INFORMATION RESOURCES MANAGEMENT Table of Contents

O. TABLE OF CONTENTS

- 1. Program Objective, Policy and Responsibilities
 - .1 Purpose
 - .2 Scope
 - .3 Applicability
 - .4 Authority
 - .5 Policy
 - .6 Objectives
 - .7 Description of the Program
 - .8 Related Programs
 - .9 Responsibilities
 - .10 Definitions
 - .11 Other Definitions
- 2. Information Resources Management (IRM) Planning
 - .1 Purpose
 - .2 Background
 - .3 Policy
 - .4 Objectives
 - .5 Responsibilities
 - .6 Procedures
- 3. Economic Analysis in Support of Information Resources Management (IRM) Decision-Making
 - .1 Purpose
 - .2 Policy
 - .3 Objective
 - .4 Responsibilities
 - .5 Procedures
- 4. Information Resources Management (IRM) Assessment Program
 - .1 Purpose
 - .2 Policy
 - .3 Objectives
 - .4 Responsibilities
 - .5 Procedures
- 5. Information Resources Management (IRM) Standards Program
 - .1 Purpose

INFORMATION RESOURCES MANAGEMENT Table of Contents

- .2 Policy
- .3 Objectives
- .4 Responsibilities
- .5 Procedures
- Information Resources Security
 - .1 Purpose
 - .2 Policy
 - .3 Objective
 - .4 Responsibilities
 - .5 Procedures
- 7. Inventory of Federal Information Processing (FIP) Resources
 - .1 Purpose
 - .2 Policy
 - .3 Objectives
 - .4 Responsibilities
 - .5 Procedures
- 8. Reutilization of Federal Information Processing (FIP)
 Resources
 - .1 Purpose
 - .2 Policy
 - .3 Objective
 - .4 Responsibilities
 - .5 Procedures
- 9. Life Cycle Management (LCM) of Information Systems
 - .1 Purpose
 - .2 Policy
 - .3 Objectives
 - .4 Responsibilities
 - .5 Procedures
- 10. Information System Management Accountability
 - .1 Purpose
 - .2 Policy
 - .3 Objectives
 - .4 Responsibilities
 - .5 Procedures

INFORMATION RESOURCES MANAGEMENT Table of Contents

- 11. Federal Information Processing (FIP) Resource Acquisitions
 - .1 Purpose
 - .2 Policy
 - .3 Objective
 - .4 Responsibilities
 - .5 Procedures
- 12. Workstations, Microcomputers and Computer Networks
 - .1 Purpose
 - .2 Policy
 - .3 Objectives
 - .4 Responsibilities
 - .5 Planning and Requirements Analyses
 - .6 Management and Use of Microcomputers
 - .7 Procedures

Supplements to 35 BIAM

<u>No</u> .	<u>Title</u>
1	Reserved
2	<pre>Information Resources Management (IRM) Planning (To be published at a later date)</pre>
3	Economic Analysis in Support of Information Resources Management (IRM) Decision-Making (To be published at a later date)
4	Information Resources Management (IRM) Assessment Program (To be published at a later date)
5	Information Resources Management (IRM) Standards Program (To be published at a later date)
6	Information Resources Security

INFORMATION RESOURCES MANAGEMENT Table of Contents

7	Inventory of Federal Information Processing (FIP) Resources (To be published at a later date)
8	Reutilization of Federal Information Processing (FIP) Resources (To be published at a later date)
9	Life Cycle Management (LCM) of Information Systems (To be published at a later date)
10	Information System Management Accountability (To be published at a later date)
11	Federal Information Processing (FIP) Resource Acquisitions (To be published at a later date)
12	Workstations, Microcomputers and Computer Networks (To be published at a later date)

1. PROGRAM OBJECTIVE, POLICY AND RESPONSIBILITIES

- 1.1 <u>Purpose</u>. This chapter describes the Bureau of Indian Affair's (BIA) Information Resources Management (IRM) (including automatic data processing [ADP], data administration, geographic and spatial data, and telecommunications) program and its scope, objectives, responsibilities, and structure. The program has been established to affect the administration, policy guidance, program direction, and authority for IRM management activities throughout the BIA.
- 1.2 <u>Scope</u>. The IRM program encompasses all information resources, information management, and information coordination activities of the BIA.

1.3 Applicability.

- A. Established BIA IRM program policies, procedures, and standards apply to all BIA offices.
- B. These policies, procedures, and standards also apply to work or activities performed by consultants, contractors, universities, other government agencies, etc., for the BIA to the extent these activities involve information resources management functions or processes.
- C. The IRM program encompasses all information resources and processes within the BIA that are concerned with creating, acquiring, cataloging, maintaining, storing, using, processing, disseminating, and disposing of information in electronic or non-electronic form.

1.4 Authority.

A. The IRM program is based on the authorities derived from applicable public laws, Federal regulations, and Executive Orders relating to information resources, assigned to the Assistant Secretary - Indian Affairs and delegated to the Commissioner of Indian Affairs as required by Department of the Interior regulations and published in 10 BIAM.

- B. Major Federal IRM legislation includes the: Federal Acquisition Regulation (Public Law 93-400) as amended by (Public Law 96-83) and Office of Procurement Policy Letter (85-1); Federal Records Act (Public Law 81-754); Brooks Act (Public Law 89-306); Freedom of Information Act (Public Law 90-23); Privacy Act (Public Law 93-574); Paperwork Reduction Act (Public Law 96-511); Competition in Contracting Act (Public Law 98-369); Paperwork Reduction Reauthorization Act (Public Law 99-500); Rehabilitation Reauthorization Act (Public Law 99-506); Computer Security Act (Public Law 100-235); Telecommunications Accessibility Enhancement Act (Public Law 100-542); Office of Federal Procurement Policy Act Amendments of 1988 (Public Law 100-679); and Small Business Act (Public Law 98-72).
- 1.5 <u>Policy</u>. It shall be the policy of the BIA to use and manage information resources in the most cost effective and efficient manner possible consistent with applicable laws, regulations, policies, and procedures.
- 1.6 Objectives. The objectives of the BIA's IRM program are to:
- A. Enhance the management of the BIA's missions through the effective use of information resources.
 - B. Improve information delivery.
- C. Satisfy information needs through the use of state-of-the-art technology and the sharing and exchanging of data.

1.7 Description of the Program.

- A. IRM includes information resources management, technology, telecommunications, and data administration; organizational requirements and uses for information and the coordination of these information needs and uses across organizational and mission program areas; and the personnel and monetary resources associated with information activities.
- B. The BIA's IRM program is comprised of the following components.

- (1) IRM Program Management. Includes IRM policy dissemination; program coordination; strategic planning; review; life cycle management; and budgeting and financial management.
- (2) Information Technology Management. Includes information technology and services planning, policy, management and procurement; and information resources standards and security programs.
- (3) Telecommunications Management. Includes telecommunications planning, policy, standards, cost accounting, procurement; and network/technology management.
- (4) Data Administration. Includes data administration planning, policy, standards, acquisition, and data base management systems.
- C. Other programs, such as directives and records management, are also involved with the IRM program as a result of their dependency on information technology, or their effect on IRM functions.
- D. The IRM program supports all missions and programs of the BIA.

1.8 Related Programs.

- A. Detailed information on the BIA's Privacy Act Program is contained in 11 BIAM.
- B. Detailed information on the BIA's Forms and Reports Management System Program is contained in 15 BIAM.
- C. Detailed information on the BIA's Records and Files Disposition Program is contained in 16 BIAM.
- D. Detailed information on the BIA's Directives Management System is contained on O BIAM.
- E. Detailed information on the BIA's Order of Succession Program is contained in 5 BIAM.

F. Detailed information on the BIA's Delegation of Authority Program is contained in 10 BIAM.

1.9 Responsibilities.

- A. <u>Commissioner of Indian Affairs</u>. The Commissioner is responsible for:
- (1) Ensuring the implementation of Federal and Department of the Interior IRM policies, procedures, and quidelines.
- (2) Designating an IRM Coordinator as liaison with the Department.
- B. <u>Information Resources Management Council (IRMC)</u>. The IRMC is responsible for:
- (1) Approving BIA IRM goals, strategies, plans, and broad policies.
- (2) Advising the Commissioner on resolution of major IRM issues.
- C. <u>Director, Office of Data Systems</u>. The Director is responsible for:
- (1) Providing guidance, direction, and oversight for policy development and implementation of the BIA's information resources management program.
- (2) Recommending major IRM policy positions to the Commissioner and the IRMC.
 - (3) Serving as the BIA's IRM Coordinator.
 - (4) Serving as Executive Secretariat for the IRMC.
- (5) Serving as the BIA Information Resources Standards Coordinator.

