

NDIA IPMD Health Metrics Committee



Angie Barkey
Raytheon Technologies



**Cathy McCain
Bell, Textron**

September 21, 2021

Agenda

- **NDIA IPMD Health Metrics Committee Mission & Objectives and Committee Membership Composition**
- **NDIA IPMD Health Metrics Committee Survey**
- **NDIA IPMD DECM Test Metric Change Process**
- **Supplemental Outputs Provided on New DECM Test Metric Versions**
- **Upcoming October 2021 DCMA Scheduled CCB (v5.0)**
- **Recap of Past DCMA CCB's (v3.1 through v4.0)**
- **January 2021 DCMA Scheduled CCB (v4.0)**
- **July 2020 DCMA Scheduled CCB Event (v3.6) and October 2020 "Out of Sequence CCB" to July 2020 DCMA CCB (v3.6.1)**
- **Additional DECM Test Metric Collaborative Initiatives**

NDIA IPMD Health Metrics Committee

Mission and Objectives

Committee Member Composition

NDIA IPMD Health Metrics Committee

Mission and Objectives



Overview/Mission:

Objective is to adjudicate industry's comments on the DCMA EVMS Compliance Metrics (DECM) and to facilitate the collaboration as one voice to DCMA. This working group will address all industry issues with data driven metrics and will work closely with other IPMD working groups as the need arises.

Leadership:



Angie Barkey
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Cathy McCain
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Objectives:

- Become the voice of Industry to collaborate with DCMA on the EVMS Compliance Metrics (DECM)
- Work closely with DCMA on their data driven metrics to provide feedback on new and/or existing data driven metrics
- Gather and adjudicate all industry comments to send to DCMA as “one voice” before each DCMA CCB meeting
- Collaborate with other NDIA IPMD Committees as the need arises

NDIA IPMD Health Metrics Committee



Membership Composition

- Formation and interest for an NDIA IPMD Health Metric Committee occurred at the Winter NDIA IPM meeting in Jan 2020
- Co-Leads of this Committee are:
 - Angie Barkey (Raytheon)
 - Cathy McCain (Bell, Textron)
- Serving as the NDIA IPMD Board of Director contacts
 - Cherilyn “CJ” Jones
 - Dan Bellovary
- Active committee members is at 30 people

Newest Committee Under NDIA IPMD and Was Launched After Covid-19 Pandemic

NDIA IPMD Health Metrics Committee

Membership Composition



Company / Agency	
AeroJet Rocketdyne	L3Harris
BAE Systems	Leidos
Boeing	Lockheed Martin
Clear Plan	NASA
CNS	Northrop Grumman
Deltek	Pratt & Whitney
Encore Analytics	Raytheon
General Atomics	Rolls Royce
Honeywell	Textron

