

SSI Tools Test Method for DECM 09A103a

Are elements of cost defined/identified for each control account?

SSI Tools identifies incomplete tasks with a Control Account (CA) id. The Element of Cost (EOC) for each resource assigned to these tasks is evaluated to determine if all EOCs are of the same type or if EOC types are missing. Examples of EOC types include: "Labor", "Material", "Travel", "Subcontract" and Other Direct Costs (ODC).

Note - Differences between SSI Tools test and DECM metric:

Since many projects do not include resource rates and budget cost values, SSI Tools sums baseline work and baseline cost to determine the numerator and denominator for its test. DECM uses baseline cost only.

Findings for this test include:

- Tasks with two or more EOC types
- Tasks with one or more resource assignment with no EOC type identified

Setup Instructions using SSI *DECM Audits* form

1. Enter the identification method for Control Accounts tasks using the drop-down list named **Control Account (CA) code or id**
2. Enter the identification method for Element of Cost using the drop-down list named **Element of Cost Identification**

The screenshot shows the 'DECM Audits' application window with the 'Project Fields for EV' tab selected. The form is titled 'Fields used for Earned Value Metrics' and contains several configuration options:

- Control Account(CA) code or id:** Text3 (WP Parent)
- Control Account Manager (CAM):** Contact
- Control Account Org Breakdown Structure (OBS):** Text2 (OBS)
- Control Account Work Breakdown Structure (WBS):** WBS
- Work Package (WP) code or Id:** Text1 (WP ID)
- Earned Value Technique (EVT) Codes:** Text4 (EVM)
- Element of Cost (EOC) Identification:** Resource Group
- Calendar Location:** C:\Users\Public\SSI_Tools\TSV
- Fiscal / Accounting Calendar:** TSV_2019_2024-Fiscal_Cal.csv
- How are Special Tasks Identified?** Per Earned Value Technique (EVT)
- Level of Effort (LOE) ID Method:** Per Earned Value Technique (EVT)
- Planning Package Id Method:** Per Earned Value Technique (EVT)
- Schedule Visibility Task (SVT) Id Method:** SVT in Name
- Schedule Margin Task Id Method:** SCHEDULE MARGIN in Name
- Load Saved Settings for this project:** DefaultSettings

At the bottom, there is a status bar that reads 'Getting Data for: Are elements of cost defined/identified for each control account?' and a 'Get Help' button.

References from EVMS Test Metric Specification

5. Attribute: 09A1: Work authorization process/documentation identifies work scope description, budgets segregated by elements of cost (i.e., direct labor dollars/hours, material dollars, subcontract dollars, and other direct costs), and period of performance for the authorized effort.
6. Test Step: Are elements of cost defined/identified for each control account?
7. Test Metric: X = Sum of BAC for incomplete CAs with budgets that cannot be segregated by element of cost Y = Total BAC of incomplete CAs
10. Data Elements Required: 13 EV Cost Tool Data 13H BAC 13AJ Element of Cost
11. Assumptions: 1. If BAC and BCWP_{CUM} are within \$100 (or 1 hour), then CA is complete. 2. If the element of cost segregation is at a lower level than CA then perform the test at lowest level.
12. Instructions: 1. Sum the total BAC for incomplete CAs; this is the denominator (Y) of the test metric. 2. Identify any incomplete CAs with budgets not segregated by element of cost, and sum the BAC of those CAs; this is the numerator (X) of the test metric. 3. Calculate the test metric (Block 7): X divided by Y. 4. If the result is within the threshold (Block 8), the metric passes.

SSI Report

SSI Report shows the following headers referring to the DCMA EVMS Test Metric Specification

- Metric ID – Block 2 **Unique Test Metric ID**
- Name – Block 6 **Test Step**
- Metric Threshold – Block 8 **Metric Threshold**
- Numerator (X) – Block 8 **Metric Threshold X Value**
- Denominator (Y) – Block 8 **Metric Threshold Y Value**
- Score – Block 8 **Metric Threshold X/Y Value**
- Pass/Fail – Block 8 **Metric Threshold X/Y Pass/Fail determination**
- Metric Spec Link – Link to the **EVMS Test Metric Specification**
- SSI Test Link – Link to SSI Test method and description (this document)

SSI Report shows the following Details:

- **Unique ID** – Task Unique ID in Microsoft Project
- **Name** – Task Name in Microsoft Project
- **BAC Work & BAC Cost** –
 - **All Incomplete CAs** - the total baseline hours and dollars for resource assignments.
 - Line items below **All Incomplete CAs** are work & planning packages that contain mixed or missing EOCs
- **Mixed EOC** – shows the mixed or missing EOCs

Note – the value on the metric summary line below Numerator (X) is Work + Cost for all the items with mixed or missing ECOs. The value on the metric summary line below Denominator (Y) is Work + Cost for all incomplete CAs. If your project contains resource rates and those rates can be used to determine Budget at Complete (BAC) , you can re-sum the Numerator, Denominator and recalculate the Score and Pass/Fail determination.

For example, if cost in the Project = BAC then the Denominator in this example can be \$159,745.00 (the value of “All Incomplete CAs” BAC Cost. The Numerator can be the sum of BAC Cost for all the lines below “All Incomplete CAs” or \$27,900 (4,800 + 13,500 + 4,200 + 5,400).

Report Example

A	B	C	D	E	F	G	H	I
Metric ID	Name	Metric Threshold	Numerator (X)	Denominator (Y)	Score	Pass/Fail	Metric Spec Link	SSI Test Link
09A103a	Are elements of cost defined/identified for each control account?	10%	28,252.00	161,841.60	17%	Fail	DECM Spec	SSI Spec
Unique ID	Name	BAC Work	BAC Cost	Mixed EOC				
NA	All Incomplete CAs	2,096.60	159,745.00					
73	Conduct Critical Design Review (CDR)	64.00	4,800.00	Mixed: Eng,PMO,Mfg,Test				
81	Perform Module Testing	160.00	13,500.00	Mixed: Test,Material,Travel,ODC				
85	Conduct Test Readiness Review (TRR)	56.00	4,200.00	Mixed: Eng,PMO,Test				
95	Conduct Production Readiness Review (PRR)	72.00	5,400.00	Mixed: Eng,PMO,Mfg,Test				