VOLUME 4, CHAPTER 19: "MANAGERIAL COST ACCOUNTING"

SUMMARY OF MAJOR CHANGES

All changes are denoted by blue font.

Substantive revisions are denoted by an asterisk (*) symbol preceding the section, paragraph, table, or figure that includes the revision.

Unless otherwise noted, chapters referenced are contained in this volume.

Hyperlinks are denoted by ***bold, italic, blue, and underlined font***.

The previous version dated December 2017 is archived.

PARAGRAPH	EXPLANATION OF CHANGE/REVISION	PURPOSE
All	Updated references and reorganized sections to comply with Department of Defense Financial Management Regulation Standard Operating Procedures.	Revision
190103	Updated Authoritative Guidance for accuracy.	Revision
190301	Updated Concepts for context and Statement of Federal Financial Accounting Standards (SFFAS) 4 alignment.	Revision
190305	Updated Systems, Sources and Cost Finding for logical title context as well as consolidation of Standard Financial Information Structure information in paragraph 190503.	Revision
190402	Merged Financial, Budgetary and Managerial Cost Accounting Relationships language with paragraph 190603 Cost, Budget, and Financial System Relationships and updated 190402 Users paragraph (which was 190403) to clarify internal and external user needs.	Revision
190501	Updated Cost Assignment and Costing Methodology overview to clarify SFFAS 4 requirements.	Revision

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CHAPTER 19

MANAGERIAL COST ACCOUNTING

1901 GENERAL

190101. Overview

A. Managerial cost accounting standards and concepts are focused on providing reliable and timely information on the full cost of federal programs, projects, activities, and outputs. This information provides the structure needed for accurate, consistent, and reliable managerial cost accounting.

B. The concepts of managerial cost accounting describe the relationship among cost accounting, financial reporting, and budgeting. Managerial cost accounting concepts are an integral part of the financial management system in that they provide a basis of accounting, recognition, and measurement appropriate for the intended purpose.

C. The five standards set forth are fundamental elements of managerial cost accounting:

1. Accumulating and reporting costs of activities on a regular basis for management information purposes,

2. Establishing responsibility segments to match costs with outputs,

3. Determining full costs of government goods and services,

4. Recognizing the costs of goods and services provided among Federal entities, and

5. Using appropriate costing methodologies to accumulate and assign costs to outputs.

190102. Purpose

The purpose of this chapter is to provide the Department of Defense (DoD) policy for managerial cost accounting to improve financial management and managerial decision making in five essential areas:

A Budgeting and cost control,

B. Performance measurement,

C. Determining reimbursements and setting fees and prices,

D. Program evaluations, and

E. Making economic choice decisions.

*190103. Authoritative Guidance

The accounting policy and related requirements prescribed by this chapter are in accordance with the applicable provisions of:

A. Chief Financial Officers Act ***(CFO) Act of 1990***;

B. Government Performance and Results Act ***(GPRA) of 1993***;

C. Government Management Reform Act ***(GMRA) of 1994***;

D. Federal Financial Management Improvement Act ***(FFMIA) of 1996***;

E. Statement of Federal Financial Accounting Standards (***SFFAS) 4***, "Managerial Cost Accounting Standards and Concepts";

F. ***SFFAS 8***, "Supplementary Stewardship Reporting";

G. Federal Accounting Standards Advisory Board (FASAB) Handbook ***Appendix E: Consolidated Glossary***;

H. Office of Management and Budget (OMB) ***Circular A-25***, "User Charges";

I. The United States (U.S.) Department of Treasury (Treasury) U.S. Standard General Ledger (USSGL) ***Treasury Financial Manual***; and

J. Chief Financial Officers' Council's Governmentwide Cost Accounting Committee Managerial Cost Accounting Implementation Guide ***(MCAIG) Glossary*** – February 1998

1902 DEFINITIONS

The following definitions primarily originate from the FASAB Handbook, Appendix E: Consolidated Glossary, and/or the MCAIG Glossary.

190201. Activity

An activity is the actual work task or step performed in producing and delivering products and services, or an aggregate of actions performed within an organization that is useful for purposes of activity based costing.

190202. Activity Based Costing

Activity Based Costing (ABC) is a cost accounting method that measures the cost and performance of process related activities and cost objects. It assigns cost to cost objects, such as products or customers, based on their use of activities. It recognizes the causal relationship of cost drivers to activities.

190203. Budgetary Accounting

Budgetary accounting is the system that measures and controls the use of resources according to the purposes for which budget authority was enacted, and that records receipts and other collections by source. It is undertaken to assess and ensure compliance with fiscal legal requirements applicable to an appropriation or fund. It tracks the use of each appropriation for specified purposes in separate budgetary accounts through the various stages of budget execution—from appropriation to apportionment and allotment to obligation and eventual outlay.

190204. Cost Accounting System

A cost accounting system is a continuous and systematic cost accounting process, which may be designed to accumulate and assign costs to a variety of objects routinely or as desired by management.

190205. Cost Accumulation

Cost accumulation is the collection of costs in an organized fashion by means of a cost accounting system. There are two primary approaches to cost accumulation: job order and process costing. Under a job order system, the three basic elements of costs: direct materials, direct labor, and overhead, are accumulated according to assigned job numbers. Under a process cost system, costs are accumulated according to processing department or cost center.

190206. Cost Allocation

Cost allocation is a method of assigning costs to activities, outputs, or other cost objects. The allocation base used to assign a cost to objects is not necessarily the cause of the incurred cost. For example, assigning the cost of power to machine activities by machine hours is an allocation because machine hours are an indirect measure of power consumption.

190207. Cost Assignment

Cost assignment is a process that identifies costs with activities, outputs, or other cost objects. In a broad sense, costs can be assigned to processes, activities, organizational divisions, goods, and services. There are three approaches of cost assignment: (a) directly tracing costs wherever economically feasible, (b) using cause and effect, and (c) allocating costs on a reasonable and consistent basis.

190208. Cost Finding

Cost finding techniques produce cost data by analytical or sampling methods. Cost finding techniques are appropriate for certain kinds of costs, such as indirect costs, items with costs below set thresholds within programs, or for some programs in their entirety. Cost finding techniques support the overall managerial cost accounting process and can represent nonrecurring analysis of specific costs.

190209. Cost Object (Also Referred to as Cost Objective)

A cost object is an activity, output, or item whose cost is to be measured. In a broad sense, a cost object can be an organizational division, function, task, good, service, or customer. It is also defined as an activity, operation, or completion of a unit of work to complete a specific job for which management decides to identify, measure, and accumulate costs. The cost object must be discrete enough and described in writing to such a level of detail as to form a basis to establish cost centers and output products.

190210. Direct Costs

Direct costs are the costs of resources directly consumed by an activity. Direct costs are assigned to activities by direct tracing of units of resources consumed by individual activities.

190211. Financial Accounting (Proprietary Accounting)

Financial accounting is the accounting for assets, liabilities, net position, revenues, and expenses as a basis for reports to external parties. It is a methodology that focuses on reporting financial information primarily for use by owners, external organizations, and financial institutions. This methodology is constrained by rule making bodies such as the Financial Accounting Standards Board, Securities Exchange Commission, and the American Institute of Certified Public Accountants. For Federal Agencies, the rule making bodies include FASAB, the Treasury, and the OMB. Financial accounting supports accrual accounting and attempts to show actual financial position and results of operations.

190212. Fixed Cost

A fixed cost is a cost that does not vary in the short term (usually less than one year) with the volume of activity. Fixed cost information is useful for cost savings by adjusting existing capacity or by eliminating idle facilities.

