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USAID

U.S. Agency for International Development

Managerial Cost Accounting

Business Process Improvement

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Table of Contents

1

1.0 Introduction

Legislation such as the Chief Financial Officers Act, the Government Performance and Results Act (GPRA), the Federal Financial Management Improvement Act and the Information Technology Management Reform Act has brought increasingly complex requirements to the financial management arena. These mandates require that federal managers widen their financial management perspective from budget execution to the preparation of auditable financial statements from reliable accounting systems that are linked to results-oriented performance measurement systems.

The Federal Accounting Standards Advisory Board (FASAB) has issued an array of concepts and standards to provide Federal accounting guidance within this context of legislated financial reform. These standards address a wide range of government accounting issues from contingent liabilities to asset management. One of the most fundamental and crosscutting standards details the framework for managerial cost accounting systems that support financial, as well as performance reporting requirements.

FASAB's Statement of Federal Financial Accounting Standards Number 4 (SFFAS No. 4), *The Managerial Cost Accounting Concepts and Standards for the Federal Government*, enhances the link between financial reporting and performance measurement. The standard which is effective beginning with fiscal year 1998 requires that federal entities establish the capacity to use managerial cost accounting information to provide reliable and timely information on the full cost of federal programs on a regular basis. The end goal in establishing these practices is to provide both Congress and federal managers information needed to improve federal financial and program management decision making, as well as supplying comparative, quantitative data for measuring agency performance.

In fiscal year 1996, Agencies began compiling organization-wide financial statements for audit, developing strategic and performance plans, identifying objectives and defining performance measurements. The convergence of financial and performance reporting initiatives resulting from these mandates and standards will begin to take effect in fiscal year 1998 with the required implementation of the revised financial statement and Annual Financial Report formats prescribed in OMB Bulletin 97-01 *Form and Content of Agency Financial Statements*. In particular, financial statement presentation will include a "Statement of Net Cost" which combines GPRA implementation, managerial cost accounting, and financial statement preparation.

The Statement of Net Cost will provide an understanding of the net costs of an agency's organization and programs, and relate gross and net cost information to the amounts of outputs and outcomes for those programs. OMB Bulletin 97-01 clarifies the integration of reform initiatives, stating that "preparers of the Statement of Net Cost and related schedules should decide the exact classification of suborganizations and major programs based on the missions and outputs described in GPRA strategic and annual plans, the entity's budget structure, and guidance presented in the FASAB managerial cost accounting standard."

In addition, the "Overview of the Reporting Entity" portion of the CFO's Annual Financial Report will link GPRA efforts with the information presented on the Statement of Net Cost. The OMB Bulletin states:

> *The performance measures presented in the overview should relate to the programs' purposes and goals, be consistent with measures previously included in budget*

documents and other materials related to implementation of GPRA, and linked to programs presented in the Statement of Net Cost.

In conclusion, a cost management program is necessary not only to comply with the new accounting standards, but also to implement budgeting and cost control systems necessary to carry out the performance measurement that is at the heart of all of the recent federal financial reform legislation.

The U.S. Agency for International Development (USAID) is pursuing the definition of current and improved financial management processes in support of its financial systems project to replace the AID Worldwide Accounting and Control System (AWACS). PricewaterhouseCoopers (PwC) is under contract with USAID to define the current state environment, research best practices, identify key process gaps, and develop recommended improved process descriptions and work flows. This report includes the results of PwC's analysis of USAID's current capabilities for managerial cost accounting within the context of Federal requirements, best practices information and recommended improvements to move towards a Commercial Off the Shelf (COTS) solution for replacing AWACS.

2.0 Scope and Approach

2.1 Scope

USAID and PwC established a plan for performing business process improvement in the area of managerial cost accounting for the purposes of defining functional requirements for a system to replace AWACS. This plan involved five steps: (1) review of legislative/regulatory requirements, (2) analysis of USAID's current accounting and performance reporting environment, (3) identification of issues to be addressed in defining a cost management program, (4) review of other organizations' practices in cost management and (5) development of recommendations to support managerial cost accounting in USAID's future financial management system environment.

In order to comply with the new Federal requirements USAID will need to define a formal cost management program. Any such program would consist of many activities including strategy development, customer education, assessment of user needs, organizational analysis, cost method evaluation, and pilot implementations. Most of these activities are beyond the scope of this engagement. However, the review and analysis of the current accounting and performance reporting environment vis-a-vis Federal requirements will be valuable to USAID as it takes on a structured cost management program.

2.2 Approach

Since managerial cost accounting as a process does not currently exist at USAID, our approach to Business Process Improvement (BPI) could not follow the typical formula of describing and flow-charting the "as-is" processes, identifying inefficiencies and developing improved work flows. Another complicating factor to BPI in the area of cost management is its broad impact on financial management as a whole and the relationships with performance measurement and budgeting. Because of these issues, we approached BPI for cost management by focusing on the existing system's structure for classifying financial and performance information that may be needed to implement a managerial cost accounting program. Our analysis of issues and recommendations address this existing structure and are more general than would be if we were reviewing actual work processes for a defined cost management program.

As noted above, the first step in PwC's approach was to review and apply the regulatory requirements to USAID's situation. Our review centered on two primary authoritative sources:

- FASAB's SFFAS No. 4, which establishes a framework for managerial cost accounting and
- JFMIP System requirements for Managerial Cost Accounting, which details the structure and data requirements for effective managerial cost accounting systems.

Although other financial reform, management, and reporting documents identify or infer managerial cost accounting requirements, SFFAS No. 4 and the JFMIP requirement represent the most comprehensive and specific guidance on managerial cost accounting for Federal agencies. The CFO Council's document entitled, *The Managerial Cost Accounting Implementation Guide,* provides guidance for agencies in understanding the cost accounting standards and requirements presented in SFFAS No. 4 and by JFMIP. PwC reviewed this guide to supplement the analysis of SFFAS No. 4 and the JFMIP, and incorporated information from this report where appropriate.

Our analysis of USAID's current state environment involved developing an understanding of the accounting classification structure in NMS as well as the agency's Operations model. Our efforts in this area included reviewing documentation such as the agency's Strategic Plan, Annual Performance Plan, Annual Performance Report, Annual Financial Report and CDIE's report entitled *A Performance-Based Budgeting System for USAID.* In addition, we interviewed staff in the Management Bureau's Office of Financial Management, Budget and Program and Policy Coordination (PPC). Finally, we reviewed various policy documents on the New Management System's activity structure and procedures for controlling and tracking funds.

As a result of our analysis of Federal Government requirements and USAID's current accounting and performance reporting environment, PwC identified certain issues that will need to be addressed to support a cost management program in USAID's future COTS environment for financial management. PwC then reviewed cost management practices on-going at other Federal government organizations. All of these tasks led to the development of a set of issues and recommendations for management's attention. Addressing these issues will assist USAID in implementing a managerial cost accounting system that not only effectively prepares the Agency to comply with financial and performance reporting requirements, but acts as a tool that program managers can use to support their decision making.

This report documents the results of our project and is structured to follow the format of our efforts:

- Discussion of managerial cost accounting standards and systems requirements
- Background on USAID's accounting classification structure and performance measurement system
- Discussion of efforts to implement the cost accounting standard at other Federal Government organizations
- Issues and recommendations to assist USAID in implementing a managerial cost accounting system

3.0 Legislative and Regulatory Environment

When implemented, managerial cost accounting will be a fundamental and integrated part of Federal financial management processes and systems and will form the basis of accounting, reporting, and measurement. The goal of the cost accounting standards set forth by FASAB is for agencies to provide reliable, valid, timely, consistent and useful information on the full cost of federal programs and their associated activities and outputs.

The standards presented in SFFAS No. 4 provide a framework around which Federal managerial cost accounting systems should be designed. To provide specific implementation guidelines to Federal agencies, JFMIP published in February 1998 the *System Requirements for Managerial Cost Accounting* to provide the structure and data requirements necessary to implement software that handles managerial cost accounting functions. Such functions can be supported by many types of systems such as the core financial system, inventory and fixed asset systems, and program tracking systems. Together, SFFAS No. 4 and the JFMIP system requirements build upon and provide a means for implementing requirements set forth in GPRA, the CFO Act, and form and content standards for the Statement of Net Cost.

The following sections discuss the requirements of SFFAS No. 4 and the JFMIP system requirements for managerial cost accounting.

3.1 Managerial Cost Accounting Concepts and Standards for the Federal Government, SFFAS No. 4

SFFAS No. 4 aims to establish a framework to guide Federal agencies to implement managerial cost accounting systems that provide reliable, valid, timely, consistent, and useful information regarding the cost of Federal programs, their activities, and outputs. This cost information should help federal managers both internal and external to the agency determine:

- Full costs of specific programs and/or activities;
- The composition or changes in the costs of programs/activities;
- Inputs and outcomes of federal program efforts and their associated costs over time; and
- Efficiency and effectiveness of government efforts to manage its assets and liabilities.

The purposes of using cost information, as outlined in SFFAS No. 4, include more effective budgeting and cost control, performance measurement, reimbursement and rate-setting determination, program evaluations, and economic decision-making. Based on widely accepted cost management concepts, these standards are broad enough to allow maximum flexibility for agency managers in developing costing methods that are best suited to their operational environment.

The following sections discuss the five standards for managerial cost accounting as contained in SFFAS No. 4.

3.1.1 Requirement for Cost Accounting

3.1.1.1 Accumulate, Report, and Document Cost on a Regular Basis

Each reporting entity should accumulate and report the costs of its activities on a regular and consistent basis. This supports management information objectives and legislative actions such as the CFO Act and GPRA.

3.1.1.2 Collect Data from a Common Data Source

The development of full cost information and the assignment of cost to programs and outputs will likely challenge most Federal agencies' information systems. This typically might require interfaces between systems that traditionally have not been linked. If information is originated in multiple systems, it is imperative that sufficient efforts are employed to ensure that the data used is collected in a common data source and processed so that consistent cost and output information is available for management's cost information needs.

3.1.1.3 Provide Appropriate Level Cost Information

The collection, measurement, accumulation, analysis, interpretation, and communication of cost information can be accomplished with a managerial cost accounting system or the use of cost finding techniques and other cost studies and analysis. Regardless of the method, the procedures followed must provide at least a minimum level of managerial cost accounting and sufficient information to accomplish planning, decision making, control, and reporting objectives of the organization.