NDIA IPMD Health Metrics Committee

Committee Survey

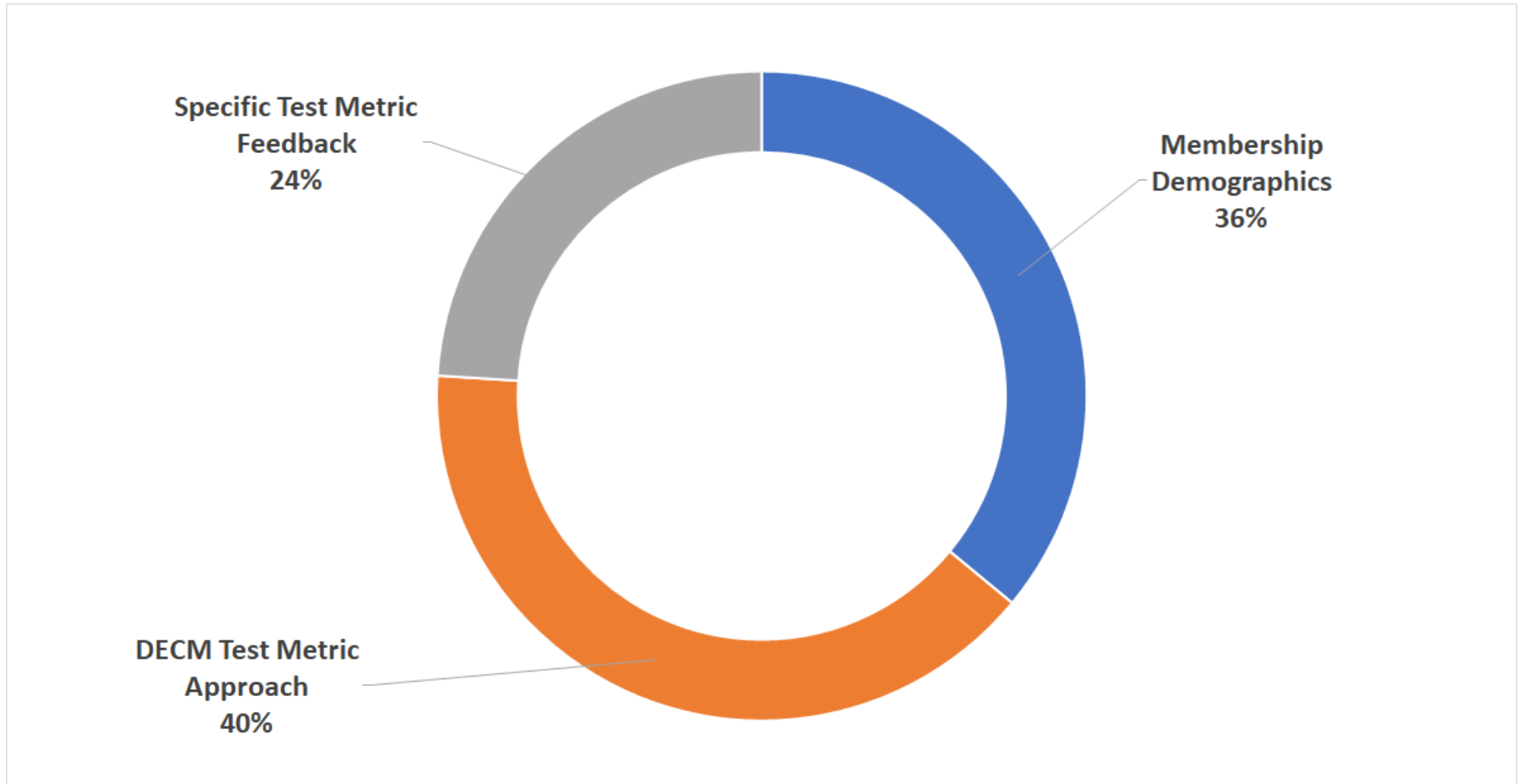
NDIA IPMD Health Metrics Committee

Health Metrics Committee Survey

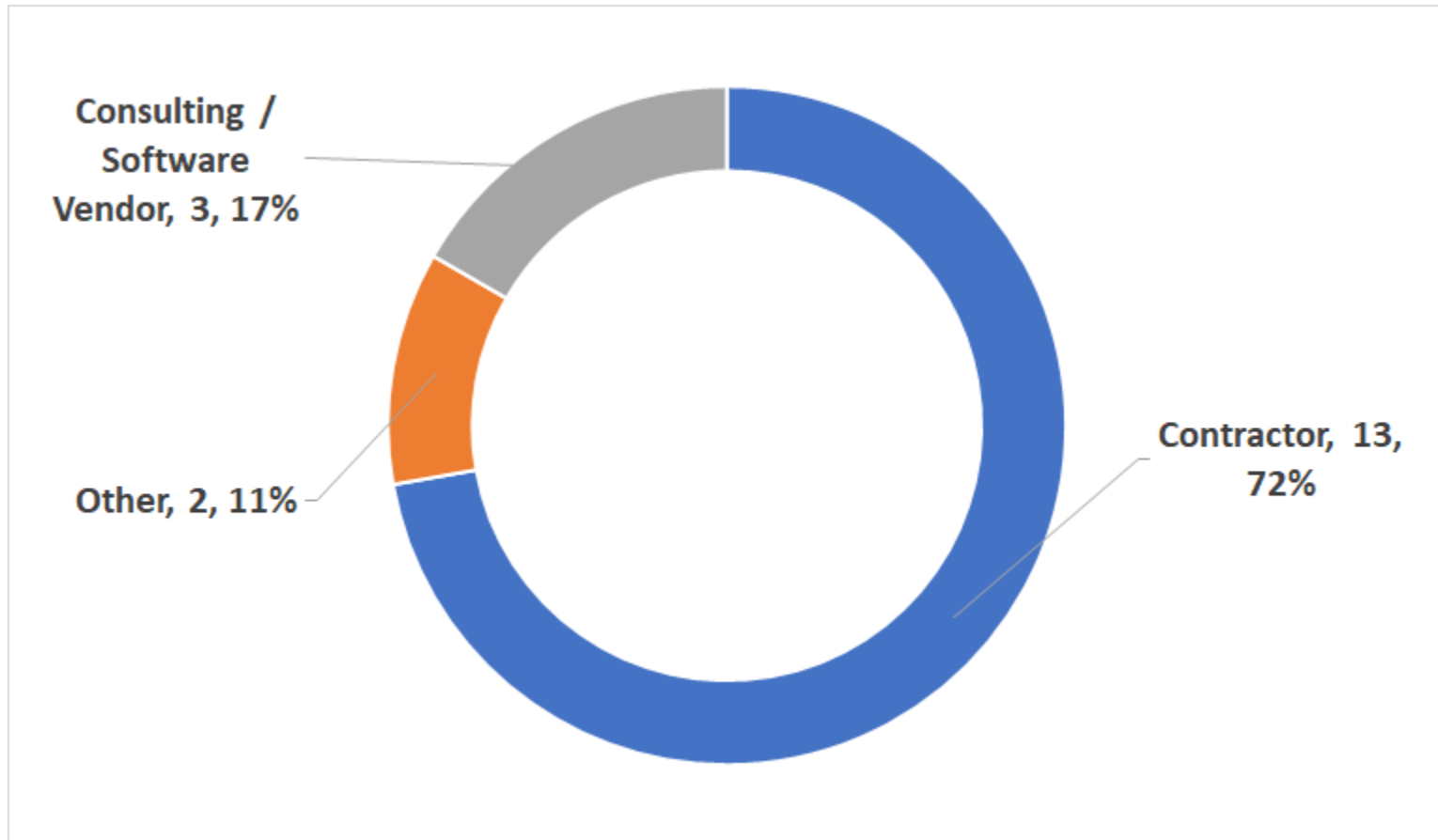


- To kick-off the committee we sent out a survey on April 10th to serve as an ice breaker for committee members to share their perspective and get to know each other.
- 2 weeks was provided for the NDIA Health Metrics Committee members to provide some feedback since some questions required some research
- There were 25 questions to answer and there was an 80% survey responses rate
- The survey collected data to :
 - Get feedback on the surveillance approach using the DECM test metrics now that we have 2 years experience into this process
 - Evaluate if industry is seeing the potential benefits with this surveillance approach
 - More importantly solicit feedback on potential test metric changes in preparation for the July 2020 CCB
 - Changes based on certain criteria specified in the survey questions

