



U.S. Department of Energy Office of the Chief Information Officer

Information Resources Management (IRM) Strategic Plan

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Introduction

It is the responsibility of the Department of Energy (DOE) Chief Information Officer (CIO) to ensure that information technology is acquired and information resources are managed in a manner that implements the policies and procedures of pertinent legislation and the priorities established by the Secretary. The CIO provides information resources management advice and assistance to the Secretary of Energy and other senior managers. The CIO also coordinates and articulates a shared vision and corporate perspective among the Department's information activities and champions Departmental initiatives to effectively manage information and to provide for corporate systems that add value to the businesses of the Department. To that end, this DOE Information Resources Management (IRM) Strategic Plan has been prepared.

The IRM Strategic Plan is a companion document to the DOE Enterprise Architecture (EA). The Department recognizes that these documents will strengthen management of its information and technology resources by:

- Supporting capital planning and investment control for information technology (IT)
- Improving the governance and effectiveness of the Department's IT planning and budgeting processes
- Increasing the efficiency, effectiveness, interoperability, and standardization of its major information systems
- Establishing business, data, applications, and technology infrastructures at the Departmental level
- Providing a migration strategy to a technology environment that meets the Department's strategic business objectives

In addition to this internal focus, DOE recognizes the need to integrate external policy directions as defined by Congress and the Administration into its IT initiatives. The DOE IRM Strategic Plan responds to the legislative mandate in the *Paperwork Reduction Act of 1995*, which specifies that agencies shall "...develop and maintain a strategic information resources management plan that shall describe how information resources management activities help accomplish agencies' missions." The *Government Performance and Results Act (GPRA) of 1993*, which specifies the strategic planning context and performance metrics to measure accomplishment against strategic goals, further clarifies this legislative direction. Finally, in accordance with OMB Circular A-130, this IRM Strategic Plan supports the Department's strategic direction. The DOE IRM Strategic Plan is modeled after the *CIO Council Strategic Plan for Fiscal Year 2001 – 2002* and is driven by the *President's Management Agenda, Fiscal Year 2002* and the *e-Government Strategy* dated February 27, 2002. A complete list of source documents used in developing the Plan can be found in Appendix B.

The scope of the DOE IRM Strategic Plan includes all aspects of computing in the Department, including: business and administrative systems; scientific computing; telecommunications; mission support systems; wireless; spectrum management; security; and records management. It involves all DOE locations: Federal sites, laboratories, and management and operational facilities. It is the initial driver in the overall DOE Information Technology (IT) Integrated Planning Framework setting the overarching guidance and direction for the IT Capital Planning

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and Investment Control process, Enterprise Architecture, and the budget process. It communicates IT strategies to link to the Departmental strategic plan, thereby ensuring technological support to the accomplishment of the Department's critical mission requirements. The IRM Strategic Plan also communicates IT strategies to link to the EA, which will expand and evolve to meet additional OMB architecture requirements such as providing a Workforce analysis. It will also progress as additional or new information becomes available, particularly in relation to DOE applications and technology resources.

The following definitions for components of the Plan are derived from the *DOE FY 2003 Annual Performance Plan*.

Mission describes work an organization does and the overall purpose of the organization.

Vision describes how an organization envisions itself 5 to 10 years from now. It communicates the essence of an organization to its communities of interest and includes a description of the organization as it carries out its operations.

Strategic Goal defines a long-term outcome. Goals are defined so that quantifiable measurement of progress can be established.

Objective is a major accomplishment that significantly contributes to a particular Strategic Goal. Objectives are written as measurable and achievable.

Strategy defines an intended action with a specific outcome or output that contributes to the achievement of an Objective.

Performance Measure is a quantitative measure of progress toward a Strategic Goal. It demonstrates the effectiveness or efficiency of achieving intended outputs or outcomes. The baseline is assumed to be FY 2001 for all performance measures.

Mission

The Department's IRM mission is to contribute to the success of the Department's mission through the management and delivery of high-quality information that can be used and shared in a secure, cost-effective manner.

Vision

The Department's IRM strategic vision closely follows the President's E-Government vision for the Federal Government. It is encapsulated in the following statement from the DOE Chief Information Officer (CIO).

