

ASD(C)

Department of Defense Instruction

SUBJECT

Performance Measurement for Selected Acquisitions

References:

- (a) DoD Directive 7000.1, "Resource Management Systems of the Department of Defense," August 22, 1966
- (b) DoD Directive 5000.1, "Major System Acquisitions," January 18, 1977
- (c) DoD Directive 5000.2, "Major System Acquisition Process," January 18, 1977
- (d) through (i), see enclosure 2.

A. REISSUANCE AND PURPOSE

This Instruction reissues reference (f) and sets forth objectives and criteria for the application of uniform DoD requirements to selected defense contracts. The provisions of this Instruction specifically require the use of Cost/Schedule Control Systems Criteria (C/SCSC) in selected acquisitions. Reference (f) is hereby superseded and cancelled.

B. APPLICABILITY AND SCOPE

- 1. The provisions of this Instruction apply to all Military Departments and Defense Agencies (hereafter referred to as "DoD Components") which are responsible for acquisitions during systems development and production.
- 2. The acquisitions governed by this Instruction are in selected contracts and subcontracts within programs designated as major system acquisition programs in accordance with reference (b). Firm-fixed-price and firm-fixed-price-with-economic-price-adjustment contracts are excluded. Application of the C/SCSC to major construction projects is also encouraged where appropriate.

C. OBJECTIVES

- 1. To provide an adequate basis for responsible decision-making by both contractor management and DoD Components, contractors' internal management control systems must provide data which (a) indicate work progress, (b) properly relate cost, schedule and technical accomplishment, (c) are valid, timely and auditable, and (d) supply DoD managers with information at a practicable level of summarization.
- 2. To bring to the attention of, and encourage, DoD contractors to accept and install management control systems and procedures which are most effective in meeting their requirements and controlling contract performance. DoD contractors also should be continuously alert to advances in management control systems which will improve their internal operations.

D. POLICY

- 1. It shall be the general policy to (a) require applications of the C/SCSC as stated in enclosure 1 to programs that are within the scope of section B., above, (b) require no changes in contractors' existing cost/schedule control systems except those necessary to meet the C/SCSC, and (c) require the contractor to provide to the Government performance data directly from the same system used for internal management.
- 2. The policies and criteria contained herein will not be construed as requiring the use of specific systems or changes in accounting systems which will adversely affect (a) the equitable distribution of costs to all contracts, or (b) compliance with the standards, rules, and regulations promulgated by the Cost Accounting Standards Board.
- 3. Subcontracts within applicable programs, excluding those that are firm-fixed-price, may be selected for application of these criteria by mutual agreement between prime contractors and the contracting DoD Component, according to the criticality of the subcontract to the program. Coverage of certain critical subcontracts may be directed by the Department of Defense, subject to the changes article of the contracts. In those cases where a subcontractor is not required to comply with the criteria, the Cost/Schedule Status Report (C/SSR) approach to performance measurement set forth in DoD Instruction 7000.10 (reference (g)) will normally be used. The limitations in reference (g) apply.
- 4. The applicability of C/SCSC and provisions concerning the acceptability and use of contractor's cost/schedule control systems shall be (a) included in the Decision Coordinating Papers (DCP) leading to the decisions for full-scale development and production, (b) addressed in procurement plans, (c) set forth in Requests for Proposal (RFP), and (d) made a contractual requirement in appropriate procurements.
- a. Reviews of Systems. To ensure compliance with the Cost/ Schedule Control Systems Criteria, contractors' systems will be reviewed during various phases of the contracting process.
- (1) Where the C/SCSC are included as a requirement in the RFP, an Evaluation Review will be performed as an integral part of the source selection process.
- (2) After contract award, an in-plant Demonstration Review will be made to verify that the contractor is operating systems which meet the criteria.
- (3) Upon successful completion of the Demonstration Review, contractors will not be subjected to another Demonstration Review unless there are positive indications that the contractor's systems no longer operate so as to meet the criteria.

