



The US Securities  
& Exchange Commission

# SEC IT Strategic Plan 2007 - 2012

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*Office of Information Technology  
U.S. Securities and Exchange Commission*



# Background

- The health of the global securities markets is intertwined with the health of the U.S. securities market; the SEC plays a vital role in safeguarding the fairness, openness and liquidity of the securities markets
- The SEC enforces laws passed by the Congress
  - Securities Act of 1933 – registration and disclosure of information by companies
  - Securities Exchange Act of 1934 – power to register, regulate, and oversee brokerage firms, transfer agents, and clearing agencies as well as the nation's securities self regulatory organizations (SROs)
  - Trust Indenture Act of 1939 – debt securities such as bonds, debentures, and notes that are offered for public sale
  - Investment Company Act of 1940 – organization of companies, including mutual funds, that engage primarily in investing, reinvesting, and trading in securities
  - Investment Advisers Act of 1940 – governs compensated securities advisors
  - Sarbanes-Oxley Act of 2002 – corporate governance and responsibility
- This IT Strategic Plan is pursuant to the following acts and guidance:
  - Information Technology Management Reform Act (ITMRA) of 1996 (Public Law 104–106, Section E, 40 U.S.C. Ch. 25)
  - E-Government Act of 2002 (Public Law 107-347, 44 U.S.C. Ch. 36)
  - The President's Management Agenda (PMA) of 2002
  - Office of Management and Budget (OMB) Circular A-130, Circular A-11, Memorandum 97-16 and Memorandum 97-02



# SEC's Vision, Mission and Strategic Goals

## Vision

The Securities and Exchange Commission (SEC) aims to be the standard against which federal agencies are measured. The SEC will strengthen the integrity and soundness of U.S. securities markets for the benefit of investors and other market participants, and will conduct its work in a manner that is as sophisticated, flexible, and dynamic as the securities markets it regulates.

## Mission

The mission of the Securities and Exchange Commission is to protect investors; maintain fair, orderly, and efficient markets; and facilitate capital formation.

## Strategic Goals

Goal 1 - Enforce Compliance With Federal Securities Laws

Goal 2 - Sustain an Effective and Flexible Regulatory Environment

Goal 3- Encourage and Promote Informed Investment Decisionmaking

Goal 4 - Maximize the Use of SEC Resources



# Guiding Principles of IT Strategy at the SEC

- 1. The U.S. financial markets will continue to be the largest in the world, in spite of growth in other markets. The financial industry will continue to adopt newer and better technology to develop and market newer products and services. In addition, citizens and investors will demand increasingly sophisticated information to assist them in protecting their financial interests.**
- 2. Information technology will improve, innovate and continue to be a driving force in today's business world, and in particular in the securities and investment management industries – perhaps the world's foremost users of sophisticated information technology.**
- 3. At the same time, the SEC and most other agencies have heavily constrained budgets, and it is inevitable that the securities markets will grow in size and complexity at a far higher rate than will the SEC's resources. It is therefore imperative that the SEC use information technology alongside prudent regulation to ensure that the SEC is as efficient as possible, that markets are as transparent and fairly structured as possible, and that investors have the information and tools needed to make prudent decisions.**
- 4. In providing these capabilities to investors and to agency staff, the SEC's IT function needs to be as mature as possible. Therefore, information resources management at the Commission will be based on business focus; modularity and standards-based design and development; flexibility to accommodate changing mandates and technologies; controlled heterogeneity to improve resilience and cost-effectiveness; a broadly applicable information security approach; and metrics-based measurement of IT effectiveness.**



# IT Strategic Objectives

- **Objective 1 – Improve the effectiveness of specific agency programs and core processes.**
  - Capabilities generally built to support enterprise-wide mission needs or enterprise-level business processes
  - Specific projects generally sponsored by one or more program offices
- **Objective 2 – Improve agencywide user productivity and the agencywide technical environment.**
  - Initiatives and projects primarily led by the Office of Information Technology
  - Provide a comprehensive, robust, and modernized technical infrastructure that improves staff productivity
  - Tackles areas like collaboration, office productivity suites and telework
  - Involves improving the effectiveness of IT operations, engineering, and support functions, as well as the hardware and software
- **Objective 3 – Improve the overall management of information technology.**
  - Contributes to Objectives 1 and 2
  - Upgrading the effectiveness and rigor of work processes and investment management
  - Consistent with the best practices outlined by the Clinger-Cohen Act and other OMB and GAO guidance
  - Primarily led by the Office of Information Technology but require active support of the rest of the agency leadership



# 1. Improve the Effectiveness of Agency Programs and Processes

- **Initiative 1A – Electronic discovery and examination**
  - Improve capability to obtain and analyze large volumes of information coming from companies and individuals during compliance examinations, enforcement investigations, or litigation
  - Convert paper or other hard-to-manage media into more reusable, electronic and digital formats
  - Improve the effectiveness of the enforcement and examination processes, and enable them to more effectively handle large bodies of information
- **Initiative 1B – Process automation, workflow, and content management**
  - Introduce a range of tools to the agency to allow for better management of internal work products, across a variety of divisions, offices, and processes
  - Pursue improvements such as the replacement of the enforcement and examination program support systems, introduction of systems to manage “departmental workflow” for smaller offices, and process improvements for publishing material to the agency website
  - Leverage common sets of tools and a unified application architecture
- **Initiative 1C – Electronic disclosure**
  - Improve the way we collect information from registrants, internally process and review the information, and enable the public to use the information for investment and educational purposes
  - Improve the usability of the information filed with us (for example, by converting more of it to interactive data formats)
  - Improve the ability for internal and external users to access and analyze the data
- **Initiative 1D – Data warehousing, analytics, and reporting tools**
  - Improve the SEC’s ability to analyze large quantities of data, either for overall program direction or in the context of specific regulatory analyses, examinations, or investigations
  - Build a suite of capabilities to obtain and analyze data from a variety of sources