“E-Government is critical to meeting today's citizen and business expectations for interaction with Government. The President's vision for reforming Government emphasizes that ‘Government needs to reform its operations—how it goes about its business and how it treats the people it serves.’ Information technology (E-Government) facilitates the Department's ability to align efforts to significantly improve service and reduce operating costs. E-Government initiatives deployed effectively will make conducting business with the Department easier, with privacy and security provided. To improve its performance in this area, the Department will focus on enterprise architecture, IT capital planning and investment control, performance measurement, enterprise data quality improvement, cyber security and ensuring that the skills exist within the Department to leverage IT to better support the business.”

Strategic Goals

The following IRM Strategic Goals reflect the Department's commitment to the agenda of the Administration and the national energy and security priorities, including those outlined in the President's Management Agenda, E-Government strategies, and Homeland Security strategies.

1. Simplified access to DOE information products and services within a Government-wide framework
2. A cost effective, interoperable infrastructure providing quality information
3. Protected and secure information assets
4. A DOE workforce with the necessary IT skills
5. World class high performance computing capabilities developed and deployed
6. High value, risk controlled, managed information technology portfolio

In accordance with the Office of Management and Budget (OMB) Circular A-130, this IRM Strategic Plan supports the Department's strategic direction. As outlined below, it provides a description of how information resources management activities help accomplish agency missions, and ensures that IRM decisions are integrated with organizational planning, budget, procurement, financial management, human resources management, and program decisions.

The Department has articulated a set of strategic goals and objectives, which have been incorporated into the Department's FY 2003 budget submission and FY 2003 Annual Performance Plan (APP). The following table lists the Strategic Goal for each of the five Business Lines, as described in the FY 2003 budget submission and the APP.

Business Line	DOE Strategic Goal
1. National Nuclear Security	Strengthen United States security through the military application of nuclear energy and by reducing the global threat from weapons of mass destruction.
2. Energy Resources	Increase global energy security; maintain energy affordability; and reduce adverse environmental impacts associated with energy production, distribution, and use by developing and promoting advanced energy technologies, policies, and practices that efficiently increase domestic energy supply, diversity, productivity, and reliability.
3. Science	Deliver the scientific knowledge and discoveries for DOE-applied missions; advance the frontiers of the physical sciences and areas of the biological, environmental, and computational sciences; and provide world-class research facilities and essential scientific human capital to the Nation's overall scientific enterprise.
4. Environmental Quality	Aggressively clean up the environmental legacy of nuclear weapons and civilian nuclear research programs at 114 of the Department's sites; permanently dispose of the Nation's radioactive wastes; minimize the social and economic impacts of the Department's activities; and ensure the health, safety, and protection of DOE workers, the public, and the environment.

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Business Line	DOE Strategic Goal
5. Corporate Management	Demonstrate excellence in the management of the Department's human, financial, physical, and information assets. Successfully implement each of the Department's requirements in the President's Management Agenda; demonstrate measured progress in resolving DOE management challenges; and resolve management recommendations from the Department's Office of Inspector General (IG) and the General Accounting Office (GAO) within 3 years of issuance.

The following table illustrates how the DOE IRM Strategic Goals support the DOE Business Lines Strategic Goals. A “P” indicates that the IRM Strategic Goal provides primary support (i.e., the support provided can be related to information explicitly stated in the DOE Business Line Strategic Goal). An “S” indicates that the IRM Strategic Goal provides important, but secondary, support (i.e., the support provided is necessary, but not explicitly stated as part of the Business Line Strategic Goal). A blank cell indicates that the IRM Strategic Goal has no obvious relationship to the DOE Business Line Strategic Goal. Details supporting this mapping are found in Appendix A.

DOE IRM Strategic Goal	DOE Business Line Strategic Goals				
	National Nuclear Security	Energy Resources	Science	Environmental Quality	Corporate Management
1. Simplified Access to DOE Information Products and Services within a Government-wide framework.	P	P	P	P	P
2. A cost effective, interoperable infrastructure providing quality information	S	S	S	S	P
3. Protected and secure information assets	P	P	S	S	P
4. A DOE work force with the necessary IT skills	S	S	S	S	P
5. World class high performance computing capabilities developed and deployed	P		P		
6. High value, risk controlled, managed Information Technology Portfolio	S	S	S	S	P

The IRM Strategic Goals are described on the following pages, along with Objectives, Strategies, and Performance Measures for each.

Strategic Goal 1:

Simplified access to DOE information products and services within a Government-wide framework.