- (4) Subsequent contracts may require a review of shorter duration and less depth to ensure the appropriate and effective application of the accepted systems to the new contract.
- (5) Detailed procedures relating to contractual application, interpretative guidance, interservice relationships, and conduct of systems reviews are contained in the Cost/Schedule Control Systems Criteria Joint Implementation Guide (reference (h)).
- b. Memorandum of Understanding. After determination that a management system meets C/SCSC, a Memorandum of Understanding may be established between the Department of Defense and the contractor to apply to future contracts.
- (1) The use of a Memorandum of Understanding contemplates the execution of a written instrument which references the C/SCSC and negotiated provisions which (a) reflect an understanding between the contractor and the DoD of the requirements of the DoD criteria, and (b) identify the specific system(s) which the contractor intends to use on applicable contracts with DoD Components.
- (2) The Memorandum of Understanding will include or make reference to a written description of the system(s) accepted in a Demonstration Review. The system description should be of sufficient detail to permit adequate surveillance by responsible parties. The use of a Memorandum of Understanding is preferred where a number of separate contracts between one or more DoD Component(s) and the contractor may be entered into during the term of the Memorandum of Understanding. It contemplates the delegation of authority to the DoD Component negotiating the Memorandum of Understanding with the contractor to make the agreement on behalf of all prospective DoD contracting components.
- (3) Action to develop a Memorandum of Understanding may be initiated by either the contractor or the DoD Component, but will usually be in connection with a contractual requirement. In a proposal, reference to a Memorandum of Understanding satisfies the C/SCSC requirement in RFP's and normally obviates the need for further Evaluation Review during source selection. Procedures for executing Memorandums of Understanding are included in the Cost/Schedule Control Systems Criteria Joint Implementation Guide (reference (h)).
- c. Surveillance. Recurring evaluations of the effectiveness of the contractor's policies and procedures will be performed to ensure that the contractor's system continues to meet the C/SCSC and provides valid data consistent with the intent of this Instruction. Surveillance reviews will be based on selective tests of reported data and periodic evaluations of internal practices during the life of the contract. Guidance for surveillance is set forth in the C/SCSC Joint Surveillance Guide (reference (i)).

E. RESPONSIBILITIES

Pursuant to authority contained in DoD Directive 7000.1 (reference (a)):

- 1. The Assistant Secretary of Defense (Comptroller) will establish policy guidance pertaining to the Cost/Schedule Control Systems Criteria and will monitor their implementation to ensure consistent application throughout the Department of Defense.
- 2. The Secretaries of the Military Departments will issue appropriate instructions which promulgate the policies contained herein and which assign responsibilities for accomplishing the actions required to validate contractors' compliance with the C/SCSC.
- 3. The Joint Logistics Commanders will develop and issue joint implementing instructions which outline the procedures to be used in applying, testing and monitoring the C/SCSC on applicable contracts and will ensure that adequate reviews of contractors' systems are performed. The joint implementing procedures and their revisions will be coordinated among all affected DoD Components and submitted to the Assistant Secretary of Defense (Comptroller) for review prior to publication.
- 4. The Defense Contract Audit Agency and the appropriate Contract Administration Service office will participate in reviews of contractors' systems under their cognizance and will perform required surveillance, collaborating with each other and with the procuring DoD Component in reviewing areas of joint interest.

F. EFFECTIVE DATE AND IMPLEMENTATION

This Instruction is effective immediately. Forward two copies of the implementing documents to the Assistant Secretary of Defense (Comptroller) within 60 days.

Assistant Secretary of Defense (Comptroller)

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Enclosures - 2

Cost/Schedule Control Systems Criteria

2. List of additional references

COST/SCHEDULE CONTROL SYSTEMS CRITERIA

1. GENERAL

- a. Any system used by the contractor in planning and controlling the performance of the contract shall meet the criteria set forth in paragraph 3., below. Nothing in these criteria is intended to affect the basis on which costs are reimbursed and progress payments are made, and nothing herein will be construed as requiring the use of any single system, or specific method of management control or evaluation of performance. The contractor's internal systems need not be changed, provided they satisfy these criteria.
- b. An element in the evaluation of proposals will be the proposer's system for planning and controlling contract performance. The proposer will fully describe the system to be used. The prospective contractor's cost/schedule control system proposal will be evaluated to determine if it meets these criteria. The prospective contractor will agree to operate a compliant system throughout the period of contract performance if awarded the contract. The DoD will agree to rely on the contractor's compliant system and therefore will not impose a separate planning and control system.

