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# **C/SSR JOINT GUIDE**

**Cost/Schedule Management** of Non-Major Contracts

Departments of the Army, the Navy and the the Air Force; the Ballistic Missile Defense Organization; the Defense Logistics Agency; the Defense Contract Audit Agency; and the National Security Agency

# May 1, 1996

This document is not authorized for contractual application.

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# Cost/Schedule Status Report (C/SSR) Joint Guide

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## Purpose

This guide provides processes and procedures for the cost/schedule management of non-major contracts. This includes implementation and use of the Cost/Schedule Status Report (C/SSR) and the Cost Performance Report (CPR) when not associated with the use of the DOD Cost/Schedule Control Systems Criteria (C/SCSC). Users of this guide are encouraged to submit recommendations for changes through command channels to the appropriate Focal Points.

## **Supplements**

The issuance of supplements to this pamphlet by subordinate elements is discouraged. A copy of any supplement issued will be furnished to the appropriate headquarters' Office of Primary Responsibility.

## **Superseded Documents**

This guide supersedes DARCOM-P 715-13, NAVMAT P5244, AFLCP 173-2, AFSCP 173-3, and DLAH 8315.3 dated November 1, 1978.

# FOREWORD

In 1967, the Department of Defense (DOD) embarked on a new course for contract performance management when it issued DOD Instruction (DODI) 7000.2, "Performance Measurement for Selected Acquisitions." This revolutionary instruction prohibited imposing unique management control system requirements on contracts. Instead, it required contractors' management control systems on major contracts to meet certain minimum standards, called the Cost/Schedule Control Systems Criteria (C/SCSC). The criteria embodied the "earned value" concept of performance measurement, a methodology for objectively measuring how much contract work had actually been accomplished as opposed to the budget versus actuals ("spend plan") techniques commonly used at the time. At about the same time, the Cost Performance Report (CPR) was developed to report the output from criteria-compliant systems. These tools, the C/SCSC, earned value and the CPR, gave government and industry managers the means to ensure consistent management of and visibility into cost and schedule performance on major contracts. In 1991 DODI 7000.2 was superseded by DODI 5000.2, and DODI 5000.2 was superseded in 1996 by DOD Regulation 5000.2-R, but after 25 years the C/SCSC and the CPR essentially are unchanged.

Shortly after adopting the C/SCSC and CPR, DOD recognized a need for more effective performance measurement on contracts below the C/SCSC application thresholds. Government and industry wanted to retain the benefits of earned value performance measurement for these "non-major" contracts, while avoiding the increased costs and reporting requirements of C/SCSC application and CPR reporting. In 1974, the Cost/Schedule Status Report (C/SSR) was created by modifying Format 1 of the CPR and adding a narrative section similar to Format 5. However, unlike the CPR, there was no management system review requirement associated with the C/SSR. The C/SSR's creators intended for it to be a performance report only with no contractual requirement for a management control system that meets minimum acceptable standards. In 1978, DOD issued a joint pamphlet, "Cost/Schedule Management of Non-Major Contracts" (also called the "C/SSR Joint Guide"), to provide uniform guidance on how to prepare, obtain and use a C/SSR. In 1991, DOD issued the C/SSR Defense Federal Acquisition Regulation Supplement (DFARS) clause (252.242-7005). This clause directs the contractor to establish and use management procedures to generate a C/SSR.

Over the years, the intended distinction between the C/SCSC and C/SSR approaches has become blurred. As dollar values for mandatory C/SCSC application increased, the "gray area" for C/SSR application expanded and C/SSRs proliferated. The decision to use the C/SSR versus the C/SCSC and CPR too frequently was based on arbitrary dollar thresholds rather than informed management consideration of cost and schedule risk, work content, and contract type. As a result, many in the performance management community now believe that the C/SSR does not provide adequate management visibility for larger non-major contracts, and have called for the creation of a C/SSR management system requirement. But is this truly the answer? Is the intended policy inadequate, or is the implementation in need of improvement?

There is compelling evidence that better implementation of existing policy would correct many of the C/SSR's perceived shortcomings. In May 1991, the joint government/industry "Report for Program Management on the Cost/Schedule Management Process" reported that many problems associated with cost and schedule reporting stem from incorrect or inadequate implementation. For example, government and industry managers were dissatisfied with report timeliness and excessive reporting requirements. These problems can be corrected by proper up-front planning and implementation. In other words, the people who control the process by which these requirements are placed on contracts, and those who subsequently use the C/SSR, have the capability to improve the report's quality and usefulness by correctly implementing existing policy.

DOD 5000.2-R retains the original policy that a contractor's C/SSR management procedures need not meet minimum management system criteria. When the Program Manager (PM) requires assurance of management system adequacy, the C/SCSC should be applied regardless of the dollar value. While this policy is not new, more emphasis is now being placed on the PM's role in obtaining and using cost and schedule information on non-major contracts. PMs are expected to consider carefully their management needs to ensure they obtain only the minimum amount of reporting necessary for effective management control. To facilitate this process, several areas of this guide have been rewritten to provide more informative guidance on how to implement and use a C/SSR. For example, Chapter 1 now discusses how to select the appropriate cost performance reporting requirement; Chapter 2 describes how these requirements are placed on contract; guidance on Integrated Baseline Reviews (IBR) is

incorporated. This guide attempts to correct perceived C/SSR problems not by tightening implementation guidance, but by loosening it and relying more on the PM's judgement in obtaining and using effectively a C/SSR.

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# Chapter 1 GENERAL

## 1-1. Introduction.

**a. General.** In 1974, DOD recognized the need for a simpler approach for obtaining earned value performance data on "non-major" contracts -- contracts not requiring the discipline associated with the C/SCSC and the CPR. To meet this need, the C/SSR was created by modifying Format 1 of the CPR and adding a narrative section similar to the CPR Format 5. The C/SSR provides managers with familiar and useful CPR-like data while reducing the number of contract-unique reports. In addition, the C/SSR increases contractors' flexibility because it does not require them to establish, maintain or use a management control system that meets the C/SCSC. Instead, contractors must simply document and use their C/SSR management procedures when the C/SSR is a contract data requirement. The Government may conduct an on-site visit to understand and evaluate these procedures, and negotiate changes, if necessary. The C/SSR approach has led to more consistent performance reporting on non-major contracts while avoiding the increased discipline associated with C/SCSC compliance.

**b. Program Manager is the Key Person.** The government PM plays a key role in the cost and schedule management of non-major programs. As the "owner" of the performance management data, the PM needs to be involved in determining the management system and reporting requirements on his/her contract, and to be an active user of the resulting reports. The PM decides what type of cost report to use, how to tailor it, and whether contractor compliance with management system criteria is needed. The choice should not be based on the rote application of dollar thresholds or previous examples. Rather, it should be based on informed knowledge of available choices and a realistic assessment of the PM's management information needs. The PM has the flexibility to select requirements that optimize contract visibility while minimizing intrusion into the contractor's operations. This guide is intended to help the PM select the appropriate requirements and ensure they are placed on contract effectively.

c. Uniform Approach. This guide presents a uniform approach for cost and schedule management of nonmajor contracts. It describes certain processes and procedures that the PM may encounter as he/she selects, implements and uses an appropriate cost/schedule performance report. The processes and procedures described herein will not be construed to represent minimum standards for C/SSR management procedures. The contractor is required only to implement C/SSR management procedures that satisfy the C/SSR DFARS clause requirements. The processes and procedures described in this guide represent objectives which may be used to establish or evaluate C/SSR management procedures. They are presented here to assist government and industry personnel in achieving a more uniform approach to C/SSR applications. The contractor should be given latitude to implement its internal procedures as long as they conform with the C/SSR DFARS clause (Appendix C). Accordingly, the PM should be aware that contractors' C/SSR management procedures may vary from one another and from this guide. This pamphlet is provided for guidance only and is not authorized for contractual application.

## 1-2. Explanation of Terms.

a. Significant Contracts and Non-Major Contracts. Significant contracts requiring C/SCSC application include non-firm fixed price research, development, test, and evaluation (RDT&E) contracts and subcontracts with a value of \$70 million or more or production contracts and subcontracts with a value of \$300 million or more (in FY 96 constant dollars). Contracts and subcontracts not significant enough for C/SCSC application that are not firm fixed price and are greater than 12 months in duration are candidates for the C/SSR. These contracts are referred to in this guide as "non-major" contracts. Compliance with the C/SCSC on non-major contracts and subcontracts below the C/SCSC thresholds may be required when, in the PM's judgement, the contract risk or management interest requires assurance that the contractor's cost and schedule management control systems are acceptable.

**b. Program Manager.** "PM" is used in this guide to identify the manager responsible for a government acquisition program, or a product or subpart of the program. PM may mean project manager, program manager, product manager, item manager, system manager, commodity manager, system project manager, etc.

**c.** Focal Point. "Focal Point" refers to a designated person or office within an acquisition organization responsible for the appropriate implementation of contract performance measurement. Focal Points normally reside at two levels in a DOD Component. Each Service or organization will have a Focal Point responsible for implementing performance measurement policy and guidance within that service or organization. In addition, subordinate field commands usually will have a cost/schedule performance measurement office with a Focal Point that directly supports the PM in fulfilling his/her performance measurement responsibilities.

**d.** Acronyms and Terms. Acronyms used in this guide are explained in Appendix A. Applicable terms are defined in Appendix B.

## 1-3. Objectives.

a. The basic objectives of the C/SSR are:

(1) Improved contract cost and schedule management by serving as a basis for integrating cost, schedule and technical performance,

- (2) Objective, integrated performance reporting,
- (3) Standardized performance reporting, and
- (4) Compatibility with CPR data.

b. The overall objective is to obtain a simpler, summary level cost and schedule performance report that satisfies the PM's management information needs. The PM should carefully consider his/her C/SSR reporting requirements to ensure he/she requests only the minimum information necessary for effective management control.

## 1-4. Nature of the C/SSR Requirement.

## a. C/SSR Overview.

(1) Integrated Cost and Schedule Performance Report. The C/SSR is an integrated cost and schedule performance report used to obtain earned value reporting in a standardized format on non-major contracts. Performance reporting is integrated because cost, schedule and technical objectives are reflected in a common dollarized performance measurement baseline. Earned value refers to the objective valuation of work actually accomplished, also called Budgeted Cost for Work Performed (BCWP).

(2) C/SSR Content. C/SSR information includes cumulative cost and schedule performance and status, current contract value, estimate at completion, and a narrative description of contract status and/or problems. Data reported in the C/SSR is similar to the data in a CPR and can be analyzed in the same way. Although the C/SSR is one of many sources of information available to the PM, it should be the primary source for integrated cost and schedule performance. (More information can be found in the C/SSR Data Item Description (DID) in Appendix F.)

(3) Contractual Requirements. The C/SSR is a contract data requirement, so appropriate requirements should be included in the solicitation and the contract. Requirements normally include the C/SSR DFARS clause (252.242-7005), a Statement of Work (SOW) tasking, and a Contract Data Requirements List (CDRL) item (DD Form 1423). (Refer to paragraphs 2-1.b. and 2-5.)

**b.** Difference between C/SSR and CPR. While the C/SSR appears to be a scaled-down version of the CPR, there are several differences as shown in Figure 1-1. The most apparent difference is one of scale: the CPR has

Figure 1-1

# Differences Between the Cost Performance Report and the Cost/Schedule Status Report

Element	C/SSR	CPR-No Criteria	CPR with C/SCSC
Must be used with management system that meets minimum criteria	No	No	Yes
Detailed on-site management system review	No	No	Yes
<ul> <li>Formats:</li> <li>Format 1 - Work Breakdown Structure</li> <li>Format 2 - Organizational Categories</li> <li>Format 3 - Baseline</li> <li>Format 4 - Staffing</li> <li>Format 5 - Problem Analyses</li> <li>Current period reporting</li> </ul>	ü ü No	ü ü ü ü Optional	ü ü ü ü Yes
Basis of BCWS and BCWP	Any logical means acceptable to the PM	Any logical means acceptable to the PM	Direct summation from work and planning package budgets
Range of Estimates at Completion	No	Optional	Optional

five formats while the C/SSR has only two. The C/SSR does not require performance reporting by organization (CPR Format 2); nor are baseline (CPR Format 3) and staffing (CPR Format 4) information required. In addition, current period reporting is not required. Another difference involves the definitions for the data elements Budgeted Cost for Work Scheduled (BCWS) and BCWP. (See Chapter 4 for explanations of these data elements.) For CPR reporting, BCWS and BCWP must be the direct summation from work and planning package budgets. For the C/SSR, these values may be determined by any logical means acceptable to the PM, as long as they conform with the C/SSR DFARS clause. If the PM requires more data on his/her non-major contract than is available on a C/SSR, he/she may use a CPR - No Criteria. This alternative allows the PM to obtain more performance information without invoking a management system requirement. (Refer to paragraph 1-4.c.(5) for more information on CPR - No Criteria.) The most significant difference is the absence of specific management system criteria and the requirement for a detailed on-site management system review for the C/SSR and the CPR - No Criteria. These are discussed in detail below in paragraph 1-4.c.

## c. Contractor Management System Practices.

(1) Assurance of Management System Adequacy Needed. The C/SCSC were developed for use on large, flexibly-priced contracts where the Government assumes substantial cost risk. One way to mitigate this risk is for the contractor to demonstrate that its internal management system (policies, procedures and methods) meets minimum standards essential for effective management control. The C/SCSC embody these minimum standards. Since the CPR must be used when the C/SCSC are required, the PM also receives increased assurance that reported

data is timely, accurate and auditable. There is usually increased cost associated with the use of the C/SCSC and CPR, so the PM should evaluate carefully his/her management information needs and require only the minimum for effective management control.

(2) Assurance of Timely and Reliable Data. On lower value contracts with less risk, criticality or complexity, the PM may not need the increased assurance of management system adequacy associated with C/SCSC compliance. On these contracts, the C/SSR DFARS clause (252.242-7005) requires the contractor to establish, maintain and use C/SSR management procedures that generate timely and reliable information. The C/SSR DFARS clause does not require the contractor to have a management system that meets minimum criteria, nor does it require a detailed, on-site acceptance review. Methods and procedures used to generate C/SSR data are left to the contractor, as long as they satisfy the minimum C/SSR DFARS clause requirements. The PM may review the contractor's C/SSR management procedures to assess their ability to produce timely and reliable data, but the contractor will not be required to change its procedures meet the C/SSR DFARS requirements, any government-requested changes to the procedures must be negotiated.

(3) No System Requirement for C/SSR Reporting. Because the C/SSR and CPR Format 1 are similar, C/SSR users may infer incorrectly that the contractor's capabilities and disciplines are also similar. Although some contractors may have a C/SSR management system or use their C/SCSC-compliant systems to generate C/SSRs, there is no requirement to do so. The PM must gauge contractor discipline and data quality by monitoring closely the data reported in the C/SSR. Unusual trends or adjustments may indicate internal procedural deficiencies. Regular surveillance may also disclose C/SSR management procedures inadequacies. (Refer to paragraph 2-10. for more information on surveillance.)

(4) C/SSR Accuracy. Because the C/SSR is the primary report for communicating integrated contract cost and schedule performance, the PM must ensure that it presents accurate and useful information. The PM should review carefully each C/SSR submitted, checking for such things as errors, DID compliance, and data anomalies. The PM should address any concerns or problems and require their prompt correction by the contractor.

(5) **CPR - No Criteria.** When the PM needs increased cost and schedule performance visibility on nonmajor contracts or subcontracts, he/she may obtain a CPR instead of a C/SSR. In this case, the C/SSR DFARS clause will apply and the C/SCSC DFARS clause will not be used. The primary reason for selecting CPR - No Criteria is for increased performance visibility. If assurance of management system adequacy is needed, C/SCSC and CPR should be selected regardless of the contract value. (Refer to paragraphs 1-5.a.(2). and 2-1.)

(6) Written C/SSR Management Procedures. The C/SSR DFARS clause requires the contractor to establish, maintain and use management procedures that provide certain specific capabilities, but it does not state that these procedures must be written. Although only a written summary is required, it is desirable for a contractor to maintain documented procedures. This is usually not a problem for larger companies. Many already have created unique C/SSR management procedures, or use their C/SCSC-compliant management systems to satisfy a C/SSR requirement. For smaller companies, however, it is possible that C/SSR management procedures may not be documented. In this situation, the PM will not require the company to create written procedures, although he/she should encourage the company to do so. If the contractor does not have written procedures provided in the contractor's proposal. Whether or not the procedures are written, the PM should evaluate whether they provide timely and reliable data and negotiate changes if weaknesses are noted.

## 1-5. Policy.

**a.** Selecting Management System and Reporting Requirements. Early in the Request for Proposal (RFP) planning process, the PM must decide what combination of performance reporting and management system requirements is best suited to the contract at hand. Many factors affect this decision, but the PM has several options from which to choose in establishing appropriate requirements (refer to Figure 1-2).

