

## CHAPTER 4. IMPROVING FINANCIAL MANAGEMENT SYSTEMS

**GOAL:** *Achieve and maintain a single, integrated financial management system that complies with federal government policy.*

The Department shares the view of the governmentwide CFO Council that a key to improved financial and program management is improved financial management systems. Improving financial management systems will provide for and strengthen decision-making capabilities and enable Interior program and financial managers to more effectively achieve the Department's missions. The Department recognizes the importance of its financial management systems as a part of its capital assets portfolio and uses sound information technology investment management principles to plan and monitor these systems. Interior's goal is to achieve and maintain a single, integrated financial management system as stated in OMB Circular A-127. In pursuing this goal, the Department will follow the information technology investment management practices and principles identified in the Clinger-Cohen Act of 1996.

### History

Since the mid-1980s, Interior has improved its financial systems and eliminated duplicative and redundant systems. By 1984, the number of personnel/payroll systems used by Interior had been reduced from five to one. All bureaus within the Department were converted from the PAY/PERS personnel/payroll system to the Federal Personnel/Payroll System (FPPS) by the end of 1998. The FPPS is a new, agency-developed system maintained by the National Business Center. The FPPS is a fully integrated, on-line system that services 22 agencies, including the Social Security Administration, in addition to the Department.

By FY 1992, the number of existing bureau core financial systems had been reduced from ten to two, with off-the-shelf software, Federal Financial System (FFS), being used in six bureaus which account for over 95 percent of Interior's annual accounting transaction volume. One additional bureau, the Office of the Secretary, converted to FFS during FY 2000. The remaining two smaller bureaus use ABACIS, an in-house developed core accounting system.

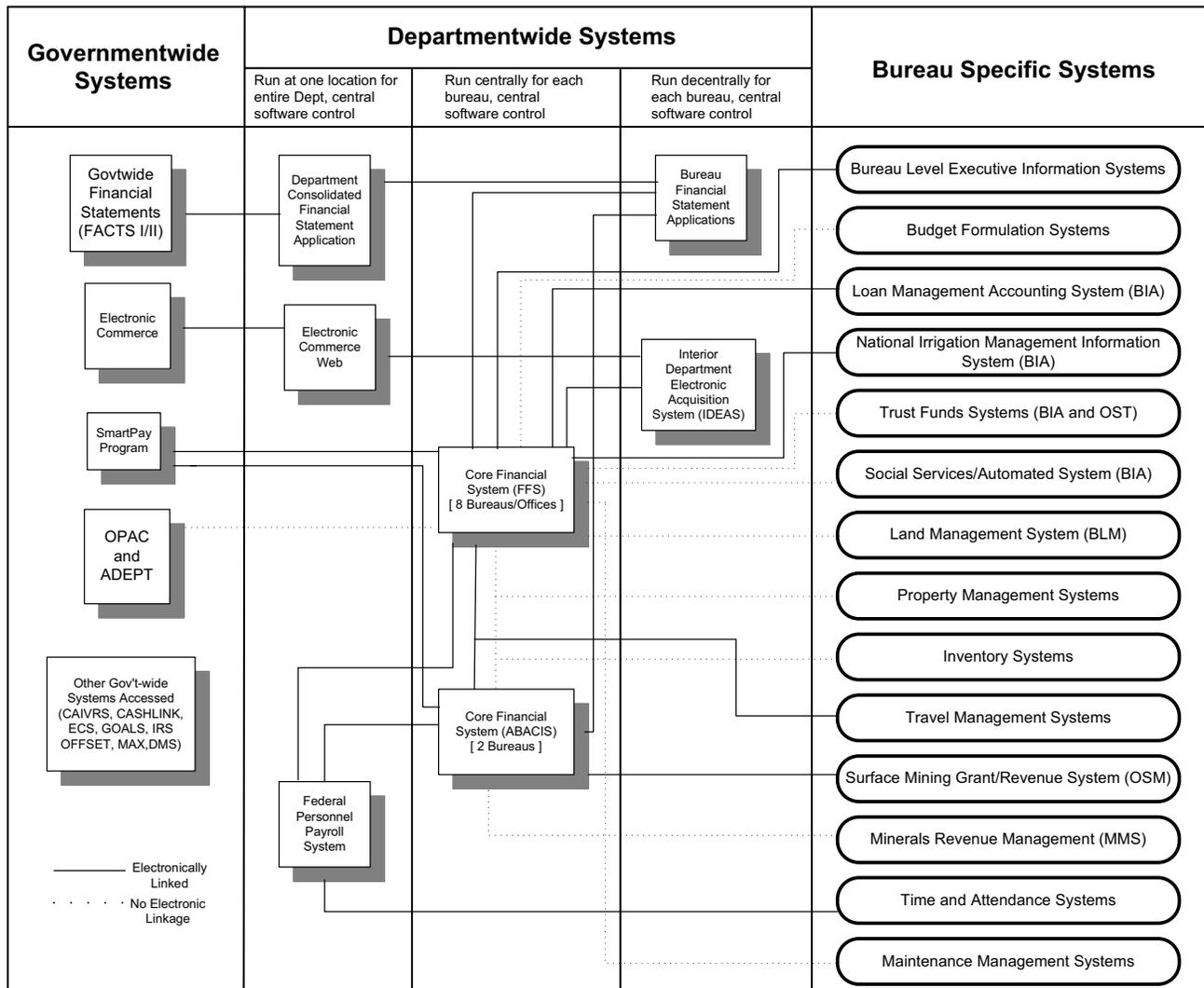
Overall, Interior's financial management systems represent a combination of governmentwide systems, departmental systems, and bureau managed systems. Increasingly, Interior is becoming reliant on technology as the enabling agent for meeting management's need for more timely and comprehensive financial management information to streamline underlying financial and administrative processes and improve the efficiency of transaction processing. Moreover, Interior is fully aware of the importance of information technology as a financial investment and of the necessity to manage this investment wisely.

## Financial Management Systems Improvement Strategy

The Department's goal is to maintain current systems for financial management until the Financial and Business Management System (FBMS) is implemented.

