

Report to Congressional Committees

August 2006

ELECTRONIC RECORDS ARCHIVES

The National Archives and Records Administration's Fiscal Year 2006 Expenditure Plan





Highlights of GAO-06-906, a report to congressional committees

#### Why GAO Did This Study

Since 2001, the National Archives and Records Administration (NARA) has been working to acquire the Electronic Records Archives (ERA) system, which is intended to address critical issues in the creation, management, and use of federal electronic records. As required by law, the agency submitted its fiscal year 2006 expenditure plan to the congressional appropriations committees, seeking the release of about \$22 million for the development of the system.

GAO's objectives in reviewing the expenditure plan were to (1) determine the extent to which the expenditure plan satisfied the legislative conditions specified in the appropriations act; (2)determine the extent to which NARA has implemented GAO's prior recommendations; and (3) provide any other observations about the expenditure plan and the ERA acquisition. We reviewed the expenditure plan and analyzed it against the legislative conditions and assessed NARA's progress in addressing prior recommendations.

#### What GAO Recommends

GAO recommends that the Archivist of the United States ensure that future expenditure plans include a sufficient level and scope of information for Congress to effectively oversee the program. In commenting on a draft of this report, the Archivist of the United States agreed with the results and recommendation.

www.gao.gov/cgi-bin/getrpt?GAO-06-906.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Linda D. Koontz at (202) 512-6240 or koontzl@gao.gov.

### **ELECTRONIC RECORDS ARCHIVES**

# The National Archives and Records Administration's Fiscal Year 2006 Expenditure Plan

#### **What GAO Found**

NARA's fiscal year 2006 expenditure plan fully satisfies three of the six legislative conditions and partially satisfies the remaining conditions (see table).

Fiscal Year 2006 Expenditure Plan: Compliance with Legislative Conditions		
Legislative conditions	Status	
1. Meet OMB capital planning and investment control review requirements	Partially satisfied	
2. Comply with NARA's enterprise architecture	Partially satisfied	
3. Conform to NARA's enterprise life cycle methodology	Partially satisfied	
4. Comply with acquisition rules, requirements, guidelines, and system acquisition management practices of the federal government	Satisfied	
5. Approval by NARA and OMB	Satisfied	
6. Review by GAO	Satisfied	

Source: GAC

The agency continues to make progress in addressing prior GAO recommendations: the agency has fully implemented three of five and has partially implemented the remaining two. The agency has (1) strengthened information security by developing a program that includes agencywide assessments of information security risks; (2) developed and implemented a document review process to ensure that recommendations from reviewers are addressed and incorporated into acquisition policies and plans; and (3) improved federal records management by implementing strategies to raise agencies' awareness of records management principles, functions, and programs. However, while NARA has completed the development of an enterprise architecture, it lacks an agencywide board for reviewing information technology projects for conformance to the architecture, including projects that are interdependent with ERA. In addition, the agency revised four out of five key policies and plans to comply with industry standards. At the time of our briefing, the Risk Management Plan was under revision. It was completed in July 2006. Until the agency fully addresses all prior recommendations, risks remain to the successful implementation of the system.

NARA's expenditure plan does not contain the level and scope of information needed by Congress to understand the agency's plans and commitments relative to system capabilities, benefits, schedules, and costs. For example, it does not fully describe how the infrastructure elements that are to be procured will fit into the overall system design. Until the agency improves future expenditure plans to include information on system capabilities, benefits, schedules, and costs, Congress will not have the information needed to oversee plans and progress on the acquisition of the system. We performed our work at NARA's College Park, Maryland, location in accordance with generally accepted government auditing standards.

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#### **Abbreviations**

ERA	Electronic Records Archives
EA	Enterprise Architecture
FISMA	Federal Information Security Management Act
$\operatorname{IT}$	Information Technology
NARA	National Archives and Records Administration
OIG	Office of Inspector General
OMB	Office of Management and Budget
SCAMPI	Standard CMMI® Appraisal Methodology for Process
	Improvement
SEI	Software Engineering Institute

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### United States Government Accountability Office Washington, D.C. 20548

August 18, 2006

The Honorable Christopher S. Bond
Chairman
The Honorable Patty Murray
Ranking Minority Member
Subcommittee on Transportation, Treasury, the Judiciary,
Housing and Urban Development, and Related Agencies
Committee on Appropriations
United States Senate

The Honorable Joe Knollenberg
Chairman
The Honorable John W. Olver
Ranking Minority Member
Subcommittee on Transportation, Treasury, and Housing
and Urban Development, the Judiciary, and District of Columbia,
and Independent Agencies
Committee on Appropriations
House of Representatives

As required by law, the National Archives and Records Administration (NARA) submitted its fiscal year 2006 expenditure plan in March 2006 to congressional appropriations committees, seeking the release of about \$22 million for the development of the Electronic Records Archives (ERA). ERA is a major information system that is intended to address critical issues in creating, managing, and using federal electronic records and automating the records management and archiving life cycle. Our objectives in reviewing the plan were to (1) determine whether the plan satisfied the conditions specified in the law, (2) determine the extent to which NARA has implemented our prior recommendations, and (3) provide any other observations about the expenditure plan and the ERA acquisition.