- (6) Serving as the Technical Information Resources Standards Representative.
- (7) Establishing and maintaining the BIA's automated IRM program.
- (8) Completing IRM reports and furnishing information as required by the Department of the Interior.
- (9) Coordinating the BIA response to Bureauwide and Department of the Interior requests for information or comment on IRM programs:
- (a) Information Technology Budget submissions required by OMB Circular No. A-11, (OMB Exhibits 43A, 43B, and 43C) and accompanying narrative.
 - (b) The Five-Year IRM Strategic Plan.
 - (c) Miscellaneous data calls.
- (10) Establishing and carrying out a program of continual evaluation and review of information technology activity and utilization.
- (11) Maintaining awareness of the BIA's information technology environment and continually reassessing the impact of changes in technology, legislation, and management policy on missions and functions within the BIA.
- (12) Managing the development, maintenance, and operation of BIA production systems, including providing functional and technical support to clients.
- D. <u>IRM Coordinator</u>. The BIA IRM Coordinator is responsible for serving as the primary coordinator and liaison with the Department of the Interior for IRM activities and performs all coordination functions for the BIA and represents the BIA in meetings, conferences, special committees, etc., established by the Department of the Interior. This role is performed by the Director of the Office of Data Systems.

- E. <u>Records Management Officer</u>. The BIA Records Management Officer is responsible for ensuring that BIA records, regardless of their physical form, are created, maintained, and disposed of in compliance with applicable laws and regulations.
- F. <u>Privacy Act Officer</u>. The BIA Privacy Act Officer is responsible for developing and implementing programs to manage BIA records covered by the Privacy Act.
- H. <u>Central Office Program Directors and Area Directors</u>. The Directors are responsible for:
- (1) Ensuring that BIA policies for IRM are adhered to, including (where applicable) life cycle management for information technology.
- (2) Identifying IRM requirements in program and budget plan formulation.
- (3) Conducting an annual review and analysis of the Area's/Office's use of information technology and needed improvements in information-handling.
- (4) Serving as active members on the IRMC as designated in the IRMC Charter.
- (5) Appointing an "IRM/ADP Coordinator" to handle routine IRM/ADP information gathering, analysis, and liaison functions within the Program Office/Area Office.
- H. <u>System Owner</u>. The System Owner is responsible and accountable for the products of the information system, defining the system functional requirements, providing functional oversight, and providing for periodic review of the system requirements in order to determine whether the requirements continue to exist and that the system continues to meet the purposes for which it was developed in an efficient and cost effective manner.
- I. <u>System Manager</u>. The System Manager is responsible for assisting the System Owner in defining the system requirements,

ensuring that all program changes meet the formal written standards and notifying the System Owner when emergency program changes are made, and providing operations and/or maintenance support.

- J. Office and Area IRM/ADP Coordinator. The IRM/ADP Coordinator is responsible for:
- (1) Preparing the Program Office/Area Office response to requests or comment on IRM programs:
- (a) Information Technology Budget submissions required by OMB Circular No. A-11 (OMB Exhibits 43A, 43B, and 43C) and accompanying narrative.
 - (b) The Five-Year IRM Strategic Plan.
 - (c) Miscellaneous data calls.
- (2) Serving as liaison between the Office of Data Systems and the Program Office/Area Office.
- 1.10 <u>Definitions</u>. For purposes of this chapter, the following definitions apply:
- A. Annual Review Assessment Plan. An annual schedule of assessments to be conducted during a fiscal year by the BIA. These plans are submitted to Department of the Interior as part of the Federal IRM assessment program and the triennial IRM assessment process required by the Paperwork Reduction Act of 1980.
- B. <u>Automated Information System</u>. An organized combination of human resources, equipment, software, and established methods and procedures designed to collect, process and/or communicate data or information for the purposes of supporting specific administrative, mission or program requirements. This includes the areas of application systems, data bases, and management information systems.

- C. <u>Benefits</u>. Improvements in mission performance or cost savings expected to be received or achieved over a given time period as a result of a proposed investment. Benefits may be categorized as:
- (1) <u>Tangible Benefits</u>. Improvements in mission performance, effectiveness, or cost savings that can be quantified in dollars or other material terms.
- (2) <u>Intangible Benefits</u>. Improvements in mission performance or effectiveness that cannot easily be quantified in dollars or other material terms, but are considered worthwhile or beneficial.
- D. <u>Bureau Information Resources Standards Coordinator</u>. The BIA person responsible for liaison with the Department of the Interior and the Technical Information Resources Standards Representatives to develop and recommend information resources standards. This role is performed by the Director of the Office of Data Systems.
- E. <u>Cost/Benefit Analysis</u>. A systematic approach for evaluating the relative value of proposed projects. A cost/benefit analysis can be used to compare alternative means of implementing a specific project or compare the relative values of a number of competing project proposals. It can also be used to assess the economic consequences of decisions that have already been made and help managers establish future courses of action. A cost/benefit analysis is sometimes referred to as an economic analysis.
- F. <u>Cost/Benefit Ratio</u>. A representation of the relationship between benefits and the investment cost incurred in producing the benefits (e.g. increases in productivity or cost savings). This indicator is used to assess alternatives having unequal costs and unequal benefits.
- G. <u>Data</u>. A representation of facts, concepts, or instructions in a formalized manner suitable for communication, interpretation, or processing by human or automated means.

- H. <u>Departmental Information Resources Standards</u>. All information resources standards approved for use throughout the Department of the Interior.
- I. <u>Delegation of Procurement Authority (DPA)</u>. The General Services Administration's exclusive authority to Federal agencies to contract for FIP resources.
- J. <u>Federal Information Processing (FIP) Resources</u>. FIP resources includes equipment, software, services, support services, maintenance, related supplies, and systems.
- (1) <u>FIP Equipment</u>. Any equipment or interconnected system or subsystems of equipment used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information.
- (2) <u>FIP Software</u>. Any software, including firmware, specifically designed to make use of and extend the capabilities of equipment.
- (3) <u>FIP Services</u>. Any service, other than support services, performed or furnished by using equipment or software.
- (4) <u>FIP Support Services</u>. Any commercial non-personal services, including maintenance, used in support of equipment, software, or services.
- (5) <u>FIP Maintenance</u>. Those examination, testing, repair, or part replacement functions performed on equipment or software.
- (6) <u>FIP Related Supplies</u>. Any consumable item designed specifically for use with equipment, software, services, or support services.
- (7) <u>FIP System</u>. Any organized combination of equipment, software, services, support services, or related supplies.

- K. Federal Information Processing (FIP) Resources Inventory. An automated data base containing management information on FIP resources (equipment and/or software) leased and owned by an organization.
- L. Federal Information Processing Standard (FIPs)
 Programming Languages. FIPs programming languages which are
 approved for Governmentwide use. These standards are designed to
 facilitate application portability and maintainability
 irrespective of the technology environment in which the
 applications are to operate.
- M. <u>Federal Information Resources Management Regulations</u> (<u>FIRMR</u>). The primary Governmentwide regulation for the acquisition, management, and use of FIP resources and Federal records.
- N. <u>Federal Information Resources Management Review (IRM)</u>
 <u>Program.</u> A program established by FIRMR to support improvements in Federal IRM and to meet specific agency IRM objectives:
- (1) To review information management activities to access their adequacy and efficiency.
- (2) To determine and report to the Congress, with the assistance of GSA, on how well agencies are meeting the agency objectives.
- O. <u>General Services Administration</u>. A Government agency responsible for issuing Governmentwide policies, procedures, standards, and guidance for information resources management.
- P. <u>Information</u>. Any communication or reception of knowledge such as facts, data, or opinions, including numerical, graphic, or narrative forms, whether oral or maintained in any medium, including computerized data bases, paper, microform, or magnetic tape.
- Q. <u>Information Resources</u>. Information and the personnel, monetary and technological elements involved in its creation, collection, storage, use, and dissemination.

