

Financial Management Series

January 1999

System Requirements for Managerial Cost Accounting Checklist

Systems Reviewed Under the Federal Financial Management Improvement Act of 1996



PREFACE

The Federal Financial Management Improvement Act of 1996 (FFMIA) requires, among other things, that agencies implement and maintain systems that substantially comply with financial management systems requirements. These requirements are detailed in the Financial Management Systems Requirements series issued by the Joint Financial Management Improvement Program (JFMIP) and in Office of Management and Budget (OMB) guidance (Circular A-127 and September 9, 1997, implementation guidance).

We are issuing this checklist that reflects JFMIP's <u>System Requirements for Managerial Cost Accounting</u> to assist (1) agencies in implementing and monitoring their managerial cost accounting processes and (2) management and auditors in reviewing their managerial cost accounting processes to determine if they are in substantial compliance with FFMIA. This checklist is not required to be used in assessing managerial cost accounting processes. It is provided as a tool for use by experienced staff. This checklist, the JFMIP source document, and the two previously mentioned OMB documents (Circular A-127 and the September 9, 1997, implementation guidance) should be used concurrently.

Experienced judgment must be applied in the interpretation and application of this tool to enable users to consider the impact of the completed checklist on their entire managerial cost accounting processes and whether those processes, as a whole, substantially comply with system requirements.

As technology progresses, new applications emerge replacing older, less efficient, and less effective ones. Policies and procedures in effect under older technologies give way to new and different processes. Judgment must be used when assessing an agency's managerial cost accounting processes against JFMIP systems requirements in order to recognize when new and different technologies achieve the objectives of JFMIP systems requirements.

Additional copies of this checklist can be obtained from the U.S. General Accounting Office, Room 1100, 700 4th St. NW, Washington, D.C. 20548, or by calling (202) 512-6000,

or TDD (202) 512-2537. It is also available on the Internet on GAO's Home Page (www.gao.gov) under "Special Publications."

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Abbreviations

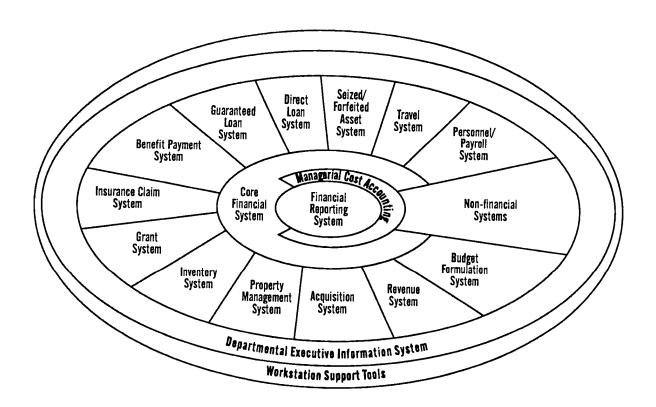
FFMIA	Federal Financial Management Improvement Act of 1996
JFMIP	Joint Financial Management Improvement Program
OMB	Office of Management and Budget
PP&E	property, plant and equipment
SFFAS	Statements of Federal Financial Accounting Standards
SGL	U.S. Government Standard General Ledger

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OVERVIEW

The Federal Financial Management Improvement Act of 1996 (FFMIA) requires, among other things, that agencies implement and maintain financial management systems that substantially comply with federal financial management systems requirements. These system requirements are detailed in the Financial Management Systems Requirements series issued by the Joint Financial Management Improvement Program (JFMIP) and Office of Management and Budget (OMB) Circular A-127, Financial Management Systems. JFMIP requirements documents identify (1) a framework for financial management systems, (2) core financial systems requirements, and (3) 16 other systems supporting agency operations. Figure 1 illustrates how these elements fit together in an agency systems architecture.

Figure 1: Agency Systems Architecture



Source: JFMIP Federal Financial Management System Requirements documents.

To date, JFMIP has issued the framework and core documents and 7 of the 16 systems identified in the architecture. (See figure 1.)1

Authoritative Guidance

OMB Circular A-127 and OMB's <u>Implementation Guidance for the Federal Financial Management Improvement Act (FFMIA) of 1996</u>, issued September 9, 1997, provide the basis for assessing compliance with the FFMIA requirements for agencies to implement and maintain financial management systems that comply substantially with federal requirements. OMB's September 1997 implementation guidance identifies various criteria that an agency must meet to be in substantial compliance with these requirements. One of the criteria listed in the OMB guidance is the JFMIP systems requirements series.

