

**PART I: CAPITAL ASSET PLAN AND BUSINESS CASE (All Assets)**

Agency **U. S. Nuclear Regulatory Commission**  
 Bureau **N/A**  
 Account Title **Salaries and Expenses**  
 Account Identification Code **31-0200-0-1-276**  
 Program Activity **IT Infrastructure and Office Automation**  
 Name of Project **Agencywide Documents Access and Management System (ADAMS)**  
 Unique Project Identifier:  
 (IT only)(See section 53) **429-00-02-06-01-1010-00**  
 Project Initiation Date **November 1999**  
 Project Planned Completion Date : **September 2011**  
 This Project is: Initial Concept  Planning  Full Acquisition  Steady State   
 Mixed Life Cycle

Project/useful segment is funded:	Incrementally <input checked="" type="checkbox"/>	Fully
Was this project approved by OMB for previous Year Budget Cycle?	Yes <input checked="" type="checkbox"/>	No
Did the Executive/Investment Review Committee approve funding for this project this year?	Yes <input checked="" type="checkbox"/>	No
Did the CFO review the cost goal?	Yes <input checked="" type="checkbox"/>	No
Did the Procurement Executive review the acquisition strategy?	Yes <input checked="" type="checkbox"/>	No
Is this investment included in your agency's annual performance plan or multiple agency annual performance plans?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Does the project support homeland security goals and objectives, i.e., 1) improve border and transportation security, 2) combat bio-terrorism, 3) enhance first responder programs; 4) improve information sharing to decrease response times for actions and improve the quality of decision making?	Yes	No <input checked="" type="checkbox"/>
Is this project information technology? (See section 300.4 for definition)	Yes <input checked="" type="checkbox"/>	No
For information technology projects only:		
a. Is this Project a Financial Management System? (see section 53.3 for a definition)	Yes	No <input checked="" type="checkbox"/>
If so, does this project address a FFMIA compliance area?	Yes	No <input checked="" type="checkbox"/>
If yes, which compliance area?		
b. Does this project implement electronic transactions or record keeping that is covered by the Government Paperwork Elimination Act (GPEA)?	Yes <input checked="" type="checkbox"/>	No
If so, is it included in your GPEA plan (and does not yet provide an electronic option)?	Yes <input checked="" type="checkbox"/>	No
Does the project already provide an electronic option?	Yes <input checked="" type="checkbox"/>	No
c. Was a privacy impact assessment performed for this project?	Yes <input checked="" type="checkbox"/>	No

Information in this record was deleted in accordance with the Freedom of Information Act, exemptions 5  
 FOIA- 2003-241

*AI/22*

- d. Was this project reviewed as part of the FY 2002 Government Information Security Reform Act review process? Yes  No
- d.1. If yes, were any weaknesses found? Yes  No
- d.2. Have the weaknesses been incorporated into the agency's corrective action plans? Yes  No
- e. Has this project been identified as a national critical operation or asset by a Project Matrix review or other agency determination? **Note: Preparations for NRC's Project Matrix Review are just now underway. The Review will not be completed until the first Quarter FY 2003, at the earliest.** Yes No
- e.1. If no, is this an agency mission critical or essential service, system, operation, or asset (such as those documented in the agency's COOP Plan), other than those identified above as national critical infrastructures? Yes No

**SUMMARY OF SPENDING FOR PROJECT STAGES**  
(In Millions)  
(Estimates for BY+1 and beyond are for planning purposes only and do not represent budget decisions)

	PY-1 and Earlier	PY ** 2002	CY 2003	BY 2004
<b>Planning:*</b>				
Budgetary Resources	0	0	0	0
Outlays	0	0	0	0
<b>Acquisition :</b>				
Budgetary Resources	13.764	0	0	0
Outlays	13.764	0	0	0
<b>Total, sum of stages:</b>				
Budgetary Resources	13.764	0	0	0
Outlays	13.764	0	0	0
<b>Maintenance:</b>				
Budgetary Resources	6.505	7.632	7.079	7.542
Outlays	6.505	7.632	7.079	7.542
<b>Total, All Stages: ***</b>				
Budgetary Resources	20.269	7.632	7.079	7.542
Outlays	20.269	7.632	7.079	7.542

## **I. A. Project Description**

- 1. Provide a brief description of this project and its status through your capital planning and investment control (CPIC) or capital programming "control" review for the current cycle.**

The Agency-wide Documents Access and Management System (ADAMS) is a client-server architecture that replaced two legacy systems (Nuclear Documents System (NUDOCS) and Bibliographic Retrieval System (BRS)). It was designed as a combination of policies, processes, and hardware/software tools to manage most NRC official records in an electronic rather than a paper-based environment. ADAMS was designed to provide cradle-to-grave document management by supporting document creation or capture, distribution and dissemination, records management, and search and retrieval by NRC staff, its stakeholders, and the public. Relevant documents are also replicated to a FileNET library outside the NRC network firewall in order for the NRC to make its documentary material related to the Yucca Mountain high-level waste repository available electronically via the Licensing Support Network.