- R. <u>Information Resources Management (IRM) Assessment</u>. An organized process to evaluate periodically the extent to which the BIA achieves the goals and objectives of specific IRM activities such as telecommunications, end-user computing, software management, information management, and electronic filing.
- S. <u>Information Resources Management (IRM) Coordinator</u>. The BIA person responsible for assuring that requests for approval to acquire FIP resources have been coordinated with appropriate BIA personnel to ensure that the requirements are in conformance with the BIA IRM Strategic Plan; meet a mission need; identify necessary funding; and represent the appropriate approach from technical, financial, and managerial viewpoints. The role is performed by the Director of the Office of Data Systems.
- T. <u>Information Resources Project</u>. A planned undertaking that may include a number of activities engaged in developing a solution to an information management problem. This includes projects to develop and/or acquire FIP resources, information, and telecommunications systems.
- U. <u>Information Resources Security</u>. The management controls and safeguards designed to protect information resources and ensure the continued performance of governmental activities during emergency situations.
- V. <u>Information Resources Standards</u>. All standards for information resources and processes concerned with creating, acquiring, cataloging, maintaining, storing, using, processing, disseminating, and disposing of information.
- W. <u>Information System</u>. The organized collection, processing, transmission, and dissemination of information in accordance with defined procedures, whether automated or manual.
- X. <u>Information Technology Budget</u>. Data on acquisition, operation, and use of information technology systems collected by the Office of Management and Budget (OMB Circular No. A-11) for oversight of the acquisition and use of automatic data

processing, telecommunications, and other information technology to manage information resources, as required by the Paperwork Reduction Act of 1980. The data is also used for analysis in support of the Chief Financial Officers Act of 1990.

- y. <u>Intelligent Workstation</u>. A powerful, specialized workstation often based upon a 32 bit microprocessor architecture with integral capabilities, such as graphics, communications (with or without voice), large memory and local file storage capabilities. These devices are often used for scientific, engineering or artificial intelligence applications.
- Z. <u>Licensing Agreement</u>. The contractual terms and conditions by which a buyer or user of proprietary software or data agrees to abide for the privilege of using the software or data. License agreements are normally explicitly stated within the documentation accompanying the proprietary software or data, but when lurch quantities are involved, different terms and conditions may be separately negotiated as a part of the acquisition process.

1.11 Other Definitions.

- A. <u>Life Cycle Management (LCM)</u>. A management approach which provides a structured process for planning and control of an information system from inception to replacement or termination. LCM provides a common framework for facilitating control of the process, specifying the contents of deliverables, improving communications among diverse interest groups, and managing the system acquisition process. The effort and level of detail of the activities performed using the LCM management approach are to be commensurate with the size, complexity, and importance of the system.
- B. <u>Major Information Resources</u>. The criteria for defining major information resources can be found in the LCM policy covering the specific resources.
- C. <u>Major Information System</u>. An information system that requires special continuing management attention because of its importance to the support of a mission; its high development,

operation, or maintenance costs; or its significant impact on administration of programs, finances, property, or other resources. An information system is determined to be major when it meets any one of the following criteria:

- (1) The system directly affects the ability of the Department of the Interior or the BIA to perform a mission designated by the President, Congress, Office of Management and Budget, or the Secretary, as being of importance.
- (2) The system involves a significant investment relating to development, operation or maintenance, including personnel costs. In this context, significant investment is defined as: (a) the cost of initial development from conception to implementation exceeds \$1 million, (b) the cost of operating and maintaining the system in any one year exceeds \$500,000 or (c) the total life cycle cost exceeds \$5 million.
- (3) The system directly affects national security or the security and safety of people, substantial financial resources, or other valuable assets.
- (4) The system is a Department of the Interior or Bureauwide standard system.
- (5) The system supports a function that is multi-bureau or multi-organization in scope.
- (6) The system directly affects the Department of the Interior or BIA's ability to meet a critical Department of the Interior, BIA, national, or international mission.
- D. <u>Microcomputer</u>. A general purpose computer consisting of one or more microprocessors assembled in a unit of desk top or smaller size, capable of supporting a number of peripheral devices. The unit typically is a keyboard, video screen, and at least one disk drive.
- E. <u>Microprocessor</u>. The portion of the microcomputer which provides the control, logic, and arithmetic capability. It is

usually manufactured in single large scale integrated circuit chip of 8, 16, 24, or 32 bit architecture.

- F. <u>Milestone</u>. A moment in time in the life cycle in which reporting is required to implement management control of the project. Milestones coincide with the end of phases and stages.
- G. <u>Non-Intelligent Workstation</u>. A fixed functional device having no programmability or communications capability except possibly to a controller to which it may be attached.
- H. <u>Phase</u>. A distinct interval in the life cycle characterized by the type of activities performed to produce specific end products.
- Proprietary Software and Data. Commercially available software and data available through lease or purchase in the commercial market. This also may pertain to software or data which is neither owned by the Federal Government nor available in the public domain. Commercially available proprietary software and proprietary commercial data bases are usually copyrighted, and all rights are reserved to the copyright owner. Unless otherwise authorized, any copying, duplicating, selling, or other unauthorized distribution of the software or data may be unlawful. Commercially available microcomputer software which is copyrighted generally may only be installed on the microcomputer(s) for which it was purchased or leased. violations of the Copyright Law of the United States can result in civil damages of up to \$0,000 in addition to actual damages (17 USC 04(c)(2)), plus criminal penalties of up to one year imprisonment and/or a \$2,000 fine (18 USC 2319(b)(3)).
- J. Records. All written, machine readable, audiovisual and other documentary materials, regardless of physical form or characteristics, made or received by the BIA in pursuance of Federal laws or in connection with the transaction of public business and preserved, or appropriate for preservation, as evidence of the organization, functions, policies, decisions, procedures, operations, or other activities, or because of the informational value of the recorded data.

- K. <u>Return on Investment (ROI)</u>. A measure of the net benefit expected over the life of a project compared to the planned level of investment.
- L. <u>Sensitive Application</u>. An application of information technology that requires protection because it processes sensitive data, or because of the risk and magnitude of loss or harm that could result from improper operation or deliberate manipulation.
- M. <u>Sensitive Data/Information</u>. Information or data that require protection due to the risk and magnitude of loss or harm which would result from inadvertent or deliberate disclosure, alteration, or destruction. The term includes information or data whose improper use or disclosure could adversely affect the ability of an agency to accomplish its mission, proprietary data, records about individuals requiring protection under the Privacy Act, and data not releasable under the Freedom of Information Act. This definition also includes confidential information which the BIA collects from the private sector or public with the implied understanding that this information will be used only for limited purposes such as statistical analysis, and will not be generally released.
- N. <u>Small Computer Network Configuration</u>. A grouping or clustering of microcomputers, workstations, and shared peripheral devices connected via direct wiring or a local area network (LAN). (Note: A small computer network configuration includes all FIP resources, telecommunications facilities connecting these devices and all network control and application software. Reference, also, the BIA policy governing planning, acquisition, and use of local area networks.)
- O. <u>Special Assessment</u>. An assessment of a specific IRM activity not scheduled in the GSA review plan and conducted by the BIA or the Department of the Interior.
- p. <u>Standard</u>. Documentation that reflects agreements on products, practices, or operations by governmental groups or nationally or internationally recognized industrial, professional, or trade associations. This concept applies to

formal, approved standards, not to de facto and proprietary standards, which are exceptions to this concept. Within the Government, standards may be voluntary or mandatory.

- Q. Stage. A sub-component of a phase in which specific deliverables are produced.
- R. <u>Strategic Planning</u>. The highest and most comprehensive level of planning within an organization. It emphasizes the organization's mission, goals, objectives, and major resource requirements projected over a period of time. Strategic planning establishes the general approach, major actions, schedule, and resources necessary for satisfying the organization's requirements. (For purposes of this chapter, strategic planning covers a minimum timeframe of five years.)
- S. <u>System Decision Paper</u>. The principal document used for recording essential information regarding the project. It focuses on issues relevant to a particular time in the life cycle and the particular decision needed from management. Decision papers are submitted for management review at specific milestones throughout the life cycle.
- T. <u>System Manager</u>. The individual who protects, operates, and/or maintains an information system in accordance with a service agreement with the System Owner. In some instances, System Manager responsibilities can be shared.
- U. <u>System of Records</u>. A group of records under the control of BIA from which information is retrieved by the name of an individual or by some identifying number, symbol, or other particular assigned to the individual.
- V. <u>System Owner</u>. The program official whose program is supported by the information system and is the primary user of the information system, who initiated development of the information system, or who exercises functional oversight of the system. The System Owner is responsible and accountable for the products of the system. In some instances, system ownership can be shared.

- W. <u>Technical Information Resources Standards</u>
 <u>Representative</u>. A BIA representative with technical expertise in a particular information technology area (e.g., automated data processing, telecommunications). This role is performed by the Director of the Office of Data Systems.
- X. <u>Technology Life Cycle</u>. The time period beginning with the identification of a requirement for a general or specific type of technology to meet a mission requirement and ending with the final disposition of the technology item(s) acquired to support the requirement.
- y. <u>Vital Records</u>. Those records or information deemed necessary to ensure continuity of essential governmental activities during and following national emergency conditions, and also those records essential to the protection of the rights and interests of the BIA, and of the individuals for whose rights and interests it has responsibility.