<sup>1</sup>NARA's fiscal year 2006 appropriations act provides that the agency must submit an expenditure plan before obligating fiscal 2006 funds for the ERA program. The plan must (1) meet the capital planning and investment control review requirements established by the Office of Management and Budget (OMB), including Circular A-11; (2) comply with NARA's enterprise architecture; (3) conform with NARA's enterprise life cycle methodology; (4) comply with the acquisition rules, requirements, guidelines, and system acquisition management practices of the federal government; (5) be approved by NARA and OMB; and (6) be reviewed by GAO. See P.L. No. 109-115, November 30, 2005, Div. A, Title VI, 119 Stat. 2486.

In May 2006, we transmitted a copy of our briefing to your staff and briefed staff from the Senate Appropriations Subcommittee on Transportation, Treasury, the Judiciary, Housing and Urban Development, and Related Agencies on the results of our review. This report transmits the materials we used at the briefing and provides the recommendation that we made to the Archivist of the United States. The full briefing materials, including our scope and methodology, are reprinted as appendix I.

In summary, we made the following major points:

- NARA's fiscal year 2006 expenditure plan has fully satisfied three of the six legislative conditions. The agency's plan (1) has complied with acquisition rules, requirements, guidelines, and system acquisition management practices of the federal government; (2) was approved by NARA and the Office of Management and Budget (OMB); and (3) was reviewed by GAO. The agency has partially satisfied the three remaining conditions by (1) meeting OMB's capital planning and investment control review requirements for the ERA acquisition, but has not appointed a group to regularly review ERA and other ongoing information technology (IT) investments, including those that have interdependencies with ERA; (2) developing and implementing a procedure to ensure that ERA complies with the agency's enterprise architecture, but has not established a board to assess IT projects agencywide, including those that have interdependencies with ERA, to ensure conformity to the EA; and (3) implementing procedures to ensure ERA conforms to the agency's life cycle methodology, but has not yet fully established an agencywide risk management capability.
- NARA continues to make progress in addressing our prior recommendations. The agency has fully implemented three of five recommendations and has partially implemented the remaining two. The agency has (1) strengthened information security by developing a program that includes agencywide assessments of information security risks and an enterprise architecture that addresses information security issues agencywide; (2) developed and implemented a document review process to ensure that recommendations from independent verification and validation reviews are addressed and incorporated into acquisition policies and plans; and (3) improved federal records management by implementing strategies to raise agencies' awareness of records management principles, functions, and programs and by monitoring the performance of agencies' records management programs and practices. The agency has partially implemented two other recommendations that

are essential for the successful management of the acquisition. It has (1) completed the development of an enterprise architecture, but lacks a board for reviewing IT projects agencywide, including projects that are interdependent with ERA and (2) revised four out of five key policies and plans to comply with industry standards. At the time of our briefing, the remaining document—the Risk Management Plan—was under revision with an expected completion date of June 2006. The Risk Management Plan was subsequently completed in July 2006.

• NARA's expenditure plan provides only general information on how the \$22 million is to be spent and does not fully describe, for example, how the infrastructure elements that are to be procured will fit into the overall system design. The legislative requirement for submitting an ERA expenditure plan to the appropriations committees is intended to provide lawmakers with a sufficient understanding of the system acquisition in order to permit effective oversight and to allow for informed decision making about the use of appropriated funds. To achieve these objectives, the plan needs to disclose a sufficient level and scope of information to understand what system capabilities and benefits are to be delivered, by when, at what cost, and the progress being made against the commitments that were made in prior expenditure plans. Without this complete information, Congress does not have the information needed to oversee plans and progress on the acquisition of the ERA system.

# Recommendation for Executive Action

To reduce the risks associated with NARA's efforts to acquire ERA, we recommend that the Archivist of the United States ensure that future expenditure plans include a sufficient level and scope of information to enable Congress to understand what system capabilities and benefits are to be delivered, by when, and at what cost, and report on the progress being made against the commitments that were made in prior expenditure plans.

### **Agency Comments**

In written comments on a draft of this report, the Archivist of the United States agreed with the results and recommendation. In addition, he stated that the agency has submitted an action plan to relevant congressional committees documenting how it plans to satisfy the legislative conditions that we identified as partially implemented. He also noted that NARA has proposed to the committees that the agency submit an addendum to its expenditure plan that would provide more detailed information on the

allocation of funds, infrastructure elements, workflow capability, and business applications in the ERA system.

We are sending copies of this report to the Archivist of the United States. We will make copies available to others on request. In addition, the report will be available at no charge on the GAO Web site at <a href="http://www.gao.gov/">http://www.gao.gov/</a>.

If you or your staff have any questions concerning this report, please call me at 202-512-6240; I can also be reached by e-mail at koontzl@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made major contributions to this report are listed in appendix III.

