

DOE EVMS CROSS REFERENCE CHECKLIST

The purpose of this checklist is to evaluate a contractor's EVMS procedures to the ANSI/EIA-748 Guidelines. This process is typically done during a certification review, evaluation of changes to procedures, and when questions arise during subsequent surveillances.

This checklist is just one tool. Other references may assist in the evaluation process. A recommended guide to be used in conjunction with this checklist is the NDIA PMSC, *Earned Value Management Systems Intent Guide*, 2006, http://www.ndia.org/Divisions/Divisions/Procurement/Pages/Program_Management_Systems_Committee.aspx

GUIDELINE and QUESTIONS	Y/N	SD Ref	ASSESSMENT NOTES	DOCUMENTS
I. ORGANIZATION				
1. Define the authorized work elements for program. A work breakdown structure (WBS), tailored for effective internal management control, is commonly used in this process.				
a. Is only one WBS used for the project				
b. Is all contract work included in the WBS including a complete definition of work scope requirements?				
c. Are the following items included in the WBS:				
(1) Contract line items and end items (if in consonance with MIL-STD-881 latest edition or applicable DOE guide)?				
(2) All WBS elements specified for external reporting?				
(3) WBS elements to be subcontracted, with identification of subcontractors?				
(4) Control account levels?				
2. Identify the program organizational structure including the major subcontractors responsible for accomplishing the authorized work, and define the organizational elements in which work will be planned and controlled.				
a. Are all authorized tasks assigned to identified organizational elements? (This must occur at the control account level as a minimum. Prepare exhibit showing relationships.)				
b. Is subcontracted work defined and identified to the appropriate subcontractor within the proper WBS element? (Provide representative example.)				
3. Provide for the integration of the company's planning, budgeting, work authorization and cost accumulation processed with each other, and as appropriate, the program work breakdown structure and the program organizational structure.				

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a. Are the contractor's management control systems listed above integrated with each other, the WBS, and the organizational structure at the following levels: (Use matrix to illustrate the relationships.)				
(1) Total contract?				
(2) Control account?				
4. Identify the company organization or function responsible for controlling overhead (indirect costs).				
a. Are the following organizational elements and managers clearly identified:				
(1) Those responsible for the establishment of budgets and assignment of resources for overhead performance?				
(2) Those responsible for overhead performance control of related costs?				
b. Are the responsibilities and authorities of each of the above organizational elements or managers clearly defined?				
5. Provide for integration of the program work breakdown structure and the program organizational structure in a manner that permits cost and schedule performance measurement by elements of either or both structures as needed.				
a. Is each control account assigned to a single organizational element directly responsible for the work and identifiable to a single element of the WBS?				
b. Are the following elements for measuring performance available at the levels selected for control and analysis:				
(1) Budgeted cost for work scheduled?				
(2) Budgeted cost for work performed?				
(3) Actual cost of work performed?				

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II. PLANNING AND BUDGETING				
6. Schedule the authorized work in a manner which describes the sequence of work and identifies significant task interdependencies requires to meet the requirements of the program				
a. Does the scheduling system contain (Prepare exhibit showing traceability from contract task level to work package schedules.)--				
(1) A master program schedule?				
(2) Intermediate schedules, as required, which provide a logical sequence from the master schedule to the control account level?				
(3) Detailed schedules which support control account and work package start and completion dates/events?				
b. Are significant decision points, constraints, and interfaces identified as key milestones?				
c. Does the scheduling system provide for the identification of work progress against technical and other milestones, and also provide for forecasts of completion dates of scheduled work?				
d. Are work packages formally scheduled in terms of physical accomplishment by Gregorian, Julian, or manufacturing day?				
e. Does the schedule support the development of a critical path?				
7. Identify physical products, milestones, technical performance goals, or other indicators that will be used to measure progress.				
a. Are meaningful indicators identified for use in measuring the status of cost and schedule performance? (Provide representative examples.)				
b. Does the contractor's system identify work accomplishment against the schedule plan? (Provide representative examples.)				

