Effective Date:	March 1, 2018	
Subject:	Earned Value Management System (EVMS) Surveillance	
Process Output:	Consistent Surveillance Reporting	
DAI Code(s):	D5460 Execute surveillance (Sys Audit-Earned Value)	
	D4000 Surveillance planning	
	D6000 Analyze results	
Point(s) of Contact:	DCMA-PIP EVMS Policy Lead, Kevin Carney, 804-416-9166	

References: DFARS 234.201, DFARS 252.234-7002, EVMS Interpretation Guide (EVMSIG), DCMA-INST 1201 Corrective Action Process, Test Metric Specification Sheets, *DCMA-MAN xxx EVMS TBD*

Purpose: Business Practice 4 defines a uniform process to conduct ongoing assessments (surveillance) of contractor EVMS compliance to the Electronic Industries Alliance Standard-748 EVMS (EIA-748) guidelines. The DCMA surveillance process will not replace the contractor's internal EVMS surveillance process or in any way remove the contractor's responsibility to implement and maintain an approved EVMS.

Roles and Responsibilities:

- 1. <u>Director, EVMS Center (referred to as "Director" in this issuance).</u> Final authority for all surveillance actions, excluding surveillance retained by Special Programs as defined below. Responsible for issuance of plans, review and outcomes of review activities. Final authority for the issuance or rescission of all surveillance Corrective Action Requests (CARs).
- 2. <u>Group Lead, EVMS Center (referred to as "Group Lead" in this issuance).</u> Assigns responsibilities to the Team Leads and Team Members to perform surveillance as outlined in this business practice. Responsible for approval/disapproval of all surveillance plans/reports and any resulting CARs.
- 3. <u>Team Lead, EVMS Center (referred to as "Team Lead" in this issuance).</u> Reviews the technical content and coordinates all surveillance plans/reports and any resulting CARs with the Group Lead. Ensures consistent corporate level ongoing compliance coverage. Coordinates site system status with cognizant contracting officers.
- 4. <u>Team Member, EVMS Center (referred to as "Team Member" in this issuance).</u> Executes the activities as directed in accordance with the process defined below.
- 5. <u>Director, DCMA Special Programs (SP).</u> Maintains personnel trained and capable of supporting surveillance planning and

execution for contracts requiring special program access at sites where mainstream EVMS Center has no contracts for performing system oversight. Will coordinate with EVMS Center to the extent possible.

Process:

Overview. EVMS surveillance assessments will be conducted IAW DCMA- MAN XXX at all contractor sites where there is a contractual requirement for EVMS oversight requirement. The EVMS surveillance assessment process can be summarized in three (3) phases as illustrated in Figure 1 below:

Plan	(steps 1-3)
Conduct	(steps 4-7)
Report	(steps 8-9)

The paragraphs below provide additional detailed steps for each phase.

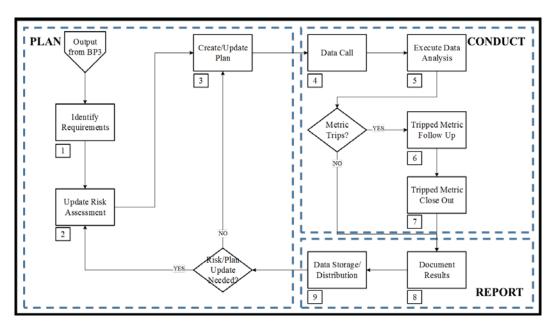


Figure 1. EVMS Surveillance Process

For SP contract(s), if existing surveillance is determined to be acceptable to address the risks of the system, the surveillance of the SP contracts is optional at the direction of the SP Director or delegate. If there is no existing site surveillance SP would develop a surveillance plan in accordance with this Business Practice.

Plan –

 <u>Identify Requirements</u> – Contracts with EVMS requirements are identified and communicated to the EVMS Center IAW DCMA-INST 2501-01 (CR&R) and are typically incorporated into the schedule as part of executing BP3. At least annually, the

Team Lead will contact the contractor's corporate/divisional level EVMS POC to identify any new sites, potential contracts, modifications to existing contracts, or subcontracts with EVMS requirements as part of developing the annual plan. The Team Lead must communicate any changes to the contract workload to the Group Lead.