The Department relies on a unified set of financial management systems planned for and managed together and operated in an integrated fashion to collectively support program and financial managers. These systems are managed at various levels within the Department. Some of these systems are managed on a departmental level, others are maintained at a bureau or local level, and some are governmentwide systems that the Department relies on. Collectively, they represent the Department's financial management systems architecture. The current financial system architecture is shown in *Exhibit 4-1*, arrayed by the different types of management approaches being used. *Exhibit 4-2* lists the Department's financial management systems and applications.

Exhibit 4-1



## Exhibit 4-2

**Department of the Interior  
Financial Management Systems Supporting Exhibit 4-1  
System/Applications**

**DEPARTMENTWIDE SYSTEMS**

**Core Financial System (FFS)**

- Federal Financial System (8 Bureaus/Offices)

**Core Financial System**

- Advanced Budget/Accounting Control and Information System (2 Bureaus)
- Accounting and Aircraft System (OAS)

**Payroll Personnel System**

- Federal Personnel/Payroll System (FPPS)

**Interior Department Electronic Acquisition System****Consolidated Financial Statement System**

**BUREAU SPECIFIC SYSTEMS**

**Bureau Level Executive Information Systems**

- Management Information System (BLM)
- Administrative Financial System III (NPS)
- Federal Aid Information Management System (FWS)
- Financial Reporting and Reconciliation System (NPS)
- Budget and Science Information System (GS)
- TSC Management Information System (BOR)

**Budget Formulation Systems**

- Budget Allocation System (FWS)
- Program and Budget System (BOR)
- Operations Formulation System (NPS)
- Project Management Information System (NPS)

**Loan Management Accounting System (BIA)****National Irrigation Management Information System (BIA)****Social Services Automated System (BIA)****Trust Funds (BIA, OST)**

- Trust Funds Accounting System
- Integrated Resources Management System

**Land Management System (BLM)**

- Payment in Lieu of Taxes
- Collection and Billing System

**Property Management Systems**

- FFS Fixed Assets Subsystem (BIA, BLM, GS, NPS)
- Moveable Property System (BOR)
- Property Management System (MMS)
- Property Management Web (MMS)
- Personal Property Management Information System (FWS)
- Real Property Management Information System (FWS)
- Federal Real Property Management (GS)
- Property Accountability Ledger System (OSM)

**Inventory Systems**

- FEDSTRIP System (BOR)
- DORRAN (GS)
- Peachtree 2000 Inventory System (GS)
- IBIS (GS)

**Travel Management Systems**

- Travel Manager Plus

**Minerals Revenue Management (MMS)****Surface Mining Grant/Revenue System (OSM)**

- Grant Information Financial Tracking System
- Fee Billing and Collection System
- Audit Fee Billing and Collection System
- Civil Penalty Accounting Control System

**Time and Attendance Systems (Various)****Maintenance Management Systems (Various)**

The Department has viewed the movement toward a single, integrated financial system as encompassing four interrelated elements: (1) migrating to and enhancing standard departmentwide systems; (2) improving or replacing financial and mixed systems to take advantage of new technological capabilities (e.g., Internet browser and smart card technology); (3) interfacing or integrating financial management systems through electronic transfer of data and establishing standardized financial data classifications for movement of data to support finance and program managers; and (4) following sound investment principles in selecting and evaluating its financial management systems and recognizing those systems as part of the Department's portfolio of capital assets.

The Department's current financial management system improvement efforts involve four major thrusts:

- *Current Systems*: Maintain current financial management systems to support administrative and program managers, update these systems where necessary for regulatory compliance requirements, and manage these systems in a manner consistent with the Department's information systems investment management policies and procedures.
- *Financial and Business Management System* : Define, plan, and implement a new generation of financial management systems to take advantage of new technology and processing opportunities.
- *Human Resources Information System (HRIS)*: Work with human resources staff to coordinate defining, planning, and implementation of certain key functionalities needed by the human resources community.
- *Critical Programmatic Management Systems*: Re-engineer and/or replace certain critical bureau-based programmatic/financial management systems supporting critical programs: Minerals Revenue Management; Indian Trust Funds Systems; and Facilities Management System.

The target architecture for the next five years will be determined by the results of the Financial and Business Management System. Therefore, an illustration of the target architecture is not included in this financial management plan.

### ***FY 2003 Accomplishments***

During FY 2003, the Department continued financial systems enhancements which included successfully completing systems improvement efforts begun in previous years and expanding the use of outside services to support transaction processing through the following:

- Maintaining the SmartPay Program (commonly called the DOI Integrated Charge Card Program) supporting the Interior travel, acquisition, and property programs through the Bank of America.
- Maintaining the Interior Departmentwide Procurement System (IDEAS) providing more than 350 locations with the software support for requisitioning, purchasing, contracting, and administering contracts.

- Improving Property Systems through the Property Management Partnership to provide a structure through which bureau officials develop common strategies and agreements to improve systems, operations, services, and information on property in order to achieve efficiencies and cost effectiveness. Current systems are using outdated technology, are not integrated, and do not have the necessary security capabilities to facilitate open access through the Internet.
- Maintaining the Current Core Accounting Systems through annual updates of the vendor software of the existing core accounting system until a replacement core accounting system is identified, acquired, and implemented. This software uses 1980's technology and needs to be replaced.
- Improving the Consolidated Financial Statement System through continuing the updates of the Hyperion Enterprise software for collecting financial statement information to support the preparation of consolidated financial statements. The Department began using the Hyperion Enterprise software in 1997 for the Department's consolidated financial statements. Since FY 1999, each bureau finance office has also used Hyperion Enterprise to prepare bureau-level audited financial statements.
- Maintaining the GPRA Performance Tracking System necessary to support the Government Performance and Results Act (GPRA). This system is an Access based system used to capture GPRA performance information to meet the GPRA reporting requirements on a departmental basis.

#### ***FY 2004 Planned Actions***

- Continue to maintain the above systems until new functional capability is available through the implementation of the Financial and Business Management System.

### **Financial and Business Management System**

In February 1998, the Interior Chief Financial Officers (CFO) Council established the Financial Management Systems Migration Steering Committee to provide for senior level leadership in the planning, acquisition, and implementation of replacements for existing Interior financial management systems. An integrated approach to systems replacement is greatly needed since a number of the Department's financial management systems must be replaced within the next few years. The development of the migration strategy will ensure that any new replacement systems adhere to the Department's information systems architecture and allow for full integration among the Department's financial management systems.