Linda D. Koontz

Director, Information Management Issues

Linda & Koontz

# **Briefing Slides**



# Electronic Records Archives: The National Archives and Records Administration's Fiscal Year 2006 Expenditure Plan

Briefing for Staff Members of the

Subcommittee on Transportation, Treasury, the Judiciary, Housing and Urban Development, and Related Agencies

Senate Committee on Appropriations

and the

Subcommittee on Transportation, Treasury, and Housing and Urban Development, the Judiciary, District of Columbia, and Independent Agencies

House Committee on Appropriations<sup>1</sup>

May 26, 2006

<sup>&</sup>lt;sup>1</sup>A technical clarification was added on p. 20.



#### **Outline of Briefing**

Introduction

Objectives, Scope, and Methodology

Results in Brief

Background

Legislative Conditions

Implementation of Prior Recommendations

- Enterprise Architecture
- Information Security
- Document Review Process
- Acquisition Policies and Plans
- · Records Management

Observation on the ERA Expenditure Plan

Conclusions

Recommendation for Executive Action

Agency Comments and Our Evaluation



#### Introduction

The mission of the National Archives and Records Administration (NARA) is to ensure "ready access to essential evidence" for the public, the President, Congress, and the courts. NARA is responsible for oversight of records management and archiving, which increasingly involves dealing with documents that are electronically created and stored. Accordingly, the Archivist of the United States plans to develop the Electronic Records Archives (ERA) to address critical issues in the creation, management, and use of federal electronic records. ERA is a major information system that NARA envisions will have the ability to preserve and provide access to massive volumes of all types and formats of electronic records. Overall, the system is to automate the records management and archiving life cycle. Specifically, ERA is to consist of

- infrastructure elements, including hardware and operating systems;
- business applications that will provide for scheduling electronic records, accessioning, preserving and storing records; and
- public access provided by a Web browser and the public Internet.

In 2001, NARA hired a contractor to develop policies and plans using the standards of the Institute of Electrical and Electronics Engineers, Inc., (IEEE) to guide the overall acquisition of an electronic records system.

Appendix I Briefing Slides



#### Introduction

In December 2003, the agency released a request for proposals for the design of ERA. In August 2004, NARA awarded two firm fixed-price contracts<sup>2</sup> for the design phase totaling about \$20 million—one to Harris Corporation and the other to Lockheed Martin Corporation. On September 8, 2005, NARA announced the selection of Lockheed Martin Corporation to build the ERA system.

NARA's fiscal year 2006 appropriations act<sup>3</sup> provides that the agency must submit an expenditure plan before obligating fiscal 2006 funds for the ERA program. The plan must

- meet the capital planning and investment control review requirements established by the Office of Management and Budget (OMB), including Circular A-11;
- comply with NARA's enterprise architecture;
- conform with NARA's enterprise life cycle methodology;
- comply with the acquisition rules, requirements, guidelines, and system acquisition management practices of the federal government;
- be approved by NARA and OMB; and
- be reviewed by GAO.

<sup>&</sup>lt;sup>2</sup>According to the Federal Acquisition Regulation, a firm fixed-price contract provides for a price that is not subject to any adjustment on the basis of the contractor's cost experience in performing the contract. This type of contract places maximum risk and full responsibility for all costs and resulting profit or loss on the contractor(s).

<sup>&</sup>lt;sup>3</sup>P.L. 109-115, November 30, 2005, Div. A, Title VI, 119 Stat. 2486.

Appendix I Briefing Slides



#### Introduction

On March 16, 2006, NARA submitted its 2006 expenditure plan to the relevant House and Senate appropriations subcommittees, seeking release of about \$22 million for the development contract with Lockheed Martin.

Since June 2002, we have completed several reports assessing NARA's efforts to acquire the ERA system.<sup>4</sup> In these reports, we made a total of 10 recommendations; 5 have been implemented while the following remained to be addressed at the beginning of this review.

- Develop an enterprise architecture.
- Improve information security in order to address the lack of (1) a capability to assess agencywide information security risks and (2) a security architecture that addresses information security issues agencywide.
- Design and implement a process to ensure that recommendations from verification and validation reviews are addressed and incorporated into ERA's acquisition policies and plans.
- Revise five key ERA program policies and plans to conform to IEEE standards.

<sup>&</sup>lt;sup>4</sup>GAO, Information Management: Challenges in Managing and Preserving Electronic Records, GAO-02-586 (Washington, D.C.: June 17, 2002); GAO, Records Management: National Archives and Records Administration's Acquisition of Major System Faces Risks, GAO-03-880 (Washington, D.C.: Aug. 22, 2003); GAO, Records Management: Planning for the Electronic Records Archives Has Improved, GAO-04-927 (Washington, D.C.: Sept. 23, 2004); and GAO, Information Management: Acquisition of the Electronic Records Archives is Progressing, GAO-05-802 (Washington, D.C.: July 15, 2005).



#### Introduction

 Develop a documented strategy for (1) raising agency senior management awareness of and commitment to records management principles, functions, and programs and (2) conducting systematic inspections of agency records management programs to (a) periodically assess agency progress in improving records management programs and (b) evaluate the efficacy of NARA's governmentwide guidance.