INFORMATION RESOURCES MANAGEMENT IRM Planning

- 2. INFORMATION RESOURCES MANAGEMENT (IRM) PLANNING
- 2.1 <u>Purpose</u>. This chapter prescribes the policies, procedures, and responsibilities regarding IRM strategic planning for information resources within the BIA.
- 2.2 <u>Background</u>. The Paperwork Reduction Act (44 USC 3501), as amended, requires each Government agency to develop and revise annually a five-year plan for meeting the agency's information technology needs. Pursuant to the Act, the Office of Management and Budget (OMB) Circular No. A-130 (8b(1)) further requires agencies to establish multi-year strategic plans for acquiring and operating information technology to satisfy program and mission needs and to support agency budget requests.
- 2.3 Policy. It shall be the policy of the BIA to:
 - A. Establish and follow a formal IRM planning process.
- B. Develop, maintain, and annually update plans covering the information resources of each office and the BIA as a whole.
- C. Integrate IRM plans with mission plans and budget strategies.
- D. Provide top-level management review and approval of office and Bureauwide IRM plans.
- E. Use IRM plans as the basis for developing and acquiring information resources.
- 2.4 <u>Objectives</u>. The objectives of IRM strategic planning are to:
- A. Establish the long term direction to be followed by the BIA for cost effective use of information and resources in support of BIA missions and programs.
- B. Serve as the basis for information technology budget information to OMB.

INFORMATION RESOURCES MANAGEMENT IRM Planning

2.5 Responsibilities.

- A. <u>Commissioner of Indian Affairs</u>. The Commissioner is responsible for ensuring the implementation of an IRM planning process in accordance with Federal and Department of the Interior policies, procedures, and guidelines.
- B. <u>Information Resources Management Council (IRMC)</u>. The IRMC is responsible for:
- (1) Reviewing and approving the BIA's Five-Year IRM Srategic Plan.
- (2) Ensuring that the BIA's Five-Year IRM Strategic Plan is consistent with, and supportive of, BIA program mission plans and administrative plans and is based on valid mission needs.
- C. <u>Director</u>, <u>Office of Data Systems</u>. The Director is responsible for:
- (1) Providing guidance, direction, and oversight for policy development and implementation of BIA's IRM planning activities program.
- (2) Ensuring that the BIA's Five-Year IRM Strategic Plan is based on valid mission requirements.
- (3) Ensuring the production, maintenance, and annual update of the BIA's Five-Year IRM Strategic Plan.
- (4) Ensuring coordination of the BIA's Five-Year IRM Strategic Plan with the IRMC.
- (5) Ensuring that IRM plans have been developed and approved prior to (a) budgeting for major information resources expenditures, and (b) initiating acquisition or development projects.
- (6) Ensuring that the BIA's Five-Year IRM Strategic Plan is linked to the BIA's budget plan, and that major

INFORMATION RESOURCES MANAGEMENT IRM Planning

information resources projects and associated funding requirements are identified in the BIA's budget estimates.

- (7) Establishing and maintaining BIA IRM strategic planning procedures.
- (8) Providing input required for the preparation of the Bureauwide Five-Year IRM Strategic Plan.
- (9) Providing technical assistance and overseeing BIA program IRM planning activities.
- D. <u>Central Office Program Directors and Area Directors</u>. The Directors are responsible for:
- (1) Ensuring that Program Office/Area Office IRM plans are prepared in accordance with BIA procedures.
- (2) Ensuring that consistency is maintained between the Program Office/Area Office budget; the Information Technology Budget submission (OMB Exhibits 43A, 43B, and 43C) required by OMB Circular No. A-11; Program Office/Area Office IRM and program plans; and the BIA's Five-Year IRM Strategic Plan.
- (3) Ensuring that funding is available in the Program Office/Area Office budget for any planned information resource acquisitions.
- (4) Reviewing the Program Office/Area Office Five-Year IRM Stragegic Plan annually to ensure that it reflects the current status of information resource utilization in the Program Office/Area Office, and that identified needs and planned solutions are clearly documented for inclusion in the overall BIA Five-Year IRM Strategic Plan.
- 2.6 <u>Procedures</u>. Detailed procedures describing the specific requirements and contents of BIA IRM Strategic plans are contained in 35 BIAM Supplement 2.

INFORMATION RESOURCES MANAGEMENT Economic Analysis in Support of IRM Decision-Making

- 3. ECONOMIC ANALYSIS IN SUPPORT OF INFORMATION RESOURCES MANAGEMENT (IRM) DECISION-MAKING
- 3.1 <u>Purpose</u>. This chapter prescribes the policies, procedures, and responsibilities for the performance and use of economic analysis to support IRM decision-making and in planning, budgeting for, developing, acquiring or replacing information resources used by the BIA in support of missions, programs, and administrative activities.
- 3.2 Policy. It shall be the policy of the BIA to:
- A. Use benefit/cost analysis principles and findings to support IRM decision-making. An analysis shall be performed and documented whenever information resources investments are planned and resource acquisition or development projects are implemented.
- B. Use cost/benefit analysis as an evaluation tool in assessing the cost effectiveness of existing information resources assets and operations.
- 3.3 <u>Objective</u>. The objective of cost/benefit analysis is to provide a systematic approach to evaluating IRM project proposals on an economic basis, particularly where several alternative approaches are feasible.
- 3.4 Responsibilities.
- A. <u>Commissioner of Indian Affairs</u>. The Commissioner is responsible for ensuring the implementation of Federal and Department of the Interior policies, procedures, and guidelines for the use of cost/benefit analyses in IRM decision-making.
- B. <u>Information Resources Management Council (IRMC)</u>. The IRMC is responsible for recommending Bureauwide IRM priorities and strategies, based on results of cost/benefit analyses, to the Commissioner.
- C. <u>Director</u>, <u>Office of Data Systems</u>. The Director is responsible for:

INFORMATION RESOURCES MANAGEMENT Economic Analysis in Support of IRM Decision-Making

- (1) Providing guidance, direction, and oversight for policy development and implementation of BIA's use of cost/benefit analyses in support of IRM decision-making.
- (2) Reviewing and approving cost/benefit analysis reports prior to their submission to the Department of Interior.
- (3) Establishing and maintaining procedures for performing and using cost/benefit analyses in IRM decision-making.
- (4) Reviewing cost/benefit analysis reports and validating findings prior to their submission to the IRMC or the Department of the Interior.
- D. <u>Central Office Program Directors and Area Directors</u>. The Directors are responsible for:
- (1) Using cost/benefit analysis results as a management tool in establishing IRM resource program priorities.
- (2) Establishing a management decision process for IRM resource projects which incorporates cost/benefit analysis results.
- (3) Implementing the policies and guidelines prescribed by this chapter.
- (4) Documenting and submitting cost/benefit analysis reports to the Office of Data Systems to support budget requests, acquisition approvals, or information system life cycle management approval requests.
- (5) Ensuring appropriate Program Office/Area Office personnel are adequately trained in performing and using cost/benefit analysis as a management tool.
- 3.5 <u>Procedures</u>. Detailed procedures and guidelines describing the use of cost/benefit analysis in support of IRM decision-making are contained in 35 BIAM Supplement 3.

INFORMATION RESOURCES MANAGEMENT IRM Assessment Program

- 4. INFORMATION RESOURCES MANAGEMENT (IRM) ASSESSMENT PROGRAM
- 4.1 <u>Purpose</u>. This chapter prescribes policy, procedures, and responsibilities for developing a BIA IRM assessment program to support improvements in BIA's IRM program.
- 4.2 <u>Policy</u>. It shall be the policy of the BIA to maintain an effective continuing system for assessing the contributions of IRM programs to the achievement of overall BIA goals and objectives.
- 4.3 <u>Objectives</u>. The objectives of the IRM assessment program are to:
 - A. Determine the effectiveness of BIA IRM activities.
 - B. Assess the quality of performance of BIA IRM functions.
- C. Identify duplication of information and information services and areas where integration of information functions would be beneficial.
- D. Demonstrate compliance with the Federal and Department of the Interior IRM assessment programs.
- 4.4 Responsibilities.
- A. <u>Commissioner of Indian Affairs</u>. The Commissioner is responsible for ensuring the implementation of Federal and Department of the Interior IRM assessment policies, procedures, and guidelines.
- B. <u>Director</u>, <u>Office of Data Systems</u>. The Director is responsible for:
- (1) Providing guidance, direction, and oversight for policy development and implementation of BIA's IRM assessment programs.