The Interior CFO Council endorsed the Steering Committee recommendation that the Department engage in a coordinated cross-functional financial management streamlining effort that encompasses the following business functions: budget formulation and execution; personnel and payroll management; acquisition, receipt, accounting, maintenance, and disposition of property and services; managerial cost accounting; and travel management. Utilizing the direction of the Clinger-Cohen Act of 1996, this proposed financial systems improvement strategy will include re-engineering processes, where necessary, and building a business case for making investments in financial management systems replacement. The current effort has completed the initial three phases:

- *Phase I - Functional Analysis Phase*
- *Phase II - Business Process Review*
- *Phase III - Business Case Development*

Additionally, in late FY 2000, Interior issued a Request for Information (RFI) to industry. The RFI process was completed during FY 2001 by conducting vendor software demonstrations. The RFI process was successful in providing needed information in each area.

Interior's strategy is to establish and maintain an integrated financial management system for use by all bureaus that will: (a) allow users in the field and senior management to access common financial data when they need it to perform their functions effectively and efficiently; (b) enable processing necessary to record underlying transaction data and the infrastructure to provide easy access to the data will be handled in the background with limited or no human intervention; and (c) provide a secure integrated systems information environment that will support e-government initiatives, be paperless, require only a single user logon for access, allow one-time initial data entry, and provide easy access to common data. This will replace Interior's current financial management systems that are old and cannot support current and planned e-Government opportunities. The core accounting system (FFS) used by most bureaus is based on a mainframe system using outdated technology; two bureaus are using an internally developed system (ABACIS) that is difficult to support; the procurement system (IDEAS) is a client-server system that does not support multi-bureau contracting initiatives and is expensive to maintain; and current financial management systems are not integrated and do not have the necessary security capabilities to facilitate more open access through the Internet.

The scope of the effort will include the following critical functions of the Department: core financial, acquisition, personal property/fleet management, travel, budget, financial assistance, real property, and enterprise management information. The strategy for implementing the new systems will be to implement the system capabilities in phases by designing the systems to be implemented across the Department but implementing the new systems capabilities in two bureaus first (OSM and MMS) before implementing the systems capabilities in the other bureaus.

The strategy has been developed to support e-Government initiatives to improve government to customer, government to business, and government to government interaction by: (1) supporting secure electronic connections with outside parties purchasing services or obtaining information from the Department; (2) supporting electronic procurement and payment infrastructure for vendors doing business with the Department; and (3) supporting business process changes necessary to link electronically to state and other federal agencies for grants and intergovernmental activity. The strategy will provide value to senior level officials by improving decision-making through more accurate and more timely access and analysis of critical management information, improving integrity in data through better integration and control over information processes, and reducing risk of systems collapse due to old technology. Value will be added for line managers by providing better administrative support for employees to improve the quality of the work environment, increasing the ability to hire and retain high quality staff, and improving the ability to take advantage of Internet capabilities. Value will also be added to administrative operating personnel by improving internal efficiency and effectiveness through streamlining processes; improving efficiency and reducing reconciliation efforts between critical systems to allow for more analytical activities; supporting increased security over applications and data; and potentially reducing

cost of systems maintenance; and allowing for less expensive enhancements to functionality in the future.

The initial investment has been included in the Department's FY 2004 budget request to the Office of Management and Budget. The total systems acquisition and implementation investment for all bureaus is planned over an eight year period.

### ***FY 2003 Accomplishments***

- With contractor assistance, developed and implemented a Performance-Based Acquisition strategy for the Financial and Business Management System (FBMS) in accordance with FAR Part 1 and recent OMB and OFPP policy guidelines.
- Conducted a series of Market Research sessions with industry and other federal agencies that have implemented, or are currently implementing, financial management systems. These sessions were held to: (1) solicit Best Practices from industry and government entities on total business solutions, performance metrics, vendor due diligence, and solution implementations; and (2) gain Lessons Learned from commercial and government entities having experienced implementing solutions for programs similar in size, scope, and complexity to FBMS.
- Conducted a Capability Assessment to identify a competitive pool of potential offerors to receive the FBMS solicitation package.
- Identified a competitive pool of potential offerors to receive the FBMS solicitation package, based on the results of the Capability Assessment.
- Issued a Request for Quotations (RFQ) for the acquisition of a FBMS solution to the competitive pool of potential offerors identified in the Capability Assessment. The RFQ provides for due diligence, written proposals, oral presentations, and an operational capabilities demonstration.
- Developed the FY 2005 Capital Asset Plan and Business Case (Exhibit 300).

### ***FY 2004 Planned Actions***

- Evaluate written proposals and test the FBMS solutions proposed by the offerors responding to the RFQ.
- Issue Task Order(s) against General Services Administration Federal Supply Schedule(s) for the FBMS solution, depending on funding availability.
- Complete the necessary preparation activities (e.g., training, module configuration, conversion, etc.) so that the first two bureaus (OSM and MMS) implement selected modules of the FBMS solution in early fiscal year 2005.
- Develop the FY 2006 Capital Asset Plan and Business Case (Exhibit 300).

### ***FY 2005 and Beyond Planned Actions***

- Depending on funding availability, implement the Financial and Business Management System strategy in phases as defined in the long-term strategic plan for the migration to an integrated financial management system for the Department.

### **Human Resources Information System**

In 1998, the Department enlisted Booz, Allen & Hamilton to do an analysis of the Federal Personnel/Payroll System (FPPS) and private sector vendors to assist in determining how best to provide additional system functionalities needed in the Human Resources (HR) community. The recommendation of Booz, Allen & Hamilton was to continue the use of FPPS for payroll and payroll-related HR functions and to select a commercial-off-the-shelf (COTS) Enterprise Resource Planning (ERP) product to provide the additional HR functionalities.