Survey Question Components



Membership Demographics

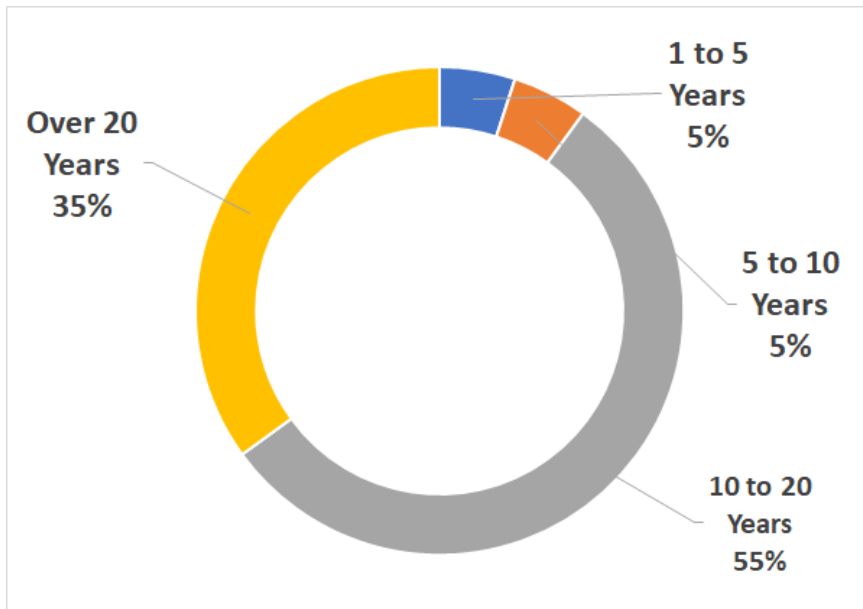


NDIA IPMD Health Metrics Committee

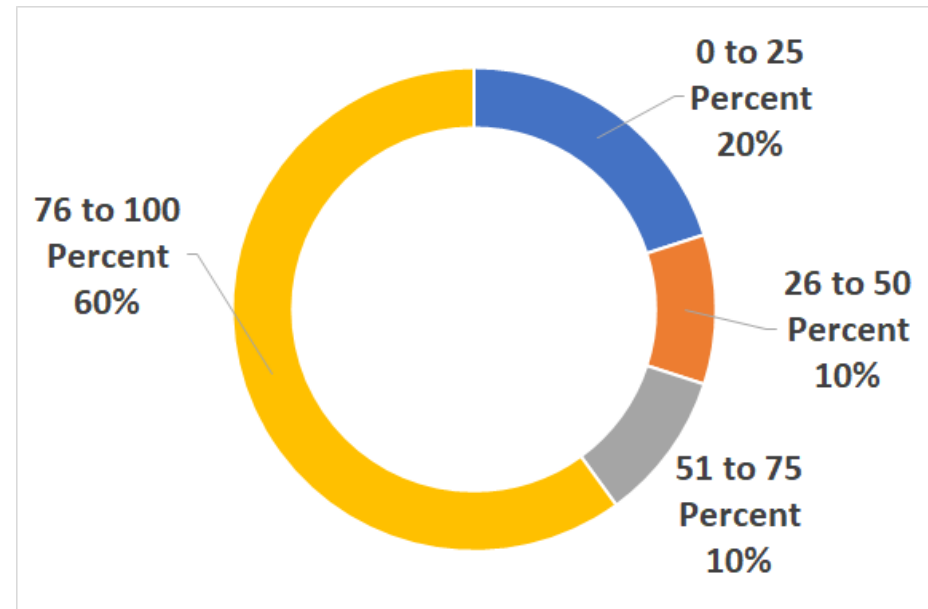
Health Metrics Committee Survey



EVMS Experience



Surveillance Involvement

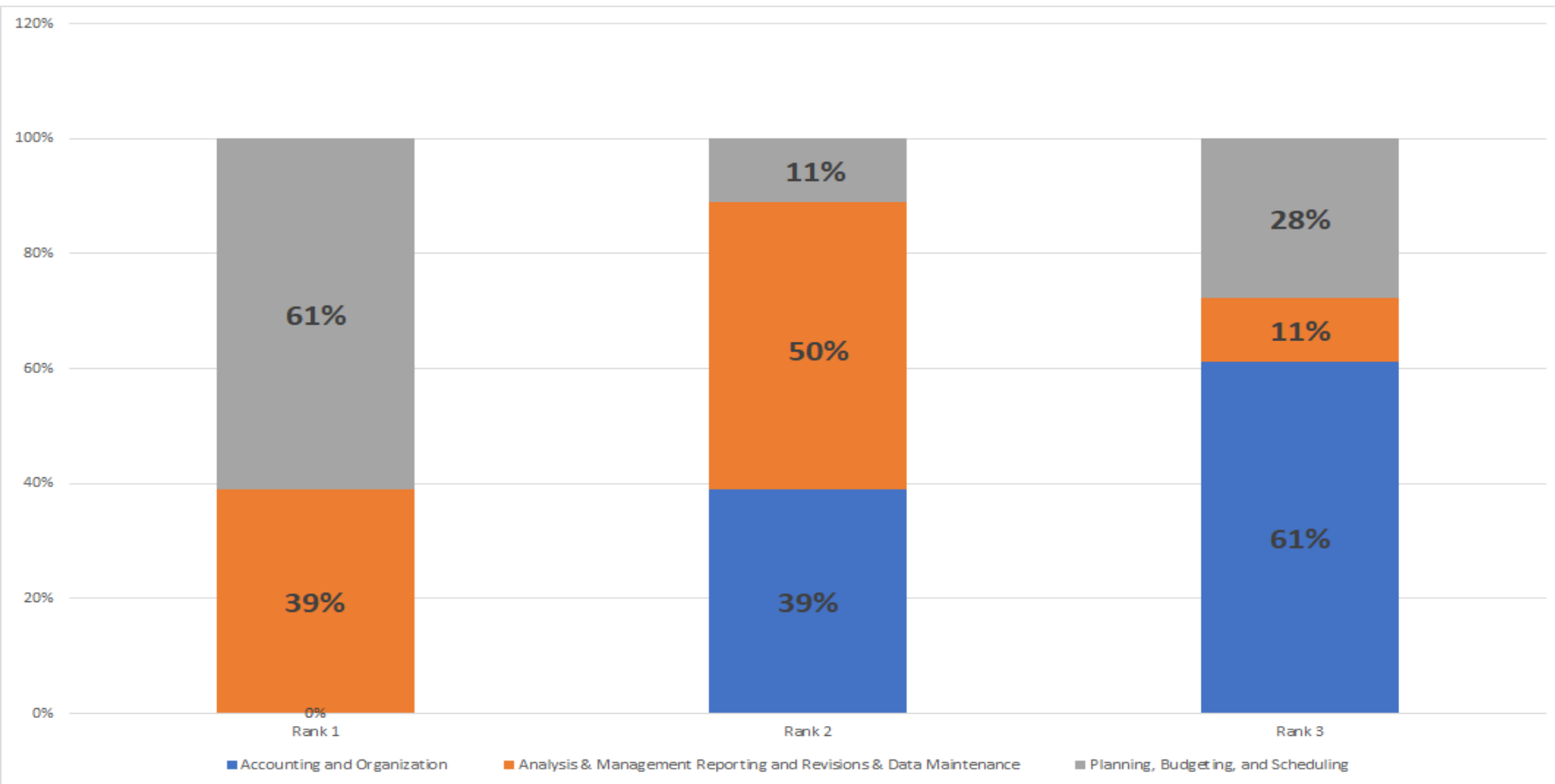


NDIA IPMD Health Metrics Committee

Health Metrics Committee Survey



EVMS Subject Matter Expertise Ranked



NDIA IPMD Health Metrics Committee

NDIA IPMD DECM Test Metric Change Proposal Process

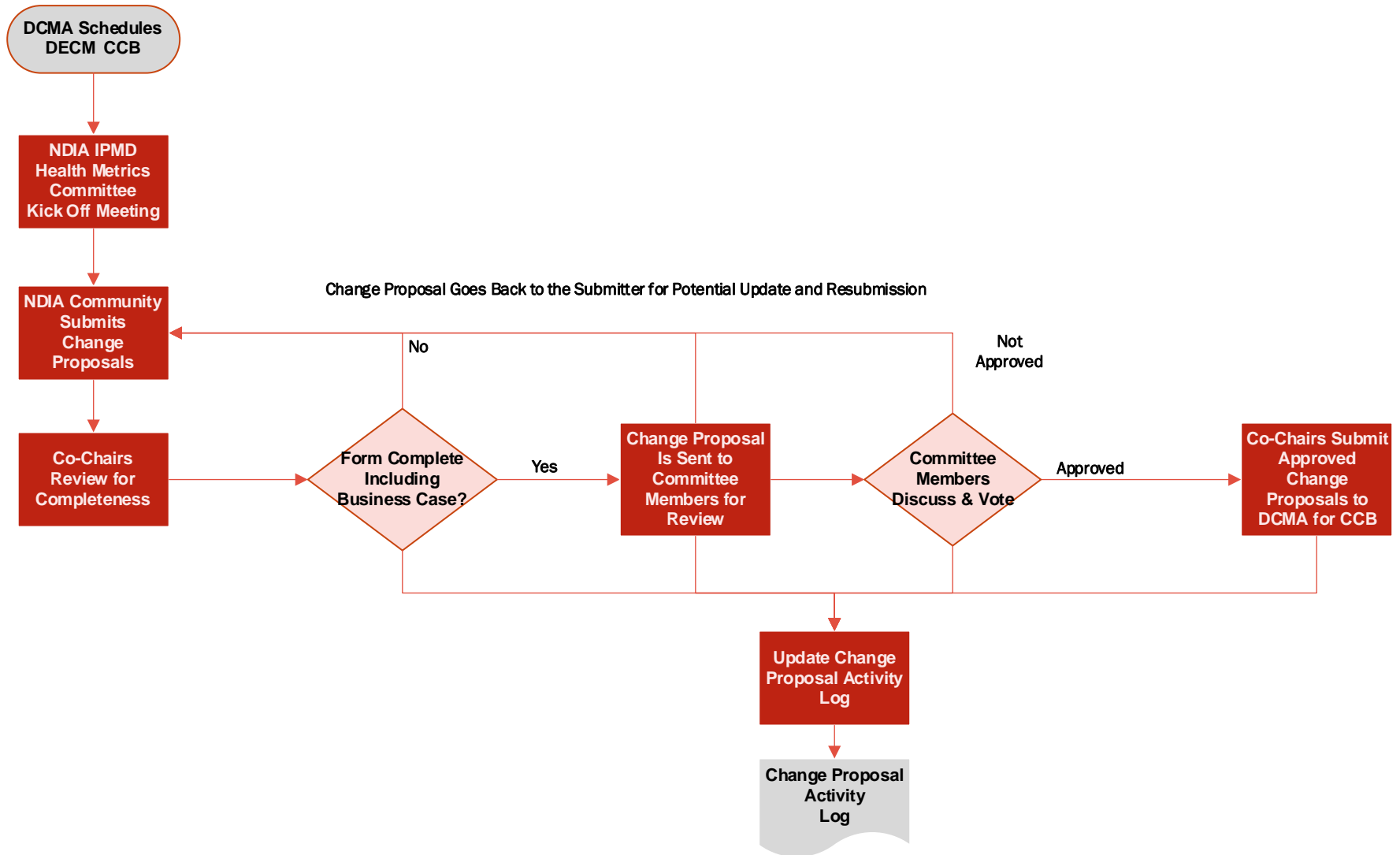
NDIA IPMD Health Metrics Committee

DCMA CCB Process & Recommended Guidelines



- Next DCMA CCB scheduled is the week of October 25, 2021 with all NDIA test metric change proposals submitted by October 11, 2021
- Recommended guidelines pertaining to the DECM CCB change request process is as follows:
 - Business Reasons should be concise and to the point (stay within 1 to 2 pages)
 - Redlines need to be tracked within the metric word document by using the tracking capability
 - Comments should be used as necessary on each individual redline to further clarify information about the proposed test metric change to mitigate DCMA from having to request additional clarification from the test metric change submitter
 - All requested changes will need to be well supported, as well as metrics requested for deletion
 - Do not need to copy Guideline Purpose and Intent from EVMSIG into the proposed documents since already on hand for DCMA
 - DCMA CCB Leaders will ensure the NDIA IPMD Test Metric Change Proposals are in the queue for CCB review
 - Co-Chairs will submit the test metric change proposals and provide other info needed
 - DCMA will communicate to the NDIA IPMD DECM Committee as to whether requested changes were accepted or rejected

NDIA IPMD Health Metrics Committee DECM Test Metric Change Process



Note: Delete Test Metric Change Requests Only Require the NDIA IPMD Test Metric Proposal Request Form whereas changes to DECM Test Metric Specifications also require a Redline attachment of the EVMS Test Metric Specification to Change

NDIA IPMD Health Metrics Committee



DECM Test Metric Change Process -- Deletions

1. Proposed DECM Test Metrics to change will be discussed in scheduled committee meetings
 - Requested changes will be sent to committee prior to meeting for review
2. Committee Member fills out the NDIA IPMD DECM Test Metric Change Proposal as a **Delete**
 - Do not attach any of the EVMS Metric Specification instructions to the change proposal
 - Only 1 Test Metric per NDIA IPMD DECM Test Metric Change Proposal
3. Co-Chairs will review the submittal for completeness and fill in the Submitted Date to NDIA IPMD DECM field and assign a Change ID to the test metric change proposal
4. Co-Chairs will log an entry into the Change log tracking all Change Proposals for a given DCMA CCB
5. Submitting committee member will present the NDIA IPMD DECM Test Metric Change Proposal to the committee for approval
6. Committee will vote on approval or disapproval of proposed Test Metric Change Proposal.
 - A **consensus vote of 2/3** must be reached for approval by the committee in order to be submitted to the DCMA CCB
7. If the NDIA IPMD Test Metric Change Proposal is approved; the Co-Chairs will update the test metric change proposal with the approval date and Submit to DCMA
 - DECM Test Metric Change log will be updated to reflect Change Proposal status (approved/disapproved)
8. Once the NDIA IPMD DECM Test Metric is deemed Ready to Submit to DCMA; the Committee Co-Chairs will send to DCMA so that the proposal gets considered in the next CCB review

