

Preserving the Past to Protect the Future



THE STRATEGIC INFORMATION RESOURCES MANAGEMENT PLAN
OF THE
NATIONAL ARCHIVES AND RECORDS ADMINISTRATION

September 2011

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PRESERVING THE PAST TO PROTECT THE FUTURE

MISSION

The National Archives and Records Administration serves American democracy by safeguarding and preserving the records of our Government, ensuring that the people can discover, use, and learn from this documentary heritage. We ensure continuing access to the essential documentation of the rights of American citizens and the actions of their government. We support democracy, promote civic education, and facilitate historical understanding of our national experience.

STRATEGIC GOALS

- ***One:*** As the Nation's record keeper, we will ensure the continuity and effective operations of Federal programs by expanding our leadership and services in managing the Government's records.
- ***Two:*** We will preserve and process records to ensure access by the public as soon as legally possible.
- ***Three:*** We will address the challenges of electronic records in Government to ensure success in fulfilling NARA's mission in the digital era.
- ***Four:*** We will provide prompt, easy, and secure access to our holdings anywhere, anytime.
- ***Five:*** We will increase access to our records in ways that further civic literacy in America through our museum, public outreach, grants, and education programs.
- ***Six:*** We will equip NARA to meet the changing needs of our customers.



Foreword

As our national record keeper, the National Archives and Records Administration (NARA) is a public trust that safeguards the records on which our citizens depend for documenting their rights, ensuring the accountability and credibility of national institutions, and analyzing the national experience. Both the Government and the citizen rely on NARA to meet an almost unlimited range of information needs from records. Literally thousands of people, including genealogists, lawyers, historians, veterans, newspaper and television journalists, and government employees, do research in our facilities each year. Thousands more write or call with inquiries for records or information from our holdings, while millions of “visitors” access our web pages, and more than 150 million documents are retrieved from electronic editions of the *Federal Register*, the *Code of Federal Regulations*, and related NARA publications.

Recognizing the citizen’s expectation for ever-higher levels of performance and accountability in Federal Government agencies, the President has set a government-wide goal to provide high-quality service at reduced cost, make government services more accessible, and increase government transparency and accountability. As our nation continues its shift from an industrial to a knowledge-based economy, information resources become more and more important to government. For NARA, this importance manifests itself in the unique challenge of dealing with an overwhelming proliferation of electronic records. Successfully meeting this challenge requires that we adhere to NARA’s strategic direction as described in our Strategic Plan, and support the mission and goals of the Strategic Plan in accordance with the guidance documented in our Enterprise Architecture.

This Strategic Information Resources Management (IRM) Plan summarizes key elements of NARA’s Enterprise Architecture and provides an overview of NARA’s strategy for managing IRM activities in alignment with the agency’s strategic goals and business programs.



Contents of the Plan

FOREWORD	III
BACKGROUND	1
IRM STRATEGY ONE: <i>MISSION ALIGNMENT</i>	5
IRM STRATEGY TWO: <i>ENTERPRISE ARCHITECTURE</i>	13
IRM STRATEGY THREE: <i>IRM PROCESS INTEGRATION</i>	16
IRM STRATEGY FOUR: <i>RISK MANAGEMENT</i>	21
IRM STRATEGY FIVE: <i>IRM GOVERNANCE</i>	23
IRM STRATEGY SIX: <i>IT INFRASTRUCTURE SUPPORT</i>	25
CONCLUSION	28



Background

In the past, each of the National Archives and Records Administration's business offices generally built their own applications to support their business processes. Although this often led to the implementation of systems that satisfied user requirements, this approach is becoming untenable as technology increasingly influences how we fulfill our mission, as the scope and scale of our information technology investment grows, and as the need to integrate technology capabilities and business processes across all agency business offices and with external customers, partners, and stakeholders becomes imperative. To address these increasingly complex needs for information system integration and support, NARA will establish and execute agency policies and Information Resources Management (IRM) processes that assure we align investments in information technology (IT) with the agency's strategic goals and business performance objectives.

NARA's Chief Information Officer (CIO), in alignment with Federal law and Office of Management and Budget (OMB) guidelines, has established the Enterprise Architecture (EA) process as the overarching IRM process for the agency. NARA integrates the Capital Planning and Investment Control (CPIC), Program Management, Performance Management, IT Security, and Systems Development Lifecycle (SDLC) processes under the EA umbrella, and governs these processes to assure EA compliance across all IRM activities. This is a fundamental shift in our approach to IRM that moves us away from a program-oriented, budget-centric approach to investment planning and management toward an integrated, agency-wide (sometimes government-wide), architecture-based approach. Our EA helps us better leverage our IRM investments by making choices that are consistent with the strategic direction of our business.¹ While we develop and evolve our EA, we carefully consider the impact of technology on both our strategic goals and our current state of IT deployment. The outcome is a comprehensive set of guidance that helps us to fulfill our mission, meet our strategic goals, and serve our customers more effectively.

At its core, IRM and EA are business driven processes. For this reason our EA methodology starts with an analysis of business needs and includes a comprehensive business element. We recognize that the most significant determinant of the effectiveness of our IRM approach is the degree to which the business owns and participates in IRM activities and how effectively we align IRM activities and EA guidance with our business strategy. For this reason, we position the *Business Architecture* as the driving element of our EA. The Business Architecture is expressed in business terms and is owned and managed by the business. The Business Architecture Working Group (BAWG) is established as a permanent committee under the Architecture Review Board (ARB) to guide and manage the development of the Business Architecture. The active participation by the business offices on the BAWG provides input to the EA process that is critical to developing EA guidance that is useful, and relevant to the agency's mission.

¹ Our EA is fully documented in the *National Archives and Records Administration Enterprise Architecture*.



The Impact of Technology

There are three key technology considerations that influence how NARA fulfills its mission. First, accommodating an ever-evolving range of electronic record formats presents a significant challenge. This includes thousands of Federal agency databases, millions of email messages, vast scientific “archives” of information pertaining to weather tracking and space exploration, and countless other records involving digital images, digital sound, geographic information systems, web sites, and other electronic record formats.

Second, the Federal Government is already using technology to produce a tremendous volume of records. During the 1990s, our holdings of electronic records increased from a few thousand files to several hundred thousand. We expect that growth will accelerate in the future. During the Clinton Administration, for example, White House staff used several electronic records management systems. Among the electronic records we accessioned from the White House were Presidential memorandums and documents, National Security Council cable traffic, the President’s daily diary, and millions of email messages. We anticipate at least a tenfold increase from the George W. Bush administration. The State Department is estimated to have more than 25 million diplomatic messages in electronic form that will be transferred to us in blocks averaging a million messages a year, every year, indefinitely.

Third, users increasingly expect immediate electronic access to information at no cost. The growth of web access and e-Government, the availability of electronic access under the Freedom of Information Act, as amended by the Electronic Freedom of Information Act, and provisions of the Government Paperwork Reduction Act will further increase demands for online records and services. Consequently, we must preserve electronic records in a way that makes them usable, ensures their authenticity and reliability, and guards against tampering, while ensuring a full and accurate representation of the transactions, activities, or facts to which they attest.