Because of budget constraints and the uncertain status of a governmentwide e-HRIS project, the Department has decided to select several interim COTS products to provide HR business process support in key functional areas until an Enterprise HR system can be implemented. The COTS products include QuickHire (a Web-based recruitment and staffing system), QuickClass (a Web-based automated classification system), and a learning management system offered under the Office of Personnel Management's e-Training initiative. QuickHire and QuickClass are currently used by many of the Interior bureaus. Other COTS products meeting other functional requirements will be investigated to determine need, applicability, and affordability.

### ***FY 2003 Accomplishments***

- Developed a Business Case for QuickHire, QuickClass, and a Learning Management System, including funding requirements for future years.

### ***FY 2004 Planned Actions***

- Continue implementation of QuickHire, QuickClass, and the learning management system in bureaus or regions where they are not currently utilized.
- Develop procedures and controls to ensure consistent and standard use of the products across the Department.
- Develop a business case for additional COTS interim systems, as applicable.

### ***FY 2005 and Beyond Planned Actions***

- Complete implementation of QuickHire, QuickClass, and the learning management system as interim Enterprise HR systems.
- Develop a Business Case for FHRIS (or a similar approach) as the full HR Enterprise system for Interior.

- Develop interfaces between FHRIS (or selected system) and other Interior financial management systems.

## **Improve the Information Technology Infrastructure Supporting Financial Systems**

The information technology (IT) infrastructure is critical to maintaining quality financial management systems that are secure. Two major efforts are underway to improve this infrastructure.

### ***Interior Information Architecture Program***

Historically, mission requirements have been isolated in focused organizations within Interior, serving their specific purposes. Although these needs often overlapped among Interior's bureaus, they were often acquired, managed, and supported independently. The result is a variety of unconnected, repetitive, or inconsistent information systems on a variety of technical platforms. Rapid advancements in the maturity of information technology, such as networking, the World Wide Web, data warehousing, and application sharing have eliminated many of the barriers formerly impeding the sharing and integration of data, information, and resources. This sharing can ultimately provide the ability to enhance or recreate business processes. These enhancements, in turn, improve management of IT requirements, total cost of ownership, and service delivery. It is precisely these improvements that enable Interior to take an agency view of financial management related systems, as well as other departmental administrative systems. These same principles are being applied across all business systems within Interior.

Recognizing these factors and the absolute need for change, the Clinger-Cohen Act of 1996 requires each Agency Chief Information Officer to develop and implement an Enterprise Architecture. Interior's implementation is designated the Interior Enterprise Architecture (IEA). Statutory requirements supporting the development and implementation of an enterprise architecture include, but are not limited to, the Government Performance and Results Act (GPRA), Presidential Decision Directive 63, and the Government Paperwork Elimination Act. The goal of the IEA is to provide the process and the policies needed to evolve Interior's various information systems and technical infrastructures to a coordinated overall structure that is responsive, accessible, affordable, and easier to maintain.

Implementation of the IEA is a well-coordinated effort that is making progress on several levels. The Clinger-Cohen Act calls for an enterprise architecture that is driven by business needs. To meet this goal, Interior is articulating the business drivers in an Interior Business Architecture (IBA), and developing or improving the component architectures that make up the Interior Enterprise Architecture. The IEA is following the Federal Enterprise Architecture framework of reference models issued by the Office of Management and Budget, i.e., Performance Reference Model (PRM), Business Reference Model (BRM), Data and Information Reference Model (DRM), Service Component Reference Model (SRM), and Technical Reference Model (TRM). The Interior Architecture Project has joined with the GPRA effort to develop the IBA. This coalition incorporates bureau information technology and mission requirements into the GPRA process, thereby ensuring a consistent and cross-cutting view of Interior's business.

The component architectures are being developed by the Interior Chief Architect and staff, with support from the Interior Architecture Working Group. Component architectures include Information Security, Data Management, Geospatial Technologies, Applications Development, Distributed Systems Management, Records and Document Management, Infrastructure, and Platform. Development of the component architectures will ensure Interior meets at least minimal compliance with related statutory and operational requirements.

### **FY 2003 Accomplishments**

- Coordinated activities of the Interior Architecture Program, broadening involvement of bureaus and offices within Interior.
- Involved and informed Interior bureaus/offices in assessments of architectural maturity throughout Interior.
- Worked with multiple contract teams to facilitate and assist in continued development of the IEA.
- Matured the governance process for IEA, involving senior managers and executives from throughout Interior.
- Formed the Architecture Review Board to ensure alignment of IT initiatives with the Interior Enterprise Architecture.
- Strengthened the partnership with GPRA to identify strategic influences and integrate them into the IEA.
- Strengthened the partnership with IT Capital Planning and Investment Control to make the IEA an integral component of managing IT investments.
- Identified opportunities for non-exclusive enterprise licensing agreements to leverage departmentwide purchasing power and reduce total cost of ownership.
- Produced the Interior Business Architecture (v. 1.0) for the financial management area.
- Produced the Interior Data Architecture (v. 1.0).
- Produced the Interior Technical Architecture (v. 2.0).

### **FY 2004 Planned Actions**

- Complete version 1.0 of the complete high-level Interior Enterprise Architecture and initiate mid-level IEA development.
- Identify additional opportunities through gap analysis to improve Interior technology infrastructure.

- Update the Technical Reference Model and Standards Profile (version 3.0).
- Continue to strengthen the partnership with GPRA to identify strategic influences and integrate them into the IEA.
- Continue to strengthen the partnership with IT Capital Planning and Investment Control to make the IEA an integral component of managing IT investments.
- Continue coordination of non-exclusive enterprise licensing agreements to leverage departmentwide purchasing power and reduce total cost of ownership.
- Strengthen outreach activities to expand awareness of the Interior Enterprise Architecture throughout the Department.

### **FY 2005 and Beyond Planned Actions**

- Continue work on a detailed level IEA.
- Update and maintain each of the reference models.
- Identify and facilitate departmentwide acquisitions of commonly used information technologies.