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c. Are current work performance indicators and goals relatable to original goals as modified by contractual changes, replanning, and reprogramming actions? (Provide exhibit showing incorporation of changes to original indicators and goals.)				
8. Establish and maintain a time-phased budget baseline, at the control account level, against which program performance can be measured. Budget for far-term efforts may be held in higher level accounts until an appropriate time for allocation at the control account level. Initial budgets established for performance measurement will be based on either internal management goals or the external customer negotiated target cost including estimates for authorized but undefinitized work. On government contracts, if an over target baseline is used for performance measurement reporting purposes, prior notification must be provided to the customer.				
a. Does the performance measurement baseline consist of the following:				
(1) Time-phased control account budgets?				
(2) Higher level WBS element budgets (where budgets are not yet broken down into control account budgets)?				
(3) Undistributed budgets, if any?				
(4) Indirect budgets, if not included in the above?				
b. Is the entire contract planned in time-phased control accounts to the extent practicable?				
c. In the event that future contract effort cannot be defined in sufficient detail to allow the establishment of control accounts, is the remaining budget assigned to the lowest practicable WBS level elements for subsequent distribution to control accounts?				
d. Does the contractor require sufficient detailed planning of control accounts to constrain the application of budget initially allocated for future effort to current effort? (Explain constraints.)				
e. Are control accounts opened and closed based on the start and completion of work contained therein?				

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f. Do the control account budgets reflect the planned resources to perform the requirements and only exceed the CBB when an OTB has been authorized?				
9. Establish budgets for authorized work with identification of significant cost elements (labor, material, etc.) as needed for internal management and for control of subcontractors.				
a. Does the budgeting system contain-- (Provide exhibit.)				
(1) The total budget for the contract (including estimates for authorized but unpriced work)?				
(2) Budgets assigned to major functional organizations?				
(3) Budgets assigned to control accounts?				
b. Are the budgets assigned to control accounts planned and identified in terms of the following cost elements: (Reference Formats 3 and 4.)				
(1) Direct labor dollars and/or hours?				
(2) Material and/or subcontract dollars?				
(3) Other direct dollars?				
c. Does the work authorization system contain(Prepare sample exhibit.)				
(1) Authorization to proceed with all authorized work?				
(2) Appropriate work authorization documents which subdivide the contractual effort and responsibilities, within functional organizations?				
10. To the extent it is practical to identify the authorized work in discrete work packages, establish budgets for this work in terms of dollars, hours, or other measurable units. Where the entire control account is not subdivided into work packages, identify the far term effort in larger planning packages for budget and scheduling purposes.				
a. Do work packages reflect the actual way in which the work will be done and are they meaningful products or management-oriented subdivisions of a higher level element of work? (Provide representative sample.)				

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b. Are detailed work packages planned as far in advance as practicable?				
c. Is work progressively subdivided into detailed work packages as requirements are defined?				
d. Is future work which cannot be planned in detail subdivided to the extent practicable for budgeting and scheduling purposes? (Provide sample.)				
e. Are work packages reasonably short in time duration or do they have adequate objective indicators/milestones to minimize subjectivity of the in process work evaluation?				
f. Do work packages consist of discrete tasks which are adequately described? (Provide representative sample.)				
g. Can the contractor substantiate work package and planning package budgets?				
h. Are budgets or values assigned to work packages and planning packages in terms of dollars, hours, or other measurable units?				
i. Are work packages assigned to performing organizations?				
j. Where engineering standards or other internal work measurement systems are used, is there a formal relationship between these values and work package budgets? (Provide samples showing relationships.)				
k. Where "learning" is used in developing underlying budgets is there a direct relationship between anticipated learning and time phased budgets?				
11. Provide that the sum of all work package budgets plus planning package budgets within a control account equals the control account budget.				
a. Does the sum of all work package budgets plus planning packages within control accounts equal the budgets assigned to those control accounts?				

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12. Identify and control level of effort activity by time-phased budgets established for this purpose. Only that effort which is unmeasurable or for which measurement is impractical may be classified as level of effort.				
a. Are time-phased budgets established for planning and control of level of effort activity by category of resource; for example, type of manpower and/or material? (Explain method of control and analysis.)				
b. Is work properly classified as measured effort, LOE, or apportioned effort and appropriately separated?				
c. Is LOE held to the lowest practical level and budgeted on a time-phased basis?				
13. Establish overhead budgets for each significant organizational component of the company for expenses which will become indirect costs. Reflect in the program budgets, at the appropriate level, the amounts in overhead pools that are planned as indirect costs.				
a. Are overhead cost budgets (or projections) established on a facility-wide basis at least annually for the life of the contract?				
b. Are overhead cost budgets established for each organization which has authority to incur overhead costs?				
c. Are all elements of indirect expense identified to overhead cost budgets of projections?				
d. Are overhead budgets and costs being handled according to the disclosure statement when applicable, or otherwise properly classified (for example, engineering overhead, IR&D)?				
e. Is the anticipated (firm and potential) business base projected in a rational, consistent manner? (Explain.)				
f. Are overhead costs budgets established on a basis consistent with anticipated direct business base?				
g. Are the requirements for all items of overhead established by rational, traceable processes?				
h. Are the overhead pools formally and adequately identified? (Provide a list of the pools.)				