Effectively integrating IT capabilities within our business programs is imperative to fulfilling our mission. Guidance expressed in our Enterprise Architecture will help ensure that we capitalize on opportunities to standardize and reuse IRM resources by analyzing, reengineering, developing, and implementing common IRM processes and functionality across business programs, and in conjunction with Government-wide initiatives. Our EA provides agency-wide planning information that we use to guide the acquisition, use and management of the agency’s IT capabilities and assets from varying perspectives (or views) to include: business, data, applications, systems, technology, operations, security, records management, and IRM transitioning.



NARA's Principles of Information Resources Management

We embrace a set of IRM concepts that guide the development of our EA, the consequent acquisition of IT components and services, and the IRM methods and practices of the agency. These concepts are rationalized as a set of *Principles* in our EA and are founded on our architectural values of *simplifying* business processes and plans, *satisfying* user needs, *standardizing* software and institutionalizing standard processes for acquiring it, and *securing* our systems and data. The Principles are fundamental philosophies that express how NARA desires to plan for, acquire, deploy, use, and manage IRM resources as an enterprise: that is, how we will implement fully functional, secure, enterprise-level information systems that meet the needs of the business. The EA Principles state that we will:

- Maintain and update an Enterprise Architecture in alignment with the agency's business strategy;
- Thoroughly understand and evaluate our business processes before automating them;
- Design and build IT systems that meet customer needs;
- Ensure that the IT infrastructure is available, regardless of a customer's location;
- Deploy IT capabilities in phases;
- Manage data as a valuable asset that is critical to the operation of the agency;
- Manage the Total Cost of Ownership (TCO) for IRM Initiatives;
- Outsource the IT components and services we require whenever practical;
- Reuse IT components whenever practical;
- Acquire systems that are flexible and adaptable to change;
- Use managed processes to specify, acquire, and deliver IT capabilities;
- Align technology acquisition with the formal and de facto IT standards that are prevalent in the IT market;
- Address business continuity, security, privacy, and records management issues as an integral part of all IT system initiatives; and
- Verify the operational readiness of all IT components prior to placing them in production.

We believe that adhering to these EA Principles is vital because adherence to them will increase our return on IRM investments and help accelerate the realization of our business strategies.



Six IRM Strategies

NARA has identified six key strategies for effective Information Resources Management that we must address. Addressing these six strategies will better enable us to fulfill our mission, meet our strategic goals, and satisfy our customers. The six strategies are listed below. Each of these strategies is further addressed in subsequent sections of this plan.

IRM STRATEGIES

- (1) *Mission Alignment* – Align all IRM activities with NARA’s business strategy, agency performance targets, and all applicable government-wide programs.**
- (2) *Enterprise Architecture* – Develop enterprise-wide IRM plans and guidance as necessary to support our business programs.**
- (3) *IRM Process Integration* – Improve the management and execution of agency programs by better integrating our IRM policies and processes.**
- (4) *Risk Management* – Manage IRM risk from an enterprise perspective, and establish an IT Security Program to assure the security and privacy of NARA’s information assets.**
- (5) *IRM Governance* – Institute IRM governance committees to oversee all IRM activities and assure conformance with business needs, EA guidance, and all applicable Federal laws, regulations, and guidelines.**
- (6) *IT Infrastructure Support* – Engineer, maintain, and operate a robust IT infrastructure.**



IRM Strategy One: *Mission Alignment* - Align all IRM activities with NARA's business strategy, agency performance targets, and applicable government-wide programs.

Overview

It is imperative that we derive all IRM requirements from our business strategy. To accomplish this, we develop and maintain a comprehensive *Business Architecture*.²

The content of the Business Architecture is expressed in business terms and is owned and managed by the business. The Business Architecture specifies our business goals and performance objectives, the products and services we currently provide, what additional products and services we desire to provide in the future, how we expect to leverage technology and information systems, how we identify and manage business risk, and how we prioritize and sequence changes to our business processes and services. The Business Architecture also considers factors such as the timing and prioritization of business change, legal and regulatory restrictions, and rules of operation. The goal of the Business Architecture is to define and document the near-term and strategic intent of the agency to a level of detail that helps us: (a) plan and manage program initiatives and their integration, (b) define and launch IT system acquisitions in alignment with business needs, and (c) guide the implementation and integration of business and technology change.

Strategic Business Activities

In 2011, NARA launched a Transformation initiative designed to:

- Align NARA organizations more closely with specific customer segments;
- Optimize enterprise-wide performance;
- Simplify and speed up decision-making on meeting customer and employee needs;
- Foster increased openness, collaboration and accountability across the agency while empowering all employees to participate in decision making;
- Exploit social media for both assessing customer needs and improving internal communication; and
- Provide an open, adaptive culture that responds quickly to changes in law, budgets, technology, and customer needs.

The following table identifies and briefly describes the business activities that we are managing to achieve our business goals, and shows the major IRM investments that support those business activities.³

² The *Business Architecture* is documented as part of the *National Archives and Records Administration Enterprise Architecture*.

³ More detailed information regarding the business activities is documented in the *Business Transformation Plan*.



Business Activity	Description	Supporting IRM Investments
Strategic Planning	NARA will continue to implement the Strategic Plan, as amended in FY2009. We will develop the FY2012 Strategic Plan update, due to issue in February 2012.	<ul style="list-style-type: none"> • EA program
Strategic Risk Management	NARA will review, test, and revise its plan (and processes) for identifying and managing strategic risks. NARA will also revise NARA 114, Internal Controls (as necessary) and will issue draft guidance on the automation of internal controls.	<ul style="list-style-type: none"> • Currently a Business Office operating budget investment
Electronic Records Archives (ERA)	<p>ERA will expand functionality for Online Public Access, support the Executive Office of the President instance by extending software so that the system can ingest additional data types and provide capabilities to respond to Freedom of Information Act requests. ERA will also establish two new instances (classified instance, Census instance), enhance the Increment five base instances and provide preservation functions for a single proprietary format (EBCDIC). ERA will support expansion of agencies transferring electronic records to NARA in accordance with OMB guidance.</p> <p>ERA will halt new development at the end of FY 2011. A new contract for operations and maintenance will be awarded, including requirements to support transition from the current development contractor.</p>	<ul style="list-style-type: none"> • ERA • EA program • IT Infrastructure
Description and Reference Process	The project team will complete the detailed design, component and system test plans, and the C& A plan. Development of the key functional areas of the services will occur and result in a pilot. NARA will select the staff users to provide feedback on the pilot software.	<ul style="list-style-type: none"> • ARC
Federal Records Center Processing	ARCIS increment 4.0 will be deployed to support new services offered by the FRCP. ARCIS will complete the	<ul style="list-style-type: none"> • ARCIS