### ***Computer Security Improvement Project***

Interior's IT security program is based on the Departmental Manual (Part 375, Chapter 19) which incorporates the applicable requirements of law (such as the Computer Security Act of 1987 and the Government Information Security Reform Act (GISRA)), Executive Branch directives (such as Office of Management and Budget (OMB) Circular A-130, Appendix III), and guidelines developed by the National Institute of Standards and Technology (NIST) and the federal CIO's Council. These broad security guidelines have been augmented by Interior-specific requirements and were used to develop a recently enacted Interior IT Security Policy, an IT Security Plan, and an IT Security Handbook. The objective of the Interior IT Security Program is to ensure that all Interior IT systems consisting of Major Applications (MA) and General Support Systems (GSS) will be compliant with OMB Circular A-130, Appendix III, IT security requirements. Certifying and accrediting these IT systems in accordance with the Interior Certification and Accreditation (C&A) methodology will accomplish this objective. DOI will target its most critical, high-risk assets first and will achieve full compliance through C&A by December 2005; all remaining systems will be fully accredited by December 2006.

### **FY 2003 Accomplishments**

*Policy and Guidance.* DOI has issued NIST-based guidance for:

- Contingency planning
- Risk assessments
- System security planning

The IT Security Office issued formal guidance on “IRM Management Control Review Guidance for 2003” dated February 14, 2003. The Information Resources Management (IRM) management control review (MCR) requirements for 2003 focus on the IT security aspects of high-risk general support and major application IT systems contained in Interior’s IT system inventory. The new MCR process will utilize NIST Special Publication 800-26, “Security Self-Assessment Guide for Information Technology Systems” as the principal evaluation tool.

The IT Security Office developed and published guidance dated March 20, 2003, on determining and designating IT enclaves (i.e., groups of systems). The IT Security team developed the enclave concept to define the boundaries of IT systems and to simplify the overall inventory of Interior IT systems. The enclave concept allows IT systems to be combined into logical groupings to obtain economies of scale, cost efficiency, and determining and improving management oversight.

The IT Security Office completed the IT Security Asset Valuation Guide, Version 2.0 dated March 4, 2003, which contains the approved Interior methodology, process, and criteria for clearly identifying, categorizing, and documenting IT assets. This process provides a means for allocating capital resources, establishing work priorities, and establishing and validating IT security requirements based upon an IT system’s overall importance.

*Interior IT Security Scorecard.* Interior has initiated an IT Security Scorecard to track bureau and office achievements in IT security programs. The Scorecard is published monthly and contains nine major performance elements that are derived from reportable elements of FISMA/GISRA and activities deemed a priority by the Department. Each of the nine areas is assigned a percentage score that when summarized add up to a maximum 100 points. A draft scorecard has been developed (June 2003) and is currently in the vetting process.

*Certification and Accreditation.* On June 16, 2003, Interior’s CIO Security Office completed and delivered the final version of Interior’s C&A guide, which outlines Interior’s C&A process based on NIST Special Publication (SP) 800-37. An Interior OCIO bulletin on C&A roles and responsibilities was also developed and released on April 11, 2003. A major goal of Interior’s IT security program is to achieve C&A of its IT systems in full compliance with OMB Circular A-130, Appendix III. Interior’s Indian trust IT systems, i.e., those systems identified as supporting trust business processes, are scheduled to achieve C&A compliance by December 31, 2005.

*DOI CIRC.* In June 2003, a centralized computer security incident handling capability was implemented within the Department. Incidents are reported to the Homeland Security Department’s Federal Computer Incident Response Center as required by the Federal Information Security Management Act of 2002 (FISMA). The contracted support is available twenty-four hours a day, seven days per week and provides incident coordination and reports. The Incident Handling Handbook, which provides program implementation guidelines and procedures, was finalized as well.

*Capital Planning.* DOI has improved the integration of IT security into the system development life cycle of DOI IT systems through the Capital Planning and Investment Control (CPIC) process. Under the CPIC process, DOI bureaus and offices are required to prepare an Exhibit 300 or 300-1 on each DOI IT system that includes funding for IT security costs. The DOI OCIO IT Security Team has supported this effort by giving a briefing to

the appropriate program analysts and bureau IT Security managers, developing a security tips document, developing security review criteria for the Exhibit 300s and 300-1, and reviewing Exhibit 300s as part of the DOI approval process.

*System Inventory and Prioritization.* The IT Security Team members, under the auspices of the IT Management Council, are developing and prioritizing Interior systems. The starting point for determining where to apply resources for managing and securing information and IT systems is to develop a credible system inventory. The team has developed the initial inventory for all IT systems, including the Interior Indian trust IT systems

*System Development Life Cycle (SDLC) Security Integration.* On June 20, 2003, Interior's CIO Security Office completed and delivered the first draft of Interior's SDLC Security Integration Guide. The SDLC Security Integration Guide is intended to provide the Department's IT system owners with a framework for implementing security throughout all stages of an IT System's life cycle and describes how this process maps back into the Certification and Accreditation (C&A) process.

*Program Reviews.* The Interior OCIO conducts IT Security Program-level reviews for the bureaus and offices within Interior. Using the basic format and categories of the NIST's Special Publication 800-26 (Security Self-Assessment Guide for Information Technology Systems), the OCIO developed an IT security program assessment questionnaire containing 58 questions. Each response was graded against the five categories of the federal CIO's Council IT security assessment framework (policy, procedures, implementation, tested, and integrated) and weighted depending on an importance factor. A percentage score for each program was derived based on the number of points achieved compared to the total number of points possible. Weaknesses are tracked using OMB's quarterly POAM report and performance measures are charted at both the individual organization and summary level. A mid-year review of IT security programs for Interior bureaus and major offices was conducted in April 2003. The review is based on the NIST Special Publication 800-26, Self-Assessment Guide for Information Technology Systems. Interior improved its score by 10 points over the IT security program review conducted in the Fall of 2002 (55%).

*Training and Awareness.* An OCIO Memorandum dated February 14, 2003, required all Interior employees and contractors using Interior IT systems to complete IT security training before June 27, 2003. As of June 27, 2003, Interior has trained 66,678 individual users of Interior IT systems and continues to recognize outstanding individuals in completing the awareness training requirements. The IT Security Office standardized the training on the "Federal Information Systems Security Awareness, Version 2", developed by the Defense Information Systems Agency (DISA), for use throughout Interior.