- 2. <u>Update Risk Assessment</u> At least annually, the Team Member will use the Risk Assessment Worksheet (Attachment A) to review and update the risk assessment for each identified contractor site. The worksheet helps pinpoint focus areas based on the unique characteristics of the site, contracts/programs, and the EVMS. Focus areas are those that may pose higher risk when performing surveillance of the contractor's EVMS. The risk assessment will require the specialist to provide:
 - a. An assessment of the efficacy of the contractor's internal control/audit program
 - b. Results/findings from contractor internal oversight activities
 - c. Results/findings from prior EVMS Center compliance assessments (e.g., output from BP3) to include recent EVMS CARs for the site or business unit
 - d. Other concerns identified by Government PMOs, DCMA Contract Management Office (CMO) Program Support Teams, and other stakeholders

The objective of the risk assessment process is to identify a population of representative contracts against which we can test all aspects of the system. For sites with a single contract, the population will be one. For sites with multiple contracts, the risk assessment should identify which contracts will be reviewed throughout the year, as well as contracts that are omitted from the plan, with supporting rationale for both cases. Surveillance of more than five (5) contracts at a single site should be discussed with the group lead as necessary to address staffing and the risks of the system.

3. Create/Update Plan – At the beginning of the fiscal year, the Team Member will initiate the creation/update of the surveillance plan (using Attachment B) to document monthly activities at a contractor's site throughout the calendar year. The plan will take into consideration and ensure the complete evaluation of the site's EVMS over a 3-year cycle to support site re-certification per DCMA-MANUAL-xxx. At a minimum, the plan will include a yearly schedule of the planned system testing criteria and events using the established groups of test metrics specific to this Business Practice (shown as Attachment C). The plan will also include any supporting rationale from the risk assessment for decreased/increased activities outside of the suggested scope and frequency of test metrics as defined in the specification. The plan should be timed such that each surveillance event can be closed out prior to starting a subsequent event on the same contract. Whenever there is a change to a risk assessment the annual plan may require revision. Revisions may be due to a change in contracts, receipt of customer requests, or findings which warrant adjustments in the execution of surveillance throughout the year. These changes must be communicated to the contractor and future event notifications should detail any changes to the metrics scheduled to be run (or supporting data requirements).

There are five (5) groups of metrics with different minimum suggested frequencies of

evaluation (shown as Attachment C). The groupings are intended to minimize the data inputs required from the contractor. While Group 1 metrics purposely leverage automated data analysis using the Integrated Master Schedule (IMS) and the EV Cost Tool Data, Groups 2-5 are mostly manual and broken out to minimize the number of data calls. The metric groups are run across all contracts identified in the risk assessment as the representative population. The applicable metric groups and contract(s) utilized in the site assessment must be identified in the established plan. The stated evaluation periods reflect the minimum frequency for site risk management but can be further reduced or increased with documented justification based on the risk assessment. The results of all metrics run on site should feed back into the risk assessment.

- a. Group 1 Metrics: Cost and schedule execution indicators (minimum frequency quarterly). These risk indicators evaluate two areas of compliance: first, the processes and attributes that ensure accurate cost/schedule integration and status; second the processes and attributes that ensure maintenance of an Integrated Master Schedule that supports producing a valid forecast to milestone completion dates.
 - i. Automated cost and schedule health metrics should be trended over time to monitor data maintenance during contract execution. Although no action will be taken if a metric does not trip an established threshold, the information should be collected for metric assessment and system risk assessments.
 - ii. All metrics within this group are automated and should be considered standalone indicators, with the following exceptions executed as a follow-up to a tripped metric:
 - 1. Time-phased ETC: to be utilized in conjunction with EAC validity indicator tests and should be trended after initial occurrence. The test should be run at least once per year regardless of trends.
 - 2. Estimated actuals must be assessed when ACWP/BCWP alignment indicator tests trip the metric. The test should be run at least once per year regardless of trends.
 - 3. Manual logic traces to include a critical path test will be used as necessary when schedule health indicators trip thresholds over a quarterly trend. The test should be run at least once per year regardless of trends.
 - iii. When a Group 1 metric breaches a threshold, additional metrics may be evaluated to determine if an issue exists. This may require the evaluation of specific metrics that are scheduled at a later time or in other groupings. The resultant metric from another group must provide additional insight into the tripped metric. Examples would include the QBD evaluation metrics or actual reconciliation for A/P alignments if follow-up has warranted further review.
- b. Group 2 Metrics: S-P-A follow-up and AMR (minimum frequency semi-annual) These are metrics which utilize manual traces to evaluate the risks associated with the processes/attributes in establishing BCWS, claiming BCWP and performing the

analysis of monthly data.