Business Activity	Description	Supporting IRM Investments
(FRCP)	deployment of release 4.0 in FY2012.	
Comprehensive Emergency Management Program (CEMP)	<p>The CEMP Program will implement its plans to address changes in the 2009 Strategic Plan revision, CEMP test results, CEMP oversight requirements (e.g., Federal Continuity Directives), MEF priorities, new business initiatives, and to exploit new NARA IT infrastructure and system enhancements. The program will also begin restructuring to address issues that emerge from CEMP evaluations and will begin to rebaseline its Business Process Analysis to reflect NARA's organizational and cultural Transformation.</p> <p>In 2011, NARA will also complete its Devolution and Reconstitution plans to sustain essential functions if a catastrophic event (e.g., nuclear attack) deprives NARA of its buildings, systems and employees. NARA will also perform an internal test of its devolution and reconstitution plans.</p>	<ul style="list-style-type: none"> • COOP • IT Infrastructure
Holdings Protection Team (HPT)	The HPT will continue its work to improve the protection of NARA's archival holdings and records, and begin sharing with other US Government agencies the best practices it develops.	<ul style="list-style-type: none"> • Currently a Business Office operating budget investment
Textual Processing	NARA will increase by 10 points the percentage of archival holdings that have been processed. The backlog consists of unprocessed records that NARA needs to establish intellectual control over so that customers can have efficient access to them. HMS will be deployed at up to 5 additional Regional Archives. Additional service objectives will be identified as business needs evolve.	<ul style="list-style-type: none"> • HMS
Implement Digitization Strategies	NARA will continue its efforts to digitize its most popular holdings. Using the work done in digitization BPRs (Business Process Reengineering) studies as well as other activities, the	<ul style="list-style-type: none"> • Currently a Business Office operating budget investment



Business Activity	Description	Supporting IRM Investments
	Digitization Working Group will develop agency-wide process flows.	
Office of Government Information Services (OGIS)	<p>OGIS will continue to analyze Federal agencies' annual FOIA reports and Chief FOIA Officer reports to develop policies and best administrative practices, to determine agency FOIA compliance, and to make recommendations to Congress and to the President to improve the FOIA process.</p> <p>OGIS will continue to solicit and receive complaints and questions from the public and from Administrative Agencies regarding the administration of the FOIA and will use this information to develop best practices for FOIA-related processes. With the assistance of consultants, OGIS will develop a strategy for implementing a formal mediation program.</p> <p>OGIS will identify issues that arise in mediation (in cases where mediation has not resolved disputes) to be addressed in advisory opinions and make the opinions.</p>	<ul style="list-style-type: none"> • Currently a Business Office operating budget investment
National Declassification Center (NDC)	<p>In the NDC, NARA will continue to improve interagency declassification processes, including analyzing and standardizing data collection both at NARA and across government declassification programs, prioritizing review and processing efforts to best answer customer requests for accessioned classified records, and overseeing a more efficient and higher quality review and processing of the backlog of records due December 31, 2013, per EO 13526.</p>	<ul style="list-style-type: none"> • ADRRES / URTS redaction and case processing system • Onestop database for accurate tracking of records throughout the Declassification Processing Cycle; aggregates data from ADRRES, HMS, and other local spreadsheets. • Ongoing BPR to establish requirements needed for future IT system.
Evaluate Records Management (RM) Programs	<p>We will continue to manage the records management inspection and agency self-assessment programs and make appropriate improvements as needed.</p>	<ul style="list-style-type: none"> • Currently a Business Office operating budget investment



Business Activity	Description	Supporting IRM Investments
FRCP Electronic Record Services (FRCP e-Services)	<p>The Federal Records Center Program (FRCP) will increase its document conversion capabilities and expand its portfolio of electronic records services to meet customer needs. Additionally, The FRCP will refine standard operating procedures for electronic document conversion and will develop a plan for integrating electronic Federal Records Center (eFRC) services into its regular operations.</p>	<ul style="list-style-type: none"> • FRCP Document Conversion Project
Preservation	<p>NARA will increase productivity for preservation processes to meet goal of less than 50 percent of archival holdings requiring preservation action by 2017.</p>	<ul style="list-style-type: none"> • Currently a Business Office operating budget investment
Federal Register	<p>The <i>Federal Register Thesaurus of Indexing Terms</i> has not been updated since 1995. NARA will consult with government documents librarians and the Cornell Legal Information Institute to create an updated list of indexing terms.</p> <p>The <i>CFR Subject Index</i>, currently a print-only publication, will be analyzed for conversion to XML for download through FDsys.</p> <p><i>The Federal Register Index</i>, currently a print-based publication, will become accessible through FDsys.</p> <p>NARA will work with the Government Printing Office, Regulations.gov, and private entities to develop user tools/widgets for Data.gov and FDsys to enable the general public to more easily track regulatory activity.</p> <p>Federal Register 2.0 (federalregister.gov) will be vetted for legal and technical issues to prepare it for presentation to the Administrative Committee of the Federal Register (ACFR) as an official edition of the <i>Federal Register</i>.</p> <p>NARA will begin exploring options for eliminating paper proofing of <i>Federal Register</i> documents and make e-review of page proofs routine to advance</p>	<ul style="list-style-type: none"> • eDOCS



Business Activity	Description	Supporting IRM Investments
	teleworking and increase preparedness for weather emergencies and COOP situations.	
Strategic Human Capital Plan	<p>NARA will continue to implement the Strategic Human Capital Plan, established in FY 2009. NARA will use this plan to develop implementation plans focused on actions and strategies to support achievement of strategic human capital goals.</p> <p>NARA will assess, analyze and report the results of their human capital initiatives to the Office of Personnel Management (OPM) in annual Human Management Capital Report.</p>	<ul style="list-style-type: none"> • Currently a Business Office operating budget investment
Collaboration Activities	Selected offices within NARA will restructure their processes to be more collaborative and re-orient their products and services to being more customer-focused as part of NARA's transformation.	<ul style="list-style-type: none"> • Currently a Business Office operating budget investment
Locations	NARA will undertake several related actions to ensure appropriate storage of its holdings. NARA will perform the work in accordance with the operating capital plans for storage and facilities, as outlined in the Annual Performance Plan's Long Range Performance Target 2.5. This will include any construction needed to insure that the George W. Bush Presidential Library facility meets NARA's architectural and design standards for Presidential libraries.	<ul style="list-style-type: none"> • Currently a Business Office operating budget investment



Business Transition Strategy

The new business operating environment that we require to support our Strategic Plan is characterized as a set of business operating models in the *Business Concept of Operations* section of the Business Architecture.⁴ Additionally, we maintain a *Business Transformation Plan* to describe the strategy by which we will transition from the current state of business operations to the new business operating environment we will need to meet the goals of our Strategic Plan. Business change management needs in the areas of products, services, policies, distribution channels, customer interactions, organizational structures, and employee roles are identified, assessed, integrated, and documented via the development of our business architecture and our ongoing business transformation planning activities. The figure below provides an overview of the business transition strategy. Key IT activities are noted in the *Systems* section of the figure. The *Sequencing Plan* aligns business activities, system development activities, and IT infrastructure activities.⁵

⁴ See the *NARA Business Concept of Operations* section of the *National Archives and Records Administration Enterprise Architecture*.

⁵ See the *NARA Enterprise Architecture Sequencing Plan* section of the *National Archives and Records Administration Enterprise Architecture*.



IRM Strategy Two: *Enterprise Architecture* – Develop enterprise-wide IRM plans and guidance as necessary to support our business programs.

