



Office of
the Chief
Information
Officer

DR 3600-000

**USDA Information and
Technology Transformation**

USDA Information and Technology Transformation

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DEPARTMENTAL REGULATION		NUMBER: 3600-000
SUBJECT: USDA Information and Technology Transformation	DATE: November 2, 2004	
	OPI: Office of the Chief Information Officer	

1 PURPOSE

This Departmental Regulation establishes USDA policies on the use of common USDA and external services to deliver USDA's information and services to customers and employees. These policies are defined around USDA's enterprise architecture and investment strategies.

2 POLICY

USDA's enterprise architecture reflects USDA's priorities and commitments to common enterprise-wide and external initiatives, including the Federal Enterprise Architecture. These initiatives fall under the auspices of "Expanding Electronic Government" as defined by the USDA eGovernment Strategic Plan, the President's Management Agenda, and the eGovernment Act of 2002.

USDA agencies shall utilize the common enterprise-wide and external services defined by USDA's enterprise architecture and eGovernment strategic plan to the maximum degree practicable. Investments in duplicative services are permitted only with the written approval of USDA's Chief Information Officer through the capital planning and the information technology waiver processes.

3 BACKGROUND

USDA's Enterprise Architecture offers extraordinary possibilities to deliver dynamic customer services, strengthen relationships with partners and stakeholders, share information across traditional boundaries, and reduce operating costs. It fundamentally changes how USDA interacts with, and provides information and services to its customers, stakeholders and employees.

The eGovernment Act of 2002 codified the Federal Government's commitment to transforming its service delivery to its customers using modern electronic delivery channels. This Act provides USDA with the further impetus to integrate services around customer needs. It changes USDA's business models in relationship to people, process, information and technology. These changes are accomplished through cross-agency business planning and integrated investment approaches that focus on delivering services collaboratively and reducing costs.

4 DEFINITIONS

- a** **Capital Planning and Investment Control Process** - A management process for ongoing identification, selection, control and evaluation of investments in information resources. The process links budget formulation and execution, and is focused on agency missions and achieving specific program outcomes.
- b** **eGovernment** - The use by the Government of Internet-based applications and other digital technologies, combined with processes that implement these technologies, to:
- enhance the access to, and delivery of, Government information and services to the public, other agencies and other Government entities, and
 - leverage investments in information technology to eliminate unnecessary duplication and improve effectiveness, efficiency, and service quality.

This includes addressing the people and process changes associated with transformed business delivery.

- c** **Enterprise** – The enterprise is comprised of every USDA agency and office, including all of their business activities, the information they create and use, and the products and services they deliver to their internal and external customers. The enterprise also extends to the business relationships USDA organizations maintain with their external suppliers and partners.
- d** **Enterprise Architecture** – A strategic information asset base which defines the mission, the information necessary to perform the mission, the technologies necessary to perform the mission, and the transitional processes for implementing new technologies in response to changing mission needs. The Enterprise Architecture includes a baseline architecture, a target architecture, and a sequencing plan. It is a framework for streamlining business processes, information flows, applications and infrastructure to support agency and interagency goals.

- e **USDA Enterprise Configuration Control Board (ECCB)** - The ECCB advises and recommends to the Chief Information Officer ways in which the Department manages its technology, data, and information through the development, maintenance, and oversight of the enterprise architecture.
- f **Executive Information Technology and Investment Review Board (E-Board)** - The E-Board represents the Department's information and information technology policy decision-makers. They are responsible for reviewing and approving strategic investments at USDA.
- g **Federal Enterprise Architecture** - A business-based framework for Government-wide improvement developed by the Office of Management and Budget to facilitate efforts to transform the Federal Government to one that is citizen-centered, results-oriented, and market-based. The Federal Enterprise Architecture is constructed through a collection of interrelated "reference models" designed to facilitate cross-agency analysis and the identification of duplicative investments, gaps, and opportunities for collaboration within and across Federal Agencies. These models are defined as: Performance Reference Model (PRM), Business Reference Model (BRM), Service Component Reference Model (SRM), Data and Information Reference Model (DRM), and Technical Reference Model (TRM).
- h **Information** - Any communication or representation of knowledge such as facts, data or opinions in any medium or form, including textual, numerical, graphic, cartographic, narrative or audiovisual forms.
- i **Information Dissemination Product** - Any book, paper, map, machine-readable material, query-friendly databases, audiovisual production or other documentary material, regardless of physical form or characteristic, disseminated by an agency to the public.
- j **Information Management** - The planning, budgeting, manipulating, and controlling of information throughout its life cycle.
- k **Information Resources** - Includes both government information and information technology.
- l **Information Resources Management** - The process of managing information resources to accomplish agency missions. The term encompasses both information itself and the related resources, such as personnel, equipment, funds, and information technology.

