Appendix E – Segment Architecture Summaries

Segment Architecture Summaries

March 2007

Part 1: Completed Segment Architectures

The following segment architectures have completed at least one iteration of the performance improvement life cycle:

1. AgLearn
2. Asset Management
3. Civil Rights Enterprise System
4. Computer Emergency Notification System (CENS)
5. Document Management
6. Electronic Permits
7. Enterprise Correspondence Management Module (ECMM)
8. Integrated Acquisition System (IAS)
9. Living Disaster Recovery Planning System (LDPRS)
10. Portal, Enterprise Shared Services (ESS)
11. USDA Common Customer Statement
12. USDA EA Repository
13. Web Content Management Tool, Enterprise Content Management (ECM)
14. WorkLenz Portfolio Manager
15. Universal Telecommunications Network (UTN)
16. Web Farms

1. AgLearn

Target Architecture Level: Common Enterprise Wide Application
Related Investment Name: eLearning/AgLearn
Related Unique Project Identification: 005-03-02-01-02-8005-04

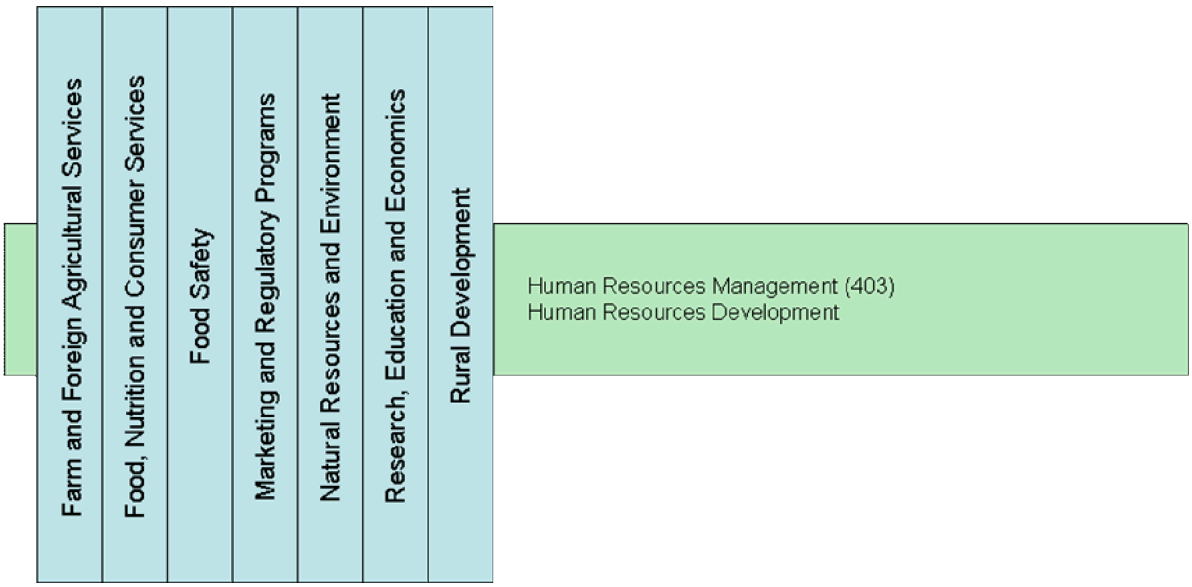
Background and Overview

AgLearn is an enterprise-wide service supporting the training needs of USDA employees, partners and customers. AgLearn uses the Plateau learning management system (LMS) and was acquired through OPM's GoLearn initiative.

USDA's eGovernment strategic plan defines development of an enterprise-wide eLearning capability as a high-priority. Capability to manage training was limited, uncoordinated, and available in only a small number of USDA agencies. USDA's eLearning initiative (later renamed AgLearn) developed an enterprise-wide capability that eliminates redundant systems, allows employees, partners, and the public to access content and manage training plans online, and coordinates content development and purchasing.

AgLearn provides a centralized infrastructure for deploying enterprise-wide and agency-specific courses and enables employees and supervisors to manage learning functions (such as registration, course delivery, and skills assessment). AgLearn is complemented by policies and processes to coordinate purchasing and management of learning content, combining purchases within USDA and across the Federal government to more effectively and cost-efficiently obtain training resources. AgLearn is USDA's implementation of the President's E-Training Initiative, fully utilizing a GoLearn service provider acquired through OPM to develop and operate the LMS, and to coordinate purchases of training content through OPM contracts.

AgLearn



Pre-AgLearn Baseline (May 2002)

- USDA agencies managed their learning resources (including both learning management and content) independently, using a wide variety of vendors and platforms.
- Learning management capabilities varied significantly. Seven agencies (APHIS, RMA, NRCS, FSA, RD, FSIS and FS) used Commercial -Off-The-Shelf (COTS) LMS software from three different vendors; four agencies (FS, GIPSA, NRCS, and OCFO) used internally developed systems. All other agencies used paper-based processes to manage learning functions such as course enrollment and skills assessment. Most agencies without an LMS lacked the capability to provide Web -based training, relying only on traditional methods such as classroom training or CD-ROMs; these agencies also lacked the capability to electronically track data on historical training records or costs.
- Uncoordinated processes across nearly 20 training offices caused USDA to purchase similar content multiple times. This lack of coordination further prevented sharing of developed content across agencies and did not enable USDA to achieve economies of scale in content purchases.

Target (September 2005)

- AgLearn replaced nine training systems used in nine agencies across the Department, including RMA Distance Learning System, FSIS Virtual Training Assistant, FS Virtual Training Assistant, APH IS Agency Readiness Center, FS Training Integrated Personnel System, GIPSA Training Management System, ICAMS eLearning Module, NRCS eLearning Center, and the National Finance Center TRAI (Training Information) system. Two agency systems were retired in FY 2004 (RMA's Distance Learning and FSIS VTA), with the remaining seven systems retired in FY 2005.
- AgLearn is integrated with USDA's Enterprise eAuthentication Service and receives employee data from USDA HR systems. USDA integrated AgLearn with the USDA Graduate School training system and added the capability to request training from sources outside USDA during FY 2005 and integrated with the USDA financial management system in FY 2006.
- Complementing AgLearn are policies and procedures that require enterprise-wide coordination of content acquisition, with purchases completed via OPM's GoLearn contracts. Centralized content acquisition permits consistent, enterprise-wide use of mandatory training (in areas such as security and civil rights) and allows USDA to acquire and develop custom content for a wider audience.
- USDA has issued policies requiring use of AgLearn and prohibiting further investment in redundant training systems and uncoordinated content acquisition.

Planned AgLearn Performance Goals

PLANNED PERFORMANCE IMPROVEMENT GOAL	PLANNED PERFORMANCE METRIC
Increased access to relevant, high quality training for private and public business partners.	Amount of training available to business partners; Rating of satisfaction with training available to business partners.
Eliminate redundant eLearning systems.	Number of USDA systems used to deliver eLearning functionality.
Increased collaboration for training development and distribution.	Number of duplicate training units; Number of redundant training content licenses.
Increased integration and data sharing between learning systems and other USDA and eGovernment systems.	Number of USDA and eGovernment Presidential Initiative systems integrated with the eLearning system.
Increase in the percentage of USDA employees with acceptable level of access to eLearning.	Percentage of USDA employees with access to eLearning.
Increase in the percentage of USDA employees using a learning management system to complete training needs.	Percentage of USDA employees using a learning management system.
Decrease in time spent per individual per course on support functions and administrative tasks.	Amount of time spent on training-related support functions and administrative tasks.
Increase in trainee and management satisfaction with support and administrative functions.	Rating of employee and management satisfaction with training-related support and administrative functions.

PLANNED PERFORMANCE IMPROVEMENT GOAL	PLANNED PERFORMANCE METRIC
Increase in the accuracy of management reporting and analysis.	Rating of employee satisfaction with training-related reporting and analysis tools.
Increase in the ability to provide rollup data for enterprise-wide reporting needs.	Percentage of data from the eLearning system that can be utilized for enterprise-wide reporting purposes
Decrease in the number of redundant learning processes performed by Agencies.	Amount of time spent designing and implementing agency learning processes.
Increase in quality of training opportunities offered.	Rating of employee satisfaction with training content.
Decrease in average per unit training costs.	Costs associated with training.
Increase number of consolidated high-interest and required training courses to employees. (e.g. Civil Right, sexual harassment, ethics.)	Number of high-interest and/or required training courses on the system catalog.
Increase the reporting information for managers to make Training delivery decisions.	Performance and productivity ratings of employees; Utilization of 360-degree feedback reporting for measuring the performance gap across competencies.

FY 2007 Current Status

- Redirected staging environment to eAuthentication St. Louis, MO, facility to provide faster response.
- Coordinated APHIS Veterinary Training Initiative for veterinary accreditation program for accredit 60,000 veterinarians
- Integrated Online SF-182
- Integrating USDA Leadership, 2210 series, and HR competencies
- Creating connection to electronic Individual Development Plans
- Negotiating with NFC regarding the electronic submittal of training requests
- Developing Cost Recovery model to provide more transparency and accountability for services
- Updating AgLearn Business Case
- Developing performance metrics to gauge progress
- Redesigning AgLearn web pages, subject areas, and catalogs to create increased demand for discretionary training
- Developing marketing plan to increase awareness and usage of AgLearn

2. Asset Management

Target Architecture Level: Common Enterprise Wide Application
Related Investment: Corporate Property Automated Information System
Related Unique Project Identifier: 005-03-01-01-01-1000-00

Background and Overview

This U.S. Department of Agriculture (USDA) Corporate Property Automated Information System (CPAIS), a Level 3 investment, provides an integrated asset management solution that enables USDA to effectively manage its real and personal property assets department-wide.

The Department requires an asset management solution that provides the capabilities for stewardship, internal controls, and integration with its procurement and financial accounting systems. CPAIS interfaces with CFMS and will interface with FMMI, the planned replacement for CFMS. Managers and members of the staff must have easy access to accurate information about USDA assets in order to make informed asset decisions, respond to external inquiries, and be prepared for natural disasters and terrorist attacks.

The objective of this investment is to provide a USDA-wide asset management solution that meets all financial management, information security, and internal control requirements. USDA expects this system to provide online access to property management information and source data entry, and the ability to provide financial data integrity that will maintain an unqualified, or "clean," opinion on an audit of the consolidated financial statements.