Overview

We recognize that the practice of developing, implementing, and managing an Enterprise Architecture is critical to accomplishing organizational goals. At NARA, we use our EA to provide a clear and comprehensive picture, in both business and technology terms, of how we operate today, how we plan to operate in the future, and how we plan to transition to the future state. As such, our EA is critical to leveraging information technology in support of our business objectives, particularly large business transformation initiatives like ERA. We use our EA process to help us recognize and balance the trade-offs between satisfying our immediate operational needs, and positioning ourselves to achieve our long-term strategic goals.

Enterprise Architecture is a joint business / information technology (IT) management process that helps us plan the design, development, acquisition, and implementation of the IRM capabilities that we require. The EA process produces a set of work products (i.e., the EA) that document the strategies, plans, and guidelines by which we will acquire, integrate, secure, deploy, use, and manage IT components and IT services in support of our business objectives.

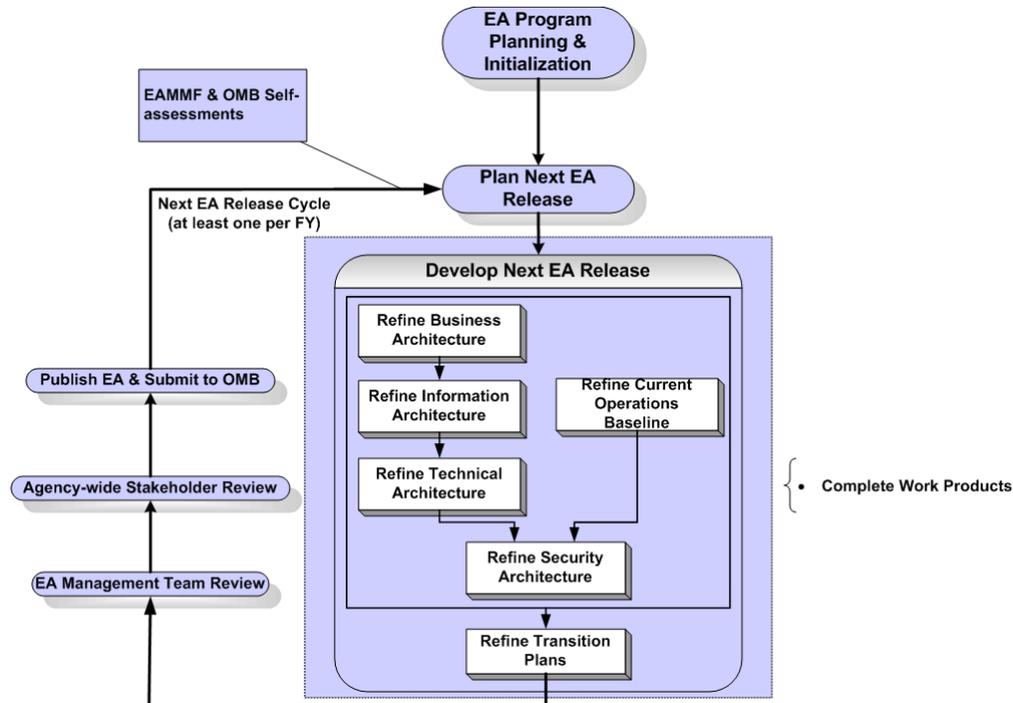
We define our EA process and EA work products by a formal methodology—the *Enterprise Architecture Planning and Development Methodology*—as summarized in the figure below. The goal of our EA process is to enable us to effectively leverage IT in support of our business needs and to better enable us to respond to changes in public policies, customer expectations, and business strategies. To accomplish this goal we use our EA to provide a comprehensive picture, from both business and technology perspectives, of how the agency operates today, how it plans to operate in the future, and how we plan to transition to its future state. As such, we use our EA to:

- Assert a core set of principles that help guide the management and use of IT within NARA;
- Provide a business architecture to help identify our business needs for IT capabilities and describe the sequence in which those capabilities should be deployed;
- Describe the information needs and flows of our business processes and services;
- Specify a modernized set of information systems and/or service components that are well-aligned with the business processes they support and the information resources they utilize;
- Specify a robust, standardized, shared, and well-managed technology infrastructure based upon industry standards;
- Integrate IRM processes to help optimize and reuse IT assets across the agency; and



- Identify IT sourcing strategies that optimize the use of in-house and outsourced IT resources in alignment with our core business competencies and strategic business needs.

Summary of the EA Methodology



The size, scope, and complexity of our IT projects; our evolving and changing business needs; and the dynamics of technology markets necessitate that the EA be developed iteratively. Our EA is continually refined and updated as the business needs for IT are clarified and as our business planning activities evolve and change.

EA Management Strategy

The EA work products we develop via our EA process are structured to provide planning information that is critical to IT acquisitions and the overall execution of our business activities. The general types of information provided in our EA include:

- Business planning information as represented by the *Business Concept of Operations*, *Performance Architecture*, *Business Process Hierarchy*, and *Business Process Definitions and Flows*;
- Technology planning information as represented by the *Data Architecture*, *Systems Architecture*, *Application Architecture*, *Operations Architecture*, and *IT Security Architecture*;
- Transition planning information as represented by the *Business Transformation Plan*, the *Sequencing Plan*, and the *IT Infrastructure Segment Plan*; and
- Technical standards information as represented by the *Technical Reference Model* and the *Technology Standards Profile*.



Since EA is a key IRM strategy, we implement a program planning and program management approach with our EA program. We implement an annual program planning cycle that occurs after the OMB EA assessment each February. We maintain our *EA Program Plan* to identify, describe, and schedule the changes planned for EA work products in a given year.⁶ Changes are always scheduled and prioritized based upon our business needs, and OMB guidance. We provide a complete update to and review of our EA at least annually, as prescribed by our EA methodology and in alignment OMB's EA assessment directives.

We recognize that clear and frequent communication is necessary to assure that our EA process provides value to the agency. To address our communications needs, we maintain an *EA Communications & Training Plan*.⁷ This plan helps us better engage agency stakeholders in our EA process by:

- Identifying the EA information that is important to communicate to (and from) stakeholders via formalized communications;
- Identifying the communication liaisons between NARA program units and the EA program;
- Identifying EA program points of contact who can respond to requests or provide clarification on matters pertaining to the EA;
- Providing the schedule of major EA activities and milestones so that NARA stakeholders can appropriately engage in the agency's EA process; and
- Providing opportunities to train NARA management and staff on the agency's EA process, their respective roles in EA development, and the importance of EA to the agency, at all levels of the organization.

Numerous work products result from our EA process and they must be updated frequently to reflect the needs of our business. To help us control and manage changes to EA work products, we follow a set of Configuration Management (CM) procedures.⁸ Enforcing these CM procedures ensures that our EA work products are well managed, and that all approved changes are appropriately implemented and reviewed.

⁶ See the *Enterprise Architecture Program Plan* for details on the current EA update cycle.

⁷ See the *EA Communications & Training Plan* for details on the current EA communication approach.

⁸ See the *NARA Enterprise Architecture Configuration Management Procedures* for details.