INFORMATION RESOURCES MANAGEMENT IRM Assessment Program

- (2) Ensuring initiation of follow-up actions relating to the findings and recommendations included in internal BIA and Department of Interior assessment reports.
- (3) Establishing and maintaining procedures for conducting internal assessments of the effectiveness of IRM functions in support of the BIA's mission, programs, and administrative activities.
- (4) Establishing plans for BIA assessments to be conducted during a fiscal year required by the Paperwork Reduction Act.
- (5) Providing administrative management support to the program including the coordination of Department of the Interior requests and input from the BIA for data calls and reports, assisting in forming assessment teams, and writing and editing assessment reports.
- (6) Participating in and providing required information for compliance assessments conducted by the Department of Interior.
- 4.5 <u>Procedures</u>. Detailed procedures regarding the BIA's IRM assessment program are contained in 35 BIAM Supplement 4.

INFORMATION RESOURCES MANAGEMENT IRM Standards Program

5. INFORMATION RESOURCES MANAGEMENT (IRM) STANDARDS PROGRAM

- 5.1 <u>Purpose</u>. This chapter describes the policies, procedures, and responsibilities for the development, application, and maintenance of BIA information resources standards.
- 5.2 Policy. It shall be the policy of the BIA to:
- A. Use existing Federal and Department of the Interior information resources standards consistent with applicable laws and regulations.
- B. Develop and implement efficient and cost-effective standards for information resources and processes where BIA has singular expertise and interests.
- 5.3 <u>Objectives</u>. The primary objectives of the Information Resources Standards Program are to:
- A. Promote compatibility and interoperability to minimize costs for information systems.
- B. Establish minimum acceptable levels of performance for information systems.
- C. Provide guidelines for use in information technology procurements.
- D. Establish common practices and processes for creating, acquiring, cataloging, maintaining, storing, using, processing, disseminating, and disposing of information.
- E. Establish an inventory of the BIA's information resource standards and standards groups in which the BIA participates.
- 5.4 Responsibilities.

INFORMATION RESOURCES MANAGEMENT IRM Standards Program

- A. <u>Commissioner of Indian Affairs</u>. The Commissioner is responsible for ensuring the implementation of Federal and Department of the Interior information resources standards.
- B. <u>Information Resources Management Council (IRMC)</u>. The IRMC is responsible for reviewing and approving all BIA IRM standards.
- C. <u>Director</u>, <u>Office of Data Systems</u>. The Director is responsible for:
- (1) Providing guidance, direction, and oversight for policy development and implementation of information resources standards within the BIA.
- (2) Advising the Department of the Interior of BIA's position on proposed information resources standards, the necessity of new standards, needed revisions, and requests for waivers.
- (3) Appointing a BIA Information Resources Standards Coordinator.
- (4) Coordinating the development of BIA information resources standards before submission to the IRMC for approval.
- (5) Reviewing existing and proposed information systems acquisitions to assure adherence to information resources standards.
- (6) Serving as the central point of contact for the BIA with the Department of the Interior and outside agencies regarding the Technical Information Resources Standards Program.
- (a) Representing and acting for the BIA on appropriate information resources standards committees.
- (b) Participating in Department of the Interior information resources standards groups to ensure that proposed and adopted standards meet BIA needs and are efficient and cost-effective.

INFORMATION RESOURCES MANAGEMENT IRM Standards Program

- (c) Serving on the Information Resources Standards Coordinators Work Group.
- (d) Serving as a working member of technical information resources standards groupS and advising the IRMC of new and developing information resources standards.
- (7) Disseminating information to BIA offices on adopted information resources standards.
- (8) Maintaining an inventory of Federal, Department of the Interior, and BIA information resources standards and standards groups in which the BIA participates.
- (9) Establishing temporary work groups necessary to develop specific information resources standards.
- D. <u>Central Office Program Directors and Alea Directors</u>. Directors are responsible for:
- (1) Implementing and maintaining Federal, Department of the Interior, and BIA information resources standards.
- (2) Participating on temporary BIA information resources standards groups to ensure that proposed and adopted standards meet Program Office/Area Office needs.
- (3) Disseminating information to the Program Office/Area Office on adopted information resources standards.
- 5.5 <u>Procedures</u>. Detailed procedures and guidelines regarding the BIA standards program and requirements are contained in 35 BIAM Supplement 5.

6. INFORMATION RESOURCES SECURITY

- 6.1 <u>Purpose</u>. This chapter establishes policies, procedures, minimum requirements, and responsibilities for the development, implementation, and maintenance of a BIA information resources security program.
- 6.2 Policy. It shall be the policy of the BIA that:
- A. All BIA information resources shall be protected against loss; theft; natural disasters such as fire or flood; improper use; unauthorized access or disclosure; alteration; manipulation; violations of confidentiality; physical abuse; or unlawful destruction, as applicable.
- B. Information resources shall be protected in a manner that conforms to applicable information resources security legislation and Federal and Department of the Interior guidance.
- C. Responsibility for the security of information resources shall reside with those BIA Federal and contractor employees who manage, provide services for, or work with information resources.
- D. All employees shall receive adequate training so that they may fulfill their security responsibilities.
- E. Passwords, encryption, or security software shall be utilized to prevent the unauthorized access and use of information, data, and software resident on peripheral devices or storage media, or in the process of being communicated via technological means.
- F. Failure to adhere to Federal, Department of the Interior, and BIA regulations pertaining to information resources security shall result in appropriate administrative, disciplinary or legal action being taken against the violators.
- G. A Continuity of Operations Plan (COOP) shall be developed for each information technology facility and each

automated application system to ensure that interruptions of service of whatever type or duration are kept to a minimum.

- H. A COOP shall be developed for each manual application system containing vital records to ensure their continued protection so that essential BIA activities can continue during periods of national emergency.
- 6.3 <u>Objective</u>. The objective of the information resources security program is to ensure that BIA information resources are properly protected.

6.4 Responsibilities.

- A. <u>Commissioner of Indian Affairs</u>. The Commissioner is responsible for ensuring the implementation of Federal and Department of the Interior information resources security policies, procedures, and guidelines.
- B. <u>Director</u>, <u>Office of Data Systems</u>. The Director is responsible for:
- (1) Providing guidance, direction and oversight for policy development, and implementation for BIA's information resources security program.
- (2) Promoting an attitude of concern for IRM security among BIA employees.
- (3) Designating a Bureau Information Resources Security Administrator (BIRSA).
- (4) Developing and maintaining automated information resources security procedures.
- (5) Conducting annual reviews and evaluations of BIA's automated information resources security program to determine its effectiveness and to recertify the adequacy of the installed security safeguards.

- C. <u>BIA Information Resources Security Administrator</u> (BIRSA). The BIRSA is responsible for:
- (1) Managing the information technology security program.
- (2) Coordinating all activities designed to protect information resources with BIA officials having security responsibility (e.g., the Records Management Officer, BIA Security Officer, and system owners).
- (3) Developing an annual planning document which describes BIA information resources security activities, and submitting the document to the Department of the Interior Information Resources Security Administrator.
- (4) Reporting incidents involving technological resources resulting in the Loss of technology, fraud, or compromise/disclosure of sensitive material to the Department of the Interior Information Resources Security Administrator and the Office of Inspector General (OIG).
- D. <u>Records Management Officer</u>. The BIA Records Management Officer is responsible for:
- (1) Ensuring that records of the BIA, regardless of their physical form, are created, maintained, and disposed of in compliance with applicable laws and regulations.
- (2) Reporting to the Commissioner and the National Archives and Records Administration incidents involving records and their unlawful removal, defacing, alteration, or destruction.
- E. <u>Privacy Act Officer</u>. The BIA Privacy Act Officer is responsible for:
- (1) Developing and implementing programs to manage BIA records covered by the Privacy Act.
- (2) Conducting periodic inspections of areas where Privacy Act records are maintained.

- (3) Coordinating corrective actions with program system managers for incidents involving Privacy Act violations.
- F. <u>Central Office Program Directors and Area Directors</u>. Directors are responsible for:
- (1) Adhering to security policies and procedures for those resources they control.
- (2) Implementing appropriate operational procedures and safeguards for acquiring, accessing, using, maintaining, or disposing of information and technological resources under their control.
- (3) Ensuring that automated and nonautomated information resources are maintained in an environmentally sound location.
- (4) Ensuring that employees receive information resources security training.
- G. Owners. Owners (i.e., the individuals responsible for the development and/or the primary users) of automated applications systems and/or manual information systems are responsible for:
 - (1) Properly securing and using information resources.
- (2) Labeling all information and data with appropriate sensitivity labels.
- (3) Ensuring that adequate security requirements are incorporated into internal or contract specifications prior to the acquisition or design of these systems.
- H. <u>Users</u>. Users of information and technological resources are responsible for:
- (1) Complying with all security requirements pertaining to the resources they utilize.