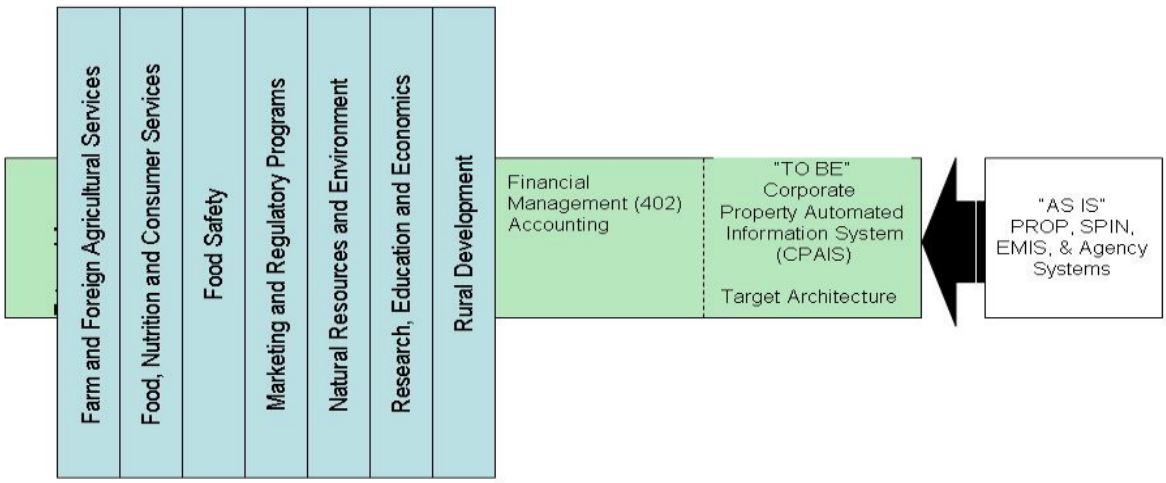
Phase 1 provides an integrated asset management solution that will enable USDA to effectively manage its real property assets department-wide including USDA owned, leased and GSA assignments and delegated authorities.

Phase 2 provides an integrated asset management solution that will enable USDA to effectively manage its personal property assets department-wide.

Phase 3 provides an integrated asset management solution that will enable USDA to effectively manage its personal property assets for replacement of the Forest Service equipment maintenance system.

The following graphic provides an overview of the Asset Management segment architecture and how it relates to USDA's missions.

Asset Management



As-Is

- A number of USDA agencies used independent, uncoordinated systems to track real property. Agencies used simple databases or manual, paper-based tracking processes to manage real property.
- USDA's Associate Chief Financial Officer for Financial Systems (ACFO - FS) manages the legacy Personal Property Management System (PROP) which integrates fiscal accounting with personal property accountability and provides uniform data for the management and control of accountable, leased, loaned, sensitive, and excess property. This is a department-wide application.
- Separate systems, including Supplies Inventory (SPIN) and Equipment Management Information System (EMIS) were used to track certain types of property. This is a department application, however, only one agency uses this system.
- Because data was not centrally managed and was incomplete, Department-wide inventories were not fully accurate and timely. This made developing unqualified financial statements difficult, as property is a major component of USDA's balance sheet.
- No major automated process or system existed to facilitate the sale of excess property. A Federal Excess Personal Property Program was (and continues to be) used to transfer of excess Federal personal property to eligible recipients as authorized by various authorities.

- USDA began implementing an enterprise-wide system, CPAIS, in FY 2004 to manage real property across the Department. During FY 2006, USDA implemented Phase 2 of CPAIS for personal property.
- The real property component, an enhanced Web-based version of the INFRA real property management system in use at the Forest Service since 1998, is operational and provides USDA with a single consolidated inventory to manage the real property portfolio. CPAIS provides for enhanced electronic data storage and exchange, improving collection and availability of property information including leases and GSA assignments. Agencies can access real property information online and in real-time.
- A personal property component provides similar functionality to the real property component and was integrated into CPAIS in FY 2006.
- CPAIS interfaces with the Foundation Financial Information System (FFIS), USDA's corporate financial management system to process acquisitions and resulting depreciation (which in turn is part of the Corporate Financial Management System (CFMS)). It is also integrated with real estate-related GSA real property related systems, including Tracking and Administering Real Property (STAR) and Federal Real Property Profile (FRPP).
- Other agency-specific asset management systems were retired and their data and features migrated to CPAIS in FY 2004 for the implementation of real property. In FY 2006, CPAIS retired the two legacy personal property systems.

Current Baseline

- Achieve accountability for 85% of owned real property for each agency implementation of Phase I.
- As of the end of the most recent audit year, real property across the Department had an error rate of less than 2%; CPAIS itself has an error rate of less than 2%.
- Maintain or improve results in the GSA FRPP leading toward USDA's 5-year property inventory certification in 2008; the first automated FRPP reports using the new system have been sent to GSA, meeting Executive Order 13327.
- Achieved customer satisfaction rating of 95% in the new system. The next CPAIS release will include enhancements which are expected to improve the satisfaction percentage.
- 100% of all known owned, leased, and GSA assignments are loaded in CPAIS
- For compliance with the President's Management Agenda, the new system achieved a Green for improvement. An Asset Management Plan has been drafted and approved by OMB.

Future Status
USDA will use the real property sales and personal property sales components of the government-wide Federal Asset Sales (FAS) initiative once these services become available, identifying property to be sold via CPAIS and transferring data from CPAIS to FAS systems as necessary. This feature is a future enhancement.

Asset Management Target Performance Goals

Fiscal Year	Measurement Area	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvement to the Baseline	Actual Results
2006	Mission and Business Results	Financial Management	Asset and Liability Management: Percentage of accountability for owned, leased, and assigned real property	2004 percentage of accountability for all real property	Maintain accountability for 100% of all real property	Real Property maintained 100% accountability
2006	Customer Results	Financial Management	Customer Satisfaction: Percentage of satisfied users, as measured by annual customer satisfaction survey	2005 customer satisfaction rating	Maintain or improve customer satisfaction rating to 90% or better in 2006	Continued Customer Satisfaction level above 95%
2006	Processes and Activities	Financial Management	Errors: Existence and Completeness rates related to CPAIS	FY 2005 Error Rate of less than 2%	Maintain or improve Existence and Completeness testing result below industry standard of 5%	Existence and Completeness testing results continue below 2% which is well below industry standard.
2006	Processes and Activities	Financial Management	Compliance: President?s Management Agenda score for the Federal Real Property Asset Management Initiative	2005 PMA Score for Federal Real Property Asset Management Initiative	For compliance with PMA, improve upon PMA score for Federal Real Property Asset Management Initiative until green status is achieved or maintain green status if achieved	Achieved a yellow status with a green for progress.

2006	Technology	Information Management	Data Reliability and Quality: Extent to which data or information is complete	2005 GSA FRPP; Progress in 2005 toward 5-year real property inventory certification; Most recent personal property inventory certification	Maintain or improve results of GSA FRPP, achieve progress toward 5-year property inventory certification in 2008, and achieve progress toward or attain 2-year personal property inventory certification	Currently, on target for the real property certification in 2008 on the 5-year cycle and personal property on the 2-year cycle.
2006	Technology	Information Management	For compliance with the President's Management Agenda, achieve green score for Federal Real Property Asset Management Initiative (when performance measures are established)	Government Federal Property Asset Management Council is developing performance measures.	For compliance with the President's Management Agenda, achieve green score for Federal Real Property Asset Management Initiative (when performance measures are established)	Achieved a yellow status with a green for progress.
2006	Technology	Financial Management	User Satisfaction: User Acceptance Test for release 1.3	User satisfaction achieved for release 1.3	Assure that User Acceptance Test meets desired standards for representatives for all agencies for 2006 release	All releases completed User Acceptance and certification before being put into production

3. Civil Rights Enterprise System (CRES)

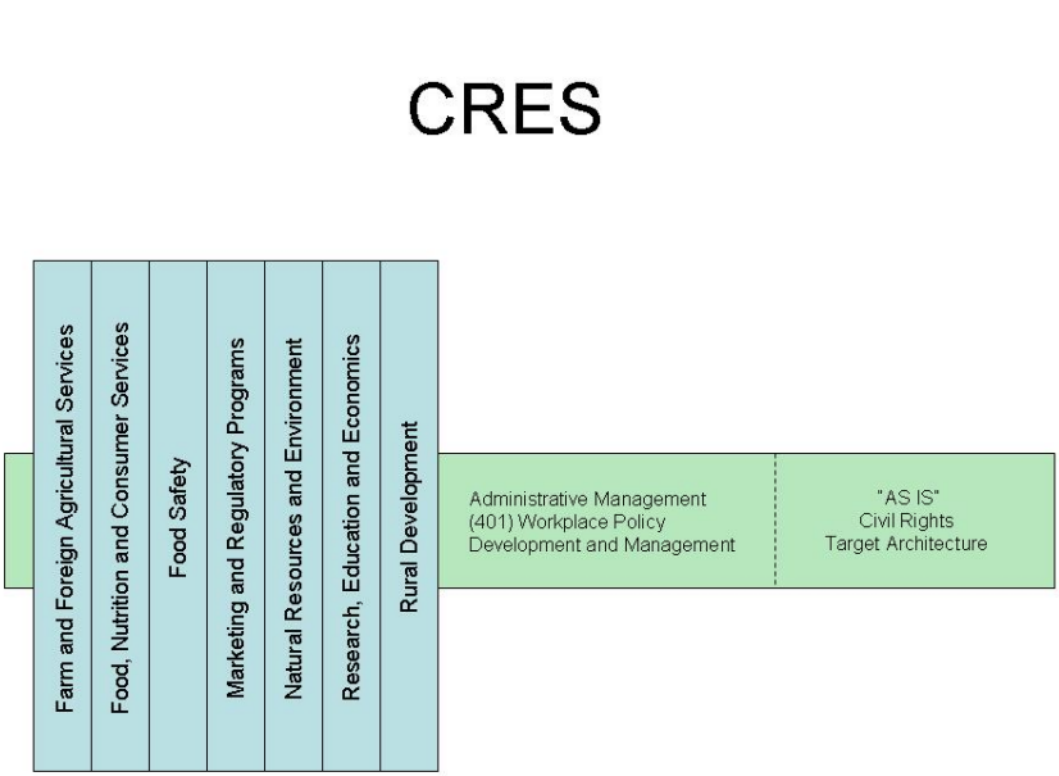
Target Architecture Level: Common Enterprise Wide Application
Related Investment: Civil Rights Enterprise System (CRES)
Related Unique Project Identifier: 005-05-01-81-02-0001-00

Background and Overview
The Civil Rights Enterprise System (CRES) enables USDA and its Agencies to track, process, manage, and evaluate employment and program complaints as well as meet regulatory reporting requirements. CRES is essential to implementing USDA's commitment to ensuring compliance with equal employment opportunity (EEO) and civil rights (CR) for all Americans, particularly to address chronic backlogs in CR complaints and comply with the No FEAR Act of 2002.

