level of uncertainty. Flexible program plans and controls should be in place to account for these risks until the work scope and requirements can be further defined.

Section 3: EVMS Process Discussion

OMB A-11

OMB Memorandum M-18-19, **Improving the Management of Federal Programs and Projects through Implementing the Program Management Improvement Accountability Act (PMIAA)** (June 25, 2018), provides guidance and a strategic outline for improving program/project management. PMIAA requires Government-wide standards and policies for program management and establishes a new interagency council to improve program/project management practices among agencies. The Act establishes a new role, the Program Management Improvement Officer (PMIO). The responsibility of PMIOs is to implement program management policies established by their respective agencies and develop strategies to enhance the role of program management and managers within their departments. Additionally, the PMIAA requires that agencies conduct annual portfolio reviews of programs in coordination with the Office of Management and Budget (OMB) to ensure major programs are being managed effectively, and that OMB conduct reviews of areas identified by the Government Accountability Office (GAO) as "high risk."

PUBLICATIONS

Electronics Industries Alliance Standard 748, **Earned Value Management Systems**.

GAO Cost Estimating and Assessment Guide GAO-09-3SP (March 2009).

GAO Schedule Assessment Guide GAO-16-89G (December 2015).

The Main Issue is that Federal Regulations only Accept Section 2 of the EIA-748

Federal Acq. Regulations (FAR)

52.234-4 Earned Value Management System.

As prescribed in 34.203(c), insert the following clause:

EARNED VALUE MANAGEMENT SYSTEM (NOV 2016)

(a) The Contractor shall use an earned value management system (EVMS) that has been determined by the Cognizant Federal Agency (CFA) to be compliant with the guidelines in Electronic Industries Alliance Standard 748 (EIA-748) (current version at the time of award) to manage this contract. If the Contractor's current EVMS has not been determined compliant at the time of award, see paragraph (b) of this clause. The Contractor shall submit reports in accordance with the requirements of this contract.

(b) If, at the time of award, the Contractor's EVM System has not been determined by the CFA as complying with EVMS guidelines or the Contractor does not have an existing cost/schedule control system that is compliant with the guidelines in EIA- 748 (current version at time of award), the Contractor shall-

Open Discussion

?