The source of all the questions in this checklist is the JFMIP System Requirements for Managerial Cost Accounting (FFMSR-8, February 1998). This document states the standard, governmentwide system requirements that an agency should consider for systems supporting managerial cost accounting functions, but also allows flexibility to address agency-specific requirements, such as those associated with the choice of costing methodology (activity-based costing, for example). JFMIP notes that the source document is called System Requirements for Managerial Cost Accounting, rather than Managerial Cost Accounting System Requirements, because cost accounting functions may be supported by many types of systems, such as the core financial system, inventory and fixed asset systems, programmatic systems, and others, in addition to systems dedicated to cost accounting.

How to Use This Guide

OMB's 1997 implementation guidance provides chief financial officers and inspectors general with a means for determining whether their agencies' financial management systems substantially comply with federal financial management systems requirements. The annual assurance statement required pursuant to section 4 of the Federal Managers' Financial Integrity Act is one of the means to assist agencies in the determination of

¹Thus far, the series includes the (1) <u>Framework for Federal Financial Management Systems</u>, (2) <u>Core Financial System Requirements</u>, (3) <u>Inventory System Requirements</u>, (4) <u>Seized/Forfeited Asset System Requirements</u>, (5) <u>Direct Loan System Requirements</u>, (6) <u>Guaranteed Loan System Requirements</u>, (7) <u>Travel System Requirements</u>, (8) <u>Personnel-Payroll System Requirements</u>, and (9) <u>System Requirements for Managerial Cost Accounting</u>. In early 1998, JFMIP decided to initiate projects to update system requirements documents that were not current with regulations and legislation. JFMIP also planned to initiate projects to complete the remaining systems requirements where none currently exist. As these projects are completed we plan to issue related checklists.

substantial compliance. Agencies can also use our checklist as a tool to help determine annual compliance with section 4 of this act.

Filling out this checklist will allow agencies to systematically determine whether specific system requirements are being met. In determining substantial compliance, agencies should assess the results of the completed checklist on the system requirements for managerial cost accounting taken as a whole. "No" answers should not be viewed by themselves or taken out of context. Rather, "no" answers should be assessed as to the impact on the overall managerial cost accounting processes and the extent to which the "no" answers inhibit the entire managerial cost accounting processes from meeting substantial compliance.

In the checklist, two columns follow each question. Use the first column to answer each question "yes," "no," or "NA." Use the second column to explain your answer. A "yes" answer should indicate that the agency's managerial cost accounting processes provide for the capability described in the question. For each "yes" answer, the second column should contain a brief description of how the managerial cost accounting processes contain the capability and should also refer to a source that explains or shows the capability.

A "no" answer indicates that the capability does not exist. For a "no" answer, the second column should provide an explanation and, where applicable, a reference to any related supporting documentation. Such explanations could include the following examples: (1) the agency is working on modifying or implementing its managerial cost accounting processes to have the capability available in subsequent years or (2) management believes the capability is not cost-effective and will not enhance the managerial cost accounting processes' ability to manage operations. Cost-benefit studies, or other reasoning, that supports a "no" answer should be identified in the explanation column. If there are no cost-benefit studies or other support, a full explanation should be provided.

Not every guide may apply to each agency. Further, while a guide may be applicable to an agency, certain questions within the guide may not be applicable. Answer such nonapplicable question(s) with "NA" and provide an appropriate explanation in the second column.

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SYSTEM REQUIREMENTS FOR MANAGERIAL COST ACCOUNTING

The JFMIP <u>System Requirements for Managerial Cost Accounting</u> document helps agencies meet government guidance by summarizing the integration requirements and specifying the information and functional processing requirements needed to accumulate and assign cost data consistent with laws and policies.

The summarized integration requirements of managerial cost accounting are discussed as follows.

Integration Requirements - The sources of the integration requirements are OMB Circular A-127, <u>Financial Management Systems</u>, and JFMIP's <u>Framework for Federal Financial Management Systems</u>, especially the Systems Architecture chapter of that document. To be integrated, financial management systems need to have the following characteristics, as described in OMB Circular A-127: common data elements, common transaction processing, consistent internal controls, and efficient transaction entry. (The checklist questions for this area are drawn from pp. I-3 through I-5 of the source document.)

The two requirements areas of managerial cost accounting are discussed as follows.

