



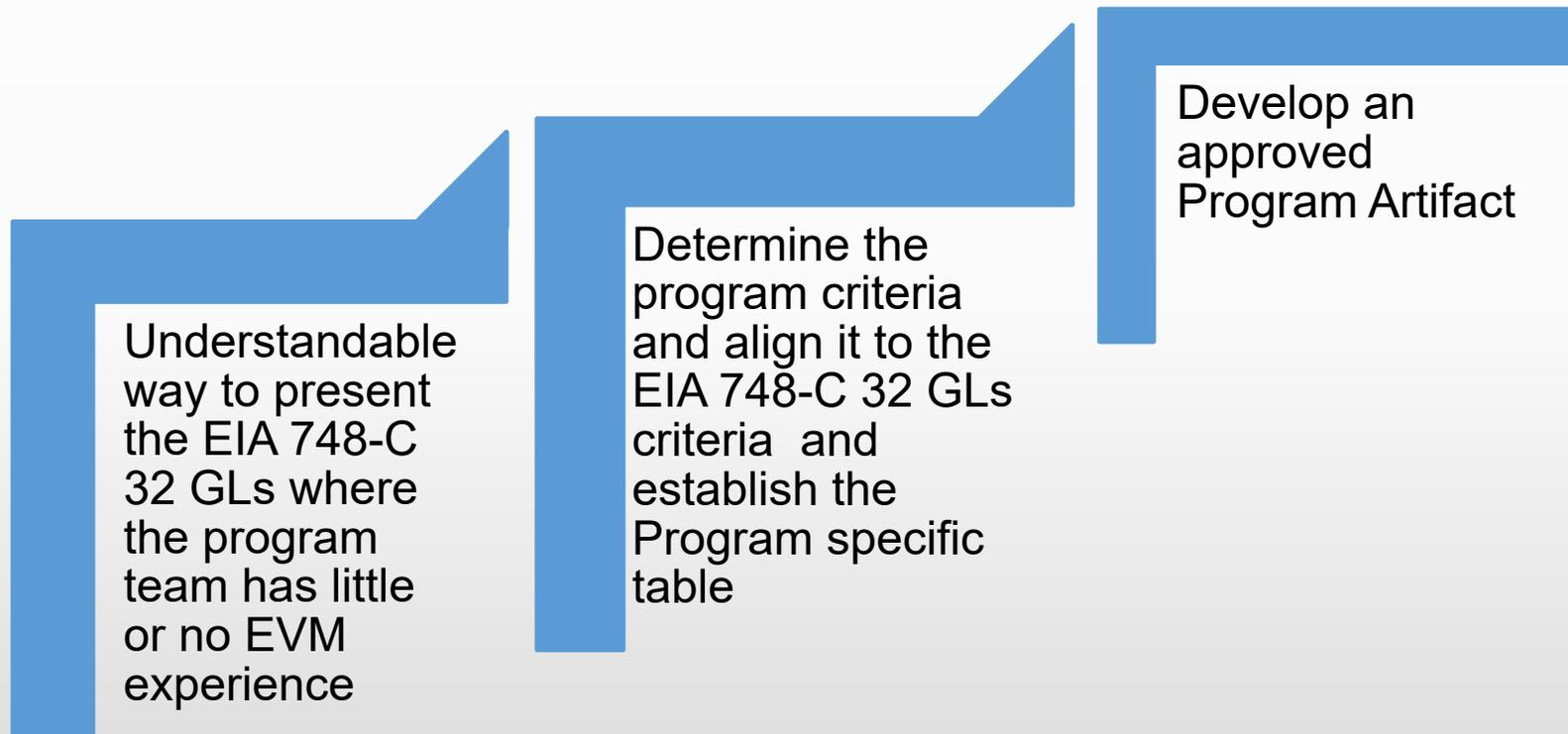
Earned Value Management Practitioners Forum 2018

EIA-748-C Compliance Matrix

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Learning Objectives



Why this Matrix worked

- Program has requirement to use EVM reporting
- Program Senior Management and team members have not been on a program that required it
- Provided a KISS (Keep It Simple for Susan) method for the Program team to understand WHAT is required and HOW it will be done
- Program Manager approved it to be artifact that established Program criteria it will meet
- It can be revised and approved with revision to maintain traceability

History of this Matrix – Part 1

- I was the EVM Analyst hired by a company that had very little experience with EVM Systems,
- I needed a KISS (Keep It Simple for Susan) method to:
 - introduce the 32 Guidelines and explain what the program needed to do to meet the requirements,
 - as well as set the program and company up to develop an EVMS that could be evaluated and receive DCMA approval
- I contacted an EVM colleague I had worked with – we had set up the reporting program for an new EVMS at another company. We discussed how she had done this for prior programs and their Program Management teams
- She shared a matrix her company had developed that used:
 - The NDIA EIA 748-C Guidelines, their format used an earlier version
 - A “stoplight” dashboard as a method to document the EVMS program and what was done to meet the requirements.