3.1.1.4 Performance Measurement

The standard emphasizes the relationship of managerial cost accounting to performance measurement and notes that measuring costs is an integral part of measuring performance in terms of efficiency and cost-effectiveness. Efficiency is measured by relating outputs to inputs; i.e., cost per unit of output. Regarding effectiveness, the standard states that *while effectiveness in itself is measured by the outcome or the degree to which a predetermined objective is met, it is commonly combined with cost information to show "cost-effectiveness."* Consequently, the managerial cost accounting system should provide information needed to determine and report efforts and accomplishments of agency services through performance measurement. This includes inputs and outputs and other non-financial information needed to measure performance. Performance measurement information provided by the managerial cost accounting system should also be used to fulfill requirements of GPRA.

3.1.1.5 Special Situations

The managerial cost accounting system should be designed with sufficient flexibility to provide special cost information to accommodate any reporting needs that may arise due to special circumstances. Each agency should determine its basic needs. For example, the agency may use the managerial cost accounting system to provide information needed to respond to congressional inquiries or external partnership information requests.

3.1.1.6 Documentation

The managerial cost accounting system should be documented in a form of a manual, handbook or guidebook and serve as a guide to users.

3.1.2 Define, Establish, and Collect Costs by Responsibility Segments

Management is required to define and establish responsibility segments and their respective outputs. SFFAS No. 4 defines a responsibility segment as *a component of an entity that is responsible for carrying out a mission, conducting a major line of activity, or producing one or a group of related products or services.* In addition, responsibility segment managers report to top management directly and their resources and results of operations are differentiated from those of other segments of the entity. Costs should be collected for each segment, assigned to outputs, and if possible, calculated per unit of each type of output. To accumulate costs, a network of cost centers can be established within a segment. The reporting entity's organization structure and its existing responsibility components, such as bureaus, offices and divisions constitute a basis for defining and structuring responsibility segments. Other factors, such as the entity's outputs or budget accounts and funding authorities, should also be considered when designating responsibility segments.

3.1.3 Full Costs of Outputs

Agencies are required to report the full cost of outputs in general purpose financial reports. "Outputs" are products and services generated from the consumption of resources. Full costs include (1) direct or indirect costs of the segment that contribute to the output regardless of funding source, and (2) the costs of identifiable supporting services provided by other responsibility segments and by other reporting entities.

Direct costs are costs that can be specifically identified with an output and should be included in the full costs of outputs. Examples of direct costs include salaries and benefits for employees who work directly on the output, materials and supplies used in the work, costs for facilities that are used exclusively to produce the output and costs of goods or services received from other segments or entities that are used to produce the output.

Indirect costs are costs of resources that are jointly or commonly used to produce two or more types of outputs but are not specifically identifiable with any of the outputs. Examples of indirect costs include costs of general administrative services, general research and technical support, rent and maintenance. Indirect costs incurred within a responsibility segment should be assigned to outputs on a cause-and-effect basis if feasible or through reasonable allocations. Indirect costs incurred on behalf of other segments or entities should first be directly traced or assigned to various segments that receive the support services and then assigned to outputs.

The standard also describes a category of costs known as *Costs Not Assigned to Programs.* These costs include those instances in which a reporting entity and its responsibility segments may incur general management and administrative support costs that cannot be traced, assigned, or allocated by any reasonable method to segments and their outputs. In such cases, these costs should remain on the Statement of Net Costs as *Costs Not Assigned to Programs.* However, this provision is not to be used to avoid the process of accumulating, assigning and allocating shared overhead expenses.

3.1.4 Inter-entity Costs

Each entity's full cost should incorporate the full cost of goods and services that it receives from other entities. The entity providing the goods or services has the responsibility to supply the receiving entity with information on the full cost of such goods or services either through billing or through other methods.

Receiving agencies must recognize material inter-entity costs that are not fully reimbursed if they (1) are significant to the receiving entity, (2) form an integral or necessary part of the receiving entity's output, and (3) can be identified or matched to the receiving entity with reasonable precision. Unbilled broad and general support services provided by an entity should not be recognized by the receiving agency unless such services form a vital and integral part of the operations or output of that entity.

3.1.5 Costing Methodology

There are two elements of a managerial cost accounting methodology: Cost accumulation and cost assignment.

Cost accumulation is an organized process of collecting cost data for each responsibility segment; it does not involve the assignment of costs from other supporting segments. This standard also requires that the accumulated costs be classified by type of resources, such as costs of employees, materials, capital assets and utilities. Information on units such as staff-days should be maintained if this information is appropriate to the outputs being measured and can be accumulated in a cost-effective manner.

Cost assignment is the process that associates accumulated costs with reporting periods and cost objects. Cost assignment is accomplished through one of three methods: (1) direct tracing, (2) cause and effect basis, or (3) cost allocations. These principles apply to all levels of cost assignments. Agency and program management is in the best position to evaluate and select a costing assignment method that provides the best results under its operating environment. Once a costing assignment method is adopted, it should be used consistently and provide comparable information. While the standard does not prescribe specific costing methodologies, most entities typically select one of the following methodologies: (1) activity based costing, (2) job order costing, or (3) process costing. Standard costing is the process of identifying variances in standard versus actual costs and can be part of any of the three aforementioned methodologies.

3.2. JFMIP Managerial Cost Accounting System Requirements

The JFMIP system requirements for managerial cost accounting were developed to assist agencies in acquiring, developing and enhancing systems that provide information useful in managing and controlling the costs. The requirements set forth by JFMIP serve as a starting point for an analysis. They are not sufficient by themselves to enable an agency to make an informed decision regarding a system's ability to meet its needs for managerial cost accounting. Agencies should integrate their unique information, functional and technical requirements with the JFMIP requirements to determine the complete set of system requirements for managerial cost accounting.

Commercial off-the-shelf software is available that can meet many of an Agency's needs related to cost management. However, agency management must first determine their functional needs including definition of appropriate cost objects, costing methodology and types of costs to be included for different decision making purposes.

The managerial cost accounting system should be fully integrated with other agency core systems and permit sharing of data elements to eliminate unnecessary duplication of transactions. Because of this inherent level of integration, JFMIP notes that the concept of a "managerial cost accounting system" could mean any one of several possibilities including:

- A separately identifiable software module with interfaces or integration points with other systems
- A part of a system labeled as something else (e.g., core financial system)
- Parts of several systems that together make up an agency's single, integrated financial management system as defined in OMB Circular A-127

There are three categories of requirements presented in the JFMIP System requirements for managerial cost accounting: Information Requirements, Functional Requirements and Integration Requirements. The following sections discuss these three categories.

3.2.1 JFMIP Managerial Cost Accounting System Information Requirements

The managerial cost accounting system, unlike most other accounting systems, is an information analysis system rather than a transaction processing system. The system receives summary information from other financial systems, manipulates this information to support management analysis, processes its own transactions to make indirect cost distributions, and generates reports for general and specific agency needs. The system captures data based on organizationally defined agency information requirements and processes that data according to its functional requirements. The managerial cost accounting information requirements presented by JFMIP provide agencies a basis for developing a managerial cost accounting system with three independent but related classification structures. An agency can make additions or deletions to the individual elements provided in these structures to meet its specific managerial cost accounting needs. The three classification structures provided by JFMIP are the following:

1. Financial Information Classification Structure
2. Operations Information Classification Structure
3. Program Information Classification Structure

The managerial cost accounting system shares these classification structures with other financial management systems. The detailed information requirements suggested by JFMIP for each of the three classification structures are described in the following sections.

3.2.1.1 Information Requirements - Financial Information Classification Structure

The Financial Information Classification Structure permits organizations to collect, categorize, track, monitor and report cost information at various category levels. This structure is made up of six essential categories: (1) Organization Unit; (2) Funding Identification; (3) Accounting Categorization; (4) Program; (5) Special Descriptors; and (6) Financial Accumulators.

Table 3.1

Financial Information Classification Structure

Organization Unit	Funding Identification	Accounting Categorization	Program	Special Descriptors	Financial Accumulators
- Reporting Entity - Responsibility Segment - Responsibility Center - Others as Needed	Optional - Account Symbol - Fund Year	- SGL Account - Object Class/ Cost Element - Entity/Nonentity Indicator - Federal/Nonfederal Indicator - Reporting Period	- Program - Project	- Management Special Information Needs	- Dollars -- Revenue (optional) -- Costs -- Planned Total Revenue - Units

- The first level is the *Organization Unit Level.* An organization unit represents the level at which an agency accumulates financial information after it is reported at the program level. At this level, at least three levels of classification are required:

  1. The reporting entity (financial statements are produced at this level),
  2. The responsibility segment (the statement of net costs is produced at this level), and
  3. The responsibility center (a level below the responsibility segment).

- *Funding Identification* is used to control budget formulation and execution and usually includes the account symbol and the fund year. In the managerial cost accounting system, these elements enable the organization to correlate budget accounts with related responsibility centers.

- The *Accounting Categorization* level is used to track assets, costs and revenues in the system and, at a minimum, include:
  1. Standard General Ledger Account
  2. Object Class/Cost Element
  3. Entity/Non-entity/Inter-entity Indicator

4. Federal /Nonfederal Indicator
5. Revenue Source Code
6. Reporting Period

- The *Program level* elements support summary of cost information related to activities or projects. This could consist of several levels depending on the requirements of the organization. At a minimum, the managerial cost accounting system suggests Program and Project. The terms that are used by an agency to represent these levels, however, are irrelevant as long as the appropriate detailed levels are maintained. The nature of the activities of the organization unit will determine the appropriate terms.

- *Special Descriptors* are additional elements that could be used to capture and accumulate costs to meet special information needs. Specific elements are not provided by JFMIP because these requirements may vary depending on individual agency needs. As an example, special descriptors could be used to help an agency respond to congressional inquiries or help support special project or initiatives.

- *Financial Accumulators* are dollar amounts of inputs and related unit information summarized from events in other systems (e.g. labor hours, output units). They reflect time periods to allow the accumulation of monthly, current year, four prior years and inception to date revenues and costs, planned revenue and costs, standard costs, and input units. For example, accumulators provide the ability to group costs incurred for a specific purpose.

3.2.1.2 Information Requirements - Operations Information Classification Structure

The Operations Information Classification Structure measures the efficiency of an operation and provides benchmarks for output evaluation. The operations information classification structure captures information on the outputs of an activity and associates costs to these outputs. This structure uses non-financial information and combines it with cost information accumulated in Financial Information Classification Structure.

Table 3.2

Operations Information Classification Structure

Operations Unit	Activity Type	Efficiency Measures (outputs)	Standards	Operations Accumulators
- Responsibility Segment - Responsibility Center - Program - Project	- Product/Service Type	- Efficiency Measure Type	- Planned Output Costs - Planned Output Units	- Output Units - Output Costs

The following represent the essential categories of the Operations Information Classification Structure:

- The *Operations Unit* represents a combination of organization units and programs as described in the Financial Information Classification Structure. Outputs should be associated to the following units: Responsibility Segments, Responsibility Centers, Program and Project.