- c. Group 3 Metrics: Change control and budget management/traceability (minimum frequency annual). The metrics utilize manual traces to evaluate the risks associated with the processes/attributes included in the PMB maintenance process.
- d. Group 4 Metrics: Integrating processes Material and/or Subcontract Management (minimum frequency triennial) Address processes/attributes related to the integration of data between the material handling system and the EVMS.
 - i. The requirement may not apply to all contracts identified in the population.
 - ii. Application should target programs/contracts that are assessed as high risk due to the volume of material included on contract and/or integrating parts from an MRP.
- e. Group 5 Metrics: Integrating processes Accounting (minimum frequency triennial). Address processes/attributes related to the integration of cost data between the accounting system and the EVMS. If the accounting tools and processes are managed above the site level, all plans should be adjusted to perform the group of tests at the same time using a representative population for that division.

All initial plans/revisions will be approved by the Team Lead. Before forwarding to the Group Lead for concurrence (for resource management purposes), the Team Lead will verify that the plan is complete and the documented substantiations support the plan in accordance with this instruction. The Team Member will walk through the plan with the contractor to clarify data delivery requirements and timing to ensure successful execution.

The Team Member will ensure the contractor understands the data requirements and timing of the deliveries to support the plan.

- a. The Team Member must identify the specific documents and program directives referenced in the company's System Description (SD) or command media (e.g., the Risk & Opportunity Log, Baseline Change Log, and Corrective Action Log) to support the metric schedule.
- b. If the contractor's business systems or EVMS process instruction require internal corporate oversight to ensure compliance to the EIA-748 guidelines, the Team Member must request the future year plan, documentation and results of the current year, and any internally-issued CARs and CAPs resulting from these internal reviews.

Conduct –

4. <u>Data Call</u> – Although the annual plan has been established with the contractor, the Team Member must notify the contractor by email in advance of each individual event. The Team Member must communicate data requirements (content and timing) and dates for follow-up actions should they be necessary. The notification also must identify any additional requirements based upon updates to the risk profile. Upon receipt the Team Member will ensure that the data is received from the

contractor IAW the request. Any missing data elements will be communicated in a timely manner to allow the contractor to supply the data to support the planned activities.

5. Execute Data Analysis - Surveillance will be based on metric results run with the contractor's data. The data is an output that should demonstrate effective implementation of the processes and tools identified within their SD and in compliance with the EIA-748 guidelines and the EVMSIG. SD evaluation is detailed in Business Practice 2, "System Description Review", however metric trips and follow-up may identify the process as described as ineffective or deficient in meeting the intent of the guidelines and requiring corrective actions to remediate the issue.

Surveillance must leverage reports and findings from internal surveillance activity (surveillance results, supporting documentation, trip follow-up/resolution, and selfidentified noncompliance's). The Team Member can spot check results and utilize the contractor's internal metric results in lieu of running independent calculation. Similarly, metric trip follow-up can leverage contractor actions, with independent validation of underlying data and interview follow-up as required. Either way, the choice to leverage contractor actions, or not to, must be supported in the report. Joint surveillance consists of a team approach to metric follow-up and/or interview actions and should be utilized to the maximum extent possible. The contractor team member must be independent of the program management reporting hierarchy for the site. The Team Member has the responsibility to document all review activities inclusive of independently identifying contractor and government actions.

<u>Evaluate Results</u> - The Team Member must evaluate the results from the test metrics. If no automated metric result exceeds the established thresholds in the Test Metric Specification Sheets, the Team Member will proceed to step 8 to document the results. For manual tests, a trip is resultant from instruction in sampling guidance, where the threshold dictates the sample size. If the metric results indicate trends that are indicative of a potential issue, the trends should be noted in the report and communicated to the contractor, but no other actions should be taken.