Original Matrix the EVM Team used

- Example from the Original Matrix - Guideline 1 – with narratives
- The Guideline, Intent and Typical Objective Evidence are from the NDIA Guideline
- The Program Evidence is developed by the Program Team

Guideline (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.

Management Value: The work breakdown structure (WBS) is used as the basic building block for the planning of all authorized work. The WBS is a product-oriented division of project tasks depicting the breakdown of work scope for work authorization, tracking, and reporting purposes, that facilitates traceability and provides a control framework for management. It should ensure that the statement of work (SOW) is entirely covered and allow for the integration of technical, schedule, and cost information. The WBS also facilitates communications as it establishes a common frame of reference for customers, management and integrated product teams (IPT).

Intent: A WBS is a direct representation of the work scope in the project, documenting the hierarchy and description of the tasks to be performed and their relationship to the product deliverables. The WBS breaks down all authorized work scope into appropriate elements for planning, budgeting, scheduling, cost accounting, work authorization, measuring progress, and management control. The WBS must be extended to the level necessary for management action and control based on the complexity of the work. Each item in the WBS is assigned a unique identifier. These identifiers should provide a structure for a hierarchical summation of costs and resources. A WBS dictionary defines the work scope for each element in the WBS.

Typical Objective Evidence:

- Work breakdown structure (WBS)
- WBS dictionary (may or may not be used, but a method to reconcile the statement of work to the WBS structure must be demonstrated).
- SOW - WBS Cross reference

***PROGRAM* Evidence:**

- *PROGRAM* Work breakdown structure (WBS) Index
- *PROGRAM* WBS dictionary
- *PROGRAM* SOW
- *PROGRAM* SOW/WBS Matrix
- *PROGRAM* Responsibility Assignment Matrix

Original Matrix the EVM Team used (Cont'd)

- Guideline 1 – table with attributes, status and remarks – all developed by the Program Team
- Dashboard indicators show status of the attributes

<i>Typical Attributes</i>	<i>Degree Met</i> ● Fully ● Partially ● Not Met ● N/A	<i>Remarks</i>
The WBS breaks down all authorized work scope into appropriate elements for planning, budgeting, scheduling, cost accounting, work authorization, measuring progress, and management control.	●	*PROGRAM* has established a WBS Index, WBS dictionary, and WBS-SOW Matrix to ensure all scope is broken down into appropriate elements for planning, budgeting, scheduling, cost accounting, work authorization, measuring progress, and management control.
The WBS is extended to the level necessary for management action and control based on the complexity of the work.	●	Release and operations management are decomposed to a manageable level in the schedule, but the project WBS used for budgeting and cost collection is at the 2 nd level WBS. Since the customer has agreed to this high level, no actions are required but in the future, work scope this large should be decomposed further in the WBS.
Each item in the WBS is assigned a unique identifier.	●	See WBS Index.
Unique identifiers provide a structure for a hierarchical summation of costs and resources.	●	See WBS Index.
A WBS dictionary defines the work scope for each element in the WBS.	●	See WBS dictionary.
Only one WBS is used per project and it contains all project work including revisions for authorized changes and modifications.	●	See WBS Index and Dictionary.
WBS contains all contract line items and end items.	●	See WBS-SOW Matrix.
WBS identifies all WBS elements specified for external reporting.	●	See WBS-SOW Matrix.
WBS is extended at a minimum to the control account level.	●	See Responsibility Assignment Matrix.
WBS elements collectively provide a complete definition of work scope requirements.	●	See WBS-SOW Matrix.

History of this Matrix – Part 2

- The EVM Team Lead I worked with determined it would best be used as a table for documenting how the Program would meet the Guidelines.
- The EVM Team converted the “stoplight dashboard” to a table,
- Each guideline was reviewed for applicability
 - If applicable, it was developed for the matrix
 - If it was not applicable, it was noted “NA” with a statement why it was not applicable.
 - I.e. – Guideline 24 - Identify budgeted and applied (or actual) indirect costs at the level and frequency needed by management for effective control, along with the reasons for any significant variances.
 - In the case of the example program it did not apply because PROGRAM X Program is the system integrator and does not have ownership of the accounting system, therefore would not be identifying the costs for the Program– direct or indirect, and would not be addressing any variations.