*Certification and Accreditation Workshop.* A C&A workshop was held June 23-26, 2003 in Arlington, Virginia. The target audience was staff involved in the C&A process, including Chief Information Officers/Deputy Chief Information Officers, system owners, program managers and IT security managers. Topics included current IT security issues as well as instructions in developing documentation required by the C&A process. This workshop was held again in Denver, Colorado July 28-31, 2003 and will be a recurring training event to assure Interior systems are following a NIST-based C&A program.

Thirty DOI employees attended a Certified Information System Security Professional (CISSP) certification training in Denver, Colorado on June 2 to June 5, 2003. The CISSP certification is designed to recognize mastery of an international standard for information security.

*Trust Certification and Accreditation Workshop.* An introductory C&A workshop for Trust bureaus and offices was held on April 2-3, 2003 in Washington, D.C. The workshop provided information about the Department's Certification and Accreditation program to system owners and Trust Bureau Information Technology Security Managers.

*Executive and Senior Managers IT Security Training.* The OCIO IT Security Office prepared and delivered version 1.0 of the Executive and Senior Managers IT Security Training module to all bureau and office CIOs. Each CIO was asked to complete the training by November 29, 2002, and provide comments on the training. The computer-based training contained five modules and focused on statutes that govern IT security in the federal government, the role of policy in enhancing Interior's security posture, the roles and responsibility of senior managers, a review of Departmental Manual 375.19 "Information Technology Security Program", and a general overview of the concept of management controls. After incorporating comments received from the CIOs, version 2.0 of the training will be released to an expanded audience including Assistant Secretaries and Bureau Directors.

#### **FY 2004 Planned Actions**

- Establish a Public Key Infrastructure (PKI) for use within the Department.
- Continue the C&A process for Interior Major Applications and General Support Systems.
- Provide continued support for bureau IT Security Program Implementation and Management.
- Implement a full IT Security Awareness Program.
- Conduct IT Security Program Reviews.
- Conduct Contractor Facility IT Security Reviews.

#### **FY 2005 and Beyond Planned Actions**

- Continue the C&A process for Interior Major Applications and General Support Systems.
- Continue PKI integration efforts.
- Conduct IT Security Program Reviews.
- Conduct contractor facility IT Security reviews.

## Replacing Critical Programmatic Management Systems

The Department has projects underway to replace or enhance certain critical programmatic management systems that process financial data. These projects include the following:

### *Minerals Revenue Management System*

Minerals Revenue Management (MRM) is responsible for ensuring that all mineral revenues from federal and Indian lands are efficiently, effectively, and accurately collected, accounted for, verified, and disbursed to recipients in a timely manner. These revenues average more than \$6 billion annually, with more than \$10 billion collected in 2001 alone. To ensure proper revenues are collected and disbursed, the Minerals Management System utilizes a broad range of financial services, and pursues a comprehensive compliance strategy that includes an automated compliance verification program to validate the accuracy and timeliness of revenues paid. MRM also administers a robust Royalty-In-Kind (RIK) program which utilizes an asset management approach to ensure the optimal value of mineral resources. In FY 2001, MRM implemented a new financial and compliance system. As MRM transitions from the implementation phase to the fully operational phase, further enhancements will be designed, tested, and implemented.

### **FY 2003 Accomplishments**

- Upgraded, modified, and enhanced multiple supporting systems to accommodate requirements of the new financial system.
- Tested and implemented the remaining segments of the new MRM financial system (production reporting and exception processing) and the MRM compliance system.
- Completed the processing of backlogged royalty and production reports that resulted from the court-ordered Internet connection shutdown which occurred from December 2001 to March 2002.
- Implemented the MRM's Gas Management System as a comprehensive information management system supporting commercial natural gas RIK sales and accounting activities.
- Implemented the MRM's Liquids Management System as a comprehensive information management system supporting the Strategic Petroleum Reserve (SPR) Fill Initiative and small refiner and other commercial crude oil RIK sales and accounting activities.
- Developed the Risk and Performance Management System designed to quantify price risks within the RIK program and to measure the performance of RIK sales programs relative to price benchmarks.

- Signed a Memorandum of Understanding between the MMS and the State of Louisiana agreeing to jointly develop and implement a royalty-in-kind (RIK) pilot program for certain federal oil and gas leases located in the 8(g) zone offshore Louisiana. The pilot program may potentially include State oil and gas leases if the State so decides. The MMS and the State are anticipating the pilot program to be in place with the first royalties being collected in kind October 1, 2003.
- Awarded a contract to Lukens Energy Group, a Houston-based energy consultant, to provide independent assessment of the RIK program, recommendations on performance metrics and marketing strategies, and a 5-year RIK Business Plan.
- Continued to implement the President's November 2001 directive to fill the remaining capacity of the Strategic Petroleum Reserve (SPR) utilizing Gulf of Mexico federal RIK oil. Oil RIK deliveries to the Department of Energy commenced on April 1, 2002, at a rate of 60,000 barrels per day. The current full deployment delivery rate is 130,000 barrels per day. The initiative is targeted to be complete by the end of FY 2005 and will involve some 120 million barrels of royalty crude oil. When full, the SPR will contain approximately 700 million barrels of oil providing a key link in the Nation's security network.
- Held public workshops on federal oil valuation regulations and on federal gas valuation regulations to obtain information for evaluating whether the existing rules should be amended. MMS compiled and analyzed the information gathered and a proposed federal oil rule is advancing through the surname process. A proposed federal gas rule is anticipated to be drafted in FY 2004.
- Published a proposed rule to implement accounting and auditing relief for marginal properties, as authorized by the Federal Oil and Gas Royalty Simplification and Fairness Act of 1996.
- Competed all compliance work in accordance with annual performance goals.
- Performed an A-76 Streamlined Cost Comparison of the Center for Excellence functions. MRM was successful in its competition and will retain these functions. The comparison was completed on February 18, 2003, 7 months ahead of schedule.
- Upgraded all MRM client workstations to a secure operating system.
- Continued an aggressive training schedule to inform industry representatives of the many changes incorporated into the new financial system and on basic royalty and production reporting.
- Continued outreach and communication efforts.