The conceptual design, identification of functional requirements, and the CPIC analysis were completed during the conceptual/planning phase of the project in 1997. Project development, engineering design and systems transition occurred during 1997 and 1998. ADAMS was deployed enterprise-wide in calendar year 1999 and is now fully operational as the official electronic recordkeeping system of the agency.

ADAMS runs on the agency's local area network and, to the extent possible, capitalizes on the availability of off-the-shelf software to deliver primary system functions. ADAMS is integrated with standard desktop office and operating system software to perform its functions. Software used by ADAMS includes MS Windows NT, Corel Office Suite, Adobe Acrobat, Novell GroupWise, and Netscape Navigator. ADAMS core capabilities of document management, records management, and access control are provided through the use of commercial FileNET Panagon IDM Document Services and Desktop software (document / image management) and TrueArc Foremost (records management) software integrated into the agency infrastructure. The ADAMS system is built as a three-tiered client/server system: the first tier contains the generic workstation and the local scanning station with the agency standard software and ADAMS client software; the second tier contains the agency infrastructure systems, which include the standard agency network, the network printers, email servers, and shared file storage servers; and the third tier contains the ADAMS servers that handle all document management, records management, data storage, and retrieval and replication services. These servers contain the production libraries (Main, Legacy, Sensitive, Public), test/non-production libraries, and backups for these libraries. The servers also support special processes, such as the Official Records Processor (ORP) and Electronic Regulatory Information Distribution System (E-RIDS).

- 2. What assumptions are made about this project and why?**

ADAMS will continue to support the creation or capture, storage and retrieval, records management, and distribution and dissemination of documents related to NRC's core business functions, such as the licensing and regulatory oversight of nuclear reactor operations and other activities involving regulation of nuclear materials and nuclear waste.

NRC will continue to upgrade the COTS components of ADAMS to supported releases of the vendors' software products. The deployment of ADAMS Version 4.0 in October 2002 will improve system maintainability and response time. It also will increase customer satisfaction by providing public users with a third-party Web-based search engine that is both powerful and easy-to-use. NRC also will continue to host ADAMS public user group meetings to obtain feedback for providing more efficient and effective access to its publicly-available documents.

NRC plans to migrate to ADAMS Version 5.0 (separate OMB Exhibit 300 has been submitted) if the findings of a directional study and a Capital Planning and Investment Control business case analysis warrant this action. At this time, it is planned that implementation of Version 5.0 will examine and, where appropriate, 1) replace custom

developed features with vendors' newly available COTS native features, (2) replace the existing client-server architecture with a web-based architecture, and (3) implement a third-party web-based search and retrieval interface for NRC staff access to the document repository that resides inside NRC's firewall. These improvements are intended to increase customer satisfaction, system maintainability, and reduce cost of ownership.

NRC also will continue to improve staff proficiency in managing its records in an electronic environment through the delivery of role-based training courses, interactive learning aids, and office-specific training.

NRC will continue processing newly created or received documents (both internal and external) into ADAMS at the rate of about 400 documents daily. The NRC is in the process of issuing a proposed rule entitled "Electronic Maintenance and Submission of Information" to clarify when and how licensees and other members of the public may use electronic media to communicate with the agency. This will expand and replace an existing agency guideline that allows for voluntary electronic submission of documents by Part 50 licensees. NRC will evaluate its impact on document processing costs based on operational experience since we are uncertain what the level of participation will be because of the voluntary nature of the program.

**3. Provide any other supporting information derived from research, interviews, and other documentation.**

The NRC conducted a preliminary assessment of ADAMS performance four months after it was declared the agency's official recordkeeping system and it had become clear that there were several operational problems, the most significant of which was the burden the ADAMS system placed on the NRC staff for document and data entry. Results of the assessment led to the issuance of the ADAMS Assessment Action Plan (September 26, 2000) that contained a structured set of tasks to address ten agency challenge areas for improving ADAMS performance and helping staff transition from a paper-based filing system to the electronic ADAMS environment. Steady progress has been made in implementing identified tasks.