- (2) Accounting for all activity performed under their User ID's/passwords if they use automated systems.
- I. <u>Custodians</u>. Custodians (i.e., those individuals responsible for the processing and storage of information or data) are accountable for:
- (1) Ensuring that the management-designated physical and administrative safeguards are operational within their areas of responsibility.
- (2) Restricting access to information and data to authorized personnel.
- 6.5 <u>Procedures</u>. Detailed procedures and guidelines regarding the BIA information resources security program are contained in 35 BIAM Supplement 6.

INFORMATION RESOURCES MANAGEMENT Inventory of FIP Resources

- 7. INVENTORY OF FEDERAL INFORMATION PROCESSING (FIP) RESOURCES
- 7.1 <u>Purpose</u>. This chapter describes the policies, procedures, and responsibilities for developing, managing, and maintaining FIP resource inventories.
- 7.2 <u>Policy</u>. It shall be policy of the BIA to maintain, periodically update, and use FIP resource inventories to ensure cost-effective and efficient use of FIP resources.
- 7.3 <u>Objectives</u>. FIP resource inventories are developed and maintained to:
- A. Provide a data base for managing FIP assets and establish proper accountability for these assets; assist in determining future needs, trends, information sharing, systems sharing, and application sharing possibilities; and eliminate unnecessary duplication of systems.
- B. Assist in analysis and tracking of FIP resource costs, help to identify obsolete and excess equipment, and help decision-making regarding lease versus purchase.
- C. Allow quick identification of FIP resources which can be reallocated, shared, or used to increase compatibility between offices.

7.4 Responsibilities.

- A. <u>Commissioner of Indian Affairs</u>. The Commissioner is responsible for ensuring the implementation of Federal and Department of the Interior FIP resource inventory policies, procedures, and guidelines.
- B. <u>Director</u>, <u>Office of Data Systems</u>. The Director is responsible for:
- (1) Providing guidance, direction, and oversight for policy development and implementation for BIA's FIP resource inventory program.

INFORMATION RESOURCES MANAGEMENT Inventory of FIP Resources

- (2) Designating a central point of contact with responsibility for collecting, coordinating, compiling, and submitting necessary data to the Department of the Interior and for carrying out BIA FIP resource inventory policies and objectives.
- (3) Establishing BIA FIP resource inventory procedures.
- (4) Developing and maintaining FIP resource inventories (equipment and major information systems).
- (5) Gathering, maintaining, and furnishing the necessary FIP resource data to the Department of the Interior in an accurate and timely basis.
- (6) Performing periodic reviews and analyses of FIP resource inventory data to ensure cost-effectiveness and efficiency in this resource area.
- C. <u>Central Office Program Directors and Area Directors</u>. Directors are responsible for:
 - (1) Implementing BIA's FIP resource inventory program.
- (2) Identifying an "ADP/IRM Coordinator" responsible for maintaining Program Office/Area Office FIP resource inventories.
- D. Office and Area IRM/ADP Coordinator. The IRM/ADP Coordinator is responsible for:
- (1) Maintaining Program Office/Area Office FIP resource inventories.
- (2) Reporting Program Office/Area Office FIP resource inventories as required.
- 7.5 <u>Procedures</u>. Detailed procedures describing the BIA's FIP resource inventory and reporting requirements are contained in 35 BIAM Supplement 7.

INFORMATION RESOURCES MANAGEMENT Reutilization of FIP Resources

- 8. REUTILIZATION OF FEDERAL INFORMATION PROCESSING (FIP)
 RESOURCES
- 8.1 <u>Purpose</u>. This chapter establishes policies, procedures, and responsibilities governing the reuse of automated FIP resources in the BIA.
- 8.2 Policy. It shall be the policy of the BIA that:
- A. Acquisition of FIP resources shall not be undertaken until an analysis is completed showing that the requirements cannot be met economically and efficiently by reuse of excess (or exchange/sale) FIP resources.
- B. Outdated FIP resources shall not be reassigned or screened for reuse when no longer required; the equipment shall be disposed of in the same manner as all other surplus property unless (1) a study has shown that the outdated resource represents the lowest overall cost solution to a requirement, or (2) the resource is part of an exchange/sale transaction.
- D. FIP resource components available for reuse that are not outdated (and exchange/sale equipment) regardless of original acquisition cost, shall be screened for reassignment first within the owner Program Office/Area Office and then within the BIA and Department of the Interior.
- E. FIP resource components available for reuse that are not outdated with an original acquisition cost of \$1,000,000 or more, shall be reported to the Department of the Interior for interagency screening if they cannot be reassigned within the BIA.
- 8.3 <u>Objective</u>. The objective of this chapter is to establish a program to transfer excess FIP resources between BIA organizations (and other Federal agencies) as a means of ensuring the economic and efficient acquisition and use of FIP resources.
- 8.4 Responsibilities.

INFORMATION RESOURCES MANAGEMENT Reutilization of FIP Resources

- A. <u>Commissioner of Indian Affairs</u>. The Commissioner is responsible for ensuring the implementation of Federal and Department of the Interior FIP resource reutilization policies, procedures, and guidelines.
- B. <u>Director</u>, <u>Office of Data Systems</u>. The Director is responsible for:
- (1) Providing guidance, direction, and oversight for policy development and implementation for BIA's FIP resource reutilization program.
- (2) Developing and maintaining an effective program for FIP resource reutilization.
- (3) Screening excess (and exchange/sale) FIP resources with an original acquisition cost below \$1,000,000 on a component basis for reuse and disposition of older FIP resources.
- (4) Reporting excess (and exchange/sale) FIP resources with an original acquisition cost of \$1,000,000 or more to the Department of the Interior.
- (5) Serving as the principal contact within the BIA and with the Department of the Interior on matters pertaining to the reuse of FIP resources.
- 8.5 <u>Procedures</u>. Detailed procedures and requirements for excess and reuse of BIA FIP resources are contained in 35 BIAM Supplement 8.

- 9. LIFE CYCLE MANAGEMENT (LCM) OF INFORMATION SYSTEMS
- 9.1 <u>Purpose</u>. This chapter establishes policies, procedures, and responsibilities for the use of LCM in planning and managing major information resources.
- 9.2 Policy. It shall be the policy of the BIA that:
- A. BIA organizations shall follow an LCM approach in planning, developing, enhancing, acquiring, and using major information resources.
- B. Major information resources projects and their goals and priorities be shall be clearly defined in the BIA's Five-Year IRM Strategic Plan as described in 35 BIAM 2.
- C. Major information systems shall be assigned a system owner responsible and accountable for the products of the system as described in 35 BIAM 10.
- D. Major information system acquisition and/or development or modification shall be justified by an economic analysis in accordance with 35 BIAM 3.
- E. A new major information system shall be custom developed only after it has been determined that an existing information system, including one from another Bureau, Federal government agency or off-the-shelf from industry, cannot be used or economically modified to satisfy the proposed information system's requirements.
- F. LCM shall be used in acquiring information technology, including hardware, software, communications capabilities, and services in support of major information systems.
- 9.3 Objectives. The objectives of this chapter are to:
- A. Provide a structured methodology for managing and controlling major information resources and their associated costs.

- B. Ensure proper and responsive communications among resource users, managers, BIA senior management, and IRM personnel.
- C. Ensure direct management accountability and responsibility for the performance and effective control of major information resources.
- D. Provide close and continued management involvement and oversight in all aspects of major information resources projects.
- E. Ensure that proper project management documentation and reporting practices are employed during the conduct of information resources projects.

9.4 Responsibilities.

- A. <u>Commissioner of Indian Affairs</u>. The Commissioner is responsible for:
- (1) Ensuring the implementation of Federal and Department of the Interior LCM policies, procedures, and guidelines.
- (2) Designating officials within user organizations to be responsible for management and control of specific major information resources projects.
- B. <u>Information Resources Management Council (IRMC)</u>. The IRMC is responsible for:
- (1) Reviewing and making recommendations on requests to initiate the development and/or acquisition of a major information system.
- (2) Providing BIA leadership and guidance during the life cycle phases of major information systems projects.
- (3) Reviewing significant milestones during the life cycles of information systems projects and making decisions on

the continuation of the project after each significant milestone is reached.