History of this Matrix – Part 2 – Cont'd

Corporate Matrix

Based on:

- Earned Value Management Systems, EIA-748-C Intent Guide Appendix, April 29, 2014 – source for:
 - Management Value
 - Intent
 - Typical Objective Evidence and
 - Typical Attributes.
- Program specifics, including:
 - Program Plan
 - Program SOW / PWS
 - Program WBS

Sample Corporate Matrix:

- Specifics that affect how this example was developed:
 - Program is its own integrator
 - IT Program

How the EVM Team adapted it

- The EVM Team changed the Matrix to an artifact documenting how the program is meeting the guidelines
 - Maintained the basic table structure, narratives for Value and Intent – taken from the NDIA Intent Guide
 - Program Team determines the Objective Evidence and Program Evidence to be specific to the program

Guideline (1): Define Work Scope (WBS)

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.

Management Value: The work breakdown structure (WBS) is used as the basic building block for the planning of all authorized work. The WBS is a product-oriented division of project tasks depicting the breakdown of work scope for work authorization, tracking, and reporting purposes, that facilitates traceability and provides a control framework for management. It should ensure that the Project Work Statement (PWS) is entirely covered and allow for the integration of technical, schedule, and cost information. The WBS also facilitates communications as it establishes a common frame of reference for customers, management and integrated product teams (IPT).

Intent: A WBS is a direct representation of the work scope in the project, documenting the hierarchy and description of the tasks to be performed and their relationship to the product deliverables. The WBS breaks down all authorized work scope into appropriate elements for planning, budgeting, scheduling, cost accounting, work authorization, measuring progress, and management control. The WBS must be extended to the level necessary for management action and control based on the complexity of the work. Each item in the WBS is assigned a unique identifier. These identifiers should provide a structure for a hierarchical summation of costs and resources. A WBS dictionary defines the work scope for each element in the WBS.

Typical Objective Evidence:

- Work breakdown structure (WBS)
- WBS dictionary (may or may not be used, but a method to reconcile the statement of work to the WBS structure must be demonstrated).

PROGRAM X Evidence:

- | | |
|--|---|
| <ul style="list-style-type: none"> • PROGRAM X Work breakdown structure (WBS) Index • PROGRAM X WBS dictionary | <ul style="list-style-type: none"> • PROGRAM X PWS • PROGRAM X PWS/WBS Matrix • PROGRAM X Responsibility Assignment Matrix (RAM) |
|--|---|

How the EVM Team adapted it (Cont'd)

- The EVM Team changed the Matrix to an artifact documenting how the program is meeting the guidelines
 - Maintained the basic table structure, narratives for Value and Intent
 - Revised the Objective Evidence and Program Evidence to be specific to the program
 - Typical Attributes are from the NDIA Guide
 - Remarks are developed by the Program

Typical Attributes	Remarks
The WBS breaks down all authorized work scope into appropriate elements for planning, budgeting, scheduling, cost accounting, work authorization, measuring progress, and management control.	PROGRAM X has established a WBS Index, WBS dictionary, and WBS-PWS Matrix to ensure all scope is broken down into appropriate elements for planning, budgeting, scheduling, cost accounting, work authorization, measuring progress, and management control.
The WBS is extended to the level necessary for management action and control based on the complexity of the work.	Task management is decomposed to a manageable level in the schedule, but the project WBS used for budgeting and cost collection is at the 6th level WBS.
Each item in the WBS is assigned a unique identifier.	See WBS Index.
Unique identifiers provide a structure for a hierarchical summation of costs and resources.	See WBS Index.

Key Takeaways

- Best Practices
 - Enable the Program Team to “get up to speed” using and understanding EVM Guidelines
 - Establish Program artifacts that are comprehensive and understandable
 - Provide a reference document for program team, especially useful when team members have no previous experience with an EVM program
 - Provide a document that can be updated and has traceability, AND
 - Using previously developed, successful formats provide new programs:
 - Validated method to educate program team
 - Tools to set up program artifacts

Key Takeaways (Cont'd)

Tips & Tricks

- Involve the program management in identifying the Program evidence and developing the attribute remarks to provide a method:
 - To educate Program team on the EIA 748-C Guidelines and make the guidelines “understandable”
 - To ensure Program management has “buy in” concerning deliverables based on the requirements

Thank you for your time

WORD and PDF files are available:

- PDF of the original table provided to me
- WORD document of the Program artifact

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