CRES enables USDA to close a serious performance gap in processing and reporting EEO and CR complaints by implementing a uniform, Web-based, enterprise-wide system for tracking, processing, and managing employment and program complaints, as well as meeting regulatory reporting requirements. The system provides core support for the mission of CR offices both at the Department and agency levels, and it serves management needs of agency heads who by law are charged with responsibility for agency compliance with EEO and CR.

Through its enterprise-wide scope, CRES replaces independent, uncoordinated systems and processes used for tracking civil rights complaints and actions across USDA agencies. This coordinated approach improves service to citizens, addresses the serious issues caused by inefficient CR and EEO compliant processing and resolution, and improves USDA's civil rights-related IT investments in support of the Department's envisioned Enterprise Architecture.

The following graphic provides an overview of the CRES segment architecture and how it relates to USDA's missions.



Pre-CRES Baseline (2003)

- Historically, automation for equal employment opportunity (EEO) and civil rights (CR) complaint processing has been fragmented, limited, and expensive. USDA's agencies have had stand-alone information systems that were disconnected from the centralized complaint processing functions of the USDA Office of Civil Rights. This has put both the Department and its Agencies at a disadvantage in terms of service to employees and the customers of its programs.
- The severity of the problems is underscored in past reports by the General Accounting Office (GAO), congressional testimony, and court settlements in the range of $1 billion for program complaints.

Current Baseline

- CRES is implemented as a Web-based enterprise-wide system that supports USDA and all Departmental agencies by tracking, processing, and managing employment and program complaints, as well as meeting regulatory reporting requirements.
- The system provides core support for the mission of CR offices both at the Departmental and Agency levels, and it serves management needs

of agency heads who, by law, are charged with responsibility for agency compliance with EEO and CR.

- The Employment Complaint Processing and Reporting module was implemented in a first release in FY 2004 – FY 2005.
- The Program Complaint Processing and Reporting module is being implemented in a second release in FY 2006 – FY 2007.
- CRES also will provide management and reporting tools that strengthen program results for the USDA Office of Civil Rights and the Department's agencies. This includes automated preparation of reports required by the Equal Employment Opportunity Commission (EEOC), the Department of Justice (DOJ), Office of Personnel Management (OPM), and other Federal oversight Agencies.

CRES includes capabilities to:

- Establish an automated solution that meets the core complaint processing and reporting needs of both the Department and its Agencies;
- Track complaints at both the informal and formal stages through a single unified system;
- Automate the preparation of standard reports for Federal oversight agencies, Departmental management, Agency heads, and the public;
- Improve services to customers (complainants) by processing complaints faster;
- Assure that complainants are informed fully of their rights as required for employee complaints covered under the No FEAR Act of 2002;
- Provide real-time access to complaint data;
- Eliminate manual data gathering and improve the accuracy of data in reports;
- Enable USDA Agencies to access case status data online throughout the entire complaint processing cycle without status calls or inquiries;
- Reduce costs by relieving USDA Agencies of the need to maintain their own unique information systems for CR;
- Cut the costs of maintaining huge case files of paper documents for complaints by implementing an electronic document strategy;
- Provide CR managers with better tools for tracking case status, assuring compliance with deadlines, and assessing productivity of caseworkers;
- Respond promptly and consistently on a Department-wide basis to changes in laws, regulatory guidance, and reporting requirements;
- Implement an enterprise-wide system with sufficient flexibility to adapt to routine changes in organization, workflow, and case processing;

- Establish a consistent business, data and technology architecture for all components of the CRES-employment complaints, program complaints, and compliance/diversity reporting.

Future Status

Future enhancements of CRES include additional reporting features and refinements as required by legislation and inter-governmental information sharing.

Actual CRES Target Performance Goals (2005)

Note: CRES was designated as a "Non-major" Investment in 2006.

Fiscal Year	Measurement Area	Measurement Category	Measurement Indicator	Baseline	Planned improvements to the Baseline	Actual Results
2005	Mission and Business Results	Service Coverage	Number of USDA Agencies Served by Phase 1 (employment) of the Enterprise System	0	80%	100%
2005	Customer Results	Timeliness and Responsiveness	Average Days to Process Formal Employment Complaint	959	720	
2005	Customer Results	Service Quality	% of CRES Users Trained (Employment Complaints)	0	90%	100%
2005	Processes and Activities	Management and Innovation	% of Integration of USDA and Agency CR Systems (Employment)	0	50%	100%
2005	Technology	Information and Data	Internal Data Sharing: Extent to Which USDA and its Agencies Can Use the Same EEO Database	5%	40%	100%

4. Computer Emergency Notification System (CENS)

Target Architecture Level: Common Enterprise Wide Application
Related Investment: Emergency Programs
Related Unique Project Identifier: 005-03-01-81-02-9700-00

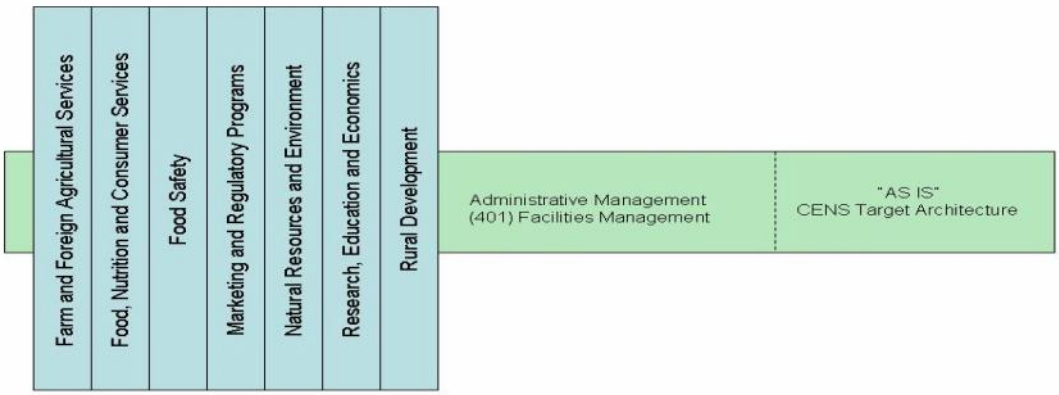
Background and Overview

Saving lives and ensuring the safety of employees is crucial during crisis situations. In today's security-conscious environment, USDA recognizes the need for a system to communicate crisis situations (and actions to be taken in response to them) to its employees. Under the leadership of USDA's Office of Operations the Department developed the enterprise-wide Computer Emergency Notification System (CENS) application to address this need and strengthen procedures for emergency planning and notification.

The CENS application utilizes USDA's intranet network to notify personnel of emergencies, building-related alerts and messages in a designated location. As a reusable, enterprise solution developed and maintained by USDA's National Information Technology Center (NITC), it provides a single solution to serve multiple needs and agencies. It was sponsored by USDA's Office of Operations to notify employees in the Washington DC area of emergency situations, and is also used by non-USDA agencies such as the Department of Veterans Affairs. This design enables USDA to deploy a single, cost-effective system for all locations nationwide in the future and provide services to other agencies and Departments, in line with USDA's Enterprise Architecture vision and the President's Management Agenda.

The following graphic provides an overview of the CENS segment architecture and how it relates to USDA's missions.

CENS



Pre-CENS Baseline (2001)

- USDA faced a number of emergency situations requiring staff evacuation (or other action) in the security-conscious environment after September 11th, 2001, particularly in its Washington DC headquarters complex.
- USDA's processes for notifying employees of emergency situations were inconsistent across locations. Some USDA facilities had public address systems or other means of communicating to employees and others, while others lacked such features.
- A lack of communications tools made notification difficult, sometimes relying on employees in each USDA agency and location to manually notify others of a situation.

Current Baseline

- CENS provides a single tool to allow electronic messages to be sent to thousands of employees' computers, across USDA agencies in the National Capitol Region.
- CENS is managed as a shared service by USDA's Office of Operations and is used by both USDA and external Federal agencies.
- The system is used both to send critical emergency notifications and other time-sensitive messages requiring distribution to a large number of USDA employees.
- CENS is built using industry standard Internet protocols and is compatible with all major Microsoft operating systems to ensure compatibility with virtually any USDA or external agency need.

Future Status

Future enhancements of CENS include continued updates and maintenance as needed.

Planned CENS Target Performance Goals

Note: CENS was designated as a "Non-major" investment in 2006.

To Be Developed

5. Document Management

Target Architecture Level: Common Enterprise Wide Application
Related Investment: Enterprise Content Management (ECM)
Related Unique Project Identifier: 005-55-01-81-04-2004-24

Background and Overview
The USDA Enterprise Content Management (ECM) is an initiative originally defined in USDA's eGovernment Strategic Plan for FY 2002-2006 as part of eDeployment. This eGovernment Strategic Plan was the result of an intensive Department-wide effort that included hundreds of individuals at all levels of the enterprise; executives and non-executives, headquarters and the field, domestic and international, and all agencies and staff offices; modeled in many respects after OMB's Quicksilver initiative.

Guided by an eGovernment Working Group comprised of an appointed representative from every agency and staff office and an eGovernment Executive Council representing each mission area, the plan specifies high-level goals, objectives, strategic and enabling initiatives, critical success factors, performance measure and timelines. Managed by the Rural Development Office of the Chief Information Officer (OCIO), the USDA Enterprise Document Management solution is a suite of technology tools and accompanying business processes that will enable USDA to achieve its goals and objectives for eGovernment; leveraging our investments and delivering document management government services in a more standard manner.

In achieving the goals of our eGovernment Program, the Document Management initiative seeks to solve and prevent the following business problems at USDA:

- Manual business processes are error prone and inefficient and distract our employees from focusing on delivery of our programs and services;
- Duplicative investment in similar information Technology (IT) systems by agencies across USDA;
- Lack of cooperation across agencies for delivering our information, programs, and services online;
- Lack of technology and standards to support common business functions across our agencies.

To solve these business problems, the ECM initiative will develop technologies, standards, and processes for a common centralized service to be utilized by all agencies and staff offices in the Department for the management of documents and other electronic assets. This also includes:

- Corporate taxonomy - common classification scheme for our online content and documents to enable sharing and re-use;
- Collaboration - common platform supporting real-time communication, sharing of content, schedules, messages and ideas; for employees using business applications running on the ECM environment, and business partners using available business applications.