- m** **Information Technology** – The term "information technology" means:
- the hardware and software operated by an organization to accomplish a federal function, regardless of the technology involved (e.g. computers, telecommunications, etc.);
 - any equipment or interconnected system or subsystem of equipment, that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information by an executive agency. (Equipment is used by an executive agency if the equipment is used by the agency directly or is used by a contractor under a contract with the executive agency which (i) requires the use of such equipment, or (ii) requires the use, to a significant extent, of such equipment in the performance of a service or the furnishing of a product.);
 - computers, ancillary equipment, software, firmware and similar procedures, services (including support services) and related resources.

The term "information technology" does not include:

- any equipment that is acquired by a Federal contractor incidental to a Federal contract;
 - national security systems as defined in the Clinger-Cohen Act of 1996 (40 U.S.C. 1452).
- n** **Integrated Service Delivery** - The provision of Internet-based federal government information or services related according to function rather than separated according to the boundaries of agency jurisdiction.

5 AUTHORITIES AND REFERENCES

The E-Government Act of 2002
 The Chief Financial Officer (CFO) Act of 1990
 The Government Performance and Results Act of 1993 (GPRA)
 The Federal Acquisition Streamlining Act of 1994 (FASA)
 The Paperwork Reduction Act of 1995 (PRA)
 The Clinger-Cohen Act of 1996 (CCA)
 The Government Paperwork Elimination Act of 1998 (GPEA)
 The Federal Information Security Management Act (FISMA)
 Privacy Act
 Federal Records Act

OMB Circular A-11

OMB Circular A-130

USDA Strategic Plan

USDA eGovernment Strategic Plan and Agency eGovernment Tactical Plans

6 USDA's APPROACH TO INFORMATION AND TECHNOLOGY TRANSFORMATION

USDA is rapidly incorporating new technologies into its program delivery strategies. The Internet is used for information dissemination and business interactions with internal and external customers and partners. USDA is partnering with other federal agencies and state and local governments in information and data sharing activities using common databases and web-enabled applications. USDA has initiated several enterprise initiatives and has aligned with, and is implementing, government-wide initiatives as well. These initiatives are foundational to USDA's current and future enterprise architecture. USDA's enterprise architecture is advanced through a disciplined and collaborative decision-making approach through the Capital Planning and Investment Control process.

USDA's transformation approach requires both leveraged investments and customer-centric focus demanding a shift from working in independent agency- and project-specific systems to delivering information and services through integrated, enterprise-wide and interdepartmental solutions. Specifically, as approved through USDA's Capital Planning and Investment Control process, all information technology investments must: a) address opportunities to provide services through collaborative versus single agency approaches; b) integrate processes and transactions to improve the customer's experience; and c) align with USDA's current and future Enterprise Architecture. USDA's approach considers the needs of all customers and recognizes that USDA may need to operate dual delivery channels as customers transition to web-based and other electronic systems.

The three major components of USDA's Information and Technology Transformation are the Transformation Framework, the Enterprise Architecture and the Capital Planning and Investment Control process. These three components provide linkage through the planning, budgeting, and decision-making processes to advance USDA's implementation of the President's Management Agenda and the Federal Enterprise Architecture and its own desire to improve service to its customers, stakeholders and employees.

The Information and Technology Transformation effort is guided by the President's Management Agenda, USDA's Strategic Plan, USDA's eGovernment Strategic Plan, Agency eGovernment Tactical Plans, the USDA's Capital Planning and Investment Control guide, the Paperwork Reduction Act, the Clinger-Cohen Act, the eGovernment Act, OMB Circulars A-11 and A-130, and the Federal Enterprise Architecture model.

7 USDA's TRANSFORMATION FRAMEWORK

Effective customer service and program delivery is facilitated through efficient business practices, ease of information sharing, and prudent investments in technology infrastructure. Achieving transformed program delivery requires the knowledge, perspectives, and participation of employees at all levels in the USDA enterprise. Contributions from both the business and information technology communities ensure the current and future enterprise architecture support the needs of business and customer requirements of the organization. Effecting this transformation will require a commitment from all mission areas, agencies and staff offices, executives and non-executives, technical information technology professionals and program leads.