#### Objectives, Scope, and Methodology

#### As agreed, our objectives were to

- determine the extent to which NARA's fiscal year 2006 expenditure plan satisfies the legislative conditions specified in NARA's appropriations act,
- determine the extent to which NARA has implemented our prior recommendations, and
- provide any other observations about the expenditure plan and the ERA acquisition.

#### To assess compliance with legislative conditions, we

- reviewed the fiscal year 2006 expenditure plan submitted by NARA in March 2006 and analyzed the plan against the legislative conditions to identify any variances;
- reviewed and analyzed NARA's processes to ensure the ERA system acquisition conforms to the agency's enterprise architecture;
- reviewed NARA's fiscal year 2006 A-11, section 300 submission to OMB and identified and analyzed NARA's responses to determine the extent to which the agency has complied with OMB's capital planning and investment control requirements; and
- reviewed the systems development life cycle policy that the agency is using to guide the ERA acquisition and analyzed relevant items for compliance.



#### Objectives, Scope, and Methodology

#### To determine the extent to which NARA has implemented prior recommendations, we

- evaluated the agency's enterprise architecture plans and products and conducted interviews of senior NARA officials to determine the status of the agency's efforts to develop an enterprise architecture;
- reviewed Federal Information Security Management Act (FISMA) reports and NARA's security
  program plan, security architecture, and system security plans; interviewed senior NARA officials
  and Office of Inspector General (OIG) auditors to determine the status of the agency's efforts to
  strengthen information security;
- reviewed key ERA policies and plans and independent verification and validation reports on the
  policies and plans and interviewed ERA officials to determine what progress the program had
  made in addressing our recommendation that policies and plans conform to industry standards;
- assessed the program's process for reviewing and finalizing policies and plans and interviewed ERA officials responsible for the review process to determine the extent to which the review process was developed and implemented; and
- interviewed NARA officials and reviewed documents to determine the progress the agency has
  made in addressing our recommendation to raise awareness among senior federal officials of the
  importance of federal records management and increase their commitment to federal records
  management; and to conduct systematic inspections of agency records management programs
  to (a) periodically assess agency progress in improving records management programs and (b)
  evaluate the efficacy of NARA's governmentwide guidance.



#### Objectives, Scope, and Methodology

#### To develop our observation on the ERA expenditure plan and acquisition, we

• assessed the completeness of the cost and schedule information contained in the expenditure plan and interviewed NARA officials in order to gain an understanding of the data.

We performed our work from December 2005 to May 2006 at NARA's College Park, Maryland, location in accordance with generally accepted government auditing standards.



#### **Results in Brief**

#### **Legislative Conditions**

NARA's fiscal year 2006 expenditure plan fully satisfies three of the six legislative conditions. The plan partially satisfies the legislative conditions that ERA meet OMB's capital planning and investment control review requirements, conform to the enterprise architecture, and comply with the requirements of the systems development life cycle.

#### **Prior Recommendations**

NARA has fully implemented three of five prior GAO recommendations and partially implemented the remaining two.

Table 1: Summary Status of NARA's Progress in Implementing Prior Recommendations

Prior recommendation	Status	Progress
1. Enterprise architecture	partially implemented	NARA has completed a baseline, target, and a plan for transitioning from the baseline to the target architecture. However, the agency lacks a board for reviewing IT projects agencywide, including projects that are interdependent with ERA.
2. Information security	implemented	NARA has developed a program that includes agencywide assessments of information security risks and an enterprise architecture that addresses information security issues agencywide.



#### **Results in Brief**

Prior recommendation	Status	Progress
3. Document review process	implemented	A document review process has been developed and implemented to ensure that recommendations from independent verification and validation reviews are addressed and incorporated into acquisition policies and plans.
Acquisition program policies and plans	partially implemented	NARA has revised four out of five key policies and plans to comply with IEEE standards. According to NARA officials, the remaining document—the Risk Management Plan—is currently under revision.
5. Federal records management	implemented	NARA has implemented strategies to raise agencies' awareness of records management principles, functions, and programs and to monitor the performance of agencies' records management programs and practices.

Source: GAO.

#### **Observations on the ERA Expenditure Plan and Program**

NARA's expenditure plan does not contain the level and scope of information needed for Congress to understand its plans and commitments relative to system capabilities, benefits, schedules, and costs.

We are making a recommendation to NARA to improve the utility of future expenditure plans.

In commenting on a draft of these briefing slides, the Archivist generally agreed with the contents and our recommendation.



**Background** ERA Expenditure Plan

NARA's fiscal year 2006 expenditure plan includes a description of plans to complete initial operating capability of the ERA system<sup>5</sup> by September 2007. Table 2 shows the schedule of planned activities.

**Table 2: Summary of Planned Activities** 

Milestone	Start date	Completion date
Develop ERA through initial operating capability	October 1, 2005	August 7, 2006
Establish ERA system infrastructure	June 5, 2006	November 24, 2006
Provide business applications for appraisal, scheduling, limited preservation, and internal dissemination of electronic records	August 17, 2006	September 30, 2006
Complete initial operating capability		September 7, 2007

Source: GAO.