190213. Full Cost

A. Full costs are the sum of all costs required by a cost object including the costs of activities performed by other entities regardless of funding sources. More specifically, the full cost of an output produced by a responsibility segment is the sum of (a) the costs of resources consumed by the responsibility segment that directly or indirectly contributes to the output, and (b) the costs of identifiable supporting services provided by other responsibility segments within the reporting entity and by other reporting entities.

B. Full cost is all direct and indirect costs to any part of the Federal Government of providing goods, resources, or services (OMB Circular A-25).

190214. Indirect Cost

Indirect costs are costs that cannot be identified specifically with or traced to a given cost object in an economically feasible way.

190215. Inter-Entity Costs

Inter-entity is a term meaning between or among different federal reporting entities. It commonly refers to activities or costs between two or more agencies, departments, or bureaus.

190216. Intra-Entity Costs

Intra-entity costs are costs from organizational components within the reporting entity that provide support for the responsibility segment's programs, projects, or activities. These costs include the direct and indirect costs of other organizational components of the reporting entity. (MCAIG Glossary)

190217. Job Order Costing

Job order costing is a method of cost accounting that accumulates costs for individual jobs or lots. A job may be a service or manufactured item, such as the repair of equipment or the treatment of a patient in a hospital.

190218. Latest Acquisition Cost

Latest acquisition cost is a method in which all units are valued at the invoice price of the most recent items purchased less any discounts, plus any additional costs incurred to bring the item to a form and location suitable for its intended use.

190219. Managerial Cost Accounting

Managerial cost accounting is the process of accumulating, measuring, analyzing, interpreting, and reporting cost information useful to both internal and external groups concerned with the way in which the organization uses, accounts for, safeguards, and controls its resources to meet its objectives. Managerial cost accounting is the integration of budgetary and financial accounting, and management reporting because it provides information for decision making purposes and performance measurement. Managerial cost accounting is the organization and procedures, whether automated or not, and whether part of the general ledger or stand-alone, that accumulate and report consistent and reliable cost data from various agency feeder systems.

190220. Outcome

A. Outcome is defined in broad terms in Statements of Federal Financial Accounting Concepts ***(SFFAC) 1***, "Objectives of Federal Financial Reporting (OFFR)", paragraphs 204-208, as accomplishments or results that occur (at least partially) because of the service efforts of government entities. Some authorities use terms like "impact," "effect," or "results" to distinguish the change in outcomes specifically caused by the government activity from the total change in conditions that can be caused by many factors.

B. Outcome is an assessment of the results of a program compared to its intended purpose. Outcomes must: (a) be capable of being described in financial, economic, or quantitative terms, and (b) provide a plausible basis for concluding that the program has had or will have this intended effect. For measuring outcomes for research and development programs, results may be reported by a narrative discussion of the major results achieved by the program during the year (SFFAS 8, paragraphs 93 and 99).

190221. Output

Output is any good or service generated from the consumption of resources. It is measured as a tabulation, calculation, or recording of activity or effort that can be expressed in a quantitative or qualitative manner. It must have two key characteristics:

A. Systematically or periodically captured through accounting or management information system, and

B. A logical connection between the reported measures and the program's purpose.

190222. Performance Measurement

Performance measurement is a means of evaluating efficiency, effectiveness, and results. A balanced performance measurement scorecard includes financial and nonfinancial measures focusing on quality, cycle time, and cost. Performance measurement should include program accomplishments in terms of outputs (quantity of goods or services provided, e.g., how many items are efficiently produced) and outcomes (results of providing outputs, e.g., are outputs effectively meeting intended agency mission objectives).

190223. Pricing

Pricing is the process to determine the amount at which to sell a product or service. Setting prices is a policy matter, sometimes governed by statutory provisions and regulations, and other times by managerial or public policies. The price of a good or service does not necessarily equal the cost of the good or the service determined under a particular set of principles (SFFAS 4, paragraph 37).

190224. Product

A product is any discrete, traceable, or measurable good or service provided to a customer. Often goods are referred to as tangible products, and services are referred to as intangible products. A good or service is the product of a process resulting from the consumption of resources.

190225. Program

Program is defined as a mission program, whose products or services the Agency delivers as part of its strategic plan. Agencies decide the exact classification of programs based on the entity's budget structure, the missions and outputs described in the GPRA strategic and annual plans and the guidance for defining and structuring responsibility segments.

190226. Project

A project is a planned undertaking, usually related to a specific activity, such as the research and development of a new product or the redesign of the layout of a plant.

190227. Process Costing

Process costing is a method of cost accounting that first collects costs by processes and then allocates the total costs of each process equally to each unit of output flowing through it during an accounting period.

190228. Recovery of Cost

Recovery of cost is the method of recovering the costs of any given expenditure.

190229. Relevant Costs

Relevant costs are those cost elements that are necessary for particular management analyses and/or decision making purposes when full cost is not appropriate. Relevant costs may include expected or potential costs that differ among alternative courses of action.

190230. Resource

A resource is an economic element that is applied or used in the performance of activities. Salaries and materials, for example, are resources used in the performance of activities.

190231. Responsibility Segment

A responsibility segment is a significant organizational, operational, functional, or process component which has the following characteristics: (a) its manager reports to the entity's top management, (b) it is responsible for carrying out a mission, performing a line of activities or services, or producing one or a group of products, and (c) for financial reporting and cost management purposes, its resources and results of operations can be clearly distinguished, physically and operationally, from those of other segments of the entity.

190232. Service

A service is an intangible product or task rendered directly to a customer. (Also, see Product as defined in paragraph 190225.)

190233. Service Department

A service department is also known as an Intermediate Cost Object. A service department is an organizational unit of a facility that has the responsibility for providing support for the work of the production departments. Examples are purchasing, building and ground personnel, and power departments. All of these activities are necessary parts of the production process and primarily supportive of production departments. Service department costs must be allocated to production departments before overhead rates are determined.

190234. Standard Costing

Standard costing is a costing method that attaches costs to cost objects based on reasonable estimates or cost studies and by means of budgeted rates rather than according to actual costs incurred. It is the anticipated cost of producing a unit of output. It is a predetermined cost to be assigned to products produced. Standard cost implies a norm, or what costs should be. Standard costing may be based on either absorption or direct costing principles, and may apply to all or some cost elements. Refer to Volume 11B and Volume 3, Chapter 19 for use of standard costing in the Working Capital Fund (WCF).

190235. Unit Price

Unit price is the cost of a selected unit of a good or service.

190236. Variable Cost

Variable cost is a cost that varies with changes in the level of an activity, when other factors are held constant. The cost of material handling to an activity, for example, varies according to the number of material deliveries and pickups to and from that activity.

1903 MANAGERIAL COST ACCOUNTING POLICY

*190301. Concepts

A. As described in SFFAS 4, paragraphs 41-45, the concepts and standards of managerial cost accounting explain the relationship among budgetary, financial, and cost accounting. Managerial cost accounting is the process of accumulating, measuring, analyzing, and reporting cost information useful to both internal and external groups concerned with how DoD uses, accounts for, safeguards, and controls its resources to meet its objectives. Managerial costing uses a basis of accounting, recognition, and measurement that is appropriate for the intended purpose. Managerial cost accounting is an essential element of proper financial planning, control, performance evaluation, and program accountability.

B. Managerial cost accounting is a basic, integral part of the DoD financial management system. Information from a common data source provides cost information relevant to budgetary and financial accounting and reporting while providing useful information directly to management for control and decision making. Financial, budgetary, and cost accounting processes ultimately produce the Department's audited general purpose financial statements and special purpose reports from the DoD general and sub ledgers to achieve cost accountability and transparency to stakeholders. Cost information developed for different purposes are drawn from a common data source so that output reports are reconcilable to each other.