IRM Strategy Three: *IRM Process Integration* – **Improve the management and execution of agency programs by better integrating our IRM policies and processes.**

Overview

There are numerous IRM processes that we implement to facilitate organizational change and improve organizational effectiveness. Ten major IRM processes are mandated for Federal agencies and include: Strategic Planning, Budgeting, Capital Planning and Investment Control (CPIC), EA, Performance Management, Program Management, Project Management, Records Management, Information Assurance (or IT Security), and the Systems Development Lifecycle (SDLC). Each of these major management processes will typically:

- Address either agency planning activities, or project execution activities;
- Focus on either financial management, business management, program / project management, or technology management; and
- Have a scope and reach that is either agency-wide or project specific.

We recognize that the effectiveness of these processes is dependent upon how well we can implement, integrate, and govern them to achieve our business objectives. To that end we maintain policy directives and guidelines that define the scope of the processes and the procedures by which they are enforced. The table below describes the intent of these IRM processes and identifies the corresponding OMB or NARA policy directives that mandate their adoption.

IRM Process	Description	NARA (or OMB) Policy Directives
Strategic Planning	The Strategic Planning process is used to establish the mission, goals, business objectives, performance objectives, and operating philosophy of the organization. Strategic planning expresses (at a high level) how the business intends to evolve its operational capabilities and improve its service delivery over the long term.	<ul style="list-style-type: none"> • OMB Circular A-11
Budgeting	The budgeting process is used to develop and submit the agency's budget to OMB for inclusion in the President's budget and Congressional approval. The budget reflects both the operating budget of the Business Offices and strategic budget initiatives (SBIs) for new business programs.	<ul style="list-style-type: none"> • OMB Circular A-11
CPIC	The CPIC process focuses on evaluating and assuring the return on investment (ROI) of any proposed IRM initiative. The CPIC process	<ul style="list-style-type: none"> • OMB Circular A-11 • OMB Circular A-130 • NARA 801



IRM Process	Description	NARA (or OMB) Policy Directives
	<p>assesses the viability and risks of potential projects based upon the projects' business cases and preliminary concepts of operations. CPIC helps the organization determine how best to prioritize IRM investments and allocate funding to business programs. CPIC also monitors and evaluates whether a program / project achieves its ROI objectives when deployed and if so, how quickly those ROI objectives are achieved.</p>	
EA	<p>The EA process focuses on integrating technology planning with business planning. EA addresses IRM planning and process integration from an organization-wide perspective. The EA process is used to: (a) determine the agency's business requirements for information systems, (b) assess how best to partition IT systems across the enterprise to assure interoperability, reuse, and standardization, (c) minimize data redundancy and interfaces, and (d) plan how to integrate and deploy information systems and technology to the business. EA is only effective when driven by comprehensive business planning as a component part of the architecture (i.e., the business architecture).</p>	<ul style="list-style-type: none"> • OMB Circular A-130 • NARA 812
Performance Management	<p>Performance management focuses on measuring how effectively the business is meeting its strategic and operational goals and objectives. Performance management looks at deployed business processes and services in terms of cost, efficiency, productivity, quality, and outcomes. Performance management differs from CPIC in that it focuses on the effectiveness of an organization's deployed business processes and services as opposed to whether or not a particular program / project achieves its expected ROI. Performance management also differs from Program Management in that it focuses on the effectiveness of the <i>outcomes from</i> programs rather than on the effectiveness of the <i>management of</i> the programs. Performance management information is integrated with and captured by projects that are deployed and operational that is, once the outcomes from a project can be measured and assessed.</p>	<ul style="list-style-type: none"> • OMB Circular A-130 • OMB Circular A-11
Program Management	<p>Program Management (sometimes called <i>portfolio management</i>) focuses on effectively integrating all activities in the organization's project portfolio.</p>	<ul style="list-style-type: none"> • OMB Circular A-11 • NARA 801



IRM Process	Description	NARA (or OMB) Policy Directives
	Program Management is execution-focused but from the perspective of understanding the schedules, resource needs, risks, costs, and dependencies across all projects in the organization rather than from the perspective of a specific project (which is handled by traditional <i>project management</i>).	
Project Management	Project Management focuses on the effective execution of a single IT project in the areas of schedule, resource needs, risks, cost, and dependencies.	<ul style="list-style-type: none"> • OMB Circular A-11 • NARA 801 • NARA 810
Records Management	The Records Management process ensures that all NARA operating units schedule new records series, and write and review records management requirements in alignment with all Federal records management directives.	<ul style="list-style-type: none"> • OMB Circular A-130 • NARA 101 • General Records Schedules (GRS)
Information Assurance	The Information Assurance process establishes the IT Security Program and the IT Security Architecture to define how NARA will secure its information technology (IT) assets. This process helps to ensure the confidentiality, integrity, and availability of NARA's information assets, and provides governance, program management, security services, and compliance auditing for all IT security activities across the agency.	<ul style="list-style-type: none"> • OMB Circular A-130 • NARA 804 • NIST Guidelines
SDLC	The SDLC process focuses on IT acquisition / development activities for an individual project or system. The SDLC process prescribes the steps, deliverables, and milestone exit criteria that an IT system project must satisfy as part of building (or acquiring) an information system, deploying it, and operating it. The activities guided by the SDLC process are typically a subset of the overall project management scope of a business initiative and are applicable when that initiative needs to integrate IT capabilities or develop information systems.	<ul style="list-style-type: none"> • OMB Circular A-11 • NARA 805

IRM Process Integration Strategy

Our strategy is threefold: (1) use the processes in the proper sequence, (2) assure that all of these processes are appropriately cross referenced to one another, and (3) effectively govern the processes to make sure that they are implemented as per our policies and guidelines.