## 2. Improve User Productivity and the Technical Environment

- **Initiative 2A – User support and training**
  - Improve support to the agency’s workforce in their use of technology tools
  - Create better access to helpdesk and other problem resolution resources
  - Improve training to advance overall IT competence and workplace effectiveness of the agency staff
- **Initiative 2B – Remote access and telework**
  - Respond to increasing mobility demands on the workforce
  - Improve support to the remote workforce through hardware, software, networking, and IT support processes
- **Initiative 2C – Back-office systems**
  - Pursue projects to upgrade the financial, human resources, performance management, and related administrative systems
  - Improve agencywide internal controls
  - Integrate with broader E-Government initiatives as appropriate
- **Initiative 2D – Technical infrastructure and telecommunications modernization**
  - Optimize the efficiency and utility of the agency’s technical infrastructure
  - Ensure that the core technical infrastructure (including servers, storage, networks, and telecommunications services) supports other IT initiatives and meets standards for performance, security and resiliency
- **Initiative 2E – Disaster recovery and business continuity**
  - Ensure the continuity of agency operations in the case of an emergency
  - Harden SEC’s technical infrastructure and processes against disruption, based on a realistic assessment of mission criticality and risk



## 3. Improve the Overall Management of Information Technology

- **Initiative 3A – Information security and privacy**
  - Implement a comprehensive program to assess and mitigate risk in information security and privacy
  - Embed these concepts deeply into the way we implement and operate information systems at the SEC
- **Initiative 3B – Investment management and governance**
  - Upgrade the tools, processes, and cultural environment to support more mature capital planning, enterprise architecture, project management, change management, and performance management
  - Maximize the use of SEC resources and successfully realize impact through our IT investments
- **Initiative 3C – IT human capital management**
  - Attract, develop, manage, and retain exceptional IT talent from across the public and private sectors
  - Make the SEC a true magnet for strong people with an interest in technology and business performance
  - Continue to move from a workforce primarily focused on engineering and operations to one primarily focused on business technology leadership, technical strategy, and project/program/vendor management



# Linkages between IT Strategic Objectives and Commission Goals

Legend	SEC Goal 1: Enforce compliance with federal securities laws		SEC Goal 2: Sustain an effective and flexible regulatory environment			SEC Goal 3: Encourage and promote informed investment		SEC Goal 4: Maximize the use of SEC resources		
	Problems detected early; violations prevented	Violators detected and sanctioned	Governance and reporting	Strong financial products and markets	Sensible regulatory burden	Disclosure accessibility and quality	Informed investors	Human capital aligned to mission	Sound financial management	Business improvement through information technology
<b>Objective 1: Improve the effectiveness of specific agency programs and core processes</b>										
1A - Electronic discovery and examination	S	M				S				M
1B - Process automation, workflow, and content management	S	M				M		S		M
1C - Electronic disclosure	S			M			M	M		M
1D - Data warehousing, analytics, and reporting tools	S	M		S			S			M
<b>Objective 2: Improve agencywide user productivity and the agencywide technical environment</b>										
2A - User support and training										M
2B - Remote access and telework										M
2C - Back-office systems								M	M	M
2D - Technical infrastructure and telecommunications modernization										M
2E - Disaster recovery and business continuity										M
<b>Objective 3: Improve the overall management of information technology</b>										
3A - Information security and privacy					S				S	M
3B - Investment management and governance									S	M
3C - IT human capital management								M		M



# Key Sub-initiatives – Objective 1

Initiative	Key sub-initiatives
Initiative 1A – Electronic discovery and examination	Document imaging Email and electronic file management Digital forensics
Initiative 1B – Process automation, workflow, and content management	Enforcement program support Examination program support Web content dissemination Departmental automation and collaboration
Initiative 1C – Electronic disclosure	Migration to interactive data formats Form restructuring and consolidation
Initiative 1D – Data warehousing, analytics, and reporting tools	Core analytics and business intelligence infrastructure Enrichment and crosslinkage of registrant data Fraud detection and risk assessment tools



## Key Sub-initiatives – Objective 2

Initiative	Key sub-initiatives
Initiative 2A – User support and training	Improved service management processes Systematic user capability measurement and management
Initiative 2B – Remote access and telework	Improved, more flexible remote access tools Business continuity testing and drilling
Initiative 2C – Back-office systems	Financial systems upgrades and integration Internal financial controls improvements
Initiative 2D – Technical infrastructure and telecommunications modernization	Infrastructure virtualization and abstraction Long-term management of steady-state costs Improved service management processes
Initiative 2D – Disaster recovery and business continuity	Improved business impact assessments Redesign of footprint for redundant data center facilities



## Key Sub-initiatives – Objective 3

<b>Initiative</b>	<b>Key sub-initiatives</b>
Initiative 3A – Information security	Improved access control management Configuration management and patching Mobile data protection and encryption Change control and version management
Initiative 3B – Investment management and governance	Enterprise architecture improvement and integration In-flight project monitoring Improved procurement and vendor management processes
Initiative 3C – IT human capital management	Human capital assessment Managed professional development