NDIA IPMD Health Metrics Committee



DECM Test Metric Change Process -- Changes

1. Proposed DECM Test Metrics to change will be discussed in scheduled committee meetings
 - Make sure there is only 1 Test Metric per Change Proposal.
 - Requested changes will be sent to committee prior to meeting for review
2. Committee Member fills out the NDIA IPMD DECM Test Metric Change Proposal as a **Change**
 - Must identify what sections of the proposed DECM Test Metric will be changed
 - All changes in the document must be made as REDLINES to the document - *DCMA strongly recommends using comments with each individual REDLINE made in the document.*
 - The document needs to be appended to the NDIA IPMD DECM Test Metric Change Proposal so that everything is self contained in the 1 document.
3. Co-Chairs will review the submittal for completeness and fill in the Submitted Date to the NDIA IPMD DECM field and assign a Change ID to the test metric change proposal
4. Co-Chairs will log an entry into the Change log tracking all Change Proposals for a given DCMA CCB
5. Submitting committee member will present the NDIA IPMD DECM Test Metric Change Proposal to the committee for approval.
6. Committee will vote on approval or disapproval of proposed Test Metric Change Proposal.
 - A **consensus vote of 2/3** must be reached for approval by the committee in order to be submitted to the DCMA CCB
7. If the NDIA IPMD Test Metric Change Proposal is approved; the Co-Chairs will update the test metric change proposal with the approval date and Submit to DCMA date
 - DECM Test Metric Change log will be updated to reflect Change Proposal status (approved/disapproved)
8. Once the NDIA IPMD DECM Test Metric is deemed Ready to Submit to DCMA; the Committee Co-Chairs will send to DCMA so that the proposal gets considered in the next CCB review

NDIA IPMD Health Metrics Committee

DECM Test Metric Change Process – Change Example



Change Proposal Overview

NDIA IPMD DECM Committee – Test Metric Change Proposal

Unique Test Metric ID:
06A505a

Attribute:
06A5: The schedule provides baseline, forecast, and actual dates.

Submitted to NDIA IPMD DECM: 8/10/2021
Revision DECM Metric Change ID: CC8102021-01
Approved by NDIA IPMD DECM: 8/26/2021
Submitted to DCMA: 10/11/2021

Proposed Deletion:

Proposed Change – Check all that are red-lined

3. Test Type	<input type="checkbox"/>	7. Metric Threshold	<input type="checkbox"/>
4. Attribute/Intent	<input type="checkbox"/>	8. Data Elements Required	<input type="checkbox"/>
5. Test Definition	<input type="checkbox"/>	9. Assumptions	<input checked="" type="checkbox"/>
6. Test Metric	<input type="checkbox"/>	10. Instructions	<input type="checkbox"/>

v4.0

Change Proposal Business Reason

NDIA IPMD DECM Committee – Test Metric Change Proposal

Unique Test Metric ID:
06A505a

Attribute:
06A5: The schedule provides baseline, forecast, and actual dates.

Business Reasons

Proposed Change:
Based on DCMA's Artificial Data and expected results, it appears that this test does not include summary activities, which is not clearly stated in the test sheet assumptions. We request that DCMA clarify whether they should truly be not included in the Assumptions.

Note: This test metric was submitted for this change in the January 2021 DCMA CCB along with 06A204b, 06A501a, 06A504a, and 06A504b. This test metric should have been approved like the other 4 test metrics were for consistency purposes.

v4.0

Change Proposal Metric Redline

EVMS Test Metric Specification

1. Guideline No: 06	2. Test Metric ID: 06A505a	3. Test Type: Automated
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4. Attribute/Intent Definition:
06A5: The schedule provides baseline, forecast, and actual dates.

5. Test Definition:
Do all in progress tasks/activities & milestones have actual start dates?

6. Test Metric: X = Count of in progress tasks/activities & milestones with no actual start date Y = Total count of in progress tasks/activities & milestones	7. Metric Threshold: X/Y ≤ 5%
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8. Data Elements Required:
11 Integrated Master Schedule
11AM Task/Milestone UIDs
11C Actual Start Date
11T EV % Complete
13 EV Cost Tool Data
13AN EV% complete
44 Cost Data Dictionary
45 IMS Data Dictionary

9. Assumptions:
1. A task/activity or milestone is considered "in progress" if EV percent complete > 0% and < 100%.
2. EV percent complete is available at the task/activity & milestone level in the IMS.
3. If the EV percent complete field is not available in the IMS, use the EV Cost Tool data to obtain the EV percent complete information for each in progress task/activity & milestones. If the work package level is at the summary level in the IMS, compare the EV percent complete at the IMS summary level to the EV Cost Tool data.
4. The scheduling software tool has both an actual start and an actual finish date for a milestone; if this is not the case, adjust the methodology accordingly.
~~4.5 Summary tasks/activities are not included.~~

10. Instructions:
1. Identify and count the total number of in progress tasks/activities & milestones where EV percent complete is greater than zero but less than 100%; this is the denominator (D) of the metric.
2. Identify and count the number of in progress tasks/activities & milestones from Step 1 that have no actual start date; this is the numerator (N) of the metric.
3. Calculate the test metric (Block 7): X divided by Y.
4. Use block 7 as an indicator in the overall Risk Assessment to determine if further evaluation is warranted.

v4.0

NDIA IPMD Health Metrics Committee

**Supplemental Outputs to a
Published DECM Test Metric Version**

NDIA IPMD Health Metrics Committee



DECM Test Metric New Version Published – Supplemental Outputs

- After a new version of the DCMA DECM Test Metrics gets published on the DCMA public website the following supplemental outputs are provided to our committee members:
 - DCMA Test Metrics Summary of Changes and Statistics
 - Comparison Report between New and Previous Version of DECM Test Metrics
 - Enhanced DCMA DECM Excel Tracker with added columns of individual changes and a added column to this Excel indicating which test metrics are sample data based

NDIA IPMD Health Metrics Committee



DECM Test Metric New Version Published – Supplemental Outputs

Version 3.5 / 3.5.1 Test Metric Change Summary	
Version 3.4 Metric Count	141
Less Version 3.5 / 3.5.1 Deleted Test Metrics	-3
Add New Version 3.5 / 3.5.1 Test Metrics	0
Total Version 3.5 / 3.5.1 Test Metrics	138
Changed Version 3.5 / 3.5.1 Test Metrics	78
No Change Version 3.5 / 3.5.1 Test Metrics	60
Total Version 3.6 Test Metrics	138
Version 3.5 / 3.5.1 EVMS Focus Area Counts	
Organization	18
Planning, Scheduling, & Budgeting	54
Accounting	22
Analysis & Management Reporting	22
Revisions & Data Maintenance	22
Total Test Metrics	138

Version 3.5 / 3.5.1 Change Count Details	
Assumptions	68
Instructions	38
Test Step	8
Step Metric	1
Test Type	1
Threshold	1
Attributes	1
Test Metric	27
Data Element	18
Total Changes	163

Supplemental Output -- Summary of Changes & Statistics

NDIA IPMD Health Metrics Committee

DECM Test Metric New Version Published – Supplemental Outputs



Compare Results

Old File:

Combine DECM Test Metrics 138 v3.5.1 All Metrics.pdf

292 pages (2.94 MB)
11/6/2020 2:09:28 PM

versus

New File:

Combine DECM Test Metrics 138 v3.6.1 All Count.pdf

291 pages (3.14 MB)
11/6/2020 2:12:29 PM

Total Changes

609

Text only comparison

Content

382 Replacements
209 Insertions
18 Deletions

Styling and Annotations

0 Styling
0 Annotations

EVMS Test Metric Specification

1. Guideline No: 03	2. Unique Test Metric ID: 03A103a	3. Test Type: Manual	4. RESERVED
5. Attribute: 03A1: The planning, scheduling, budgeting, work authorization and cost accumulation systems are integrated with each other via a common coding structure and, as appropriate, with the Contract Work Breakdown Structure (CWBS) and the Organizational Breakdown Structure (OBS) at Control Account (at a minimum) through the total contract level.			
6. Test Step: Do the forecast start and finish dates in the subcontractor EMS reconcile to the prime IMS?			
7. Test Metric: X = Count of sampled incomplete tasks/activities & milestones in the subcontractor IMS with a forecast start/finish date that cannot be reconciled to the forecast start/finish date in the prime IMS Y = Total count of sampled incomplete subcontractor tasks/activities & milestones in the prime contractor IMS			8. Metric Threshold: $X/Y \leq 5\%$
9. UN/CEFACT Required DEI(s)			
10. Data Elements Required: 11 Integrated Master Schedule (IMS) 11V Forecast Finish Date 11W Forecast Start Date 11AM Task/Milestone UIDs 37 Subcontractor Schedule 37C Forecast Finish Date 37D Forecast Start Date			
11. Assumptions: 1. Test metric is based on a sample of incomplete tasks/activities & milestones. 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. Incomplete WP/PP equals at least one task/activity or milestone without an actual finish date in the IMS. 4. The count is performed at the task/activity & milestones level, and each task/activity & milestones can only count as a single failure.			
12. Instructions: 1. Filter the prime contractor IMS to identify a sample of incomplete subcontractor tasks/activities & milestones. The count of these tasks/activities & milestones is the denominator (Y) of the test metric. 2. At the level commensurate with the inclusion of subcontractor tasks/activities & milestones in the prime contractor IMS, review the forecast start and forecast finish dates for the corresponding subcontractor IMS elements for the tasks/activities & milestones identified. 3. Review the prime contractor IMS to ensure that forecast start and forecast finish dates of corresponding tasks/activities & milestones from the subcontractor schedule can be reconciled. 4. If a discrepancy exists between subcontractor data and prime contractor data, document the number of tasks/activities & milestones with discrepancies. This number is the numerator (X) in the test metric calculation. 5. Calculate the test metric (Block 7): X divided by Y. 6. If the result is within the threshold (Block 8), the metric passes.			
13. Numerator Code			
14. Denominator Code			

v3.6.1

Supplemental Output – Comparison Report

NDIA IPMD Health Metrics Committee

DECM Test Metric New Version Published – Supplemental Outputs



Active Metrics - purpose is to show the current list of metrics that have been approved for use by the DCMA EVMS Center Configuration Control Board (CCB)																			
Test Metric Count	Unique Test Metric ID	GL	Changed? (JUL 20 CCB)	Changed? (Oct 20 CCB)	1. Assumptions	2. Instruction	3. Test Step	4. Test Type	5. Threshold	6. Attribute	7. Test Metric	8. Data Element	9. Sample	Attribute ID	Current Metric Revision	Test Metric Rev Date	Test Step	Test Metric Numerator (X)	
9	03A101g	03											X	03A1	v3.6	29-Jul-20	Is control account data traceable between system artifacts including schedule, cost data, and work authorization documents? • Do the CA baseline dates align between the WAD and the EV cost tool?	X = Count of sampled incomplete CAs with baseline start and baseline finish dates outside the WAD POP in the EV cost tool	Y = Tot tool
10	03A101h	03		Y	X									03A1	v3.6.1	2-Nov-20	Is control account data traceable between the system artifacts including schedule, cost data, and work authorization documents? • Does the OBS align between the IMS and EV Cost Tool?	X = Count of incomplete CAs where IMS OBS does not match EV Cost Tool OBS, or there are more than one IMS OBS assigned, or no IMS OBS assigned.	Y = Tot
11	03A101i	03		Y	X	X								03A1	v3.6.1	2-Nov-20	Is control account data traceable between system artifacts including schedule, cost data, and work authorization documents? • Does the WBS align between the IMS and EV Cost Tool?	X = Count of incomplete CAs where IMS WBS does not match EV Cost Tool WBS, or there are more than one IMS WBS assigned, or no IMS WBS assigned.	Y = Tot
12	03A102a	03	Y								X	X	X	03A1	v3.6	29-Jul-20	Is subcontractor data aligned with and traceable through the prime system? • Do the subcontractor EVM data elements reconcile to the prime EV cost tool?	X = The sampled BAC value of the open subcontractor CAs where a data element (BCWP, BCWS, ACWP, BAC) from the subcontractor's IPMR/CPR cannot be reconciled to the prime EV cost tool	Y = Sur
13	03A103a	03		Y	X	X						X	X	03A1	v3.6.1	2-Nov-20	Do the forecast start and finish dates in the subcontractor IMS reconcile to the prime IMS?	X = Count of sampled incomplete tasks/activities & milestones in the subcontractor IMS with a forecast start/finish date that cannot be reconciled to the forecast start/finish date in the prime IMS	Y = Tot tasks/;
14	03A103b	03	Y	Y	X	X					X	X	X	03A1	v3.6.1	2-Nov-20	Do the baseline start and finish dates in the subcontractor IMS reconcile to the prime IMS?	X = Count of Sampled incomplete tasks/activities & milestones in the subcontractor IMS with a baseline start/finish date that cannot be reconciled to the	Y = To tasks/;

Supplemental Output – Enhanced DCMA DECM Excel Tracker

NDIA IPMD Health Metrics Committee

**Upcoming DCMA CCB for DECM
Test Metrics v5.0**

NDIA IPMD Health Metrics Committee

October 2021 DCMA CCB – Meeting Schedule



- **8/12/2021 – October 2021 CCB Kickoff Meeting**
- **8/26/2021 – Industry Submit Ideas or Submit Metric Change Proposals**
- **9/9/2021 – Industry Submit Ideas or Submit Metric Change Proposals – Cancelled Meeting**
- **9/23/2021 – Industry Submit Ideas or Submit Metric Change Proposals**
- **10/7/2021 – Final Session of Industry Submit Ideas or Submit Metric Change Proposals**
- **10/11/2021 – Submit NDIA IPMD DECM Change Proposals to DCMA**
- **Week of 10/25/2021 – October 2021 DCMA CCB**

NDIA IPMD Health Metrics Committee

October 2021 DCMA CCB – NDIA IPMD DECM Test Metric Proposal Changes



Here is a list of DECM Test Metric Proposal Changes in queue and areas to consider:

- **06A505a & 06A505b** should be redlined to include Summary tasks/activities are not included in Assumption block of Test Metric Specification
- **06A506c** should be further clarified on test definition & test metric to align better
- **06A211a** – NDIA IPMD Planning & Scheduling Committee thought Total Float referenced in Test Metric block should be High Float to be consistent with Attribute/Intent Definition block.

EVMS Test Metric Specification			
1. Guideline No: 06	2. Unique Test Metric ID: 06A211a	3. Test Type: Manual	4. RESERVED
5. Attribute: 06A2: The network schedule/TMS depicts the sequence of work (horizontal integration) and identifies the significant interdependencies that are indicative of the actual way the work is planned and accomplished.			
6. Test Step: Is high float rationale/justification acceptable?			
7. Test Metric: X = Count of total float Non-LOE tasks/activities & milestones sampled with inadequate rationale Y = Total count of total float Non-LOE tasks/activities & milestones sampled			8. Metric Threshold: $X/Y \leq 20\%$
9. UN/CEFACT Required DEI(s)			
10. Data Elements Required:			

- **06A401a** – NDIA IPMD Critical Path group worked with DCMA on a review process where DCMA will review the critical path methodology (CPM) process applied on a contractor’s project is valid and compliant using the contractor’s System Description and/or company’s policies/procedures. If compliant, DCMA will use the contractor’s CPM process to test the CPM results.
- **16A301a** – Change test metric calculation to move from counts to data materiality (SUM)
- Revisit any prior DECM Test Metric Proposal Change submittals that committee feels should have been approved or new DECM Test Metric Proposal change recommendations surfaced at company surveillance review audits

NDIA IPMD Health Metrics Committee

Recap of Past DCMA CCBs (v3.1 through v4.0) When DECM Test Metrics Were Used on Pilot and Surveillance Reviews

Recap of Past CCBs Supported by NDIA IPMD Committee (v3.6 through v4.0)

NDIA IPMD Health Metrics Committee

Past DCMA CCBs (Version 3.1 through Version 4.0)



	DECM v3.1	DECM v3.2	DECM v3.3	DECM v3.4	DECM v3.5/3.5.1	DECM v3.6/3.6.1	DECM v4.0
EVMS Focus Area	Test Metric Count	Test Metric Count	Test Metric Count	Test Metric Count	Test Metric Count	Test Metric Count	Test Metric Count
Organizing	18	18	18	18	18	18	18
Planning, Scheduling, and Budgeting	52	55	58	56	54	54	53
Accounting	20	22	22	22	22	22	22
Analysis and Management Reporting	20	22	23	23	22	23	23
Revisions and Data Maintenance	21	22	22	22	22	26	26
Grand Total	131	139	143	141	138	143	142
Change from Version 3.1		8	12	10	7	12	11
Change from Version 3.2			4	2	-1	4	3
Change from Version 3.3				-2	-5	0	-1
Change from Version 3.4					-3	2	1
Change from Version 3.5/3.5.1						5	4
Change from Version 3.6/3.6.1							-1