(1) Mandatory C/SCSC and CPR Application. For flexibly priced contracts and subcontracts above a certain dollar threshold, use of the C/SCSC is mandatory. C/SCSC application is required by DOD 5000.2-R on all significant contracts and subcontracts within acquisition programs, including highly sensitive classified programs and military construction programs. Significant contracts include RDT&E and production contracts valued at more than \$70 million and \$300 million (in FY 96 constant dollars). C/SCSC may be required for contracts below these values when, in the PM's judgement, risk or management interest requires assurance that the contractor's cost and schedule management control systems are adequate . The same C/SCSC thresholds also apply to contracts executed for foreign governments and specialized organizations such as the Defense Advanced Research Projects Agency, and

Figure 1-2

# MANAGEMENT SYSTEM AND PERFORMANCE REPORTING USE JUDGEMENT

# SIGNIFICANT CONTRACTS

> \$70M\* RDT&E > \$300M\* PRODUCTION

INCLUDES: CONTRACTS FOR HIGHLY - CLASSIFIED, FOR BGN, AND IN-HOUSE PROGRAMS

EXCLUDES: CONTRACTS THAT ARE FIRM FIXED PRICE, TIME AND MATERIALS, AND MAINLY LEVEL OF EFFORT

# LIMITED JUDGEMENT

MUST USE C/SCSC WITH CPR UNLESS WAIVED BY MILESTONE DECISION AUTHORITY

IF WAIVED, USE CASSRID RICPR WITHOUT CASESC

# OTHER THAN SIGNIFICANT, OR

## NON-MAJOR CONTRACTS

- < \$70M\* RDT&E
- < \$300 M\* PRODUCTION
- > 12 MONTHS DURATION

EXCLUDES: CONTRACTS THAT ARE FIRM FIXED PRICE, TIME AND MATERIALS, AND MAINLY LEVEL OF EFFORT

# USE JUDGEMENT

DEPENDING ON LEVEL OF RISK, CRITICALITY OR DOLLAR VALUE, USE:

- C/SSR
- CPR WITH C/SCSC
- CPR WITHOUT C/SCSC

## LOW VALUE

NON-MAJOR CONTRACTS

< \$6M\*

## **RDT&E AND PRODUCTION**

CASSR WILL NOT BE USED ON CONTRACTS LESS THAN 12 MONT HS IN DURATON

# USE JUDGEMENT

EVALUATE MANA GEMENT NEEDS CAREFULLY TO ENSURE ONLY MINIMUM INFORMATION FOR EFFECTIVE MANAGEMENT CONTROL IS REQUESTED. USE

- C/SSR
- OTHER AUTHORIZED STATUS REPORTS IN THE AMSDL

## \* VALUES ARE FY 1996 CONSTANT DOLLARS

SOURCE: DOD REGULATION 50002-R, 3/15/96

significant acquisition effort performed by government activities. The C/SCSC do not apply to firm fixed price contracts (exceptions may be made by the MDA for individual contracts), time and material contracts, and contracts which consist mostly of level-of-effort (LOE) work. The CPR will be used to report contract performance when use of the C/SCSC is required. The PM and the contractor will agree on the application of the C/SCSC and CPR on subcontracts, depending on the criticality of the subcontract. The Milestone Decision Authority (MDA) or his/her designee may waive the C/SCSC requirement. If the C/SCSC have been waived, the C/SSR or CPR - No Criteria shall be used.

(2) Mandatory Earned Value Performance Reporting - Optional Management System Requirement. For flexibly priced contracts that fall below the mandatory thresholds for C/SCSC application, Figure 1-2 shows a range of alternatives available to the PM. The PM must evaluate each contract's risk, criticality, management interest and complexity to decide whether the circumstances merit assurance that the contractor's management systems are adequate. If so, the PM should select the C/SCSC and CPR, regardless of the dollar value. If the circumstances do not merit compliance with the C/SCSC, but the PM requires more information than the C/SSR provides, the PM may select the CPR without the C/SCSC, also called "CPR - No Criteria." This alternative provides the PM with increased visibility into contractor performance, but does not require the contractor to demonstrate that its internal management practices meet the C/SCSC. However, the PM may visit the contractor to understand its CPR management procedures. If risk, criticality, and complexity are judged to be relatively low, the PM should select the C/SSR. This choice levies minimal requirements on the contractor, yet still provides the PM with reliable earned value performance information based on a clear understanding of the contractor's C/SSR management procedures.

(3) Optional Earned Value Performance Reporting - No Management System Requirement. For flexibly priced contracts below \$6 million (FY 96 constant dollars), the PM should carefully evaluate performance measurement needs and request only the minimum to ensure effective management control. As shown in Figure 1-2, the C/SSR or another authorized status report contained in the Acquisition Management Systems and Data Requirements List (AMSDL) may be chosen. DOD acquisition policy precludes the use of the C/SSR on contracts less than 12 months in duration.

(4) **Tailoring Performance Reports.** The selected report should be tailored to suit the PM's specific needs. Items subject to tailoring include reporting frequency and submission dates, variance analysis guidelines, and Work Breakdown Structure (WBS) reporting levels. Tailoring instructions will be included in the CDRL DD Form 1423 and are subject to negotiation with the contractor. DOD policy prohibits tailoring C/SSRs and CPRs to require more information than specified in the DID. For example, the PM cannot request a CPR Format 3, Baseline, in a C/SSR. The PM should carefully evaluate his/her needs to ensure no more information is obtained than is needed. Over-specifying reporting requirements can diminish a report's usefulness, intrude on the contractor's operation and unnecessarily add cost to the contract. In addition, the PM should review the tailored items periodically to ensure they still satisfy his/her information needs. If circumstances have changed and the tailored items no longer satisfy the PM's information needs, the PM and the contractor should change them.

(5) Work Breakdown Structure (WBS). A WBS is a product-oriented family tree of the hardware, software, services, data and facilities of a defense materiel item. WBSs form the essential framework for program and technical planning, cost estimating, resource allocations, performance measurement, contract actions, and work execution. Program WBSs (PWBS) are created for specific materiel items by using the guidance and descriptions contained in Military Handbook (MIL-HDBK) 881. The PWBS should be established early and should be approved via DOD's Integrated Product Team (IPT) process. The Contractor Cost Data Reporting (CCDR) Plan is the vehicle for PWBS approval for Acquisition Category I programs. The CCDR Plan should be approved prior to the issuance of an RFP to industry. The PM is responsible for ensuring a PWBS and Dictionary have been developed and approved for his/her program. Contract WBSs (CWBS) are created for specific contracts within a program by selecting appropriate elements from the approved PWBS. The PM is responsible for ensuring CWBSs and Dictionaries have been prepared and included in all RFPs and contracts. (Refer to MIL-HDBK-881 for more information on WBSs. Refer to DOD 5000.2-R for more information on CCDR Plans.)

(6) Electronic Data Interchange (EDI). Submission of performance reports by EDI is encouraged as a way to reduce cost and accelerate C/SSR delivery. The American National Standards Institute (ANSI) X12

standard transaction sets (806 for schedule and 839 for cost), or the United Nations Electronic Data Interchange For Administration Commerce and Transport (EDIFACT) equivalent, should be used for EDI transmissions.

**b.** Consistency of Applications. The PM should rely on contractors' existing C/SSR management procedures, making only those changes necessary to meet DFARS clause requirements or to accommodate the specific contractual circumstances. The PM should request assistance from the Contract Administration Office (CAO), the Defense Contract Audit Agency (DCAA) Field Audit Office (FAO), and his/her cost/schedule performance management specialist to achieve consistency with existing or previous applications.

**c.** Contractor Responsibilities. The contractor is responsible for establishing, maintaining and using effectively its C/SSR management procedures and for preparing and delivering a C/SSR that accurately reflects current contract status. The contractor must provide access to internal documents to show proper implementation and ongoing use of its C/SSR management procedures. The contractor must submit any substantive changes to its C/SSR management procedures to the Contracting Officer for review.

## d. Responsibility of DOD Components.

## (1) C/SSR Responsibilities.

(a) The PM is responsible for obtaining a useful C/SSR and using it effectively as a tool to manage the contract.

(b) To the extent authorized by a Memorandum of Agreement (MOA) or Letter of Delegation (LOD), the CAO is responsible for assuring, through surveillance, that the contractor complies with the provisions of the contract and C/SSR DFARS clause. The CAO also ensures that agreed company procedures used to satisfy the C/SSR requirement are continuously applied.

(c) The FAO assists the CAO by providing information on 1) the accuracy and reliability of financial data and 2) the results of other audits or reviews that may affect the reliability of C/SSR data.

(d) The Procuring Contracting Officer (PCO) ensures appropriate contractual measures are taken to meet the PM's requirements for contract performance information.

(2) **Obtaining C/SSR Support.** The PM should consult with the procuring activity Cost Performance Analysis Office to help him/her execute his/her C/SSR responsibilities. That office can assist the PM in several ways, including tailoring the C/SSR, assisting in on-site visits, and providing advice on procedural or reporting problems.

**1-6. Disputes.** Differences between contracting parties concerning implementation of C/SSR guidance will be resolved through negotiations. If an acceptable resolution cannot be negotiated, the contract clause covering "disputes" will apply.

## 1-7. Related Publications.

a. DOD Regulation 5000.2-R, Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) Acquisition Programs, for mandatory procedures for C/SCSC application; the CPR; the C/SSR; the Contract Funds Status Report (CFSR), which tracks contract funding; and CCDR, which reports historical cost data. This document also contains mandatory procedures for CCDR Plans and WBSs.

**b. Defense Acquisition Deskbook** for additional guidance on contract performance management, EDI, CCDRs and WBSs.

c. DOD 5010.12-M, Procedures for the Acquisition and Management of Technical Data, for procedures on completing CDRL DD Form 1423.

**d. DOD 5010.12-L, Acquisition Management Systems and Data Requirements List (AMSDL)** for an index of all DOD authorized management systems and DIDs.

e. MIL-HDBK-881, Work Breakdown Structures (WBS) Handbook, for guidance on the preparation and use of WBSs.

**f. Earned Value Management Guide (draft)** for information on contract surveillance. (This draft document is the successor to the C/SCSC Joint Implementation Guide and the C/SCSC Joint Surveillance Guide.)

g. Defense Contract Management Command (DCMC) Manual 8000.5 ("One Book") for information on CAO roles and responsibilities.

# Chapter 2 IMPLEMENTATION ACTIONS

**2-1. Preparing the Solicitation.** The C/SSR's usefulness as a program management tool depends greatly on actions taken before a contract is awarded, beginning with the planning phase. The PM and his/her staff must make important decisions on such things as C/SSR content and WBS development that must be reflected properly in the solicitation and resulting contract. The following paragraphs describe key steps and decisions to place C/SSR requirements effectively in a solicitation or contract. The process of placing C/SSR requirements on contract is depicted in Figure 2-1. The steps described herein also apply when placing a CPR - No Criteria on contract.

**a. Evaluating Management Information Needs.** The PM first evaluates the anticipated contract type; cost, schedule and technical risk; complexity; and criticality. This evaluation should include assistance from functional experts, such as cost/schedule performance management specialists, systems engineers, the CAO, and the PCO. The result of the PM's evaluation is a decision as to which performance management techniques are best suited for the contract and what performance report will provide the information needed for effective management control (refer to paragraph 1-5.).

(1) C/SSR. Because the C/SSR is intended for use on non-major contracts, it is designed to provide a minimum amount of performance information. In addition, the contractor is not required to have a C/SSR management control system that meets minimum standards or criteria. The guidance in the following paragraphs is intended to ensure that these important characteristics are properly reflected in RFPs and contracts.

(2) **CPR - No Criteria.** Like the C/SSR, the CPR - No Criteria is intended for use on non-major contracts, and the contractor is not required to have a management control system that meets minimum standards or criteria. Consequently, the following C/SSR guidance should be used to place a CPR - No Criteria on contract. (Refer to paragraphs 1-4.c.(5) and 1-5.a.(2) for more information on CPR - No Criteria.)

**b. Preparing the Solicitation.** Effective implementation of the C/SSR or CPR - No Criteria requires more than just inserting a CDRL item (DD Form 1423) in the contract. The following paragraphs outline steps necessary to place a C/SSR or CPR - No Criteria requirement on contract.

(1) C/SSR DFARS Clause. The C/SSR DFARS clause (252.242-7005) will be included in the solicitation and the contract when the C/SSR or CPR - No Criteria is required. This clause requires the contractor: 1) to establish, maintain and use procedures for preparing the C/SSR, 2) to provide access to internal records showing proper and continuing use of these procedures, and 3) to allow government representatives access to the facility to review implementation of these procedures. It also gives general guidelines for placing C/SSR or CPR - No Criteria requirements on subcontracts. If a CPR - No Criteria is required, a provision should be included in the solicitation and contract stating that the C/SSR DFARS clause will apply. The C/SSR DFARS clause is included in Appendix C.

(2) Statement of Work (SOW). The C/SSR or CPR - No Criteria SOW tasking should instruct the contractor to deliver an earned value based, integrated cost and schedule performance report and to relate technical accomplishment with cost and schedule accomplishment. The PM can include related taskings in this section, such as how C/SSR data will be presented during regularly scheduled progress reviews, and guidelines for C/SSR requirements on subcontracts. Normally the requirement for a cost/schedule performance report is contained in the management section of the SOW. Suggested SOW tasks are included in Appendix D.

(3) C/SSR Data Item in the CDRL (DD Form 1423). A DD Form 1423 (or its equivalent) referencing the C/SSR DID, DI-MGMT-81467 (Appendix F), will be included in the RFP and contract when a C/SSR is required. This form provides C/SSR preparation guidance, including reporting frequency, distribution, and tailoring instructions. The contractor's C/SSR must comply with the DID, as modified by tailoring instructions. A DID may be tailored only to require less information. If the PM needs more information, the CPR - No Criteria option should be selected (refer to paragraph 2-1.a.(2)). In this case, the solicitation should include a DD Form

1423 referencing the CPR DID (DI-MGMT-81466), indicating any tailoring desired. The C/SSR DID encourages the use of

Figure 2-1

# C/SSR AND CPR - NO CRITERIA



contractor formats, provided such formats are suitable for management use. When EDI is used, the ANSI X12 standard, or the United Nations EDIFACT equivalent, applies. Requirements to submit a C/SSR or CPR - No Criteria by electronic means or to use contractor formats will be included in the C/SSR CDRL item (DD Form 1423) and the SOW.

c. Contract Work Breakdown Structure (CWBS). The PM should ensure a CWBS has been prepared for inclusion in the RFP. The CWBS is prepared by selecting appropriate elements from the approved PWBS. The CWBS normally is limited to level 3 but may extend lower to cover high-risk or -cost elements. However, the PM should refrain from specifying an excessive number of lower level elements because it may impinge upon the contractor's normal method of operations or result in excessive reporting requirements. The CCDR Plan (if any), the SOW, or the CDRL item (DD Form 1423) is used to document the CWBS in the RFP and to list the elements for which regular reporting is required. The SOW should task the contractor 1) to extend the CWBS to meaningful management- or product-oriented lower levels which reflect the way it does business, and 2) to prepare and deliver a CWBS Index and Dictionary. The contractor should have complete flexibility in extending the CWBS. The CWBS Index and Dictionary are contract data requirements, so a DD Form 1423 citing the CWBS DID (DI-MGMT-81334) should be included in the CDRL. (Refer to MIL-HDBK-881 for more information on WBSs. Refer to DOD 5000.2-R for more information on CCDR Plans. Appendix D contains a suggested CWBS SOW tasking.)

**d.** Other Contract Data Requirements. Related cost and schedule contract data requirements that may be required or are desirable include:

(1) Cost Estimating. CCDRs are used to collect program historical costs. A CCDR Plan and some or all of the four CCDR reports may be required if the contract value is greater than \$2 million. Refer to DOD 5000.2-R for guidance.

(2) Contract Funds Status. The CFSR is used to report and to forecast funds status; it is not a performance measurement report like the C/SSR. No specific dollar thresholds are prescribed, but contracts less than \$1.2 million (FY 96 constant dollars) should be reviewed carefully to ensure only the minimum information is required for effective management control. DOD 5000.2-R gives CFSR policy.

(3) Schedules. The PM is encouraged to obtain some form of schedule report to augment analysis of C/SSR schedule information. A C/SSR schedule variance is an "accomplishment variance" that provides an early indication of problems when the contractor is not meeting the internal work plan. When analyzed in isolation, the C/SSR schedule variance may be misleading because unfavorable performance in some areas can be offset by favorable performance in other areas. By itself, the C/SSR schedule variance may not reveal critical path information and should be analyzed in conjunction with other schedule information such as found in networks, Gantt charts, or line-of-balance charts. To avoid imposition of a new scheduling system or reporting requirement, the PM should request a report that is generated by the contractor's existing scheduling system.