Successfully acquiring the ERA system also involves the management of interdependent IT projects. The current environment consists of a number of legacy systems that do not adequately fulfill mission needs, comprehensively address the entire life cycle management of records, or support all of NARA's evolving business processes. These legacy systems will be subsumed into the new system.

<sup>&</sup>lt;sup>5</sup>A senior ERA official indicated that these dates were tentative and would not be finalized until August 7, 2006, when Lockheed Martin and NARA complete the design.



**Background** ERA Expenditure Plan

NARA's fiscal year 2006 expenditure plan for the ERA program also includes a summary of funding to complete initial operating capability of the ERA system.

Table 3: Summary of NARA's Fiscal Year 2006 ERA Expenditure Plan

Project category	Amount
Program management	\$12,019,698
Research and development	3,500,000
Site deployment	1,980,000
Development contract – Lockheed Martin	21,780,000
Independent verification and validation <sup>6</sup>	1,549,909
Total	\$40,829,607

Source: NARA 2006 Expenditure Plan

Of these funds, NARA cannot obligate the \$21,780,000 for the development contract with Lockheed Martin until Congress reviews and approves the expenditure plan. Congress released the remaining funds when NARA's appropriations bill was signed in November 2005.

<sup>&</sup>lt;sup>6</sup>NARA contracted with Northrop Grumman to perform independent verification and validation on policies and plans produced by the ERA program and contractual deliverables produced by Lockheed Martin.



#### **Legislative Conditions**

NARA has fully satisfied three of the six legislative conditions and partially satisfied three.

Table 4: Fiscal Year 2006 Expenditure Plan Provisions for Satisfying Legislative Conditions

Legislative condition	Status	Progress
Meet OMB capital planning and investment control review requirements	Partially satisfied	NARA meets OMB's capital planning and investment control review requirements for the ERA acquisition. It identified funding required for acquiring ERA and conducts regular reviews of the program. However, while NARA has appointed a group comprised of senior managers that meets weekly to review ERA, the agency does not regularly review other ongoing IT investments, including those that have interdependencies with ERA.
2. Comply with NARA's enterprise architecture	Partially satisfied	NARA has developed and implemented a procedure to ensure that ERA complies with the agency's enterprise architecture (EA). However, while the chief technology officer reviews and approves ERA's conformance to the agency's EA, NARA has not yet established a board to assess IT projects agencywide, including those that have interdependencies with ERA, to ensure they conform to the EA.
3. Conform to NARA's enterprise life cycle methodology	Partially satisfied	ERA conforms to the life cycle methodology. For example, the plan includes descriptions of the incremental approach the agency has adopted for acquiring ERA and the program performs risk and performance management. However, NARA has not yet fully established an agencywide risk management capability. While it has established a Risk Review Board and assigned a chairperson to it, identified risks, and is developing processes, it has not yet completed a risk management plan or strategy.



#### **Legislative Conditions**

Legislative condition	Status	Progress
4. Comply with acquisition rules, requirements, guidelines, and system acquisition management practices of the federal government	Satisfied	NARA satisfied this provision by (1) conducting internal assessments in 2002 and 2004 that used the Software Engineering Institute's (SEI) <sup>7</sup> SA-CMM <sup>8</sup> methods to determine the maturity of ERA's system policies, processes, and practices; (2) implemented a process to address the assessment's recommendations; and (3) is planning to commission an independent standard CMMI® <sup>9</sup> appraisal methodology for process improvement (SCAMPI <sup>sm</sup> ) <sup>10</sup> appraisal of ERA in FY 2007.
5. Approval by NARA and OMB	Satisfied	<ul><li>OMB – March 14, 2006</li><li>NARA – March 16, 2006</li></ul>
6. Review by GAO	Satisfied	GAO – May 26, 2006, briefing to NARA's appropriations subcommittees.

Source: GAO

<sup>&</sup>lt;sup>7</sup>SEI is a federally funded research and development center operated by Carnegie Mellon University and sponsored by the Department of Defense. Its objective is to provide leadership in software engineering and in the transition of new software engineering technology into practice.

<sup>&</sup>lt;sup>8</sup>SA-CMM: Identifies key process areas that are essential to effectively managing software-intensive system acquisitions.

<sup>9</sup>CMMI is registered in the U.S. Patent and Trademark Office by Carnegie Mellon University. The CMMI is SEI's process model that describes how to develop the processes needed for software development and specific practices that organizations should follow.

<sup>10</sup>SCAMPI (SM) is a service mark of Carnegie Mellon University. It is a method used for appraising organizations using CMMI.

Appendix I Briefing Slides



#### **Legislative Conditions**

NARA recognizes the weaknesses associated with the legislative conditions. According to its Chief Information Officer, the agency

- intends to establish a group to assess IT projects' compliance with the EA,
- plans to establish a process for regular reviews by management of ongoing IT investments, and
- has begun to establish an agencywide risk management capability.



### Implementation of Prior Recommendations Enterprise Architecture

In our June 2002 report, we recommended that NARA strengthen its IT management capabilities by developing an EA. An EA provides a description—in useful models, diagrams, and narrative—of the mode of operation for an agency. It describes the agency in logical terms, such as interrelated business locations and users, and in IT operational terms, such as hardware, software, data, communications, and information security attributes and standards. It provides these perspectives both for the baseline and target environments as well as a plan for transitioning from the baseline to the target. Furthermore, the agency should establish an architecture review board that meets regularly to evaluate projects' compliance with the EA.