All existing and proposed USDA information management and technology investments will be evaluated to ensure that Internet-based and other electronic information, services and program delivery channels have been sufficiently considered. Investments must align with USDA business goals and objectives and the USDA eGovernment mission, vision, goals and objectives. They must further integrate with and not duplicate USDA and government-wide initiatives. Only those information management and technology projects that align with USDA's overall information and information technology investment strategy will be approved. Exemptions for non-conforming investments are granted only in exceptional circumstances.

The following initiatives are integral parts of USDA's Transformation Framework and USDA's current and future enterprise architecture direction:

- a **President's Management Agenda – Presidential eGovernment Initiatives and Lines of Business.** “Expanding Electronic Government” is one of the five key elements in the President's Management Agenda. The key goals of this element are to improve information resources management planning through the budget process and champion citizen-centered electronic government that will result in a major improvement in the federal government's value to the citizen. USDA participates in 21 of these inter-departmental projects and line of business initiatives and is required to align overlapping Departmental projects with the broader Government-wide efforts. Lines of business include financial management, human resources, grants, Federal Health Architecture, and case management.

b **USDA eGovernment Strategic Plan –USDA eGovernment Smart Choices.**

USDA's eGovernment Strategic Plan serves as the Department's guide to transforming the development and delivery of USDA information and services. The plan identifies 24 cross-agency eGovernment opportunities that were adopted by the Deputy Secretary and the E-Board. These 24 opportunities are categorized as either Strategic or Enabler initiatives. The 15 Strategic initiatives are programmatic in nature and directly impact how information, services, and products are delivered to USDA customers. The 9 Enabler initiatives provide foundational architectural components that allow program delivery from an enterprise perspective and build USDA's current and future enterprise architecture direction.

- c** **Agency eGovernment Tactical Plans.** To augment the Department's eGovernment Strategic Plan, each agency develops an annual Agency eGovernment Tactical Plan. The Agency eGovernment Tactical Plans describe how each organization will support and integrate with the USDA eGovernment Strategic Plan, the Presidential eGovernment Initiatives, and other eGovernment priorities that are critical to its business. The plans provide an opportunity to further enhance the visibility and integration of eGovernment planning efforts across the Department and allow the Office of the Chief Information Officer to better manage USDA's information technology portfolio. Each agency is required to submit in its information technology budget an investment proposal for each initiative listed in its eGovernment Tactical Plan. Agency eGovernment Tactical Plans must integrate with the agency programmatic budget, align with USDA's enterprise architecture, and comply with USDA's Capital Planning and Investment Control and information technology waiver processes.

USDA's Transformation Framework is advanced through its governance structure consisting of the eGovernment Working Group, the Agency eGovernment Steering Committee, the USDA Presidential and Lines of Business Initiative Leads, and Agency Decision Makers. Agency Heads ensure that the individuals fulfilling the roles and responsibilities required by these positions have the authority and executive support required to make critical resource decisions and lead change within the organization. Members of the eGovernment Working Group have the principal communication responsibility within their agency and in representing their agency to USDA's eGovernment initiative leaders.

8 **USDA's ENTERPRISE ARCHITECTURE**

USDA's enterprise architecture defines the agency's business applications, the information necessary to operate the business, and the technologies necessary to support the business operations. USDA is developing its enterprise architecture to establish an enterprise-wide roadmap to achieve its mission within an efficient information technology environment. This will provide a sound foundation to support the Capital Planning and Investment Control and Information Technology waiver processes.

The USDA enterprise architecture builds upon the individual agencies enterprise architecture efforts and investment decisions, and the foundation of the Federal Enterprise Architecture. The investment decisions made today will affect the way the USDA conducts business well into the next decade.

The enterprise architecture is designed to yield significant results in the areas of business productivity, information technology asset productivity, and risk management. It helps prevent the duplication of information technology resources by providing a modernized blueprint for investments and the business capabilities supported across USDA. Moreover, it allows managers to quickly identify opportunities to utilize corporate contracting for equipment and consulting services. These practices will reduce costs associated with future information technology investments. In those cases where USDA enterprise architecture and the Federal Enterprise Architecture require alignment, the Federal Enterprise Architecture takes precedence.