**FY 2004 Planned Actions**

- Upgrade the PeopleSoft financial application software for system enhancements.
- Perform an Operational Analysis of all MRM systems as required by OMB A-11 to ensure that the existing systems continue to meet business requirements and to explore alternatives for improved economy and efficiency.
- Continue to develop and implement major system components identified in the preliminary design of the compliance system.
- Establish an ongoing continuous improvement cycle for compliance processes and systems. As new techniques and approaches are developed in the workplace, implement new tools and applications to support them.
- Publish and implement various oil and gas valuation rules, including a final federal oil valuation rule and a proposed and final federal gas valuation rule.
- Publish a final rule to implement accounting and auditing relief on marginal properties and a proposed rule to give prepayment of royalty relief.
- Establish a new 205 cooperative audit agreement with the State of Alaska and initiate two additional Intergovernmental Personnel Act (IPA) agreements with Indian tribes.
- Fully deploy and utilize the RIK Risk and Performance Management System capabilities and integrate these capabilities with recommendations on performance metrics provided to MMS by the Lukens Energy Group.

**FY 2005 and Beyond Planned Actions**

- Develop and implement upgrades and enhancements to the financial system and the data warehouse to improve efficiency and effectiveness.
- Plan and implement additional process improvements for streamlining and enhancing compliance.
- Improve Indian trust beneficiary services by establishing one additional Federal Indian Minerals Office (FIMO) by FY 2005. After Departmental approval, MMS will partner with BLM and BIA to open the new FIMO.
- Implement the 5-year RIK Business Plan and conduct the action items within the plan, which are anticipated to include actions involving human resources, marketing strategies, and cost accounting measurements.
- Complete the SPR Fill Initiative by the end of calendar year 2005, depending on crude oil production levels in the Gulf of Mexico.
- Continue outreach and communications effort, which includes training activities as needed, for both internal and external stakeholders.

## ***American Indian Trust Funds Systems***

The American Indian Trust Fund Management Reform Act of 1994 identified some of the Secretary's responsibilities related to trust fund management and established the Office of Special Trustee for American Indians (OST). The Act identified actions required for the Secretary's proper discharge of trust responsibilities including: providing adequate systems for accounting for and reporting trust fund balances; providing adequate controls over receipts and disbursements; providing periodic, timely account reconciliations; determining accurate cash balances; and preparing periodic statements of account performance and balances. The Act also addressed the need for developing systems for accounting and investing funds, for reporting to account holders, and for maintaining accurate data on ownership and lease of Indian lands.

In the past, reviews by the General Accounting Office (GAO), the Department's Inspector General, and independent accounting firms have identified serious financial management problems in the management of Indian Trust Funds. Reports based on these reviews indicated, among other things, that trust fund data was unreliable, inaccurate, and inconsistent, and trust systems have been inadequate to comprehensively process trust data and support investment activities. Inadequate internal controls and lack of consistent, written policies and procedures were also cited in the reports.

Efforts have been made to bring about long-term constructive improvement in trust funds management. For example, the Department issued a June 1994 draft report, Indian Trust Funds and Trust Asset Management Reform Plan, which resulted in implementing an interim service bureau system for managing tribal investments and accounting services. BIA has performed most collection activities. The Plan also called for correcting problems with Individual Indian Money (IIM) accounts, including correcting IIM data, and improving IIM-related systems.

In April 1997, the Special Trustee submitted a strategic plan to the Secretary and the Congress, and it was agreed that the trust system improvements and data cleanup efforts portions of the plan would proceed. The plan included initiatives to clean up IIM records; eliminate data backlogs; improve policies, procedures, and controls; enhance training; and improve computer systems. Acquisitions were planned for: (1) Trust Funds Accounting System (TFAS); (2) Trust Asset and Accounting Management System (TAAMS); and (3) Land Records Information System (LRIS) enhancements.

These initiatives were also included in the High Level Implementation Plan (HLIP) of the Trust Management Improvement Project (TMIP). The July 1998 HLIP, as revised in February 2000, addressed the following 11 subprojects and identified responsible officials, progress made, action plans, and resource requirements:

- Administrative Data Cleanup (OST)
- Resources Data Cleanup (BIA)
- Probate Backlog (BIA and Office of Hearings and Appeals)
- Appraisal Backlog (BIA)
- Trust Funds Accounting System Deployment (OST)
- Trust Asset and Accounting Management System Deployment (BIA)
- Systems Re-engineering (MMS)
- Records Management Improvement (OST)

- Policy and Procedures (BIA)
- Training (OST)
- Internal Controls (OST)

Although many specific HLIP tasks were completed, the Department received conflicting information on the state of trust reform. In response, the Department commissioned an independent review and report, which concluded that the previous reform results were not satisfactory.

Accordingly, the Department developed a more comprehensive and integrated approach—the Comprehensive Trust Management Plan, (CTM) dated March 28, 2003. It sets forth a strategic framework, including six strategic goals (and various objectives) for the Department to meet to fulfill its obligations to its fiduciary trust beneficiaries:

- Beneficiary services that are trusted, accurate and responsive.
- Tribal self-governance and self-determination that increases participation in managing assets.
- Ownership information that is accurate, timely and reliable.
- Land and natural resource management that maximizes return while meeting desires of beneficiaries.
- Trust fund assets management that meets fiduciary principles.
- Administrative services that:
  1. Enable and empower the organization and workforce to be an effective fiduciary trustee; and
  2. Provide modern, appropriate systems and tools to manage the fiduciary trust.

The CTM incorporates the substantive objectives in the HLIP, but adopts a more integrated “business plan” approach. It identifies primary business lines for Interior as beneficiary trust representation, trust financial management and stewardship, and management of land and natural resources. The strategic goals and specific related objectives fit within these business lines.

### **FY 2003 Accomplishments**

- Completed the court-ordered Fiduciary Obligations Compliance Plan (addresses how the Department intends to comply with certain fiduciary obligations owed to IIM account holders; accounting systems must maintain accurate account balances and report information to beneficiaries) and Historical Accounting Plan for Individual Indian Money Accounts.

- Completed Comprehensive Trust Management Plan, which articulates the Department's strategy for managing and reforming its trust responsibilities and guides implementation of trust improvement activities.
- Completed As-Is Study/Business Process Documentation, prepared in conjunction with a contractor, which details how trust business processes are now being performed.
- Started the reorganization of OST/BIA, as outlined in the Department of the Interior Manual revised on April 21, 2003, to establish a clear line of responsibility for trust operations within Interior.