2. DEFINITIONS

- a. ACTUAL COST OF WORK PERFORMED (ACWP). The costs actually incurred and recorded in accomplishing the work performed within a given time period.
- b. ACTUAL DIRECT COSTS. Those costs identified specifically with a contract, based upon the contractor's cost identification and accumulation system as accepted by the cognizant DCAA representatives. (See Direct Costs.)
 - ALLOCATED BUDGET. (See Total Allocated Budget.)
- d. APPLIED DIRECT COSTS. The amounts recognized in the time period associated with the consumption of labor, material, and other direct resources, without regard to the date of commitment or the date of payment. These amounts are to be charged to work-in-process in the time period that any one of the following takes place:
- (1) When labor, material and other direct resources are actually consumed, or
- (2) When material resources are withdrawn from inventory for use, or
- (3) When material resources are received that are uniquely identified to the contract and scheduled for use within 60 days, or

- (4) When major components or assemblies are received on a line flow basis that are specifically and uniquely identified to a single serially numbered end item.
- e. <u>APPORTIONED EFFORT</u>. Effort that by itself is not readily divisible into short-span work packages but which is related in direct proportion to measured effort.
- f. <u>AUTHORIZED WORK</u>. That effort which has been definitized and is on contract, plus that for which definitized contract costs have not been agreed to but for which written authorization has been received.
 - g. BASELINE. (See Performance Measurement Baseline.)
- h. <u>BUDGETED COST FOR WORK PERFORMED (BCWP)</u>. The sum of the budgets for completed work packages and completed portions of open work packages, plus the appropriate portion of the budgets for level of effort and apportioned effort.
- i. <u>BUDGETED COST FOR WORK SCHEDULED (BCWS)</u>. The sum of budgets for all work packages, planning packages, etc., scheduled to be accomplished (including in-process work packages), plus the amount of level of effort and apportioned effort scheduled to be accomplished within a given time period.
 - j. BUDGETS FOR WORK PACKAGES. (See Work Package Budgets.)
- k. <u>CONTRACT BUDGET BASE</u>. The negotiated contract cost plus the estimated cost of authorized unpriced work.
- 1. <u>CONTRACTOR</u>. An entity in private industry which enters into contracts with the Government. In this Instruction, the word may also apply to Government-owned, Government-operated activities which perform work on major defense programs.
- m. <u>COST ACCOUNT</u>. A management control point at which actual costs can be accumulated and compared to budgeted costs for work performed. A cost account is a natural control point for cost/schedule planning and control, since it represents the work assigned to one responsible organizational element on one contract work breakdown structure (CWBS) element.
- n. <u>DIRECT COSTS</u>. Any costs which can be identified specifically with a particular final cost objective. This term is explained in ASPR 15-202.
- o. <u>ESTIMATED COST AT COMPLETION OR ESTIMATE AT COMPLETION (EAC)</u>. Actual direct costs, plus indirect costs allocable to the contract, plus the estimate of costs (direct and indirect) for authorized work remaining.
- p. INDIRECT COSTS. Costs, which because of their incurrence for common or joint objectives, are not readily subject to treatment as direct costs. This term is further defined in ASPR 3-701.3 and ASPR 15-203.

q. INITIAL BUDGET. (See Original Budget.)

- r. INTERNAL REPLANNING. Replanning actions performed by the contractor for remaining effort within the recognized total allocated budget.
- s. <u>LEVEL OF EFFORT (LOE)</u>. Effort of a general or supportive nature which does not produce definite end products or results.
- t. MANAGEMENT RESERVE. (Synonymous with Management Reserve Budget). An amount of the total allocated budget withheld for management control purposes rather than designated for the accomplishment of a specific task or set of tasks. It is not a part of the Performance Measurement Baseline.
- u. <u>NEGOTIATED CONTRACT COST</u>. The estimated cost negotiated in a cost-plus-fixed-fee contract, or the negotiated contract target cost in either a fixed-price-incentive contract or a cost-plus-incentive-fee contract.
- v. ORIGINAL BUDGET. The budget established at, or near, the time the contract was signed, based on the negotiated contract cost.
 - w. OVERHEAD. (See Indirect Costs.)
- x. PERFORMANCE MEASUREMENT BASELINE. The time-phased budget plan against which contract performance is measured. It is formed by the budgets assigned to scheduled cost accounts and the applicable indirect budgets. For future effort, not planned to the cost account level, the performance measurement baseline also includes budgets assigned to higher level CWBS elements, and undistributed budgets. It equals the total allocated budget less management reserve.
- y. PERFORMING ORGANIZATION. A defined unit within the contractor's organization structure, which applies the resources to perform the work.
- z. PLANNING PACKAGE. A logical aggregation of work within a cost account, normally the far term effort, that can be identified and budgeted in early baseline planning, but is not yet defined into work packages.
- aa. PROCURING ACTIVITY. The subordinate command in which the Procuring Contracting Office (PCO) is located. It may include the program office, related functional support offices, and procurement offices. Examples of procuring activities are AFSC/ESD, AFLC/OC-ALC, DARCOM/MIRADCOM, and NMC/NAVAIRSYSCOM.
 - bb. <u>REPLANNING</u>. (See Internal Replanning.)
- cc. <u>REPROGRAMMING</u>. Replanning of the effort remaining in the contract, resulting in a new budget allocation which exceeds the contract budget base.