By integrating these technologies and developing related standards, procedures, and services, the ECM initiative will help USDA realize the following business objectives:

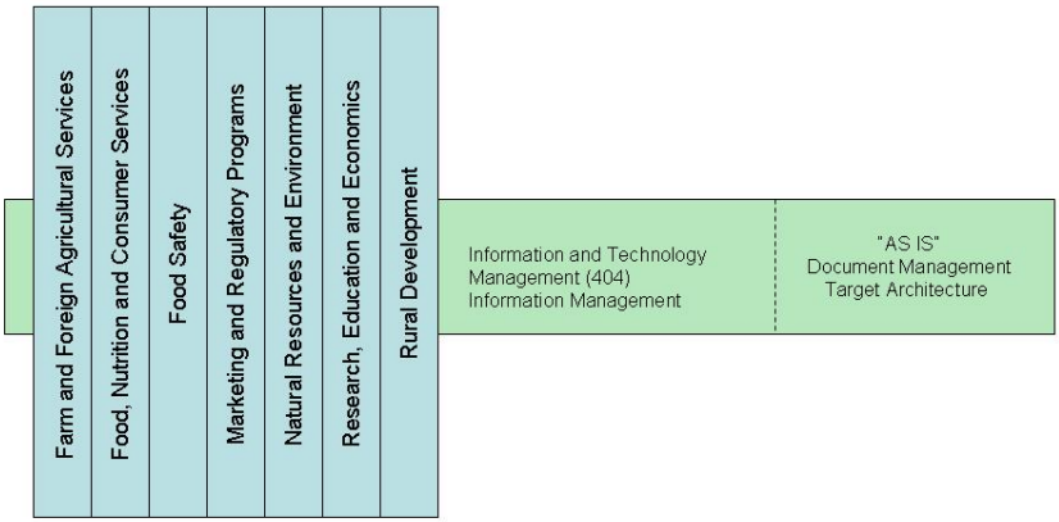
- A consistent and easy interface for all online applications;
- The discovery, sharing, and management of online content, documents, records, and other electronic media;
- The consolidation and sharing of data;
- Access to information and services by area of interest versus USDA's organizational structure;
- The ability to leverage existing technology investments;
- Consolidation of customer support services; and
- Adherence to legislative mandates and participation in Presidential Initiatives.

The services offered by ECM will be enterprise-wide: Department, Agency, or Federal eGovernment initiatives can leverage the capabilities and services the ECM initiative will deliver, thus avoiding the higher costs and risk of operating independently.

The Enterprise Content Management initiative is currently in the Implement and Operate Performance Improvement Life Cycle.

The following graphic provides an overview of the target segment architecture and how it relates to USDA’s missions.

Document Management



Pre-Document Management Baseline (2002)

- No enterprise-wide document management system existed. Agencies used Staff Action to manage Secretarial correspondence assigned to them but used a variety of manual processes and basic electronic tracking systems to track their internal correspondence.
- Significant delays occurred when documents were lost in the authoring and approval chain.

Current Baseline

- Enterprise products (FileNet "workflow" tools) are used to manage information in electronic form; including classification capability, workflow management, and records management.
- A pilot of the ECM system is complete, managing all Secretarial correspondence assigned to the Rural Development mission area. Staff in both the Office of the Executive Secretariat and Rural Development used the system to track and manage this correspondence; the pilot also engaged USDA review and clearance offices, including the Office of Budget and Program Analysis, and the Office of the General Counsel.

- ECM replaces the Staff Action system within OES and across all other agencies and offices.
- Tailored versions of ECM for agencies' use are planned, with OCIO and OES working with agency leaders to determine needs and scope.

Future Status

ECM is based on the Enterprise Shared Services infrastructure, leveraging the FileNet document management tool to provide document storage and workflow features. Specifically, the system includes:

- Web-based access, integrated with the USDA eAuthentication Service;
- Ability to accept documents received by physical mail, fax, or Email;
- Ability to store any common type of document or file (Microsoft Office, PDF, video, etc.);
- Folder-based correspondence storage and retrieval;
- Workflow engine allowing both sequential or simultaneous assignment of actions; and
- Ability to add additional data, notes, or attachments to the initial correspondence.

Future enhancements of the Document Management segment include continued updates and maintenance as needed.

Document Management/ECM Target Performance Goals for (2006)

Fiscal Year	Measurement Area	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvement to the Baseline	Actual Results
2006	Mission and Business Results	Information Management	Increase number of Lines of Business supported by Enterprise Content Management to enable better information management.	3	5	4

2006	Customer Results	Timeliness	Increase number of internal reports to aid in monitoring timeliness in responding to citizen requests for information	6	20	18
2006	Processes and Activities	Efficiency	Increase number of active users of Enterprise Content Management to aid in productivity and efficiency	176	250	315
2006	Technology	Internal Data Sharing	Increase number of documents available in Enterprise Content Management to aid in sharing of information	55,922	700,000	736,982

6. Electronic Permits (ePermits)

Target Architecture Level: Agency
Related Investment: Electronic Permits
Related Unique Project Identifier: 005-32-01-61-01-2001-00

Background and Overview

In October 1998, USDA, Animal and Plant Health Inspection Service (APHIS) working under a cooperative agreement with the National Plant Board assembled a Safeguarding Review Group comprised of 43 stakeholders from states, industry, academia and environmental groups to review its efforts to safeguard American agriculture and plant resources. The Safeguarding Review Group, through extensive research prepared a thorough analysis of the challenges facing the safeguarding system. The report issued by the group in August 1999 specifically identified the need for a comprehensive electronic permit system covering all import permits issued by APHIS's Plant Protection and Quarantine (PPQ) program.

Additional recommendations specific to the permit process include:

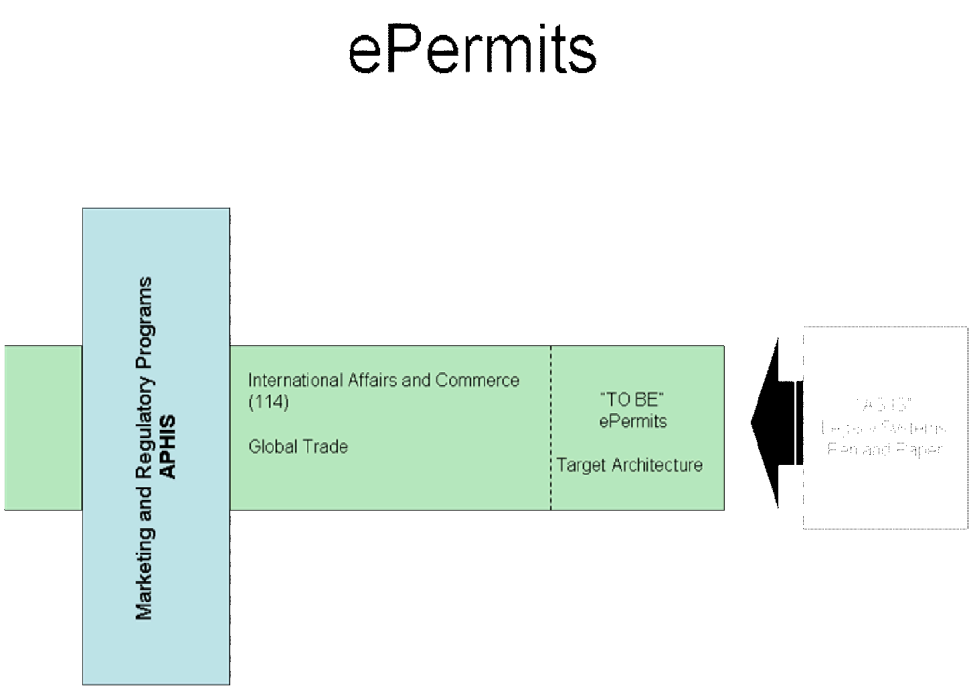
- Adopt new technologies to improve the efficiency of the permit process
- Develop, with a sense of urgency, an electronic database for permit status, tracking, and permit/entry requirements for propagative and non-propagative materials
- Develop an electronic or "paperless" permit system that should be incorporated into an electronic database

In response to government- and Agency-wide eGovernment initiatives and the recommendations identified in the Safeguarding Review Report, PPQ began pursuing the creation of an electronic permitting system – ePermits. To facilitate development of ePermits, PPQ invested resources to examine current permit processes, cross-training permit staff, working with business process re-engineering leaders to streamline the permit processes and gain International Standards Organization (ISO)-9000 certification for the permit process.

As PPQ began to pursue development of ePermits, APHIS Veterinary Services (VS) became interested in the ePermits project and sought inclusion. When Biotechnology and Regulatory Services (BRS) was formed, the management team decided to continue to participate in ePermits. To coordinate among the various APHIS organizations, an ePermits Steering Committee and Working Group were created. Both the Steering Committee

and Working Group include representatives of PPQ, VS and BRS. The f ocus of these teams was to provide guidance throughout the ePermits life cycle.

The following graphic provides an overview of the Enterprise Permits (ePermits) segment architecture and how it relates to USDA's missions.



Pre-ePermits Baseline
The baseline prior to ePermits consisted of a mixture of stove pipe applications and manual operations as indicated below:

- Several legacy systems (Joint Permitting System, Biotechnology Paradox database, Import Tracking System, Permit Issuan ce and Tracking System and eGovernment Pilot web application)
- WordPerfect, MS-Word
- Paper Applications

Current Baseline
As part of the USDA's overall eGovernment initiative to transform and enhance the delivery of its programs, services, and information, t he Animal and Plant Health Inspection Service (APHIS) launched its new electronic permitting system (ePermits) on April 3, 2006. ePermits is a Web -based tool that gives customers the ability to apply for a permit, check its status, and view it online. Subm itting applications and receiving permits via the Internet will save customers a tremendous amount of time and effort on one of APHIS' more paper-intensive processes. This new process also

enables Federal regulatory officials to issue, track and rapidly ve rify the validity of import permits, thus reducing data -entry, processing, and delivery time and expense.

As of April 2006, ePermits customers were able to apply for six Plant Protection and Quarantine (PPQ) and Biotechnology and Regulatory Services (BRS) permit types online. By July 2006, customers were able to apply for three additional Veterinary Services (VS) permit types online. It is expected that by late 2006, ePermits will feature four additional permit types for PPQ and BRS. The next phase of ePe rmits will also include a feature to generate and print mailing labels required for certain types of high risk shipments. These labels will include barcodes that Federal inspectors will be able to scan to confirm a valid permit exists for the shipment.