- *Activity Type* identifies the type of output to be measured within an operation to act as a management tool to improve the efficiency of selected areas in need of improvement by capturing information on products and services types.

- The *Efficiency Measures* identify the relationship between inputs and volume of outputs for a certain type of activity and provide information in terms of measuring efficiency.

- *Standards* permit the evaluation of an activity by establishing performance targets and allow the managerial cost accounting system to capture information on: Planned Output Units and Planned Output Costs

- *Operations Accumulators* capture the actual number of output units and the actual output unit cost allow comparison to the standards. Therefore, the system should capture information on both output units and output costs.

3.2.1.3 Information Requirements - Program Information Classification Structure

The Program Information Classification Structure is used to categorize cost information to evaluate the effectiveness of the program performance, but data standards for this structure are the least defined. The managerial cost accounting system would be most beneficial if it had the ability to associate program costs with the outcomes identified in an agency's strategic plan. As defined by GPRA, the strategic plan and performance goals are the medium for defining or identifying performance indicators to measure and evaluate outputs, services and activity performance. The SFFAS No. 4 requires only reporting the full costs of outputs in financial statement reports, without reference to the cost of outcomes. However, SFFAS No. 4 does state that, while effectiveness in itself is measured by the outcome or the degree to which a predetermined objective is met, it is commonly combined with cost information to show cost-effectiveness. Therefore, the managerial cost accounting system would be most useful when it has the ability to assess part of the effectiveness of a program by reporting on the costs of the program and of those outcomes which are quantifiable in terms of cost. These categories of the program classification structure are described below.

Table 3.3

Program Information Classification Structure

Programs Unit	Effectiveness Measures (outputs)	Goals and Objectives	Program Accumulators
- Program	- Planned Outcomes	- Quantitative Outcome Goals - Planned Program Costs	- Outcome Measures - Program Costs

- The *Program Unit* is the level to which outcomes will be associated and addressed by the strategic plan. The managerial cost accounting system should categorize information by program.
- *Effectiveness Measures* are the planned outcomes that programs should achieve, for example, the number of new patents developed. Therefore, the system should capture information on planned outcomes.
- The *Goals and Objectives* present management's projected outcomes and results, including those defined in the strategic plan. Therefore, the system should capture information on quantitative outcome goals and planned program costs.
- *Program Accumulators* permit an organization to measure the cost effectiveness of programs by capturing information on outcome measures and program costs.

3.2.2 JFMIP Managerial Cost Accounting System Functional Requirements

As noted above, an agency's managerial cost accounting system may be comprised of several system applications. This is an especially important consideration in reviewing the major functional requirements since many of the data elements required by the managerial accounting functions are shared with other financial management systems. JFMIP groups the major system requirements for managerial cost accounting into the following functional areas:

1. System administration
2. Data capture
3. Indirect cost distribution
4. Cost assignment
5. Cost monitoring

The following sections describe these five functional requirements.

3.2.2.1 Functional Requirements - System Administration

System administration is the maintenance of the static system codes and table structures that control other system functions and is most effective if it is performed together across all of the integrated financial management systems, with no duplication of effort. The personnel in charge of this function will have the responsibility of managing the application level security and data storage for the entire system. The requirements associated with system administration are:

- *Data Classification Structure Maintenance* provides for the accumulation of required accounting information and therefore, supports the information requirements described above in the previous section. The managerial cost accounting system should use other systems' tables wherever possible rather than maintaining its own set of tables. The managerial cost accounting system may also use some unique data classification structure, which should be reconcilable to data from other systems to maintain data integrity at all times.

- *Cost Assignment Rules Maintenance.* Enables authorized users to maintain the rules for distributing costs to cost objects. A cost object is defined as a particular output or service produced, a program, an organization, an activity, or other items that an agency wants to measure. Costs can be assigned to a cost object through one of three ways:

    1. Direct tracing
    2. Cause-and-effect basis
    3. Allocations

Cost assignment rules control the assignment of costs by the managerial cost accounting system. They indicate which method of cost assignment, as listed above, will be used to assign a certain type of cost to a cost object and how it will be applied. A system based on activity-based costing will have a different set of rules than a system using another cost allocation approach for assigning costs. Maintenance of these rules should support the chosen costing methodologies, cost objects, and resources.

Typically, an agency's program costs will be defined as either a direct cost of an output or as a indirect cost of an output. There will be some costs incurred by an agency during a fiscal year, however that are considered "non-production costs." These costs are assigned to programs, but not to outputs because they are related only to a specific period and not to the production of goods and services. An example of such non-production costs would be the costs associated with an agency's reorganization. In other cases, there may be costs incurred by an agency's office for high-level general management and administrative support that are associated with the reporting entity or responsibility segment but cannot be reasonably assigned to the programs or outputs. The managerial cost accounting rules would need to provide for these different possibilities.

- *Security.* As stated in Appendix III to OMB Circular A-130 and reiterated in JFMIP *Security of Federal Automated Information Systems,* security must be established and maintained in the managerial cost accounting system and unauthorized access should be prevented.

- *Data Management.* Data management is the process of storing, retrieving, archiving, purging, and manipulating data. Although data keeping is not strictly a requirement of the managerial cost accounting system, agencies need to keep historical cost information such as the five-year Supplementary Stewardship Reporting requirements. Because of this need, a cost accounting system may be the most logical place to store historical information for trend analysis.

3.2.2.2 Functional Requirements - Data Capture

A managerial cost accounting system must capture data from other systems or allow direct input by authorized users. When data is directly entered into the managerial cost accounting system, an appropriate audit trail should be maintained and a summary should be sent to the core financial system for posting to the general ledger. Captured cost is stored according to the data classification structure and the information requirements. This includes:

- *Cost accumulation.* Cost accumulation is the organized method for collecting cost data within each responsibility segment and does not involve the assignment or allocation of costs incurred by other supporting segments. The managerial cost accounting system is required to capture summary information on all costs. In addition, to support full costing and the preparation of the Statement of Net Cost, the managerial cost accounting system should also retrieve the estimated costs included in the financial system (e.g., contract and grant accruals).

- *Unit Data Capture.* The system should capture units ("standards of measurement") of inputs, outputs and if possible and available, outcomes (direct measurement of outcomes is not a direct requirement of SFFAS No. 4). Information in terms of units is captured by the system to associate units with a cost object and to provide a basis for indirect cost distribution. The managerial cost accounting system needs to capture all data on unit information in order to determine the cost of outputs and the total net cost of the entity's operations, including disclosure of the components of net cost.

- *Exchange Revenue, Gain and Loss Data Capture.* Exchange revenues, gains and losses are included in the calculation of net costs of operations for financial reporting for a reporting entity and agencies are required to collect and report this information in the Statement of Net Cost. It is, however, optional that this data be processed and maintained in the managerial cost accounting system. It may be useful for an agency to maintain this type of data in its managerial cost accounting system at a detailed level consistent with its level of cost information to determine the net cost of a particular cost object. Authorized users may input this information directly into the system, but an appropriate audit trail should always be maintained.

3.2.2.3 Functional Requirements - Cost Assignment

Cost assignment is the process of assigning accumulated costs to costs objects. A cost object may be an activity, organizational unit, a program, product, service, or customer that needs to be measured. A responsibility segment should use managerial cost accounting to measure the costs of its outputs and final cost objects. In many cases there may also be intermediate products that a segment provides that are required in the process of producing the final product or service of other segments within the same entity. In addition, some responsibility segments may provide support and administrative services to other segments within the entity. In these cases, the costs of the intermediate products and the support services should be assigned to the segments that receive those services and products.

The costs that are assigned to the outputs of a responsibility segment include:

- Direct and Indirect costs incurred within the responsibility segment;
- Costs of other responsibility segments that are assigned to the segment; and
- Inter-entity costs recognized by the receiving entity and assigned to the segment.

SSFAS No. 4 does not require the use of a particular method to assign costs to outputs, but does provide several costing methodologies and provides an order of preference for the use of cost methods:

1. Direct tracing of costs wherever feasible.
2. Assign costs on a cause-and-effect basis.
3. Allocate costs on a reasonable and consistent basis.

These principles apply to assigning inter-entity costs to segments, the costs of support services and intermediate products, and direct and indirect costs to outputs. The reliability of these methods has a direct relationship to their costs. In other words, directly tracing costs and assigning costs on a cause-and-effect basis is more expensive to maintain than cost allocations, but produce more accurate cost information. The common characteristic among these methods is that the indirect costs with similar cause and effect relationships to outputs, or similar characteristics for allocation purposes, are grouped into cost pools. If the method used assigns an amount of costs different from the actual costs incurred, this variance should be applied periodically on a reasonable and consistent basis. To enhance financial reporting integrity, the summarized impact of the cost distribution and any resulting adjustments should be posted to the core financial system and the general ledger.

Under a managerial cost accounting system, USAID will be required to accumulate costs of resources that are jointly or commonly used to produce two or more type of outputs but cannot be directly identified with a specific output. There are two levels of these costs:

- Indirect costs incurred within a responsibility segment. A directorate designated as a responsibility segment would have the cost of the Front Office within that Directorate assigned to subordinate divisions and, ultimately, to the related outputs based on cause-and-effect or through reasonable allocations.

- Costs of support services that a responsibility segment receives from other segments or entities. This can be illustrated by an example where the portion of costs of the procurement office that has been used to award contracts should be first directly traced or assigned to other Directorates that benefited from their services, and in a second phase, they should be assigned to outputs.

3.2.2.4 Functional Requirements - Cost Classification

Cost assignment includes classification of costs as operating expenses, assets or stewardship resource costs for each reporting period. Costs that apply to the operation of an entity for the current accounting period should be recognized as expenses of that period. Assets, however, benefit future periods and therefore separate cost calculations are required for them. Assets include inventory and related property and PP&E, and require the following types of calculations to classify their related costs:

- *Inventory and Related Property Calculations.* The managerial cost accounting system provides support to the inventory system. It does not capture information on all items of inventory, but it does accumulate costs such as acquisition costs, repair costs and productions costs. The managerial cost accounting system also provides indirect costs to the appropriate system for recording asset or expense type. Based on the nature of the inventory or related property, the managerial cost accounting system forwards revenue and cost information to the other systems, and receives information from the entity's inventory system.

