

# Office of the Chief Information Officer



**OCIO Annual Report  
FY 2001 - FY 2002  
March 2002**



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

March 8, 2002

MEMORANDUM TO: Office Directors and Regional Administrators

FROM: Stuart Reiter  
Chief Information Officer *Stuart Reiter*

SUBJECT:: OCIO ANNUAL REPORT FOR FY 2001 - FY 2002

As a follow-on to the Commission Briefing on January 30, 2002, the OCIO is providing the OCIO Annual Report for FY 2001 - FY 2002. This report outlines accomplishments in our major information technology and information management programs during FY 2001, other emergent issues we dealt with this past year and our plans for FY 2002, and five of the Chairman's Challenges we are addressing.

We look forward to FY 2002 as we continue to focus on our dual roles. In our leadership and oversight roles, we plan to focus on improving NRC's computer security, applications delivery process, stakeholder alignment, and compliance with e-government legislation. In our service and product provider role, we believe we have made significant progress in controlling and reducing costs, and plan to maintain a focus on the bottom line of all the services we provide.

We appreciate the opportunity to communicate with you about IT/IM accomplishments and plans. For additional information, you may contact Jacqueline Silber, Deputy Chief Information Officer, or myself.

Attachment: As stated

cc: Chairman Meserve  
Commissioner Dicus  
Commissioner Diaz  
Commissioner McGaffigan  
Commissioner Merrifield  
W. D. Travers, EDO

MEMORANDUM TO THOSE ON THE ATTACHED LIST DATED: March 8, 2002

SUBJECT: OCIO ANNUAL REPORT FOR FY 2001 - FY 2002

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IT Business Council Members		

Office of the Chief Information Officer  
Annual Report  
FY 2002 - FY 2002

March 2002

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# INTRODUCTION

This report discusses the Fiscal Year (FY) 2001 accomplishments of the Office of the Chief Information Officer (OCIO) for the U.S. Nuclear Regulatory Commission (NRC), as well as the OCIO's responses to emergent issues and the key challenges presented to the OCIO by the President, the Chairman, and the Commission.

The OCIO serves two important roles for the agency. First, the OCIO provides leadership by establishing agencywide information technology (IT) and information management (IM) programs and standards. Second, the OCIO provides leadership and oversight to ensure successful implementation. The oversight role is conveyed through a number of Management Directives, in some cases specified by law. Oversight responsibilities include such areas as capital planning and investment control, information security, IT architecture, and the Freedom of Information Act (FOIA). The OCIO's leadership responsibilities include establishing and ensuring compliance with agencywide guidance, policy, and standards. As a service and support organization, the OCIO provides products and services that are used by every employee in the agency. These products and services are critical to the agency's day-to-day operations and support its mission and performance goals. This service and support role includes infrastructure, applications, and IM services.

Appendix A summarizes the OCIO's FY 2001 accomplishments. These accomplishments are evident in the following five areas:

- **Document Management**  
A key challenge area last year was the NRC's Agencywide Documents Access and Management System (ADAMS). The ADAMS Action Plan and the ADAMS Steering Group continue to provide guidance and direction to the agency's Document Processing Modernization Program, through which the NRC has become a pacesetter in efforts to automate the document lifecycle "from cradle to grave."
- **Contracting Initiatives**  
Last year, the support contracts for infrastructure services, applications services, and document processing services were up for re-competition. The OCIO worked in partnership with the agency's program and support offices, with strong support from the Contracts Division of the NRC's Office of Administration, to obtain terms and conditions that would benefit the agency. This resulted in a smooth transition to the new service providers.
- **Production Environment**  
In the past the NRC depended on running most of the agency's core systems from offsite locations such as the National Institutes of Health (NIH). The OCIO now provides greater value and flexibility to the agency through in-house support for many of these core systems. The OCIO also stabilized ADAMS production operations in FY 2001, and completed extensive work to implement a production environment that allowed the Office of the Chief Financial Officer (OCFO) and the Office of Human Resources (OHR) to start up the PeopleSoft/Human Resources Management System (HRMS) applications in November.

- **Technology Innovation**

In FY 2001, the OCIO responded to the Commission's request to take a special look at technology innovation, specifically with regard to the use of wireless and mobile computing technologies. The OCIO completed a pilot with offices and the regions to demonstrate Personal Digital Assistant (PDA) technology and its benefits to regional management and staff.

- **Web Redesign**

During FY 2001, the OCIO made significant progress toward redesigning the agency's external Web site. This program received significant Commission interest.

In addition to managing these five areas of accomplishment, the OCIO responded to a number of emergent issues. These include responding to the terrorist attacks on September 11, 2001, increasing computer security, expanding the "electronic Government" (E-Government) program, and improving the applications delivery processes.