190302. Standards

A. SFFAS 4 requires each reporting entity to accumulate and report the cost of its activities on a regular basis for management. Costs may be accumulated through cost accounting systems or through cost finding techniques. The standard provides flexibility based on organization mission, operations, size, capabilities, and resources. Agencies have flexibility in designing a cost accounting methodology that meet both internal and external user needs.

B. The following are the five standards referenced in SFFAS 4:

1. Requirement: Accumulate and report costs of activities on a regular basis for management information purposes (see section 1904),

2. Responsibility Segments: Establish responsibility segments to match costs with outputs (see section 1905),

3. Full Cost: Determine the full cost of goods and services (see sections 1904, 1905, and 1906),

4. Inter-Entity Costs: Recognize the cost of goods and services provided among federal entities (see sections 1905 and 1906), and

5. Methodology: Use appropriate costing methodologies to accumulate and assign costs to outputs (see section 1905).

190303. Uses

In managing DoD programs, cost accounting information assists managers and other stakeholders in making informed decisions in the areas of budget and cost control, performance measurement, reimbursement and fee/price setting, program evaluations, and economic choice decisions. An organization should be able to answer the following types of questions:

A. Given the current spend plan and rate of execution, at what interval (if applicable) could the program experience a cost over-run?

B. What are the full costs to deliver goods and/or services by organization, line of business, or region?

C. How well is the organization managing its available resources in terms of mission effectiveness and cost efficiency?

D. How well has the organization met its strategic plan and the expected outcomes based on resources available?

190304. Assignment and Methodologies

A. Cost assignment approaches link expenses from a financial accounting perspective using the USSGL, as further defined in the Office of the Deputy Chief Financial Officer Standard Financial Information Structure ***(SFIS)*** to outputs of an organization (see paragraph 190503). Users should assign costs with one of the following approaches listed in the order of preference:

1. Directly trace costs wherever feasible and economically practicable,

2. Assigning costs on a cause and effect basis, or

3. Allocating costs on a reasonable and consistent basis.

B. Methodologies are processes used to accumulate and allocate costs to specific outputs. Although SFFAS 4 does not require the use of a particular costing methodology, the standard requires that a costing methodology, once adopted, be used consistently. The standard recognizes that the agency management is in the best position to select a type of costing system that would meet its needs and describes the four costing methodologies in section 1905, which include (a) job order costing, (b) process costing, (c) standard costing, and (d) ABC. The DoD Component must select the costing methodologies that best meet the organization's operational need and mission requirement.

*190305. Systems, Sources and Cost Finding

Managers must establish appropriate procedures and practices to enable the collection, measurement, accumulation, analysis, interpretation, and communication of consistent and periodic cost information with a system or the use of cost finding techniques.

A. A system is a continuous and systematic process, which may be designed to accumulate and assign costs from a common data source to a variety of objects routinely or as desired by managers. The common data source may include many different kinds of data from many financial and non-financial sources of information to support cost, financial and budgetary accounting. Costs are traced using the accounts described in the USSGL as the standard to produce financial and budgetary general purpose reports and special purpose performance reports. Cost accumulation is facilitated by the SFIS structure, which includes the Standard Line of Accounting (SLOA). See paragraph 190503.

B. When data systems are unable to provide the needed cost information or where information is required on a non-recurring basis (e.g., budget estimates, Business Case Analysis, Cost Benefit Analysis, and/or Analysis of Alternatives), cost finding techniques may provide the needed results through analytical or sampling methods and special cost studies and analysis. Cost finding techniques should not replace consistent and regular managerial cost reporting when available.

1904 REPORTING AND ANALYSIS

190401. Overview

A. Reliable costs of federal programs and activities is important to managers. Cost reporting and analysis provides a better understanding of specific programs and activities (e.g., products and services) to include costs and changes in costs; efforts and accomplishments over time; efficiency and effectiveness of assets and liabilities in support of budgetary, financial, and managerial cost reporting; and program business decisions. Additional benefits are derived when planned and actual performance data are aligned, such as the ability to capture full costs of products and/or manpower, transparency into pricing and fees, and consistency in standardized cost reporting for historic and forecasting value. Benefits derived will vary based on organization, model maturity, and department mission.

B. Managerial cost accounting improves both financial management and decision making by providing:

1. An understanding of the reporting requirements as seen by management,

2. The type of information management needs, and

3. An approach to developing the analysis that will eventually support the reporting and performance structure.

*190402. Users

A. Regardless of a stakeholder's function, users need accurate reporting to identify cash, disbursements, collections, full cost of resources, activities, capabilities, and operations for various needs. Specifically, for the DoD Reporting Components, some of these needs include:

1. Making better decisions at the cost element levels,

2. Knowing the cost of operations and activities,

3. Linking budget planning and allocation to actual expenditures,

4. Responding to both external and internal cost related inquiries, and

5. Making costs visible to DoD leadership, component leadership, operational commanders, and program managers.

B. Internal Users

1. Government managers are the primary users of cost information. They are responsible for carrying out program objectives with resources entrusted to them. Reliable and timely cost information helps ensure that resources are spent to achieve expected results and outputs as well as identify waste and inefficiency.

2. Program Managers use cost information to (a) effect cost control, (b) make resource acquisition decisions, (c) evaluate and improve efficiency and cost effectiveness of various program activities, and (d) make budget and planning proposals to agency heads and Congress.

3. Financial Managers, including accountants and budget analysts, use cost information to (a) calculate unit costs of outputs, (b) analyze and explain cost variances, (c) formulate standard costs, (d) compile period financial reports, and (e) analyze the cost behavior to quantify variable, fixed, and/or incremental costs for decisions such as buy or lease.

4. Franchise Activity Managers use cost information to set prices or reimbursements for the goods or services they provide (MCAIG A-xxv).

5. Government executives use cost information to (a) evaluate the overall performance of the programs, (b) assess future resource requirements for financial plans and budgets, and (c) develop proposals to the President and Congress on resource allocations and program expansion, modification, or downsizing.

C. External Users

1. Congress makes policy decisions on program priorities and allocates resources among programs through the appropriations process. These officials need cost information to compare alternative courses of action and to make program authorization decisions by assessing costs and benefits and evaluating program performance outcomes and outputs.

2. Citizens, including news media and interest groups, use cost information to assess the efficiency and effectiveness of resource allocation.

190403. Decision Making

A. To interpret cost data appropriately, it is important to distinguish between direct and indirect costs, fixed and variable costs, and full and relevant costs. Analysis of these cost components help managers understand the demand their program places on federal resources of other organizational units and contributes to their organizational costs. The accurate recording and availability of detailed historical cost information is important in providing insight into budgets, cost estimates, and performance metrics.

B. Cost information should allow organizations to address:

1. Current spend plan and program expense status, and

2. The full costs to deliver goods and/or services by an organization, line of business, or region,

C. Cost information assists managers in budget and cost control, performance measurement, reimbursement and fee/price setting, program evaluations, and economic choice decisions.

190404. Budget and Cost Control

A. Budget planning and control serves an important function within the Federal Government. Managers use historical and current costs of program activities as a basis in estimating future budgets and to measure actual performance against established goals.

B. Once budgets are approved and executed, current cost information serves as feedback on the budgets. DoD financial managers use the feedback derived from the current costs to budget analysis to control and reduce costs, as well as, find and avoid waste. With appropriate cost information collected through managerial cost accounting, federal managers can:

1. Explain variances between actual and budgeted costs of a cost object,

2. Compare cost changes over time and identify their causes,

3. Compare costs of similar activities and identify cost differentials, and

4. Produce budgets at a detailed level which will improve accuracy, insight, and increased transparency of an agency's expenditures.