- *Property, Plant and Equipment Calculations.* SFFAS No. 6 classifies property, plant and equipment (PP&E) as general PP&E, federal mission PP&E, heritage assets, and stewardship land; USAID has determined that the agency maintains only general PP&E. General PP&E are assets that are used and consumed in providing goods and services and are carried as assets on the Agency's books. Since multiple periods benefit from the general PP&E, depreciation is calculated to identify the amount of the PP&E value that was "used and consumed" in providing those goods and services. The cost accounting system should include depreciation expenses for the period, as they represent part of the cost of doing business. The agency should also determine and accumulate the cost of general PP&E under construction and once completed, transfer the value of the project to the appropriate asset account. This information should be shared among the core financial system, the property management system, and the managerial cost accounting system.

In addition to expenses and assets, the managerial cost accounting system should classify appropriate stewardship resources costs. These costs involve large investments by the Federal government for the benefit of the public and consist of heritage assets, national defense PP&E, stewardship land, non-federal physical property, human capital investments, and research and development investments. When these investments are made, they are treated as expenses in the financial statements. The managerial cost accounting system must capture and classify the costs associated with acquisition, construction, improvements, reconstruction, or renovation of heritage assets.

Stewardship investments are treated as expenses when calculating net cost. However, their costs must be accumulated and maintained in the managerial cost accounting system on an annual basis to support stewardship reporting for a period of five years.

3.2.2.5 Functional Requirements - Cost Monitoring

Cost monitoring supports the review of the cost of operations and provides the opportunity for management review of program performance. The managerial cost accounting system should provide the information necessary to produce and support the Statement of Net Costs and statements needed for reporting stewardship resources. It must also have the capability to produce similar cost information at program levels.

Managerial cost accounting is a tool for financial and performance reporting and provides information on the costs of programs and outputs to assist management in identifying areas in need of improvement. The managerial cost accounting system must also be able to support reporting required under GPRA by allowing agencies to include performance indicators that associate program activity with program/service/output costs. Therefore, the system should be able to perform the following functions:

- Accumulate costs in defined cost centers related to the organization's performance measures.
- Accumulate defined numeric output/outcome information.
- Calculate the unit costs of output/outcomes.
- Produce unit cost reports by output.
- Produce project, job order, and work order reports detailing costs from start to date.
- Produce contract reports presenting revenue and costs.

3.2.3 JFMIP Managerial Cost Accounting System Integration Requirements

JFMIP Managerial Cost Accounting System Requirements state that the JFMIP *Framework for Federal Financial Management Systems* and OMB Circular A-127, *Financial Management Systems* are the sources for integration requirements. OMB Circular A-127 requires, that to be integrated, the financial systems must:

- <u>Use common data elements</u>. Standard data classifications should be established and utilized for recording financial transactions. Common data elements should be used to meet reporting requirements, and to the furthest extent possible used throughout the agency for collecting, storing, and retrieving financial information.

- <u>Use common transaction processing</u>. Common methods should be used for processing similar types of transactions throughout the system so the transactions are reported in a consistent manner.

- <u>Implement and maintain consistent internal controls</u>. Controls over data entry, transaction processing and reporting should be implemented, applied, and maintained consistently throughout the system to ensure the validity of the information in the system.

- <u>Ensure efficient transaction entries</u>. The design of the system should be such that duplicate transaction entries are eliminated to the furthest extent possible. Wherever possible, data needed by the systems to support financial processing should be entered only once and other parts of the system should be updated electronically as required by timing and transaction cycles.

4.0 USAID's Accounting and Performance Reporting Environment

USAID is just beginning to apply the requirements of SFFAS No. 4 to its financial management practices and will need to determine the most efficient and effective methods to satisfy the standards. As discussed in the scope section of this report, USAID's limited experience with cost accounting necessitated a different approach in performing process improvement. In order to determine potential gaps in USAID's capabilities to implement a compliant managerial cost accounting system, we focused our review on the elements of the current accounting and performance reporting environment. Specifically, we gained an understanding of USAID's Accounting Classification System (ACS) as it currently exists in the NMS suite of software applications. In addition we reviewed the operations model for managing for results to study managerial cost accounting issues related to budgeting, financial and performance reporting.

4.1 Relevant USAID Systems

The ACS resides in various applications within the NMS integrated suite of applications. Best practices and market surveys of financial management COTS products indicate that the ACS is normally maintained in the core financial system. This situation requires a careful consideration of the effect of a COTS financial management system on the various elements of the ACS that exists in the A&A, BUD and OPS modules of NMS.

The **A.I.D. Worldwide Accounting and Control System (AWACS)** serves as the core financial system and contains the general ledger, funds management, accounts receivable and account payable sub-modules. Transactions are posted to accounts through standardized transaction codes for USAID/Washington transactions only. Field mission transactions are captured at the summary level in the general ledger only. Consequently, expense information at the transaction level is captured for USAID/Washington only by the various ACS elements such as object class, organizational structure and fund accounts.

The **Operations (OPS)** application serves as USAID's program planning, implementation and results tracking system. The backbone of the ACS, known as the Strategic Objective Hierarchy, resides in OPS and is discussed in detail in section 4.3.

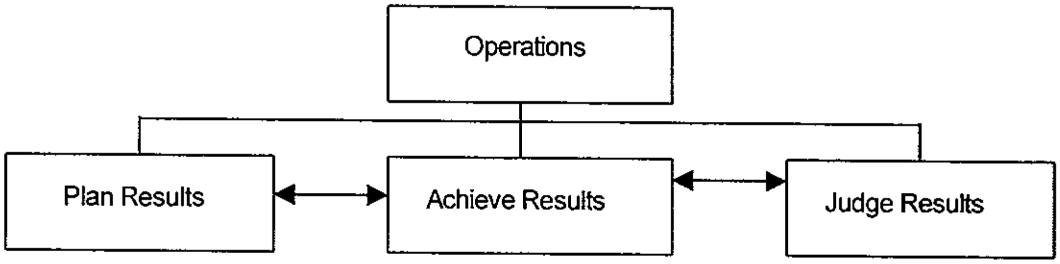
The **Budget (BUD)** application's purpose is to support decision making on resource planning and allocation, streamline and control the distribution of funds, and facilitate budget submissions. The BUD module also houses certain aspects of the ACS including fund account symbol and fund year. In addition, the BUD module duplicates the object class element that also resides in AWACS.

The **Acquisition and Assistance (A&A)** application's primary purpose is to support the agency's procurement management processes. However, A&A functionality includes some basic financial management practices that require duplicative tables for certain aspects of the ACS. For example, fund account tables reside in A&A that record the commitment and obligation of contracts, grants, cooperative agreements and small purchases. Fund account tables for the same purposes are maintained in AWACS.

4.2 USAID's Operations Model

In 1994, USAID completed a reengineering of its method of operating development assistance programs. The important feature of this reengineered operations system is the use of strategic planning to define a framework for making management decisions. Specifically, it is a system in which USAID professionals identify development objectives and results, the achievement of which is supported by related processes including budgeting, procurement, implementation, accounting and monitoring. In short, the focus of the new operations system is on managing for results. The essential functions of this system include the following three distinct processes performed in an interdependent or iterative manner:

Figure 4.1: Operations Model



This operations model supports USAID's agency-wide Strategic Plan required under GPRA. The agency's mission as stated in the Strategic Plan is as follows:

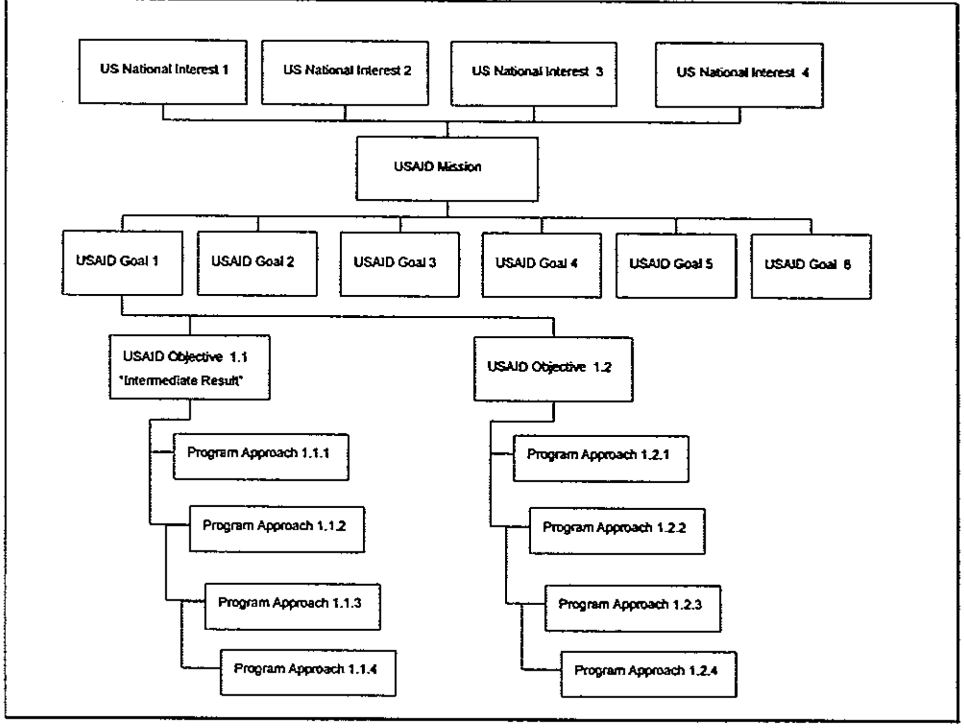
> *USAID contributes to U.S. national interests through the results it delivers by supporting the people of developing and transitional countries in their efforts to achieve enduring economic and social progress and to participate more fully in resolving the problems of their countries and the world.*

USAID promotes its mission and associated goals by achieving objectives or "intermediate results" through a variety of tactics or "approaches." USAID has also defined a list of performance goals and indicators against which it will assess progress and overall effectiveness of its objectives and tactics. Specific performance targets have been identified where possible and are for explicit levels of results to be achieved within the ten year period of the strategic plan. In its September 1997 Strategic Plan, USAID states that it "recognizes that these performance goals are beyond its manageable interest in that their achievement also depends on the work of its partners. Nevertheless, USAID believes that, through its collaborative relationships with host governments and other donors, it can significantly influence the desired results."

The goals and objectives in the Strategic Plan are not the same as the "strategic objectives" of operating units which directly contribute to program results attributable to USAID programs. The Strategic Plan notes that indicators at the operating unit level are expected to be useful for aggregating program results across countries, but are not appropriate as Agency-level performance goals which are attempting to capture the broader country-level progress from the development assistance efforts of all donors and partners. USAID expects to include some program-specific measures in the Annual Performance Plan and Annual Performance Report. However, these are not to be confused with the agency-wide goals and objectives against which performance goals will be monitored, measured and reported under GPRA. This operations model is also supported by the budgetary process in that the budget requests includes a distribution of USAID budget resources across the agency level goals.