In FY 2001, the OCIO increased its focus on computer security, consistent with the Government Information Security Reform Act (GISRA), which required additional formal assessments of the agency's information security programs. Through these assessments, the OCIO and the Office of the Inspector General (OIG) have identified areas for attention that will further improve the current efforts to ensure a secure IT environment for the NRC. As part of the President's Management Agenda, the NRC provided the Office of Management and Budget (OMB) with a statement of the agency's E-Government strategy. The OCIO also continued to lead the agency toward compliance with the Government Paperwork Elimination Act. Toward that end, the OCIO has been increasing its efforts, in conjunction with the program offices, to encourage licensees to make use of NRC's Electronic Information Exchange capabilities. Over the past several years, the agency has been heavily involved in bringing several major applications on line. The OCIO is now identifying ways to improve the applications delivery processes by looking at lessons learned and industry best practices.

## **OCIO FY 2001 ACCOMPLISHMENTS**

### **Document Management**

As a result of the advice of the ADAMS Steering Group and the efforts of staff in both the OCIO and other offices, the operational characteristics of ADAMS today are very different from the initial production system deployed in late 1999 and early 2000.

Work accomplished during FY 2001 has resulted in a stable system, with good availability, improved response time, and increased usage by the public and NRC staff. Software problems with the earlier release have been fixed, with the exception of full-text searching, which will be reenabled when the agency moves to a more current release of the commercial, off-the-shelf (COTS) product. Staff burden in entering documents into the system has been reduced and data quality has been improved as a result of transferring much of the work to document processing contractors. The OCIO has also begun using a newly operational electronic records management module to file documents electronically for NRC offices and regions.

As a result of these accomplishments, ADAMS has enabled the agency to realize significant improvements over previous systems by processing documents in days rather than weeks, and by making the images — rather than just descriptions of documents — available to users to view and download locally at no charge. These improvements have enabled the public to avoid spending \$210K in reproduction costs in FY 2001.

The OCIO has also achieved significant cost reductions in its contracted document processing operations. On the basis of a time and motion study conducted early in the transition of the contracted document processing operations, the OCIO projected that the NRC would spend approximately \$3.1 million in FY 2002 to process incoming and staff-generated documents. As a result of a recent competitive contract award and operational efficiencies, the OCIO has reduced unit document processing costs, resulting in an annual cost reduction of about \$800K (or 26% of the originally projected FY 2002 costs). These recurring annual costs are \$500K less today than they were under the Nuclear Documents System (NUDOCS) in FY 1998 (\$2.3M under ADAMS in FY 2002 compared to \$2.8M under NUDOCs in FY 1998). Thus the OCIO has achieved an 18% reduction in costs, while delivering greater value for a higher volume of documents (based on a comparison of FY 2002 dollars vs. FY 1998 dollars, unadjusted for inflation).

Table 1 contrasts FY 2002 estimated Document Processing Center (DPC) costs under ADAMS as compared to FY 1998 actual DPC costs under NUDOCs.



Table 1 Contractor Document Processing Center (DPC) Costs (FY 2002 Estimates vs. FY 1998 Actual Expenditures)			
Cost Item	ADAMS Environment Original FY 2002 Estimate (Note 1)	ADAMS Environment FY 2002 Estimate Based on Current Operations	NUDOCS Environment FY 1998 Actuals
Recurring DPC Costs	\$3.1M	\$2.3M	\$2.8M
Non-Recurring DPC Costs for Special Projects under ADAMS Action Plan (Note 2)	\$0.1M (Note 3)	\$0.2M (Note 4)	\$0.0M
<b>TOTAL</b>	<b>\$3.2M</b>	<b>\$2.5M</b>	<b>\$2.8M</b>
Note 1: ADAMS original FY 2002 estimates based on time and motion study Note 2: Special projects will be completed in FY 2003 Note 3: includes electronic filing of backlogged documents and ADAMS database cleanup Note 4: includes electronic filing of backlogged documents, ADAMS database cleanup and removal of documents from the public library			

Table 2 provides additional cost information, including costs for IT systems support and document copying and dissemination.

Table 2 Complete Document Management Costs (FY 2002 Current Estimated Costs vs. FY 1998 Actual Costs)		
Cost Item	ADAMS Environment FY 2002 Estimate Based on Current Operations	NUDOCS Environment FY 1998 Actual Costs
IT Systems Support (Hardware, Software, Production)	\$3.1M	\$1.2M
Recurring DPC Costs	\$2.3M	\$2.8M
Non-Recurring DPC Costs for Special Projects under ADAMS Action Plan (Note 1)	\$0.2M (Note 2)	\$0.0M
Document Copying and Dissemination	\$1.0M	\$2.4M
<b>TOTAL</b>	<b>\$6.6M</b>	<b>\$6.4M</b>
Note 1: Special projects will be completed in FY 2003 Note 2: includes electronic filing of backlogged documents, ADAMS database cleanup, and removal of documents from the public library		

In FY 2001, the OCIO, the NRC's Executive Director for Operations (EDO), the NRC's Office of the Inspector General (OIG), and consultants performed a number of reviews to develop an understanding of lessons learned and how to move forward to improve ADAMS. These reviews included a lessons learned study of the inadvertent release of documents in the ADAMS Public Library and also of the development and implementation of ADAMS. The OCIO is integrating these lessons learned into the ADAMS program and making appropriate changes. (With regard to the inadvertent release, an EDO Task Force concluded that the risk is low of inadvertently releasing a properly profiled document because of software that the OCIO has already installed in response to the event.)