It is the Mission of the Department to foster a secure and reliable energy system that is environmentally and economically sustainable, to be a responsible steward of the Nation's nuclear weapons, to clean up its own facilities, and to support continued United States leadership in science and technology. Within this program context, information technology becomes a strategic enabler to achieve this Strategic Goal.

DOE will address this Goal by implementing an E-Government strategy, unifying core applications and making them accessible, thereby allowing DOE to provide simplified access to Government services. An effective E-Government strategy helps manage a growing number of users and their secure access to Government resources in a scalable, cost-efficient manner, across a heterogeneous IT infrastructure. That ease of access can be provided without exposing critical resources through secure, innovative E-Government applications. The President's Management Agenda (PMA), rising public expectations, and the spread of the Internet and e-commerce are driving DOE to participate more fully in E-Government. This Strategic Goal focuses on the four service areas of the Government-wide E-Government strategy:

- *Individuals/Citizens: Government-to-Citizens (G2C)*
- *Businesses: Government-to-Business (G2B)*
- *Inter-governmental: Government-to-Government (G2G)*
- *Intra-governmental: Internal Efficiency and Effectiveness (IEE)*

Objectives

- Establish a single point of entry to access DOE information and services
- Increase the customer value of DOE sites
- Make transactions with all levels of DOE seamless to communities of interest
- Improve key corporate business processes
- Establish linkages to federal, state, local, and tribal initiatives

Strategies

- Develop a comprehensive E-Government transition plan by:
 - Assessing the PMA and Innovative DOE E-Government Applications (IDEA) E-Government initiatives to identify and structure preliminary functional and technical requirements.
 - Identifying and defining business process reengineering/improvement and change management projects.
 - Changing the organizational structure to make lines of responsibility and accountability clearer.
 - Identifying and defining the specific functional and technical requirements for the IT software capabilities needed to support the E-Government initiatives.

- Identifying and defining the E-Government technology requirements based on the creation of single authentication access; establishment of an application-hosting environment; use of site-wide application licenses; possible use of LINUX on the mainframe for highly reliable processing and storage for E-Government applications; use of advanced data storage technologies; and possible use of thin-client computing.
- Defining project performance measures, standards, and oversight processes and structures.
- Establishing project dependencies, milestones, and timelines. Generating resource estimates to establish project budgets.
- Communicate the E-Government strategy and action plan to DOE’s communities of interest.
- Determine highest priority information requirements of DOE’s communities of interest.
- Improve business processes for handling of nuclear materials, awarding clearances, and establishing research project portfolios.
- Implement applications to automate the process of dealing with academic institutions and private industry in the awarding of contracts and grants.
- Implement an integrated information portal to DOE information and business opportunities.
- Create an opportunity for private industry to learn about and take advantage of licensing opportunities for DOE-developed technology.
- Create an opportunity for appropriate staff from agencies dealing with Homeland security to access DOE terrorist-related information.
- Cooperate with interagency efforts in e-procurement, e-grants, e-clearance, e-medical, e-signature, and E-FOIA.

Performance Measures

<i>Metric 1</i>	Percentage of information categorized and available by full text search
<i>Target</i>	95% of business information is categorized by FY 2005; 100% of post-1990 DOE-held scientific information is available by full text search by FY 2012.
<i>Metric 2</i>	Level of customer satisfaction with DOE Internet and Intranet web information, including information currency, usefulness, and level of usage
<i>Target</i>	80% of customers are at least “satisfied” with information and access (as measured by customer survey/feedback).
<i>Metric 3</i>	OMB Scorecard E-Government measure
<i>Target</i>	Green by FY 2004 in all E-Government categories.

Strategic Goal 2:

A cost effective, interoperable infrastructure providing quality information

DOE's IT infrastructure must be positioned to support the Department's E-Government strategy, promoting interoperability and allowing sharing of quality information across business functions, throughout the organization, and with outside entities. To achieve this, the infrastructure must be standards-based, and must include the capability to support an emerging, data-centric XML environment. This will require the Department to implement data management and data quality strategies. IT assets will not only be shared, but they will also be capable of use and reuse. The IT infrastructure will enable flexible business processes and adapt to customer expectations. The infrastructure will be geared to delivering applications, but it will also provide the platform for business change and new business initiatives.

In addition to this forward-looking vision, there must be strategies to maintain and update the IT working environment of a huge, nationwide complex. DOE must furnish an efficient and effective work environment for approximately 150,000 people at approximately 40 sites around the country. Many of these sites are in remote locations and cover large geographical areas.