The agency-level strategic framework can be depicted graphically as shown on the following page:

Figure 4.2: USAID Strategic Framework



Operating Units' Strategic Plans are a major function of the operations model. These operating unit level plans:

- articulate significant results to be achieved—strategic objectives—and the interrelated results which lead to their achievement
- define a strategic management framework for implementing strategic objectives and continual assessment of the performance
- Provide a basis for requesting resources to achieve results.

Operating units' "strategic objectives" are defined as *significant, measurable results, both quantitative and qualitative, which the operating unit believes it and its partners can achieve and for which the operating unit is willing to be held accountable.* These strategic objectives must be linked to an agency level goal. Approval of the operating unit's strategic plan by USAID/W is, in effect, a contract under which the operating unit agrees to work to achieve the strategic objectives and USAID/W agrees to supply the resources necessary within the constraints of annual appropriations. Annually, a Results Review and Resource Request (R4 Document) is prepared by each operating unit for the purposes of demonstrating performance and requesting a budget for each of the two following years. Actions undertaken to achieve results are known as "activities" which form the basis of the main part of the accounting classification structure—the activity structure. This structure is discussed in the following section.

4.3 Accounting Classification Structure

The activity structure in NMS ties together the four main applications—AWACS, A&A, BUD and OPS. Residing in the OPS module, activities comprise a large part of the structure in which USAID organizes and classifies its accounting information. The Operating Year Budget (OYB) and the distribution of funds through the allowance level occur through this activity structure. All transactions including commitments, obligations and expenditures are made against activities. In addition, reporting on earmarks and directives are tied to activities through the use of emphasis area codes.

As discussed in section 3.2 of this report, the JFMIP system requirements for managerial cost accounting are developed from information requirements that are supported by the core financial system's accounting classification structure as well as operational and program information structures. To understand the gaps and associated issues with data that USAID is currently capturing in its systems vis-a-vis the JFMIP system requirements, a review and analysis of the Agency's classification structure is necessary. In addition, since a majority of the classification structure is defined outside of the core financial system, there will be several integration issues for USAID as it moves towards a COTS replacement of AWACS.

4.3.1 NMS Activity Structure

The activity structure consists of USAID's organizational hierarchy, system-generated activities and user-created activities. The different types of activities are as follows:

1. The *Organization and Program Structure Activities* make up the first level of the activity structure. This first level includes administrative expense cost centers for USAID/Washington support services for the Housing Guaranty Program, the Office of the Inspector General, the MSED loan program and Operating Expenses. In addition, this first level of the activity structure includes Bureaus, Missions, Independent Offices and "non-presence" country programs. Organization and program structure activities are automatically generated by NMS and are available for review in the OPS Activity application.

2. The *Support Budget Activity* resides below each organization/program level activity and is used for funds related to operating expense budgets and those cases where USAID is authorized to use program funds for administrative management purposes. This level of the activity structure is also system generated and available for viewing in the OPS Activity application.

3. *Operating Unit Objective Activities* represent the highest level program result the operating unit is committed to achieving. These include the Operating Unit Strategic Objective, the Special Objective and the Strategic Support Objective. This level of the activity structure is created by users in the OPS Results Tracking application.

4. *User-Created Activities* are the user's structure for organizing and managing the commitment, obligation and expenditure of funds for achieving program results. User-Created Activities must be subordinate (child) activities of Operating Unit Objective Activities. As the name implies, these activities are created by users, but unlike Operating Unit Objective Activities, User-Created Activities are created in the OPS Activity application and not the Results Tracking module.

There is no limit to the number and levels of activities that can be created in the OPS module. However, limitations do exist regarding the types of transactions that can be carried out depending on the number and levels of activities that are created. The accounting uses of the activity structure are discussed in the following section.

4.3.3 Accounting Transactions Using the Activity Structure

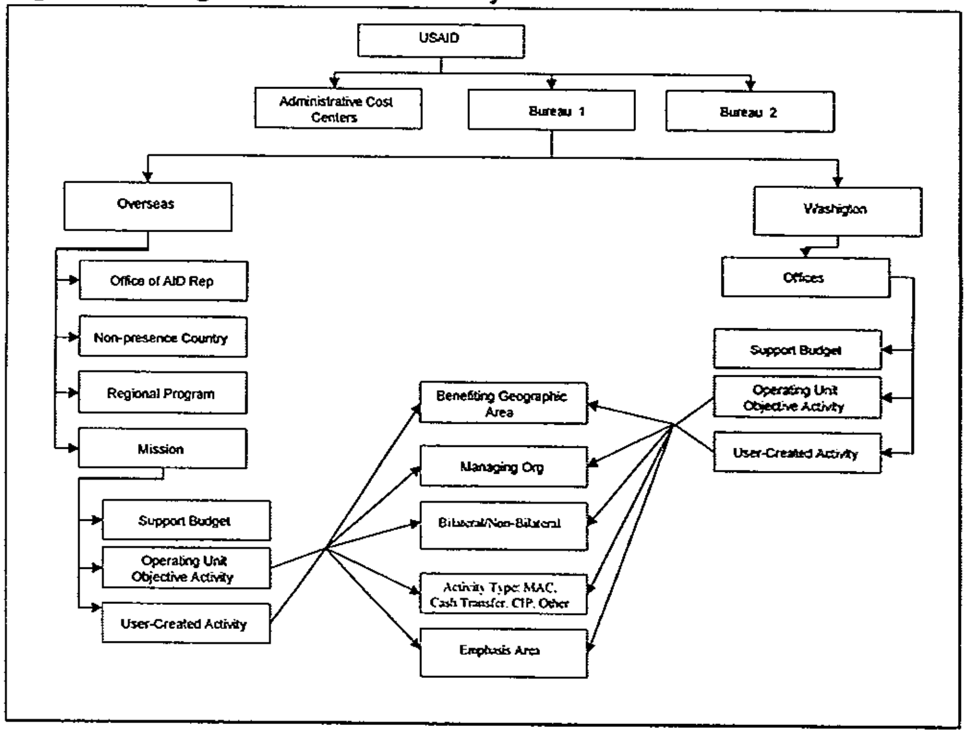
The following basic accounting functions are carried out through the activity structure: distribution of the OYB, distribution of allowances, recording of commitments and obligations, and tracking of congressional earmarks and directives.

Once funds have been distributed to the bureau level, further *Distribution of the Operating Year Budget* to activities at any level of the activity structure is performed in the BUD module of NMS. In order to be able to commit and obligate these distributed funds, *Distribution of an Allowance* to an activity is performed through the AWACS module of NMS. However, once commitments and/or obligations are recorded against an activity, fund balances and/or additional funds cannot be further distributed to lower level activities. Commitments and obligations are recorded against activities in both the A&A and AWACS modules of NMS. In the A&A module, commitments and obligations are for procurement instruments such as contracts and grants. The AWACS module allows commitments and obligations for miscellaneous activities and bilateral agreements and their associated sub-activities. Because of the limitation against distributing and committing/obligating funds, Operating Unit Objective Activities are used to distribute funds only and not to record bilateral commitments or obligations. A lower level activity must be created and designated as bilateral in order to commit and obligate a bilateral agreement. In order to sub-commit and sub-obligate funds, at least one sub-activity to the bilaterally designated higher level activity must be created. However, once funds are sub-committed and/or sub-obligated, they cannot be further distributed to other sub-activites. In addition, all sub-activites created under the bilateral parent activity are generated by the system as bilateral. As a result, any need to changes the designation of funds from bilateral requires the deobligation/decommitment of the bilateral activity and redistribution of funds to the appropriate activity to be recommitted and reobligated.

4.3.2 Emphasis Area Coding

Emphasis Area (EA) codes are used to track congressional earmarks and directives and determine amounts obligated against Agency level goals and objectives. All EA codes are applied by fiscal year and fund account and are applied at the objective level or at any activity level below the objective. Codes applied at lower level activities are aggregated and the results are captured at upper levels including the objective level. There are five types of EA codes: Primary Purpose, Secondary Purpose, Beneficiary, Type and Institution. Policy on coding is on a bureau by bureau basis within the parameters of the certain basic rules. There are several possibilities and combinations of coding which is highly dependent on user decisions and data entry. This activity structure is shown below:

Figure 4.3: Organizational and Activity Structure



5. 0 Federal Government Practices in Cost Management

This section provides an overview of other Federal agencies that have instituted Managerial Cost Accounting programs within the past several years. The organizations presented have implemented best practices in cost accounting, and have dealt with many of the issues USAID faces today. The purpose of this section is to provide USAID with practical examples of how other organizations are instituting cost accounting requirements and the benefits they have achieved.

National Science Foundation (NSF). To develop an action plan for implementing a cost management program, NSF started a project to evaluate its ability to comply with SFFAS No. 4 and the JFMIP system requirements. This evaluation consisted of a review and documentation of NSF's current systems environment by focusing on the availability of data and information necessary to support a managerial cost accounting system. In addition, the evaluation identified ongoing cost allocation activities and the Foundation's facilities for collecting and reporting information on input-to-output relationships.

As a result of this evaluation, issues were identified that need to be addressed to form the basis for a managerial cost accounting program. Specifically, NSF needs to:

- Link its strategic plan and performance information. The study noted that the strategic plan lacks connections between strategic goals and day-to-day operations. The agency's outcome goals as defined in the strategic plan consist of qualitative goals (e.g., *Discoveries at and across the frontier of science and engineering)* measuring factors that are beyond the control and direct influence of NSF. To link the strategic plan to its annual performance plans NSF developed four Key Program Functions around which it intended to request a restructuring of its appropriations. This realignment of program areas to the budget was deemed necessary since the goals could not easily be linked to the existing budget structure and would therefore limit NSF's ability to reasonably identify and assign costs to programs.

- Define the "reporting entity" in terms of Responsibility Segments, Responsibility Centers, and programs, recognizing that this framework should support the higher-level requirements relevant for financial reporting as well as the more detailed program management information needs.

- Determine the most appropriate system format, platform, and processes to collect, distribute, and report managerial cost accounting information. NSF also needs to identify the organization responsible for developing and maintaining, or "owning," this system.

- Determine the appropriate steps and processes that must be developed to capture and distribute the agency's direct and indirect costs by Responsibility Segment and program.

- Select the appropriate cost assignment technique to apply throughout the organization. In addition, NSF will have to determine the basis of and formulas for allocating items not directly traceable to programs.

NSF is just beginning to address these issues and is implementing an interim solution to meet the FASAB financial statement and SFFAS No. 4 requirements for fiscal year 1998. NSF has recently learned that it will not be able to restructure its appropriations to be aligned with the key program areas. This situation will require NSF to revisit its strategic plan vis-a-vis performance reporting and efficiency measures.