Further, in April 2001, the Harvard Computing Group (HCG) completed an independent assessment of ADAMS. The purpose of the assessment was to determine whether the NRC was on an appropriate pathway to establish an electronic document management system that would meet the agency's long-term needs. Upon completion of HCG's assessment, the Gartner Group then conducted an independent validation and verification analysis. HCG and the Gartner Group both concluded that FileNET and TrueArc, the vendors of the COTS packages being used for ADAMS for document management and records management respectively, should remain in place as the technical foundation for the long-term evolution of the system.

**I.B. Justification (All Assets)**

**1. How does this investment support your agency's mission and strategic goals and objectives?**

The NRC's mission is to regulate the Nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of public health and safety, to promote the common defense and security, and to protect the environment.

Effective management of information is critical to NRC performing its mission and most important information is contained in documents. The Commission's policies, decisions, and bases for regulatory actions are reflected in and depend on these documents.

ADAMS supports the creation or capture, storage and retrieval, records management, and distribution and dissemination of documents related to NRC's core business functions, such as the licensing and regulatory oversight of nuclear reactor operations and other activities involving regulation of nuclear materials and nuclear waste. Access to these documents by both NRC staff and the public is absolutely essential to carrying out the mission of the agency.

NRC's Strategic Goals	NRC Strategies	Supports	How Does Your Initiative Support this NRC Goal or Corporate Management Strategy?
<p>1. Nuclear Reactor Safety: Prevent radiation-related deaths and illnesses, promote the common defense and security, and protect the environment in the use of civilian nuclear reactors.</p>	<p>NRC will increase public confidence by making public participation in the regulatory process more accessible, by communicating more clearly and making information available in a timelier manner.</p>	<p>X</p>	<p>ADAMS will support this strategic goal by providing the public, those we regulate, and other stakeholders in the national and international communities by making documents available in a more convenient (electronic rather than paper) and timelier manner.</p>
<p>2. Nuclear Materials Safety: Prevent radiation-related deaths and illnesses, promote the common defense and security, and protect the environment in the use of source, byproduct, and special nuclear material for medical, academic, and industrial purposes</p>	<p>NRC will increase public confidence by making public participation in the regulatory process more accessible, by communicating more clearly and making information available in a timelier manner.</p>	<p>X</p>	<p>ADAMS will support this strategic goal by providing the public, those we regulate, and other stakeholders in the national and international communities by making documents available in a more convenient (electronic rather than paper) and timelier manner.</p>
<p>3. Nuclear Waste Safety: Prevent adverse impacts from radioactive waste to the current and future public health and safety and the environment, and promote common defense and security</p>	<p>NRC will increase public confidence by making public participation in the regulatory process more accessible, by communicating more clearly and making information available in a timelier manner.</p>	<p>X</p>	<p>ADAMS will support this strategic goal by providing the public, those we regulate, and other stakeholders in the national and international communities by making documents available in a more convenient (electronic rather than paper) and timelier manner.</p>
<p>4. International Nuclear Safety Support: Support U.S. interests in the safe and secure use of nuclear materials and in nuclear non-proliferation</p>	<p>NRC will increase public confidence by making public participation in the regulatory process more accessible, by communicating more clearly and making information available in a timelier manner.</p>	<p>X</p>	<p>ADAMS will support this strategic goal by providing the public, those we regulate, and other stakeholders in the national and international communities by making documents available in a more convenient (electronic rather than paper) and timelier manner.</p>
<p>NRC Corporate Management Strategy 1: Employ innovative and sound business practices</p>	<p>We will improve customer service and will find new and better ways of doing business to increase effectiveness and efficiency of operations.</p>	<p>X</p>	<p>ADAMS will support this corporate management strategy through the continued use of new and improving technology. ADAMS will continue to become a more efficient and effective way for the public and staff to access NRC's information.</p>
<p>NRC Corporate Management Strategy 2: Sustain a high-performing, diverse workforce.</p>	<p>We will improve the capability of our workforce through training and development will select and develop strong managers who can provide vision and strategic leadership and will recruit, hire, and retain a high-quality, diverse workforce with the skills needed to achieve our mission and goals.</p>		

NRC's Strategic Goals	NRC Strategies	Supports	How Does Your Initiative Support this NRC Goal or Corporate Management Strategy?
NRC Corporate Management Strategy 3: Provide proactive information management and information technology services.	We will make it easier for the staff to acquire, access, and use the information they need to perform their work We will improve the ability of the NRC and external entities to conduct mutual business electronically. We will provide external stakeholders the ability to easily access desired publicly available information to aid in their participation in the NRC's regulatory processes, and to enhance understanding of the agency's mission, goals, and performance.	X	ADAMS supports this corporate strategy by providing cradle to grave enterprise wide document management functionality. Initiatives underway include expansion of the voluntary submission of documents by licensees and the public; improved public and staff ease of access to documents in the ADAMS document repository; and improved document and data integrity of documents that reside in ADAMS.
NRC Corporate Management Strategy 4: Communicate strategic change.	We will improve communication with the public by using strategies that recognize the ongoing changes in the environment external to the agency and we will respond to requests and inquiries from stakeholders in a timely, courteous, and professional manner.		