C. Organizations should produce a Statement of Net Cost (actual to budget) in accordance with Volume 6B, Chapter 5.

190405. Performance Measurement

A. The GPRA requires Federal Agencies to develop five year strategic plans and annual performance plans and report annually on actual performance compared to goals. The GMRA reduces duplicative administrative services by establishing a self-sustaining franchise fund to provide common and efficient administrative support services on a reimbursable basis. Participation in these franchise funds requires proper costing procedures. Subsequently, the FFMIA was enacted to help improve compliance with accounting standards resulting in reporting full costs of programs and activities, which increases accountability and improves cost efficiency, performance, and productivity. The FFMIA builds upon and complements the CFO Act, GPRA, and GMRA, and increases the capability of agencies to monitor execution of the budget by more readily permitting reports that compare spending of resources to results of activities. Cost information is necessary to aid organizations in evaluating and comparing actual costs to planned performance measures, outputs, and outcomes.

B. In defining annual performance plans, program managers can establish performance goals based upon an understanding of both the direct and indirect costs of programs, and thereby align strategic resources to results.

C. Results are often stated in terms of an "output," because they are easier to identify and measure. Leading practice in performance management prefers to measure an "outcome" or a result or measureable goal, which is often more difficult to identify and measure. The utilization of managerial cost accounting can provide the performance details useful to leadership for determining whether the organization achieves an "outcome" or not. Defined cost goals will assist managers in deploying resources more efficiently to achieve the desired performance.

D. An annual performance plan defines measurements for each major activity, good, and service. Plans and performance goals are developed based upon anticipated resource levels. In the budget formulation process, program managers begin to connect federal resources to results. Managerial cost accounting policies require that financial managers base their planning upon all federal resources allotted to their programs. This includes resources for both direct and indirect costs. The indirect allocated support for activities, goods, and services that are separately appropriated or covered through relevant activities are often overlooked and not included. A complete and fully inclusive performance report will include both direct and indirect (from all sources within program or support programs) costs of the cost object. When the cost of a program is managed through managerial cost accounting, and cost goals are defined, the costs of the activity, good, and service can be monitored and managed more efficiently.

E. Performance measurement can be viewed as the government equivalent of private sector profitability measurements. However, selecting appropriate measurements is quite difficult and requires exercise of judgment. Cost itself can be a performance metric, but cost should also be combined with an effectiveness measure, such as the percent of a goal achieved at a level of expected performance, to ensure the resulting output is cost effective.

F. As suggested by SFFAS 4, paragraph 35, measuring cost is an integral part of measuring performance for efficiency and cost effectiveness. Efficiency is measured by relating outputs to inputs, often expressed as cost per unit of output. Effectiveness is measured by the outcome or the degree to which a predetermined objective is met, commonly expressed as "cost effectiveness." Therefore, the service efforts and accomplishments of a government entity can be evaluated with the following measures:

1. Measures of an organization's efforts (inputs), which include the costs of resources used or consumed, and non-financial measures,

2. Measures of an organization's accomplishments (outputs), which include the quantity of goods and services provided and outcomes (the results of those goods and services), or

3. Measures that relate efforts to accomplishments, such as cost per unit of output or cost effectiveness.

190406. Reimbursements and Fee/Price Setting

A. Cost information is important for setting prices and user fees for government provided goods and services. Pricing and costing, however, conceptually use cost information differently. In the Federal Government, setting prices is a policy matter, sometimes governed by statutory provisions and regulations, and at other times, by department or managerial policies.

B. SFFAS 4, paragraph 37 and OMB Circular A-25 requirements include:

1. With respect to goods and services that the government provides in its sovereign capacity to a particular group of individuals as a special benefit, user charges should be sufficient to recover the full cost of those goods and services.

2. With respect to goods and services that the government provides under business-like conditions, user charges for those goods and services need not be limited to the recovery of full cost and may yield net revenue. WCFs are revolving funds that rely on a cost recovery methodology to finance operations. WCF activities are designated as zero profit/loss or breakeven activities. The full costs of the goods and services delivered are reimbursed through the associated sales. Those sales represent receipts from the appropriated funds. For this to happen, it is critical that reimbursement rates be as accurate as possible. If the rates are set too high, the organization will overcharge its customers. If rates are set too low, costs will not be fully recovered.

To set rates accurately, the DoD needs a comprehensive understanding of the goods and services that are delivered, the activities and tasks required for delivery, and the resources consumed by those activities. For more information on WCF see Volume 3, Chapter 19 and Volume 11B.

C. Cost information is also important in calculating reimbursements for goods and services provided by one federal agency to another. Hence, reimbursable accounting allows one federal organization to recover its cost from another federal organization for the direct and indirect costs of providing those goods and services. The reimbursable fee structure, best displayed in the reimbursement of communication, data, and accounting services by some of the DoD agencies, is specifically established for providing those goods and services. Even if fees or reimbursements do not recover the full costs due to policy or economic constraints, management needs to be aware of the difference between cost and price. With this information, program managers can properly inform the public, Congress, and federal executives about the costs of providing the goods or services. For more information on reimbursable fees, see Volumes 11A and 11B.

190407. Program Evaluations

The cost of federal resources required by programs is an important factor in making policy decisions related to program authorization, modification, consolidation, or discontinuation. These decisions are usually subject to policy constraints. They often require the consideration of both social and economic costs and benefits affecting different sectors of the economy and society. For complete program cost evaluation, it may be necessary to obtain advice from outside the entities' data systems. The Office of the Director, Cost Assessment and Program Evaluation (CAPE), provides independent analytic advice to the Secretary of Defense on all aspects of the Defense program, including alternative weapon systems and force structures, the development and evaluation of defense program alternatives, and the cost effectiveness of defense systems.

190408. Economic Choice Decisions

As noted in SFFAS 4, agencies and programs often face decisions involving choices among alternative actions, such as whether to do a project in-house or contract it out, to accept or reject a proposal, or to continue or discontinue a good or service. Making these decisions requires cost comparisons among available alternatives. In the case of outsourcing, decisions may involve comparing the incremental cost and benefits of continuing a government activity with the incremental cost and benefits of turning the project over to a private sector business. In federal terms, it may use an analysis of alternatives, for example, in the selection of software application, an upgrade to an enhanced good or service, or a capital investment project. Cost studies of various types can help to decide whether to accept or reject a proposal for a government capital project, to continue or drop a government good or service, or to contract with a private sector vendor.

1905 COST ASSIGNMENT AND COSTING METHODOLOGY

*190501. Overview

SFFAS 4, paragraph 116, requires that managers accumulate the cost of resources consumed by responsibility segments and type of resource; accumulate outputs produced and, if practicable, measured in units; and that the full cost of direct and/or indirect resources be assigned to outputs through consistently-applied and appropriate costing methodologies or cost finding techniques.

A. When assessing cost accounting requirements, reporting entities must determine the appropriate detail for processes and procedures based the following factors:

1. Nature of the entity's operations,

2. Precision desired and needed in cost information (accuracy, frequency, granularity, transparency, and cost benefit of obtaining data),

3. Practicality of data collection and processing,

4. Availability of service departments for indirect services,

5. Cost of installing, operating, and maintaining the cost accounting processes, and

6. Any specific information needs of management.

B. Management should evaluate alternative costing methods and select those that provide the best results considering its operating environment and economic feasibility (e.g., the benefits resulting from implementing the methods outweigh the costs).