Currently, PPQ and BRS send paper permits to states for review and comment. If a specific State is experiencing a plant disease outbreak, they will collaborate with APHIS to ensure that the Federal permit provides appropriate safeguards. In the future, eP ermits will allow APHIS to communicate and record comments online.

APHIS was a recipient of the 2006 GCN Agency Awards for ePermits. The awards are given to ten government agencies for innovative IT accomplishments.

ePermits integrates with USDA's eAuth entication Service for customer and employee credential management and the U.S. Treasury Department's Pay.gov for online payments. In a future release, ePermits will integrate with the Center for Disease Control's (CDC) eAuthentication system to provide an enhanced level of authentication for applicants submitting Select Agent permit applications. Additionally, ePermits will integrate with USDA's High-Consequence Agent Registration and Tracking System (HCARTS) which will integrate with CDC's National Sele ct Agent Registration (NSAR) system and the USDA's Veterinary Services Process Streamlining (VSPS) system. This demonstrates the capability of making the application an interoperable component of the USDA enterprise architecture.

The ePermits system is a multi-stakeholder, national database that is an ongoing effort to improve citizens' knowledge of and access to USDA by enhancing service delivery and using technology to improve internal efficiency. The online payment and application features are designed and operated in a way to ensure the privacy and confidentiality of applicant information. The system collects, maintains, uses, and disseminates information only as authorized by law and, as necessary, to carry out

agency responsibilities.

ePermits is transforming USDA-APHIS from a paper-intensive organization to an organization with reduced cycle times, more efficiencies, and improved services for USDA business partners and customers. ePermits provides a complete solution for automation, collaboration, and distribution of standard business correspondence among APHIS users, State agencies, port officials, research institutions, and U.S. importers. Customers have the option of filling out Web forms or being interviewed by the system (similar to Turbo Tax) to assist in form completion.

ePermits uses the Web and workflow technologies to eliminate ineffectual processes and allows the Agency to focus on safeguarding American agriculture and promoting free trade. Businesses that submit many permit applications can now submit documents directly from their internal systems, saving time and labor. ePermits complies with Section 508 requirements so anyone can apply for a permit. ePermits improves customer satisfaction by enabling users to work with USDA more effectively. The system provides collaboration tools for government scientists, peers and customers to share information. The system records the collaboration in the official records and provides an audit trail for all permit activities.

Performance Expectations

- APHIS will cut in half the time it takes to process applications to import enterable plants and timber when the applications are entered online using ePermits. For most applicants, the paper application process could take as long as four days. With ePermits the process can be completed within one day.

- Increased data integrity is provided with ePermits. The new system will make it more difficult to tamper with a permit. With paper permits, it is easy for people to alter expiration dates.

- ePermits provides immediate access to information relating to applications and permits. Inspectors at ports will be able to scan a barcode on a shipping label and immediately view permit information on a monitor.

- USDA estimates that there will be an expansion of the ePermits user base from 1,500 to as many as 10,000 people. These numbers include Federal and State regulatory partners as well as the applicant community.

- ePermits eliminates the need for the staff augmentation necessary to support the continuation of a paper-only permit application process and allows for the avoidance of associated costs. By eliminating the cost of processing paper and automating the system, more efficiency will result in saving APHIS an estimated $1.2 million per year in the first full year of operating the system.

- The cost of maintaining multiple systems will be eliminated.

- Further cost savings will be realized by applicants who apply online instead of through the mail. Efficiencies will also result by allowing the applicants to pay for their applications using Treasury's Pay.Gov.

Electronic Permits Target Performance Goals

Fiscal Year	Measurement Area	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvement to the Baseline	Actual Results
2006	Mission and Business Results	Border and Transportation Security	Improved coordination in safeguarding the health of animals, plants, and ecosystems (supports APHIS strategic mission and goals)	3 independent permit programs	3 ePermit programs (enabling consistent management oversight) and 5 independent programs	Three programs: Biotechnology Regulatory Services (BRS), Plant Protection and Quarantine (PPQ), and Veterinary Services (VS).
2006	Mission and Business Results	New Customers and Market Penetration	Additional Applicants using system	# Applicants using new forms	10% of applications received on line for VS and PPQ	As of 7/5/06, 32% of PPQ and VS applications were submitted electronically by applicants.
2006	Mission and Business Results	Financial Management	Payments	Collect and Process User Fees	# of Permits Collecting Fees on-line	As of 7/5/06, fees are being collected online for 2 permit application form types.

2006	Customer Results	New Customers and Market Penetration	# Users in ePermits process (supports eGov and PMA focus on Citizens)	No external users	2 external groups provided access to software	As of 7/6/06, 2 external groups are using the system: general applicant community using web access, and BRS applicant community using XML.
2006	Customer Results	Response Time	Timeliness of response to permit application (supports eGov/PMA and the government and adoption efficiencies in the Alternatives Analysis)	90 days	15% reduction in turn-around time for implemented permit programs	As of 7/6/06, BRS Notification (17 days), VS On-hold shipment (18 days), PPQ 526 (55 days), PPQ 585 (1 day), PPQ 587 (4 days), PPQ 588 (13 days), PPQ 621 (4 days), VS 16-3 (20 days).
2006	Processes and Activities	Efficiency	Number of applicants using ePermits instead of manual processes and applications (supports government efficiency and adoption benefits in Alternatives Analysis)	No applications submitted using ePermits	At least 10% of APHIS permit applications received electronically through ePermits for the Release 2 import programs	As of 7/5/06, 34% of applications were submitted electronically by applicants.
2006	Processes and Activities	Security Management	# Applicants registered with eAuthentication	0 applicants registered	25% of applications received electronically for forms implemented	As of 7/5/06, 34% of applications were submitted electronically by applicants.
2006	Technology	Availability	Number of new permits/forms automated (supports GPEA requirements, eGov/PMA customer satisfaction, and government efficiency benefit in Alternatives Analysis)	2 forms automated in pilot	10+ total forms automated	10 forms: (1) PPQ 526, (2) PPQ 585, (3) PPQ 587, (4) PPQ 588, (5) (6) PPQ 621, (7) BRS Notification, (8) VS 16-3 for animal products, (9) VS 16-3 for organisms and vectors, (10) VS 16-7

2006	Technology	Service Efficiency	User Satisfaction	# Repeat Customers using system	>60% use ePermits vs. paper	As of 7/6/06, 37% of applicants have submitted more than 1 application.

Future ePermits status includes:

- Web-Based software
- Accurate, Fast, Global permitting process
- Common Processes improved and in one place
- Quicker access to data
- Migration of legacy data and access to other data
- Elimination of manual processes

7. Enterprise Correspondence Management Module (ECMM)

Target Architecture Level: Common Enterprise Wide Application
Related Investment: Enterprise Correspondence Management Module (ECMM)
Related Unique Project Identifier: 005-03-02-01-02-0610-04

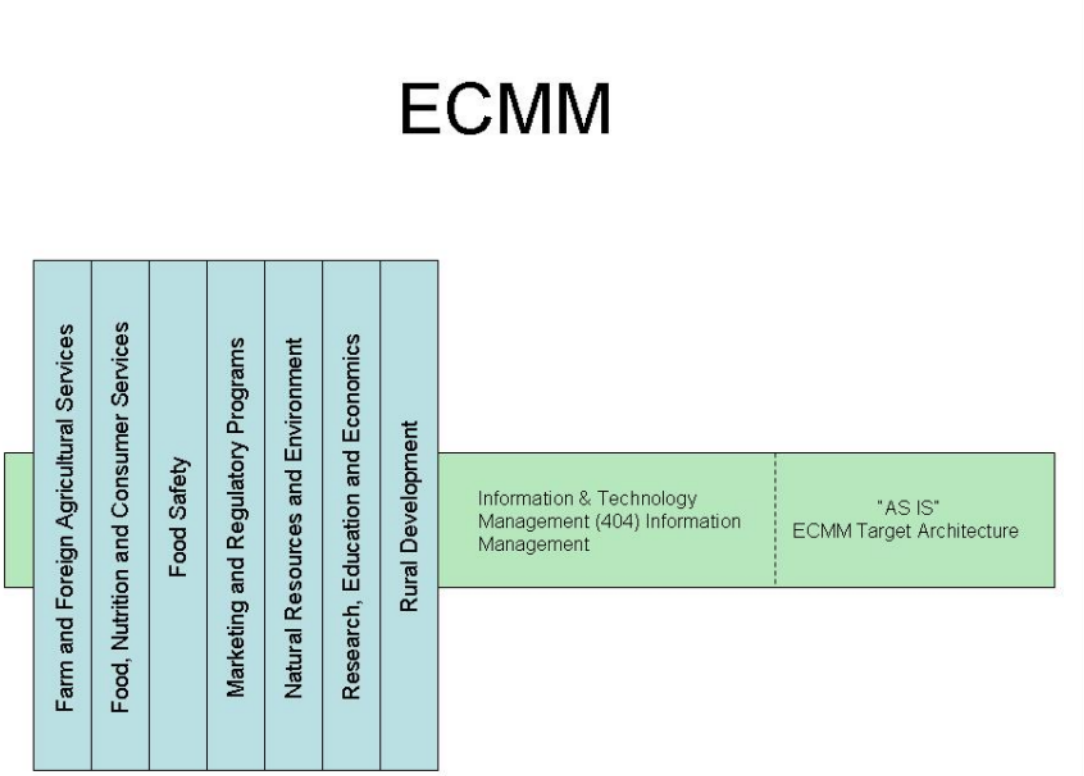
Background and Overview

The Enterprise Correspondence Management Module (ECMM) is an application, built on USDA's common Enterprise Shared Services Infrastructure, that allows staff to track Secretarial communications and other controlled correspondence. ECMM helps USDA employees manage correspondence at any organizational level from initial receipt through completion of a response and archival storage. The system's strong workflow capabilities enable documents to be routed within or among USDA agencies and offices for collaborative input or review, and a robust security scheme ensures that information is available only to authorized personnel. Easy-to-use search and report features help executives, managers, and other users find and display the information they need quickly and efficiently.

USDA's eGovernment strategic plan identified a need for enterprise-wide document and correspondence management features. Existing correspondence management processes varied significantly across agencies and staff offices, and many agencies used manual processes or antiquated electronic systems to track correspondence. Much controlled correspondence requires coordination between the Office of the Secretary and other offices or agencies to which correspondence is routed, and uncoordinated processes did not allow personnel in USDA's Office of the Executive Secretariat and other employees to effectively track and manage correspondence.