The agency has established baseline and target architectures that include

- business process definitions and flows for interrelated activities;
- IT defined in operational terms including hardware, software, data, and security; and
- a plan to transition from the baseline to the target architecture.

However, as previously noted, the agency lacks a review board for ensuring that IT projects conform to the EA.

Until a board is established, the agency lacks assurance that projects are fully consistent with the architecture.

Appendix I Briefing Slides



# Implementation of Prior Recommendations Information Security

In our June 2002 report, we recommended that the agency improve information security because it lacked a program for assessing agencywide information security risks and an EA that addresses security issues across the agency.

NARA has strengthened information security by:

- improving its information security program plan, performing agencywide assessments of information security risks, and developing plans of action and milestones for identified weaknesses and
- developing its EA to encompass information security and providing documentation that identifies and specifies NARA's requirements for IT security management, processes, and technologies across the agency.

Because of several assessments that identified numerous security weaknesses, the Archivist declared information security a material weakness in fiscal year 2000. According to the Archivist, corrective actions taken since then to address these weaknesses were completed in fiscal year 2005, and information security is no longer considered a material weakness. However, in its annual FISMA reports, the OIG has identified numerous NARA IT security weaknesses.

While the agency has addressed our specific recommendation, NARA will need to continue to be vigilant in identifying and addressing information security weaknesses.



### Implementation of Prior Recommendations Document Review Process

In our September 2004 report, we reported that the program lacked a process to ensure that the results of verification and validation reviews of policies and plans were incorporated into final versions. We recommended that the Archivist direct the ERA program director to design and implement a process to ensure that recommendations from verification and validation reviews are addressed and incorporated into acquisition policies and plans. We noted that such a process reduces the risk that acquisition policies and plans do not meet industry standards. Without a documented process, NARA cannot ensure that reviewers' comments are integrated into the final versions.

NARA has developed and implemented standard operating procedures to ensure that reviewers' recommendations are addressed in the final versions of ERA's acquisition policies and plans. Specifically, acquisition policies and plans are assessed by an independent verification and validation contractor, who reviews them against applicable industry standards and prepares a report with results and recommendations. After the policies and plans have been revised and recommendations incorporated, they are returned to the independent verification and validation contractor to ensure that all recommendations have been incorporated. NARA recently applied these procedures in its revisions to key ERA policies and plans, including the acquisition strategy and configuration management plan.

By ensuring that independent verification and validation comments are addressed and incorporated into final versions of its policies and plans, NARA has increased assurance that it now has compliant acquisition policies and plans to guide its efforts.



### Implementation of Prior Recommendations Acquisition Policies and Plans

We previously reported that ERA had developed key acquisition policies and plans to guide its acquisition, but that the documents did not fully conform to the IEEE standards selected by the agency. These policies and plans are essential for managing the acquisition and providing critical guidance to the contractor who will be developing the system. As a result, we recommended that ERA revise these policies and plans to conform to industry standards.

NARA has revised these four of five key acquisition policies and plans to comply with IEEE standards

- Acquisition Strategy
- Configuration Management Plan
- Quality Management Plan
- Program Management Plan

The revised acquisition policies and plans have been reviewed by an independent verification and validation contractor. According to these reviews, these documents are compliant with IEEE standards.

According to the Director of the ERA Program Support Division, the remaining document—the risk management plan—is currently under revision and should be completed by June 2006.<sup>11</sup>

By revising these key ERA policies and plans to meet industry standards, NARA has strengthened the guidance it needs to acquire the ERA system.

<sup>&</sup>lt;sup>11</sup>The Risk Management Plan was subsequently completed in July 2006.



## Implementation of Prior Recommendations Records Management

We previously reported that records management was generally afforded low priority by federal agencies and that NARA lacked strategies to address the low priority given to records functions and to monitor the performance of records management programs and practices on an ongoing basis. We recommended that the Archivist develop documented strategies for

- raising senior management awareness of and commitment to records management principles, functions, and programs and
- conducting systematic inspections of agency records management programs to (1) periodically assess agency progress in improving records management programs and (2) evaluate the efficacy of NARA's governmentwide guidance.

NARA has implemented our recommendation by

- briefing agency leaders on the importance of records and information management and providing guidance and support on electronic records to senior agency officials;
- assessing agency records management programs by (1) conducting cross-government studies to
  identify and analyze records management best practices; (2) developing governmentwide
  recommendations and guidance on these practices; and (3) developing a plan to undertake
  agency inspections based on a risk-based model, government studies, or reports from the media;
  and
- conducting a survey of agency federal records officers that determined that the officers were generally satisfied with the utility of NARA guidance products.



# Implementation of Prior Recommendations Records Management

In addition, NARA plans to broaden the survey to include electronic records guidance, records management training, and scheduling and appraisal services.

The plans and strategies implemented by NARA should raise agencies' awareness of records management principles, functions, and programs.