## 2-2. Content of Contractor Proposals.

**a. Response to C/SSR Requirement.** In response to the solicitation, the contractor must provide a written summary of the management procedures that will be used to satisfy the C/SSR requirement. The summary should address the requirements in the C/SSR DFARS clause, which include procedures for:

(1) establishing the time-phased BCWS (including work authorization, budgeting and scheduling), the BCWP, the Actual Cost of Work Performed (ACWP), the Budget at Completion (BAC), the Estimate at Completion (EAC), and provisions for subcontractor performance measurement and reporting;

(2) applying all direct and indirect costs and provisions for use and control of Management Reserve (MR) and Undistributed Budget (UB);

(3) incorporating changes to the Contract Budget Base (CBB) for both government directed changes and internal replanning;

(4) establishing constraints to ensure performance measurement remains realistic by precluding subjective adjustment of data; and

(5) establishing the capability to accurately identify and explain significant cost and schedule variances, both on a cumulative basis and projected at completion basis.

The summary facilitates understanding of how the contractor's internal cost/schedule planning and control activities generate the data required by the C/SSR. A contractor intending to use a system previously accepted as compliant with the C/SCSC may submit a copy of its Memorandum of Understanding (MOU), Advance Agreement (AA) or Letter of Acceptance (LOA) in lieu of the summary referred to above, provided the acceptance applies to contracts of the same phase as the contract under consideration (i.e., development or production). If the contractor submits an MOU, AA or LOA in lieu of the summary but plans to tailor its validated system to satisfy the C/SSR requirement, it should provide a summary of the areas that will vary from the validated system description.

**b.** Contract Work Breakdown Structure. The contractor will extend the CWBS to meaningful management- or product-oriented lower levels that reflect how it intends to accomplish the entire contract work scope. The extension should conform with the CWBS provided in the solicitation. However, the contractor should be encouraged to propose changes when needed to meet essential requirements of the solicitation, or to enhance the effectiveness of the CWBS in satisfying the program objectives.

**2-3.** Contractor Proposal Evaluation. During the proposal evaluation, participants in the source selection process should, as a minimum: 1) determine whether the contractor's summary of management procedures meets the minimum requirements of the C/SSR DFARS clause; and 2) review the contractor's extension of the CWBS and consider differences between it and the CWBS in the solicitation. It is also desirable to evaluate the contractor's past experience with implementing and using its C/SSR management procedures.

**2-4. Contract Negotiations.** Actions taken during contract negotiations can affect significantly the amount and quality of cost/schedule information available to the PM. For this reason, the PM should participate actively in contract negotiations to ensure that the final agreement reflects his/her stated management information needs. PM involvement in contract negotiations may preclude costly and time-consuming follow-up or diminished cost/schedule visibility. The PM may wish to consult with a cost/schedule performance management specialist for advice and assistance during negotiations.

**a. Tailoring.** The PM can tailor certain C/SSR information to suit his/her management information needs, including WBS reporting elements, reporting frequency, submission dates, distribution, and variance analysis guidelines. (Refer to paragraph 1-5.a.(4) for tailoring information.) If the tailored items become the subject of negotiations, the PM is encouraged to participate actively to ensure his/her needs are addressed. Because these needs may evolve during contract execution, the PM should review tailored items periodically and negotiate changes if necessary. Other C/SSR elements are governed by the DID and may not be negotiated.

**b. BCWP Methods.** The validity of the BCWP is one of the primary determinants of the accuracy and usefulness of the C/SSR. Many of the C/SSR's uses, such as cost and schedule variance analysis, trend analysis and end cost projections, are impaired if BCWP is not accurate. Consequently, the PM should determine early what BCWP methods the contractor plans to use. Objective measures based on indicators of physical accomplishment, such as milestones, are preferred rather than subjective methods, such as estimates or LOE. If the PM is not satisfied that the contractor's earned value methods will provide accurate information, he/she should negotiate changes. The PM should coordinate this evaluation with the CAO and a cost/schedule performance management specialist.

**c.** Existing C/SSR Procedures. If the contractor proposes to use C/SSR management procedures that have been used previously to produce acceptable C/SSRs, the PM should not change those procedures unless required by the specific circumstances of the contract at hand. The PM should consult with the CAO and his/her cost/schedule performance management specialist before negotiating changes to procedures that are being used successfully to satisfy current or previous C/SSR requirements.

**d. CWBS Changes.** If the contractor proposes changes to the CWBS to better accomplish the contract work, these changes will be evaluated and negotiated, if necessary. If the proposed changes are accepted, they must be reflected in the negotiated CWBS, which is included in the contract and becomes the basis for the contractor's extended CWBS during contract execution. If the accepted changes affect the PWBS, it may have to be resubmitted for approval in accordance with DOD regulation.

2-5. Contract Award. The awarded contract should include, as a minimum:

(a) SOW tasks instructing the contractor to provide an integrated, earned value-based cost and schedule performance report, and to extend the negotiated CWBS and use it as a basis for planning, budgeting, and reporting;

- (b) the C/SSR DFARS clause;
- (c) C/SSR and CWBS CDRL items (DD Form 1423 or its equivalent);
- (d) instructions or agreements on subcontractor performance reporting, if applicable; and
- (e) the negotiated CWBS.

The PM may also include a SOW task instructing the contractor to use C/SSR earned value information as a basis for integrating the presentation of cost, schedule and technical information at regularly scheduled program reviews. (Refer to paragraph 2-7.b.) If a CPR - No Criteria is required, the contract should include a clause stating that the C/SSR DFARS clause will apply.

## 2-6. Subcontract Application.

**a. Policy.** The C/SSR DFARS clause instructs the prime contractor to require subcontractors to furnish a C/SSR in each case where the subcontract is other than firm fixed price, is 12 months or more in duration, and has critical or significant tasks related to the prime contract. Although not stated in the clause, flowdown is not required on subcontracts that are time and material or mainly level of effort. Critical or significant tasks will be defined by agreement between the Government and contractor. Each subcontractor's reported cost and schedule information will be incorporated into the prime's C/SSR.

**b. C/SSR Flowdown.** The PM should confer with the contractor prior to contract award to discuss whether any subcontracts merit a C/SSR requirement. Subcontracts should be selected for flowdown based upon the guidelines of DOD 5000.2-R and the cost, schedule or technical risk they pose to the prime contract. As with prime contracts, no minimum dollar thresholds are prescribed for subcontracts. The PM should thoroughly evaluate his/her need for visibility and require only the minimum information necessary for effective management control.

**2-7.** After Contract Award. The focus of the PM's efforts shifts at this point from proposal evaluation and negotiation to contract execution. This shift must occur rapidly so that the PM can monitor early cost and schedule progress and initiate corrective action, if necessary. History has shown that cost and schedule performance trends become stable when the contract is between 10 percent and 20 percent complete, and, if unfavorable, they are unlikely to be reversed. The following paragraphs discuss actions that should occur after contract award.

a. Performance Measurement Baseline (PMB) Establishment. The PM should monitor the contractor's progress in establishing a PMB after contract award. The PM should encourage the contractor to establish a PMB immediately after contract award, even if the contract is undefinitized. While it may not be possible at the outset to plan all work in detail through the end of the contract, the contractor should plan near-term work to the extent practicable. Establishing a baseline as soon as possible after contract award will give the contractor and the PM early visibility into contract performance, thereby giving them time to identify and act upon emerging cost or

schedule problems. Because of its importance to the accuracy of the C/SSR, the PM should make every effort to ensure the contractor implements early a baseline that is complete and realistic.

**b. Begin Using C/SSR Data.** The first C/SSR should arrive at the Program Office shortly after contract award. Several options are available for analyzing C/SSR data. The PM may wish to designate someone in the program office or a matrix organization to review and analyze the C/SSRs, review them himself/herself, or rely on the CAO. Whichever option is selected, the PM should initiate active C/SSR review and analysis immediately upon receipt of the first C/SSR and should set an example by understanding and using C/SSR analyses. The PM also is encouraged to disseminate the C/SSRs and related analyses to technical and functional specialists working on the program. Not only should these people be aware of cost, schedule and technical progress reported in the C/SSR as it relates to their areas, they can validate -- confirm or contradict -- information reported in the C/SSR. This "cross fertilization" will improve program decision making by integrating cost, schedule and technical considerations, and will assure the PM of the consistency of reported information from various sources. Consequently, it is highly recommended that the PM require cost and schedule status information reported in the C/SSR to be discussed in conjunction with technical status at regularly scheduled government staff meetings and contractor progress reviews.

**c.** Conduct an Integrated Baseline Review. DOD policy requires PMs to conduct an IBR on their contracts within six months of contract award. The PM should begin making arrangements to visit the contractor's facility to review the contractor's performance measurement baseline. IBRs are discussed in paragraph 2-8. below.

**d. Execute a Memorandum of Agreement.** The PM should execute an MOA with the CAO for Contract Administration Services (CAS), including C/SSR surveillance, if one has not been executed previously. MOAs and surveillance are discussed in paragraph 2-9. below.

## 2-8. Integrated Baseline Review.

**a. Purpose.** Effective contract cost and schedule management depends on establishment by contractors of reliable performance measurement baselines. The baseline must capture the entire technical scope of work consistent with contract schedule requirements, and have adequate resources assigned. Two objectives of the baseline reviews are to reduce the number of C/SSR Plant Visits required and to improve use of cost performance data by contractor and government managers.

(1) Reduce the Number of Plant Visits. The C/SSR DFARS clause requires the Contracting Officer to visit the contractor's facility to review implementation of the contractor's C/SSR management procedures and to verify that the procedures provide timely and reliable data. Conducting a Plant Visit (Appendix E) accomplishes this requirement. However, this requirement may be satisfied with an IBR and regular C/SSR surveillance (refer to paragraph 2-10.), thereby obviating the need for a separate Plant Visit. The focus of the IBR will be the contractor's baseline implementation, but the IBR also affords the government team the opportunity to become familiar with the contractor's C/SSR management procedures. If after completing the IBR, the PM decides the contractor's C/SSR management procedures noted during the IBR. If the IBR discloses no significant problems with the contractor's C/SSR management procedures, the PM should forego the Plant Visit.

(2) Improve Management Use of Cost Performance Data. By conducting an IBR, PMs and their technical staffs can evaluate whether the contractor has a good understanding of the full scope of work and has implemented a viable baseline plan, adequately scheduled and resourced, for accomplishing the work. The IBR provides invaluable insight into the contractor's assumptions and conditions for accomplishing the technical scope of work. For example, the contractor may assume best case outcomes of certain tests, where the government may believe a more conservative assumption is warranted. When such issues arise, the Government will not require the contractor to change its baseline. The two parties will note the issue and will manage the risk accordingly. By being aware of such areas of risk, both government and contractor staff will be able to better understand and use the integrated cost/schedule information reported in the C/SSR.

**b. Policy.** DOD has recognized the importance of a good baseline by implementing a policy requiring PMs to conduct an IBR on contracts within six months after award. While policy requires an IBR to be performed within six months, it is a reasonable and desirable objective to perform one at the earliest practical time. C/SSR IBRs should be similar to, but less comprehensive than IBRs on contracts requiring the C/SCSC. Contact the DOD Component Focal Point for specific guidance on conducting an IBR.

**c. Approach.** PMs and their technical staffs will work with cost/schedule performance management specialists and the CAO to plan and execute an IBR. DOD policy requires PMs and their technical staffs to lead the review because 1) they have the requisite contractual and technical knowledge to evaluate the baseline, 2) the review will improve their knowledge and use of cost/schedule performance information to effectively manage the program, and 3) the PM is considered the "owner" of the performance management process and data. IBRs should be of short duration, normally three days or less, and should be done by a small government team working jointly with the contractor's PM and technical staff. The Government will not grade an IBR, (i.e., pass/fail). The review should result in consensus between the Government and contractor as to the viability of the contractor's baseline plan, with issues or areas of concern noted.

## 2-9. C/SSR Procedures in Operation.

a. Maintain and Use C/SSR Procedures. The C/SSR DFARS clause requires the contractor to establish, maintain and use management procedures to satisfy the C/SSR data requirement. The PM is responsible for ensuring that the contractor maintains and uses the procedures that were summarized and submitted in response to the solicitation, as subsequently modified. The PM should obtain assistance from the CAO in the form of surveillance, and from his/her cost/schedule performance management specialist. To ensure data quality and effective internal management, the PM should actively address and resolve any problems noted.

**b. C/SSR Procedures Changes.** The C/SSR DFARS clause requires the contractor to submit substantive changes to its C/SSR management procedures to the Contracting Officer for review. Normally, the CAO Contractor Performance Management (CPM) Monitor will review and act upon proposed changes. The CPM Monitor should discuss any proposed change with the PM and, if necessary, with the PM's cost/schedule performance management specialist before taking action. If the CPM Monitor analyzes the change and determines it to be significant, he/she will refer the request to the PCO and PM via the Administrative Contracting Officer (ACO). Significant questions involving contract provisions or the interpretation of this guide should be referred to the PCO and the PM via the ACO. Visibility into such changes will assist the PM in understanding the procedures used to generate the C/SSR.

**c. CWBS Changes.** Once the CWBS has been negotiated, the contractor must obtain government approval before changing it. Normally, changes to the CWBS should not be made after work is underway unless major rescoping of the program occurs. The contractor has flexibility to change the extended CWBS after work has started but it must maintain traceability between the old and new extended CWBSs whenever such a change is made. (Refer to MIL-HDBK-881 for more information on WBSs.)

## 2-10. Surveillance.

**a.** General. C/SSR surveillance is one of the CAS tasks delegated to a CAO. Normally, CAS responsibilities are delegated via a PCO letter. As part of its C/SSR surveillance responsibilities, the CAO, assisted by the FAO, will assure that the contractor is meeting its contractual requirements, and that the C/SSR reflects actual conditions, addresses actual and potential cost and schedule problems, and includes an appropriate summary of corrective actions taken or proposed. (Additional information on surveillance is found in the Earned Value Management Guide and DCMC Manual 8000.5.)

**b. Memorandum of Agreement.** The authority for CAO surveillance is normally a PCO letter, but specific activities should be set forth in an MOA executed between the PM and the CAO. If an MOA does not already exist, the PM and the CAO should agree upon contents of an MOA as soon as possible after contract award. C/SSR surveillance can be addressed in a stand-alone MOA, or it can be included in an overall Program MOA.

Suggested activities are described in 2-10.c. below. If necessary, the PM and CAO may solicit assistance from a cost/schedule performance management specialist in preparing the MOA.

## c. Surveillance Actions.

(1) Recurring surveillance actions will normally consist of:

(a) Monitoring the progress of any corrective actions previously required of the contractor.

(b) Receipt, analysis, reconciliation, and processing of the C/SSRs to include reconciliation to the contractor's internal data.

(c) Ensuring compliance with the C/SSR DFARS clause.

(d) Monitoring the contract to assure the contractual requirements and negotiated agreements are

## met.

(2) Other surveillance actions will include verification that:

- (a) The C/SSR reflects current, actual status.
- (b) The contractor identifies and explains significant changes to the budget plan.
- (c) Changes to internal procedures do not adversely affect C/SSR report quality.

(d) Contract changes are incorporated into the budget plan in a timely manner.

(e) The contractor adequately explains the reasons for and impact of those cost or schedule variances on which it is required to report, and indicates the corrective actions taken or proposed.

(f) C/SSR data is reconcilable with data on other reports.

## d. Records and Reports.

(1) The CAO will ensure that the results of surveillance efforts are documented and maintained. The CAO will provide surveillance information to the PM as agreed to in the MOA.

(2) If deficiencies are discovered in the contractor's compliance with C/SSR contractual requirements, the contractor will be so advised by the CAO who will document the problem and any corrective action required. The CAO will follow up to ensure the deficiency is resolved.

(3) Contractual problems relative to C/SSR that cannot be resolved with the contractor will be reported to the PM and PCO for resolution. All formal reports of contractual problems will be transmitted to the PM and PCO via the ACO.

(4) The CAO will review the C/SSR and related internal data flow on a recurring basis, or as agreed to in the MOA. The CPM Monitor will document and maintain surveillance results as part of a chronological record of the contract. The CPM Monitor will provide the PM with an independent and complete assessment of the accuracy and timeliness of C/SSR information as agreed to in the MOA. These reports must specifically highlight issues that could affect contract milestones or areas of considerable cost, schedule, or technical risk.

e. Subcontractor Surveillance. The prime contractor is responsible for assuring that subcontractors' C/SSRs are accurate and timely. The Government's contract administration and audit functions normally are limited to evaluating the effectiveness of the prime contractor's management of its subcontracts. Subcontractor surveillance in conjunction with a C/SSR flowdown requirement will normally be performed by the prime contractor. However, there may be occasions when a prime contractor requests CAO support to perform or assist in performing

surveillance of a subcontractor. Such administrative support is not to be construed as a release from the prime contractor's contractual obligations and basic responsibilities in managing the subcontract. Where appropriate, a written request, or LOD, for the performance of surveillance in connection with the subcontract, including audit assistance, is made by the prime contractor's cognizant CAO to the subcontractor's cognizant CAO. Where proprietary interests are in conflict between the prime and subcontractor, the subcontractor may also request surveillance be performed by the cognizant CAO.