- 1. <u>Information Requirements</u> These requirements are for the three separate but related classification structures consisting of financial information, operations information, and program information. The financial information classification structure is the primary structure for capturing accounting information, including costs, revenues, and units of input, such as labor, inventory, etc. The operations information classification structure is used to measure the efficiency of an operation and associate costs to outputs. The program information classification structure is used to measure program effectiveness and associate costs to outcomes. (The checklist questions for this area are drawn from pp. II-1 through II-6 of the source document.)
- 2. <u>Functional Requirements</u> These requirements consist of system administration, data capture, indirect cost distribution, cost and revenue calculations, and cost monitoring. The checklist questions for this area are drawn from pp. III-1 through III-10 of the source document.)

The checklist questions follow the JFMIP source document. It should be noted that not all questions will apply in all situations and, as with the use of any checklist, professional judgment should be exercised. Using the JFMIP source document along with the two previously mentioned OMB documents will help ensure that the user is

cognizant of the background information necessary to fully understand the questions and to ensure that the checklist questions are not taken out of context with the source document requirements. Although JFMIP's <u>Framework for Federal Financial Management Systems</u> is primarily a reference tool rather than a standard-setting document, it may also be helpful to the users of this checklist. It describes the basic elements of a model for integrated financial management systems, how these elements should relate to each other, and specific considerations in developing and implementing integrated financial management systems (e.g., documentation).

I	ntegration Requirements	Yes/no NA	Explanation
1.	Do the agency's financial management systems have the following characteristics necessary for integration: - Common data elements? - Common transaction processing? - Consistent internal controls? - Efficient transaction entry?		
2.	Are the managerial cost accounting processes fully integrated with other agency systems, that is, are they designed to eliminate unnecessary duplication of transaction entry and share data elements without rekeying or reformatting?		

I	ntegration Requirements	Yes/no NA	Explanation
3.	Are financial and nonfinancial (e.g., units) data accepted from the core financial system, inventory system, payroll or labor distribution system, property management system, and others? These data include but are not limited to labor costs, material costs, depreciation, labor hours, exchange revenues, and number of items produced.		
4.	Are data provided to the core financial system, inventory system, property management system, financial reporting system, and possibly others? Examples of data provided include work-in-process values, finished goods values, and data for the Statement of Net Costs.		

	Information Requirements	Yes/no NA	Explanation
1.	Are summary data shared with the core financial system and other transaction processing systems?		
2.	Are the data manipulated to support management's analysis and reporting of cost information?		
3.	Are the data captured consistent with the information requirements, and are these data processed according to the functional requirements?		
4.	Are data shared with and returned to other systems and reported according to the reporting requirements?		
5.	If so, are the data defined and classified in order for all this to be done systematically?		

Information Requirements	Yes/no NA	Explanation
 6. Does the information classification structure consist of the following separate but related classification structures: - Financial information? - Operations information? - Program information (optional)? 		
 7. Does the financial information classification structure contain the following essential categories: - Organization unit? - Funding identification? - Accounting categorization? - Program? - Special descriptors? - Accumulators? 		

Information Requirements	Yes/no NA	Explanation
 8. Does the financial information classification structure have at least the following organization unit levels at which financial information is consolidated and reported within an agency or externally to central agencies: Reporting entity, the level at which financial statements are produced? Responsibility segments, required for the statement of net costs for external reporting purposes? Responsibility centers, a level below responsibility segment? Based on existing law and policies (see JFMIP source document for listing), at least the above three levels are needed. A fourth level, ABC Activity, used in activity-based costing, is optional. 		

Information Requirements	Yes/no NA	Explanation
 9. Does the financial information classification structure include the following optional funding identification elements that are used to control the budget formulation and execution processes: Account symbol? Fund year? Although cost accounting at the budget account level is not a specific requirement of the managerial cost accounting standard SFFAS No. 4, these elements have been included to enable an entity to correlate budget accounts with related responsibility centers. 		

Information Requirements	Yes/no NA	Explanation
 10. Does the financial information classification structure contain the following minimum accounting categorization elements used to track assets, costs, and revenues in the cost system: Standard general ledger account? Object class/cost element? Entity/nonentity/ interentity indicator? Federal/nonfederal indicator? Reporting period? Revenue source code (optional)? 		

Information Requirements	Yes/no NA	Explanation
 11. Does the financial information classification structure have, at a minimum, the following program elements to support aggregation of financial information related to specific activities or purposes: Program? Project? Each of these could have several levels (e.g., program, subprogram, or subsubprogram). 		
12. Does the financial information classification structure have, at a minimum, the flexibility to include special descriptors (e.g., geographic location, commodity code) to satisfy management's special information needs?		