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i. Are the organizations and items of cost assigned to each pool identified?				
j. Are projected overhead costs in each pool and the associated direct costs used as the basis for establishing interim rates for allocating overhead to contracts?				
k. Are projected overhead rates applied to the contract beyond the current year based on-				
(1) Contractor financial periods; for example, annual?				
(2) The projected business base for each period?				
(3) Contemplated overhead expenditure for each period based on the best information currently available?				
l. Are overhead projections adjusted in a timely manner to reflect-				
(1) Changes in the current direct and projected base?				
(2) Changes in the nature of the overhead requirements?				
(3) Changes in the overhead pool and/or organization structures?				
m. Are the WBS and organizational levels for application of the projected overhead costs identified?				
14. Identify management reserves and undistributed budget.				
a. Is all budget available as management reserve identified and excluded from the performance measurement baseline?				
b. Are records maintained to show how management reserves are used (sources, uses, control account affected, current value)? (Provide exhibit.)				
c. Is undistributed budget limited to contract effort which cannot yet be planned to WBS elements at or below the level specified for reporting to the Government?				

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d. Are records maintained to show how undistributed budgets are controlled (sources, uses, control account affected, current value)? (Provide exhibit.)				
15. Provide that the program target cost goal is reconciled with the sum of all internal program budgets and management reserves.				
a. Does the contractor's system description or procedures require that the performance measurement baseline plus management reserve equal the contract budget base?				
b. Do the sum of the control account budgets for higher level WBS elements, undistributed budget, and management reserves reconcile with the contract target cost plus the estimated cost for authorized unpriced work? (Provide exhibit.)				
III. ACCOUNTING CONSIDERATIONS				
16. Record direct costs in a manner consistent with the budgets in a formal system controlled by the general books of account.				
a. Does the accounting system provide a basis for auditing records of direct costs chargeable to the contract?				
b. Are elements of direct cost (labor, material, and so forth) accumulated within control accounts in a manner consistent with budgets using recognized acceptable costing techniques and controlled by the general books of account?				
17. When a work breakdown structure is used, summarize direct costs from control accounts into the work breakdown structure without allocation of a single control account to two or more work breakdown structure elements.				
a. Is it possible to summarize direct costs from the control account level through the WBS to the total contract level without allocation of a lower level WBS element to two or more higher level WBS elements? (This does not preclude the allocation of costs from a control account containing common items to appropriate using control accounts.)				

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18. Summarize direct costs from the control accounts into the contractor's organizational elements without allocation of a single control account to two or more organizational elements.				
a. Is it possible to summarize direct costs from the control account level to the highest functional organizational level without allocation of a lower level organization's cost to two or more higher level organizations? (This does not preclude the allocation of costs from a control account containing minor non-organizational work to the appropriate functional organizations.)				
19. Record all indirect costs which will be allocated to the contract.				
a. Does the cost accumulation system provide for summarization of indirect costs from the point of allocation to the contract total?				
b. Are indirect costs accumulated for comparison with the corresponding budgets?				
c. Do the lines of authority for incurring indirect costs correspond to the lines of responsibility for management control of the same components of costs? (Explain controls for fixed and variable indirect costs.)				
d. Are indirect costs charged to the appropriate indirect pools and incurring organization?				
e. Are the bases and rates for allocating costs from each indirect pool consistently applied?				
f. Are the bases and rates for allocating costs from each indirect pool to commercial work consistent with those used to allocate such costs to Government contracts?				
g. Are the rates for allocating costs from each indirect cost pool to contracts updated as necessary to ensure a realistic monthly allocation of indirect costs without significant year-end adjustments?				