- dd. <u>RESPONSIBLE ORGANIZATION</u>. A defined unit within the contractor's organization structure which is assigned responsibility for accomplishing specific tasks.
- ee. <u>SIGNIFICANT VARIANCES</u>. Those differences between planned and actual performance which require further review, analysis, or action. Appropriate thresholds should be established as to the magnitude of variances which will require variance analysis.
- ff. TOTAL ALLOCATED BUDGET. The sum of all budgets allocated to the contract. Total allocated budget consists of the performance measurement baseline and all management reserve. The total allocated budget will reconcile directly to the contract budget base. Any differences will be documented as to quantity and cause.
- gg. <u>UNDISTRIBUTED BUDGET</u>. Budget applicable to contract effort which has not yet been identified to CWBS elements at or below the lowest level of reporting to the Government.
 - hh. VARIANCES. (See Significant Variances.)
- ii. WORK BREAKDOWN STRUCTURE. A product-oriented family tree division of hardware, software, services, and other work tasks which organizes, defines, and graphically displays the product to be produced, as well as the work to be accomplished to achieve the specified product.
- (1) Project Summary Work Breakdown Structure. A summary WBS tailored to a specific defense materiel item by selecting applicable elements from one or more summary WBS's or by adding equivalent elements unique to the project (MIL-STD-881A).
- (2) <u>Contract Work Breakdown Structure (CWBS)</u>. The complete WBS for a contract, developed and used by a contractor within the guidelines of MIL-STD-881A, and according to the contract work statement.
- jj. WORK PACKAGE BUDGETS. Resources which are formally assigned by the contractor to accomplish a work package, expressed in dollars, hours, standards, or other definitive units.
- kk. <u>WORK PACKAGES</u>. Detailed short-span jobs, or material items, identified by the contractor for accomplishing work required to complete the contract. A work package has the following characteristics:
 - (1) It represents units of work at levels where work is performed.
 - (2) It is clearly distinguishable from all other work packages.
 - (3) It is assignable to a single organizational element.
- (4) It has scheduled start and completion dates and, as applicable, interim milestones, all of which are representative of physical accomplishment.

- (5) It has a budget or assigned value expressed in terms of dollars, man-hours, or other measurable units.
- (6) Its duration is limited to a relatively short span of time or it is subdivided by discrete value-milestones to facilitate the objective measurement of work performed.
- (7) It is integrated with detailed engineering, manufacturing, or other schedules.

3. CRITERIA

The contractors' management control systems will include policies, procedures, and methods which are designed to ensure that they will accomplish the following:

a. Organization

- (1) Define all authorized work and related resources to meet the requirements of the contract, using the framework of the CWBS.
- (2) Identify the internal organizational elements and the major subcontractors responsible for accomplishing the authorized work.
- (3) Provide for the integration of the contractor's planning, scheduling, budgeting, work authorization and cost accumulation systems with each other, the CWBS, and the organizational structure.
- (4) Identify the managerial positions responsible for controlling overhead (indirect costs).
- (5) Provide for integration of the CWBS with the contractor's functional organizational structure in a manner that permits cost and schedule performance measurement for CWBS and organizational elements.

b. Planning and Budgeting

- (1) Schedule the authorized work in a manner which describes the sequence of work and identifies the significant task interdependencies required to meet the development, production and delivery requirements of the contract.
- (2) Identify physical products, milestones, technical performance goals, or other indicators that will be used to measure output.
- (3) Establish and maintain a time-phased budget baseline at the cost account level against which contract performance can be measured. Initial budgets established for this purpose will be based on the negotiated target cost. Any other amount used for performance measurement purposes must be formally recognized by both the contractor and the Government.

- (4) Establish budgets for all authorized work with separate identification of cost elements (labor, material, etc.).
- (5) To the extent the authorized work can be identified in discrete, short-span work packages, establish budgets for this work in terms of dollars, hours, or other measurable units. Where the entire cost account cannot be subdivided into detailed work packages, identify the far term effort in larger planning packages for budget and scheduling purposes.
- (6) Provide that the sum of all work package budgets, plus planning package budgets within a cost account equals the cost account budget.
- (7) Identify relationships of budgets or standards in underlying work authorization systems to budgets for work packages.
- (8) Identify and control level of effort activity by time-phased budgets established for this purpose. Only that effort which cannot be identifed as discrete, short-span work packages or as apportioned effort will be classed as level of effort.
- (9) Establish overhead budgets for the total costs of each significant organizational component whose expenses will become indirect costs. Reflect in the contract budgets at the appropriate level the amounts in overhead pools that will be allocated to the contract as indirect costs.
 - (10) Identify management reserves and undistributed budget.
- (11) Provide that the contract target cost plus the estimated cost of authorized but unpriced work is reconciled with the sum of all internal contract budgets and management reserves.