- 6. <u>Tripped Metric Follow-Up</u> If any metrics exceed the threshold or the sample is outside the statistical range of acceptability, the Team Member will evaluate the data anomalies causing the trip(s). All follow-up actions will be completed from the data/artifacts supplied to the greatest extent possible. Follow-up actions may include:
 - a. Discussions with the contractor and other stakeholders
 - b. Requests for data to support an expanded sample size or additional artifacts related to the data anomalies
 - c. Interviews with appropriate Control Account Managers and other contractor personnel
- 7. <u>Tripped Metric Closeout</u> After metric follow-up actions are complete, the Team Member will determine if the metric trip represents a false indicator, in which case it

should be closed out and annotated. If it is not a false indicator the team member will take one of the following steps to close out the action:

- a. Acceptance of the condition as the correct execution of the contractor system
- b. Notation of a risk for future surveillance activities (with specific actions at a subsequent event)
- c. Issuance of Corrective Action Request(s) IAW DCMA-INST 1201"Corrective Action Process"

At the completion of the surveillance event, the Team Member will provide an outbrief to their contractor counterparts summarizing the event and any actions taken for metric close-out. All metrics must be closed out within the current surveillance event. The detail and format of the outbrief should be adjusted based upon the events included in the review.

Special circumstances may arise or exist where evaluation of all planned metrics may not be practical or appropriate (e.g., the investigation of an identified deficiency requires that further metric evaluation be suspended; programmatic reviews impact the timeline available for execution). Each circumstance will be considered for approval on a case-by-case basis by the Group Lead.

Report -

- 8. <u>Document results</u> Assessment activities for each site will be documented using the report template (Attachment D). The report must summarize or provide the following:
 - a. A report with an executive summary providing high level results and any impacts or adjustments to EVM program analysis for delivery to the PMO/CMO.
 - b. Results from all metrics that were evaluated during the surveillance event (to include:
 - i. differences between actual execution and the plan, including justification
 - ii. data "as of" date used for metric analysis
 - c. Follow-up actions taken based on the metric results and metric close-out, to include:
 - i. Contractor personnel interviews which were conducted
 - ii. Additional artifact(s) requested and reviewed
 - iii. Result of the artifact(s) review
 - iv. Interview summaries
 - d. Summary of CARs issued or observations made
 - e. Summary of updates to the site risk assessment resulting in an update to the plan (if applicable)
 - f. Potential impacts to EVM Program Analysis (if applicable)
 - g. CAR/Corrective Action Plan (CAP) status for site

Report frequency will support the activities identified in the plan; at a minimum a report must be issued quarterly to identify surveillance conducted during the period unless there is no event planned. If the Team Member identifies any significant deficiencies in the contractors EVMS they shall present those findings to the Team Lead for concurrence and elevation to the Group Lead. Group Lead will ensure the documentation of any significant deficiency in accordance with DCMA-MAN xxx EVMS TBD and the Business System Instruction for escalation to the Director for concurrence and processing.

All completed surveillance reports must be reviewed and approved by the Team Lead.

If changes to the surveillance plan are required, the Team Member will draft the updated plan and submit to the Team Lead. The Team Lead will coordinate with the Group Lead for guidance and concurrence of the proposed changes. Refer to the **Plan** section for plan update requirements.

9. Documents/Data Storage & Distribution - The Team Member will post approved plans/reports to the Integrated Workflow Management System (IWMS) and event tracking and completion will be noted in the DCMA 360 Earned Value (EV) System Surveillance Tracker. Contractor sensitive, proprietary, or NOFORN (no foreign nationals) data will be marked and protected accordingly. The Group Lead is responsible for ensuring the DCMA 360 EV System Surveillance Tracker and IWMS databases are maintained with complete and accurate data.

After approval, plans/reports will be distributed to the appropriate DCMA CMO point(s) of contact, Government PMOs, and contractor by the Team Member. Distribution of documents to other requesting individuals or organizations will require approval from the Director or delegate to ensure proprietary data has been removed. Caution will be used when distributing documents outside of DCMA to prevent disclosure of program sensitive or contractor proprietary information.

This business practice will remain in effect until further notice.

Attachments:

- A. Risk Assessment Worksheet
- B. Surveillance Plan Template
- C. Surveillance Metrics
- D. Surveillance Report Template

OLSEN.STEPHEN. SHANE.12357225 49 Shane Olsen Director, EVMS Center Portfolio Management and Business Integration

Rev Number	Description of Change	Sections Affected	Date
v1.0	Initial version		02/28/2018