- C. <u>Director</u>, <u>Office of Data Systems</u>. The Director is responsible for:
- (1) Providing guidance, direction, and oversight for policy development and implementation for BIA's LCM program.
- (2) Ensuring that the LCM process is applied to all the BIA's major projects.
- (3) Developing and maintaining BIA LCM procedures and guidelines which establish the minimum acceptable management requirements and standards applicable to major information systems projects.
- (4) Coordinating the development and implementation of multi-organization and BIA-wide major information systems in cooperation with the appropriate BIA functional offices.
- (5) Reviewing and recommending significant milestones and LCM documentation during the life cycle of major information systems.
- D. <u>Central Office Program Directors and Area Directors</u>. Directors are responsible for ensuring that major Program Office/Area Office information resources projects are based on valid program mission or administrative requirements.
 - E. System Owners. System Owners are responsible for:
- (1) Preparing the Project Decision Paper which records essential information regarding the project and focuses on the issues relevant to a particular phase or stage and the particular decision needed from the IRMC.
- (2) Preparing the Mission Needs Statement which identifies the current mission needs and deficiencies, determines significant assumptions and restraints, and recommends the exploration of alternative solutions to correct the deficiencies.

- (3) Preparing the Project Benefit/Cost Analysis which provides an analysis of the costs, benefits, and uncertainties of each alternative concept to determine the most cost-effective means of satisfying the stated mission need.
- 9.5 <u>Procedures</u>. Detailed procedures and additional guidance on the application of LCM to specific IRM functional areas are contained in 35 BIAM Supplement 9.

10. INFORMATION SYSTEM MANAGEMENT ACCOUNTABILITY

- 10.1 <u>Purpose</u>. This chapter prescribes policies, procedures, and responsibilities for establishing information systems management accountability.
- 10.2 Policy. It shall be the policy of the BIA that:
- A. Each information system shall be assigned a System Owner who is responsible and accountable for the products of the system.
- B. The names of System Owners of major information systems shall be reported to BIA IRM Coordinator when the initial LCM documentation is submitted for IRM review; subsequent changes in System Owners for information systems shall be reported to BIA IRM Coordinator, as they occur.
- C. A System Manager, responsible for operating and/or maintaining the information system, shall be formally designated for each system.
- D. The System Owner and the System Manager of a major information system shall not be the same individual.
- 10.3 <u>Objectives</u>. The objectives of the information system management accountability program are to:
- A. Fix accountability for individual information systems throughout the BIA regardless of where system operations are performed.
 - B. Promote adherence to LCM policies.
 - C. Encourage use of common services and technology.
- D. Eliminate, to the greatest extent practicable, redundancies in data management activities and facilitate the sharing of valuable data resources.

10.4 Responsibilities.

- A. <u>Commissioner of Indian Affairs</u>. The Commissioner is responsible for ensuring the implementation of Federal and Department of the Interior information system management accountability policies, procedures, and guidelines.
- B. <u>Director</u>, <u>Office of Data Systems</u>. The Director is responsible for:
- (1) Providing guidance, direction, and oversight for policy development and implementation for BIA's information system management accountability program.
- (2) Establishing and maintaining BIA procedures and quidelines for information system management accountability.
- (3) Coordinating with other organizations throughout the BIA with related program interests to prevent duplication of systems and data.
- C. <u>System Owner</u>. The System Owner is responsible and accountable for the products of the information system, and include:
 - (1) Defining the system functional requirements.
 - (2) Providing functional oversight.
- (3) Providing for periodic review of the system requirements in order to determine whether the requirements continue to exist and the system continues to meet the purposes for which it was developed in an efficient and cost effective manner.
- (4) Coordinating with the BIA IRM Coordinator and the Information Resources Security Administrator to determine appropriate security requirements prior to information system acquisition/ development and certifying prior to implementation that the information system satisfies applicable security

regulations, policies and standards and that its security safeguards are adequate.

- (5) Securing required information systems support for the information system.
- (6) Ensuring that a continuity of operations plan is developed for the information system.
- (7) Establishing formal, written standards for program changes (both scheduled and emergency) and authorizing all scheduled program changes.
- (8) Assuring that internal controls and operating policies that address the functionality of the information system are implemented as required.
- (9) Certifying the information system to ensure it satisfies its defined functional and quality requirements.
- (10) Ensuring that internal control reviews are conducted as required.
 - D. System Manager. The System Manager is responsible for:
- (1) Assisting the System Owner in defining the system requirements.
- (2) Coordinating with BIA Records Managers regarding retention periods and disposal standards applicable to the various types of data and storage media.
- (4) Ensuring that all program changes meet the formal written standards and notifying the System Owner when emergency program changes are made.
 - (5) Providing operations and/or maintenance support.
- (6) Forecasting development, implementation, and operational costs of the information system.

10.5 <u>Procedures</u>. Detailed procedures and guidelines regarding BIA's information system management accountability program are contained in 35 BIAM Supplement 10.

- 11. FEDERAL INFORMATION PROCESSING (FIP) RESOURCE ACQUISITIONS
- 11.1 <u>Purpose</u>. This chapter establishes policies, procedures, and responsibilities for the acquisition of FIP resources.
- 11.2 Policy. It shall be the policy of the BIA to:
- A. Follow established Federal and Department of the Interior FIP resource procurement policies and procedures.
- B. Acquire FIP resources that result in the most advantageous alternative to the Government.
- C. Develop long-term strategies for the acquisition of FIP resources.
 - D. Correlate acquisition plans with mission plans.
 - E. Promote compatibility of FIP resources.
- F. Consolidate acquisitions of FIP resources where feasible and cost effective.
- 11.3 <u>Objective</u>. The objective of this chapter is to establish a program which ensures the economic and efficient acquisition and use of FIP resources.

11.4 Responsibilities.

- A. <u>Commissioner of Indian Affairs</u>. The Commissioner is responsible for ensuring the implementation of Federal and Department of the Interior FIP resources acquisition policies, procedures, and guidelines.
- B. <u>Information Resources Management Council (IRMC)</u>. The IRMC is responsible for approving major information system acquisitions.
- C. <u>Director</u>, <u>Office of Data Systems</u>. The Director is responsible for:

- (1) Providing guidance, direction, and oversight for policy development and implementation for BIA's FIP resource acquisition program.
- (2) Developing and maintaining procedures and guidelines for the acquisition of FIP resources which fall below Department of the Interior approval thresholds.
- (3) Reviewing and approving requests for FIP resource acquisitions to ensure compliance with Federal and Department of the Interior FIP procurement policies and procedures.
- (4) Serving as the principal point of contact to the BIA and the Department of the Interior for FIP resource acquisitions.
- (5) Adhering to all appropriate Federal, Department of the Interior, and BIA procurement policies, procedures, and regulations.
- (6) Maintaining analytical and explanatory records and other documentation pertaining to justification, evaluation, and selection for FIP resource acquisitions.
- D. <u>Central Office Program Directors and Area Directors</u>. Directors are responsible for:
 - (1) Assuring the validity of specified requirements.
- (2) Submitting requests for FIP resources to the BIA IRM Coordinator for technical review and approval.
- (3) Performing requirements analyses, feasibility studies, and cost-benefit analyses as defined in 35 BIAM 9.
- (4) Identifying FIP resource acquisitions in the Program Office/Area Office Five-Year IRM Strategic Plan.
- (5) Adhering to all appropriate Federal, Department of the Interior, and BIA procurement policies, procedures, and regulations.

- (6) Documenting and retaining as a part of the official procurement file (in addition to the FAR, FIRMR, and BIAM requirements) the following items:
- (a) Mission needs statement and specific mission performance requirements justification.
- (b) Technical specifications, performance, and compatibility requirements.
- (c) Acquisition strategy including the sources and acquisition vehicles considered, and the feasibility of consolidation with other acquisition requirements.
- (d) Selection criteria applied (technical features, performance, cost, support services, delivery schedule, or a combination of these factors).
 - (e) Evaluation results.
- (f) Copy of contract and any modifications and/or purchase orders issued.
- (7) Performing a pre-installation review prior to delivery of FIP resources (equipment) which should verify that:
- (a) The physical site is adequate to support the space, power, and environmental requirements (review of the physical site should re-affirm the results of the preliminary review performed during the requirements analysis process);
- (b) Communications facilities are arranged as required.
- (c) Work tables, chairs, and other support equipment are available.
- (d) Paper, ribbons, diskettes, and other supplies are available.

- (e) User training needs have been assessed and training has been conducted or scheduled.
- (f) Site and systems security controls are adequate.
- (8) Initiating action to correct any deficiencies identified in the pre-installation review. Serious deficiencies will be corrected prior to FIP equipment installation.
- (9) Maintaining records as defined in 35 BIAM 9 which show the life cycle costs associated with each FIP system installation.
- 11.5 <u>Procedures</u>. Detailed procedures and guidelines regarding FIP resource acquisitions are contained in 35 BIAM Supplement 11.