ECMM replaces previously uncoordinated processes and systems, including the client/server Staff Action system used by the Office of the Executive Secretariat, with an enterprise-wide Web-based solution built on USDA's Enterprise Shared Services foundation. The system's FileNet software, tailored to meet the needs of personnel managing controlled correspondence, allows the Office of the Executive Secretariat to track incoming and outgoing correspondence and route or assign individual communications to the appropriate agency for action. Agencies will use ECMM to track their actions regarding Secretarial correspondence and requests initiated by OES; they will be also able to use EC MM to track internal agency correspondence as well.

The following graphic provides an overview of the Enterprise Correspondence Management (ECMM) segment architecture and how it relates to USDA's missions.



Pre-ECMM Baseline (2002)

- OES used a client-server system, called Staff Action, to manage controlled correspondence.
- No enterprise-wide correspondence management system existed. Agencies used Staff Action to manage Secretarial correspondence assigned to them but used a variety of manual processes an d basic electronic tracking systems to track their internal correspondence.
- Significant delays occurred when documents were lost in the authoring and approval chain.

Current Baseline

- A pilot of the ECMM system is complete, managing all Secretarial correspondence assigned to the Rural Development mission area.

Staff in both the Office of the Executive Secretariat and Rural Development used the system to track and manage this correspondence; the pilot also engaged USDA review and clearance offices, including the Office of Budget and Program Analysis, and the Office of the General Counsel.

- ECMM replaces the Staff Action system within OES and across all other agencies and offices.
- Tailored versions of ECMM for agencies' use are planned, with OCIO and OES working with agency leaders to determine needs and scope.

ECMM is based on the Enterprise Shared Services infrastructure, leveraging the FileNet document management tool to provide document storage and workflow features. Specifically, the system includes:

- Web-based access, integrated with the USDA eAuthentication Service;
- Ability to accept documents received by physical mail, fax, or Email;
- Ability to store any common type of document or file (Microsoft Office, PDF, video, etc.);
- Folder-based correspondence storage and retrieval;
- Workflow engine allowing both sequential or simultaneous assignment of actions; and
- Ability to add additional data, notes, or attachments to the initial correspondence.

Future Status

To Be Developed

Planned ECMM Target Performance Goals

To Be Developed

8. Integrated Acquisition System (IAS)

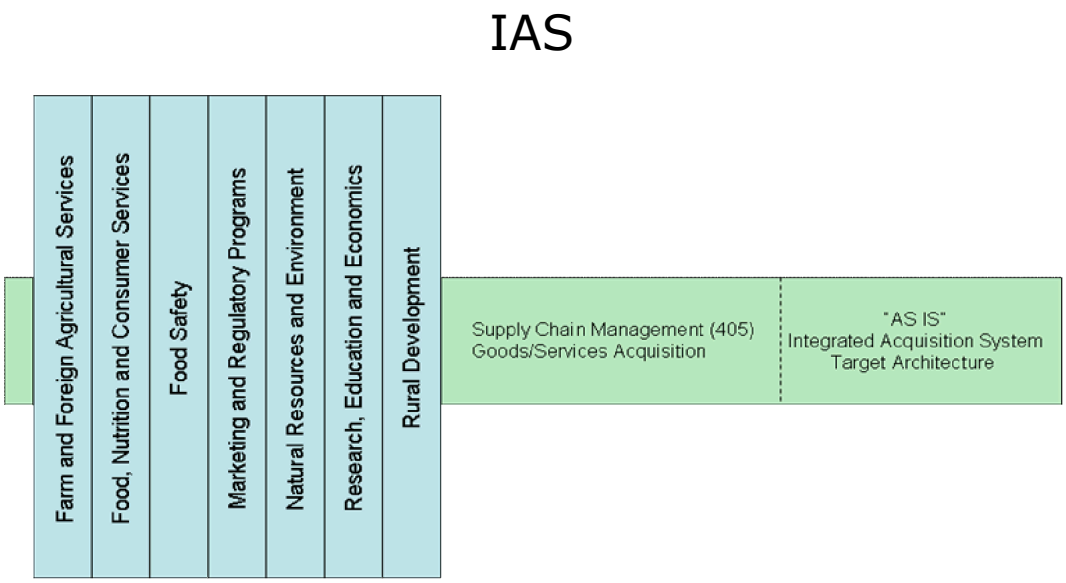
Target Architecture Level: Common Enterprise Wide Application
Related Investment: Integrated Acquisition System (IAS)
Related Unique Project Identifier: 005-03-01-81-01-1020-00

Background and Overview

IAS is a single enterprise-wide acquisition management system for USDA that replaces previously independent and uncoordinated agency procurement systems and improves the Department's ability to effectively manage the acquisition process and improve compliance with Joint Financial Management Improvement Program (JFMIP) guidelines.

IAS was designed to provide significantly increased functionality to USDA and its agencies, including (1) a real-time interface to the Department's core financial system, Foundation Financial Information System (FFIS); (2) reliable data and a reduction in acquisition cycle times; and (3) extensibility and scalability to support more advanced strategic and standardized acquisition management practices consistently across the Department.

The following graphic provides an overview of the IAS segment architecture and how it relates to USDA's missions.



Pre-IAS Baseline (May 2002)

- Nine USDA agencies and staff offices, plus the Department -level Office of Procurement and Property Management used 10 different, duplicative legacy systems and numerous proprietary feeder systems to execute and manage acquisitions.
- The systems comprised primarily three groups: (1) PRCH, the legacy purchase order manage ment system that transfers obligation information to the Department's core financial management systems; (2) front end applications to PRCH; and (3) contract writing and management systems.
- The multi-system environment did not provide an integrated or streamlined approach to procurement, nor enable the Department to comply with acquisition and financial management legislative and executive (e.g., President's Management Agenda) mandates.
- Acquisition systems and processes were not linked to financial system s and data, resulting in insufficient financial controls and difficult account reconciliation.
- In 1997, USDA's Procurement Executive provided the foundation for IAS by issuing a policy prohibiting all USDA agencies, offices, and/or programs from continued investment in individual procurement solutions/acquisition systems and directing the Department to establish a corporate/enterprise approach for acquisition management across USDA.

Current Baseline

- IAS provides a single service to manage procurement acros s all USDA agencies and staff offices. In June, 2006 IAS completed implementation of the core functionality to all USDA agencies. Currently, there are approximately 10,000 users, with about 8,800
- IAS has processed over $1.6 billion dollars of committed e xpenditures since October 2004.
- IAS interfaces with FFIS USDA's core financial system by utilizing commercially available products (i.e. case middleware with custom code), achieving compliance with Joint Financial Management Improvement Program (JFMIP) gui delines. With FFIS, IAS checks for funds availability, commits and obligates funds real -time and allows users to authorize vendor payment.
- All IAS functionality and components are Web -based and compliant with Section 508 accessibility standards.

- IAS interfaces with Federal Procurement Data System – Next Generation (FPDS-NG), directly feeding award information to satisfy mandated reporting requirements.
- The IAS solution has reduced software application maintenance costs, individual system operational and contract support, training, and help desk support for previous, redundant agency-level procurement systems.
- IAS training is available through USDA's enterprise-wide AgLearn learning management system.

Future Status

In FY07 and FY08, the IAS Program plans to implement additional functionality. In FY07, this will include eAuthentication, purchase card reporting and establishing a data mart. In FY08, electronic catalogs and electronic solicitation are expected to be added to the system .

Actual IAS Target Performance Goals (September 2006)

Additional business benefits realized are listed below:

Improve Internal Controls

- 8 agencies and 2 offices practice commitment accounting, up from 2 prior to IAS
- Division of authority, warrant levels and FPDS-NG reporting systematically enforced

Improve Data Accessibility and Accuracy

- Financial entries recorded in minutes instead of overnight
- Procurement spend data is in one database facilitating Departmental sourcing analysis
- Unresolved documents decreased 72% from 11/05 – 06/06 compared to PRCH

Establish Standard Process and Usage

- Common Help Desk, IAS training regimen and support documentation
- Standardized use of data fields across agencies
- Significantly fewer errors resulting from data entry
- IAS platform can be integrated to USDA's Financial Management environment as it is modernized

9. Living Disaster Recovery Planning System (LDRPS)

Target Architecture Level: Common Enterprise Wide Application
Related Investment: Enterprise Contingency Planning Program (ECPP)
Related Unique Project Identifier: 005-03-02-01-02-0251-04

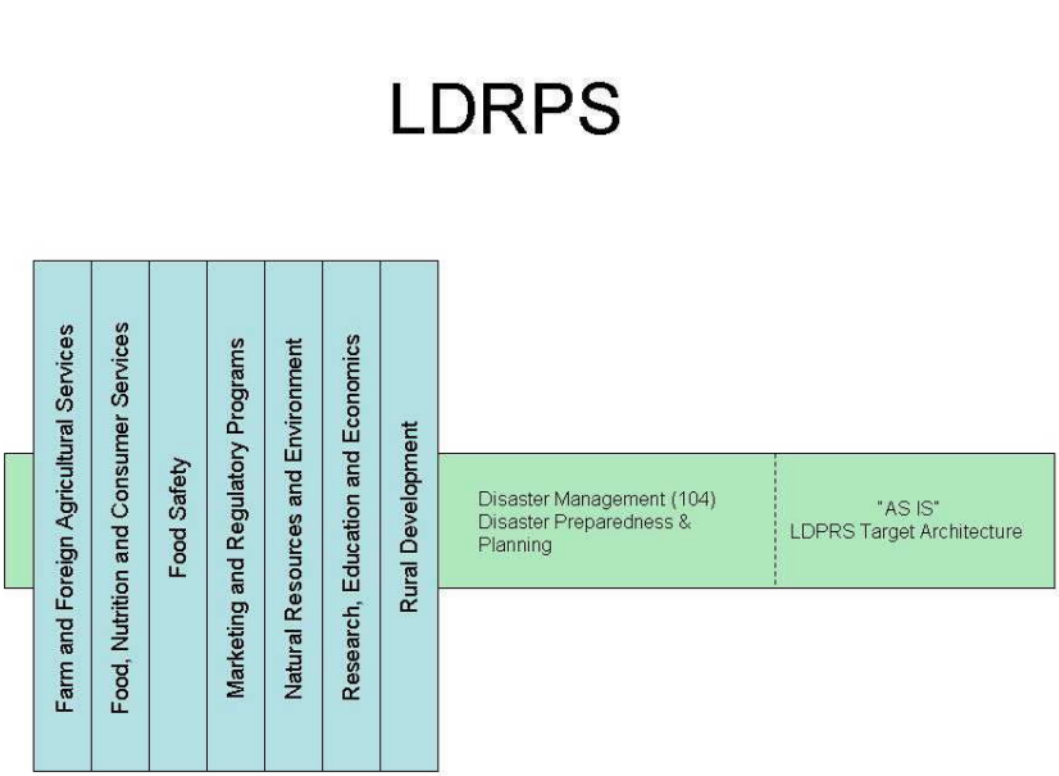
Background and Overview

In today's security-conscious environment, developing plans and procedures for responding to disasters or other emergency situations, and ensuring that USDA's critical business processes and IT systems can continue to function in such situations, is a priority for the Department. To ensure that agencies and staff offices across USDA have the resources they need to effectively manage disaster recovery planning, the Department has acquired a suite of software tools centered on Strohl Systems' Living Disaster Recovery Planning System (LDRPS).