**2. How does it support the strategic goals from the President's Management Agenda?**

Presidents Management Agenda (PMA)	Supports	How Does Your Initiative Support This PMA Item?
Human Capital		
Competitive Sourcing		
Financial Performance		
E-Government	X	ADAMS is an enterprise-wide, NARA approved, electronic recordkeeping system. . NRC also has an operational capability to support electronic submission of documents submitted by Part 50 licensees using electronic signaturing.
Budget and Performance Integration		

**3. Are there any alternative sources in the public or private sectors that could perform this function?**

There are at least five other Document Management product vendors available; they include Hummingbird, Documentum, Open Text, and Cimage Novasoft. None of them could meet all of ADAMS functional requirements.

**4. If so, explain why your agency did not select one of these alternatives.**

ADAMS is now a steady-state application that has been in operation since November 1999. However, as explained in detail in earlier OMB 300 submissions, during its project development and acquisition stage, NRC explored both government and commercial sources of document management products. The NRC performed an intensive search to identify potential government off-the-shelf products (GOTS) and over 200 COTS products that might have provided either full or partial functionality required in ADAMS. Although no single product met all of our requirements, we concluded that the integration of several of these products could serve as the basis of ADAMS.

Even though ADAMS is now fully operational, the technical staff and project manager continue market research in order to stay aware of changes in technology products. To date, although there are other sources that could perform

the many of the same functions as ADAMS, it is not in NRC's best interest to change direction at this time. The Harvard Computing Group conducted an independent assessment of ADAMS in March 2001 and they contracted with Gartner Group, an independent IT consulting firm, to perform a validation of their findings. Both companies agreed that FileNet should be maintained as the technical foundation of ADAMS.

5. **Who are the customers for this project? and,**  
6. **Who are the stakeholders of this project?**

ADAMS customers and stakeholders include: (1) all NRC staff, including those from 4 regional offices; (2) NRC licensees; (3) law firms; (4) various public interest groups; (5) professional organizations; (6) medical offices and hospitals; (7) schools, universities, and students; (8) many local, state, and federal government agencies; and (9) other members of the public.

7. **If this is a multi-agency initiative, identify the agencies and organizations affected by this initiative.**

The ADAMS system is a single agency initiative.

8. **How will this investment reduce costs or improve efficiencies?**

- Documents are captured upon receipt or signature, and stored electronically in one central location (repository), rather than in numerous office-level locations as previously, thus ensuring the integrity of the document collection.
- Incoming documents are distributed electronically, eliminating the substantial paper duplication efforts and making documents available for review more quickly.
- Because they are available in electronic form, ADAMS facilitates the re-use of documents by staff (cut and paste).
- The agency's record copy is in electronic form that will be transferred to the NARA.
- Users can search for, view the image of, and print documents at their workstations, regardless of geographic location.
- Documents are now available to the public in days rather than weeks and can be viewed and downloaded at no charge. These improvements have enabled the public to avoid spending over \$210K in reproduction charges in FY 2001.

9. **List all other assets that interface with this asset.**

ADAMS receives electronic copies of documents from its stakeholders and the public through the Electronic Information Exchange (EIE). It also provides electronic copies of relevant documents to several FileNET libraries that reside outside NRC's firewall (Electronic Hearing Docket (EHD) and High-Level Waste Documents Repository (HLW)). It will provide copies of documents to the Digital Data Management System (DDMS) for high level waste proceeding after the DDMS is developed and implemented.

**Have these assets been re-engineered as part of this project?**

Yes (in part). NRC's document receipt process was re-engineered to accept incoming documents electronically rather than in paper. The agency's management of its dockets was also re-engineered. Work to support the high level waste proceeding is in progress.