NDIA IPMD Health Metrics Committee

DCMA CCB's Supported by Committee



Test Metrics & Test Metric Document Changes	Version 3.6 DCMA CCB -- July 2020	Version 3.6.1 DCMA CCB -- October 2020	Version 4.0 DCMA CCB -- January 2021
Previous Test Metric Version Metric Count	138	143	143
Changed New Version Test Metric Documents	33	24	142
Unchanged New Version Test Metric Documents	105	119	0
Added New Version Test Metric Documents	5	0	0
Deleted New Version Test Metric Documents	0	0	-1
New Test Metric Version Metric Count	143	143	142
Test Metric Document Block Changes	Version 3.6 DCMA CCB -- July 2020	Version 3.6.1 DCMA CCB -- October 2020	Version 4.0 DCMA CCB -- January 2021
Assumptions	22	21	86
Instructions	14	16	141
Test Step ==> Test Definition	2	6	17
Test Type	0	0	2
Threshold	0	0	1
Attribute ==> Attribute/Intent Definition	0	0	7
Test Metric	11	7	27
Data Elements Required	8	13	111
Total Metric Block Changes	57	63	392
DCMA CCB v4.0 Had an EVMS Metric Specification Template Change			

NDIA IPMD DECM Committee Did Not Submit Any DECM Test Metric Change Proposals and Was Working on a Test Metric Prioritization Study for DCMA ... Only Recorded the Change Information from that "Out of Sequence" CCB

NDIA IPMD Health Metrics Committee

DCMA CCB's Supported by Committee



NDIA IPMD Test Metric Proposal Changes	Version 3.6 DCMA CCB -- July 2020	Version 3.6.1 DCMA CCB -- October 2020	Version 4.0 DCMA CCB -- January 2021
Submitted Test Metric Change Proposals	36	0	14
Withdrawn Test Metric Change Proposals	-1	0	0
Disapproved Test Metric Change Proposals	-1	0	0
Approved Test Metric Change Proposals Sent to DCMA	34	0	14
Fully Approved NDIA IPMD Test Metric Change Proposals	7	0	1
Partially Approved NDIA IPMD Test Metric Change Proposals	2	0	6
Not Approved NDIA IPMD Test Metric Change Proposals	25	0	4
Test Metric Deleted in DCMA CCB	0	0	1
Not Approved that Should Have Been Partially Approved	0	0	2
Total NDIA IPMD Test Metric Change Proposals Submitted to DCMA CCB	34	0	14

DCMA CCB for v3.6.1 was a an “Out of Sequence” CCB established to catch oversights made by DCMA in v3.6

NDIA IPMD Health Metrics Committee

**Committee Support for DECM Test
Metrics v4.0 – January 2021 DCMA CCB**

NDIA IPMD Health Metrics Committee



January 2021 DCMA CCB

- Held 4 Committee Meetings, 4 DCMA Meetings, 2 One on One Meetings with Individual Companies, and 4 Committee Leadership meetings to Support the January 2021 DCMA CCB
- 14 DECM Test Metric Change Proposals to Submit to DCMA CCB (1 Sponsored by DCMA)
 - 2 Recommended Deletions
 - 0 Recommended Changes to Metric Threshold
 - 2 Recommended Changes to Test Metric criteria that impacts Test Metric Result
 - 12 Test Metric Changes that provide Clarification
- 14 Changes to DECM Test Metric Documents
 - 2 Deletions
 - 0 Attribute Change
 - 0 Test Step Changes
 - 2 Test Metric Changes
 - 0 Metric Threshold Changes
 - 2 Data Element Required Changes
 - 11 Changes to Assumptions
 - 4 Changes to Instructions
- Submitted NDIA IPMD DECM Test Metric Change Proposals to DCMA on Tuesday, 1/5/2021
- DCMA CCB is scheduled from Tuesday, 1/19/2021 through Thursday, 1/21/2021
- DECM Test Metric Version 4.0 was published on 3/5/2021

NDIA IPMD Health Metrics Committee

January 2021 DCMA CCB



January 2021 DCMA CCB NDIA IPMD DECM Test Metric Change Proposals

Revision DECM Metric Chg ID	Test Metric ID	Test Metric Description	Delete Test Metric	03. Test Type	05. Attribute	06. Test Step	07. Test Metric	08. Threshold	10. Data Element	11. Assumptions	12. Instruction
CCB012021-01	03A101g	Control Account baseline dates align between the WAD and the EV cost tool	X								
CCB012021-12	03A103a	Forecast start and finish dates in the subcontractor IMS reconcile to the prime IMS							X	X	
CCB012021-13	03A103b	Baseline start and finish dates in the subcontractor IMS reconcile to prime IMS							X	X	
CCB012021-02	06A204b	Dangling logic in the IMS								X	
CCB012021-03	06A501a	Checks whether task/activities or milestones have baseline start and finish dates								X	
CCB012021-04	06A504a	Actual start dates changed after first reported								X	
CCB012021-05	06A504b	Actual finish dates changed after first reported								X	
CCB012021-06	06A505a	Progress task tasks/activities and milestones have actual start dates								X	
CCB012021-07	06A505b	Completed task/activities and milestones with no actual finish date								X	
CCB012021-08	09A101a	Checks whether authorization date is prior to budgeted baseline start	X								
CCB012021-09	10A109b	Validates each work package/planning package have an assigned budget					X			X	X
CCB012021-10	10A202a	Material segregated from other non material elements of costs within work packages								X	X
CCB012021-11	29A401a	Checks for changes to open work packages									X
CCB012021-14	29I401a	Baseline dates being updated to mask legitimate variances					X			X	X

NDIA IPMD Health Metrics Committee

DECM Test Metrics v4.0 Impact Changes



- Revised EVMS Test Metric Specification Template was implemented in DECM Test Metrics v4.0
- Naming convention of DECM Test Versions have changed to increment by +1.0 for each yearly scheduled DCMA CCB and any “Out of Sequence” CCBs will be +1.X now
- Total Count of Test Metrics is now 142 with 1 Delete (10A202a) & No Additions
- Test Metric 10A201a got changed to focus on co-mingling of EOC to cover intent of deleted 10A202a and cover removed scope from 10A105a that verifies QBD on how performance is defined for material
- Distinction was made between discrete and LOE work packages when determining if they are complete
 - Discrete WPs: If BAC and BCWPCUM are within \$100 (or 1 hour); then WP is complete
 - LOE WPS: If BAC and BCWPCUM are within \$100 (or 1 hour) and ETC is less than \$100, then WP is complete
- Test Metric 29I401a got changed back from a project level type test metric to a sample type test metric
- Data Elements Required to support a Review got a more complete list of artifacts
 - IMS Data Dictionary is required when IMS is requested on a metric
 - Cost Data Dictionary is required when EV Cost Tool data is requested on a metric
 - Other artifacts were added on some of the test metrics

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DECM Test Metrics v4.0 Universal Changes



- EVMS Test Metric Specification template changed by removing all unused blocks from the v3.6 template being Blocks 4, 9, 13, and 14 and re-numbering the Blocks that stayed in the v4.0 template

EVMS Test Metric Specification Template			
Old Block No.	Old Block Description	New Block No.	New Block Description
1	Guideline No.	1	Guideline No.
2	Unique Test Metric ID	2	Unique Test Metric ID
3	Test Type	3	Test Type
4	RESERVED	4	Attribute/Intent Definition
5	Attribute	5	Test Definition
6	Test Step	6	Test Metric
7	Test Metric	7	Metric Threshold
8	Metric Threshold	8	Data Element Required
9	UN/CEFACT Required DEI(s)	9	Assumptions
10	Data Element Required	10	Instructions
11	Assumptions	11	Configuration Summary
12	Instructions		
13	Numerator Code		
14	Denominator Code		
15	Configuration Summary		

DCMA Test Metric Template -- Block Changes

- Deleted 4 Sections or Blocks from Template
- Re-numbered blocks to get rid of unused block deletions (see block changes above)
- Renamed Attribute block to Attribute/Intent Definition
- Renamed Test Step to Test Definition
- Deleted RESERVED block
- Deleted UN/CEFACT Required DEI(s) block'
- Deleted Numerator Code
- Deleted Denominator Code

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DECM Test Metrics v4.0 Universal Changes