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h. Are the procedures for identifying indirect costs to incurring organizations, indirect cost pools, and allocating the costs from the pools to the contracts formally documented?				
20. Identify unit costs, equivalent units costs, or lot costs when needed.				
a. Does the contractor's system provide unit costs, equivalent unit or lot costs in terms of labor, material, other direct, and indirect costs? (Describe procedure.)				
b. Does the contractor have procedures which permit identification of recurring or non-recurring costs as necessary?				
21. For EVMS, the material accounting system will provide for: (1) Accurate cost accumulation and assignment of costs to control accounts in a manner consistent with the budgets using recognized, acceptable, costing techniques. (2) Cost performance measurement at the point in time most suitable for the category of material involved, but no earlier than the time of progress payments or actual receipt of material. (3) Full accountability of all material purchased for the program including the residual inventory.				
a. Does the contractor's system provide for accurate cost accumulation and assignment to control accounts in a manner consistent with the budgets using recognized acceptable costing techniques?				
b. Are material costs reported within the same period as that in which BCWP is earned for that material?				
c. Does the contractor's system provide for determination of price variance by comparing planned versus actual commitments?				
d. Is cost performance measurement at the point in time most suitable for the category of material involved, but no earlier than the time of actual receipt of material?				
e. Does the contractor's system provide for the determination of cost variances attributable to the excess usage of material?				
f. Does the contractor's system provide unit or lot costs when applicable?				

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g. Are records maintained to show full accountability for all material purchased for the contract, including the residual inventory?				
IV. MANAGEMENT and ANALYSIS				
22. At least on a monthly basis, generate the following information at the control account and other levels as necessary for management control using actual cost data from, or reconcilable with, the accounting system: (1) Comparison of the amount of planned budget and the amount of budget earned for work accomplished. This comparison provides the schedule variance. (2) Comparison of the amount of the work budget earned the actual (applied where appropriate) direct costs for the same work. This comparison provides the cost variance.				
a. Does the contractor's system include procedures for measuring performance of the lowest level organization responsible for the control account? (Provide typical example.)				
b. Does the contractor's system include procedures for measuring the performance of critical subcontractors?				
c. Is cost and schedule performance measurement done in a consistent, systematic manner?				
d. Are the actual costs used for variance analysis reconcilable with data from the accounting system?				
e. Is budgeted cost for work performed calculated in a manner consistent with the way work is planned? (For example, if work is planned on a measured basis, is budgeted cost for work performed calculated on a measured basis using the same rates and values?)				
f. Does the scheduling system identify in a timely manner the status of work?				
g. Does the contractor use objective results, design reviews, and tests to trace schedule?				

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23. Identify, at least monthly, the significant differences between both planned and actual schedule performance and planned and actual cost performance, and provide the reasons for the variances in the detail needed by program management.				
a. Does the contractor have variance analysis procedures and a demonstrated capability for identifying (at the control account and other appropriate levels) cost and schedule variances resulting from the system (provide examples) which-				
(1) Identify and isolate causes of favorable and unfavorable cost and schedule variances?				
(2) Evaluate the performance of operating organizations?				
(3) Identify potential or actual overruns and underruns?				
b. Identify potential or actual budget-based and time-based schedule variances?				
c. Evaluate the cause and impact of schedule changes, work around, etc. in sufficient detail needed for program management?				
(1) Does the scheduling system identify in a timely manner the status of work? (Provide representative examples.)				
(2) Does the contractor use objective results, design reviews and tests to trace schedule performance? (Provide examples.)				
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.				
a. Are the variances between budgeted and actual indirect costs identified and analyzed at the level of assigned responsibility for their control (indirect pool, department, etc.)?				

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b. Does the contractor's cost control system provide for capability to identify the existence and root causes of cost variances resulting from--				
(1) Incurrence of actual indirect costs in excess of budgets, by element of expense?				
(2) Changes in the direct base to which overhead costs are allocated?				
c. Are management corrective actions taken to reduce indirect costs when there are significant adverse variances?				
25. Summarize the data elements and associated variances through the program organization and/or work breakdown structure to support management needs and any customer reporting specified in the contract.				
a. Are data elements (BCWS, BCWP, and ACWP) progressively summarized from the detail level to the contract level through the WBS? (Provide exhibit.)				
b. Are data elements summarized through the functional organizational structure for progressively higher levels of management? (Provide exhibit.)				
c. Are data elements reconcilable between internal summary reports and reports forwarded to the Government?				
d. Are procedures for variance analysis documented and consistently applied at the control account level and selected WBS and organizational levels at least monthly as a routine task? (Provide examples.)				
e. Do management actions plans include corrective actions plan/mitigation plan, task, milestones, exit criteria, schedules?				
26. Implement managerial actions taken as the result of earned value information.				
a. Is data disseminated to the contractor's management timely, accurate, and usable?				