Objectives

- Provide an interoperable, reliable, and available technology infrastructure
- Employ standards-based approaches for developing and procuring technology products
- Monitor and evaluate technology advancements
- Provide interoperable and reliable information

Strategies

- Implement E-Government technology infrastructure projects as defined in a Goal 1 Strategy.
- Update the IT standards profile with new or modified standards to reflect the new Technical Reference Model (TRM) and E-Government technical environment. Retire older standards.
- Re-engineer the existing standards management process to ensure that it addresses the need for a technology research and assessment function and broader involvement of DOE staff at all sites and in all programs in developing, reviewing, and approving the IT standards profile.
- Implement infrastructure consolidation projects such as help desk consolidation, desktop standards, automated control of business applications and infrastructure using tools (i.e., the Tivoli suite of configuration and operations management software products), and e-mail messaging software consolidation.
- Continue development and enhancement of the two (necessarily diverse) DOE networks—DOENet (the DOE business intranet) and ESnet (the scientific research intranet that provides worldwide connectivity for the scientific community and serves as the network arm of high performance computing research).
- Establish a Departmental data management program as the first phase of the migration to a knowledge management environment.

- Develop modernized applications to automate business support functions such as human resources and funds management.
- Implement an integrated document management system.
- Cooperate with intergovernmental initiatives for provision of geographic information (GIS).

Performance Measures

<i>Metric 1</i>	Total cost of infrastructure per year
<i>Target</i>	5% reduction per year

<i>Metric 2</i>	Percentage reduction in number of different solutions/platforms
<i>Target</i>	10% reduction per year

<i>Metric 3</i>	Percentage of infrastructure components meeting or exceeding contract/service-level agreement performance specifications
<i>Target</i>	100% meet or exceed, FY 2002 and subsequently

<i>Metric 4</i>	Performance improvement in data quality index (reduction in redundant data, elimination of data inaccuracies, timeliness or currency of data)
<i>Target</i>	10% improvement per year

<i>Metric 5</i>	Percentage of IT investments adhering to DOE standards
<i>Target</i>	80% by FY 2006

Strategic Goal 3: Protected and secure information assets

DOE relies heavily on computers and electronic data to perform mission-essential Departmental functions. Increasing reliance on interconnected systems and electronic data compounds the risk of disclosure of sensitive data and disruption of critical operations and services. Of particular importance is fulfilling the Department's cyber security responsibilities to support Homeland Security goals of guarding against terrorist attacks. For DOE these include preventing cyber attacks that would allow compromise of the nuclear stockpile or disruption to the energy power grid. The Office of the Chief Information Officer is taking steps to implement policies and controls to reduce the Department's cyber security risks. The DOE cyber security program emphasizes proactive measures to protect Departmental data and computer infrastructure as required by numerous Federal regulations, including the Clinger-Cohen Act of 1996.

Objectives

- Incorporate Government and industry best practices into DOE security policies and procedures
- Provide a secure technology infrastructure
- Build security and privacy into every IT investment
- Protect data and information at appropriate levels
- Monitor and evaluate adherence to security policies and practices
- Monitor and evaluate security performance

Strategies

- Leverage emerging information and communication technologies to ensure privacy and data protection.
- Develop and issue risk-management based policies for the protection of classified and unclassified information.
- Initiate an expanded and strengthened cyber security training effort.
- Enhance the incident response capability.
- Expand the Public Key Infrastructure (PKI) initiative.
- Upgrade the DOE site cyber security protection.
- Educate and inform DOE communities of interest on how sensitive information is being used.
- Develop, maintain, and update the Government Information Security Reform Act (GISRA) Plan of Action and Milestones for the Office of Management and Budget.
- Establish an Information and Data Security and Privacy Framework to govern the security and privacy of information.
- Establish a DOE cyber security architecture.
- Establish a modernized secure network.

Performance Measures

<i>Metric 1</i>	Percentage of IT investments with an up-to-date, current security plan
<i>Target</i>	100% by the end of FY 2003 and subsequently

<i>Metric 2</i>	Time to recovery from security breach
<i>Target</i>	100% recovery within 24 hours by FY 2005

<i>Metric 3</i>	Level of successful prevention for known types of attacks
<i>Target</i>	100% prevention of recurrence of known attacks by FY 2003

<i>Metric 4</i>	Percentage of IT investments with no significant security findings of non-compliance in their security assessments
<i>Target</i>	100% by the end of FY 2004 and subsequently

Strategic Goal 4: A DOE workforce with the necessary IT skills

This Strategic Goal encompasses the first two initiatives of the President's Management Agenda: Strategic Management of Human Capital and Competitive Sourcing. Taken together, they guarantee that the human resources supporting IT operations are the best qualified, operationally efficient, and performance-driven, whether they are Federal staff or acquired under contract.