C. SFFAS 4 requires that a costing methodology, once adopted, be used consistently so that cost information can be compared from year to year. This requirement, however, does not preclude necessary improvements and refinements to the system or methodology, so long as the effect of any change is documented and explained. Documenting the changes assists in appropriately incorporating the new processes over historic years and provides support to any forecast adjustments.

190502. Cost Accumulation

A. SFFAS 4 states that cost accumulation is the process of collecting cost data in an organized way and that the accumulation is for costs incurred within each responsibility segment; this does not involve the assignment or allocation of costs incurred by other supporting segments.

B. Of the five standards in SFFAS 4, two reference cost accumulation:

1. Accumulating and reporting costs of activities on a regular basis for management information purposes, and

2. Using appropriate costing methodologies to accumulate and assign costs to outputs.

C. Cost accumulation for cost objectives or outputs is achieved by selecting costing methods (e.g., standard costing, job order costing, ABC) or cost finding techniques that are suited to the operational environment. For more information on cost finding techniques, see section 1906.

D. SFFAS 4 requires organizations to accumulate costs for the identified types of outputs produced for various programs or projects. Organizations may establish a network of cost centers to accomplish this cost accumulation task. Cost centers are a tool that groups relevant costs that support a consistent output or objective. Cost centers can be used to simplify the various costs incurred by aggregating costs into a cost center that provides a product, be it a service or a good. A project management office is a common type of cost center.

E. Responsibility segments should accumulate the costs of resources consumed by the type of resource, such as costs of employees, employee benefits, and office space or rent. Accumulating the costs incurred by resource type supports detailed reporting and provides transparency of cost by type. Outputs (if practical, measured in units) produced by responsibility segments should also be accumulated; the full cost of resources that directly or indirectly contribute to the production of outputs should be assigned, if the purpose is to support billing a customer (refer to Volumes 11A and 11B).

190503. Cost Assignment Authoritative Guidance

The SFIS is a comprehensive DoD enterprise data structure and common business language for budgeting, financial accounting, cost, performance, and standardized reporting requirements. SFIS enables budgeting, performance-based management, and the generation of financial statements. Through the SLOA classification, SFIS improves interoperability between business systems, provides better end-to-end funds traceability and linkage between budget and expenditures, complies with Treasury requirements, and helps achieve audit readiness. SLOA provides additional granularity to accounting transactions that improves the appropriate assignment of costs. Volume 1, Chapters 4 and 7, and the ***SFIS resources web page*** provide complete information, including the SFIS matrix, Compliance Checklist, USSGL Transaction Library, the Standard Chart of Accounts (SCOA) and the SLOA.

190504. Cost Assignment Approaches

A. Cost assignment is the process that identifies the accumulated costs to cost objects (an activity or item whose cost is measured). As per SFFAS 4, there are three approaches, summarized in Table 19-1, for assigning costs to outputs listed in order of preference:

1. Directly tracing costs wherever feasible and economically practicable,

2. Assigning costs on a cause and effect basis, and

3. Allocating costs on a reasonable and consistent basis

Table 19-1. Cost Assignment Approaches

Approach	General Cost Behaviors	Accuracy/ Frequency	Granularity/ Transparency	Project/ Program Requirement
Direct Tracing	Job Order Direct and/or Indirect Actual or Standard	High	High to Moderate	Activity / Task Level
Cause and Effect	Job Order Direct and/or Indirect Process Direct and/or Indirect Variable Actual or Standard	High to Moderate	High to Moderate	Task / Delivery Order
Allocation	Job Order Indirect Process Indirect Fixed Actual or Standard	Lowest	Lowest	Project / Program

B. Agencies and responsibility segments select the appropriate cost assignment approach based on their operational needs. Operational needs tend to follow historic practices (if reliable historic data is available); however, cost assignment approaches can change if the operating environment or regulations change. SFFAS 4 requires organizations to identify the full cost of outputs (the goods or services produced, the missions or tasks performed, and the customers or markets served) including:

1. Direct and indirect costs incurred within the responsibility segment,

2. Intra-entity costs from other responsibility segments, and

3. Inter-entity costs recognized by the receiving entity.

C. Responsibility segments that produce only one output assign costs of the resources used in production to the output. Responsibility segments that deliver intermediate goods or provide supporting services assign the costs to the segments that receive the goods and services. Inter-entity costs are assigned to the responsibility segments that use the inter-entity goods and services. A receiving entity should also recognize assigned inter-entity costs from other Federal Entities.

D. It is a requirement to document changes to a cost assignment approach. Documenting changes may also require noting in the financial statements. It is important to maintain a consistent cost assignment approach, where possible, for reporting and pricing efforts.

190505. Direct Tracing

A. Direct tracing applies to resources directly used in the production of an output. Examples include materials used in production, employees providing direct effort, facilities, and equipment used exclusively in the production of the output, and goods or services received from other entities (inter-entity) directly used in support of the output. Direct tracing also applies to specific resources dedicated to particular outputs, such as resources tracked to a single task or objective.

B. Direct costs tend to originate internally by program, responsibility segment, or reporting entity; however, outside entities may also assign direct costs to a segment. Additionally, the direct tracing approach is not limited to direct costs. Indirect costs from these outside entities can also use the direct tracing approach to capture costs in more detail. Regardless of origin or funding profile, all direct costs are included in the cost of the output.

C. As noted in Table 19-1, directly tracing costs provides the highest level of granularity and yields the highest level of reporting information; however, it is not necessary to apply direct tracing to all elements of a cost object or output. For example, directly tracing office supplies to a particular weapon system upgrade would not be cost effective, but if a program or activity explicitly budgets for administrative or clerical services, then direct traceability is relevant for costing purposes.

190506. Cause and Effect Basis

A. Costs that cannot be traced directly to a final output (such as activities or work elements), or it is cost prohibitive to do so, but a relationship can be made between the resource costs and outputs, are assigned to intermediate cost objects. The cause and effect basis recognizes that activities have incurred costs, outputs have required these activities, and therefore, a reasonable relationship can be derived between the two. The causal beneficial relationship permits the activity costs to be accumulated and assigned using the cause and effect basis.

B. Establishing an intermediate cost object requires the identification of homogenous activities to an output and determining the rate of allocation to receiving cost objects. For example, a laboratory's costs can first be assigned to various tests it runs. The costs of the tests can then be assigned to the operating units that ordered the tests.

C. The cause and effect basis is useful when production is consistent and manageable. The cause and effect basis must not be used if cost cannot be normalized or linked to a final output; instead, costs are assigned using a more general process.

190507. Cost Allocation

A. Cost allocation is the process of assigning costs that cannot be directly traced or assigned using the cause and effect basis. General and Administrative services used by various common segments apply cost allocation to assign costs to benefiting cost objects. Cost allocation provides the least detail in costs incurred and is used for indirect costs only.

B. General and Administrative support costs are allocated initially to the segments and then to the outputs of that segment on a pro rata basis. This involves two steps:

1. Allocate the accumulated costs of services to the segment, and

2. Allocate the accumulated costs to the outputs of each segment.

C. The usual basis for cost allocations is the relevant common denominator. The basis of cost allocation may include the number of employees, direct hours worked, or the amount of direct costs incurred in segments. The common denominator is also referred to as the allocation base. Grouped costs should be accumulated and assigned using a consistent and relevant base. The allocation frequency and base should remain consistent to allow cost comparison over a period of time.

D. Cost allocation is similar to cause and effect in that it may use an intermediate cost object to accumulate costs; however, it differs in that a single benefiting segment or output is unable to be identified for allocation purposes. Cost allocation is commonly used for general and administrative costs. A responsibility segment may use more detailed costing methods to accumulate costs within the intermediate cost object for more detailed internal reporting, but the allocation remains based on the accumulated cost.