#### I.C. Performance Goals and Measures (All Assets)

##### ADAMS PROJECT GOAL #1

Fiscal Year	Strategic Goal(s) Supported	Existing Baseline based on a	Planned Performance Improvement	Actual Performance Improvement	Planned Performance Metric	Actual Performance Metric Results

	Supported	scale of 1 to 4	Goal	Results	Metric	Metric Results
2002	NRC Corporate Mgt strategy to provide proactive info mgt and IT services	1.9	Continuous improvement of staff access to NRC documents in order to improve staff satisfaction with ADAMS	Improvement will be determined by increased ranking in the annual customer satisfaction survey	Results of annual customer satisfaction survey increases to 2.4	2.5
2003	Same as previous year	To be determined by prior yr performance metric results	Same as previous year	Same as previous year	Results of annual customer satisfaction survey increases to 2.6	TBD
2004	Same as previous year	Same as previous year	Same as previous year	Same as previous year	Results of annual customer satisfaction survey increases to 2.8	TBD
2005	Same as previous year	Same as previous year	Same as previous year	Same as previous year	Results of annual customer satisfaction survey increases to 3.0	TBD
2006	Same as previous year	Same as previous year	Same as previous year	Same as previous year	Results of annual customer satisfaction survey increases to 3.2	TBD
2007	Same as previous year	Same as previous year	Same as previous year	Same as previous year	Results of annual customer satisfaction survey increases to 3.4	TBD

## ADAMS PROJECT GOAL #2

Fiscal Year	Strategic Goal(s) Supported	Existing Baseline based on a scale of 1 to 4	Planned Performance Improvement Goal	Actual Performance Improvement Results	Planned Performance Metric	Actual Performance Metric Results
2002	NRC Strategic Goal strategy to increase public confidence	N/A Baseline will be determined in FY 2003	Improvement of public access to NRC documents in order to improve their satisfaction with ADAMS	Improvement will be determined by increased ranking in the annual public customer satisfaction survey	N/A	N/A
2003	Same as previous year	To be determined by this year's performance metric results	Same as previous year	Same as previous year	Results of first annual customer satisfaction survey is at least 2.6 on a scale of 1 to 4.	TBD
2004	Same as previous year	Same as previous year	Same as previous year	Same as previous year	Results of annual customer satisfaction survey increases to 2.8	TBD
2005	Same as previous year	Same as previous year	Same as previous year	Same as previous year	Results of annual customer	TBD

	previous year	previous year	year	year	satisfaction survey increases to 3.0	
2006	Same as previous year	Results of annual customer satisfaction survey increases to 3.2	TBD			
2007	Same as previous year	Results of annual customer satisfaction survey increases to 3.4	TBD			

**I.D. Program Management [All Assets]**

**1. Is there a program manager assigned to the project? If so, what is his/her name?** Yes  No   
 Lynn Scattolini is the ADAMS program manager. She is Director of the Information, Records, and Document Management Division in the Office of the Chief Information Officer. Ms. Scattolini is a member of the SES corps, and reports directly to the NRC's Chief Information Officer. (CIO). Ms. Scattolini manages, coordinates and interfaces with NRC headquarters and regional offices

**2. Is there a contracting officer assigned to the project? If so, what is his/her name?** Yes  No   
 There are several existing contracts that support ADAMS. The individual who is the contracting officer for all of the various contracts is Sally Adams, Information Technology Acquisition Management Branch, Division of Contracts and Property Management, Office of Administration.

**3. Is there an Integrated Project Team?** Yes  No

**3. Is there an Integrated Project Team?**

**3a. If so, list the skill set represented.** In addition to Lynn Scattolini and Sally Flynn,, the ADAMS project team is supported by an NRC software development project officer, senior software engineers, senior systems analysts, librarians, and records managers, and contractor computer operations, system and software programmers, and vendor product technical specialists.

**4. Is there a sponsor/owner?** Stuart Reiter, NRC's Chief Information Officer (CIO) is the agency's sponsor of ADAMS.

**Part II: Additional Business Case Criteria for Information Technology**

**II. A. Enterprise Architecture**

**II.A.1 Business**

**A. Is this project identified in your agency's enterprise architecture? If not, why?**

Yes, ADAMS has been identified in NRC's in-progress enterprise architecture (EA).

**B. Explain how this project conforms to your departmental (entire agency) enterprise architecture.**

ADAMS falls within the scope of NRC’s baseline EA. As such, this system supports the performance of the business functions identified in the agency enterprise business model, documented in the NRC publication, “NRC Enterprise Model.” ADAMS provides NRC staff and stakeholders with business management of information support through the capture, storage and retrieval, records management, and distribution and dissemination of documents related to NRC’s core business functions (e.g., licensing and regulatory oversight of nuclear reactor operations). ADAMS also contributes to NRC’s support delivery of services: public affairs business function, by making publicly available information related to NRC’s core business functions available to the public. ADAMS products and components are aligned with NRC’s current application and technology standards and future direction as specified in NRC’s existing technology planning documents. Although the NRC’s existing technology planning documents are being updated, the current documents identify some core technology needs and address ADAMS as a core business support system. These core technology needs are in the process of being updated and expanded through an evolving organizational EA governance process that will ensure that all current and future technology needs are vetted by NRC business managers to validate links to NRC business drivers for the identified technologies. When fully functional, NRC’s integrated EA and CPIC processes will enable NRC to apply the same sound risk management strategies to its IT investments that have long characterized NRC’s core business operations. NRC has also provided the Federal Enterprise Architecture Business Reference Model (FEA BRM) with high level business functions and sub functions derived from the “NRC Business Model.” NRC is working to uncover additional internal cross-cutting initiatives and has begun to look at other agency business processes and State business processes to identify potential areas for collaborative efforts.