Information Requirements	Yes/no NA	Explanation
 13. Does the financial information classification structure provide for accumulating the monthly, current year, 4 prior years, and inception to date total for revenue dollars (optional), cost dollars, planned total revenue dollars (optional), planned total cost dollars, and units? 		
 14. Does the operations information classification structure have the following essential categories: - Operations unit? - Activity type? - Efficiency measures? - Standards? - Accumulators? 		

I	nformation Requirements	Yes/no NA	Explanation
15.	Does the operations unit category of the operations information classification structure include - responsibility segments, - responsibility centers, - program, and - project?		
16.	Does the activity type category of the operations information classification structure identify product/service type?		
17.	Does the efficiency measures category of the operations information classification structure provide information on the efficiency measure type?		
18.	Does the standards category of the operations information classification structure capture information on - planned output units, and - planned output costs?		

I	nformation Requirements	Yes/no NA	Explanation
19.	Does the accumulators category of the operations information classification structure capture information on - output units and - output costs?		
20.	Although not required, if used, does the program information classification structure have the following categories: - program unit, - effectiveness measures, - goals and objectives, and - accumulators?		
21.	Although not required, if used, does the program information classification structure for the program unit category categorize information by program?		

I	nformation Requirements	Yes/no NA	Explanation
22.	Although not required, if used, does the program information classification structure for the effectiveness measures category capture information on planned outcomes?		
23.	Although not required, if used, does the program information classification structure for the goals and objectives category capture information on - quantitative outcome goals and - planned program costs?		
24.	Although not required, if used, does the program information classification structure for the program accumulators category capture information on - outcome measures and - program costs?		

Functional Requirements	Yes/no NA	Explanation
1. Are the information requirements in chapter II of the JFMIP System Requirements for Managerial Cost Accounting supported and is the data classification structure described there used?		
2. Are the other systems' tables (or other data structures) that define codes in the data classification structure accessed, where possible and practical, rather than having a set of tables maintained for these data elements?		
3. If a set of tables (due to system architecture restrictions, for example) are maintained, are the reconciliation and replication of the duplicated data with the other system easy, frequent, and reliable to minimize data integrity problems?		

Functional Requirements	Yes/no NA	Explanation
4. Are authorized users allowed to maintain unique data classification elements (for example, activities in an activity-based costing system) and use them for editing and reporting purposes? Different users may have different access and update capabilities.		
5. Does the cost assignment rules maintenance process support the costing methodologies, cost objects, and resources chosen by the agency for its use?		
6. Is security established and maintained following the computer security policies set forth in appendix III to OMB Circular A-130, Security of Federal Automated Information Systems, to prevent unauthorized access to functions and data?		

	Functional Requirements	Yes/no NA	Explanation
7.	Are data maintained for the periods needed for compliance with applicable standards, laws, and regulations and to meet management's needs for historical information?		
8.	Can data, such as data on costs, units, exchange revenues, and gains and losses be captured and accessed?		
9.	Can all data on costs needed to determine the costs of outputs and the total net cost of the entity's operations, with the appropriate disclosures of the components of net cost (e.g., operating costs, acquisition of mission assets, and exchange revenue) be captured (or shared with other systems)?		
10.	Once captured, are costs stored according to the data classification structure?		

	Functional Requirements	Yes/no NA	Explanation
11.	Can summary information on all costs from the core financial system and other systems of original entry for cost transactions be captured? These costs include, but are not limited to, operating expenses, costs of transfer payments, costs of goods sold, work-in-process costs, and mission asset costs.		
12.	Is direct input of cost information by authorized users with an appropriate audit trail in order to capture costs that are not entered into any other system allowed?		

Functional Requirements	Yes/no NA	Explanation
13. If costs are entered directly, are they summarized and sent to the core financial system for posting to the general ledger? An example of this is recording the estimated cost of goods and services received from another entity without reimbursement and the corresponding financing source to cover it, where the cost needs to be recorded at a level of detail not supported by the core financial system.		
14. Are all data captured (or shared with other systems) on units needed to determine the costs of outputs and the total net cost of the entity's operations, with the appropriate disclosures of the components of net cost?		

	Functional Requirements	Yes/no NA	Explanation
15.	Once captured, are data on units stored according to the data classification structure? Examples of unit information to be captured include amounts and unit types (e.g., hours or items). These data elements are used to represent actual units of inputs and outputs, equivalent units (such as full-time equivalent employees), percentage of a project completed and measurements of outcomes.		
16.	Is information on units from the core financial system and other systems of original entry captured (or shared)?		
17.	Is the direct input of unit information allowed by authorized users with an appropriate audit trail in order to capture unit information not entered into any other system?		