E. Costs accumulated for intermediate cost objects must be homogeneous. Examples in homogeneity accumulation include, but are not limited to: human resource departments, program management offices, and general and administrative offices. Activities within these examples are often difficult to measure in meaningful amounts per unit or per cost object.

190508. Costing Methodologies and Cost Behaviors

It is important to note that the costing methodologies described in paragraphs 190509 through 190512 are not mutually exclusive nor all inclusive, and can be utilized in combination based on the objective, job order, or process costing and can be applied to both ABC and standard costing systems.

190509. Job Order Costing

A. Job order costing is a costing methodology that accumulates and assigns costs to discrete jobs. Job order costing systems are used by organizations that produce unique products or special order products, projects, assignments or groups of similar outputs. Job order costing is used if:

1. The production or service is being performed to meet customer specifications or requirements, or

2. Products or services require different amounts and types of direct material, labor and indirect costs.

B. In a job order costing system, different products with varying degrees of production time and different amounts of direct materials consumed are tracked separately by work orders. Job order costing provides more control, less estimation, and more direct and reliable allocation of costs.

C. Direct materials and supplies owned by the performing activity, acquired from a WCF or from an inventory account financed by appropriated funds, are charged to a job order in accordance with established costing procedures for the segment.

D. The structure for job order data must be consistent with the SFIS and the SFIS Business Rules (see paragraph 190503). Where relevant, subsidiary ledger accounts or proprietary accounts will be incorporated into the structure for job order data.

E. A job order number is given to each identified cost object, similar to a project Work Breakdown Structure, in which a number is assigned to each task that is being tracked or reported. Job order numbers are the framework for identifying each job and a means of accumulating departmental direct labor, direct material, and overhead (indirect, general, and administrative) cost by job order. Detailed DoD specific transactions are available in the DoD USSGL Transaction Library and must be consistent with Volume 1, Chapters 4 and 7. Refer to Volumes 11A and 11B for reimbursable policies applicable to activities financed with annual appropriations and WCFs.

190510. Process Costing

A. Process costing accumulates costs by individual processing cost center. These processing cost centers are involved in a continuous flow of effort, with each center contributing towards the completion of the end products. The output of a processing center becomes the input of the next processing cost center or becomes a part of the end product.

B. Process costing is appropriate for production of goods or services with the following characteristics:

1. The production involves a regular pattern of processes, and

2. The output consists of homogeneous units, and

3. All units are produced through the same process procedures.

C. Each cost center accumulates costs, assigns the costs to its outputs, and calculates the unit cost of its output. For each period, cost centers prepare a cost and performance report showing the costs, the completed effort, and the work-in-process. When a certain number of completed units are transferred from the cost center to the next cost center, the cost of those units are also transferred and are eventually incorporated into the costs of the end product. Therefore, the cost flow follows the physical flow of the production. The unit cost of the end product is the sum of the unit costs of all the divisions.

190511. Standard Costing

A. Standard costs are carefully predetermined or expected costs that can be applied to activities, services or products on a per unit basis. The purpose of standard costing is to have a standard cost per product used as a goal to compare with actual costs.

B. A standard cost outlines how a task should be accomplished in nonfinancial terms (hours, minutes, board feet) and how much it should cost. Standard costing can be done for components such as direct materials, direct labor, and indirect costs. Standard costs are a fixed price per unit and are commonly used in production or service center models.

C. Standard costing is used in conjunction with job order costing, process costing, and activity based costing and it can be applied to specific outputs or activities, or to a responsibility segment in aggregate by comparing total actual costs with total standard costs based on outputs produced within a certain time period. Standard costing is appropriate for operations that produce services or products on a consistently repetitive basis. (Refer to Volumes 11A for Reimbursable Operations and 11B for WCF activities).

190512. ABC

A. ABC focuses on activities of a production cycle, based on the premises that:

1. Output requires activities to produce, and

2. Activities consume resources.

B. ABC uses cost drivers to assign costs through activities to outputs.

C. The ABC cost assignment process is a two-stage process. The first stage assigns the cost of resources to activities. The second stage assigns activity costs to outputs.

D. Implementing ABC is a four step process:

1. Identifying activities within a segment. This may require an in-depth analysis of the operating processes, as some processes may consist of one or more activities. Activities may be classified into unit level, batch level, product sustaining, and facility sustaining activities. Management may combine related small activities into larger activities to avoid excessive costing efforts.

2. Assigning resource costs to activities to capture the full cost of the final output. Assigned resource costs should include direct and indirect costs as well as any inter- or intra-department costs relevant to the activity. Resource costs are assigned to activities in three ways, depending on feasibility and cost benefit considerations:

a. Direct tracing,

b. Standard costing or cost finding report, or

c. Allocations.

3. Identifying outputs. Outputs are any good or service generated by a segment, and can include information or paper work generated by the completion of the tasks or customers (e.g., persons or entities to whom a federal agency is required to provide goods or services). Omitting a resource cost, activity, or output in the ABC process will result in overcharging costs to other outputs.

4. Assigning activity costs are assigned to outputs using activity drivers based on individual outputs' consumption or demand for activities. For example, a driver may be the number of times an activity is performed or the length of time an activity is performed in the production of an output. These are referred to as transactional and durational drivers, respectively.

E. ABC can be used in conjunction with job order costing or process costing. Job order or process costing would be costing activities that occur in the production of a final output. For example, a contracting office has many activities that lead into the finalization of a contract. There are routine processes relevant to all contracts, such as document formatting, printing, and delivery activities, that are likely allocated using a standard cost methodology (established rate per output), while other activities such as research and negotiation are not common and vary depending on contract type, are allocated using ABC methods.

F. A major advantage of using ABC is that it avoids or minimizes distortions in product costing that result from arbitrary allocations of indirect costs. By tracing costs through activities, ABC can provide more accurate good or service costs. Ranking activities by the degree to which they add value to the organization or its outputs encourages management to evaluate the efficiency and cost effectiveness of activities. An ABC method starts with identifying and examining the following:

1. What value-added activities are really needed in order to accomplish a mission, deliver a service, or meet customer demand?

2. How can activities be modified to achieve cost savings or product improvements?

3 What activities do not actually add value to services or products?

4. Where can cycle time analysis and value-added analysis be incorporated?

1906 DATA SYSTEMS, DATA SOURCES AND COST FINDING

190601. Data System

A. Financial accounting, budgeting, and managing are three essential ingredients of accountability. Data systems are the source of cost and programmatic information used for reporting. SFFAS 4 requires that each reporting entity accumulate and report the cost of activities on a regular basis.

B. A data "system" is an organized grouping of methods, source information, and activities surrounding data collection used to produce reliable cost information on a consistent basis. Data systems include a collection of system tools and sources used for automating managerial cost accounting reporting, but can also include manual processes, such as cost finding reports. System based reporting should be used first before relying on cost finding reports in order to routinely collect reliable data from a common data source, process the data, and report cost and output information for general and special purposes. Data systems will integrate sources of information across an organization and may need to include data sources that cross multiple reporting segments of an entity in order to provide the proper cost information, such as accounting information, time records, or asset data. A data system can also include evaluation and decision source information derived as a result of prior reporting and feedback.

C. Cost information developed for managerial cost accounting purposes from established data systems should be reconcilable to financial, budgetary, or managerial accounting items. When possible, information produced from a data system should be corroborated with other reporting tools to validate the content in the systems (quantity of line items or sum of dollars). This task may be included in a recurring internal control assessment to reduce redundancy. DoD financial managers will decide the best approach based on the complexity of the data and its reliance.