# Chapter 3 USING THE C/SSR: QUESTIONS AND ANSWERS

**3-1. Why Should I Buy A C/SSR?** Most PMs receive an enormous volume of paper each month. Each of these documents vies for the PM's attention -- with varying degrees of success. The C/SSR, however, is unique. It's the only report that quantifies how much work a contractor has performed on a particular contract. It also quantifies how much work should have been accomplished and how much the work performed has actually cost. If the contractor is behind schedule or over cost, the C/SSR identifies where the problems lie and what the contractor plans to do about them. In short, a C/SSR is one of the PM's most valuable tools and, like any tool, it should be used properly.

**3-2. What Constitutes "Proper Use" Of The C/SSR?** The C/SSR is, foremost, a PM's report. It summarizes cost and schedule performance status (usually monthly), identifies cost and schedule problem areas, details management actions taken to resolve existing problems, and reflects the contractor's latest information about the estimated cost at completion. The C/SSR can assist the PM in discovering or confirming suspected cost, schedule, or technical problems, determining the magnitude of these problems, and assessing the corrective actions which are underway or planned.

**3-3. What Level Of Detail Does The C/SSR Provide?** The C/SSR should provide summary level cost and schedule performance information. Reporting is normally required at level two or three of the WBS. Of course, the PM should only require as much data as can be effectively used. This can be achieved by identifying the right depth of the reporting levels and by establishing realistic variance analysis reporting requirements. In most cases, C/SSR reporting at WBS level two or three will provide adequate cost performance information. However, for areas expected to entail high cost, schedule, or technical risk, reporting may be required at lower levels. Excessive reporting requirements almost always result in C/SSRs that are burdensome for the contractor to prepare and difficult for the PM to use.

**3-4. How Can I Make Sure That My C/SSR Is A Quality Report?** Poor quality C/SSRs often are blamed on a lack of contractor discipline. The argument that, without the C/SCSC, obtaining a quality report is impossible fails to account for the PM's influence. If the PM shows right from the start that the C/SSR is important, that reliable data will be demanded, that the report will be the primary medium for communicating integrated cost, schedule, and technical progress, then the C/SSR will be a high quality document. Also, periodic redetermination of variance thresholds (resulting from a regular dialogue between the PM and the contractor) will ensure that the C/SSR is able to adapt as the contract progresses. It will also elevate the C/SSR's importance as a management tool, and keep it from becoming simply a boilerplate contractual requirement. In short, the best way to ensure your C/SSR is a quality report is to take an interest in it and to use it effectively as a contract management tool.

**3-5. How Can I Ensure That I Will Receive High Quality Variance Analyses?** It is important to establish reasonable variance reporting thresholds before the first C/SSR is compiled. Careful selection of these thresholds will minimize preparation time and will ensure a streamlined report with meaningful variance explanations. Another way to ensure high quality variance analyses is to review variance analysis thresholds periodically and change them if necessary.

**3-6. What Variance Reporting Options Are Available?** There are many ways to determine which variances will require explanations. However, risk, complexity, and management interest should always be the guiding factors. The PM needs information that accurately and succinctly reflects the contractor's progress. The quantity of variance analyses is far less important than the quality. Therefore, explanations keyed to changes in variance trends for elements high in cost, schedule, or technical risk are the secret to a quality C/SSR. The most common methods for setting variance analysis thresholds are listed below.

a. Analyze any variance that exceeds a predetermined threshold in dollar or percentage terms. Variance percentages may be based on BCWS or BCWP. The variances can be positive or negative, cumulative, current or at completion. This method usually results in more variances analyses, particularly as the contract progresses.

b. Analyze the top 5 or 10 (or any number) largest dollar variances. The variances can be positive or negative, cumulative, current or at completion. This method usually reduces the number of variance analyses and focuses attention on the most significant problems.

c. Pre-select high-cost or -risk areas for analysis. As the contract progresses, the risk areas will change so the areas selected for analysis should also change.

d. Areas to be analyzed can be selected after the C/SSR is received. This allows the PM to review the performance data and pinpoint areas of interest to be analyzed. This method is useful when the PM intends to use the results obtained during upcoming program status reviews. It may also result in earlier submission of the C/SSR.

e. The PM may specify summary-level WBS elements (e.g., level two) for analysis. Such analyses will summarize the significant cost or schedule variances drivers within each specified summary-level element. This method provides the PM wider coverage while reducing effort required to produce the report.

## 3-7. How Can I Effectively Analyze The C/SSR Data Elements?

a. Time history plots of C/SSR data can reveal important trends. The cumulative performance and cost and schedule performance graphs shown in Figure 3-1 are two of the many useful portrayals of program performance which can be developed using C/SSR data. (Refer to Chapter 4 for an explanation of the terms contained in Figure 3-1.) Also, the PM should distribute the C/SSR to various functional experts on the program management staff and should seek comments on data pertinent to each functional area. This use of expert knowledge, across all portions of the WBS, is a useful supplement to routine C/SSR analysis. Current period data is easily derived from the C/SSR, and may be used to identify problems that otherwise might be "buried" in the cumulative C/SSR data.

b. Excellent analytical software packages, such as Performance Analyzer, are now in use across DOD. These packages can enhance the presentation of C/SSR information through informative charts, graphs and displays. Use of such packages is a significant advancement in the analysis of performance management information. However, despite the computer's valuable contribution, it is essential that the PM and his/her staff carefully review the C/SSR and the computer's analysis output and apply judgement.

**3-8. Can I Use The C/SSR Data To Project An Independent Estimate At Completion For A Contract?** The information contained in a C/SSR provides a basis for developing independent EACs for internal DOD use or as a check against the contractor's estimate. The paragraphs below describe how independent EACs are computed from C/SSR data. Additional guidance on EAC preparation is available from DOD Component cost/schedule performance management offices.

a. Independent EACs can readily be calculated from C/SSR data. An estimate for remaining work (BAC - BCWP) must first be calculated and then added to actual costs to date (ACWP). The estimate for remaining work is usually based on cost or schedule performance efficiency experienced to date. This performance efficiency is expressed as an index as shown in Figure 3-2. The cost performance index (CPI) is a measure of cost performance efficiency, and the schedule performance index (SPI) is a measure of schedule performance (accomplishment) efficiency. Indices of less than one indicate inefficient performance (e.g., behind schedule or over cost). The reverse is true for indices over one. CPIs and SPIs can be calculated for cumulative or current period trends, or numerous variations in between (e.g., 6 month CPI). A combination of CPI and SPI may also be used when appropriate. If inefficient performance has been experienced to date, it is logical to "factor up" remaining work with an index less than one. Remaining work should be "factored down" with an index of greater than one if efficient performance has been experienced. History has shown that, when a contract is overrunning, performance indices based on cumulative trends produce one of the lowest EACs; performance indices based on more recent trends (e.g., 3 month CPI) produce a higher EAC; and performance indices based on a composite of cost and

schedule trends produce one of the highest EACs. Selecting the appropriate index requires considerable judgement and experience. Consequently, the PM should solicit support from a cost/schedule performance management specialist in preparing his/her EAC.

b. The reasonableness of a contractor's EAC can be checked using an index called the To-Complete CPI (TCPI). As shown in Figure 3-2, this index comes in two common variations: BAC and EAC. The TCPI (BAC) shows what efficiency (CPI) is required to accomplish remaining work within budget. It is often useful as a

# **GRAPHIC ANALYSIS**





Notes: CBB and TAB are equal unless an OTB has been implemented. The difference between PMB and TAB is MR.





benchmark. The TCPI (EAC) shows what efficiency is required to accomplish remaining work within the contractor's (or any) EAC. For example, if performance efficiency to date has been about .9 and the TCPI for the contractor's EAC is 1.1, it may indicate that the contractor's EAC assumptions may need to be reviewed or updated. However, there may be valid reasons why the contractor is assuming such favorable performance on the remaining portion of the contract. This technique is intended to foster a dialog on the quality of the contractor's

Figure 3-2

# **Common Performance Indices**

$SPI = \frac{BCWP}{BCWS}$	Measure of schedule performance efficiency - "what is the relationship between the work we planned to accomplish and the work we actually accomplished?"
$CPI = \frac{BCWP}{ACWP}$	Measure of cost performance efficiency - "what is the relationship between the value (planned cost) of the work we accomplished and what it actually cost to do that work?"
TCPI (BAC) = $\frac{BAC - BCWP}{BAC - ACWP}$	Cost performance efficiency required to accomplish remaining work within the BAC
TCPI (EAC) = $\frac{BAC - BCWP}{EAC - ACWP}$	Cost performance efficiency required to accomplish remaining work within the EAC

CPI = Cost Performance Index SPI = Schedule Performance Index TCPI = To-Complete Performance Index BAC = Budget At Completion BCWS = Budgeted Cost for Work Scheduled BCWP = Budgeted Cost for Work Performed ACWP = Actual Cost of Work Performed EAC = Estimate At Completion

(or any) EAC.

c. Computing an EAC from C/SSR data should be done with caution. The ready availability of C/SSR performance information and computers with analytical software makes it easy to compute a range of EACs. Some people believe these EACs have a higher level of credibility because they are computer-generated using actual C/SSR data. In reality, these EACs are derived from C/SSR information that may not always be 100 percent accurate and are computed using mathematical formulas. The C/SSR analyst should be aware of factors, such as large firm fixed price subcontracts, that would affect the results of EAC formulas. Therefore, calculated EACs should be used with care and should be backed up with another EAC methodology, if possible. EAC preparers should consider all available information and apply common sense instead of accepting without question a computer-generated "point estimate."

**3-9.** Where Does C/SSR Data Come From And How Does It Relate To Other Reports? C/SSR data usually originates from the same system used by the contractor for internal management and reporting, although there is no requirement to do so. C/SSR data should reconcile with data used for the CFSR (which provides funding information) and the various CCDRs (which provide historical cost data). The C/SSR should satisfy the PM's need for contract cost performance information. Use of contract peculiar or specifically designed cost reports in lieu of, or in conjunction with, the C/SSR is discouraged. However, the PM is encouraged to obtain a supplemental schedule report to augment C/SSR schedule analysis (refer to paragraph 2-1.d.(3)).

**3-10. Will I Have Access To The Contractor's Internal Cost Data?** Contractors produce a variety of management reports for internal use. These reports cover all aspects of project cost and schedule management, such as work planning, budget allocation, work accomplishment and cost accounting. The PM may request these reports on an exception basis to support a particular management need. For example, the PM may wish to obtain, via the CAO, functionally-oriented cost performance data as opposed to the WBS-oriented data contained in the

C/SSR. Also, many contractors produce cost and schedule presentations which may be useful to the PM at various contractual decision points. However, frequent requests may result in increased contract costs or requests for equitable adjustment. The C/SSR should be sufficient to fulfill the PM's routine cost performance needs. Therefore, requests for additional data should be infrequent and highly selective.

**3-11. Does The C/SSR Provide Visibility Into Subcontracted Effort?** If the prime contractor has placed a C/SSR requirement on one of its subcontracts, the prime must incorporate the subcontract data in its own C/SSR. The prime contractor should try to ensure that the subcontractor's C/SSR is available in time to be incorporated into the prime's C/SSR. Differing accounting periods and processing time (data analysis, problem identification, and corrective actions) may make this a difficult task. However, one way to mitigate the problem is to obtain performance information as soon as possible, to be followed later by narrative explanations, problem identification and corrective actions.

**3-12.** Can The C/SSR Be Transmitted Using An Automated Format? Submission of C/SSR data via EDI is now possible. ANSI X12 compliant cost and schedule transaction sets are available (refer to paragraph 1-5.a.(6).) Submitting C/SSRs via EDI is encouraged because it will reduce costs, speed the delivery of monthly C/SSRs, and can be imported directly into the most popular C/SSR analysis software programs.

# Chapter 4 DATA ELEMENT EXPLANATION

**4-1. Overview.** The C/SSR consists of four sections: Heading, Contract Data, Performance Data, and Narrative Explanations. These sections are prepared using C/SSR DID DI-MGMT-81467 (Appendix F), Cost/Schedule Status Report. Each section is explained below.

**a. Heading.** This section contains pertinent information on the contract, the contractor, and the program, as well as the report period and the contractor's authorized representative signature.

**b.** Contract Data. The Contract Data section presents the agreed contract costs, both original and current, as well as the Management EAC. This section includes blocks for Initial Target Cost, Negotiated Changes, Current Target Cost, Estimated Cost of Authorized, Unpriced Work, and CBB. The Management EAC also is presented and compared to the CBB to determine the Variance At Completion (VAC). A block for Over Target Baseline (OTB) Date signals the existence of an OTB, if applicable, by giving the date of the first C/SSR in which the latest approved OTB appears.

(1) Contract Budget Base (CBB). The negotiated cost and schedule provisions provide the targets which are used to establish contract plans, schedules, and budgets. As the contract changes, C/SSR budgets change accordingly, and the contractor's detailed work plan, called the Performance Measurement Baseline (PMB), is revised to reflect the contract changes. It is important that all authorized work be recognized and that the parties agree on its value, including authorized undefinitized effort, so that it can be included in the PMB for performance measurement purposes. Thus, the CBB must consist of the negotiated cost for all definitized effort plus an estimated amount for any authorized work that has not been definitized. Profit or fee is not included in the CBB. (Refer to Figure 4-1.) For reimbursable contracts, increases in the estimated or target cost with no associated work scope (i.e., cost growth) will not be included in the CBB. The CBB will equal the Total Allocated Budget (TAB) unless an OTB has been implemented. More information on OTBs is presented below and in paragraphs 4-8.b. and 4-10.b.

(2) Management EAC. The Management EAC in the Contract Data section is the contractor's most likely estimate of total contract costs. It includes an estimate for all authorized contract work as represented by the CBB, and also may include an estimate for contract risk or probable future business conditions. The Management EAC may differ from the EAC in the Performance Data section. Any difference must be explained in the Narrative Explanation section.

**c. Performance Data.** The Performance Data section depicts for contractually specified WBS elements: cumulative cost and schedule performance status, budgets, and estimated cost at completion.

(1) Cumulative Cost and Schedule Performance. The BCWS is the contractor's time phased, resourceloaded work plan. It is expressed in dollar terms by assigning budgets to time phased increments of scheduled work. The BCWP, or earned value, represents work accomplishment. It is the budget value associated with work actually completed. The ACWP is the cost of accomplishing the completed work. The difference between BCWS and BCWP provides a schedule (or accomplishment) variance, and the difference between BCWP and ACWP is the cost variance for completed work. (Refer to paragraph 2-1.d.(3) for more information on accomplishment variance.)

(2) Estimate at Completion (EAC). The contractor's EAC is provided and compared with the BAC for the WBS elements and other categories specified for reporting. The difference between BAC and EAC is the projected VAC.

(3) Other Data Elements. Cost of Money (COM), General and Administrative (G&A), UB, and MR will be reported separately from amounts applicable to WBS elements. If the contractor chooses to include G&A in the WBS elements, it should enter the amount in the At Completion column and indicate "non add" after G&A in Column 1. The budgets distributed in the WBS elements, plus COM, G&A (if separate), and UB will sum to the

PMB. The PMB plus MR will equal the TAB. The TAB equals the CBB unless the contractor has implemented an OTB.

Figure 4-1



Relationship of Contract Values to C/SSR Budgets

(4) Over Target Baseline (OTB). Normally, the Performance Data section total line reflects the contractor's progress against contractual targets. However, this is not true if the contractor has implemented an OTB. An OTB occurs when the contractor establishes a budget baseline, or TAB, that sums to an amount greater than the CBB. In short, an overrun at completion has been built into the baseline. Because of the built-in overrun, C/SSR users should be aware of the existence of an OTB. To indicate the existence of an OTB, the contractor must give the OTB date in the Contract Data section, and provide pertinent details in the Narrative Explanation section. The PM and the contractor must agree on the terms of the OTB, and the Contracting Officer must provide written approval prior to implementing the OTB. (Refer to paragraphs 4-8.b. and 4-10.b.)

**d.** Narrative Explanations. This section presents a summary of contract progress, problems, corrective actions and other pertinent information. The C/SSR DID gives required inclusions for this section, but the contractor should include any other information deemed significant or noteworthy. (Refer to the C/SSR DID in Appendix F.)

**4-2. Work Breakdown Structure Reporting Elements.** Information in the Performance Data section is normally presented by WBS element. A WBS is a product-oriented family tree, composed of hardware, software, services, data and facilities of a defense materiel item. (More information on WBSs is given in paragraph 1-5.a.(5) and in MIL-HDBK-881.) WBS reporting elements are specified in the contract. The contractor and the PM should review periodically, and change, if necessary, WBS reporting elements to ensure they continue to meet the PM's information needs.