An assessment performed by the Harvard Computing Group concluded that the vendor software packages currently being used for ADAMS should remain in place. During FY 2002, the OCIO will focus on completing specific tasks to further the acceptance and use of ADAMS by NRC and public users and improve its supportability. These tasks include the following:

- Upgrade ADAMS software to a supported release of the software products.
- Reenable full-text search capability on the Main Library.
- Deploy a prototype Web-based, Yahoo-type alternative search-and-retrieval interface for public users.
- Provide role-based training through the Professional Development Center (PDC) to improve staff proficiency in using ADAMS software and transitioning to an electronic records management environment.

## **Information Management Program**

Within the Information Management Program, the OCIO realized the following FY 2001 accomplishments, which focus on reducing costs and improving service:

- The FOIA staff exceeded the agency's timeliness goal for responding to FOIA requests.
- The OCIO entered into an agreement with the National Archives and Records Administration to provide records storage and retrieval services; this agreement resulted in a cost avoidance of \$150K per year.
- The NRC Library secured staff access to the full text of 64 additional scientific and technical journals from their PCs at no additional cost to the agency.
- The OMB cited the NRC in its Annual Report to Congress as one of only a few agencies that had no violations of the Paperwork Reduction Act, and achieved burden reductions at a time when most other agencies increased their burden to the public. In addition, because of the NRC's past performance with regard to the quality of its submittals for OMB review and approval of information requests, the OMB delegated authority to the NRC to approve certain types of information clearances, and granted the NRC a blanket clearance for public satisfaction surveys.

## **Contracting Initiatives**

In FY 2001, the OCIO successfully completed the negotiation and transition of three major contracts that have resulted in significant cost avoidances for the agency. (A cost avoidance is the difference between the costs projected under an old contract, and those costs estimated using a new replacement contract.) The three replacement contracts are described as follows:

- **Comprehensive Information Systems Support Consolidation (CISSCO) II**  
The CISSCO-II initiative established contracts for software operations, maintenance, and development; document processing; computer security; and IT architecture development. In the area of application operations and maintenance, the OCIO is projecting a cost avoidance of \$2.4M over a 2-year period (see Table 3). This reflects

the difference in the projected cost for the operations and maintenance services under the old contract and the new CISSCO II contract.

Table 3 CISSCO-II Cost Avoidance		
	CISSCO (Government Estimate based on CISSCO O&M Level of Effort)	CISSCO-II (O&M Delivery Order Award)
2-Year Cost	\$10.7M	\$8.3M
Additional costs NRC would have incurred under previous contracts	Baseline	\$2.4M
Services	Operations and maintenance support for NRC application systems	Operations and maintenance support for NRC application systems

- Federal Telecommunications Services (FTS) 2001**

The OCIO successfully completed the transition of the agency's long distance voice, data, and emergency telecommunications services to the FTS 2001 service offered by the General Services Administration (GSA). Despite a difficult transition, the OCIO projects that the current long distance voice and data service under the FTS 2001 contract will enable the agency to avoid costs of \$800K per year, compared to the costs incurred under the previous FTS 2000 service offering (see Table 4). This cost avoidance is reflected in the OCIO's budget.

Table 4 FTS 2001 Cost Avoidance		
	FTS 2000	FTS 2001
Annual Cost	\$3.2M	\$2.4M
Additional costs NRC would have incurred under previous contracts	Baseline	\$0.8M
Services	Long distance voice and data services	Long distance voice and data services

- Infrastructure Services and Support Contract (ISSC)**

The OCIO successfully negotiated and awarded the ISSC as a performance-based contract for infrastructure support services, such as electronic mail, desktop support, and network/help desk services. The ISSC provides essentially the same services that the NRC acquired under previous support contracts, with the added benefits of a 3-year desktop and network infrastructure "refresh" to reduce maintenance costs, a performance-based contract vehicle, managed service delivery through established service levels, and the purchase of peripheral equipment and software through an online catalog. (By contrast, the previous contracts provided only a 5- to 7-year desktop refresh rate, with no network infrastructure refresh.)

Under the ISSC, the OCIO will be able to provide the same level of service, with added benefits, at the same cost to the agency. As a result, the OCIO estimates a cost avoidance for the agency of approximately \$1.5M per year (see Table 5). This cost avoidance has been reflected in the OCIO's budget.