**C. Identify the Lines of Business and Sub-Functions within the Federal Enterprise Architecture Business Reference Model that will be supported by this initiative.**

Line of Business	Sub-Function
Support Delivery of Services: Business Management of Information	<ul style="list-style-type: none"> <li>▪ Information Collection</li> <li>▪ Record Retention</li> <li>▪ Information Sharing</li> </ul>
Support Delivery of Services: Public Affairs	<ul style="list-style-type: none"> <li>▪ Customer Services</li> <li>▪ Communications and Outreach</li> <li>▪ Public Relations</li> </ul>

**D. Briefly describe how this initiative supports the identified Lines of Business and Sub-functions of the Federal Business Architecture**

ADAMS supports the “Business Management of Information” line of business by managing all information that is critical to NRC performing its mission. The Commission’s policies, decisions, and bases for regulatory actions are reflected in and depend on the documents that ADAMS creates, captures stores and retrieves, manages as official agency records, and distributes and disseminates. Documents managed in ADAMS relate to all NRC’s core business functions, such as the licensing and regulatory oversight of nuclear reactor operations and other activities involving regulation of nuclear materials and nuclear waste. Access to these documents by both NRC staff and the public is absolutely essential to carrying out the mission of the agency.

**E. Was this project approved through the EA Review committee at your agency?**

Yes. ADAMS was approved through the NRC Enterprise Architecture Review Committee.

**F. What are the major process simplification/reengineering/design projects that are required as part of this initiative?**

NRC changed its business practices related to the receipt, capture, processing, and dissemination of documents prior to and during ADAMS implementation. We plan to redesign and standardize NRC's process for distributing documents internally in FY03.

**G. What are the major organization restructuring, training, and change management projects that are required?**

The Office of the Chief Information Officer implemented some organizational changes to support the ADAMS program. Training was developed and is being offered through the agency's Professional Development Center. We will address change management as part of an FY03 initiative to redesign and standardize NRC's process for distributing documents internally in FY03.

**H. What are the Agency lines of business involved in this project?**

ADAMS is a document management capability that supports business processes across all 11 business areas as defined in the NRC Enterprise Model (EM). The NRC EM is a model of NRC business functions and processes with information technology systems mapped to the business functions they support. ADAMS conforms to the NRC's technology infrastructure and to the NRC Information Technology Architecture framework, which is similar to the Federal Enterprise Architecture Framework (FEAF). Because ADAMS was a generic capability that would provide document management in support of all NRC business functions, a detailed business model was developed for it. A working group of NRC business managers developed a functional model of generic document management capabilities and requirements. This high level functional model was de-composed into five areas and detailed process models were developed for each of these areas. In addition, workflow processes, security, and access controls were developed. These defined the business architecture for ADAMS.

**I. What are the implications for the agency business architecture?**

There are no specific implications for the agency business architecture.

**II.A.2 Data**

**A. What types of data will be used in this project?**

ADAMS was designed using Commercial Off The Shelf (COTS) software with built-in document and records management capabilities. The underlying database structure is both Object Data Base Connectivity (ODBC) and Structured Query Language (SQL) compliant to ensure a standard method of accessing relational data. Some customization was performed to incorporate additional data elements and feature functions. Where applicable, ADAMS utilized data administration and modeling techniques as supported in the NRC Systems Development Life Cycle Management Methodology and the NRC Data Administration Reference Manual. The fields and identifiers for ADAMS documents are standard and conform to the NRC Data Architecture Naming Standards and Conventions. These were developed and coordinated through an agency data administration (DA) function. The agency DA function maintains the NRC Strategic Data Model (SDM) and NRC Consolidated Data Model (CDM). The NRC SDM is a model of NRC data entities with entities mapped to the business functions and application systems they support. The NRC CDM is a detailed inventory of standard data entities and attributes. In some cases, ADAMS developed new data fields and rule sets, such as "author affiliation", which were added to the CDM.