National Aeronautics and Space Administration (NASA). NASA initiated its *Full Cost Initiative* in 1995 in response to direction from the Agency Administrator, emerging Federal cost accounting standards, and evolving management information requirements. The overall objective of the full cost initiative is to enhance cost-effective mission performance by modifying the way NASA does business so that managers are provided with information which supports better plans and decisions. Currently, costs directly related to programs and projects, Civil Service personnel and infrastructure, are managed budgeted, and accounted for separately. These costs are not routinely combined in a systematic fashion to arrive at the total resources consumed in the successful completion of a project. Moreover, there is considerable variance in the extent to which project managers control different types of costs.

Under NASA's new full cost practices, project managers must assume a new role as they strive to manage or influence the total costs of their projects. Full cost management supports more control by project managers over costs related to their activities. However, the use of full cost management, budgeting, and accounting does not in and of itself change the infrastructure; rather, it more clearly discloses infrastructure costs, and their relationship to projects, while facilitating the decision making process.

The concept of full cost ties all Agency costs (including Civil Service personnel costs) to major activities. There are no "free resources. All costs must be associated with an activity, commonly referred to as a cost objective. Based upon experience gained during the Prototype Phase of the full cost initiative, NASA will use projects as cost objectives for managing, budgeting, and accounting.

While costs may be categorized in many ways, NASA's full cost approach separates costs into three categories:

- **Direct Costs** – Costs that are obviously and physically related to a project at the time they are incurred and are subject to the influence of the project manager. An example of a direct cost would be project labor, whether provided by Civil Service or contractor employees.

- **Service Costs** – Costs that cannot be specifically and immediately identified to a project, but can subsequently be traced or linked to a project and are assigned based on usage or consumption. Examples of service costs include automatic data processing and fabrication.

- **General and Administrative Costs** – Costs which cannot be related or traced to a specific project, but benefit all activities. Such costs are allocated to a project based on a reasonable, consistent basis. Examples of G&A costs include costs associated with financial management, procurement, security, and legal activities.

The full cost of a project is the sum of all direct costs, service costs, and G&A costs associated with the project. Because service and G&A costs, by definition, cannot be immediately and directly identified with a specific project, cost pools will be used to accumulate costs of similar purpose. A variety of methodologies will be used to distribute costs to projects. In the case of service costs, usage or consumption data will be used to assign costs to a benefiting project. G&A costs will be allocated to projects based on project direct labor.

NASA's full cost initiative has been managed by a team from both NASA headquarters and regional center managers as well as support from outside consultants. There are six phases to the project:

Phase I:	Concept and Approach	1995
Phase II:	System Requirements	1995/6
Phase III:	Prototype	1996
Phase IV:	Agency-wide Testing	1997/9
Phase V:	Implementation	1999
Phase VI:	Operational	2000

Phase I involved visits with industry representatives and other Federal agencies to develop a concept and approach for implementation of full cost practices. The system requirements phase identified basic cost accounting, budget and management requirements to support the full cost initiative. These requirements were integrated into NASA's ongoing Integrated Financial Management Project. Prototype testing activities were done at Headquarters and three NASA Centers to evaluate the full cost concept and approach. The prototyping demonstrated that full cost practices could be implemented in NASA but that existing systems could not efficiently support full cost practices. NASA continues to test the full cost concept at all Centers and has focused on:

1. Testing full cost budgeting by recasting the fiscal year 1999 budget into a full cost format;
2. Testing full cost accounting by applying cost finding techniques to six months of fiscal year 1997 accounting data to determine program/project costs; and
3. Identifying issues which needed to be resolved before full cost implementation.

The full cost initiative has evolved during the first four phases as issues arose, alternative approaches were developed and evaluated, and solutions were chosen. From its early experience, NASA developed an implementation guide for the full cost initiative that serves as guidance for testing and implementation of full cost practices. NASA expects to update the guide at the end of the testing phase in order to use it as a reference source for full cost operations and include it in its system of financial management manuals.

United States Coast Guard (USCG). The USCG is currently undertaking an Activity Based Costing project for the Marine Safety and Environmental Protection Directorate (M Directorate). The project has the following major purposes:

- Identify and cost the work activities of the M Directorate
- Provide a link from those activities to the M Directorate program components
- Set the framework for applying ABC throughout all operational components of USCG.

The USCG M Directorate spends tremendous resources performing environmental protection activities that maintain U.S. coastline and intracoastal waterways. USCG established an ABC project team to define and determine the full cost of the major activities that support these environmental services. Activities and products analyzed include work performed in response to the threat of pollution and marine disasters that impact the environment; all aspects of the USCG's work related to Vessel Traffic Services, from routing services in busy harbors to ship traffic assistance provided in U.S. coastal waterways; and required vessel inspection work..

This project determined appropriate cost assignment of resources to each activity and product The ABC team conducted intensive activity and product development workshops, and validated all field-related work through survey tools with field personnel. The scope of work covered FY 1997 and provided detailed support in spreading an understanding of ABC throughout Marine Safety and Environmental Protection. During the project, the ABC team coordinated instructional briefings, formal training, group facilitation, interviews and work reviews. The project required in-depth financial analysis to develop accurate expense listings and to assign these expenses to activities and outputs. The project team also integrated data from the USCG measurement system to help relate activities to outputs. The ABC project was needed to help answer demanding questions by Congress and OMB on how and where Marine Safety and Environmental Protection was spending its funding resources.

The USCG ABC team is currently developing a method for linking the ABC efforts with the GPRA strategic goals set forth by the M Directorate. The team is identifying causal relationships between the M Directorates products/services to program components within the USCG. After determining the relationships between products/services to USCG program components, the team will identify the relationships between M Directorate program components and GPRA strategic goals.

Veterans Benefit Administration (VBA). In November, 1997 the VBA identified the need to implement Activity Based Cost Management (ABCM) across the administration. The VBA required a detailed activity-based costing (ABC) implementation to determine the unit cost of their work products. A successful ABC system by the end of fiscal year 1998 has been defined as one that provides unit cost for significant VBA products by station, business line, and consortia. The system will provide cost for key activities (work steps) that go into developing the products and integrate with the VBA Balanced Scorecard performance measurement initiative.

VBA is implementing a phased approach to define the ABC system and related data reporting over time. The project is being carried out by the Office of Resources Management (ORM) ABC Team. The ORM ABC team is responsible for the daily planning, management and implementation of ABC at the VBA as defined by an Executive Steering Committee. During the initial phase of the project, the ABC project team defined resources, activities and work products for several VBA locations including the Central Office, Hines Data Center, St. Louis, and Philadelphia. Since then, six organizations within VBA have conducted pilot ABCM implementations. Initial results indicated that ABCM provides managers with the information necessary to determine the costs of activities associated with delivering a product or service as well as the cost of the product/service itself. Additionally, ABCM has created areas of opportunity for improving various process steps within each VBA line of business. Based on the results of the pilot implementations, the VBA Executive Steering Committee decided to implement a Cost Management Information System (CMIS). The objectives of the CMIS are to:

- Establish and validate one centralized ABC model for the VBA.
- Standardize the resource types, activities, and products/services offered by each line of business
- Integrate ABC/M with VBA performance measure initiatives
- Develop the technical infrastructure to support an enterprise-wide information management system that provides a systematic approach for periodic data inputs, informational reports, and a centralized data warehouse
- Develop a VBA CMIS communication plan and ABCM training plan

The target completion date for the CMIS is October 1, 1998.

US Department of Energy. In FY 1995, the Energy Department's Office of Energy Research (ER) embarked on a large-scale Activity Based Costing initiative to provide management with information that would allow thoughtful, informed, data-based decisions about the internal processes that drive all of the organization's work. Key to this endeavor was an ABC study that gave ER a baseline definition of all its activities and the costs associated with each. In an environment of declining resources, this information was deemed crucial for ER management to increase efficiency and productivity. ER used an Activity Based Costing methodology to identify key processes and activities performed in the organization, determine their costs, and identify work products and customers for each activity. The effort showed total cost and full-time equivalents (FTEs) by core process, sub-process, and activity for ER as a whole, for each ER office, and for each category of ER federal employees, Intergovernmental Personnel Act employees (IPAs), details, and support service contractors. In addition, the ER ABC team developed an activity process model, which defines the organization's core processes, sub-processes, and activities, and an activity dictionary, which provides a detailed definition and set of examples for each activity. The team also identified the outputs generated by each activity and the customers of the outputs.

Next, the ER ABC team developed and compiled the results of a time allocation survey, which measured how 100 percent of ER employees distributed their labor across all of the activities. In addition to labor costs, data was collected on travel costs, support services contractors, IPAs, and details. This enabled the team to develop an ER cost model, which is a derivation of total cost and FTE level for each activity, sub-process, and core process. Finally, the ABC team provided its preliminary analysis, observations, and recommended next steps to the ER Executive Steering Committee and ER employees. As a result of this effort, ER is now equipped with a thorough assessment of its activities and their costs, as well as the FTEs, customers, and outputs associated with each activity. In addition, ER has an analysis of improvement opportunities that identifies cost drivers and performance measures for each opportunity. ER management has obtained a clear definition of the top priority areas for improvement and re-engineering through a detailed analysis of the data provided by the ABC study. As changes are implemented in business processes using the ABC data as a catalyst, ER management will fully capitalize on ABM as a business management tool, thereby fulfilling the ultimate goal of the project.

6.0 System Implementation Issues and Recommendations

The managerial cost accounting system at USAID should be designed to: (1) produce the information and reports required by the Federal regulatory environment and (2) assist in the decision-making processes of management at all organizational levels. The managerial cost accounting system requirements presented in section 3.2 should be viewed as the means by which to accumulate, process, assign data, and to produce reports. A successful system implementation, however, does not ensure that the managerial cost accounting system will be successful. Management must also put into place the foundation of the system and implement the appropriate management processes at all layers in the organization.

USAID must address a number of issues before the appropriate management processes can be fully implemented. Based on the analysis of the Federal regulatory requirements and USAID's current accounting and performance reporting environment, PwC developed a comprehensive set of issues and recommendations. In addressing these issues, USAID will define a program for managerial cost accounting and the parameters by which the phases of implementation will be designed.

These issues are presented in the following sections.

6.1 USAID Should Define its Objectives for Managerial Cost Accounting

The objectives for the managerial cost accounting system must be clearly stated and should convey USAID's commitment to use cost accounting as a means to meeting the requirements of GPRA, as well as financial statement reporting requirements. Best practices show a strong correlation between a commitment from the highest levels of management and a successful implementation of cost management programs. The objectives should support USAID's commitment to be more accountable for achieving program results as compared to its goals presented in the Agency's five-year strategic plan and annual performance plans.