#### Observations on the ERA Expenditure Plan and Acquisition ERA Expenditure Plan

The legislative requirement to submit an expenditure plan for ERA to the appropriations committees is intended to provide lawmakers with a sufficient understanding of the system acquisition to permit effective oversight and to allow for informed decision making about the use of appropriated funds. For this to occur, however, these plans need to disclose a sufficient level and scope of information to understand what system capabilities and benefits are to be delivered, by when, at what cost, and what progress is being made against the commitments that were made in prior expenditure plans.

NARA's expenditure plan does not contain the level and scope of information needed for Congress to understand its plans and commitments relative to system capabilities, benefits, schedules, and costs. More specifically, the plan provides only general information on how the \$22 million, for which it is requesting release, is to be spent. According to the plan, these funds are to enable the development contractor, Lockheed Martin, to

- Provide the infrastructure for systems operations, including security, systems management, common services, and limited storage capabilities. This is to enable receiving, storing, and maintaining the integrity of electronic records being ingested into ERA. The plan also notes that a key element of this infrastructure is an "automated workflow capability."
- Initiate work on business applications needed to support records appraisal, scheduling, limited preservation, and limited internal dissemination.



#### Observations on the ERA Expenditure Plan and Acquisition ERA Expenditure Plan

However, the spend plan does not contain details on, for example:

- how the \$22 million requested is to be allocated among planned tasks;
- the infrastructure elements—including software and hardware—that are to be procured or how these will fit into the overall system design;
- what is meant by an "automated workflow capability" and its relationship to system requirements and benefits; and
- the portion of the work on business applications that will be completed during fiscal year 2006 with the funds requested.

We also note that the schedule provided in the expenditure plan has changed since the plan was submitted to the appropriations committees. Specifically, while the plan indicates that the review and approval of the infrastructure design was to be completed by May 23, 2006, NARA officials stated that the current plan is to conduct a series of reviews that will result in approval of both the infrastructure and business applications designs by August 7, 2006.

NARA officials stated that they had attempted to use another agency's plans as models in developing their own. They also indicated that they have more detailed information on their plans—including a list of the equipment to be procured—but did not include it because they believed it was too detailed.

A listing of specific equipment would be of limited value; however, the plan does not provide sufficient information on system capabilities, benefits, schedules or costs to fully inform the Congress on what is being acquired. Without this information, Congress does not have the information needed to oversee plans and progress on the acquisition of the system.

Appendix I Briefing Slides



#### **Conclusions**

NARA's expenditure plan satisfies three of six legislative conditions and the agency has continued to make significant progress in implementing our recommendations. The agency plans to address outstanding issues. If NARA complies with the legislative conditions and implements our recommendations, the agency should be better positioned to successfully acquire the ERA system.

NARA has not included a sufficient level and scope of information on infrastructure elements, automated workflow capability, and business applications to be completed in fiscal year 2006 so that Congress will be able to understand what system capabilities and benefits are to be delivered, by when, and at what cost. Without sufficient detail in future expenditure plans, Congress may be hampered in its ability to effectively oversee the program.

Appendix I Briefing Slides



#### **Recommendation for Executive Action**

We recommend that the Archivist of the United States ensure that future expenditure plans include a sufficient level and scope of information so that Congress will be able to understand what system capabilities and benefits are to be delivered, by when, and at what cost, and what progress is being made against the commitments that were made in prior expenditure plans.



#### **Agency Comments and Our Evaluation**

In written comments on a draft of our briefing slides, the Archivist of the United States generally agreed with the contents and our recommendation. He stated that he was pleased to note the recognition of the progress made towards implementing our recommendations and indicated that the agency would make every effort to complete those identified as being partially implemented.

Regarding the information provided in this year's spend plan, the Archivist said that providing more detail to Congress was inappropriate because (1) funding had fallen far short of expectations, (2) the agency and its contractor were replanning ERA to match available resources, and (3) the plan's details had not been finalized. However, NARA's spend plan did not provide information on these developments. Without this information, it is difficult for Congress to discern from the expenditure plan that NARA is significantly revising ERA's cost, schedule, and performance goals. Nonetheless, the Archivist agreed that NARA would provide additional information in future expenditure plans, as we recommended.

The Archivist also stated that, because of substantial corrective actions completed in fiscal year 2005, information security is no longer considered to be a material weakness. We have clarified this in our briefing. However, information security must continue to be a priority as the agency increases reliance on its IT infrastructure for records management and archiving of electronic information.



8601 Adelphi Road College Park, Maryland 20740-6001

Government Accountability Office Director of Information Issues Ms. Linda Koontz 441 G Street, NW Washington, DC 20548

Dear Ms. Koontz:

We thank you for the opportunity to review and comment on the draft presentation entitled *Electronic Records Archive: The National Archives and Records Administration's Fiscal Year 2006 Expenditure Plan* before it is briefed to the staff members of the Subcommittee on Transportation, Treasury, the Judiciary, Housing and Urban Development and Related Agencies, Senate Committee on Appropriations and the Subcommittee on Transportation, Treasury, Housing and Urban Development, the Judiciary, District of Columbia, and Independent Agencies, House Committee on Appropriations. We are pleased to note the recognition of the progress made towards implementing five of the ten recommendations provided by GAO in their reports since June 2002.