**B. Does the data needed for this project already exist at the Federal, State, or Local level? If so, what are your plans to gain access to that data?**

In some cases. In support of the Yucca Mountain High Level Waste (HLW) Repository licensing proceeding NRC, via the implementation of a Licensing Support Network Portal, is integrating HLW-related information from governmental participants that include, but are not limited to NRC, DOE, State of NV, Clark County, Nye County, and other potential parties such as Industry and Environmental Groups, AULGs (Affected Units of Local Governments), and Tribal Interests. This data, as introduced into the licensing hearing, will be electronically transmitted and automatically processed into and published to NRC internal and appropriate external document repositories via ADAMS.

- B. Are there legal reasons why this data cannot be transferred? If so, what are they and did you address them in the barriers and risk sections above?**

See response to B.

- C. If this initiative processes spatial data, identify planned investments for spatial data and demonstrate how the agency ensures compliance with the Federal Geographic Data Committee standards required by OMB Circular A-16.**

N/A

### **II.A.3 Application and Technology**

- A. Discuss this initiative/project in relationship to the application and technology layers of the EA. Include a discussion of hardware, applications, infrastructure, etc.**

ADAMS was implemented as an infrastructure capability for modern document management. It replaces earlier systems that offices had been using for these functions. These legacy applications were identified in the NRC Inventory of systems and databases. ADAMS and all of its components were implemented using client-server technology and agency-approved COTS products. NRC developed some custom code and interfaces. The custom interfaces were implemented using FileNet's Panagon IDM Toolkit using 32-bit COM (Microsoft Component Object Model) objects that will support future upgrades of Panagon. Tools used in the customization of ADAMS were added to the NRC Applications Development Toolkit.

- B. Are all of the hardware, applications, and infrastructure requirements for this project included in The EA Technical Reference Model? If not, please explain.**

ADAMS conforms to the agency's technology architecture, as documented in the NRC's Technical Reference Model. This is a framework of technical standards used to plan platforms and infrastructure for new systems. It documents the technology and network architecture for the agency. ADAMS was implemented within the agency's standard client-server and LAN infrastructure and is accessible via agency-standard microcomputers.

**II. B. Security and Privacy**

**NOTE:** Each category below must be addressed at the project (system/application) level, not at a program or agency level. Referring to security plans or other documents is not an acceptable response.

**II.B.1. How is security provided and funded for this project (e.g., by program office or by the CIO through the general support system/network)?**

The ADAMS program budget provides funding for GISRA and COOP requirements. OCIO funds for IT security infrastructure and overhead.

**A. What is the total dollar amount allocated to security for this project in FY 2004?**

GISRA Review and update = \$80K

COOP funding = \$100K

IT security infrastructure and overhead = \$67K

**II.B.2 Does the project (system/application) meet the following security requirements of the Government Information Security Reform Act, OMB policy, and NIST guidance?**

YES. NRC's interim Management Directive 2.5, "Application Systems Life-Cycle Management," establishes the policies for developing and maintaining application systems. The SCLCM Methodology Handbook and its companion volume of procedures, standards, and forms implement Directive 2.5 by providing life-cycle structure and guidance for all NRC projects. The SDLCM methodology requires that security controls, as set forth in Office of Management and Budget (OMB) Circular A-130, Appendix III, "Security of Federal Automated Information Resources," and reiterated in NRC Management Directive 12.5, "NRC Automated Information Systems Security Program," be included as an integral part of the systems development and life-cycle management process for both general support systems and major applications. The six security controls are as follows:

1. The assignment of responsibility for security - a system security officer
2. Security Planning - Security Plan developed
3. Periodic review of security controls - Certification Testing
4. Management authorization - Accreditation

In addition, MD 12.5 requires that the following security controls are also in place and implemented:

5. Performance of a Risk Assessment
6. Backup and Recovery Plan developed and tested

In accordance with OMB Circular A-130, Appendix Part III, it is NRC policy that the security controls are reviewed for each system when significant modification is made to the system, but at least every three years.

- A. Does the project (system/application) have an up-to-date security plan that meets the requirements of OMB policy and NIST guidance? What is the date of the plan?
- B. Has the project undergone an approved certification and accreditation process? Specify the C&A methodology used (e.g., NIST guidance) and the date of the last review.
- C. Have the management, operational, and technical security controls been tested for effectiveness? When were most recent tests performed?

ADAMS was accredited at GISRA Level 5 on July 8, 2002. The following reports were completed following NIST approved methodologies. A Quantitative Risk Assessment methodology and review by experienced contractors were used to determine the level of risk associated with the system.

- (1) Final ADAMS Risk Assessment: March 25, 2002
- (2) Final ADAMS System Security Plan: June 7, 2002
- (3) ADAMS Security Test and Evaluation performed: June 2002
- (4) Final ADAMS Business Continuity Plan: June 14, 2002.
- (5) A Mitigation Plan of action in response to reported risks and vulnerabilities: July 3, 2002.