These objectives will help communicate to USAID personnel why the need for a managerial cost accounting system exists and that the cost information provided by current systems is insufficient to meet Federal requirements. The goal of clearly stating these objectives is for USAID employees to buy into the concept of managerial cost accounting and serve as willing participants in the implementation of the system.

6.2 USAID Should Define the Needs of Its Cost Accounting Audience

In its operations reengineering project, USAID identified one of its four core values to be a "customer focus." As such, USAID defined "process customers" to be stakeholders and reserved the term "customers" to refer to the end user of development assistance. In the Business Area Analysis for Operations, USAID addressed the concept of customer focus as follows:

> *For the purposes of reengineering, we recognize the importance and function of customers as well as stakeholders, and build into our processes mechanisms which meet their needs, while focusing on the end user or customer where our ultimate interests and objectives can be achieved. For example, to improve the economic well being of disadvantaged farmers through a country program requires resources, and acquiring those resources necessitates meeting the needs of Congress for information which demonstrates that the program is effective and managed efficiently. Also, it requires some form of service delivery system, and establishing that may necessitate understanding and meeting the needs of the government and NGOs for technical expertise and infrastructure support. Thus, USAID's function is to play a key role within a network of stakeholders (including partners) to ensure that customer needs are met, and this means improved and more effective participation in our processes by customers as well as by partners and other stakeholders.*

In this same regard USAID must identify the specific audience for cost information, both internal and external to the Agency, who will benefit from the managerial cost accounting system. Once this audience is identified, USAID must gain a detailed understanding of the needs of these customers in regards to the outputs of the system. These USAID customers can include, but are not limited to the following:

- Senior internal management will use the cost information to help make decisions, respond to OMB and Congress and measure the efficiency and cost effectiveness of program performance.

- Program managers are the primary users of the cost information provided by the system. Information produced by the cost system will assist managers improve the efficiency of operations by increasing their awareness of the costs of their operations, ensuring that resources provided are spent wisely and focusing on performance.

- The Management Bureau is responsible for producing the Agency's budget and financial statements. The managerial cost accounting system can enhance the budgeting function and is necessary for financial statement preparation since it provides detailed cost information regarding the resources used by different programs.

Federal Government Organizations such as Congress, the Office of Management and Budget, and the FASAB, require USAID to respond to various Federal acts and standards, such as GPRA, GMRA, and the CFO Act. A managerial cost accounting system will give USAID the ability to gather cost information to respond to these external customers, justify budget submissions, satisfy OMB and FASAB recommendations, and provide costing information to respond to congressional inquiries. A cost accounting system should enable USAID to track the obligation as well as the expenditure of funds that are subject to congressional earmarks and directives.

6.3 Output Measures Must be Identified

USAID pursues its mission through six strategic goals and one management goal. These agency level goals as presented in the Fiscal Year 1999 Performance Plan have performance goals which measure outcome level achievements, the majority of which are beyond the direct control of USAID. USAID does not define output type goals and measures that can be directly traced to the daily operations of its business and thereby related to the costs of the Agency. USAID will want to ensure that its performance is not solely measured against accomplishments that it cannot directly control.

The main objective of GPRA, as stated in the act, is to "*present Congress with budgets that show a direct relationship between proposed spending and expected results, along with anticipated effects of higher or lower amounts*," and provide quantifiable information on which to base their funding decisions. Therefore, the Agency should also include goals that can be expressed in a quantifiable manner and measured in terms of outcomes and outputs of factors that are under the Agency's control. For example, USAID's strategic goal "World Population stabilized and human health protected" is measured at the outcome level using the following indicators:

- Total fertility rate
- Under five mortality rate
- Prevalence of underweight children under five
- Early Neonatal mortality rate (proxy for maternal mortality rate)
- HIV seroprevalence rate in 15-49 year olds

Annual output level efficiency measures that are directly attributed to the results of USAID's funding have not been included in USAID's strategic framework for this Agency goal. Examples of such efficiency measures may include the number of: contraceptives distributed, information campaigns launched, inoculations performed and child health care clinics funded. USAID will need to define such output measures.

Another issue regarding output measures is that the results frameworks at the individual Mission unit level do not have consistent measures that would support the aggregation necessary to report in accordance with SFFAS No. 4. Regardless of the definition of responsibility segments and centers, USAID will need to establish output level measures on a consistent basis throughout the organization.

6.4 USAID Must Define its Responsibility Segments and Centers.

As required by SFFAS No. 4 and JFMIP, USAID should define responsibility segments and responsibility centers. The selection of the segments and centers creates the structure within which cost accumulation, methodologies and reporting will occur.

SFFAS No. 4 defines a responsibility segment as a "component of a reporting entity that is responsible for carrying out a mission, conducting a major line of activity, or producing one or a group of related products or services. Responsibility segments usually possess the following characteristics: (1) Their managers report to the entity's top management directly; (2) Their resources and results of operations can be clearly distinguished from those of other segments of the entity." SFFAS further states that some reporting entities may have only one responsibility segment, if they perform one single mission, conduct only one line of activity or produce only one type of product and/or service.

USAID has the flexibility to determine responsibility segments in relation to appropriations as they are presented in the budget or based on outputs, organizational structure, or program areas. USAID's organizational structure easily translates into responsibility segments because the Bureaus conduct development assistance for different geographic areas, Assistant Bureau Administrators report directly to the Agency Administrator and one Bureau's resources can be clearly distinguished from another Bureau's. In addition, the agency's core financial system captures activity based on the Bureau organizational structure.

For the first Statement of Net Costs that will be prepared for fiscal year 1998, USAID has determined that it will have only one responsibility segment. This decision was based on the conclusion that USAID has one single mission. We believe that this conclusion is not supported by the requirements of FASAB and JFMIP. In addition, we believe that the information resulting from a cost program based on one responsibility segment will not provide the type of cost information that USAID needs to benefit from the opportunities presented in measuring full costs. In reevaluating this decision, USAID should keep in mind that the Statement of Net Costs has to be produced at the responsibility segment level and tie program costs to program outputs. Regardless of the organization level at which USAID assigns responsibility segments, the issue of consistent outputs that can be aggregated from individual operating units to the responsibility segment level will need to be addressed.

6.5 USAID Should Perform Pilot Programs at the Operating Unit Level

Best practices in establishing cost management programs have shown that pilot programs are very valuable in fully defining cost accounting needs. USAID should select an operating unit that is representative of a typical USAID unit with program related activities. If possible, this organization should fit into USAID's definition of a responsibility segment and have a few responsibility centers associated with it. For example, a regional Bureau naturally fits the definition of a responsibility segment and Missions may be considered responsibility centers. USAID will benefit from the Pilot Project in the following ways:

- USAID will have the opportunity to test the definitions of managerial cost accounting objectives and customers, and the selection of responsibility segments and centers. Based on the results of the pilot, USAID may determine that the definitions are not appropriate and take opportunity to redefine them before implementing the managerial cost accounting system agency-wide.
- USAID will be able to fully explore the concept of "full costing."
- USAID will have the opportunity to explore various cost accumulation and assignment techniques.
- USAID will be introduced to the process required to select activities within an organization, including their associated outputs, units of measure, and workload monitoring techniques.

6.6 USAID Must Gain Agency-wide Management Support for Managerial Cost Accounting

It is important that USAID communicate the need, as well as the Federal requirements, for a managerial cost accounting system and inform its customers of the benefits of such a system. Program managers must realize that managerial cost accounting is not just another accounting exercise affecting and benefiting only federal financial managers. Managerial cost accounting should be communicated as a tool to support program manager's decision making activities by providing cost and performance data regarding the various processes involved in the day-to-day functions of their organization. Cost information on budgeted and actual costs assists managers in planning and cost control. Performance information assists managers in making decisions regarding staffing, resource allocation, work assignment, and cost savings measures.

USAID must determine the best plan to communicate the benefits of managerial cost accounting to USAID personnel. This may include training sessions or internal conferences. USAID must ensure the Agency gains full support and commitment it needs to make the managerial cost accounting system's implementation a success.

6.7 Information Requirements Issues

The following three sections summarize the JFMIP information requirements for financial, operations and program information and the gaps/issues that USAID must address as it implements a cost accounting system.

6.7.1 Financial Information

The following matrix summarizes whether USAID is currently capturing the information needed to comply with JFMIP Financial Information Classification requirements.

Table 6.1

JFMIP Requirements		Current Capabilities
Organizational Unit	Reporting Entity	Captured
	Responsibility Segments	Mostly Captured
	Responsibility Centers	Mostly Captured
	Others as needed	Partially Captured
Funding Identification	Account Symbol	Captured
	Fund Year	Captured
Accounting Categorization	SGL	Captured
	Object Class/Cost Element	Captured
	Entity/Non-entity/Inter-entity Indicator	Captured
	Federal/Nonfederal Indicator	Captured
	Reporting Period	Captured
Program	Program	Partially Captured
	Project	Partially Captured
Special Descriptors	Special Management Information Needs	Partially Captured
Financial Accumulators	Revenue Dollars	Captured
	Cost Dollars	Captured
	Planned Revenue Dollars	Partially Captured
	Units (e.g., labor hours)	Not Currently Captured

Below is a summary of the issues USAID must address in order to comply with JFMIP Financial Information Classification requirements.

- *Cost Accumulation at Organizational Unit Levels.* Based on the Responsibility Segment selection, management will need to assess the cost accumulation capabilities and address any deficiencies as necessary. We encourage USAID to consider long-range information needs for program cost identification and GPRA implementation and cost benefit implications when deciding how to define Responsibility Segments. Although USAID has determined to report only one responsibility segment for fiscal year 1998, we believe this structure should change to provide for more meaningful accounting through multiple responsibility segments.

  Given the existing organizational structure and the resulting operations and policy framework, it may be follow that Regional Bureaus be designated as responsibility segments and Missions as responsibility centers. An example of information not available in NMS is the fund status (commitments, obligations and expenditures) for "Field Support." In addition, fund status by non-prescence countries is also not available in the current system. These are both examples of information that is needed to support the results-oriented focus and measurement of the full costs of USAID programs.

- *Cost Accumulation at Program Levels.* Currently USAID can directly accumulate costs at the Agency Goal level for USAID Washington and through a crosswalk from MACS for Mission programs. JFMIP suggests two levels in the Program Level structure to track and control: (1) programs, and (2) projects. USAID must determine the appropriate level of detailed data it wishes to maintain. The needs of program managers should be an important factor when defining these levels based on their program level cost accumulation requirements. For example, USAID does not currently use the term "project" in its current structure. However, USAID does have a need to track funds by individual strategic objectives—either bilateral or non-bilateral. AWACS can not track incremental funding of bilateral agreements. USAID should ensure that this capability is added to its program structure in the new system.