Table 5 ISSC Cost Avoidance		
	Previous Support Services Contract	ISSC
Annual Cost	\$11.6M	\$10.1M
Additional costs NRC would have incurred under previous contracts	Baseline	\$ 1.5M
Services	Infrastructure support services 5- to 7-year desktop refresh with no network refresh	Infrastructure support services 3-year desktop refresh with network infrastructure refresh

The ISSC implementation is currently underway. As part of that implementation, the OCIO is verifying the configuration and location of the agency's infrastructure resources, including desktop computers, laptops, portable computing devices (i.e., PalmPilots), personal printers, and software. The OCIO expects to complete the transition during FY 2002.

## Production Environment

In FY 2001, the OCIO continued to improve the agency's production application environment. NRC's production systems, such as the Reactor Programs System (RPS), ADAMS, the PeopleSoft financial management software (known as STARFIRE), the external Web, and electronic mail, continue to play a vital role in supporting the agency's business needs. The OCIO deployed initial pilots for the PeopleSoft Time and Labor software and implemented the system into full production in November 2001. This implementation reflected the increased focus by OCIO on maintaining a stable and reliable production environment for key business applications. The OCIO has also emphasized increasing support to bring new applications into full production with minimum disruption of current operations and a high level of application availability and performance. In FY 2001, the OCIO also implemented a Consolidated Test Facility (CTF) to conduct rigorous application testing before deploying business applications. This facility supports application testing at critical points in the development lifecycle to verify functionality and thereby reduce the risk of disrupting production services. The facility was used to test new ADAMS releases, perform production load testing for STARFIRE, and support the development of new agency Web applications. Based on that experience, the OCIO anticipates that this facility will significantly reduce disruption of the production environment as future business applications are deployed.

## Technology Innovation

The OCIO formed a Technology and Architecture Team (TAT) to plan for future agency infrastructure and architecture changes and evaluate new technologies. The goal of the team is to facilitate the introduction and leveraging of new technology by agency business units and to enable offices to more effectively and efficiently accomplish the agency's business objectives. Some of the areas that the TAT has reviewed include the implementation of a Web-based application architecture and the use of mobile computing technologies. These innovations will support access to agency business applications, such as ADAMS and STARFIRE, through a Web browser, and improve the agency's ability to provide public

access to NRC information. The TAT also partnered with the Office of Nuclear Material Safety and Safeguards (NMSS) and the regions to use Personal Digital Assistant (PDA) technology to support materials inspections. To validate the use of this technology, the OCIO established a pilot to inspect general licensees who failed to return registration forms. The OCIO and NMSS recently completed visits to each region to implement and train the staff on the use of PDA technology and the pilot. The TAT also conducted a demonstration of the technology and its benefits to regional management and staff. The pilot was successful; training and implementation went very well. The TAT is also supporting the Office of Nuclear Reactor Regulation (NRR) with a pilot using PDA technology to enhance the efficiency of reactor inspectors by providing direct access to reference information during inspections, as well as staff's ability to send and receive e-mail while traveling.

## **Web Redesign**

The Internet has become a significant medium for the agency to communicate with its external stakeholders and the public. As a result, maintaining an easy-to-use Web site containing information that is current and reliable is an important strategy for increasing public confidence in the agency. Achievements made by the Web Redesign Project and the institution of new Web management controls are helping to meet this objective. During FY 2001, the OCIO made significant progress in redesigning the NRC's public Web site with substantial guidance and assistance from a Web Redesign Steering Committee chartered by the EDO and the CIO, and a Web Redesign Working Group comprised of the staff who post information to the current site. Many other staff throughout the agency also contributed to this effort. On July 11 and July 31 of 2001, the OCIO made available a prototype of the redesigned Web site, seeking comments from a cross-section of external stakeholders and the NRC staff. Overall, users were more satisfied with the prototype than with the existing public Web site. The staff and external stakeholders submitted many useful suggestions and comments. Of the 28 significant recommendations for improving the site, the OCIO is implementing 22 in the first phase of the site redesign.

After the terrorist attacks on September 11, 2001, the Commission decided to limit material on the public Web site until it had been reviewed for sensitivity. In responding to that decision, the OCIO determined that it would be more efficient to rebuild the site in the redesigned format than to rebuild it in the old format and subsequently replace it. To date, the OCIO has completed four releases and expects to continue the incremental rebuilding process, completing the bulk of the site rebuilding in early spring 2002. The redesigned site will contain much of the information available through the old site and will have additional material in some areas, including new information that should be helpful to materials licensees. The final content on the redesigned site will reflect any new Commission direction on information sensitivity criteria resulting from the terrorist attacks.

In addition to the Web Redesign initiative, the OCIO has other related activities under way, including development of a Public Meeting Notice System, standards and policies to maintain the integrity of the NRC's new Web site, and development of a training program for staff who post information to the site.

## **OCIO RESPONSE TO EMERGENT ISSUES**

In addition to managing the areas of accomplishment, the OCIO has responded to a number of emergent issues. These include responding to the terrorist attacks on September 11, 2001, increasing computer security, expanding the E-Government program, and improving the applications delivery processes.