## 4-3. Budgeted Cost for Work Scheduled (BCWS).

**a.** General. BCWS represents the budgeted cost of the work scheduled for accomplishment. Since the C/SSR presents only cumulative performance data, BCWS in the C/SSR reflects the planned cost for all work scheduled

Figure 4-2

Data Element	Common Name/Explanation	
Budgeted Cost for Work Scheduled (BCWS)	<b>Planned work.</b> The budgeted value of work planned to be accomplished to-date.	
Budgeted Cost for Work Performed (BCWP)	<b>Earned value</b> . The budgeted value of planned work actually accomplished to-date.	
Actual Cost of Work Performed (ACWP)	Actuals. The actual cost of planned work actually accomplished to-date.	
Cost Variance (BCWP - ACWP)	<b>Cost Variance.</b> The amount (value) by which the work actually accomplished underran (positive cost variance) planned costs or overran (negative cost variance) planned costs to-date. "By how much did the work we actually accomplished cost more or less than we planned?"	
Schedule Variance (BCWP - BCWS)	Schedule Variance. The amount (value) of planned work that was accomplished ahead of the planned date (positive schedule variance), or the amount of planned work that was scheduled to be accomplished but was not (negative schedule variance). "By how much did the work we actually accomplished vary from the work we planned to accomplish?"	
Budget at Completion (BAC)	<b>Budget.</b> The distributed and undistributed budgets plus management reserve (same as Total Allocated Budget). This is usually the contract target or estimated cost plus authorized, unpriced work.	
Estimate at Completion (EAC)	<b>Estimate.</b> The latest revised estimate of the value of remaining work plus actual costs to-date.	
Variance at Completion (BAC - EAC)	Variance at Completion. The cost overrun or underrun at completion. "How much over or under the contract target/estimated cost is our EAC?"	

# C/SSR Data Elements

for accomplishment since the beginning of the contract through the "as of" date of the report (Figure 4-2). Contractual work is planned in detail, scheduled, and assigned budgets at appropriate levels. Sometimes referred to as the "planned work," BCWS is the cumulative summation of the budgets of these lower-level work increments.

**b.** Time-Phasing and Detailed Planning. While BCWS is similar to a time-phased budget plan or spend plan, there is one significant difference. BCWS is based on work scheduled to be performed rather than when money is to be spent. Therefore, BCWS is not only time phased, but is also "work phased" to represent the planned schedule for accomplishing the contractual effort. The extent to which future BCWS can be established will depend on the contract's nature and duration. A detailed time-phased baseline should be established as soon as feasible. For a lower value, less complex contract, this detailed planning could cover the entire contract shortly after contract award. For a higher value, more complex contract, detailed planning might be feasible for only several months into the future. However, the portion which cannot be planned in detail must nevertheless be defined and time-phased to ensure that there is and will be sufficient budget for the entire contract effort.

**c. Control of Budgets.** Budgets must be relatable to identified elements of work, and budgets applicable to work at one WBS level must not exceed the total budget at the next higher level, a rule which holds true all the way to the total contract level. In other words, the budgets must "add-up," and the sum of distributed budgets, UB, and MR should equal the definitized contract cost plus the estimated cost for authorized, undefinitized work, unless an OTB has been implemented. For any given WBS element, the total BCWS must equal the budget allocated for that element.

**d.** Changes to Budgets. To maintain a realistic and current plan, contractual changes should be incorporated into the PMB within a reasonable time after the change is authorized. The contractor should strive to keep the plan consistent with the actual manner in which the work is to be performed. Replanning future work should be carefully controlled and expediently executed. If the replanning involves contractual milestones, the contractor should obtain the PM's and PCO's concurrence before it is implemented. Revisions to budgets for completed work should not be made unless necessitated by extraordinary circumstances such as accounting adjustments or correction of errors, or when the PM and the contractor agree that such an adjustment will provide a more accurate portrayal of actual contract status in the C/SSR. Significant revisions to budgets for completed work should be brought to the PM's attention before the change is made, and if implemented, will be reported in the Narrative Explanation section. (Refer to paragraph 4-8.d. for more information on replanning work.)

## 4-4. Budgeted Cost for Work Performed (BCWP).

**a. General.** BCWP represents the budgeted value of completed or in-process work, and reflects actual progress made toward completing the planned work (BCWS). BCWP is referred to as "earned value" because it represents the budgeted value earned for completing scheduled work. BCWP is determined on a regular basis, at least monthly, and compared to the BCWS to measure any schedule variance, and to actual costs (ACWP) to measure any cost variance. The percentage of completion for a WBS element or the total contract can be obtained by dividing BCWP by the BAC. For completed effort, BCWP is equal to the BCWS for that effort.

**b.** Methods of Determination. The C/SSR DFARS clause (252.242-7005) requires the contractor to have management procedures for determining BCWP. The PM should review the procedures 1) to ensure he/she fully understands the contractor's earned value methods, and 2) to evaluate whether the contractor plans to use primarily objective earned value measurement. While there are many acceptable earned value methods, BCWP is more meaningful if it is determined using objective indicators of physical accomplishment, such as milestones, rather than subjective methods, such as estimates or LOE. In addition, earned value is more meaningful if it is determined by the responsible person at the level where the work is actually performed. As a general rule, the further from the working level that earned value is determined, the more subjective and inaccurate it becomes. Mathematical formulas may be used for determining earned value, particularly where the in-process work time is quite short. However, the use of formulas should be held to a minimum since their indiscriminate use will adversely affect the validity and usefulness of reported data. Due to the variety of earned value methods available, it is very important that the PM thoroughly understand the contractor's methods for generating C/SSR earned value data.

## 4-5. Actual Cost of Work Performed (ACWP).

**a.** General. ACWP represents the direct and indirect costs specifically identified or allocated to the contract. The C/SSR DFARS clause requires the contractor to have management procedures for applying all direct and indirect costs. Actual costs reported in the C/SSR should reconcile to other contractually required cost reports and to the contractor's internal accounting records, which are regularly reviewed by government auditors. Costs should be recorded promptly and must relate to the accomplishment of contractual work. Recording direct labor and other direct costs usually is straightforward since these costs are recorded when they are incurred. Application of indirect costs is governed by the contractor's cost accounting disclosure statement. Material costs, however, have unique characteristics and are handled differently as described below.

**b.** Material Costs. Material costs differ from other cost categories because they may be recorded at various points in time. Material receipt, invoice payment, inventory acceptance or withdrawal, and floor application are all examples of acceptable points in time for material performance measurement. The choice should depend on such factors as planned use, material type, value, or anticipated time in inventory before use. The point in time which most accurately reflects true contract performance should be the determining factor. Normally, actuals should not be recorded and earned value taken before material receipt. However, there may be legitimate instances where this is done, such as when a subcontract provides for progress payments. In addition, material budgets must always be prepared on the same basis as costs are to be recorded in order to make comparisons between budgeted and actual costs meaningful. For example, contractors should not budget material based upon when it is to be used and record actual costs based upon receipt.

(1) Estimating Actuals. To prevent false variances, actual costs should be recorded in the same period that earned value is taken. Estimated actuals should be used if material earned value is taken prior to the time of actual payment to vendors.

(2) Purchase Order Commitments. Material cost variances based on purchase prices (as differentiated from material cost variances based on material usage) can be identified early as the contractor obtains supplier commitments for material orders. Significant material cost variances identified by purchase order commitments should be reflected promptly in the contractor's EAC and explained in the Narrative Explanation section.

(3) Cost Accounting Disclosure Statement and Material Management Accounting System. The PM should be aware that the contractor's cost accounting disclosure statement or Material Management Accounting System may affect how the contractor records actual material costs. The PM should determine if or how this will affect material costs reported in the C/SSR. The PM will not make changes to the contractor's cost accounting disclosure statement or Material Management Accounting System in an attempt to improve C/SSR reporting. The PM should consult with the cognizant FAO if he/she believes there is a problem with the contractor's actual costs reported in the C/SSR.

## 4-6. Schedule Variance (BCWP minus BCWS).

**a. General.** A schedule variance exists when BCWP varies from BCWS. If BCWP is greater than BCWS, more work has been done than was planned and an ahead-of-plan condition, or favorable schedule variance, exists. The opposite is true if BCWP is less than BCWS. Schedule variance percent is equal to the schedule variance divided by BCWS. The schedule variance quantifies in dollars the deviation from the work plan, and should be viewed as an "accomplishment variance." The relation to other time-oriented schedules is discussed below. (Refer also to paragraph 2-1.d.(3).)

**b.** Relation to Master and Subordinate Schedule Variance. BCWS is a schedule that reflects the contractor's resource-loaded, time-phased plan for accomplishing the contractual scope of work. BCWS complements, but does not replace formal activity or event-based schedules, such as networks, Gantt Charts, or Line-of-Balance. By itself, the C/SSR schedule variance may not reveal critical path information and should be analyzed in conjunction with other schedule information. However, the C/SSR schedule variance should be relatable to the schedule status indicated by the contractor's master and subordinate schedules. If the contractor's scheduling system indicates a behind-schedule condition, but the C/SSR schedule variance indicates work is

proceeding according to plan, this may indicate that work being done ahead of schedule is offsetting the behindschedule work. On the other hand, it may raise a question as to the validity of the BCWS and BCWP. Such a situation could indicate that the BCWS is not related to the schedules, or that the BCWP is not correct. If the latter is true, then the cost variance resulting from the comparison of BCWP and actual costs may also be distorted. Under these circumstances, the PM should request the contractor to furnish an explanation and should request assistance from the CAO.

**c.** Schedule Variance Reporting. The C/SSR DID requires the contractor to explain significant schedule variances in the Narrative Explanation section. The contractor should explain the variance's cause and impact, and the proposed corrective action. For unfavorable variances, if recovery cannot be made without additional costs being incurred, the additional cost should be reflected promptly in the contractor's EAC. The PM should evaluate carefully his/her information needs and request only an amount that is needed for effective management control. Excessive variance explanations can diminish the C/SSR's usefulness and add cost to the contract.

## 4-7. Cost Variance (BCWP minus ACWP).

**a.** General. A cost variance exists when BCWP varies from ACWP. A cost variance indicates that the contractor incurred more or less cost (ACWP) than budgeted for the accomplishment of planned work (BCWP). Cost variances can result from many things, so they should be investigated to determine their cause. The cause of a cost variance should be determined early so corrective actions can be taken. The sooner corrective actions are initiated, the more likely an unfavorable variance will be overcome. The C/SSR provides the PM with summary visibility into the contractor's cost performance. It is the PM's responsibility to obtain and use meaningful cost variance information and to learn more about the contractor's detailed cost performance.

**b.** Need for Budget Discipline. The C/SSR DFARS clause requires the contractor to have management procedures that establish constraints to preclude the subjective adjustment of data. Subjective data adjustments can suppress cost variances which will delay visibility of contract cost problems. Variances can be suppressed in several ways, including arbitrary or uncontrolled budget transfers. "Borrowing" budget from future work and replanning upcoming work are examples of such transfers. The contractor should exercise discipline in using its procedures for allocating and controlling budgets. Cost variances also will be suppressed if the PMB is "front-loaded." A front-loaded baseline occurs when a disproportionate amount of budget is assigned to near-term work, leaving inadequate budgets for far-term work. The PM can evaluate the reasonableness of the contractor's baseline by performing an IBR. An experienced Cost Performance Analyst may also be able to discern a front loaded baseline by viewing a graphic depiction of the time-phased BCWS through the end of the contract. Refer to paragraph 2-8. for more information on IBRs.

**c.** Cost Variance Reporting. As with schedule variances, the C/SSR DID provides guidance for identification and explanation of significant cost variances. The contractor should explain the variance's cause and impact, and the proposed corrective action. If unfavorable cost variances cannot be eliminated through corrective actions taken or proposed, then the impact should be reflected promptly in the contractor's EAC. The PM should evaluate carefully his/her information needs and request only an amount that is needed for effective management control. Excessive variance explanations can diminish the C/SSR's usefulness and add cost to the contract.

## 4-8. Budget at Completion (BAC).

**a.** General. The BAC column of the C/SSR lists the contractor's budget allocations, the sum of which is called the Total Allocated Budget (TAB). The TAB consists of the PMB and MR. The PMB consists of budget distributed to individual WBS elements, UB, and, depending on contractor practices, G&A and COM. Normally the TAB is equal to the contractual budget value, called the Contract Budget Base (CBB). The CBB consists of the original negotiated cost plus authorized (definitized and undefinitized) contract changes. For cost reimbursable contracts, the contractor will not include in the TAB any contract changes that increase the estimated or target cost but have no associated work scope (i.e., cost growth). The TAB will be greater than the CBB when an OTB has been implemented. (OTBs are discussed below at paragraphs 4-8.b. and 4-10.b.) Budget allocations change during the life of a contract because of contract changes, internal replanning, and application of MR. However, they must always sum to the TAB.

## b. Over Target Baseline (OTB).

(1) General. During contract execution, the contractor may conclude that the budget, and sometimes schedule, for performing the remaining work is decidedly insufficient and no longer represents a realistic plan. At this point the contractor should prepare and submit a request to implement an OTB. Once it receives written approval, the contractor can create a budget baseline, or TAB, in excess of the CBB, and, if necessary, replan remaining work to a realistic schedule. This allows the contractor to provide its managers with realistic budgets and schedules for accomplishing the remaining work. Implementing an OTB is a major management decision. Consequently, the PM should fully understand the concept of and process for implementing an OTB. The PM should consider the factors discussed below when considering whether an OTB is appropriate for his/her contract and when evaluating a contractor's OTB request.

(2) Government Review and Approval. The contractor will initiate the process by submitting an OTB request to the PM detailing its implementation plan. (Refer to paragraph 4-8.b.(4) for essential elements of an OTB request.) To expedite the return to a realistic baseline, the PM must promptly review and negotiate changes, if necessary, to the contractor's OTB request, normally within 30 days. If the request is not approved within 30 days, the PM should provide specific reasons as to why it was denied and what is required to obtain approval. If the OTB request is approved, the Contracting Officer will promptly send written approval to the contractor to proceed. The contractor will not implement an OTB without prior written approval from the Contracting Officer. Because OTB budgets and schedules do not supersede contract values and schedules and are implemented solely for planning, controlling, and measuring performance on already authorized work, a contract modification is not needed. The PM should seek support from his/her technical and support staff in evaluating an OTB request, but he/she must ensure that the OTB approval process is not inhibited by inappropriate or unrelated issues. The overriding goal should be to allow the contractor to implement in a timely manner a baseline that allows it to effect proper management control of the ongoing effort.

(3) When to Use an OTB. The contractor should submit an OTB request when it determines that the current baseline does not represent a realistic plan for accomplishing the remaining work and no longer serves as a basis for effective control. Working to an unrealistic baseline inhibits effective management control, possibly exacerbating the present over-cost or behind-schedule condition. To restore effective management control, the contractor should prepare an OTB request that reflects the needed changes to its baseline. The primary reason for implementing an OTB should be to improve the contractor's ability to manage and control ongoing work. Therefore, the decision to request an OTB should originate with the contractor. The PM should not unilaterally determine OTB specifics, such as the amount or schedule. After first concluding that the contractor needs an OTB to effect proper control over the remaining work, the PM should consider the following factors in deciding whether an OTB is appropriate on his/her contract:

(a) Do the contractor and Government understand why the current work plan is no longer valid? The parties should identify the problems that rendered the current work plan unrealistic, and implement measures that will prevent these problems in the future.

(b) Is the existing plan for accomplishing the remaining work valid? The "to-go" plan should reflect a realistic schedule of how the work actually will be done and should contain adequate budgets.

(c) Has contract work progressed sufficiently to warrant an OTB? The use of an OTB may be inappropriate in a contract's early stages because insufficient work has been accomplished to verify the need for an OTB. However, nothing precludes the contractor from implementing an OTB at the outset, provided the PM and PCO concur.

(d) Does sufficient time remain on the contract to warrant an OTB? If there is little time remaining, an OTB may not be worthwhile.

(e) Has an OTB been implemented previously? The need for multiple OTBs suggests the above factors, especially (a) and (b), have not been adequately considered, and may indicate significant underlying management problems that should be investigated.

(f) Will the disruption in C/SSR reporting, if any, be a problem for the PM? The PM may have an urgent need for performance measurement data that may preclude implementing an OTB at this time.

(4) **Implementing an OTB.** The PM and the contractor must agree on the specifics of the OTB before it is implemented. The PM is encouraged to seek support from his/her cost/schedule performance management specialist and the CAO when evaluating an OTB. The contractor's OTB request should contain the following essential elements:

(a) An adequate OTB amount. The requested OTB amount should be adequate. The contractor should perform a detailed bottom-up estimate of remaining work to substantiate the need for and amount of an OTB.

(b) A realistic schedule for accomplishing remaining work. The remaining work plan should be based on a realistic schedule. The new work plan need not be phased to the current contract schedule if the contractor has notified the government that the contract schedule is not going to be met. However, both parties must agree that the existing contract schedule remains in effect until such time as a contract change is negotiated and consideration issues, if any, are resolved. The OTB schedule does not supersede the contract schedule.

(c) A description of how the OTB will be reported in the C/SSR. The parties should agree on how the OTB will be reported in the C/SSR. Specifically, how will existing cost and schedule variances be handled and how will visibility into the budget allocations be reported. The variances can be retained or eliminated, or some combination thereof, depending on the specific circumstances of the contract. Visibility into OTB budget allocations is discussed further in 4-8.b.(5) below. The PM should evaluate carefully his/her management information needs before deciding how these items should be handled.

(d) **OTB implementation time frame.** The contractor's plan should provide for timely OTB implementation and reporting. Normally one to two full accounting periods after written authorization to proceed is received is sufficient time to fully implement an OTB.