- *Special Descriptors Need to be Defined.* To respond to managerial cost accounting objectives, USAID should review the use of special descriptors to determine if it has identified and is currently capturing all special information needs such as those identified through emphasis area coding in NMS. USAID could expand the use of special descriptors based on program managers needs, and ensure the managerial cost accounting system can accommodate them.

- *USAID Must Define Accumulators.* Existing USAID systems accumulate information on planned obligations (OYB). However, planned cost dollars (actual expenditures) are not tracked. In addition, unit information such as labor hours is not accumulated and tracked. USAID's cost accounting system will need to accumulate the monthly, current year, four prior years and inception to date totals for planned and actual cost dollars and unit information.

6.7.2 Operations Information

The following matrix summarizes USAID's current capabilities for complying with JFMIP Operations Information Classification requirements.

Table 6.2

JFMIP Requirements		Current USAID System Capability
Operations Unit	Responsibility Segments	Partially Captured
	Responsibility Centers	Partially Captured
	Program	Partially Captured
	Project	Not Currently Used
Activity Type	Product Type	Captured
	Service Type	Captured
Efficiency Measures	Efficiency Measures	Not Currently Captured
Standards	Planned Output Units	Not Currently Captured
	Planned Output Costs	Not Currently Captured
Accumulator	Output Units	Not Currently Captured
	Output Costs	Not Currently Captured

Below is a summary of the issues USAID must address in order to comply with JFMIP Operations Information Classification requirements.

Operations Units Should be Selected. Based on the Responsibility Segments and Centers selected, USAID will need to define and allocate the outputs related to these levels. Although the Agency may identify several relevant outputs, awards are the most obvious. At program, division and directorate levels, awards may cross programs and therefore these awards may need to be allocated between organizations.

Activities/Outputs Need to Be Defined. JFMIP states that activity type identifies the type of output to be measured within an operation to accurately diagnose problem areas or areas needing improvements in efficiency. USAID needs to define the activities at Responsibility Segments or Center levels for which outputs will be defined and measured. These activities will need to be standardized across the Agency in order to support the roll up of consistent information. USAID should consider the following when defining activities:

- USAID systems must have the capability to track costs to the defined activity;
- USAID must be able to monitor the output of these activities;
- Cost and output monitoring of these activities must provide indication of the efficiency of a process.
- The activities selected should represent how costs are consumed by an organization.

Efficiency Measures Should be Captured. USAID should define efficiency measures for each defined activity and the managerial cost accounting system must permit the capture of information on efficiency measures at activity levels.

Standards Should Be Defined. GPRA and compliance with managerial cost accounting standards require USAID's budget, strategic plan and performance plan to provide targets expressed in terms of output units and output costs to be compared to actuals. USAID must determine the targets appropriate to its organization based on the activities defined for that organization. Other targets should also be established for organizational units providing support services such as the Management Bureau.

Accumulators Must be Defined. USAID must ensure that it has the ability to accumulate the actual number of output units and the actual output unit costs that are defined for the managerial cost accounting system.

6.7.3 Program Information Classification Issues

The following matrix summarizes USAID's current capabilities for complying with JFMIP Program Information Classification requirements.

Table 6.3

JFMIP Requirements		**Current USAID System Captured**
Program Unit	Program	Captured
Effectiveness Measures (Outcomes)	Planned Outcomes	Captured
Goals and Objectives	Quantitative Outcome Goals	Captured
	Planned Program Costs	Not Currently Captured
Accumulators	Outcome Measures	Currently Captured
	Program Costs	Partially Captured

USAID has made considerable progress in defining its programs and their associated outcome measures and goals. The majority of this information is currently captured in the NMS.

6.8 Functional Requirements Issues

Cost Accumulation Methods Must Be Defined. Once USAID has selected Responsibility Segments and Centers, management must determine the appropriate methods for accumulating costs at those levels. USAID's financial classification structure currently captures accumulated costs at the Mission, Bureau and Agency-wide levels. However, field support costs are not currently captured at the mission level and direct-hire salaries and benefits are not captured at both the Mission and Bureau levels. In addition, costs for non-prescence countries are not currently captured. USAID would need to create the appropriate linkages in the managerial cost accounting system to accumulate costs at those levels.

Cost Assignment Methods Must Be Defined. Once the cost accounting parameters are defined, USAID should perform an analysis of its cost assignment requirements. Specifically, USAID will need to define the process by which it will identify accumulated costs with cost objects. Cost objects could be organizations, programs, activities, tasks, services or customers. However, since the purpose of cost accounting by responsibility segment is to measure the costs of outputs, the ultimate cost object of a responsibility segment is its outputs. The assignment of costs to cost objects includes various methods such as direct tracing, cause-and-effect basis, and cost allocations.

Direct tracing applies to resources that are directly used in the production of an output. An example of such resources would be the cost of employees who directly worked on a planned output for a responsibility segment. For costs that are not directly traced to the final cost object, an intermediate object can be used to link costs using a cause-and-effect relationship. For example, the Global Bureau provides various support services such as technical assistance to the Regional Bureaus. These costs may be assigned to the Regional Bureaus on a cause-and-effect basis through two steps. In the first step, the costs are assigned to certain activities such as program evaluations. In the second step, the costs of program evaluations would be further assigned to the Regional Bureaus based on their consumption of evaluation services. Finally, costs may be allocated on a reasonable basis when it is not economically feasible to directly trace or assign on a cause-and-effect basis. Costs that are commonly allocated include general management, rent, depreciation and security. These are usually allocated on a prorated basis using some common denominator such as the number of employees or square footage of office space.

Cost Distribution Rules Maintenance Must be Performed. Management should develop and maintain the indirect cost distribution models and pools as static elements in USAID's managerial cost accounting system. The organization assigned to develop the cost distribution models should also be responsible for maintenance, including regular updates of these tables to account for any needed changes. USAID does not currently perform any formal cost assignment. Under a managerial cost accounting system, USAID will be required to perform such assignments to ensure they comply with "full cost" requirements of SFFAS No. 4 and JFMIP.

Data Management Must be Performed. USAID must have the ability to archive financial data for at least five years to support any required stewardship reporting.

Unit Data Capture Capabilities Must be Developed. Once the parameters of the managerial cost accounting system are defined, USAID must develop the ability to capture the required units of inputs and outputs.

PP&E Depreciation Must be Included. In order to comply with reporting requirements for the Statement of Net Costs and accounting for Property, Plant and Equipment (PP&E), depreciation expense should be calculated and shared between the property management system, the financial accounting system and the managerial cost accounting system. Once USAID implements a property management system, it must ensure that the system integrates with the managerial cost accounting system.

Financial Reporting capabilities should be developed. As reiterated throughout this report, once USAID defines the Responsibility Segments and Centers, it must ensure the managerial cost accounting system has the capability to accumulate costs at those levels. This will enable USAID to accurately produce the Statement of Net Costs, as well as enabling program managers to review similar reports at lower levels of detail to evaluate the cost effectiveness of their activities.

Performance Reporting Needs Should be Determined for All Organizational Levels. During the process of selecting the parameters for the managerial cost accounting system, USAID must consider the type of performance reporting required at various organization levels. This process includes the following considerations:

- At the program level, USAID must involve program managers to determine their performance reporting needs in order for them to effectively monitor program performance and cost. This would include both efficiency and effectiveness performance.

- At the Responsibility Segment level, USAID must involve segment level management to determine the type of performance reporting that is required to perform program evaluations, make economic decisions, monitor costs and outputs, and associated outcomes.

- At the reporting entity level, USAID must determine the appropriate performance reporting to monitor inputs, outputs and outcomes of the Agency's efforts and their associated costs over time. While USAID has made considerable progress in defining its outcome level goals and measures, work will be required to define output measures in order to comply with SFFAS No. 4. Performance reporting at this level should support management's efforts to comply with GPRA. As depicted in the exhibit below, performance reporting will assist USAID in fine tuning its results oriented vision.

Special Reporting Needs Should be Considered. The managerial cost accounting system designed by USAID should have the flexibility to accumulate costs and generate reports to accommodate special needs of management at all organizational levels. Examples of needs specific to USAID would include cost reporting by emphasis areas, earmarks and directives.

6.9 Integration Requirements Issues

Below is a summary of the issues USAID must address in order to comply with JFMIP system integration requirements:

Common Data Elements. To the furthest extent possible, the managerial cost accounting system at USAID should utilize the same data elements used by other USAID systems (e.g., Core Financial System, Budget, Operations, etc.) to enable the managerial cost accounting system to access that data.

Common Transaction Processing. When designing the managerial cost accounting system, USAID should include the use of transaction codes to ensure transactions are reported consistently throughout the system.

Consistent Internal Controls. USAID should ensure the processes are in place to protect the reliability and validity of the information in the managerial cost accounting system. For example, consistent levels of control access should be in place across its systems.

Efficient Transaction Entry. The USAID managerial cost accounting system should be designed so that it does not require the duplication of transaction entries to the furthest extent possible. It should strive to use data from other systems that is electronically updated on a regular basis. Therefore, interfaces between existing USAID systems and the managerial cost accounting system should be developed where required to capture cost and unit information from the appropriate information sources.

7.0 Conclusion

Over the past several years, various legislation has required Federal managers to respond to public demands to better explain the use of resources. This request for increased accountability in the Federal government has brought increasingly complex requirements to the program, budgeting and financial management arena. USAID will be most successful in addressing this new accountability standard, if it implements an integrated process for managing for results, financial accounting and budgeting. Managerial cost accounting will serve as one of the Agency's key tools in implementing the processes required to link program objectives with resources and the actual results achieved.

Management must know the costs of their responsibility segments and cost objects (outputs) in order to make good business decisions and to report the financial and performance information to its stakeholders. In order to reach this point, USAID should build upon its structure for managing for results by developing output level performance goals that are linked to budgetary resources.

The following list summarizes the general steps of a structured program approach that USAID will need to take:

- Develop Managerial Cost Accounting Strategy
- Define Managerial Cost Accounting Sponsorship, Steering Committee and Working Group
- Educate Customers on Benefits of Cost Accounting

- Conduct User Needs Assessment
- Perform Organizational Analysis
- Evaluate Costing Methodologies
- Perform Pilot Implementation
- Implement Agency-wide Program

The managerial cost accounting standards allow for a flexible approach to developing a cost management program. Within the broad boundaries of the standards, USAID has the opportunity to design an accountability program that is consistent with its operational environment and management improvement objectives.