c. Accounting

- Record direct costs on an applied or other acceptable basis in a formal system that is controlled by the general books of account.
- (2) Summarize direct costs from cost accounts into the WBS without allocation of a single cost account to two or more WBS elements.
- (3) Summarize direct costs from the cost accounts into the contractor's functional organizational elements without allocation of a single cost account to two or more organizational elements.
- (4) Record all indirect costs which will be allocated to the contract.
- (5) Identify the bases for allocating the cost of apportioned effort.

- (6) Identify unit costs, equivalent unit costs, or lot costs as applicable.
- (7) The contractor's material accounting system will provide for:
- (a) Accurate cost accumulation and assignment of costs to cost accounts in a manner consistent with the budgets using recognized, acceptable costing techniques.
- (b) Determination of price variances by comparing planned versus actual commitments.
- (c) 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.
- (d) Determination of cost variances attributable to the excess usage of material.
 - (e) Determination of unit or lot costs when applicable.
- (f) Full accountability for all material purchased for the contract, including the residual inventory.

d. Analysis

- (1) Identify at the cost account level on a monthly basis using data from, or reconcilable with, the accounting system:
- (a) Budgeted cost for work scheduled and budgeted cost for work performed.
- (b) Budgeted cost for work performed and applied (actual where appropriate) direct costs for the same work.
- (c) Variances resulting from the above comparisons classified in terms of labor, material, or other appropriate elements together with the reasons for significant variances.
- (2) Identify on a monthly basis, in the detail needed by management for effective control, budgeted indirect costs, actual indirect costs, and variances along with the reasons.
- (3) Summarize the data elements and associated variances listed in (1) and (2) above through the contractor organization and WBS to the reporting level specified in the contract.
- (4) Identify significant differences on a monthly basis between planned and actual schedule accomplishment and the reasons.

- (5) Identify managerial actions taken as a result of criteria items (1) through (4) above.
- (6) Based on performance to date and on estimates of future conditions, develop revised estimates of cost at completion for WBS elements identified in the contract and compare these with the contract budget base and the latest statement of funds requirements reported to the Government.

e. Revisions and Access to Data

- (1) Incorporate contractual 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 functional organizations.
- (2) Reconcile original budgets for those elements of the work breakdown structure identified as priced line items in the contract, and for those elements at the lowest level of the DoD Project Summary WBS, with current performance measurement budgets in terms of (a) changes to the authorized work and (b) internal replanning in the detail needed by management for effective control.
- (3) Prohibit retroactive changes to records pertaining to work performed that will change previously reported amounts for direct costs, indirect costs, or budgets, except for correction of errors and routine accounting adjustments.
- (4) Prevent revisions to the contract budget base (paragraph 2.k.) except for Government directed changes to contractual effort.
- (5) Document, internally, changes to the performance measurement baseline (paragraph 2.x.) and, on a timely basis, notify the procuring activity through prescribed procedures.
- (6) Provide the contracting officer and his duly authorized representatives access to all of the foregoing information and supporting documents.

7000.2 (Encl 2) Jun 10, 77

REFERENCES

(d) Armed Services Procurement Regulation (1976 Edition)

(d) Armed Services Procurement Regulation (1970 Edition)
 (e) MIL-STD-881A, "Work Breakdown Structures for Defense Material Items," April 25, 1975
 (f) DoD Instruction 7000.2, "Performance Measurement for Selected Acquisitions," April 25, 1972 (hereby cancelled)
 (g) DoD Instruction 7000.10, "Contract Cost Performance, Funds Status and Cost/Schedule Status Reports," August 6, 1974
 (h) AFSCP/AFLCP 173-5, DARCOM-P 715-5, NAVMAT P5240, DSAH 8315.2
 "Cost/Schedule Control Systems Criteria Joint Implementation

"Cost/Schedule Control Systems Criteria Joint Implementation

Guide," October 1, 1976

(i) DARCOM-P 715-10, NAVMAT P5243, AFLCP/AFSCP 173-6, DSAH 8315.1, DCAAP 7641.46, "C/SCSC Joint Surveillance Guide," July 1, 1974 and Change 1, October 1, 1976