We also appreciate the insight into the progress remaining to be made towards addressing the five GAO recommendations discussed in the presentation, as well as the recommendations for future expenditure plans. To ensure successful implementation of the Electronic Records Archives (ERA) system we will make every effort to complete those recommendations identified in your presentation as "Partially Implemented". As you point out in your presentation, NARA is already working towards implementing the solutions to your recommendations.

We would like to clarify the observations provided on the ERA Expenditure Plan and Acquisition. GAO noted that the ERA Expenditure Plan does not contain sufficiently detailed information on the allocation of funds, the infrastructure elements, workflow capability and work on business applications in the ERA system. While NARA had such information at the time the plan was submitted, it would have been inappropriate to include it. Such information was most fully articulated in Lockheed Martin's proposal for addressing NARA's requirements; however, the costs of addressing those requirements at the pace laid out in NARA's instructions to the contractor far exceeded expected resource levels. This necessitated a re-plan of all details about what would be built when. While NARA and the contractor reached a high level agreement on this quickly, revision of detailed plans is still in progress. Detailed re-planning requires not only addressing each element, but also assessing feasibility of each change and the cost,

National Archives and Records Administration

Appendix I **Briefing Slides** 

schedule, and engineering impacts on other elements of the plan. NARA and Lockheed expect to complete agreement on revised detailed plans by July. NARA will be happy to provide detailed information in future expenditure plans, as recommended by GAO.

While the effort involved in the re-planning has required some adjustments in the system development effort, all major milestones in system development since the award of the contract option in September 2005 have been met on time. The schedule change noted in GAO's observation will enable us to meet the next major milestone of completing the Critical Design Review as scheduled in August 2006.

Finally, we would like to clarify the statement on slide 18 pertaining to our past material weakness in information security identified by NARA in our Fiscal Year 2000 Federal Managers' Financial Integrity Act (FMFIA) Assurance Report to the President. The slide states that information security continues to be a material weakness. The Archivist of the United States reported in the FY 2005 Performance and Accountability Report, that because of the substantial corrective actions completed last year, the information technology security material weakness was resolved during FY 2005.

Again, we thank you for this opportunity and look forward to our future interactions as we continue the ERA acquisition process.

Sincerely,

Alla Weinstein Recumil MAY 19, 7006 ILLEN WEINSTEIN T. Case ALLEN WEINSTEIN

Archivist of the United States

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# Comments from the National Archives and Records Administration



JUL 18 2006

Government Accountability Office Director of Information Issues Ms. Linda Koontz 441 G Street, NW Washington, DC 20548

Dear Ms. Koontz:

We thank you for the opportunity to review and comment on the proposed report entitled Electronic Records Archive: The National Archives and Records Administration 's Fiscal Year 2006 Expenditure Plan before the report is issued. As mentioned in our letter of May 22,2006, we are pleased to note the recognition of the progress made towards implementing five ofthe ten recommendations provided by GAO in their reports since June 2002 and the insight into the progress remaining to be made towards addressing the five GAO recommendations discussed in the presentation, as well as the recommendations for future expenditure plans.

Weare making every effort to complete those recommendations identified in your report as "Partially Implemented" as well as the concerns regarding the Electronic Records Archives (ERA) Expenditure Plan. The same concerns were raised by the Committees on Appropriations in their letter of June 22, 2006.

In response to the letter from the Committees, we are providing an action plan on fully satisfying the three legislative conditions identified as "Partially Implemented". We are also proposing submission of an addendum to the existing ERA Expenditure Plan that would provide more detail information on the allocation of funds, the infrastructure elements, workflow capability and work on business applications in the ERA system identified in your report. This information will be available on September 1, 2006 after we have reached an agreement with Lockheed Martin on their proposed re-plan for the expected resource levels.

While the effort involved in the re-planning has required some adjustments in the system development effort, all major milestones in system development since the award of the contract option in September 2005 have been met on time. The schedule change noted in GAO's observation will enable us to meet the next major milestone of completing Increment 1 of the project.

Finally, we appreciate your clarification on slide 18 pertaining to our past material weakness in information security. The Archivist of the United States reported in the FY

National Archives and Records Administration

Appendix II Comments from the National Archives and Records Administration

2005 Performance and Accountability Report that because of the substantial corrective actions completed last year, the information technology security material weakness was resolved during fiscal year 2005. However, understanding the importance of information security in the Federal government, we will continue to be vigilant in identifying and addressing information security weaknesses in the future.

Again, we thank you for this opportunity and look forward to our future interactions as we continue the ERA acquisition process.

Sincerely,

ALLEN WEINSTEIN

Archivist of the United States

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# GAO Contacts and Staff Acknowledgments

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Staff Acknowledgments	In addition to the contact named above, Naba Barkakati, Timothy Case, Mike Dolak, Nancy Glover, Mary Hatcher, Jacqueline Mai, and Amos Tevelow made key contributions to this report.

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