12. WORKSTATIONS, MICROCOMPUTERS AND COMPUTER NETWORKS

- 12.1 <u>Purpose</u>. This chapter establishes policies, procedures, and responsibilities for the acquisition, management, operation, and support of microcomputers, workstations, and small computer network configurations.
- 12.2 Policy. It shall be the policy of the BIA to:
- A. Utilize microcomputers to cost-effectively support mission and administrative functions, and to improve personnel and organizational productivity.
- B. Acquire, implement, control, and support microcomputers through the execution of well-planned management strategies. These management strategies include:
- (1) An established set of management responsibilities and accountabilities.
- (2) A defined methodology for planning and requirements analysis.
- (3) An application and configuration management process.
 - (4) An acquisition plan.
 - (5) An installation/training plan.
- (6) Operational controls including security and accounting controls.
 - (7) User support and hardware maintenance strategies.
- 12.3 Objectives. The objectives of this chapter are to:
- A. Establish an effective management and support framework which accommodates flexible acquisition and innovative

application of state-of-the-art technology while maintaining necessary management controls.

B. Achieve and maintain optimum levels of compatibility to promote sharing of technology, applications, and data resources throughout the BIA.

12.4 Responsibilities.

- A. <u>Commissioner of Indian Affairs</u>. The Commissioner is responsible for ensuring the implementation of Federal and Department of the Interior microcomputer policies, procedures, and guidelines.
- B. <u>Director</u>, <u>Office of Data Systems</u>. The Director is responsible for:
- (1) Providing guidance, direction, and oversight for policy development and implementation for BIA's microcomputer program.
- (2) Establishing and maintaining procedures and guidelines regarding the overall acquisition, application, management, operation, and compatibility of microcomputers used in support of BIA missions.
- (3) Performing reviews of all FIP resource acquisitions to ensure compliance with Federal, Department of the Interior, and BIA policies and guidelines.
- (4) Ensuring that adequate planning and requirements analyses were performed prior to selection and acquisition of microcomputers.
- (5) Integrating requirements and consolidation of acquisitions to the maximum practical extent.
- (6) Establishing operational, security, and accountability controls for microcomputers.

- (7) Maintaining BIA inventories of microcomputers and associated peripherals, software, etc., and submission of inventory data and reports to the Office of the Secretary, as required, to support Department of the Interior management and reporting requirements.
- (8) Providing planning support and assistance in the acquisition of FIP resources (including telecommunications) services including development of plans to integrate current and planned installations of microcomputers.
- C. <u>Central Office Program Directors and Area Directors</u>. Directors are responsible for:
- (1) Implementing BIA directives regarding the overall application, management, operation and compatibility of microcomputers used in support of assigned mission/administrative responsibilities.
- (2) Ensuring that the BIA and Department of the Interior microcomputer policies are adhered to within the Program Office/Area Office.
- (3) Identifying application, system performance, communications, and security requirements for microcomputers within the Program Office/Area Office.
- (4) Implementing management controls and accountability for microcomputers within the Program Office/Area Office consistent with BIA IRM and property management procedures.
- (5) Maintaining compatibility of microcomputers, applications, and data within the Program Office/Area Office consistent with BIA IRM procedures, including maintenance of technological and application compatibility with all mainframes or minicomputers that are accessed by microcomputers.
- (6) Maintaining up-to-date, accurate hardware and software inventories. Proprietary software which is licensed,

copyrighted, or otherwise restricted should also be accounted for as sensitive property in the BIA's Personal Property System regardless of acquisition cost.

- (7) Conducting an assessment of the skills that are required to operate microcomputer system(s), and the training needs required to bring the skills of the person(s) assigned to use the system(s) to the appropriate level in order to operate the equipment effectively and efficiently.
- (8) Developing ongoing training plans to develop and maintain adequate levels of literacy and proficiency in the operation and use of microcomputers.
- (9) Ensuring adequate planning is accomplished in the creation and handling of automated records to meet the requirements of life cycle records management.
- (10) Maintaining records, consistent with the size and complexity of the installation, which show the life cycle costs associated with microcomputers. These records should include the initial acquisition cost of the microcomputers, peripherals, software, maintenance and related support facilities, plus the cost of any add-on features or augmentations throughout the life of the microcomputer.
- D. <u>Users</u>. Microcomputer users are responsible for the operational control, security, and proper utilization of microcomputers which they use exclusively or share with other users. Users will:
- (1) Maintain individual hardware and software inventories and provide updates to the BIA-wide inventory, and account for costs and assess utilization of microcomputers in accordance with BIA policies.
- (2) Protect microcomputers and associated peripherals, software and storage media against damage or loss and unauthorized use.

- (3) Properly operate and utilize microcomputers in accordance with BIA procedures, including following established procedures for records management and privacy data.
- (4) Secure and protect sensitive data stored or processed within microcomputers.
- (5) Protect telephone numbers, passwords, etc., which provide microcomputer accesses to minicomputers, mainframes, or telecommunications networks.
- (6) Maintain proficiency in using microcomputers applications software.
- (7) Strictly observe all license agreements for proprietary software or data.

12.5 Planning and Requirements Analyses.

- A. Planning for the acquisition and application of microcomputers must be accomplished in accordance with approved BIA strategic plans. Major procurement actions (specifically those requiring Department of the Interior acquisition approval) shall be identified in the BIA's Five-Year IRM Strategic Plan. In addition, budget requirements shall be identified in Office of Management and Budget submissions (OMB Circular No. A-11, Exhibits 43A and 43B).
- B. Offices shall conduct requirements analyses, feasibility studies, and economic analyses commensurate with the size and complexity of each planned microcomputer acquisition. Requirements analyses will include both immediate and projected requirements over the planned technology life cycle. Documentation shall always address overall mission requirements, general application requirements, specific functional requirements, and data requirements.
- C. The scope of planning and requirements analyses shall cover the broadest possible organizational unit, program or mission area, administrative or other functional activity to ensure achievement of optimum levels of compatibility and cost

effective acquisitions of technology. Short term or immediate requirements within a specific program area shall not override longer term needs of the entire program or organization without clear justification to do so.

12.6 Management and Use of Microcomputers.

- A. Microcomputers are to be used to improve the productivity of individuals and/or organizations in the collection, analysis, preparation, processing, and reporting of data including text, numeric, or image (graphic) data or combinations thereof. In a networked environment, they are to be used to share common facilities (e.g., printing or storage) where practical, share or exchange data and applications software (non-proprietary only, unless permitted under license agreement); and facilitate inter-organizational communications and common administrative processes.
- B. Microcomputers shall be applied to processes which can be cost effectively automated at the individual user level. They shall also be applied as a part of larger (multi-user application environments to support applications functions such as off-line or interactive data entry or data extraction (from a host system), to support the distributed need for data access, and to facilitate data analysis.
- C. Microcomputers shall not be used as a substitute for a mainframe or minicomputer where a requirements and economic analysis indicates that a more powerful processing capability is needed and is more cost effective.
- D. Configuration of microcomputers shall be based upon consideration of all relevant current and future performance requirements, application needs, and technology changes which are likely to occur during the planned life of the microcomputer. A cost/performance analysis of various configurations shall be conducted. At least a part of the configuration process shall be appropriately deferred to the acquisition process, with bids or offers solicited for various configuration options.

- E. Application software shall, to the maximum practical extent, consist of commercial off-the-shelf software packages which are supported by the original software supplier or authorized vendor representative. Application software which must be developed shall be programmed in one of the preferred FIPS programming languages unless otherwise justified.
- F. Prior to installing new microcomputers, offices shall first conduct an assessment of the skills that are required to operate the system(s), and the training needs required to bring the skills of the person(s) assigned to use the system(s) to the appropriate level in order to operate the equipment effectively and efficiently. Offices shall also develop ongoing training plans to develop and maintain adequate levels of literacy and proficiency in the operation and use of microcomputers. At minimum, the training plans shall include:
- (1) Basic computer literacy training for all unskilled or first-time microcomputer users.
- (2) Basic training on Department of the Interior and BIA IRM and FIP resource management and operational policies, procedures, and guidelines.
- (3) Training covering specific application and microcomputer technology products which will be used in that office.
- (4) For users who will be developing or customizing application programs, training on applications design, programming, and testing.
- 12.7 <u>Procedures</u>. Detailed procedures regarding microcomputer standards and guidelines are contained in 35 BIAM Supplement 12.