Federal agencies continue to be faced with the reality that IT human resources are in short supply. The increasing need for qualified IT professionals puts the Government in competition with private sector organizations with radically different compensation structures and advancement opportunities. The President's Management Agenda mandates that agencies have a workforce in place that is aligned with the agency mission. To achieve that end requires that DOE recruit the best and brightest candidates, employ adaptive recruitment strategies, utilize all Federal hiring flexibility, and create innovative retention practices.

Competitive Sourcing is one of the Administration's five Management Agenda items designed to make the Government market-based, while encouraging innovation in its operation. Like all other Federal agencies, DOE has been tasked by the President to subject 15 percent of its Federal Activities Inventory Reform Act (FAIR Act) positions performing commercial activities to public-private competition during FY 2002 and 2003.

Objectives

- Sustain a pool of skilled, talented IT professionals who can plan, operate, and support the IT environment of the future
- Provide opportunities and methods for all staff to acquire the necessary skills and knowledge to use IT investments
- Establish a right-size IT workforce with the appropriate balance of federal and contractor personnel

Strategies

- Hire replacement employees in advance of known losses to allow the experienced employees to mentor new hires and pass on institutional knowledge.
- Determine requirements for expert and knowledge management systems.
- Provide innovative training technologies and approaches (e.g., distance learning, video teleconferencing) to enhance the cost effectiveness, timeliness, and global reach of training delivery.
- Initiate work on defining DOE knowledge management environment. This is specified in the Target Architecture, Enterprise Architecture Version 1.1, Draft, June 2002 and is critical to retaining the scientific and technical knowledge of the DOE retiring workforce.
- Establish an expanded mentoring program.
- Conduct an A-76 outsourcing study for the IRM function in the Department.

- Develop a strategic IT workforce plan that includes identification of current workforce capabilities, assessment of future needs, recruitment/hiring strategies and plans, training plans, and retention strategies.
- Implement the Clinger-Cohen Act requirement to define senior executive competencies relative to IT investment management, assess competency levels, develop plans to improve competencies as needed, and report progress annually.

Performance Measures

<i>Metric 1</i>	Best value – lowest cost and highest performance (schedule, quality, quantity) – for each IT business function/process/activity regardless of provider (DOE federal or contractor)
<i>Target</i>	Value (cost/performance) improves by 5% each year

<i>Metric 2</i>	Number of IT staff vacancies
<i>Target</i>	No more than 10% of authorized positions vacant at any time

<i>Metric 3</i>	Value of training as measured by composite index (satisfaction with course, learning, application on the job, improvement in organizational or process performance due to training, and return on investment [ROI])
<i>Target</i>	Increase overall value of training by 5% per year for each of the next three years

Strategic Goal 5:

World class high performance computing capabilities developed and deployed

Technology is key to gaining knowledge, advancing the Department's mission, and providing service to the citizen. The Department of Energy is one of the foremost technology oriented agencies. The national laboratories represent a huge repository of research and development for next-generation computing environments. DOE also supports research in the universities through issuing and administering grants.

The Mathematical, Information, and Computational Sciences (MICS) program provides two types of advanced computing and communications facilities. The first type of facility enables scientists to use IT resources already developed. Examples are the National Energy Research Supercomputer Center (NERSC) and Energy Sciences Network (ESnet). The second type of facility is itself a research project. The principal current examples of this type of facility are the Advanced Computing Research Facilities (ACRFs), which represent the evolution of the High Performance Computing Research Centers and which were established as part of the High Performance Computing and Communications (HPCC) initiative.

The National Nuclear Security Administration's (NNSA) Stockpile Stewardship Program's goal is to maintain existing weapon systems indefinitely, well beyond their intended lifetimes, while observing the moratorium on nuclear testing. To make this scientifically feasible, an extraordinarily high level of computational capability for detailed 3-dimensional scientific simulations is needed. The Advanced Simulation and Computing Program (formerly known as the Accelerated Strategic Computing Initiative, or ASCI) exists to create new computer architectures that provide new levels of computational capability.