### **9/11 Response**

In response to higher risks and the need for increased protection following the terrorist attacks on September 11, 2001, the OCIO has increased its security and management controls used to protect the agency's information, infrastructure, and applications. The OCIO is also closely monitoring potential threats and will be doing more in the future to manage the increased risks. In addition, the OCIO has an important leadership role in managing publicly available information for the agency. As the agency became aware of potential threats to public safety from adversaries, the OCIO worked with the staff to determine what should be done to protect information that could potentially be useful to an adversary. Toward that end, the OCIO provided advice and assistance to the offices regarding temporary policies for release of public information, pending a Commission decision on potential adjustments to the public information dissemination criteria.

### **Computer Security**

Last September, the agency provided its response to OMB's reporting requirement under GISRA. In that response, the OCIO stated that, although the NRC has a comprehensive set of policies and procedures in place for the Information Security Program, more oversight and measurement of the program are needed in order to ensure that the proper security practices exist and are being followed. The response also covered all outstanding weaknesses identified during previous security reviews. Subsequent to its initial response, the OCIO provided OMB with a plan of action to address all of the identified security weaknesses. Table 6 lists the corrective actions planned to address 16 OIG recommendations for the NRC's Information Security Program.

Table 6 NRC Information Security Program Corrective Action Plan (Corrective Actions Addressing the 16 OIG Programmatic Recommendations)		
Corrective Action	# of OIG Recommendations Addressed	Areas Addressed (examples)
Designate a senior information security official reporting to the CIO	5	<ul style="list-style-type: none"> <li>Lack of central oversight, comprehensive security program, and certain policies.</li> <li>Assure that corrections identified in all studies are performed as appropriate</li> </ul>
Establish centralized monitoring, reporting, and tracking	6	<ul style="list-style-type: none"> <li>Identify all systems requiring protection per MD 12.5</li> <li>Ensure that all systems are at a minimum of NIST Level 3</li> <li>Assure that all security plans are kept current</li> <li>Develop procedures for incident reporting</li> </ul>
Develop program-level security performance measures	1	<ul style="list-style-type: none"> <li>Lack of information security program performance measures</li> <li>Develop detailed security budget reporting</li> </ul>
Develop system-level security performance measures		<ul style="list-style-type: none"> <li>Measures compliance with the information security program for all systems</li> </ul>
Establish and track security training requirements	2	<ul style="list-style-type: none"> <li>Identify security training required for contractors and staff</li> <li>Track compliance with training requirements</li> </ul>
System-level recommendation	1	<ul style="list-style-type: none"> <li>Mark computer center sprinkler emergency shutoff valve</li> </ul>
System-level recommendation	1	<ul style="list-style-type: none"> <li>Acquire plastic covers for computer center in case of sprinkler system discharge</li> </ul>

Although the lack of oversight and absence of performance measures were identified in recent security reviews, the NRC has an outstanding track record when it comes to information systems from an operational standpoint — no NRC business function has been compromised due to a lapse in security in the past 8 years. Other validations also indicate that the agency's major applications are secure. For example, the National Institute of Standards and Technology (NIST) developed a standard for measuring the security of a system on a scale of from 1 to 5 (5 being the highest level). Using that scale, NIST states that "... agencies should seek to bring all assets to Level 4 and ultimately to Level 5. At a minimum, agencies should ensure that all assets are at Level 3." The NRC's major applications currently have an average rating over 3, and the OCIO staff is looking at how to achieve an average level of 4 across all major applications (with no applications less than a level of 3) by the end of FY 2003. The OCIO has also established a new, senior-level position for an agency Chief Information Systems Security Officer. This action will ensure that the OCIO is well-positioned to satisfy the need for oversight and performance monitoring as determined by the latest security assessments.

## Applications Delivery

The OCIO continues to look for ways to strengthen management processes and apply lessons learned to improve the applications delivery process and results. Last year, the OCIO completed lessons learned assessments for the ADAMS and STARFIRE implementations and the Capital Planning and Investment Control (CPIC) process. The results of these assessments will be evident in a revised CPIC process, as reflected in an updated CPIC Management Directive, which is scheduled for release later this year. In addition, in anticipation of new support requirements as the agency's applications are implemented in a Web-based environment, the OCIO has established the nucleus of a new Web Applications Support Team.

The main focus of this team is to ensure consistency and standard implementations for agency Web-based applications.

Looking toward the future, the OCIO has begun an initiative to create a “roadmap” that will lead to measurable improvements in the way the OCIO manages IT projects. This roadmap is being developed based on the software acquisition capabilities maturity model (SA-CMM) developed by the Carnegie Mellon University Software Engineering Institute (see Table 7).