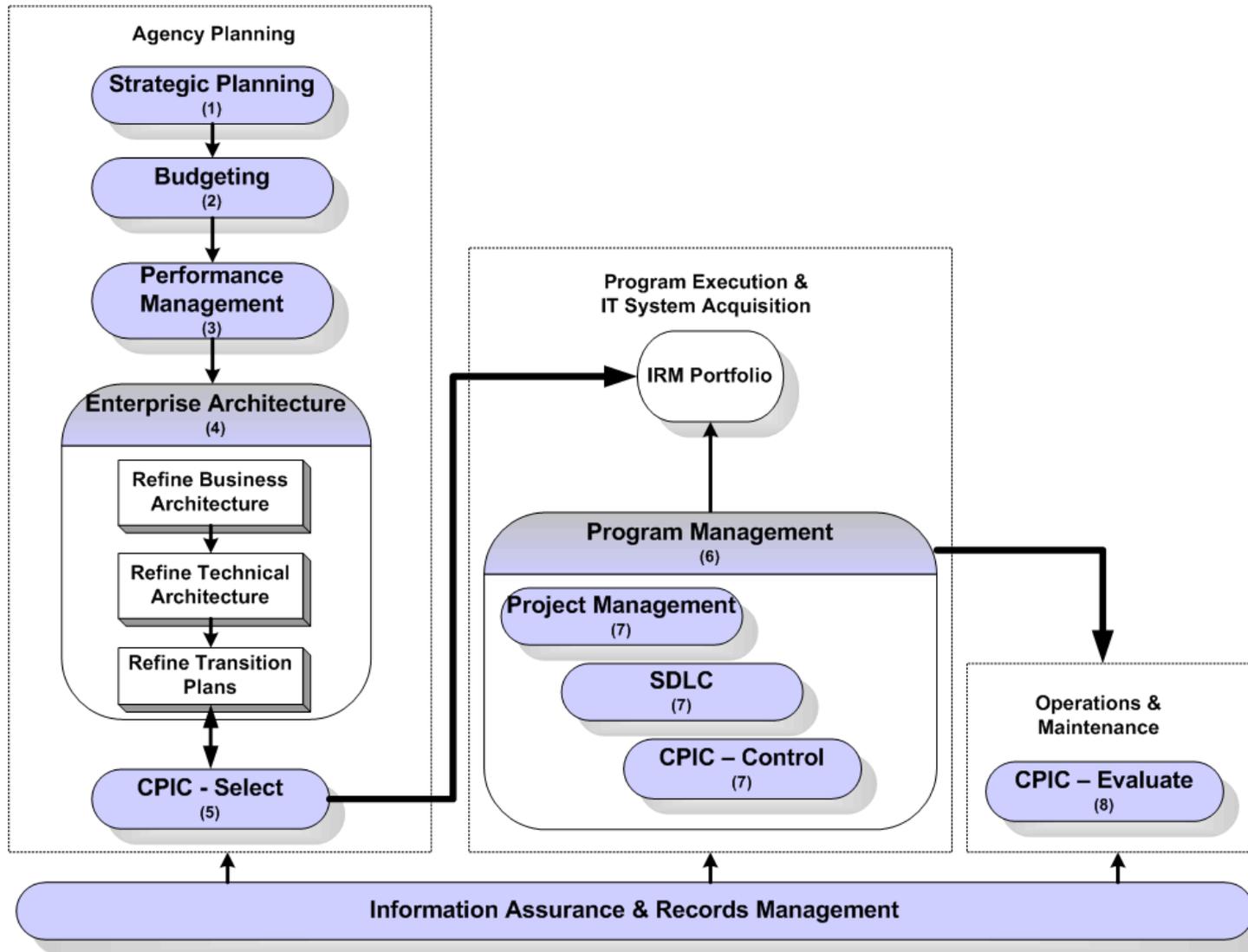
Although these IRM management processes are interrelated, there is an optimum order in which they should proceed. The figure below provides a simplified overview of the sequencing of these processes. The basic premise behind our sequencing strategy is to ensure that enterprise planning precedes project execution, and business planning drives downstream IT system planning and IT project activities. It is important to note that information assurance and records management considerations are addressed across all IRM process areas.

A key part of our strategy is to use the EA process as the integrating IRM process for the agency. Business planning information is consolidated and refined via the Business Architecture. This information is then assessed for technology requirements to determine our needs for IRM projects. Once projects are determined to have acceptable business cases via the CPIC process, they become part of the enterprise transition strategy; they are added to the agency project portfolio; and they can begin the SDLC and the IT acquisition process. The final phases of the SDLC help us transition IT systems into operations and assure they are maintained throughout their useful lifecycle.

The final part of our strategy is to assure that all of our IRM policies and process guidelines are carefully cross-referenced to one another, and that they define key review criteria for milestone exit and approval by our governance committees.



Overview of IRM Process Sequencing





IRM Strategy Four: *Risk Management* – Manage IRM risk from an enterprise perspective, and establish an IT Security Program to assure the security and privacy of NARA’s information assets.

Overview

Effective information security is essential to the mission of our agency and the expansion of Federal e-Government initiatives. As NARA moves to improve service to its customers and provide citizens with the capability to conduct a full range of online business—including transactions involving personal or financial data—citizens must be assured that their transactions are secure. Consequently, we must carefully analyze any privacy and security risks associated with new applications or uses of electronic data in an environment complicated by hacker attacks, web page defacing, and identity theft.

Our long-term goal is to achieve a fully integrated, continuously improving information security program. To achieve this goal, NARA will focus on integrating information security among people, processes, and technology across the agency, in alignment with and support of our overall business risk management needs. While reaching for operational excellence, the information security program will focus on a customer service oriented approach with risk based planning and decision-making. Therefore, the information security office becomes an ally to the business rather than a hindrance. For example, services such as strong authentication, identity management, host and network intrusion detection, and consolidated auditing and analysis are just a few security services that are demanded by modern business practices. The standard security goals of confidentiality, integrity, and availability serve to directly support our mission to safeguard and preserve records, provide essential documentation, and to provide access to NARA holdings.

IRM Risk Management Strategy

Our IRM risk management strategy is to integrate risk management, security, and privacy protections into all of our IRM management processes and all of our IRM activities from the development of our business architecture, through the execution of our IRM programs, to the operations and maintenance of our IT applications and infrastructure. Statutory imperatives set forth by the Federal Information Security Management Act (FISMA) and the corresponding IT security guidelines from the National Institute of Standards and Technology (NIST) designate security responsibility to an IT security program—and we must conform to this mandated guidance. However, we also recognize that we cannot effectively manage IT security from the perspective of a single program that is focused primarily on IT. Our challenge is to enhance and expand this focus to make security and privacy considerations integral to everything we do. To address the challenge of making security and privacy considerations an integral part of our agency culture, we will pursue the following strategic approach:

- We will monitor business risks associated with IRM activities. The ITEC and the ARB will provide governance oversight to help ensure that business program



- risks and technology risks are appropriately managed and mitigated commensurate with their potential impact to the agency's mission.
- We will review all of our information assets from the business perspective, and categorize them according their sensitivity, importance to the business, and requirements for access control, protection, and recovery.
 - We will maintain Continuity of Operations Plans (COOP) for our key business processes and services, and ensure that our investments in IT applications and infrastructure appropriately address our business continuity of operations needs.
 - We will define and maintain an *IT Security Architecture* as an integral part of the EA and the authoritative IT security policy and standards guidance for the agency. This will help us assure that all FISMA and NIST requirements are uniformly and consistently addressed across our IRM activities, and that security and privacy considerations are integrated into the other domains of our architectural specifications and plans.
 - We will include security and privacy review checkpoints as part of the milestone exit criteria in our key IRM management processes to include EA, CPIC, Project Management, and the SDLC. We will enforce these compliance checks via the ARB and CCB as part of our EA and system engineering compliance reviews.
 - We will institute a rigorous Assessment & Authorization process to assure that all IT acquisitions address security and privacy considerations in accordance with our policies and standards, and that all security requirements are satisfactorily addressed prior to acceptance and deployment of IT applications and infrastructure components.
 - We will develop a comprehensive security monitoring capability to detect, identify, track, manage, and resolve IT security issues in production—and we will ensure this capability is appropriately engineered, integrated, and managed within our overall IT operations environment and in alignment with our EA.
 - We will perform periodic, independent reviews of all elements of our Security Program to ensure conformance with our policies and standards.
 - We will provide mandatory security and awareness training for all NARA managers, staff, and contractors that have access to our facilities and information systems.



IRM Strategy Five: *IRM Governance* – Maintain IRM governance committees to oversee all IRM activities and assure conformance with business needs, EA guidance, and all applicable Federal laws, regulations, and guidelines.

