

EVMS Test Metric Specification

1. **GUIDELINE NO:**
10

2. **TEST METRIC ID:**
10A105a

3. **TEST TYPE:**
Automated/Manual

4. **ATTRIBUTE/INTENT DEFINITION:**
Intent: Each work package is established using the best method to budget and then measure its progress toward completion. The EVT is established based on how the work is planned (Budgeted Cost for Work Scheduled (BCWS)), and performance (Budgeted Cost for Work Performed (BCWP)) is earned consistent with the EVT. Based on the nature of the work contained in work packages, an appropriate EVT is identified for use in measuring work accomplishment.

10A1: Work packages have the following characteristics:

- Represent the scope of work at the level where work is performed or aggregated.
- Are distinguishable from all other work packages.
- Are assigned to a single organizational element.
- Include scheduled start and completion dates; and as applicable, interim milestones, all of which are representative of technical accomplishment.
- Have a time-phased budget or value expressed in terms of dollars, labor hours, or other measurable units that is substantiated in terms of supporting project plans.
- Have durations that are limited to a span of time that is practical for the work scope. Longer-duration work packages have interim objective measures, such as points of technical achievement, to enable accurate performance assessment.
- Are identified within the Integrated Master Schedule (IMS) and other supporting schedules.

5. **TEST DEFINITION:**
Is BCWP claimed consistent with the WP EVT?

6. **TEST METRIC:**
X = Count of in-progress Non-LOE, non-material WPs sampled with a recorded percent complete that is not consistent with budget and EVT.
Y = Total count of in-progress Non-LOE, non-material WPs sampled

7. **METRIC THRESHOLD:**
 $X/Y \leq 5\%$

8. **DATA ELEMENTS REQUIRED:**
13 EV Cost Tool Data
 13AJ Element of Cost
 13AN EV % Complete
 13AP EVT
 13H BAC

13BA WP/PP/SLPP UIDs
13Q BCWP_{CUM}
13S BCWP_{CUR}
13X BCWS_{CUR}
32 Quantifiable Backup Data
32A EV % Complete
44 Cost Data Dictionary

9. ASSUMPTIONS:

1. Test metric is based on a sample of in-progress Non-LOE, non-material WPs.
 2. With threshold > 0, the MIL-STD-1916 and ANSI/ASQ Z1.4 Zero Based Sampling Plan does not apply. Chosen sampling methodology must be explained. When appropriate, it is acceptable to test the entire population instead of sampling.
 3. “Supported” means that QBD provides an output which equates to the reported percent complete.
 4. “Predetermined” means that QBD is in place at the time the work is started.
 5. “Objective” means that the criteria included in the QBD represent technical progress towards WP completion.
 6. If BAC and BCWP_{CUM} are within \$100 (or 1 hour), then the WP is complete.
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10. INSTRUCTIONS:

1. Identify a sample of in-progress Non-LOE, non-material WPs; this is the denominator (Y) of the test metric.
2. For each selected WP, verify that percent complete is consistent with the EVT assigned and budget allocated:
 - a. Where the EVT permits a limited range of values, identify any WPs that have a BCWP that is inconsistent with the way BCWS was planned (Note: An example of an inconsistent WP would be an EVT of 0-100 with percent complete that is neither 0% nor 100%).
 - b. Where the EVT is % complete, identify any WPs that have a percent complete that cannot be substantiated by the QBD associated with the WP.
3. Count the WPs that are determined by Steps 2a and 2b to be inconsistent; this is the numerator (X) of the test metric.
4. Calculate the test metric (Block 7): X divided by Y.
5. Use block 7 as an indicator in the overall Risk Assessment to determine if further evaluation is warranted.

11. CONFIGURATION SUMMARY:

<i>Rev Number</i>	<i>Detailed Description of Change</i>	<i>Sections Affected</i>	<i>Spec Sheet Date</i>
v1.0	Initial Budget CCB	All	1/19/2016
v1.1	Edited and returned for retest		6/22/2016
v2.1	Updated after retest		11/17/2016
v3.0	Minor changes – updated to 3.0		3/23/2017
v3.1	Removed Block 4 (Frequency)		12/19/2018
v3.3	No changes – updated to v3.3		5/24/2019
v3.4	Update: Attribute and Assumptions		8/31/2019
v3.5	Update: Attribute, Test Step, Step Metric, Data Elements Required, Assumptions, and Instructions		2/22/2020
v3.6	Update: Test Metric, Data Elements Required, Assumptions, and Instructions		8/30/2020
v4.0	Changed Metric Template to delete old blocks 4, 9, 13, & 14 & updated block numbering & wording. Removed Pass/Fail verbiage to allow assessment of test results case by case. Updated blk 8 for consistency & added data element 44 to supplement artifact 13.	8 &10	3/05/2021
v5.0	No changes – updated to v5.0		12/13/2021
v6.0	Update layout for Section 508 Accessibility Compliance		12/02/2022
v7.0	Update layout for Section 508 Accessibility Compliance		12/06/2024
v8.0	No changes - updated to v8.0		8/21/2025