Objectives

- Increase flexibility of access to high performance computing, data, and research facilities
- Increase use of collaborative technologies by DOE labs and university partners
- Advance research in high performance computing
- Construct systems of aggregated resources for solving large scale problems
- Couple multiple computational simulations and data archives

Strategies

- Continue to upgrade NERSC and ESnet to provide increasingly faster data manipulation speeds and capability for creating, maintaining, and accessing increasingly larger stores of data.
- Continue to develop the DOE Science Grid to revolutionize the use of computing in science by making the construction and use of large-scale systems of diverse resources as easy as using today's desktop environments.
- Continue working with ASCI vendors to advance teraflop computing capability.
- Conduct basic research into diverse state-of-the-art computer architectures that are sited at the various ACRFs.

- Perform engineering studies on the ESnet to identify opportunities to eliminate jitter, latency, lost packets, and other factors that inhibit optimal data transfer.
- Conduct research into software tools to enable collaboration on complex activities.
- Research new computational techniques that enable fuller utilization of computational resources.
- Refine multi computer interaction algorithms that allow multiple computers to work together over a network.
- Develop and conduct state of the art simulations to enable accurate prediction of nuclear weapons effects.
- Deploy protocols that enable video conferencing over ESnet.
- Identify the opportunities and vulnerabilities of the IP6 protocol.

Performance Measures

<i>Metric 1</i>	Percentage increase in multivariate Collaboration Index (tools, sessions, people)
<i>Target</i>	10% increase per year

<i>Metric 2</i>	Number of teraflops of computing power on one machine
<i>Target</i>	100 teraflops by FY 2010

<i>Metric 3</i>	Interhub bandwidth
<i>Target</i>	1000 gigabits by FY 2006

<i>Metric 4</i>	Percentage increase in sustained operating ratios
<i>Target</i>	5% improvement per year for applications' utilization ratios

Strategic Goal 6:

High value, risk controlled, managed information technology portfolio

DOE is committed to maximizing value and managing risk associated with its information technology investment portfolio. To accomplish this, DOE will allocate resources in a manner consistent with Departmental strategic goals and objectives to ensure the Departmental mission is achieved.

The management of IT investments will improve by directly linking them to improved mission performance. The strategic requirement for quality information in a constrained resource environment increases the importance of making informed investment decisions. Better management of IT investments will maximize mission effectiveness, mitigate risk, reduce total cost of ownership, and improve productivity.

“Reform IT management processes to increase efficiency and mission contribution,” captures the essence of the Clinger-Cohen Act, emphasizing the management process improvements that are needed to more effectively deliver information and services to DOE.

Objectives

- Optimize the IT investment portfolio
- Reduce duplicative IT system investments
- Align IT investment management functions with DOE business and planning processes
- Consistently apply DOE IT investment management policies, methodologies, and measures
- Incorporate statutory requirements and best practices into DOE IT investment management policies, methodologies, and measures

Strategies

- Fully implement a Capital Planning and Investment Control (CPIC) process and integrate the CPIC process into the Departmental budget process.
- Institute a comprehensive IT project management/oversight and evaluation process with reporting of progress against performance measures to senior management, thereby detecting inadequate performance early; undertake corrective actions before major problems lead to cost overruns and/or project failures.
- Continue to develop the Department’s Enterprise Architecture by doing the following:
 - o Further developing the baseline;
 - o Further developing the target architecture based on decisions made related to the establishment of the Department of Homeland Security, IDEA Task Force, and the goals, objectives, and performance measures in the new Departmental Strategic Plan;
 - o Formulating the enterprise transition plan;
 - o Defining the architectural segments and the sequence in which they should be developed.
- Develop and institute a governance structure and processes to oversee the management of DOE’s IT investments.

- Examine the business case development and analysis process; institute changes to streamline and improve the process, meeting OMB requirements.
- Institute procedures, requirements, and training for the timely preparation, submission, and evaluation of OMB Exhibits 53 and 300 as an integral part of the annual budget process.
- Develop procedures to integrate the preparation and use of EAs and CPIC throughout DOE.