Overview

Perhaps the most significant determinant of the success of our IRM activities is the effectiveness by which they are governed. Governance is achieved by establishing leadership teams to assure adequate oversight and review of the plans for our IRM programs and the outcomes they produce. Our objective is to assure that all IRM program plans, IRM activities, and IRM outcomes are reviewed from the business, financial, program management, and technology perspectives; and to assure that our IRM programs achieve the desired results for the agency. When IRM activities deviate from their plans or fail to produce expected results, our governance committees are chartered to direct re-planning of the activities, or to terminate them if appropriate.

IRM Governance Strategy

Our strategy for IRM governance is simply to maintain governance committees, via formal charters, to oversee the major IRM process areas of the agency and establish checkpoints for governance committee review and approval within our IRM management processes. To accomplish this strategy we established the following three governance boards to oversee our IRM activities:

- (1) The Information Technology Executive Committee (ITEC);
- (2) The Architecture Review Board (ARB); and
- (3) The Configuration Control Board (CCB).

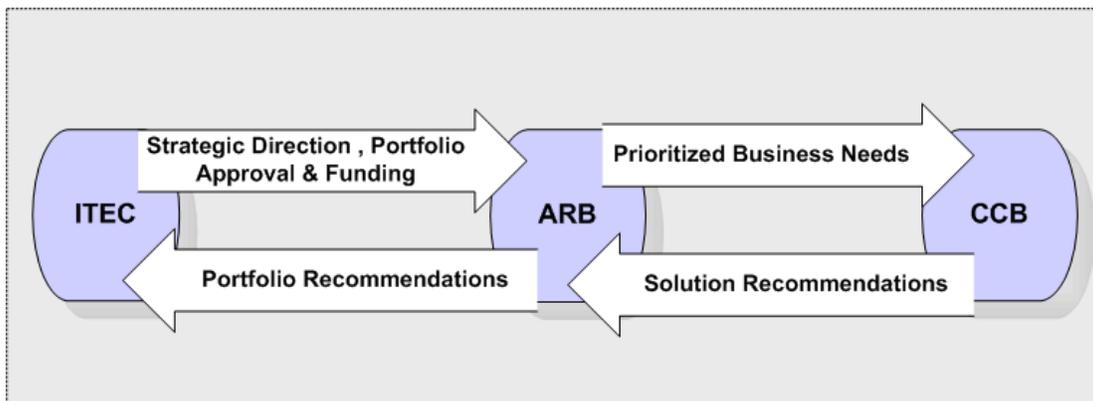
Governance for IRM planning processes is addressed primarily by the ITEC and the ARB via the EA process. Governance for project management processes and IT operations processes is addressed by the ARB and CCB via the SDLC process. Our EA, CPIC, IT Security, and SDLC policy directives all have milestone exit criteria that cross reference each other to assure that all IRM perspectives are considered when reviewing project plans and deliverables. The membership, purpose, and focus of these governance boards are described in the table below. The general interaction among the boards is depicted in the figure below.

Board	Membership and Purpose	IRM Process Focus
<p>ITEC</p>	<p>The ITEC is chaired by the Archivist and is comprised of the senior business executive of the agency. The group’s primary purpose is to oversee all business operations, and approve all investments, policies, and business plans for the agency. The ITEC is the executive steering committee for the agency.</p>	<ul style="list-style-type: none"> • Strategic Planning • Budgeting • Performance Management • CPIC – Select • Strategic Risk Management



Board	Membership and Purpose	IRM Process Focus
ARB	<p>The ARB is co-chaired by the agency CTO and the Product Management Director. It is comprised of business office senior managers and the IT office division heads. The ARB is the core steering committee for IRM process and work activities. The ARB oversees the agency’s EA process and assures that all IRM investments and all IRM project deliverables (through the preliminary design phase of the SDLC) are reviewed for EA compliance and conform to EA guidance. The ARB also approves the annual EA Program Plan and all changes to the EA. The ARB is chartered to establish special working groups as required to support IRM program activities and facilitate IRM decision making. The ARB makes recommendations to the ITEC regarding the approval or disapproval of IRM investments.</p>	<ul style="list-style-type: none"> • Enterprise Architecture • CPIC –Control & Evaluate • SDLC • Program Management • Information Assurance • Records Management • Strategic Risk Management
CCB	<p>The CCB is chaired by the Director of IT Operations. The CCB is the steering committee for IT operations work activities. The CCB oversees the operations engineering of the agency’s IT infrastructure, and assures that all IT project deliverables are reviewed and conform to agency standards. The CCB approves all changes to the IT Operations environment, and determines when new IT systems and infrastructure elements are ready for production operations.</p>	<ul style="list-style-type: none"> • Project Management • SDLC • IT Operations • Information Assurance

Governance Board Interaction





IRM Strategy Six: *IT Infrastructure Support* – Engineer, maintain, and operate a robust IT infrastructure.

Overview

A sound IT infrastructure is an important and foundational element of our IRM strategy. The importance of IT infrastructure lies in its capacity to ease the implementation of value-added applications that often span business functions. Accomplishing NARA's strategic business programs depends on having a flexible, robust, secure, and scaleable IT infrastructure that supports web-based customer access to electronic records, lifecycle records management, and billable services. Requirements for these capabilities are imbedded in—and are critical to—each of our strategic business programs.

IT Infrastructure Support Strategies

Our first strategy is to establish a sound IT Infrastructure engineering capability for the agency. We recognize that one of our IRM principles is to outsource for the IT components and services we require rather than build them in-house. However, this approach still requires that we be able to document and manage our IT infrastructure requirements, test purchased IT components for interoperability, and engineer IT components for deployment into our operations environment. For these reasons, we will perform the following activities.

- Develop and maintain an IT Infrastructure Segment Architecture and transition plan that allows us to track and manage all IT infrastructure engineering activities and prepare annual IT infrastructure release plans for the agency.
- Develop systems engineering review criteria for all phases of the SDLC and integrate them within all IRM policy directives and process guidelines.
- Establish an enterprise requirements management process that enables us to trace and manage all IT requirements throughout the system development lifecycle. The process will include the implementation of an enterprise requirements repository.
- Maintain a systems engineering lab that allows us to prototype and engineer new IT components, services, and capabilities - and verify the operational readiness of purchased IT component in a “production-like” environment.