- Pass/Fail verbiage was changed on all DECM Test Metrics
 - Pass was changed to In Tolerance
 - Fail was changed to Out of Tolerance
 - Majority of Test Metric Instructions changed on evaluating the Metric Threshold (Box 7) where risk assessment is used to determine if further evaluation is warranted or not
- Some common phrases used in the v3.6.1 EVMS Test Metric Specifications got changed in v4.0 EVMS Test Metric Specification for consistency purposes
 - Changed subcontractor to subcontractor/supplier
 - Changed EV cost tool data to EV Cost Tool data (in some cases data was not referenced)
 - Changed WPs, PPs, SLPPs to WPs/PPs/SLPPs and missing ones would be added
 - Changed tasks/activities to tasks/activities & milestones
 - Changed discrepancy to deficiency to be consistent with all other Contractor Business System Review terminology

NDIA IPMD Health Metrics Committee

NDIA IPMD DECM Test Metric v4.0 Submittal Results



DCMA CCB Supporting	Date Submitted to DECM Committee	Revision DECM Metric Chg ID	Test Metric ID	Test Metric Description	Delete Test Metric	03. Test Type	05. Attribute	06. Test Step	07. Test Metric	08. Threshold	10. Data Element	11. Assumptions	12. Instruction	Date Received By Committee	Status			Approval Date	DCMA Submitted Date	NDIA IPMD's Assessment of DCMA Approval Outcome
															Withdrawn	Not Approved	Approved			
January 2021	11/18/2020	CCB012021-01	03A101g	Control Account baseline dates align between the WAD and the EV cost tool	X											X		12/3/2020	1/5/2021	Not Approved
January 2021	12/1/2020	CCB012021-12	03A103a	Forecast start and finish dates in the subcontractor IMS reconcile to the prime IMS							X	X				X		12/17/2020	1/5/2021	Partially approved Data Element Required Recommendations Did not approve DFARS clause flow down requirement as inclusion on major subcontractors
January 2021	12/1/2020	CCB012021-13	03A103b	Baseline start and finish dates in the subcontractor IMS reconcile to prime IMS							X	X				X		12/17/2020	1/5/2021	Partially approved Data Element Required Recommendations Did not approve DFARS clause flow down requirement as inclusion on major subcontractors
January 2021	11/20/2020	CCB012021-02	06A204b	Dangling logic in the IMS								X				X		12/3/2020	1/5/2021	Partially Approved -- Added statement of Summary tasks/activities are not included
January 2021	11/20/2020	CCB012021-03	06A501a	Milestones have baseline start and finish dates								X				X		12/3/2020	1/5/2021	Partially Approved -- Added statement of Summary tasks/activities are not included
January 2021	11/20/2020	CCB012021-04	06A504a	Actual start dates changed after first reported								X				X		12/3/2020	1/5/2021	Partially Approved -- Added statement of Summary tasks/activities are not included
January 2021	11/20/2020	CCB012021-05	06A504b	Actual finish dates changed after first reported								X				X		12/3/2020	1/5/2021	Partially Approved -- Added statement of Summary tasks/activities are not included
January 2021	11/20/2020	CCB012021-06	06A505a	Progress task tasks/activities and milestones have actual start dates								X				X		12/3/2020	1/5/2021	Clarification from DCMA this test metric should have had the same outcome as 06A204b, 06A501a, 06A504a, and 06A504b. Those changes will be incorporated into the next CCB.
January 2021	11/20/2020	CCB012021-07	06A505b	Completed task/activities and milestones with no actual finish date								X				X		12/3/2020	1/5/2021	Clarification from DCMA this test metric should have had the same outcome as 06A204b, 06A501a, 06A504a, and 06A504b. Those changes will be incorporated into the next CCB.
January 2021	11/18/2020	CCB012021-08	09A101a	Checks whether authorization date is prior to budgeted baseline start	X											X		12/3/2020	1/5/2021	Not Approved
January 2021	12/1/2020	CCB012021-09	10A109b	Validates each work package/planning package have an assigned budget					X			X	X			X		12/3/2020	1/5/2021	Not Approved
January 2021	12/1/2020	CCB012021-10	10A202a	Material segregated from other non material elements of costs within work packages								X	X			X		12/3/2020	1/5/2021	DCMA deleted this metric in v4.0
January 2021	12/1/2020	CCB012021-11	29A401a	Checks for changes to open work packages									X			X		12/17/2020	1/5/2021	Not Approved
	12/1/2020	CCB012021-14	29I401a	Baseline dates being updated to mask legitimate variances					X			X	X			X		12/17/2020	1/5/2021	Fully Approved

DECM Test Metric Proposal Submittal Results Summary		
Result	Count	% of Total
Fully Approved	1	7%
Partially Approved	6	43%
Not Approved	4	29%
Test Metric Deleted in v4.0	1	7%
Partially Approved -- Next CCB	2	14%
Total Submitted	14	100%

NDIA IPMD Health Metrics Committee

January 2021 DCMA CCB



Version 4.0 Test Metric Change Summary	
Version 3.6.1 Metric Count	143
Less Version 4.0 Deleted Test Metrics	-1
Add Version 4.0 New Test Metrics	0
Total Version 4.0 Test Metrics	142
Changed Version 4.0 Test Metrics	142
No Change Version 4.0 Test Metrics	0
Add Version 4.0 New Test Metrics	0
Total Version 4.0 Test Metrics	142
Version 4.0 EVMS Focus Area Counts	
Organization	18
Planning, Scheduling, & Budgeting	53
Accounting	22
Analysis & Management Reporting	23
Revisions & Data Maintenance	26
Total Test Metrics	142

Version 4.0 Test Metric Change Summary	
Assumptions	86
Attribute/Intent	7
Data Element Required	111
Instructions	141
Test Definition	17
Test Metric	27
Test Type	2
Threshold	1
Total Changes	392

NDIA IPMD Health Metrics Committee

**Committee Support for DECM Test Metrics v3.6
– July 2020 DCMA CCB**

**Committee Support for DECM Test Metrics
3.6.1 – October 2020 CCB**

July 2020 DCMA CCB Results from DECM Test Metric Proposals Submitted

- Held 5 Committee Meetings, 4 DCMA Meetings, 5 One on One Meetings with Individual Companies, and 16 Committee Leadership meetings to Support the July 2020 DCMA CCB
- 34 DECM Test Metric Change Proposals to Submit to DCMA CCB
 - 7 Recommended Deletions
 - 3 Recommended Changes to Metric Threshold
 - 6 Recommended Other Changes to Test Metric criteria that impacts Test Metric Result
 - 16 Test Metric Changes with a Priority (**8 High, 4 Medium, & 4 Low**)
 - 18 Test Metric Changes that provide Clarification
 - 03A103b and 16A502a each had 2 Test Metric Change Proposals
- 32 Changes to DECM Test Metric Documents
 - 7 Deletions
 - 1 Attribute Change
 - 2 Test Step Changes
 - 10 Test Metric Changes
 - 3 Metric Threshold Changes
 - 4 Data Element Required Changes
 - 8 Changes to Assumptions
 - 17 Changes to Instructions
- 9 Changes were either Fully Approved or Partially Approved (26.5% Approval Rating)
 - 7 Changes got approval that provided Clarification and were the Fully Approved Changes
 - 2 Changes got approved that were defined as a Priority and were Partially Approved Changes
 - 0 Test Metric Deletions got Approved (Submitted 7)
 - 0 Test Metric Threshold Changes got Approved (Submitted 3)

NDIA IPMD Health Metrics Committee

July 2020 DCMA CCB



Version 3.6 Test Metric Change Summary

Version 3.5 / 3.5.1 Metric Count	138
Less Version 3.6 Deleted Test Metrics	0
Add New Version 3.6 Test Metrics	5
Total Version 3.6 Test Metrics	143
Changed Version 3.6 Test Metrics	33
No Change Version 3.6 Test Metrics	105
Add New Version 3.6 Test Metrics	5
Total Version 3.6 Test Metrics	143

Version 3.6 EVMS Focus Area Counts

Organization	18
Planning, Scheduling, & Budgeting	54
Accounting	22
Analysis & Management Reporting	23
Revisions & Data Maintenance	26
Total Test Metrics	143

Version 3.6 Change Count Details

Assumptions	22
Attributes	0
Data Element	8
Instructions	14
Test Metric	11
Test Step	2
Test Type	0
Threshold	0
Total Changes	57

NDIA IPMD Health Metrics Committee

July 2020 DCMA CCB



July 2020 DCMA CCB Results – Approved and Partially Approved

Priority and Test Metric Change Type												
Test Metric ID	Compliance Demonstrates	Priority	Delete Test Metric	03. Test Type	05. Attribute	06. Test Step	07. Test Metric	08. Threshold	10. Data Element	11. Assumptions	12. Instruction	DCMA JUL2020 CCB Comments
03A102a	Subcontractor data aligned and traceable through Prime system						X					Fully Approved.
03A103b	Subcontract IMS Aligns to Prime - Baseline Dates						X					Fully Approved.
06A401b	Subcontract IMS Aligns to Prime - Baseline Dates						X					Fully Approved.
06I101b	Schedule Margin										X	Fully Approved.
10A105a	BCWP Is Consistent with Budgeted EVT	X					X			X	X	Partially Approved. Non-Loe, non-material WP replaces Non-Loe, non-material WP.
27A104b	ETCs Generated on Completed WPs									X		Fully Approved.
29A401a	BAC Change on Started WP	X					X			X	X	Partially approved. Reject Assumption 4: PP excluded, non value added.
29A601a	Rolling Wave / Freeze Period										X	Fully Approved.
32A102a	IMS incorporates latest authorized changes						X					Fully Approved.