D. DoD data systems, to the extent practicable, should be integrated with an organization's accounting, budgetary, and financial system(s). As SFFAS 4, paragraph 72 prescribes, a system should take into consideration:

1. The nature of the entity's operations,

2. Precision desired and needed in cost information,

3. Practicality of data collection and processing,

4. Availability of electronic data handling,

5. Cost of installing, operating and maintaining the cost accounting processes, and

6. Any specific management information needs.

E. Data systems will support cost analyses used to compare actual to anticipated costs. To meet managerial cost accounting needs, data systems should use uniform and basic cost, transactional, or programmatic data. Examples of these data are units of output produced and input used, to include the amount of labor in terms of employees or employee hours.

190602. Data Sources

A. Data sources, as SFFAS 4 describes it, "consists of all financial and programmatic information used by the budgeting, cost accounting, and financial accounting processes. The common data source may include many different kinds of data, which may be spread among multiple systems or locations, including non-computerized sources. These data are far more than the information about financial transactions found in the standard general ledger, although that is a significant part of the data source." Non-financial data may include human capital, logistical, and operational data. Common data sources will include information about financial transactions found in the standard general ledger along with various other data types. The use of the term "data source" is not limited to the use of computerized systems for information, but includes a broad array of sources of information (for example, manually prepared reports or audit findings).

B. Data sources integrated into the data system must be relevant to the reporting segment and its reporting requirements. Data sources may originate from within the reporting segment or from an external entity. Data sources must be capable of retaining pertinent data over periods sufficient to provide historical reference and allow for forecasting. Managers will examine non-systematic data sources for content, accuracy, and reliability on a recurring basis.

C. Reporting needs will vary depending upon the circumstances and purpose for which the measurement is used. Data sources established within an entity's data system may need to change as the operational needs change. However, as stated in SFFAC 1, the focus is on developing generally accepted accounting standards for reporting on the financial operations, financial position, and financial condition of the Federal Government and its component entities and other useful financial information. This implies a variety of data sources that complement budget information will be required and must be adapted to fit OFFR, SFIS, and SLOA standards.

190603. Cost, Budget, and Financial System Relationships

A. Proper financial management requires that cost, budget, and financial systems work closely together to provide useful information. Per FASAB, OFFR should consider the needs of both internal and external users, the decisions they make and the information they need. The established data systems must follow the DoD USSGL Transaction Library and DoD SCOA for consistency of the cost information.

B. Budgetary accounting ensures compliance with fiscal legal requirements and tracks the use of each appropriation for specified purposes in separate budgetary accounts through the various stages of budget execution—from appropriation to apportionment and allotment to obligation and eventual outlay. Cost accounting informs budget formulators and decision makers with the full cost of federal resources required to support policy and program goals. Cost accounting also assists the budget execution process by consistently accumulating and reporting the costs of the federal resources consumed, and by comparing actual against planned federal resource consumption (MCAIG Glossary, page I-19). Managerial cost accounting uses the defined data elements prescribed by SLOA to produce a more detailed Statement of Net Cost for budget reconciliation (see paragraph 190503).

C. Financial accounting tracks financial events of DoD Reporting Entities and produces results of operations, including assets, liabilities, and changes in net position, revenues, and expenses. Federal financial reporting derived from cost accounting data systems will encompass general and special purpose report capabilities to meet the needs of the four user groups: program managers, executives, Congress, and citizens. Information produced by managerial cost accounting appears in or influences both general and special purpose reports.

D. Data systems for cost accounting should provide sufficient cost detail on a timely basis to support performance reporting. Measuring and reporting actual performance against established goals is essential to assess governmental accountability. Cost information is necessary in establishing strategic goals, measuring service efforts, determining whether expected outcomes were achieved, and relating efforts to accomplishments.

E. Data systems that use different accounting bases or different recognition and measurement methods than the norm should be reconcilable and should fully explain the accounting bases and measurement methods. Regardless of the type of report in which it is presented, cost information should ultimately be traceable back to the original source.

F. As per SFFAS 4, to be reconcilable, the amount of the differences in the information reported should be ascertainable and the reasons for the differences should be explainable. In some situations, informational differences may be clearly understandable without further explanation. However, other cases may require a narrative statement concerning the differences. In complicated situations, a schedule or table may be required to fully explain the differences. Any variances observed in data system reports to budgetary, financial, or managerial cost accounting reports must be documented noting the reason for the variance (if discernable), the source of the variance, and the resolution, if applicable.

190604. Cost Finding

A. Cost finding is a tool used to perform cost examinations when a data system cannot provide sufficient data. Cost finding techniques produce cost data by analytical or sampling methods. Cost finding techniques are only appropriate for certain kinds of projects or programs that have limited scopes or costs. Organizations may use thresholds to limit the use of cost finding technique.

When cost finding techniques are used, the value of the report should be limited and a timeframe for updating the cost finding report established. As cost information becomes available and normalized on the project or program, the cost finding report should be replaced with actual data.

B. Special purpose cost reports and analyses, or cost finding techniques, can be performed for financial based decision making. Cost finding techniques will vary depending on the type, level, and significance of the financial decision, e.g., planning decisions for replacement costs, capital costs, or sustainment of operations. It is important that the basis and method used be appropriate for the circumstances and consistent with the intended purpose.

C. Cost finding techniques produce cost data by analytical or sampling methods. Cost finding techniques are used for indirect costs, items with costs below set thresholds within programs, or for programs in their entirety. Cost finding techniques support the overall managerial cost accounting process and can represent nonrecurring analysis of specific costs.

190605. Cost Finding Application

A. Cost findings generated manually outside of the standard reporting tools should utilize an established managerial cost accounting data system where possible. Cost finding techniques will vary. It is crucial that the process be thoroughly documented. Documentation must be sufficient to replicate the cost finding process used with consistent results.

B. Within the DoD, cost finding techniques will be used to compare costs of different organizational units or operations performing the similar output. Cost finding is one tool in estimating full costs, and can be used to compare organizational efficiency. For example, the costs for an intermediate object, such as processing a personnel action at a personnel office, can be compared with the cost at other personnel offices to determine the efficiency of one over the other or value of both.

C. Cost finding techniques are used for a number of different circumstances, but there are four general circumstances:

1. A cost accounting system is not in place for full cost of a cost objective.

2. The data system does not have the full costs incurred to provide an output or product. In this scenario, the output is often new or unique.

3. Activities do not have formal cost accounting capability as part of their financial management system, but periodically provide outputs to other DoD Components, Federal agencies, or to the public.

4. The cost of an item has not been recorded in the accounting system and the item is being transferred, sold, or recorded in the accounting system for the first time.

D. When the purpose of a cost finding includes the preparation of an internal report or an external report for another Federal agency or non-Federal organization, General Fund (GF) Components should follow the guidance contained in Volume 11A, Chapter 1 to ensure that all applicable costs are considered. WCF Components must follow the guidance in Volume 11B. When the purpose is to establish the cost of an activity associated with the Security Cooperation Program, managers and users will follow the guidance contained in Volume 15, Chapter 7.

190606. Cost Finding Requirements

A. Cost finding techniques must be repeatable and set up in a manner that is consistent with similar prior cost finding reports in the cost collection approach, even if the effort is associated with a one-time cost accounting requirement. This is required to sustain an audit or assessment of the cost later.

B. Although cost finding practices are outside of the standard processes, cost finding techniques must align with the SFIS Business Rules for financial data (see paragraph 190503).