Table 7 Software Acquisition Capabilities Maturity Model ( Developed by the Carnegie Mellon University Software Engineering Institute )		
Level	Focus	Key Process Areas
5 - Optimizing	<i>Continuous process improvement</i>	<ul style="list-style-type: none"> <li>• Acquisition Innovation Management</li> <li>• Continuous Process Improvement</li> </ul>
4 - Quantitative	<i>Quantitative management</i>	<ul style="list-style-type: none"> <li>• Quantitative Acquisition Management</li> <li>• Quantitative Process Management</li> </ul>
3 - Defined	<i>Process standardization</i>	<ul style="list-style-type: none"> <li>• Training Program</li> <li>• Acquisition Risk Management</li> <li>• Contract Performance Management</li> <li>• Project Performance Management</li> <li>• User Requirements</li> <li>• Process Definition and Maintenance</li> </ul>
2 - Repeatable	<i>Basic project management</i>	<ul style="list-style-type: none"> <li>• Transition to Support</li> <li>• Evaluation</li> <li>• Contract Tracking and Oversight</li> <li>• Project Management</li> <li>• Requirements Development and Management</li> <li>• Solicitation</li> <li>• Software Acquisition Planning</li> </ul>
1 - Initial	<i>Competent people and heroics</i>	

The SA-CMM is a proven, “best practices” model for maximizing an organization’s ability to conduct IT projects on time, within budget, and with required functionality. In the future, the OCIO anticipates building on the lessons learned assessments from the General Licensee Tracking System (GLTS) and Licensing Support Network (LSN) projects, which are due in FY 2002.

During FY 2001, the OCIO has been significantly involved in supporting the High-Level Waste (HLW) Repository Licensing Program. For that application program, the OCIO encouraged the formation of the HLW Licensing Support Program Executive Steering Committee chaired by Mr. Paul Bollwerk. Mr. Stuart Reiter is the OCIO representative on the Committee, and the OCIO has a dedicated team to support all automation efforts related to this program. Also in FY 2001, the Atomic Safety and Licensing Board Panel (ASLBP) achieved a major milestone by completing the development of a Web portal for the LSN. This Web portal facilitates Internet-based access to HLW-related documents provided by participants in repository-related hearings, including the NRC and the U.S. Department of Energy (DOE). Notably, this major accomplishment was brought in on schedule and within budget. Also, under the LSN program during FY 2001, the ASLBP completed the business plan for its Digital Data Management System (DDMS). As a first step of that plan, in FY 2003, the ASLBP plans to complete a pilot of the first DDMS module. The purpose of that pilot will be to demonstrate



the viability of the DDMS concept and to fully flesh out business processes, cost/benefit analyses, and implementation and operational issues. The ASLBP will then use the pilot results as the basis for decisions regarding the future direction of DDMS and the basis for a revised CPIC submission.

## **Expanded E-Government**

As one of the elements of the President's management agenda, E-Government encourages the improvement of internal agency processes through the judicious application of IT and the provision of Government services to citizens electronically. The OCIO outlined the NRC's E-Government and Government Paperwork Elimination Act (GPEA) strategy in its report to OMB last October. Specifically, the strategy included a number of actions to (1) implement all of the agency's electronic transactions reported under the Government Paperwork Elimination Act, (2) extend digital signature capability, (3) move to full electronic document management functionality (spanning the document lifecycle from creation through retirement), (4) move to a single fully integrated human resources information management system that provides employee self-service facilities, and (5) leverage the Web for both external and internal communications.

The Electronic Information Exchange (EIE) Program is a key component of the NRC's E-Government activities. In particular, the EIE Program enables licensees and other external stakeholders to use the Internet to transmit to the NRC digitally signed electronic documents in a way that ensures that the documents will have legal standing in any hearing. The EIE capability also enables the NRC to realize internal processing efficiencies and allows licensees to leverage the Internet and reduce regulatory burden by eliminating the need to create and handle paper-based documents. In FY 2001, the OCIO implemented the EIE production system. In FY 2002, the OCIO plans to recommend to the Commission that a direct final rule be issued that will allow NRC licensees and others to electronically submit almost all documents and data via the EIE.

In addition to these initiatives, the NRC is fully supporting and participating in the E-Regulation Community of Practice, an interagency working group under the auspices of the Federal CIO Council.

## OCIO RESPONSE TO KEY CHALLENGES

The OCIO is responding to key challenges presented to the OCIO by the President, the Chairman, and the Commission. The OCIO has initiated activities in six areas:

- **Human Capital**

In the area of human capital, the OCIO recognizes the importance of the NRC staff and their skills. The world is rapidly changing with new technologies and new ways for the staff to learn new skills for use in their day-to-day business processes. Like many Federal agencies, the NRC is facing increased staff retirements and the resulting loss to the agency of important knowledge and expertise. Along with the OHR, the OCIO is responding to these needs through focused workforce planning. Toward that end, the OCIO continues to assess the current skills and competencies of its staff and those that will be required in the future. In addition, the OCIO is developing a workforce strategy and action plan. Key components of that strategy will address appropriate staff training, as well as recruitment of new staff and skills to ensure a highly qualified and diverse workforce.