**D. Have all system users been appropriately trained in the past year, including rules of behavior and consequences for violating the rules?**

Yes. The NRC has an aggressive and proactive security awareness program to insure that risks are understood. This program includes a Computer Security Awareness Day, new employee IT security orientation, a mandatory on-line IT security awareness course, and the issuance of all-employee alerts and awareness announcements frequently. This is intended to make individuals aware of IT security as a concern that must be considered daily.

**D. How has incident handling capability been incorporated into the system, including intrusion detection monitoring and audit log reviews? Are incidents reported to GSA's FedCIRC?**

ADAMS is a major application which is attached to NRC's LAN/WAN infrastructure support system. The LAN/WAN has documented incident response capabilities and procedures which have been implemented and tested. These include reporting to FedCIRC, as appropriate, based on intrusion monitoring and responses to alerts from reputable sources. ADAMS itself automatically tracks the following user access activities: (1) specific user who added individual documents, packages, or folders, and the date/time it was added; (2) specific user who checked out each document and who checked in each new version of a document and the date/time; and (3) who last accessed any specific document and the date/time. As needed, these logs are reviewed in responding to any potential incidents.

**E. Is the system operated by contractors either on-site or at a contractor facility? If yes, does any such contract include specific security requirements required by law and policy? How are contractor security procedures monitored, verified, and validated by the agency?**

The system is operated by contractors on site. Contracts require personnel obtain security clearances. Contractors are screened prior to being granted access to the NRC facility and ADAMS. Contractors are also required to sign nondisclosure statements when they are assigned to work with sensitive information. In accordance with the provision of their contracts, contractors are also required to promptly report when a member of their staff no longer requires access to NRC systems or assets.

**II.B.3 How does the agency ensure the effective use of security controls and authentication tools to protect privacy for those systems that promote or permit public access?**

Only non-sensitive documents are made publicly available. Software controls, policies, procedures, and training are in place to help prevent inadvertent release of sensitive documents. NRC publicly accessible systems and web sites are "read only".

**II.B.4 How does the agency ensure that the handling of personal information is consistent with relevant government-wide and agency policies?**

The NRC follows the requirements of the Privacy Act, 5 U.S.C. 552a and OMB's requirements for the implementation of the Privacy Act. NRC's policies can be found in NRC's regulations at 10 CFR Part 9, Management Directive 3.2, "Privacy Act," and on the NRC's external Web site.

**II.B.5 If a Privacy Impact Assessment was conducted, please provide a copy to OMB.**

Since ADAMS contains some personal information about individuals, a Privacy Impact Statement (PIA) is attached to this Exhibit 300.

**II. C. Government Paperwork Elimination Act (GPEA)**

**II.C.1 If this project supports electronic transactions or record-keeping that is covered by GPEA, briefly describe the transaction or record-keeping functions and how this investment relates to your agency's GPEA plan.**

ADAMS has been established as NRC's official recordkeeping system for all record series in which an analysis showed that it is cost-effective to maintain collections of records in electronic in lieu of paper form. This covers virtually all of the programmatic record collections of the agency and some of its administrative record collections. The software that NRC employs conforms to DOD standards that have been endorsed by the NARA.

ADAMS will use the technology, processes, and procedures of NRC's electronic information exchange program (EIE) to allow for 2 way voluntary electronic submission of documents to the NRC and between NRC and its stakeholders. A production electronic information exchange (EIE) system is in place to accommodate voluntary electronic document submittals allowed for 10CFR Part 50 licensees and vendors. The system provides for electronic authentication (electronic signature) methods to verify the identity of the sender and the integrity of electronic content. The production EIE system will be expanded to accommodate other types of submittals eligible for electronic submission to the NRC.

ADAMS is an electronic information system that is a vital component of a multi-tiered NRC's public information strategy. ADAMS is appropriate for public users who are familiar with NRC's documentation and who, by virtue of their interest and/or occupation, require frequent and regular access to NRC's documents. ADAMS allows expanded public access to all NRC's publicly-available documents via the Internet. The system permits full text searching and provides the ability to view document images, download files, and print locally. It provides the ability for the public to order copies of NRC documents on-line. The methods used for ADAMS search and retrieval by the public are the same as those used by NRC staff for management of agency documents.

**II.C.2 What is the date of your GPEA plan?**

September 9, 2001

**II.C.3 Identify any OMB Paperwork Reduction Act (PRA) control numbers from information collections that are tied to this investment.**

N/A