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b. Are data being used by managers in an effective manner to ascertain program or functional status, to identify reasons or significant variance, and to initiate appropriate corrective action?				
c. Are there procedures for monitoring action items and corrective actions to the point of resolution and are these procedures being followed?				
27. Develop revised estimates of cost at completion based on performance to date, commitment values for material, and estimates of future conditions. Compare this information with the performance measurement baseline to identify variances at completion important to company management and any applicable customer reporting requirements including statements of funding requirements.				
a. Are estimates of costs at completion based on-				
(1) Performance to date and material commitment?				
(2) Actual costs to date?				
(3) Knowledgeable projections of future performance?				
(4) Estimates of the cost for contract work remaining to be accomplished considering economic escalation?				
(5) Emerging risks and opportunities within the project's risk register which will impact integrated master schedule and resource plan for the remainder of the work?				
b. Are the overhead rates used to develop the contract cost estimate to complete based on-				
(1) Historical experience?				
(2) Contemplated management improvements?				
(3) Projected economic escalation?				
(4) The anticipated business volume?				
c. Are estimates of cost at completion generated with sufficient frequency to provide identification of future cost problems in time for possible corrective or preventive actions by both the contractor and the Government program manager?				

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d. Are estimates developed by program personnel coordinated with those responsible for overall plant management to determine whether required resources will be available according to revised planning?				
e. Are estimates of cost at completion generated by knowledgeable personnel for the following levels:				
(1) Control accounts?				
(2) Major functional areas of contract effort?				
(3) Major subcontracts?				
(4) WBS elements contractually specified for reporting of status to the Government (lowest level only)?				
(5) Total contract (all authorized work)?				
f. Are the latest revised estimates of costs at completion compared with the established budgets at appropriate levels and causes of variances identified?				
g. Are estimates of costs at completion generated in a rational, consistent manner? Are procedures established for appropriate aspects of generating estimates of costs at completion?				
h. Are estimates of costs at completion utilized in determining contract funding requirements and reporting them to the Government?				
i. Are the contractor's estimates of costs at completion reconcilable with cost data reported to the Government?				

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V. REVISIONS AND DATA MAINTENANCE				
28. Incorporate authorized changes in a timely manner, recording the effects of such changes in budgets and schedules. In the directed effort prior to negotiation of a change, base such revisions on the amount estimated and budgeted to the program organizations.				
a. Are authorized changes being incorporated in a timely manner?				
b. Are all affected work authorizations, budgeting, and scheduling documents amended to properly reflect the effects of authorized changes? (Provide examples.)				
c. Are internal budgets for authorized, but not priced changes based on the contractor's resource plan for accomplishing the work?				
d. If current budgets for authorized changes do not sum to the negotiated cost for the changes, does the contractor compensate for the differences by revising the undistributed budgets, management reserves, budgets established for work not yet started, or by a combination of these?				
29. Reconcile current budgets to prior budgets in terms of changes to the authorized work and internal replanning in the detail needed by management for effective control.				
a. Are current budgets resulting from changes to the authorized work and/or internal replanning, reconcilable to original budgets for specified reporting items?				
30. Control retroactive changes to records pertaining to work performed that would change previously reported amounts for actual costs, earned value, or budgets. Adjustments should be made only for correction of errors, routine accounting adjustments, effects of customer or management directed changes, or to improve the baseline integrity and accuracy of performance measurement data.				
a. Are retroactive changes to direct costs and indirect costs prohibited except for the correction of errors and routine accounting adjustments?				
b. Are direct or indirect cost adjustments being accomplished according to accounting procedures acceptable to DCAA OR OTHER GOVERNMENT AUDIT AGENCY?				

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c. Are retroactive changes to BCWS and BCWP prohibited except for correction of errors or for normal accounting adjustments?				
31. Prevent revisions to the program budget except for authorized changes.				
a. Are procedures established to prevent changes to the contract budget base (see definition) other than those authorized by contractual action?				
b. Is authorization of budgets in excess of the contract budget base controlled formally and done with the full knowledge and recognition of the procuring activity? Are the procedures adequate?				
32. Document changes to the performance measurement baseline.				
a. Are changes to the performance measurement baseline made as a result of contractual redirection, formal reprogramming, internal replanning, application of undistributed budget, or the use of management reserve, properly documented and reflected in the Contract Performance Report?				
b. Do procedures specify under what circumstances replanning of open work packages may occur, and the methods to be followed? Are these procedures adhered to?				
c. Are retroactive changes to budgets for completed work specifically prohibited in an established procedure, and is this procedure adhered to?				
d. Are procedures in existence that control replanning of unopened work packages, and are these procedures adhered to?				