- **Internal Communications**

The second challenge is to improve communications, both internally and externally. To enhance internal communications, the OCIO is building on the work done by last year's Senior Executive Service (SES) Candidate Development class, which conducted a study and defined areas for improvement in agency communication. In responding to the results of that study, the OCIO has begun an internal initiative with an OCIO Communications Working Group (CWG), which was formed in November 2001. Mr. Stuart Reiter is the Communications Champion for OCIO, and Ms. Jacqueline Silber is the lead for the CWG, which includes OCIO staff and management. The CWG is already actively involved and has proposed a number of ideas, and the OCIO has begun implementing some of those ideas.

In addition to internal communication, the OCIO plans to improve its external communications with customers and stakeholders. Toward that end, the OCIO began working with stakeholders in August 2001 to implement the office's Planning, Budgeting, and Performance Management (PBPM) process. As part of the PBPM Project, the OCIO is working with its stakeholders in discussions concerning the agency's information and technology programs. These meetings have been highly interactive and successful, with wide representation across the NRC. In addition, the Deputy CIO has begun having regular meetings with the NRC's office directors. These ongoing meetings help to improve communication and understanding of stakeholder needs.

The OCIO also plans to use the internal Web site to improve communication within the agency. After completing its redesign of the agency's public Web site, the OCIO will apply the lessons learned to improve the design of the internal Web site.

- **External Communications**

Historically, the agency has used its Public Document Room and Bibliographic Retrieval System as primary contacts and communication points with the public. With increasing use of the Internet, however, the public and stakeholders expect to communicate with the NRC electronically. To meet their expectations, the OCIO needs to be proactive in expanding the agency's communications options. The programs for ADAMS, the Web Redesign, and the EIE are laying a foundation for improving these options, and the OCIO is now beginning to simplify online access to agency information. These enhancements also support the agency's goal of improving public confidence.

In introducing these changes, the OCIO is aware of, and sensitive to, their potential impact on stakeholders. To minimize that impact, the OCIO must coordinate and work with stakeholders to plan and complete these transitions using communication plans. In addition, the OCIO has strengthened its public outreach with users groups, such as the ADAMS Public Users Group. That group, which includes lawyers, consultants, utility managers, architects, engineers, and public interest groups, has increased two-way communication regarding such considerations as the best ways to use and improve ADAMS.

The NRC's external Web site is also an important tool for communicating with the public. As a result, the OCIO is planning to enhance the site by adding new capabilities, such as a new Public Meeting Notice system, which will eliminate the need to post notices on multiple pages.

- **Stakeholder Alignment**

The initiatives for stakeholder alignment and evaluations respond to the challenge to improve performance monitoring and strategic planning. In order to accomplish stakeholder alignment, the OCIO is committed to work together with the various NRC offices to "do the right work at the right time."

The PBPM process is a framework that the NRC uses to continue to build on and become a better performance-based organization. Through the PBPM process, the OCIO is working with stakeholders to align the agency's IT and IM policies and activities with the NRC's goals and strategies, as outlined in the NRC Strategic Plan. This process is expected to improve performance measures and ensure better alignment with stakeholder goals and strategies.

- **Evaluations and Assessments**

The OCIO uses self-assessments to make corrections and adjustments throughout the year. For the coming year, the OCIO has planned four such assessments. Of the four, two will focus on the new CISSCO-II contract and review internal procedures for that contract. The third will assess the ISSC contract and its service level requirements. The fourth will consider recommendations for improving the operations of the Document Processing Center. In addition, the OCIO will follow up on the results of an OIG audit and an EDO Task Force report related to the inadvertent release of documents last summer to the ADAMS Public Library.

- **Information Technology**

The challenge to effectively use IT is a primary goal of the OCIO. The OCIO is committed to providing the leadership, guidance, and support to effectively and efficiently use and manage information and technologies across the agency. This report has outlined some of the OCIO's accomplishments in furthering the effective use of technology through improved hardware, software, and training, as well as interaction with stakeholders.

## **CONCLUSION**

In conclusion, the OCIO will continue to focus on its oversight role during FY 2002. Computer security will remain a high priority, as evidenced by the OCIO's establishment of a senior-level executive position to ensure a robust information systems security program. The OCIO also has a corrective action plan in place to guide the agency's efforts to remedy issues raised in the GISA reviews, and will continue to challenge the environment to identify possible vulnerabilities. In addition, the OCIO is in the process of reviewing and revising its policies, guidance, and methods to improve applications delivery and, through the PBPM process, the OCIO is working to improve program alignment with stakeholders. As part of the President's Management Agenda, the OCIO will also provide leadership and oversight of the agency's E-Government initiatives, particularly with regard to the activities to ensure conformance to the requirements of the Government Paperwork Elimination Act. Toward that end, the OCIO will recommend that the Commission extend the ability to accept documents electronically.

Throughout FY 2002, the OCIO will also continue to focus on its role as a product and service provider. Toward that end, the OCIO will monitor the implementation of the new contracting vehicles to ensure that they meet performance expectations for applications, infrastructure, and document processing services. The OCIO will also continue to work the ADAMS Action Plan, and will seek approval to introduce Release 4.0 of ADAMS, which will offer performance improvements and position the agency for the transition of ADAMS to a Web-based user interface. In addition, the OCIO plans to maintain its focus on the "bottom line" for all of the services that the office provides, consistent with the FY 2001 accomplishments to control and reduce service costs.