(5) **Reporting an OTB.** The existence of an OTB in the C/SSR is indicated by the inclusion of an OTB date in the Contract Data section. Another indication is that the TAB will be higher than the CBB. The contractor also must describe pertinent OTB details in the Narrative Explanation section. The contractor and the PM may also agree to report specific OTB budget allocations in the Narrative Explanation section and to reconcile OTB cost/schedule variances to original contractual variances by WBS element. However, this option may add to the cost of reporting so the PM should carefully evaluate his/her need for information in determining how much visibility is needed.

**c.** Use of Internal Operating Budget. The contractor may choose to establish a separate operating budget for internal use while reporting progress against the contractual PMB. An internal operating budget is not intended to serve as a complete plan for performing the contract work. Rather, it normally is restricted to specific tasks where assigned budgets may be unrealistic. If the internal operating budget (amount and timephasing) differs substantially from the PMB, the contractor should consider using an OTB.

**d. Internal Replanning.** To facilitate accurate performance measurement, the contractor should maintain a PMB that reflects the actual plan for performing the remaining work. Maintaining such a PMB occasionally may necessitate replanning remaining effort. Examples of when internal replanning may be appropriate include: 1) when the original plan becomes unrealistic due to cost, schedule or technical problems; 2) when a reorganization of work or people to increase efficiency becomes necessary; or 3) when the decision is made to use a different engineering or manufacturing approach. Internal replanning is similar to using an OTB in that the remaining work is rephased to a different work plan and/or schedule. However, internal replanning should be selected over an OTB when existing budgets for remaining work are deemed sufficient. The following guidelines apply to internal replanning.

- (1) Government concurrence is not required if the replan:
  - (a) affects work beyond the current accounting period,

- (b) is consistent with contract milestones, and
- (c) does not result in a TAB that exceeds the CBB.
- (2) Government concurrence is required if the replan:
  - (a) causes changes to work in current or prior periods,
  - (b) is inconsistent with contractual milestones, or
  - (c) results in a TAB that exceeds the CBB.

(Note: The contractor cannot implement an OTB without prior written approval from the Contracting Officer.)

(3) Significant replanning actions that result in changes to budgets for reporting level WBS elements or their timephasing must be explained in the C/SSR Narrative Explanation section.

**4-9. Estimate at Completion (EAC).** The EAC in the Performance Data section represents the contractor's latest, best estimate of the final contract costs for the WBS elements and other categories being reported. The EAC should consist of actual costs to date (ACWP) plus an estimate of the cost of remaining work. The estimate should be developed by those closely associated with the work who are well-informed regarding work performance, problems, and future resource requirements. The contractor should prepare the EAC in a consistent manner with appropriate consideration given to such factors as performance to date, known and anticipated future problems, "work-arounds," economic escalation, and anticipated business volume or other causes of changes in indirect costs. Nothing prevents the EAC from being developed by higher level contractor personnel, but the further from the performing organization the EAC is developed, the less it is likely that the aforementioned factors will be considered. The EAC for each WBS element should be reviewed monthly and revised as required to provide the best possible estimate of final contract costs. If the sum of the EACs for the WBS elements, COM, and G&A does not equal the Management EAC in the Contract Data section, the difference should be discussed in the Narrative Explanation section. The contractor's management procedures must provide for establishing an EAC.

## 4-10. Variance at Completion (BAC minus EAC).

**a.** General. A VAC exists when the EAC varies from the BAC. The contractor will explain VACs in the Narrative Explanation section as specified in the C/SSR CDRL item (DD Form 1423). The explanation should be specific and concise, and should describe the cause, impact and corrective actions taken or proposed.

**b.** When Using an OTB. When an OTB has been implemented, the VAC no longer represents a variance to contractual budgets because the BAC contains a built-in overrun. The VAC represents only the overrun to the OTB. To determine the variance relative to contractual budgets by WBS element, visibility must be maintained into how the contractor initially allocated the OTB among WBS elements. The need for this visibility into pre-OTB cost and schedule variances will be a significant consideration in determining the C/SSR reporting guidelines when the OTB is implemented. (Refer to paragraph 4-8.b.(4).) The total contract VAC can be determined easily by subtracting the Management EAC in the Contract Data section from the CBB.

## 4-11. Undistributed Budget (UB).

**a.** General. UB represents the budget for authorized work that the contractor has not yet allocated to WBS elements or MR. UB may contain other items, such as de-scoped effort that has not yet been contractually reduced by the customer. It is a temporary holding account for use when it is not possible to distribute budget promptly. It is not to be used as MR and it should not hold for long any budget which can be allocated to a WBS element(s). It may contain budget for newly authorized work awaiting allocation, or budget (and scope) that is being reallocated.

**b.** Reason for UB. Situations may occur where it is impractical to define work or distribute budgets immediately. UB exists as a holding account for these temporary situations. A common example is a contract change authorized near the end of a reporting period where time does not permit budget to be allocated prior to the reporting cutoff date. The budget is held in UB until it can be allocated, normally within the next accounting period. All budget held in UB should be associated with a specific work scope and, except as provided in paragraph 4-11.d., should be completely allocated as soon as practicable.

**c.** Use of UB. The UB account should not be used as a substitute for early and complete budget planning. Its purpose is strictly to accommodate temporary situations where adequate planning is clearly impractical, such as when the work is insufficiently defined to permit meaningful budget distribution. The contractor's C/SSR management procedures must provide for using and controlling UB. Normally the contractor will maintain a log documenting the source and destination of UB transfers, as well as the amount and reason. All UB should be fully explained in the C/SSR Narrative Explanation section.

**d.** Undefinitized Contracts. For recently awarded undefinitized contracts, the contractor may hold significant portions of the budget in UB. But when there is a reasonable basis for allocating budgets, such as the contractor's proposal, the contractor should allocate budgets to WBS elements to the maximum extent practicable. As a minimum, the contractor must allocate budgets for ongoing work and for effort scheduled to start prior to the conclusion of negotiations. When the contract is definitized, the contractor should allocate any remaining budget promptly. Authorized undefinitized contract changes are handled the same way. If the contract remains undefinitized for an extended period of time, the PM should investigate the reason for the delay.

**4-12. Management Reserve (MR).** MR represents the portion of the negotiated contract value retained for use by contractor program management. MR is usually controlled by the contractor PM, but it may also be controlled at a lower level. Regardless of the level, all MR should be identified and controlled separately from the PMB and reported in the C/SSR. MR is intended to be used for unforeseen occurrences, such as emergent requirements (work in the contract scope but not included in the baseline) or exploring different technical alternatives. It should not be used to cover already incurred cost growth on existing tasks. The Government should not consider MR a contingency amount that can be reduced during negotiations or used to absorb the cost of contract changes. The contractor's C/SSR management procedures must provide for the use and control of MR. The contractor should document MR changes and report them in the C/SSR Narrative Explanation section.

# Appendix A ACRONYMS

AA	Advance Agreement
ACO	Administrative Contracting Officer
ACWP	Actual Cost of Work Performed
AMSDL	Acquisition Management Systems and Data Requirements List
ANSI	American National Standards Institute
BAC	Budget at Completion
BCWP	Budgeted Cost for Work Performed
BCWS	Budgeted Cost for Work Scheduled
C/SCSC	Cost/Schedule Control Systems Criteria
C/SSR	Cost/Schedule Status Report
CAO	Contract Administration Office
CAS	Contract Administration Services
CBB	Contract Budget Base
CCDR	Contractor Cost Data Reporting
CDRL	Contract Data Requirements List
CFSR	Contract Funds Status Report
СОМ	Cost of Money
CPI	Cost Performance Index
CPM	Contractor Performance Management
CPR	Cost Performance Report
CWBS	Contract Work Breakdown Structure
DCAA	Defense Contract Audit Agency
DCMC	Defense Contract Management Command
DFARS	Defense Federal Acquisition Regulation Supplement
DID	Data Item Description
DOD	Department of Defense
DODI	Department of Defense Instruction
EAC	Estimate at Completion
EDI	Electronic Data Interchange
EDIFACT	Electronic Data Interchange For Administration Commerce and Transport
FAO	Field Audit Office
FAR	Federal Acquisition Regulation
FY	Fiscal Year
G&A	General & Administrative
IRR	Integrated Baseline Review
IPT	Integrated Product Team
	Letter of Acceptance
LOD	Letter of Delegation
LOD	Level of Effort
MDA	Milestone Decision Authority
MIL-HDRK	Military Handbook
MOA	Memorandum of Agreement
MOL	Memorandum of Understanding
MP	Management Reserve
OTB	Over Target Baseline
PCO	Drocuring Contracting Officer
PM	Program Project or Product Manager
DMB	Parformance Measurement Receline
DWRS	Program Work Breakdown Structure
	Pasaarch Davalopment Test & Evaluation
RETRE	Request for Proposal
1/1/1	Request for Floposal

SOW	Statement of Work
SPI	Schedule Performance Index
TAB	Total Allocated Budget
TCPI	To-complete Performance Index
UB	Undistributed Budget
VAC	Variance at Completion
WBS	Work Breakdown Structure

# Appendix B GLOSSARY

The following terms apply to C/SSR management procedures and reporting.

**a.** Actual Cost of Work Performed (ACWP). The costs actually incurred and recorded in accomplishing the work performed within a given time period.

**b. Apportioned Effort.** Effort that by itself is not readily divisible into short-span work tasks but which is directly relatable to discrete effort. BCWP for apportioned effort is based upon the accomplishment of related discrete effort.

**c.** Authorized Work. That effort which has been definitized and is on contract plus that effort for which definitized contract costs have not been agreed to but for which written authorization has been received.

d. Budget at Completion (BAC). See Total Allocated Budget.

**e.** Budgeted Cost for Work Performed (BCWP). The sum of the budgets for completed work tasks and completed portions of open work tasks, plus the applicable portion of the budgets for level of effort and apportioned effort.

**f. Budgeted Cost for Work Scheduled (BCWS).** The sum of the budgets for all work tasks scheduled to be accomplished (including in-process and completed work tasks), plus the amount of level of effort and apportioned effort scheduled to be accomplished within a given time period.

**g.** Contract Budget Base (CBB). The negotiated contract cost plus the estimated cost of authorized undefinitized work. The CBB is equal to the TAB unless an OTB has been implemented.

**h.** Contractor. An entity in private industry which enters into contracts with the Government. The term may also apply to government entities which perform work on major defense programs.

**i. Cost of Money.** An imputed cost determined by applying a cost of money rate to facilities capital employed in contract performance. It is developed by applying a rate determined by the Secretary of the Treasury to the cost of facilities capital employed, without regard to whether the capital source is equity or borrowed. The resulting amount is not a form of interest on borrowings. Refer to FAR 31.205-10.

**j. Direct Costs.** Any costs which can be identified specifically with a particular final cost objective. Refer FAR 31.202.

**k. Discrete Effort.** Effort that has specific interim or end products or results. BCWP for discrete effort is based upon objective indicators of physical accomplishment, such as milestones.

**I. Earned Value.** See Budgeted Cost for Work Performed.

**m.** Estimate at Completion (EAC). Actual direct costs and indirect costs allocable to the contract, plus the estimate of costs (direct and indirect) for authorized work remaining.

n. Facilities Capital Cost of Money. See Cost of Money.

**o.** Focal Point. The principal point(s) of contact for coordination and exchange of information related to C/SCSC and C/SSR policy and guidance. DOD Component Focal Points normally reside in the service or organizational headquarters (e.g., Air Force Materiel Command, Army Materiel Command, Assistant Secretary of the Navy (Research, Development and Acquisition)) and at their respective field commands (e.g., Air Force Space and

Missile Systems Center, US Army Missile Command, Naval Sea Systems Command). A table of DOD Component Focal Points is available from Defense Contract Management Command Headquarters.

**p. General & Administrative (G&A).** A type of indirect cost grouping that is distributed to all cost objectives within a business entity, rather than on the basis of benefits accrued. An example of a G&A cost is corporate headquarters expenses. Refer to FAR 31.203.

**q. Indirect Costs.** Any costs not directly identified with a single, final cost objective, but identified with two or more final cost objectives or an intermediate cost objective. Refer to FAR 31.203.

**r.** Integrated Baseline Review. A joint review of the contractor's performance measurement baseline by the government and contractor PMs and their technical staffs to determine 1) if the baseline captures the entire technical scope of work consistent with contractual schedules, and 2) if the baseline has adequate resources assigned.

**s. Internal Operating Budget.** A separate operating budget for the contractor's internal use that is not included in the PMB. Internal Operating Budgets are intended to be used for specific tasks and not as a complete plan for accomplishing contract work.

t. Internal Replanning. Replanning actions performed by the contractor for remaining effort within the recognized contract value and schedule.

**u.** Level of Effort (LOE). Effort of a general or supportive nature which does not produce definite end products or results. BCWP for LOE is based solely on the passage of time, rather than on task accomplishment.

v. Management Reserve (MR). An amount of the TAB withheld for management control purposes rather than allocated for the accomplishment of specific tasks. It is not a part of the PMB.

w. Memorandum of Agreement (MOA). An agreement between a government PM and a CAO establishing the scope of CAS responsibilities. Refer to FAR 42.3 for more information on CAS and MOAs.

**x.** Negotiated Contract Cost. The estimated cost negotiated in a cost plus fixed fee contract or the negotiated target cost in either a fixed price incentive contract or cost plus incentive fee contract.

**y. Non-Major Contracts.** Contracts that do not require the assurance of management systems adequacy associated with the C/SCSC because of lower dollar value, contract risk, or management concern. Usually these are flexibly-priced development contracts under \$70 million or production contracts under \$300 million (in FY 1996 constant year dollars). Use of the C/SCSC is not required on these contracts.

z. Other Than Significant Contracts. See Non-Major Contracts.

**aa.** Over Target Baseline (OTB). The baseline that results from increasing budgets for remaining work without a related increase in the contract value, resulting in a TAB that exceeds the CBB. This process of implementing an OTB is called reprogramming.

ab. Overhead. See Indirect Costs.

**ac. Performance Measurement Baseline (PMB).** The time-phased budget plan against which contract performance is measured. It is formed by the budgets (direct and indirect) allocated to performing organizations plus COM, G&A and any amount held in UB. The PMB equals the TAB less MR.

**ad. Plant Visit.** A short-duration, summary level review of the contractor's C/SSR management procedures. Its purpose is to review implementation of the contractor's C/SSR management procedures and to verify that the procedures provide timely and reliable data.

ae. Replanning. See Internal Replanning.

af. Reprogramming. The process of implementing an Over Target Baseline.

**ag. Significant Contracts.** Contracts that require assurance of management systems adequacy because of higher dollar value, contract risk, or management concern. Usually these are flexibly-priced development contracts greater than \$70 million or production contracts greater than \$300 million (in FY 1996 constant dollars). Use of the C/SCSC is required on these contracts.

ah. Significant Variances. See Variance Thresholds, Variances.

**ai.** Total Allocated Budget (TAB). The sum of all budgets allocated on the contract. The TAB consists of the PMB plus MR. The TAB will equal the CBB unless an OTB has been implemented.

**aj.** Undistributed Budget (UB). Budget applicable to contract effort which has not yet been identified to WBS elements at or below the lowest level of reporting to the Government.

**ak. Variance Thresholds.** The basis for deciding if a variance is "significant," thereby causing a variance analysis to be prepared. The objective should be to establish variance thresholds at a level that provides a reasonable amount of narrative explanations for reasonable insight into contract performance problems. See also Variances.

**al. Variances.** Those differences between planned and actual performance, both cumulative and at completion, which require further review, analysis, or action. Significant variances are those that, because of their size, risk or management interest, must be identified and discussed in the C/SSR. Thresholds for significant variances will be included in the contract. See also Variance Thresholds.

**am. Visit Coordinator.** The Visit Coordinator is responsible for all aspects of a Plant Visit, including planning, on-site activities, and visit follow-up and closure. The PM may choose to be the Visit Coordinator, or he/she may delegate this responsibility. The Visit Coordinator should be familiar with C/SSR policy and procedures and have Plant Visit experience.

**an. Work Breakdown Structure (WBS).** A product-oriented family tree, composed of hardware, software, services, data and facilities which results from system engineering efforts during the development and production of a defense materiel item. Refer to MIL-HDBK-881 for more information on WBSs.

## C/SSR Related terminology

The following terms may be encountered during an IBR or C/SSR Plant Visit but are <u>not</u> required by C/SSR policy or this Guide. They are included here for information only. The IBR or Plant Visit team may encounter these terms if the contractor chooses to use them in its C/SSR management procedures, or if the contractor uses its validated C/SCSC System Description to satisfy the C/SSR requirement. However, applying or inferring any management system criteria, such as the C/SCSC, to these terms is inappropriate.

**a.** Cost Account. A management control point at which actual costs can be accumulated and compared to budgeted cost of 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 CWBS element. Formal cost account identification is not a C/SSR requirement.