USDA's enterprise architecture is managed by the USDA Enterprise Configuration Control Board (ECCB). All recommendations by the ECCB are made to the USDA Chief Information Officer, who may approve (with or without modifications) or reject a recommendation of the ECCB. Similarly, all decisions and dispensations made by the ECCB are subject to the review by the Chief Information Officer, who may endorse, reject or remand for reconsideration any decision of the ECCB. USDA's E-Board has the ultimate authority for approving USDA's Enterprise Architecture.

9 USDA'S CAPITAL PLANNING AND INVESTMENT CONTROL (CPIC) PROCESS

Recognizing both the importance of information management and technology investments to the organization and their role in supporting the success of these investments, the Office of the Chief Information Officer is engaged in an ongoing effort to establish, maintain, and support an information and technology investment analysis and decision-making environment. This environment consists of three key components: executive decision-makers, supporting tools, and repeatable processes.

- a Executive decision-makers** – Consists primarily of the Executive Information Technology Review Board (E-Board), which oversees the process, approves investments and is a stakeholder in the success of USDA.
- b Tools** – USDA uses a variety of tools to manage its information technology investments. A primary tool is a web-based project portfolio management tool that integrates fundamental project management activities with portfolio level reporting across USDA.

- c Processes** – Capital Planning and Investment Control is USDA’s primary process for making decisions about which initiatives and systems in which USDA should invest, and creating and analyzing the associated rationale for these investments.

The Capital Planning and Investment Control process ensures that USDA’s investments in information and information technology are well thought out, cost-effective, and support the missions and business goals of the organization advancing USDA’s enterprise architecture. Ongoing information technology investments in the operational mode (i.e., steady state phase) must undergo an eGovernment Strategy Review. Through sound management of these investments, the E-Board determines the information technology direction for USDA through the USA enterprise architecture, and ensures that agencies manage information and technology investments with the objective of maximizing return to the Department and achieving business goals.

10 ROLES AND RESPONSIBILITIES

- a The Office of the Chief Information Officer (OCIO)** will provide leadership for Department-wide implementation of USDA’s Transformational Framework, Enterprise Architecture, and the Capital Planning and Investment Control process.

- (1) **Specific responsibilities within OCIO include:**

- (a) Leading and providing oversight of the common enterprise and external initiatives in USDA’s enterprise architecture and eGovernment Strategic Plan.
- (b) Designing, implementing, and managing the enterprise architecture and Capital Planning and Investment Control programs.
- (c) Implementing, managing and maintaining USDA-wide telecommunications services, including intrusion detection, and establishing telecommunications technical standards and business practices for the Department.
- (d) Managing all aspects of cyber security across the enterprise architecture.
- (e) Working with agencies to provide cost effective solutions that enhance service to customers and USDA employees.

- (2) **Each of the OCIO organizational components** shall address USDA’s information and information technology requirements as collaborative and integrated processes. The processes shall:

- (a) Provide for the selection of information technology investments, and the management and evaluation of the results of such investments;

- (b) Be integrated with the Departmental processes for making budget, financial and program management decisions;
- (c) Include: 1) minimum criteria to be applied in considering whether to undertake a particular investment in information systems, 2) criteria related to the quantitatively expressed projected net risk-adjusted return on investment and 3) specific quantitative and qualitative criteria for comparing and prioritizing alternative information systems investment projects;
- (d) Provide for identifying information systems investments that would result in shared benefits or costs for other Federal agencies or State or local governments;
- (e) Require identification of quantifiable measurements for determining the net benefits and risks of a proposed investment; and
- (f) Provide the means for senior management to obtain timely information regarding the progress of an investment, including a system of milestones for measuring progress, such as earned value management systems, on an independently verifiable basis, in terms of cost, capability of the system to meet specified requirements, timeliness, and quality.

b Executive Information Technology and Investment Review Board (E-Board).

The E-Board represents the Department's information and information technology policy decision-makers who are responsible for reviewing and approving strategic investments and USDA's enterprise architecture. The E-Board is comprised of the Department's senior-level policy executives, as follows:

- (1) Deputy Secretary - Chair
- (2) Chief Information Officer - Vice-Chair and Executive Secretary
- (3) Chief Financial Officer
- (4) General Counsel
- (5) Director of the Office of Budget and Program Analysis
- (6) Under Secretary for Farm and Foreign Agricultural Service
- (7) Under Secretary for Food, Nutrition and Consumer Service
- (8) Under Secretary for Food Safety
- (9) Under Secretary for Marketing and Regulatory Programs
- (10) Under Secretary for Natural Resources and Environment
- (11) Under Secretary for Research, Education, and Economics
- (12) Under Secretary for Rural Development
- (13) Assistant Secretary for Administration

(14) Assistant Secretary for Civil Rights.