## Appendix A

### SUMMARY OF THE OCIO'S FY 2001 ACCOMPLISHMENTS

#### DOCUMENT MANAGEMENT

- **Achieved stable operations for ADAMS**, with good availability, improved response time, and increased usage by the public and NRC staff.
- **18% cost reduction, FY2002 .vs. FY 1998, in contracted document processing center (DPC) costs**, with greater value added for a higher volume of documents.
- **26% cost reduction, FY2002 actual .vs. FY2002 projected, in contracted DPC costs**, with a cost reduction of about \$800K.
- **Reduced staff burden in adding NRC documents into ADAMS** by reassigning responsibility for minimal profiles to secretarial staff and transferring much of the work to HQ and regional contractors.
- **Clarified roles and responsibilities of NRC staff, managers, and OCIO** and provided step-by-step procedures and training to regional and HQ document submitters.
- **Improved data quality for all record additions.** Contractors perform 100% independent quality control of scanning and profiling of all documents added to the system. Data quality for prior documents was improved as a result of a QC program in which OCIO further refined data standards and made more than 35,000 corrections to the database.
- **Successfully completed a pilot program to support electronic submission of documents to a secure Web site using electronic signaturing.** NRR issued a Regulatory Issues Summary (RIS) to allow its licensees to submit electronically in lieu of paper and OCIO, in coordination with OGC, began work on a rulemaking to allow for electronic communications by NRC stakeholders.
- **Implemented an electronic records management module**, which is in use by OCIO and its contractors, who assumed responsibility for filing records stored in ADAMS electronically for NRC offices and regions.
- **NRC first agency to receive NARA approval of its records disposition schedules to permit the maintenance of agency-wide programmatic records in an electronic recordkeeping system; eliminating the need to maintain future voluminous paper records.** (Work completed in FY 2001, NARA approval received in FY 2002).

#### INFORMATION MANAGEMENT

- **FOIA request response exceeded agency timeliness goal.**
- **Annual cost avoidance of \$150K/year for records storage and retrieval services** which are provided through an Interagency Agreement with the National Archives and Records Administration (NARA).
- **Additional staff access to scientific and technical journals at no added cost to agency.**
- **No violations of Paperwork Reduction Act.** OMB cited NRC in its FY 2001 Annual Report to Congress as one of only a few agencies who had no violations of the Paperwork Reduction Act and who had achieved burden reductions at a time when most other agencies had increased their burden to the public to respond to Federal requests for information. In addition, because of NRC's past performance in the quality of its submittals to OMB for review and approval of information collection requests, OMB delegated authority to the OCIO to approve insignificant burden information collections and granted a blanket clearance for public satisfaction surveys.
- **Copier pilot confirmed new copiers will: save resources, improve staff efficiency, lower costs and, directly connect to the network.** A copier pilot project confirmed the potential to save resources and improve staff efficiency. New copiers have lower maintenance costs and can receive copy jobs directly from the NRC network electronically.

#### CONTRACTING INITIATIVES

- **Cost avoidance\* of \$2.4M over a 2 year period projected for new CISSCO II contract.**
- **Cost avoidance\* of \$800K per year projected for transition to new FTS2001 contract.**

- **Cost avoidance\*** of \$1.5M per year projected for new ISSC contract. ISSC provides same level of service, with the added benefit of a 3-year desktop and network infrastructure refresh.

#### **PRODUCTION ENVIRONMENT**

- Implemented full production system for PeopleSoft Time and Labor/HRMS system.
- Maintained stable and reliable production environment for agency business applications.
- Developed support to bring up new applications into full production with minimum disruption to current operations and high level of application availability and performance.
- Implemented a Consolidated Test Facility for rigorous application testing prior to deployment.

#### **TECHNOLOGY INNOVATION**

- Formed a Technology and Architecture Team to plan for infrastructure and architecture changes and evaluate new technologies.
- Completed pilot, demonstration, and training for use of Personal Digital Assistant technology to support materials inspections and enhanced reactor inspections.

#### **WEB REDESIGN**

- Completed prototype and stakeholder review of redesigned Web site.
- Started rebuilding information on web site incrementally; completed 4 releases.

#### **COMPUTER SECURITY**

- Completed annual Government Information Security Reform Act (GISRA) report to OMB.
- Completed plan of action to address identified security weaknesses, including corrective actions addressing 16 OIG recommendations.

#### **APPLICATIONS DELIVERY**

- Completed lessons learned for the ADAMS and STARFIRE implementations, and the CPIC process.
- Provided critical feedback on HLW Repository Licensing Program proposal resulting in significant modifications to proposal.

#### **EXPANDED E-GOVERNMENT**

- Implemented the Electronic Information Exchange production system.

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\*i.e. Additional costs NRC would have incurred under previous contracts.