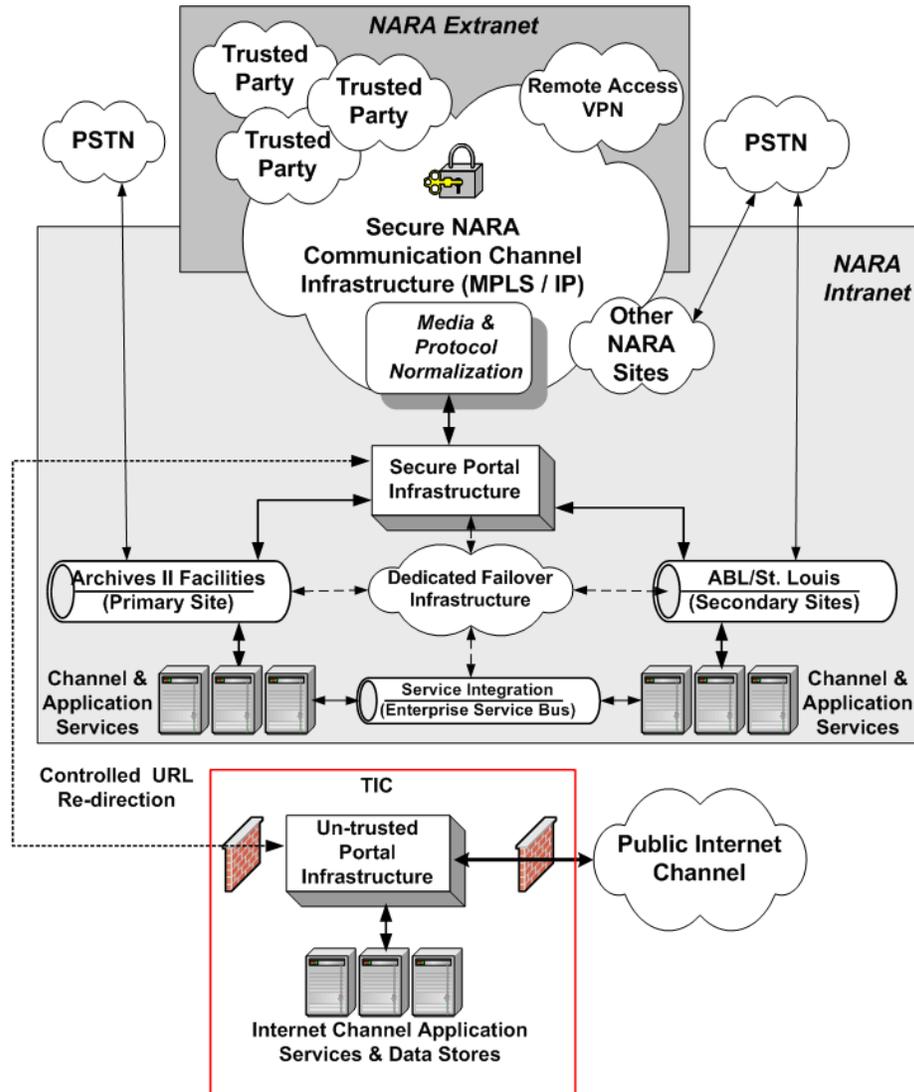
Our second strategy is to plan and engineer a NARANET infrastructure upgrade as depicted in the figure below. The infrastructure will provide the following general capabilities:

- Support data, voice, and video services and channel management;
- Position the agency for IPv6 implementation and Trusted Internet Connections (TIC) in alignment with OMB guidelines;



- Provide an extranet capability that allows us to interact securely with our business partners;
- Provide an enterprise-wide storage network infrastructure to support the storage and management of digitalized files and General Support Services (GSS) files and databases;
- Provide an enterprise service bus for service integration;
- Provide a failover capability for all network and platform elements in alignment with business continuity of operations (COOP) requirements; and
- Conform to the infrastructure design specifications expressed in the EA.⁹

Next Generation NARANET – Concept

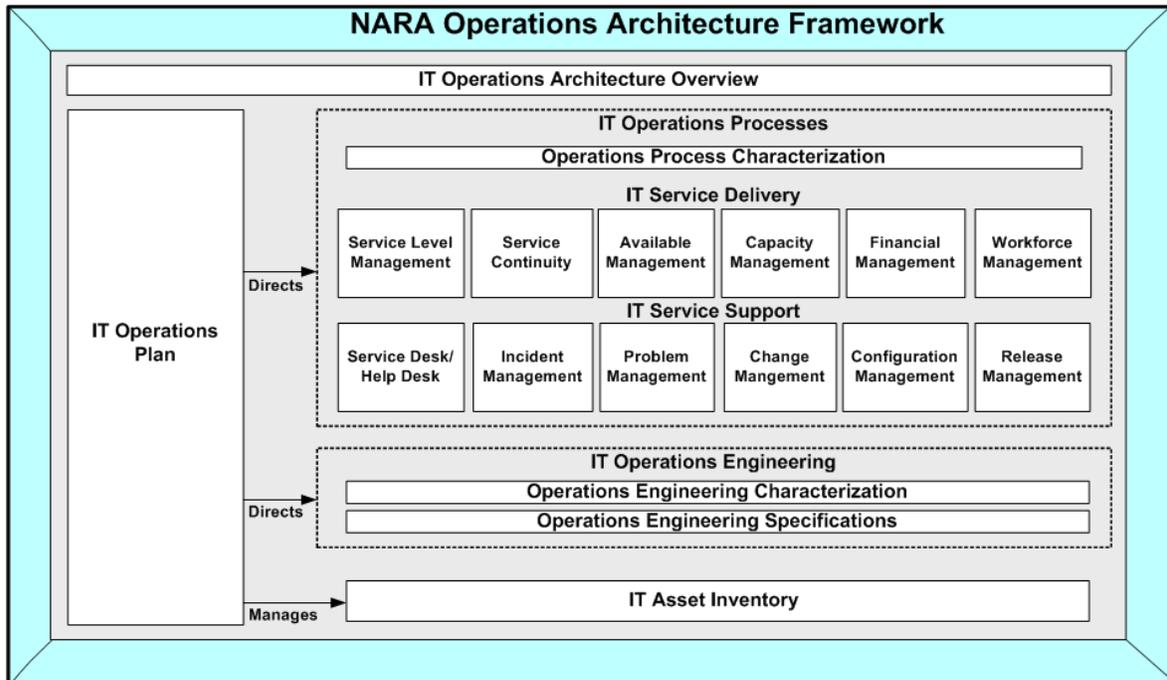


⁹ See the *Technical Infrastructure Design* section of the *National Archives and Records Administration Enterprise Architecture*.



Our third strategy is to monitor our operations management contract and continuously improve our IT operations environment. We will strive to address all elements of the Operations Architecture Framework depicted below. The following activities are considered key to improving our IT operations capabilities:

- Develop, maintain, and manage to an IT operations management plan;
- Deploy, use, and manage enterprise-wide IT infrastructure monitoring capabilities;
- Maintain configuration management over all IT infrastructure components;
- Document all operations management processes and all operation engineering specifications, and keep them in a centrally managed and secure repository;
- Maintain the agency’s IT asset inventory and integrate asset management with the acquisition process;
- Utilize the systems engineering lab to support operations engineering activities; and
- Ensure operations engineering and transition to support requirement are identified and addressed in the SDLC as part of the systems engineering process.





Conclusion

This Strategic IRM Plan provides a short overview of the six IRM strategies that we need to focus on as an agency and identifies how we plan to continuously improve in each of these six strategic areas. We urge all NARA management, staff, and contractors, and any stakeholders in NARA's IRM activities to embrace this strategic plan, to review the more detailed planning guidance documented in our Enterprise Architecture, to become familiar with the policies we have established for IRM management processes and IRM governance, and support us as we move forward in our IRM endeavors.

Our six IRM strategies are as fundamental as they are challenging. We will continue to strive toward our goal of having IRM capabilities that are well aligned with our business objectives; that are supported by integrated management processes and governance reviews; that are guided by a comprehensive enterprise architecture; that are cognizant of risk, security, and privacy considerations; and that result in a robust, well-managed application portfolio and IT infrastructure for our business.