**b. Planning Package.** A logical aggregation of work within a cost account, normally far-term effort, that can be identified and budgeted in early baseline planning, but is not yet defined into work packages. Formal planning package identification as a cost account component or use of summary level planning packages is not a C/SSR requirement.

**c.** Work Packages. Detailed short-span jobs, tasks, or material items comprising a cost account, identified by the contractor for accomplishing work required to complete the contract. Formal work package identification within a cost account is not a C/SSR requirement.

# Appendix C C/SSR DFARS CLAUSE

As set forth in 242.1107.70, the following clause should be included in solicitations for which the resultant contract will require the submission of a Cost/Schedule Status Report:

## 252.242-7005 Cost/Schedule Status Report (December 1991)

- (a) The Offeror shall submit a written summary of the management procedures it will establish, maintain and use in the performance of any resultant contract that provides for -
  - (1) Planning and control of costs;
  - (2) Measurement of performance (value for completed tasks); and
  - (3) Generation of timely and reliable information for the Cost/Schedule Status Report (C/SSR).
- (b) As a minimum, the Contractor's management procedures must provide for -
  - Establishing the time-phased budgeted cost of work scheduled (including work authorization, budgeting and scheduling), the budgeted cost of work performed, the actual cost of work performed, the budget at completion, the estimate at completion and provisions for subcontractor performance measurement and reporting;
  - (2) Applying all direct and indirect costs and provisions for use and control of management reserve and undistributed budget;
  - (3) Incorporating changes to the contract budget base for both government-directed changes and internal replanning;
  - (4) Establishing constraints to preclude subjective adjustment of data to ensure performance measurement remains realistic. Unless the Contracting Officer provides prior written approval, in no case shall the total allocated budget exceed the contract budget base. For cost reimbursement contracts, the contract budget shall exclude changes for cost growth increases, other than for authorized changes to the contract scope; and
  - (5) Establishing the capability to accurately identify and explain significant cost and schedule variances, both on a cumulative basis and a projected at completion basis.
- (c) The Offeror/Contractor may use a cost/schedule control system that has been accepted by a DoD Component as complying with DoD Cost/Schedule Control Systems Criteria (C/SCSC) on a contract of the same nature (e.g., development, production, etc.). The Offeror shall submit a copy of the Memorandum of Understanding instead of the written summary required in paragraph (a) of this clause.
- (d) The Contracting Officer or designated representative shall visit the Contractor's facility to review implementation of the Contractor's procedures used to satisfy the C/SSR requirements and to verify that the procedures employed provide timely and reliable data. The Contractor shall provide necessary documents and data which describe the methods of planning, control, and data generation in actual operation and satisfy the requirements of paragraph (a) of this clause.
- (e) The Contractor shall provide access to all pertinent records, company procedures, and data requested by the Contracting Officer or authorized representative, to -

- (1) Show proper implementation of the procedures generating the cost/schedule information being used to satisfy the C/SSR contractual data requirements to the Government; and
- (2) Ensure continuing application of the accepted company procedures in satisfying the C/SSR data item.
- (f) The Contractor shall submit any substantive changes to the procedures and their impact to the Contracting Officer for review.
- (g) The Contractor shall require a subcontractor to furnish a C/SSR in each case where the subcontract is other than firm fixed price, is 12 months or more in duration, and has critical or significant tasks related to the prime contract. Critical or significant tasks shall be defined by mutual agreement between the Government and the Contractor. Each subcontractor's reported cost and schedule information shall be incorporated into the Contractor's C/SSR.

(End of Clause)

# Appendix D SUGGESTED STATEMENT OF WORK TASKS

**a.** C/SSR SOW Tasks. The following paragraphs are <u>suggested</u> SOW tasks for solicitations requiring the submission of a C/SSR. These SOW tasks will be modified appropriately for inclusion in the awarded contract.

**Contractor Cost and Schedule Reporting.** The contractor shall provide regular reports detailing the integrated cost and schedule status of work progress on the contract. The report shall be prepared using procedures for planning work, controlling costs, measuring performance using earned value techniques, and generating timely and reliable information as required by DFARS clause 252.242-7005, Cost/Schedule Status Report (C/SSR). The contractor shall also relate technical accomplishment with cost and schedule accomplishment in contract performance reports and meetings. The report's format and contents shall conform with Contract Data Requirements List (CDRL) item number \_\_\_\_\_\_. The contractor shall provide this information in a format consistent with the ANSI X12 standard for electronic data interchange, or the United Nations Electronic Data Interchange For Administration Commerce and Transport (EDIFACT) equivalent.

**Integrated Baseline Review (IBR).** The contractor shall be prepared to present the contents and underlying assumptions of its time-phased performance measurement baseline to government representatives during an IBR at the contractor's facilities. The contractor shall also be prepared to demonstrate that its C/SSR management procedures comply with DFARS clause 252.242.7005 during an on-site visit by government representatives should non-compliance be detected during the IBR or regular C/SSR surveillance. The contractor shall provide ongoing access during contract performance to pertinent records and data which underlie and support the cost and schedule data reported.

**Subcontractor Cost and Schedule Reporting.** Integrated cost and schedule reporting is required on subcontracts which, based on risk, schedule criticality or dollar value, have the potential to impede the successful completion of the prime contract. The Government and the contractor shall agree on which subcontracts will be selected for integrated cost and schedule reporting.

**b. CWBS SOW Tasks.** The following paragraph is a <u>suggested</u> SOW task for solicitations that include a CWBS. This SOW task will be modified appropriately for inclusion in the awarded contract.

**Contract Work Breakdown Structure.** The contractor shall extend the government-provided Contract Work Breakdown Structure (CWBS) to lower levels which represent how the contractor plans to accomplish the entire contract work scope and which are consistent with internal organizations and processes. The extended CWBS will serve as the framework for contract planning, budgeting, and reporting of cost and schedule status to the Government. The contractor shall identify major elements of subcontracted work in the extended CWBS. The contractor may propose changes to the CWBS to enhance its effectiveness in satisfying program objectives.

**CWBS Index and Dictionary.** The contractor shall prepare and deliver a CWBS Index that relates CWBS elements with Statement of Work paragraphs and contract line items. The contractor shall also prepare and deliver a CWBS Dictionary describing the efforts and tasks associated with each CWBS element. The CWBS Index and Dictionary shall conform with Contract Data Requirements List (CDRL) item number \_\_\_\_\_.

# Appendix E PLANT VISIT GUIDE

**Overview.** The C/SSR DFARS clause requires the Contracting Officer to visit the contractor's facility to review implementation of the contractor's C/SSR management procedures and to verify that the procedures provide timely and reliable data. This visit, called a Plant Visit, should be a short-duration, summary level review of the contractor's C/SSR management procedures. The review should focus on deficient areas noted during the IBR or regular surveillance. The duration and number of attendees should be held to the minimum necessary to review effectively the contractor's procedures. Unlike a C/SCSC review, the visit does not measure the contractor's system against management system criteria. Nor does it result in a system "validation," LOA or any form of pass/fail grade. Rather, it affords the Government the opportunity to become familiar with the contractor's procedures and to evaluate whether they will generate timely and reliable C/SSR data. Any government-requested changes to procedures that satisfy the C/SSR DFARS clause requirements must be negotiated.

**Purpose.** The Plant Visit affords the PM and his/her staff the opportunity for familiarization with the contractor's C/SSR management procedures. Understanding the methods the contractor uses to generate C/SSR data is essential for effective C/SSR analysis and communications with the contractor. The Plant Visit also ensures the contractor is generating C/SSR data in accordance with the C/SSR DFARS clause and contractual requirements. The PM should conduct a Plant Visit if, after conducting an IBR, he/she decides more in-depth evaluation of the contractor's C/SSR management procedures is warranted. A Plant Visit may also be considered if regular C/SSR surveillance discloses significant noncompliance with the C/SSR DFARS or contractual requirements.

**Plant Visit Coordinator.** Should the PM decide a Plant Visit is necessary, he/she should begin planning it immediately. The first step is to designate a Visit Coordinator. The Visit Coordinator is responsible for all aspects of the visit, including planning, on-site activities, and visit follow-up and closure. The PM may choose to be the Visit Coordinator, or he/she may delegate this responsibility. The Visit Coordinator should be familiar with C/SSR policy and procedures and have Plant Visit experience.

**Scope.** The Plant Visit should focus on deficient areas noted during the IBR or regular surveillance. The Visit Coordinator should ask the cost/schedule performance management specialist, the CAO, and the FAO for relevant information on the selected areas. The Visit Coordinator may decide to evaluate other areas not found to be deficient during the IBR or regular surveillance, but these areas should be minimized. Plant Visits that evaluate all areas of a contractor's C/SSR management procedures are discouraged. Interviews of technical personnel should be held to a minimum, and should focus on those deficient areas noted during the IBR or regular surveillance. Plant Visits normally should focus on reviewing contractors' procedures and related documentation.

**Team Composition.** The team should include the PM and other representatives from the program office, the cost/schedule performance management office, the contracts office, and the FAO. CAO personnel will participate in all Plant Visits. Prior to the visit, participants should become familiar with the contractor's C/SSR management procedures and with the contract's C/SSR provisions. The Visit Coordinator is responsible for providing Plant Visit information to team members and for training members as appropriate.

**Follow-up and Closure.** The Visit Coordinator will prepare a report summarizing Plant Visit results and agreements. If appropriate, the contractor will prepare an action plan for correcting deficient areas. The CAO will monitor the contractor's progress against its action plan. When all significant deficiencies have been corrected, the CAO will notify the PM and the PCO that 1) all actions are complete and the deficiencies have been corrected and 2) the Visit Coordinator can close the Plant Visit. Significant deficiencies are those that materially affect C/SSR reporting or involve non-compliance with contract provisions. The CAO should monitor any remaining minor deficiencies.

**Uniform Approach.** The C/SSR DFARS clause requires the contractor to submit a summary of the management procedures it will establish, maintain and use in the performance of any resultant contract. The clause does not require the contractor to have a C/SSR management system, although some may in fact have such a system. Rather, it requires the contractor to have procedures that satisfy the contractual requirements of the C/SSR DFARS

clause. Once the procedures are deemed to satisfy C/SSR DFARS clause requirements, the PM will evaluate the procedures to assess their ability to provide timely and reliable data. The contractor should be given latitude to implement its own management procedures, as long as they satisfy C/SSR DFARS clause requirements. Plant Visit team members may encounter procedures that will vary from this guide and from company to company.

**Evaluation Guidelines.** The following paragraphs discuss mandatory and desirable characteristics of contractors' C/SSR management procedures. They represent objectives which may be used to establish or evaluate C/SSR management procedures, but they will not be used as a set of minimum criteria or requirements. They are presented here to assist government and contractor personnel in achieving a more uniform approach to C/SSR applications.

**a. Budgeted Cost for Work Scheduled (BCWS).** The contractor's procedures must allow for establishing a timephased baseline. The baseline should be resource-loaded and should relate schedules and budgets with specific elements of work. The contractor should define the work into tasks, schedule these tasks, and provide budgets for task accomplishment. The baseline should realistically represent the contractor's work plan in order to be a useful tool for integrating cost, schedule and technical management and reporting. The contractor should explain the methods by which:

- 1. Work is identified and planned for the entire contract within the WBS.
- 2. Work is scheduled and controlled.
- 3. Budgets are assigned to elements of work.
- 4. Subcontracted work is identified in the WBS.

**b.** Budgeted Cost for Work Performed (BCWP). The contractor must have procedures for assigning value to in-process and completed work. Although subjective methods are acceptable, BCWP methods that assign value based on objective measures of work accomplishment, such as milestones, are preferred. The procedures should describe all aspects of earned value, including who determines it, the methods for determining it, and the level at which it is recorded. The contractor should explain the methods by which:

- 1. BCWP methods accurately and objectively assign value to in-process and completed work.
- 2. BCWP is derived on the same basis as the related BCWS.
- 3. BCWP is determined by knowledgeable persons.

**c.** Actual Cost of Work Performed (ACWP). Actual costs from the contractor's system must be reported in the C/SSR for comparison with budgeted costs. Because cost categories vary with respect to their content and timing, it is important that the PM understand the methods by which costs are collected. The contractor also must have procedures for applying all indirect costs. Reporting of actual costs in the C/SSR may be affected by the contractor's cost accounting disclosure statement or Material Management Accounting System. The contractor should explain the methods by which:

- 1. Labor, material and other direct costs are recorded.
- 2. Indirect costs are controlled and allocated.
- 3. Actual costs reported in the C/SSR are reconcilable to the contractor's accounting system.

**d. Budget at Completion (BAC).** At contract inception, the BAC should equal the Contract Budget Base (CBB), which includes definitized and undefinitized work. The contractor should have procedures to ensure that allocated budgets sum to the CBB. In addition, the contractor's procedures must provide for controlling Management Reserve (MR) and Undistributed Budget (UB), and for ensuring that the Total Allocated Budget (TAB) does not exceed the CBB without prior written government approval. The contractor should explain the methods by which:

- 1. Budget allocations are initiated and controlled.
- 2. MR and UB are established and controlled.
- 3. The relationship between the Total Allocated Budget and the CBB is maintained.

**e.** Estimate at Completion (EAC). The contractor must provide periodic updates of estimated costs at completion and must be able to identify and explain significant variances at completion (VACs). The contractor should have

procedures that establish consistent, rational methods for preparing EACs. The estimates should be prepared by knowledgeable individuals, should consider prior performance, and should be based on an evaluation of remaining work. The contractor should explain the methods by which:

- 1. EACs are prepared.
- 2. VACs are identified and explained.
- 3. C/SSR EACs are reconciled to the contractor's internal estimates and other reports to the Government.

**f. Subcontractor Performance Measurement and Reporting.** The contractor must have procedures for subcontractor performance measurement and reporting. Subcontract performance measurement methods will vary depending on the subcontract's type, value, duration and/or risk. The contractor's procedures should accommodate cost and schedule performance reports when required on larger subcontracts, or other performance measurement methods for smaller subcontracts. The contractor should explain the methods by which:

- 1. Subcontract tasks are budgeted.
- 2. Subcontract performance is measured and reported.
- 3. Subcontract actual costs are reported.
- 4. Subcontract EACs are formulated.

**g. Variance Analysis.** Budgeted and actual costs must be compared to earned value data periodically to ascertain contract cost and schedule status. The contractor must have procedures for accurately identifying and explaining significant cost and schedule variances. Variance analysis should be done at appropriate levels by individuals knowledgeable of work accomplishment. The contractor's procedures also should specify how the results of variance analysis are used. The contractor should explain the methods by which:

- 1. The cost and schedule status of work is determined.
- 2. Variance analysis information is used to identify emerging problems.
- 3. Corrective actions are initiated and monitored.

**h. Baseline Change Control.** The BAC may change for numerous reasons, including contract modifications, distributions of MR or UB, and internal replanning. The contractor must have procedures to accommodate such baseline changes. In addition, to ensure the PMB remains realistic, the contractor must have procedures that prevent subjective data adjustments. The procedures should ensure that changes are controlled in a disciplined timely manner. The contractor should explain the methods by which:

- 1. Contract changes are incorporated in a timely manner.
- 2. Changes to the PMB and the CBB are authorized and controlled.
- 3. Subjective data adjustments (e.g., changes to in-process or completed work) are strictly controlled.

Appendix F

# **C/SSR DATA ITEM DESCRIPTION**

DATA ITEM DESCRIPTION		Form Approved OMB NO. 0704-0188	
Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.			
1. TITLE COST/SCHEDULE STATUS REPORT (C/SSR)	2. IDENT DI-I	TIFICATION NUMBER MGMT-81467	
3. DESCRIPTION/PURPOSE This report is prepared by contractors and provides summarized contract cost and schedule performance information for program management purposes. The report (Sample Format 1) contains the following information: contract and program identification; contract data, including original and current contract values and the management estimate at completion (EAC); performance data which consists of cost and schedule performance information by summary level Work Breakdown Structure (WBS) elements; and narrative explanations, which presents information on significant cost and schedule variances and other contract problems			
4. APPROVAL DATE (YYMMDD)       5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)         951019       OUSD (A&T) API / PM	6a. DTIC APPLICABLE	6b. GIDEP APPLICABLE	
<ul> <li>7. APPLICATION/INTERRELATIONSHIP</li> <li>7.1 This Data Item Description (DID) contains the instructions for the data product generated by the delineated in the contract.</li> <li>7.2 This DID may be used in conjunction with the DI-MGMT-81468, and the Contract Work Breakdown St</li> </ul>	e format and conter e specific and disc e Contract Funds Sta ructure DID, DI-MGM	nt preparation crete task requirements as atus Report DID, MT-81334. This DID and	
the Cost Performance Report (CPR) DID, DI-MGMT-81466, will not be used on the same contract. 7.3 The C/SSR will be used to collect cost and schedule performance information on contracts over 12 months in duration where application of the CPR is not appropriate. There are no specific application thresholds for the C/SSR. However, application to contracts of less than \$5 million (constant fiscal year 1990 dollars) should be evaluated carefully to ensure that only the minimum information necessary for effective management control is required.			
7.4 C/SSR data elements will reflect the output of the contractor's C/SSR management procedures (refer to DFARS 252.242-7005). The definitions of terms contained in the Cost/Schedule Control Systems Criteria (C/SCSC) (refer to DFARS 252.242-7001) may be used as guidance in completing Columns (2) through (9) of the C/SSR with the exception of the definitions for Budgeted Cost for Work Scheduled (BCWS) and Budgeted Cost for Work Performed (BCWP). Application of the C/SSR does not invoke the unique requirements or disciplines of the C/SCSC, such as the use of work packages for determining BCWP. The contractor may use C/SCSC compliant practices if they constitute the contractor's normal way of doing business. The method of deriving the BCWP will be left to the discretion of the reporting contractor and will be subject to negotiation, if necessary, and inclusion in the contract. While the contractor must be in a position to explain the method used for determining the BCWP, the indepth demonstration review referred to in DFARS 252.242-7001 will not be required.			
8. APPROVAL LIMITATION 9a. APPLIC. DD FO:	able forms rm 2735	9b. AMSC NUMBER D7121	
10. PREPARATION INSTRUCTIONS 10.1 Format. Contractor formats should be substituted whenever they contain all the required data elements at the specified reporting levels in a form suitable for DOD management.			
10.2 <u>Content</u> . The Cost/Schedule Status Report shall contain the following:			
10.2.2 <u>Contract</u> . Enter the contract name, number, type, and share ratio, if applicable, in Block 2.			
10.2.3 <u>Program</u> . Enter in Block 3.a. the name, number, acronym and/or type, model, series, or other designation of the prime items purchased under the contract. Enter the program phase in Block 3.b. (Concept Exploration and Definition, Demonstration and Validation, and Engineering and Manufacturing Development are considered RDT&E. Production programs are those that have passed Milestone III.) (Continued on page 2)			
Distribution Statement A: Approved for public release; distribution is unlimited.			