At the Board's discretion, ex-officio members may be named to provide specialized expertise and advice.

The E-Board provides overall strategic direction and guidance for USDA's evolving enterprise architecture and for capital investments. The E-Board reviews spending proposals for major information technology initiatives from a very broad and strategic perspective to assess their potential for long-term improvements in program and service delivery within the context of current and projected budget realities.

- c** **USDA Enterprise Configuration Control Board (ECCB).** The ECCB advises and recommends to the Chief Information Officer ways in which the Department manages its technology, data, and information through the development, maintenance, and oversight of the enterprise architecture. The ECCB works with existing and new system-level Configuration Control Boards.

NOTE: The Chief Information Officer provides day-to-day management and stewardship of the enterprise architecture on behalf of the E-Board, which owns the enterprise architecture and is responsible for protecting and supporting it.

- d** **USDA's eGovernment Governance Structure.** Agency Heads ensure that the individuals fulfilling the below described roles have the authority and executive support to make critical resource decisions and lead change within the organization.
- (1) **eGovernment Decision-Makers.** eGovernment Decision-Makers are Executive Sponsors from either the business or information technology area that have the authority to commit financial and human resources for eGovernment initiatives on behalf of their agency. These individuals establish the level of agency commitment to various initiatives. They are responsible for championing, coordinating, sharing information, and facilitating implementation of USDA's major eGovernment initiatives.
- (2) **eGovernment Working Group (EGWG).** EGWG members are Executive Sponsors from either the agency business or information technology area and are responsible for leading all eGovernment activities for their respective agencies. They are responsible for championing, coordinating, sharing information and facilitating implementation of USDA's major eGovernment initiatives and chairing the agency eGovernment Steering Committee. They ensure that agency eGovernment Decision Makers and all agency program areas are fully apprised of

USDA's enterprise architecture and eGovernment direction.

- (3) **Agency eGovernment Steering Committee.** This Committee is comprised of the of program leaders and specialists representing public affairs, information technology, security, privacy, forms management and records management. The Committee addresses agency compliance with USDA's current and future enterprise architecture and USDA's eGovernment Strategic Plan. The Committee develops and annually updates the agency eGovernment Tactical Plan and monitors its implementation. The agency's EGWG member will chair the steering committee.
- (4) **Presidential Initiative (PI) Leads - USDA Presidential Initiative & Line of Business Lead.** USDA participates in 21 of the Presidential Initiatives and line of business initiatives. This commitment is reflected in both financial and personnel contributions. Each USDA PI Lead:
- (a) Represents USDA on government-wide decision-making bodies deciding USDA's financial and human resource contributions and ensuring USDA is getting a return on these investments;
 - (b) Coordinates USDA's involvement in the initiative, including working with the initiative's Managing Partner, the OCIO and all participating USDA agencies; and
 - (c) Provides overall stewardship for the initiative at USDA, including measuring the performance of all USDA agencies participating in the effort and serving as the point of contact for all inquiries concerning the initiative.
- e **Chief Acquisition Officer and Heads of the Contracting Activities.** USDA's Chief Acquisition Officer and heads of contracting activities ensure that information technology procurements adhere to information technology investment policies and federal acquisition regulations and policies.
- f **Agency and Staff Office Executives, Program Managers, and Chief Information Officers.** USDA agencies are responsible for supporting USDA's eGovernment, enterprise architecture, and Capital Planning and Investment Control direction. Agency leadership ensures that each investment in information technology complies with the eGovernment and enterprise architecture vision, principles, and standards, and is consistent with agreements reached through the collaborative decision-making processes.

Agencies will ensure collaboration and integration of functions across agency leadership and management functions. These functions include, but are not limited to, the EGWG member and eGovernment Steering Committee, PI leads, eGovernment decision-makers, the Government Paperwork Elimination Act Coordinator, records management officer, forms management officer, and information collection coordinator, information technology portfolio manager(s) and enterprise architect.

- g** **All Employees.** Each employee is responsible for providing customer service. These services may be provided to external customers and stakeholders or as services to employees. All employees are encouraged to become fully knowledgeable of eGovernment capabilities and tools, and apply them to their work situation accordingly.

End