C. A thoroughly documented cost finding approach requires:

1. The cost objects or outputs (both intermediate and final) to which cost finding techniques are to be applied, in addition to the relevant funds used to support the organization (WCF and GF),

2. The organizations involved in performing the cost objects and the tasks performed by each,

3. The applicable cost elements,

4. A plan that includes the specific cost finding techniques to be used and the criteria followed in selecting the specific cost finding technique, and

5. A description of how those techniques will be used to estimate the cost object.

D. The documented statement and the related work papers should be retained for the same length of time as other documentation used to support billings to federal agencies or the public. Refer to Volume 1, Chapter 9, for document retention and audit readiness.

E. Identifying and describing cost objects are an important element of the documentation requirement. When the cost object identified is at a reporting entity or organizational level, the cost finding approach could rely on more estimation techniques and fewer details in the cost estimates. If the cost object identified is at the specific function or operation level, additional granularity will be required to provide useful cost object data. At the specific function or operation level, the data may not be available in the legacy financial systems.

F. The task is to classify the direct or indirect cost objects. A cost object responsible for actually performing the work is direct. A cost object that provides support or performs an administrative function is indirect.

G. Organizations or cost objects may be either direct or indirect costs depending on the activities identified. For example, when using cost finding techniques to collect costs for paying a contractor invoice, the costs of the accounting technicians at the Defense Finance and Accounting Service (DFAS) disbursement function would be considered direct costs, as they are assigning their time directly to the specific customer. However, when using cost finding to collect costs for the operation of an aircraft carrier battle group, the disbursing function at DFAS is considered an indirect cost and allocated to all benefiting organizations. In the two examples, the difference is the activity scope performed and how cost is recognized as a singular cost easily identifiable in a cost summary or multiple cost aggregated into a single assignment.

H. An organization classified as indirect cost will not always be recognized in the computation of costs for a final cost object. At the macro level, service center type organizations generally will be recognized as indirect and the related costs allocated among direct organizations. At the micro level, materiality and usefulness will be determining factors on recording the costs as direct. Specifically, if some cost assignment amounts are not readily available, and they are estimated to be relatively insignificant in the context of the total costs, cost finding techniques would allow them to be excluded from the overall costs with a notation that they are not material.

I. An important aspect of any cost finding technique is identifying the direct and indirect cost elements applicable to the good or service. Even within a direct cost organization, there may be indirect cost elements. Both the direct and indirect activities may have the same cost elements, such as civilian personnel costs. The difference is in whether the costs are considered direct or indirect. If indirect, allocate across the direct cost elements.

J. All possible cost elements must be identified and determined if they are significant. Personnel compensation, purchased services, supplies, and materials are typical major categories within the SFIS Cost Element Code (see paragraph 190503).

K. After the potential elements are identified, it must be decided which cost elements are sufficiently significant to the final cost object and if they warrant separate consideration. An evaluation of the elements would also include the relevance and materiality of each cost element to the cost object. Materiality is determined by analyzing whether excluding the data could distort the computed value for the final cost object.

L. Before the values for each cost finding can be determined, the source documents for the required data must be identified and physical hardcopies or softcopies retained for audit or performance examination purposes. Source documentation is cost information on a prior project, effort, or purchase that is the same or similar in nature. Examples include: invoices of procurements, contracts, statement on costs, and funding reports.

When WCF organizations are part of the cost finding, detailed cost or pricing documentation should already be available since these data are needed for the customer rate setting process. Depending on the significance and intended use of the cost finding report, the identification of specific documents may not be necessary if it is insignificant to the operating costs to which it will be applied.

M. The following principles are intended to help guide the collection of comprehensive data:

1. Provide a comprehensive data structure for the cost object that specifies the source of all data,

2. Rely on the financial management system to the maximum extent possible and ensure the source data is complete and representative for its intended purpose (reflective of all debits, credits, cost transfers, and journal adjustments),

3. Document the rationale for direct and indirect costs,

4. Pricing lists, costing sheets, benchmarking studies on standard items such as direct and indirect labor and materials, and

5. Create an auditable, repeatable process to support cost management analysis over time.

N. The following guidance using cost finding techniques should be applied when determining the individual costs of intermediate and final cost objects:

1. Civilian direct labor costs are computed using the average pay grade for applicable General Schedule series personnel (e.g., step 5). For Wage Grade employees, use the average applicable pay grade (e.g., step 4). Amounts included as direct labor costs should recognize only productive time that is, the time actually used to perform the function. All other times, such as training or annual leave, are indirect labor and are included in indirect costs. Actual costs may be used, if known, provided appropriate documentation is available to support their substitution. Prior to applying the labor costs, it will be necessary to develop an approach for collecting the number of hours associated with an activity reflected in a cost object.

2. Civilian Personnel Fringe Benefit costs are computed using the rates published annually on the Office of the Under Secretary of Defense, Comptroller (OUSD(C)) ***Financial Management Reports*** website in accordance with Volume 11A, Chapter 6 or Volume 15, Chapter 7.

3. Costs for Military Personnel are calculated using standard military composite rates in accordance with guidance in Volume 11A, Chapter 1 and Chapter 6, Appendix I. Military Personnel Composite Standard Pay and Reimbursement Rates are published annually on the OUSD(C) Financial Management Reports website.

4. Both military and civilian labor should be included, as applicable. Labor that is directly traceable to jobs should be recorded as direct labor. Indirect labor (labor that cannot be charged to a specific job) should be used in computing indirect costs. Volume 11A, Chapter 1, reimbursable policy controls whether military labor costs actually are includable in charges to other DoD entities.

5. Direct material cost is determined using standard prices, unless the actual cost is known from vendor invoices. Standard prices can be obtained from vendor catalogs, supply system stock databases, recent contract purchases of similar items, or any other available data source.

6. Depreciation and amortization of capitalized property and real property represent an additional cost of an activity, project, or service. Chapters 24-27 provide additional guidance on calculation of depreciation and amortization for general equipment; assets under capital leases, internal use software, government furnished equipment, contractor acquired property, and real property.

7. Other costs that can be directly related to the cost object are determined using source documents, such as vendor invoices and travel vouchers.

190607. Pricing for a Cost Finding Report

Pricing elements (labor, materials and overhead) for cost finding reports are estimates based on prior same or similar purchases, projects, or programs. When pricing for a cost finding primarily uses financial system data, it improves the accuracy and confidence in the estimate. Common elements such as labor, raw materials, and materiel are examples of standard costs found in financial systems. Pricing practices and standards should be researched for each agency before developing a new practice or procedure.

A. Information available from CAPE, such as full cost of manpower, and defense employment and purchase projection system are available to support pricing of labor costs. In addition to base pay, these sources provide additional costs related to labor, including fringe benefits and training. When pricing labor, it is important to include the full cost of labor, as fringe benefits will increase total labor costs significantly.

B. Materials and supply pricing tools are also available from CAPE. These tools can support costs for common purchase items. Pricing for materials and supplies should include the full cost of procurement, which can include material handling and destination charges. Supporting agencies like Washington Headquarters Services or Defense Logistics Agency may supply the full cost of procurement. It is important to identify where services and goods originate from as part of the pricing documentation. The life cycle of a procurement will need to be included as part of a procurement pricing estimate.

C. A pricing Basis of Estimate (BoE) will vary for services provided by a GF Component vice a WCF Component. Volume 11A, Chapter 1, paragraph 010102.C provides guidance on the pricing of reimbursements for providing authorized services or materiel unless a specific DoD issuance authorizes alternative reimbursement policies. Volume 11B provides WCF guidance for products and services cost recovery. A WCF-financed activity must include general and administrative costs and other overhead in a BoE to satisfy requirements for full cost recovery. Under reimbursable policies set forth in Volume 11A, Chapter 1, DoD activities that finance reimbursable operations using annual appropriations generally do not include such costs in charges to customer activities within the DoD.