NDIA IPMD Health Metrics Committee

July 2020 DCMA CCB



July 2020 DCMA CCB Results – Newly Added DECM Test Metrics

Metric	Metric Description	Comments
27A102b	Timephased ETCs aligned with remaining tasks in IMS	Similar to 27A102a but is more focused at looking at alignment between IMS and EV Cost Tool Data in terms of Period of Performance, gaps in time, front loaded, and back loaded.
29I402a	Checks LOE budgets having a sound basis of estimate and time phased to properly reflect when the work will be accomplished	Checks where the first ACWP was 3 reporting periods or more before the first BCWS
29I402b	Checks LOE budgets having a sound basis of estimate and time phased to properly reflect when the work will be accomplished	Checks where the first BCWS was 3 reporting periods or more before the first ACWP
29I402c	Checks LOE budgets having a sound basis of estimate and timephased to properly reflect when the work will be accomplished	Checks where the last ACWP was 3 reporting periods or more before the last BCWS
29I402d	Checks LOE budgets having a sound basis of estimate and timephased to properly reflect when the work will be accomplished	Checks where the last BCWS was 3 reporting periods or more before the last ACWP

NDIA IPMD Health Metrics Committee



July 2020 DCMA CCB & October 2020 Out of Sequence DCMA CCB

- Out of Sequence CCB Meeting will occur when there is a need for one (greater than semi-annually) where the EVMSC Director authorizes the board to convene
 - Out of Sequence CCBs are generally used to correct issues from a previously scheduled CCB
 - CCB Facilitator coordinates efforts to address only the issues requiring the review
 - All other remaining review items are addressed at the next scheduled CCB meeting
 - Out of Sequence CCBs of the same fiscal year become DECM 4.X.1 for approved CRs
- DCMA Test Metrics Version 3.6 / 3.6.1 Contains a Total of 143 Test Metrics versus Version 3.5.1 having 138 Test Metrics
- DCMA has released DCMA Test Metrics 3.6 / 3.6.1 with the following changes:
 - 5 New Test Metric, 0 Deleted Test Metrics, and 49 Updated Test Metrics Specifications from Version 3.5.1
 - Added Test Metric 27A102b Timephase ETC aligned with remaining tasks in IMS
 - Added Test Metric 29I402a Budgets for LOE has sound basis of estimate & timephased properly
 - Added Test Metric 29I402b Budgets for LOE has sound basis of estimate & timephased properly
 - Added Test Metric 29I402c Budgets for LOE has sound basis of estimate & timephased properly
 - Added Test Metric 29I402d Budgets for LOE has sound basis of estimate & timephased properly
- 49 Test Metrics were changed for test step changes, assumption clarifications, test instruction changes, step metric changes, test type changes, threshold changes, attribute changes, test metric changes, and data element changes. This change value is based on the changes from v3.6.1 to v3.5.1.

NDIA IPMD Health Metrics Committee

October 2020 Out of Sequence DCMA CCB



	Version 3.5.1 to Version 3.6	Version 3.6 to Version 3.6.1	Version 3.5.1 to Version 3.6.1	Comments
Metric Change Specification Documents Changed	38	24	49	11 New Document Changes were made in 3.6.1 not existing in 3.6
Changes in Assumptions	22	21	38	
Changes in Instructions	14	16	25	
Changes in Test Steps	2	6	6	
Changes in Test Type	0	0	0	
Changes in Threshold	0	0	0	
Changes in Attribute	0	0	0	
Changes in Test Metric	11	7	14	
Changes in Data Elements Required	8	13	16	
Total Discrete Changes to Metric Specification Documents	57	63	99	

The Metric Specification Documents change above include the New Test Metrics Added to 3.6 / 3.6.1

NDIA IPMD Health Metrics Committee

October 2020 Out of Sequence DCMA CCB



Version 3.6 / 3.6.1 Test Metric Change Summary

Version 3.5 / 3.5.1 Metric Count	138
Less Version 3.6 / 3.6.1 Deleted Test Metrics	0
Add New Version 3.6 / 3.6.1 Test Metrics	5
Total Version 3.6 / 3.6.1 Test Metrics	143
Changed Version 3.6 / 3.6.1 Test Metrics	49
No Change Version 3.6 / 3.6.1 Test Metrics	94
Add New Version 3.6 / 3.6.1 Test Metrics	0
Total Version 3.6 / 3.6.1 Test Metrics	143

Version 3.6 / 3.6.1 EVMS Focus Area Counts

Organization	18
Planning, Scheduling, & Budgeting	54
Accounting	22
Analysis & Management Reporting	23
Revisions & Data Maintenance	26
Total Test Metrics	143

Version 3.6 / 3.6.1 Change Count Details

Assumptions	38
Attributes	0
Data Element	16
Instructions	25
Test Metric	14
Test Step	6
Test Type	0
Threshold	0
Total Changes	99

Section Changes for All Document Changes

NDIA IPMD Health Metrics Committee

**Additional DECM Test Metric
Collaborative Initiatives**

NDIA IPMD Health Metrics Committee

Additional DECM Test Metric Collaborative Initiatives



- Technical Exchange Meeting (TEM) – DCMA Suggestion
 - DCMA would like to arrange a TEM to allow vendors and industry to ask questions or discuss issues
 - Looking to have the TEM in one of the face to face NDIA IPMD meetings
 - There will be general sessions held for the entire group using the topics DCMA recommended and possibly solicited topics from the NDIA DECM Committee
 - Recent updates on DECM Test Metrics
 - Sample data set history, method, expectations
 - Open discussions – How DCMA requests data
 - Any other recommended topics from NDIA DECM Committee to hold in general sessions or more personalized sessions
 - DCMA may have up to six individuals with different expertise to hold 20 minute sessions with individuals
 - Everyone that attends NDIA will be invited
- DCMA database collection of Surveillance Review data for FY 19 and FY 20
 - Data collected will be used for trending and prioritization of test metrics
 - Data should indicate which guidelines/test metrics are high risk vs low risk
 - Data should supplement the test prioritization effort being considered

NDIA IPMD Health Metrics Committee



DoD Industry DECM Test Metric Prioritization

- Seven companies participated in this DECM Test Prioritization effort.
 - 6 Aerospace contractors and 1 EVMS consulting firm
- Each company's SMEs evaluated and selected the priority ranking of each DECM Test Metrics from a corporate entity perspective with an importance level/score.
 - High=5, Medium=3, or Low=1
- Adjustments to rankings were made once all scores were gathered and analyzed side by side, to ensure the companies used some form of common ground when prioritizing. Compiled scores with a DoD Industry ranking.
 - 4.0 or above = High, 2.5 or above = Medium, less than 2.5 = Low
- A subset of the group evaluated the DECM Test Metrics to determine Primary and Secondary metrics.
- Purpose of the Primary/Secondary metrics determines if a contractor fails a Primary metric, it does not make sense to test the Secondary metrics.
- Primary vs Secondary metrics were fine tuned by the team with a final number of 35 Primary Test Metrics.
- Primary metrics are the metrics we believe best demonstrate:
 - A thorough understanding and intent to meet the fundamental principles of EVM
 - Mature, disciplined EVM processes are employed to manage the work scope
 - Management and customers are provided credible information to make timely and effective decisions
- Data sent to DCMA for review and has been forwarded to the DMCA Metric Prioritization Team.