Performance Measures

<i>Metric 1</i>	Percentage of implemented IT investments in portfolio meeting original planned, risk-adjusted ROI.
<i>Target</i>	100% by FY 2008
<i>Metric 2</i>	Level of maturity as measured by the GAO ITIM Model
<i>Target</i>	<ul style="list-style-type: none"> • Level 3 by end of FY 2004 • Level 4 by end of FY 2006 • Level 5 by end of FY 2008
<i>Metric 3</i>	Percentage of DOE IT investment portfolio Exhibit 300s meeting OMB criteria for funding and accepted by OMB
<i>Target</i>	100% meet requirements and accepted by OMB for BY 2005 and in all subsequent years
<i>Metric 4</i>	Overall risk-adjusted ROI of the IT investment portfolio
<i>Target</i>	10% improvement in IT investment portfolio overall average ROI (risk-adjusted) each year

Appendix A

IRM Strategic Goals Support the Departmental Business Line Strategic Goals

Following is a discussion of the manner in which the six IRM Strategic Goals support the Departmental business line strategic goals.

Simplified Access

This IRM Strategic Goal provides primary support to:

- The National Nuclear Security and Environmental Quality strategic goals because a strategy is to improve the nuclear material handling process.
- The National Nuclear Security strategic goal because there are strategies to share personnel clearance and anti-terrorist information with appropriate personnel from other areas of government.
- The Energy Resources and Science strategic goals because a strategy is to enable processing of research grants online and a strategy for research project portfolio management.
- Environmental Quality strategic goal because a strategy is to improve payments to those who have suffered ill effects from radiation.
- The Corporate Management strategic goal because it implements the President's Management Agenda.

Infrastructure

This IRM Strategic Goal provides primary support to:

- The Corporate Management strategic goal because it helps to demonstrate excellence in the management of information assets.
- The Science strategic goal because it provides more computing power and bandwidth to scientific researchers.

This Goal also provides secondary support to the first four business line strategic goals because the infrastructure is the underlying framework that allows for the storage and delivery of reliable information for those business lines to achieve their strategic goals.

Protected Information

This IRM Strategic Goal provides primary support to:

- The National Nuclear Security and Energy Resources strategic goals because it protects information about nuclear weapons and national energy sources.
- The Energy Resources Goal and Science strategic goals because it ensures the integrity of scientific information.
- The Corporate Management strategic goal because it ensures continuity of operations, continuity of governance, and privacy of personal information.
- The Corporate Management strategic goal because it helps to demonstrate excellence in the management of information assets.

This Goal also provides secondary support to the Science and Environmental Quality strategic goals by protecting the privacy, sensitivity, and integrity of the data of those business lines.

IT Skills

The IRM Strategic Goal provides primary support for the Corporate Management strategic goal because it supports the President's Management Agenda.

This IRM Strategic Goal provides secondary support to the first four business line strategic goals because an objective is to upgrade IT skills of the DOE workforce so that benefits can be realized from the IT investments.

High Performance Computing

This IRM Strategic Goal provides primary support to:

- The National Nuclear Security business line strategic goal because it directly supports the simulation of testing of nuclear weapons.
- The Science business line strategic goal because it advances the frontiers of computational sciences.

Managed IT Portfolio

This IRM Strategic Goal provides secondary support to:

- The first four business line strategic goals because it promotes the efficient delivery of IT products and services that support the business lines.
- The Corporate Management business line strategic goal because it helps to demonstrate excellence in the management of information assets, ensuring that IRM decisions are integrated with other agency business decisions.

Appendix B Sources

The following are sources for the DOE IRM Strategic Plan.

DOE Specific

- Annual Performance Plan for FY 2003
- ASCI Program
- Circular A-11 Exhibit 300 FY 2004 submissions
- Cyber Security Action Plan III, April 2002
- E-Government Strategic Action Plan, July 2002 Draft
- Enterprise Architecture, Version 1.1, June 2002 Draft
- ESnet Program Plan, 2001
- IT Investment Management Framework, June 2002 Draft
- Lead Program Secretarial Office (LPSO) Strategic Plan Session Working Papers, May 2002
- NERSC Strategic Plan, May 2001
- Strategic Plan, 2000

Government-wide

- CIO Council IRM Strategic Plan, October 2000
- eGovernment Strategy, February 2002
- Federal Enterprise Architecture Business Reference Model, April 2002
- President's Management Agenda, FY 2002

Legislation and OMB Guidance

- Clinger-Cohen Act of 1996
- Government Performance and Results Act of 1993
- OMB Circular A-11, Preparation, Submission, and Execution of the Budget, June 2002
- OMB Circular A-130, Management of Federal Information Resources, November 2000
- Paperwork Reduction Act of 1995