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10/19/95

Block 7, Application/Interrelationship (Continued)

7.5 Data reported on the C/SSR will pertain to all authorized contract work, including both priced and unpriced effort. The Government and the contractor may agree to exclude from C/SSR reporting portions of the contract for which performance reporting is not needed, such as firm fixed price contract line items. Data reported will normally be limited to level 3 of the WBS or higher. However, if a cost/schedule performance problem occurs at a lower level, the Program Manager (PM) may request information on an exception basis until the problem is resolved.

7.6 Reporting frequency will be specified in the contract. C/SSRs will not be required more frequently than monthly. Reports may reflect data as of the end of the calendar month or as of the contractor's accounting period cut-off date. Reports normally are due 25 days after the end of the report period.

7.7 Certain aspects of the report are subject to negotiation between the Government and the contractor, such as:

7.7.1 The variance thresholds which, if exceeded, require problem analysis and narrative explanations. Variance thresholds should be reviewed periodically, and changed if necessary, to ensure they continue to provide appropriate visibility without requiring excessive information. Refer to Chapter Three of the C/SSR Joint Guide for examples of the various methods for establishing variance thresholds.

7.7.2 The WBS elements reported in the Performance Data section. The level of detail will normally be limited to level 3 or higher, but lower levels may be selected for high-cost or -risk areas. Reporting levels should be reviewed periodically, and changed if necessary, to ensure they continue to provide appropriate visibility without requiring excessive information.

7.8 Contractor formats should be substituted for C/SSR formats whenever they contain all the required data elements at the specified reporting levels in a form suitable for DOD management use. The American National Standards Institute (ANSI) X12 standards (transaction sets 839 for cost and 806 for schedule), or the United Nations Electronic Data Interchange for Administration, Commerce and Transport (EDIFACT) equivalent, will be used for Electronic Data Interchange.

7.9 In all cases, the C/SSR CDRL is subject to "tailoring." Tailoring is defined as deleting requirements from this DID. Requiring more information in the C/SSR CDRL than specified in this DID is prohibited by DOD regulation. All negotiated reporting provisions will be specified in the contract.

7.10 This DID supersedes DI-F-6010A.

Block 10, Preparation Instructions (Continued)

10.2.4 <u>Report Period</u>. Enter the beginning and ending dates of the period covered by the report in Block 4.

10.2.5 <u>Signature, Title and Date</u>. The contractor's authorized representative will sign the report and enter his/her title and the date in Block 5.

10.3 Contract Data.

10.3.1 Original Contract Target Cost. Enter in Block 6.a. the dollar value (excluding fee or profit) negotiated in the original contract. For a cost

plus fixed fee contract, enter the estimated cost negotiated. For an incentive contract, enter the definitized contract target cost.

10.3.2 <u>Negotiated Contract Changes</u>. Enter in Block 6.b. the cumulative cost (excluding fee or profit) applicable to definitized contract changes which have occurred since the beginning of the contract. Changes to estimated costs for cost plus fixed fee contracts will include only amounts for changes in the contract work scope; changes for cost growth will not be included.

10.3.3 <u>Current Target Cost</u>. Enter the sum of Block 6.a. and Block 6.b. in Block 6.c. The amount shown should equal the current dollar value (excluding fee or profit) on which contractual agreement has been reached.

10.3.4 Estimated Cost of Authorized, Unpriced Work. Enter in Block 6.d. the estimated cost (excluding fee or profit) for contract changes for which written authorization has been received but for which contract prices have not been negotiated.

10.3.5 <u>Contract Budget Base (CBB)</u>. Enter the sum of Block 6.c. and Block 6.d. in Block 6.e.

10.3.6 <u>Management Estimate at Completion</u>. Enter in Block 6.f. the contractor's most likely EAC. The estimate should include actual costs to date plus a knowledgeable projection of future performance. The estimate should be based on the agreed work scope as reflected in the CBB (Block 6.e.). The contractor may include an estimate for management reserve (MR), if applicable. The contractor also may include a realistic estimate for program risk or probable future business conditions. If the management EAC differs from the value in Column (8) of Block 7.e., the difference shall be discussed in the Narrative Explanation section.

10.3.7 <u>Variance at Completion</u>. Enter the difference between Block 6.e. and Block 6.f. in Block 6.g.

10.3.8 Over Target Baseline (OTB) Date. If applicable, enter in Block 6.h. the report period ending date of the C/SSR in which the latest approved OTB first appears. The Government and the contractor must agree on the terms of an OTB prior to its establishment. The contractor shall not implement an OTB without prior written approval from the Contracting Officer.

## 10.4 Performance Data.

10.4.1 <u>Work Breakdown Structure (WBS) Elements</u>. Enter in Column 1 of Block 7.a. the name of the WBS elements for which cost information is being reported. WBS elements or levels required will be those specified in the contract. Organizational categories may be used in lieu of WBS elements if the Government and the contractor agree that such categories would be more beneficial.

10.4.2 <u>Cost of Money (COM)</u>. Enter in Columns (2) through (9) of Block 7.b. the appropriate COM figures. If COM has been included in the costs reported above, then COM will be shown as a nonadd entry on this line with an appropriate notation. When a facility has two or more contracts with cost reporting requirements, the contractor shall ensure that all COM values are derived from the same accounting source.

10.4.3 <u>General and Administrative (G&A)</u>. Enter in Columns (2) through (9) of Block 7.c. the appropriate G&A costs. If G&A has been included in the costs reported above, then G&A will be shown as a nonadd entry on this line with an appropriate notation. If a G&A classification is not used, no entry will be made other than an appropriate notation to that effect. 10.4.4 <u>Undistributed Budget (UB)</u>. Enter in Column (7) of Block 7.d. the amount of budget applicable to authorized contract effort which has not been identified to WBS elements at or below the reporting level. Enter in Column (8) of Block 7.d. an estimate for the scope of work represented by the amount shown in Column (7) of Block 7.d. Enter the difference, if any, between Column (7) and Column (8) in Column (9) of Block 7.d. All UB must be explained in the Narrative Explanation section.

10.4.5 <u>Subtotal - Performance Measurement Baseline (PMB)</u>. Enter in Columns (2) through (9) of Block 7.e. the totals of the distributed budgets, actuals and estimates for the WBS elements, COM, G&A and UB in Blocks 7.a. through 7.d.

10.4.6 <u>Management Reserve (MR)</u>. Enter in Column (7) of Block 7.f. the amount of budget identified as MR as of the end of the report period. Amounts of MR applied during the reporting period will be explained in the Narrative Explanation section. MR application will be explained in terms of amounts applied, WBS elements to which applied, and reasons for application.

10.4.7 Total. Enter the sum of the direct and indirect budgets and costs in Columns (2) through (7). The total in Column (7) will equal the value in Block 6.e. unless an OTB has been implemented.

10.4.8 <u>Data Elements</u>. For each WBS element in Block 7.a. and the categories in Blocks 7.b. through 7.g., enter the following information where applicable:

10.4.8.1 <u>Budgeted Cost for Work Scheduled (BCWS) (Column 2)</u>. Enter the numerical representation of the value of all work scheduled to be accomplished (in-process and complete) as of the reporting cut-off date.

10.4.8.2 <u>Budgeted Cost for Work Performed (BCWP) (Column 3)</u>. Enter the numerical representation of the value of all work accomplished (in-process and complete) as of the reporting cut-off date.

10.4.8.3 <u>Actual Cost of Work Performed (ACWP) (Column 4)</u>. Enter the actual costs (direct and indirect) applicable to work accomplished as of the reporting cut-off date. Actual costs and budgeted costs will be reported on a comparable basis.

10.4.8.4 <u>Schedule Variance (Column 5)</u>. Enter the difference between the BCWS and the BCWP by subtracting Column (2) from Column (3). A negative figure indicates an unfavorable variance and should be shown in parentheses. Variances exceeding established thresholds shall be fully explained in the Narrative Explanation section.

10.4.8.5 Cost Variance (Column 6). Enter the difference between the BCWP and the ACWP by subtracting Column (4) from Column (3). A negative figure indicates an unfavorable variance and should be shown in parentheses. Variances exceeding established thresholds shall be fully explained in the Narrative Explanation section.

10.4.8.6 <u>Budget at Completion (BAC) (Column 7)</u>. Enter the total budget identified to each WBS element listed in Column (1). Assigned budgets will consist of the original budgets plus or minus budget adjustments resulting from contract changes, internal replanning, or application of MR.

10.4.8.7 Estimate at Completion (EAC) (Column 8). Enter the contractor's latest revised estimate of cost at completion including estimated overrun/underrun for all authorized work. The estimated cost at completion consists of the sum of the actual cost to date plus the latest estimate of cost for work remaining.

10.4.8.8 Variance at Completion (VAC) (Column 9). Enter the difference between the BAC and the EAC by subtracting Column (8) from Column (7). A negative figure indicates an unfavorable variance and should be shown in parentheses. Variances exceeding established thresholds shall be fully explained in the Narrative Explanation section.

## 10.5 Narrative Explanations.

10.5.1 Provide a summary analysis of overall contract performance, including significant existing or potential problems and corrective actions taken or required, to include government action where required.

10.5.2 Explain cost, schedule and EAC variances that meet variance analysis thresholds provided in the contract. Explanations of these variances must be explicit and comprehensive, and must clearly identify the nature of the problems being experienced, the impact on the total contract, and the corrective actions taken or required. See Chapter Three of the C/SSR Joint Guide for examples of variance threshold methodologies. While this DID does not require the reporting of current period cost performance data, the PM may tailor the C/SSR CDRL DD Form 1423 to require current period variance analysis.

10.5.3 Normally, the amount shown in Block 7.g. of Column (7), total BAC (also called Total Allocated Budget (TAB)), will equal the amount shown in Block 6.e., CBB. This relationship is necessary to ensure that the BCWS and the BCWP provide meaningful indicators of contractual progress. If the TAB exceeds the CBB, it is an indication that an OTB has been implemented. In this case, the contractor shall reflect in Block 6.h. the report period end date of the C/SSR in which the latest approved OTB first appeared and shall provide the following information in the Narrative Explanation section of the C/SSR in which the latest approved OTB first appeared: the reasons for the OTB; the identity of the WBS element(s) to which additional budget was added; and the approval authority for the latest approved OTB. The Government and the contractor shall agree on what OTB information will appear in subsequent C/SSR submissions. Refer to Chapter Four of the C/SSR Joint Guide for more information on OTBs.

CLASSIFICATION (When filled in)

COST/SCHEDULE STATUS REPORT DOLLARS IN									
1. CONTRACTOR		2. CONTRACT			3. PROGRAM		4. REPO	4. REPORT PERIOD	
a. NAME a. NA		a. NAME	. NAME		a. NAME		a. FROM	a. FROM (YYMMDD)	
b. LOCATION (Address and ZIP Code)		b. NUM BER			-				
		c. TYPE	d. SHA	RE RATIO	b. PHASE (X one)	PRODUCT	ю. IO (	YYMMDD)	
5. AUTHORIZED CONTRACTOR REPRESENTATIVE				c. SIGNATURE			d. DATE	SIGNED	
a. NAME (Last, First, Middle Initial) b. TITLE						(YYMMDD		MDD)	
6 CONTRACT DATA									
a. ORIGINAL CONTRACT TARGET COST b. NEG		OTIATED CONTRACT CHANGES		c. CURRENT TARGET COST (a. + b.		) d. ESTIMATED COST OF AUTHORIZED UNPRICED WORK		THORIZED	
e. CONTRACT BUDGET BASE (c. + d.) f. MANA COMPLE		AGEMENT ESTIMATE AT ETION		g. VARIANCE AT COMPLETION (e		- f.) h. OV ER TARGET BASELINE DATE (YYMMDD)			
7. PERFORMANCE DATA									
		С	UMULATIVE TO DA	TE			AT COMPLETION		
ITEM				VARIANCE					
ITEM	BUDGE	TED COST		VAR VAR		DUDGETED			
ITEM	BUDGE WORK SCHEDULED		ACTUAL COST WORK PERFORMED	SCHEDULE	COST	BUDGETED	ESTIMATED	VARIANCE	
(1)	BUDGE WORK SCHEDULED (2)	WORK PERFORMED (3)	ACTUAL COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	BUDGETED (7)	(8)	(9)	
(1) a. WORK BREAKDOWN STRUCTURE ELEMENT	BUDGE WORK SCHEDULED (2)	WORK PERFORMED (3)	ACTUAL COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	BUDGETED (7)	(8)	(9)	
ITEM (1) a. WORK BREAKDOWN STRUCTURE ELEMENT	BUDGE WORK SCHEDULED (2)	WORK PERFORMED (3)	ACTUAL COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	BUDGETED (7)	(8)	(9)	
(1) a. WORK BREAKDOWN STRUCTURE ELEMENT	BUDGE WORK SCHEDULED (2)	WORK PERFORMED (3)	ACTUAL COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	BUDGETED (7)	(8)	(9)	
(1) a. WORK BREAKDOWN STRUCTURE ELEMENT	BUDGE WORK SCHEDULED (2)	WORK PERFORMED (3)	ACTUAL COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	BUDGETED (7)	(8)	(9)	
ITEM (1) a. WORK BREAKDOWN STRUCTURE ELEMENT b. COST OF MONEY	BUDGE WORK SCHEDULED (2)	WORK PERFORMED (3)	ACTUAL COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	BUDGETED (7)	(8)	(9)	
ITEM (1) a. WORK BREAKDOWN STRUCTURE ELEMENT b. COST OF MONEY c. GENERAL & ADMINISTRATIVE	BUDGE WORK SCHEDULED (2)	WORK PERFORMED (3)	ACTUAL COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	BUDGETED (7)	(8)	(9)	
ITEM (1) a. WORK BREAKDOWN STRUCTURE ELEMENT b. COST OF MONEY c. GENERAL & ADMINISTRATIVE d. UNDISTRIBUTED BUDGET	BUDGE WORK SCHEDULED (2)	WORK PERFORMED (3)	ACTUAL COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	BUDGETED (7)	(8)	(9)	
ITEM (1) a. WORK BREAKDOWN STRUCTURE ELEMENT b. COST OF MONEY c. GENERAL & ADMINISTRATIVE d. UNDISTRIBUTED BUDGET e. SUBTOTAL (Performance	BUDGE WORK SCHEDULED (2)	WORK PERFORMED (3)	ACTUAL COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	BUDGETED (7)	(8)	(9)	
ITEM (1) a. WORK BREAKDOWN STRUCTURE ELEMENT b. COST OF MONEY c. GENERAL & ADMINISTRATIVE d. UNDISTRIBUTED BUDGET e. SUBTOTAL (Performance Measurement Baseline)	BUDGE WORK SCHEDULED (2)	WORK PERFORMED (3)	ACTUAL COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	(7)	(8)	(9)	
ITEM (1) a. WORK BREAKDOWN STRUCTURE ELEMENT b. COST OF MONEY c. GENERAL & ADMINISTRATIVE d. UNDISTRIBUTED BUDGET e. SUBTOTAL (Performance Measurement Baseline) f. MANAGEMENT RESERVE	BUDGE WORK SCHEDULED (2)	WORK PERFORMED (3)	ACTUAL COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	(7)	(8)	(9)	

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SAMPLE FORMAT

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Cost/Schedule

Status Report

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