	Functional Requirements	Yes/no NA	Explanation
18.	Is information captured (or accessed) on exchange revenues (net of revenue adjustments) and gains and losses resulting from exchange transactions (net of adjustments) from the core financial system and other systems of original entry (optional)?		
19.	Is the cost of supporting services and intermediate products to the segments that receive the services and products assigned when some responsibility segments of an entity provide supporting services or deliver intermediate products to other segments within the same entity? This is referred to as the intraentity cost assignments.		
20.	Are interentity costs recognized for goods and services received from other federal entities?		

	Functional Requirements	Yes/no NA	Explanation
21.	Are interentity costs assigned to the responsibility segments that use the interentity services and products?		
22.	Are cost methods consistent with the order of preference in SFFAS No. 4, Managerial Cost Accounting Standards, as follows: 1. Directly tracing costs wherever economically feasible? 2. Assigning costs on a cause and effect basis? 3. Allocating costs on a reasonable and consistent basis? The choice of methods depends on their relative costs and benefits. These		
	principles apply to all levels of cost assignments including: (1) assigning interentity costs to segments, (2) assigning the costs of support services and intermediate products among segments of an entity (the intraentity cost assignments), and (3) assigning direct and indirect costs to outputs.		

	Functional Requirements	Yes/no NA	Explanation
23.	Are one or more of the following four costing methodologies described in SFFAS No. 4 supported: - Activity-based costing? - Job order costing? - Process costing? - Standard costing?		
	The managerial cost accounting processes are not limited to these four as long as the methodology used complies with the principles in SFFAS No. 4.		

	Functional Requirements	Yes/no NA	Explanation
24.	Is the summarized impact of cost assignments sent to the core financial system for posting to the general ledger and for external reporting if the cost assignment process affects the values of <u>Standard General Ledger</u> (SGL) accounts in the core financial system's general ledger? If, on the other hand, cost assignment merely moves costs between classification structure elements other than SGL accounts (e.g., organizations and programs), posting changes to the core financial system is optional.		
25.	Are alternate controls in place to ensure that all costs have been properly accounted for if posting to the core financial system is not performed?		
26.	Is either the cost accounting or the core financial system able to report costs upon request both before distribution (i.e., as originally recorded) and after distribution of indirect costs?		

	Functional Requirements	Yes/no NA	Explanation
27.	Is the inventory system (or other property system) supported by accumulating costs from multiple sources for inventory and related property that has been acquired, is undergoing repair, or is in production (work-in-process)?		
28.	Are accumulated costs, including applicable indirect costs, provided to the appropriate system for recording as the appropriate asset or expense type?		
29.	Are cost data provided to systems that need them to calculate revenue amounts for goods and services being produced?		
30.	Are the full cost of general property, plant and equipment (PP&E) under construction accumulated and determined?		

Functional Requirements		Yes/no NA	Explanation
31.	Are the costs maintained for the current period and in total for each construction project and item of property?		
32.	For asset valuation purposes, is information that occurs when a project is completed and construction-in-progress is transferred to the appropriate asset account passed to the core financial system and property management system(s)?		
33.	Are the appropriate property management system's depreciation expenses captured and handled in much the same way that expenses associated with labor, materials, and other items are captured?		

Functional Requirements		Yes/no NA	Explanation
34.	Are the costs of acquiring, constructing, improving, reconstructing, or renovating heritage assets; the costs of acquiring PP&E and the costs of acquiring stewardship land and preparing it for its intended use to comply with SFFAS No. 8, Supplementary Stewardship Reporting captured and classified?		
35.	Is the proper accounting supported for multi-use heritage assets, such as buildings that provide both reminders of our heritage and are used for day-to-day government operations unrelated to the assets themselves?		
36.	Are costs accumulated and maintained for stewardship investments (investment in human capital, research and development, and nonfederal physical property) on an annual basis for stewardship reporting for a period of 5 years?		

	Functional Requirements	Yes/no NA	Explanation
37.	Can cost data needed to produce the Statement of Net Costs for the agency's financial statements be provided?		
38.	Are the exchange revenue data needed to produce the Statement of Net Cost (optional) maintained?		

Functional Requirements	Yes/no NA	Explanation
 39. Do the managerial cost accounting processes support cost management by performing such tasks as the following: - Accumulating costs in agency-defined cost centers that are associated with agency-defined performance measures? - Accumulating numerically valued agency-defined output information? - Calculating the unit cost of outputs? - Produce unit cost reports by output? - Produce project, job order, and work order reports showing costs from inception to date? - Produce contract reports showing revenue and costs? 		

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