### **FY 2004 Planned Actions**

- Finish the initial trust business process To-Be model and begin implementation.
- Finish the reorganization of OST/BIA with the objectives of:
  - Keeping specific management decisions about trust assets at the agency level.
  - Creating a trust center and Trust Officers.
  - Promoting Self-Governance and Self-Determination.
  - Ensuring trust accountability by creating a new Office of Trust Accountability within OST.

### **FY 2005 and Beyond Planned Actions**

- Complete the process re-engineering of trust business processes.
- Acquire the best automated systems to support the re-engineered trust business processes and fulfill beneficiary needs and fiduciary requirements.
- Implement re-engineered trust business processes.

### ***Facilities Management System (FMS)***

Interior's public buildings, structures, and other facilities represent a major investment of tax dollars. Ensuring that maintenance and repair of such facilities is funded and implemented efficiently and effectively is an important element in protecting that investment and reducing potential Department and bureau liability. Inadequately funded maintenance due to reduced budgets, diversion of maintenance funds for emergency responses, and competition for resources from other program needs has led to accelerated facility deterioration. Deterioration can affect public health and safety, reduce morale and productivity of employees, compromise bureau missions, reduce revenues, and increase the need for costly major repair or early replacement of constructed assets.

In FY 1997, the Interior Planning, Design, Construction and Maintenance Council (PDCMC) initiated a departmentwide study of maintenance and repair issues with the goal of reducing financial and safety liability to Interior, increasing the effectiveness and awareness of facilities maintenance, controlling the increasing backlog of deferred maintenance, and ultimately, improving the stewardship of Interior's constructed assets. In February 1998,

the final report from the study was issued. It is entitled, “Facilities Maintenance Assessment and Recommendations”, and offers ten major recommendations to improving the bureaus’ and the Department’s facilities maintenance programs. Three of these recommendations directly relate to facilities management systems:

1. *Ensure Appropriate Use of Maintenance Allocations*

- Initiate policies and procedures such that maintenance funds are separately identified, allocated, and tracked to ensure that all maintenance funds are used for facilities maintenance.
- Establish policies and procedures to effectively account for the expenditure of facilities maintenance funds.

2. *Establish Common Definitions for Key Maintenance Terms*

- Interior should establish:
  - a common subset of facilities data elements;
  - more standardized definition of terms;
  - procedures for documenting inventory and backlogs;
  - procedures for determining estimated replacement costs; and
  - budget categories for the bureaus to adopt into their facilities program processes.
- The bureaus’ real property and facilities data and systems should be consistent to achieve compatibility of data.
- Program and budget information should be linked with the Federal Financial System.

3. *Ensure Integrity of Maintenance Deficiency Databases*

- Initiate a uniform methodology and core data set for facility condition surveys to assess the maintenance and repair needs of all existing Interior facilities. Validate inventory of existing facilities.
- Develop automated backlog documentation that accurately communicates the facilities’ needs and that can easily be reviewed and updated by field staff. Include standard need descriptions and associated cost estimating procedures.

The Department is currently implementing these recommendations.

### **FY 2003 Accomplishments**

- NPS completed deployment of the MAXIMO facilities management software in their remaining park units. USGS has initiated the software in the first 3 of the 14 installations for which it is to be used. BLM, FWS, and BIA/Irrigation Projects and Safety of Dams have begun a phased deployment of the system.

- The facilities managing bureaus continued a facilities condition assessments process which is on schedule to meet a FY 2005 completion date for the first cycle of assessments.
- In order to manage future consistency within the facilities management data and reduce life-cycle systems costs, the Department facilitated the purchase of the latest, fully web-based version of the MAXIMO software. The purchase was for 6,000 licenses to be shared by the implementing bureaus. The quantity was based on the accumulated projection of the bureaus' short-term (3 years) need for licenses. The procurement was negotiated at the Department level in order to take advantage of quantity discounting resulting in a substantial saving to the taxpayers.
- Increased the intensity of Department-level management of the facilities management system implementation.

### **FY 2004 Planned Actions**

- In support of the Maintaining America's Heritage initiative, the Department will implement the fifth year of the "Five-Year Facilities Deferred Maintenance and Capital Improvement Plan" to address critical health and safety needs and critical resource protection needs across the bureaus. The long-term improvement of facilities management is dependent upon the ability to collect current and accurate facilities data, utilize standard database definitions for those data elements that are required at the Department level, implement a formal program of facilities condition assessments, and have consistent facilities management systems to effectively and efficiently process facilities data.
- Implement a DOI Preventative Maintenance (PM) Library that can be accessed from the bureaus' facilities management systems. This will reduce duplication of effort in preparation of preventative maintenance work orders and plans within the implementing bureaus. This initiative involves establishing standard PM work routines and formats for incorporation into the FMS application. This effort also involves the development of a methodology for electronically sharing the PM's contained in the library with consideration given as to how to update and maintain the data over time.
- Develop a standard list of asset types with definitions that links to the GSA real property reporting requirements. Because, for the Department, the FMS will be asset based, this standardization of asset types is critical to the multiple modules and interfaces in place and under development (i.e., the Preventative Maintenance Library). It is also essential in reporting progress in all five strategic goal areas of the DOI Draft Strategic Plan for FY 2003-2008: (1) Resource Protection; (2) Resource Use; (3) Recreation; (4) Serving Communities; and (5) Management. The improvement and maintenance of the facilities and infrastructure that support each of these goal areas is an integral part of the strategy of successful goal accomplishment. Each of the goal areas uses Facilities Condition Index (FCI) as a performance measure of success. The standard asset type list allows particular asset types to be identified to each of the Strategic Plan goal areas and the FCI computed for those asset type sets.
- Establish FCI as a standard results-based performance measure within the facilities managing bureaus. This metric will be used to relate conditions of similar asset types and to monitor the change in that condition.

### **FY 2005 and Beyond Planned Actions**

- Continue implementation and improvement of the Five-Year Facilities Deferred Maintenance and Capital Improvement Plan.
- Improve accuracy of the deferred maintenance backlog through cyclic facilities condition assessments.
- Complete development and deployment of consistent facilities management systems throughout the bureaus.