These tools, customized for USDA use, provide an enterprise standard for contingency and disaster planning, in line with USDA's Enterprise Architecture vision. This enables agencies to develop coordinated, standardized Continuity of Operations (COOP) plans and other disaster recovery plans based on a robust set of tools and standards. It also avoids the acquisition of duplicative contingency planning tools across agencies and ensures that USDA is investing IT funds effectively (and effectively protecting the investments it has made).

The planning tools provided by LDRPS are complemented by processes to ensure that tested, executable plans are in place Department-wide for any type of disaster or incident, training to ensure that agencies and offices fully understand disaster planning goals and tools, and policies requiring that plans are developed correctly.

The following graphic provides an overview of the Living Disaster Recovery Plan (LDRPS) segment architecture and how it relates to USDA's missions.



Pre-LDPRS Baseline (2003)

- USDA had no enterprise-wide tool for developing or managing disaster recover planning.
- Agencies used a variety of manual processes, policies, and formats to create COOP, business continuity, and IT continuity plans.

Current Baseline

- A suite of contingency planning tools, including Living Disaster Recovery Planning System (LDRPS), Business Impact Analyzer (BIA), and Incident Manager, is available for use by all USDA agencies and staff offices to plan for and manage disaster situations, including continuity of both business and IT operations.
- The Cyber Security division of USDA's Office of the Chief Informatio n Officer (OCIO) has instituted policies requiring use of these tools to develop and maintain disaster recovery and contingency management plans for most IT systems.
- A business structure has been implemented, with an overall LDRPS Program Manager and individual Phase Managers (supported by an LDRPS Rules Committee) to act as a central point of contact and

subject matter expertise for all phases/components of contingency planning.

LDRPS and its supporting tools were developed by Strohl Systems Inc, and have been customized for USDA's use. Specifically, the enterprise wide tool suite includes the following three software packages:

- *Living Disaster Recovery Planning System* , used to document contingency plans including the Continuity of Operations Plan (COOP), Business Resumption Plan (BRP), Disaster Recovery Plan (DRP), Business Continuity Plan (BCP), and IT Contingency Plan.
- *Business Impact Analysis Professional* , used to compile business impact assessments. There are three steps: identify critical IT resources, identify disruption impacts and allowable outage times, and develop recovery priorities. A thorough, accurate BIA is the key to an effective contingency plan. BIA activities can be coordinated with the risk assessment and related activities.
- *Incident Manager*, used to manage the response to an incident or disaster.

The contingency plans in LDRPS are separated into three phases, each with a phase manager who coordinates issues and concerns:

- *COOP Phase* – All users developing COOP Plans must be coordin ated with the Phase Manager.
- *Facilities Phase* – All Facilities Plans must be coordinated with Phase Manager.
- *IT Phase* – Users building IT plans work through their designated agency coordinator, who coordinate with the phase managers.

Future Status (2007)

LDRPS is an important component of USDA's IT security activities. A USDA Departmental Regulation requires agencies to conduct IT contingency planning and to use LDRPS to build and test all such plans. The Cyber Security Program within OCIO manages the system and ensures that all agencies and offices adhere to the regulation , including Certification and Accreditation requirements. A new investment is being introduced for the continued function. That investment is known as the Enterprise Contingency Planning Program (ECPP). Future activities for ECPP will occur in Planning, Acquisition, and Operations & Maintenance towards the purchase of hardware, software, services, and other items .

Planned LDRPS Target Performance Goals

Note: LDRPS was designated as a "Non-major" Investment in 2006.
The Performance Goals identified for the future states are presented in the table below:

Fiscal Year	Measurement Area	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvement to the Baseline	Actual Results
2007	Technology	Reliability	Concurrent usage of full license capability of 125 users should be achievable with no adverse system degradation.	Full baseline system utilization of 125 concurrent users has not been tested.	Verify that the CPS infrastructure is capable of sustaining 125 concurrent users. Evaluate USDA telecommunications infrastructure and supporting hardware for effectiveness. PMO to prepare plans with estimated costs to correct any deficiencies.	TBD
2007	Mission and Business Results	Information Management	A test environment is required for COTS upgrades and other enhancements as the CPS is implemented enterprise-wide.	Currently the production database is used as the test database. There is no separate Test database.	Implement separate test environment for COTS upgrades and other enhancements.	TBD

2007	Mission and Business Results	Operational Defense	Develop comprehensive key asset and critical infrastructure ID and protection strategy within ECPP PMO for compliance (Homeland Security Presidential Directiv 7), aid in risk management, organizational business impact analysis and incident response	Comprehensive key asset and critical infrastructure identification and protection strategy does not exist.	Develop comprehensive infrastructure identification and protection strategy.	TBD
2007	Customer Results	Customer Services	Customer Satisfaction: Average time it takes for customer to access desired data.	TBD: Customer satisfaction metrics methodology to be established and metrics gathered by the ECPP PMO.	Anticipate baseline customer satisfaction metrics to be 90% acceptable time to access desired data.	TBD
2007	Mission and Business Results	Contingency Planning	Establish Contingency Plan templates for the Facilities Management Phase of the ECPP in preparation for plan development in LDRPS.	FY 2006 Results: 33 Contingency Plans have been developed for the pilot phases of the Facilities Management	Prepare 30% of the templates for the Facilities Management Phase of the ECPP Program.	TBD
2007	Processes and Activities	Benefits Management	Ensure that COOP, IT, and Facilities Contingency Plans are executable for mission critical systems through planning efforts of Executive council	No consistency in processes or tools	Develop Information Survivability Master Project Plans for execution of USDA mission critical COOP, IT, and Facilities mission critical systems and activities.	

10. Portal, Enterprise Shared Services (ESS)

Target Architecture Level: Common Enterprise Wide Application
Related Investment: Enterprise Shared Services (ESS)
Related Unique Project Identifier: 005-03-02-01-01-8004-00

Background and Overview

Managed by USDA's Office of the Chief Information Officer (OCIO), Enterprise Shared Services (ESS) is a suite of technology tools and accompanying business processes that enable USDA to achieve its goals and objectives for eGovernment, leveraging our investments and delivering government services in a more citizen-centric manner. The services offered by ESS are enterprise-wide and centralized--Department, Agency, or Federal eGovernment Presidential Initiatives can leverage these services --thus avoiding the high cost and high learning curve of operating independently.

Originally, the ESS investment was called eDeployment. In the second quarter of FY05, the name was officially changed by the Program Manager to better reflect that ESS was moving from a conceptual phase to more of a 'run' phase.

In achieving the goals of USDA's eGovernment Program, the ESS initiative seeks to solve and prevent the following business problems at USDA:

- Manual business processes are error prone and inefficient and distract our employees from focusing on delivery of our programs and services;
- Duplicative investment in similar information technology (IT) systems by agencies across USDA;
- Lack of cooperation across agencies for delivering our information, programs, and services online. Specifically, there were no enterprise-wide capabilities for managing documents or Web information and services USDA. USDA had no portal software for either internal or external audiences. USDA's main Web site and agency sites lacked capabilities to personalize content for specific audiences or users; and
- Lack of technology and standards to support common business functions across our agencies. Specifically, USDA had no enterprise-wide standards for "look and feel," browser guidelines and Web coding, or information presentation and structure. Agency Web sites and the main USDA.gov site used a wide range of site structures and designs, making navigation across agency sites and location of information difficult.

In solving these business problems, the ESS initiative continues to develop technologies, standards, and processes for a common centralized service to

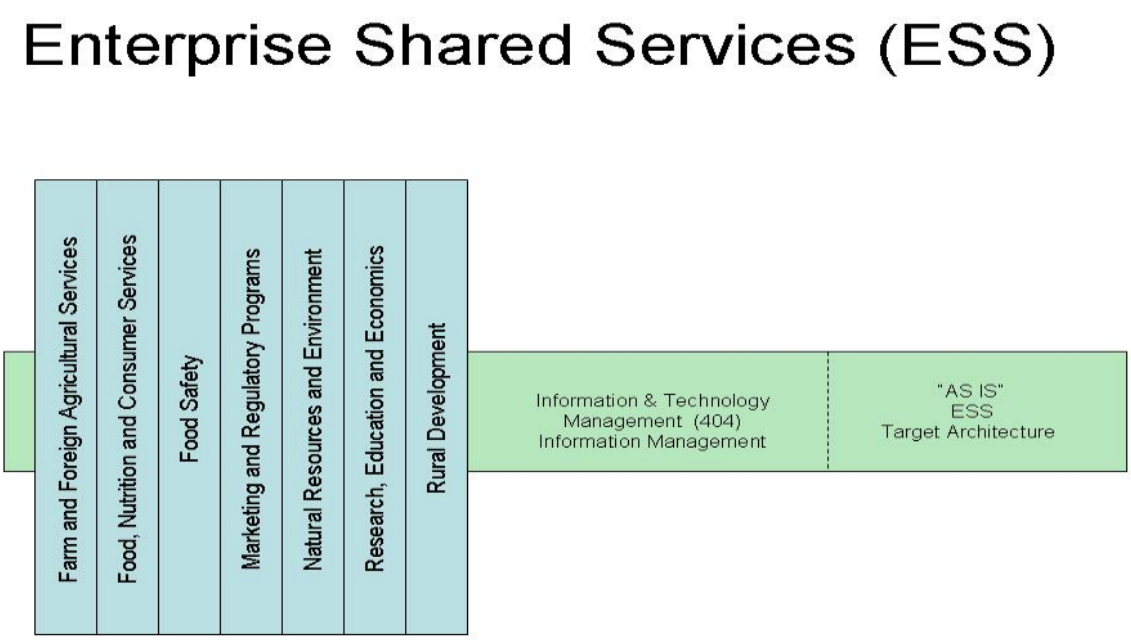
be utilized by all agencies and staff offices in the Department. Specifically the ESS initiative is currently comprised of the following:

- Web Content Management: A service which manages the Web content contribution lifecycle through, review, approval, publishing, and archival of Web content. Built with Stellent software, the WCM service will allow for streamlined Web page development and deployment processes and simplify reuse of content;
- Document Management: FileNet-based "workflow" tools that simplify management of online and offline documents. Document management will enable fast, powerful electronic document retrieval, tracking, and searching;
- Portal Services: Service for deploying and managing agency Web sites and Web-based services. Based on the IBM WebSphere application server and portal platforms, it includes dynamic page generation and personalization/customization functionality;
- Web Standards: Standards and guidelines for look, feel, and navigation of Web pages and Web-based applications;
- Common Templates: Developed to facilitate Web content management, this set of standard templates allow users to publish content to public facing sites and comply with USDA's Web Standards and guidelines;
- Common Employee Database: Secure, single point of access to common employee data to support systems managing HR, security functions, and employee directories. This common repository was designed to simplify and reduce the cost of acquiring data needed for internal applications;
- Corporate Taxonomy: A common classification scheme for our online content and documents to enable sharing and re-use;
- Collaboration Tools: Tools enabling secure instant messaging, online document and related information sharing services (team rooms), and a standardized, nationwide online meeting capability for ad-hoc and formal meetings;
- Enterprise Shared Services Support: Internal Web site using ESS document management features to provide overall guidance and detailed documentation to agencies implementing (or seeking to implement) ESS services; and
- Google Search Appliance: In order to provide a single source for searching all USDA Web sites, ESS has implemented an enterprise-wide search appliance to gather and present USDA data.

By integrating these technologies and developing related standards, procedures, and services, the ESS initiative helps USDA realize the following business objectives:

- A consistent and easy to use customer and employee interface for all online applications;
- The discovery, sharing, and management of online content, documents, records, and other electronic media;
- The consolidation and sharing of data;
- Access to information and services by area of interest versus USDA's organizational structure;
- The ability to leverage existing technology investments;
- Adherence to legislative mandates and participation in Presidential Initiatives; and
- Consolidation of customer support services.

The following graphic provides an overview of the Enterprise Shared Services segment architecture and how it relates to USDA's missions.



As-Is

- No enterprise-wide capabilities for managing documents or Web information and services existed at USDA. USDA had no expandable portal. Infrastructure to support the growing demand for electronic delivery of information and services. USDA's main Web site and agenc y sites lacked capabilities to personalize content for specific audiences or users.
- USDA had no enterprise-wide standards for look, feel, and navigation of online services. Agency Web sites and the main USDA.gov site used a wide range of site structures and designs, making navigation across agency sites and location of information difficult.
- There was no capability to manage the contribution or review of Web content. All information presented on USDA's Web sites —over 12 million pages—had to be placed on sites by Webmasters or those with knowledge of HTML coding. Review and approval of Web content was manual, with no standard processes within or across agencies. With no central facility to manage Web content, agency Webmasters could not even accurately determine how many Web pages existed.
- USDA had no electronic records management capabilities and very limited guidance and policies on electronic storage and management of official records.
- A number of systems were used to store employee data, with incomplete information in each and no way for IT systems needing to access this data to efficiently do so.
- USDA had no standard electronic collaboration tools. A small number of agencies used different software to provide virtual workspaces and Web conferencing, but most agencies had no such capabilities. Other electronic communications tools, such as secure instant messaging, did not exist anywhere at USDA.
- Search capabilities were limited. USDA.gov and some agency sites used the FAST search engine operated by FirstGov, but the engine did not allow users to easily find much of the information on USDA Web sites.
- Enterprise-wide services to provide portal, Web content management, and document management functionality are deployed. IBM WebSphere is used to provide portal and application server functionality, while Stellent provides Web content management and FileNet provides document management.
- Products in the ESS suite are available to replace agency-specific technical infrastructure for developing and hosting online services, as well as to serve an additional range of enterprise-wide and agency-specific application needs.
- Agency systems are developed on the ESS infrastructure, including the USDA.gov portal and Enterprise Content Management Module

(described in separate overviews). Agency-specific applications include Web sites for GIPSA and FSIS based on ESS' WebSphere architecture.
- Departmental regulations complementing ESS tools require all USDA systems requiring portal, content management, or document management functionality to use ESS' services; they also prohibit redundant investment in similar agency-specific systems.
- Enterprise-wide Web Style Standards provide a consistent set of look, feel, and navigation guidelines for all public-facing USDA Web sites.
- 16 USDA agency web sites using the Web Style Standards are deployed. USDA Departmental Regulations require all public-facing sites to transition to the standards by the end of 2005.
- Enterprise-wide search capabilities, based on an enterprise purchase of industry-leading Google technology, improve searches across USDA public Web sites and allow agencies to use Google search services for their intranet sites.
- An ESS Support site using ESS' document management service, provides USDA agencies seeking to build applications based on ESS services (or migrate existing applications) with technical and business resources to aid their transition.
- A Common Employee Database (CED), based on the Oracle database (a USDA enterprise standard), provides a central, authoritative repository for all key employee data and supports enterprise-wide systems including AgLearn and the eAuthentication Service. The CED will be used to support HSPD 12 physical and IT security guidelines.
- Enterprise collaboration tools will allow USDA employees to securely exchange instant messages, conduct virtual meetings, and use electronic workspaces while avoiding a proliferation of agency standards and redundant purchases.
- Records management capabilities are planned to be added into ESS by FY 2006.

Current Baseline
- There were 18 Web sites compliant with USDA Web Standards.
- The Google Search appliance is deployed on 7 Agencies and Staff Offices Web sites.
- Five applications have been integrated to use the Common Employee Database.
- 95% availability per server for Infrastructure Services during operational hours. 90% availability per server for Infrastructure Services during non-operational hours.
- ESS has 3 agencies or staff offices are using ESS WebSphere or WebSphere Portal infrastructures.
- Eleven Common Templates were created and completed.

- Enterprise Correspondence Management Module (ECMM) successfully piloted in the FY05 Q2. Users now use detailed workflows to manage USDA correspondence.

Future Status

With the introduction of content management and document management capabilities content owners and creators are empowered to create quality enriched content without requiring deep technical abilities. This has indirectly changed the roles and responsibilities of USDA agency content developers and even those who currently communicate to external audiences through traditional means. Technical resources who were relied upon to create "Web" versions of content, are now allowed to focus on higher priority and more technical areas in their department and allow non-technical users the ability to publish information directly to Web sites. Likewise, our constituents will more easily navigate and find information that they are looking for through an intentions-based design and use of a common taxonomy across all our online information. Common look and feel standards have been identified and enforced throughout the Department to ensure a higher quality user experience. Within the Department as a whole, agencies have been asked to work in a more collaborative environment to develop online solutions. In the past, agencies have worked independently and have often provided redundant information to our constituents. With ESS, agencies work together to develop online information and services around our common business functions - a fundamental difference in the way USDA does business, but necessary to achieve our goal of citizen-centric government.

ESS Target Performance Goals

Fiscal Year	Measurement Area	Measurement Category	Measurement Indicator	Baseline	Planned improvements to the Baseline	Actual Results
2006	Customer Results	Customer Benefit	Increase in the number of agency and staff office Web sites that provide agricultural, food, and nutrition related information for citizens, business partners, and employees using USDA's Web Standards.	As of January 2005, there were 7 Web site compliant with USDA Web Standards.	53 total Web sites compliant with USDA Web Standards.	TBD

2006	Technology	Effectiveness	Increase in the number of agencies and staff offices Web sites that are integrated with the Google Search appliance.	There was at least one other search engine available to agencies but not all agency sites had this capability. Further, the previous search engine was sluggish and the results were returned without preference. Finally, it was not interoperable between agency Web sites.	19 total agency/staff office Web sites integrate the Google search appliance to provide enhanced search results to employees and public by the 4th quarter of FY05.	TBD
2006	Mission and Business Results	Human Resource Management	Increase in the number of USDA applications integrated with a single point of access to common employee data.	0 applications were integrated to a single point of access to common employee data.	6 total applications integrated with the Common Employee Database.	TBD
2006	Customer Results	Service Accessibility	Provide ESS Infrastructure services to customers in accordance with USDA's eGovernment vision of making services electronically available, any place, any time.	No baseline prior to the fiscal year.	90% availability per server for Infrastructure Services during operational hours.	TBD
2006	Technology	Information and Data	Standardize infrastructure technologies and skills within USDA to minimize redundant and overlapping technologies.	As of January 2005, there were 2 agencies or staff offices using ESS infrastructure tools.	9 total Agency or Staff Office web applications hosted on the ESS WebSphere or WebSphere Portal infrastructures.	TBD
2006	Customer Results	Customer Benefit	Increase number of standard templates available online.	No current templates exist.	12 Common Templates.	TBD

2006	Technology	Information and Data	Track and report on number of emergency, expedited, and standard changes to better understand (1) the support and operations groups' activities and (2) the current status of customers' change or release requests.	Tracking does not exist	Establish ability to report and track the number of emergency, expedited and standard changes.	TBD
2006	Technology	Reliability and Availability	Improve incident management after core operating hours. Respond to after-hours requests with informed decision-making materials to expedite incident resolution.	No after hours help desk	Track number of calls accepted by the System Network Control Center (SNCC) after hours.	TBD
2006	Technology	Reliability and Availability	Provide Tier 1 Help Desk support on a 24x7 basis and escalate Tier 2 and Tier 3 calls appropriately.	No existing Help Desk specific to ESS.	Establish Tier 1 Help Desk by the end of FY06 Q4.	TBD
2006	Technology	Information and Data	Create a USDA 'repository' of all online content to enable sharing and reuse.	All online content is not sharable.	All Agency and Staff Office main public-facing Web sites (total of 29) migrate content to ESS Web Content Management (Stellent) infrastructure.	TBD
2006	Technology	Information and Data	Users will be able to manage records electronically and manage through defined workflows.	No electronic records management occurs.	Enterprise records management module is operational for the pilot entities in the first quarter of FY06.	TBD

11. USDA Common Customer Statement

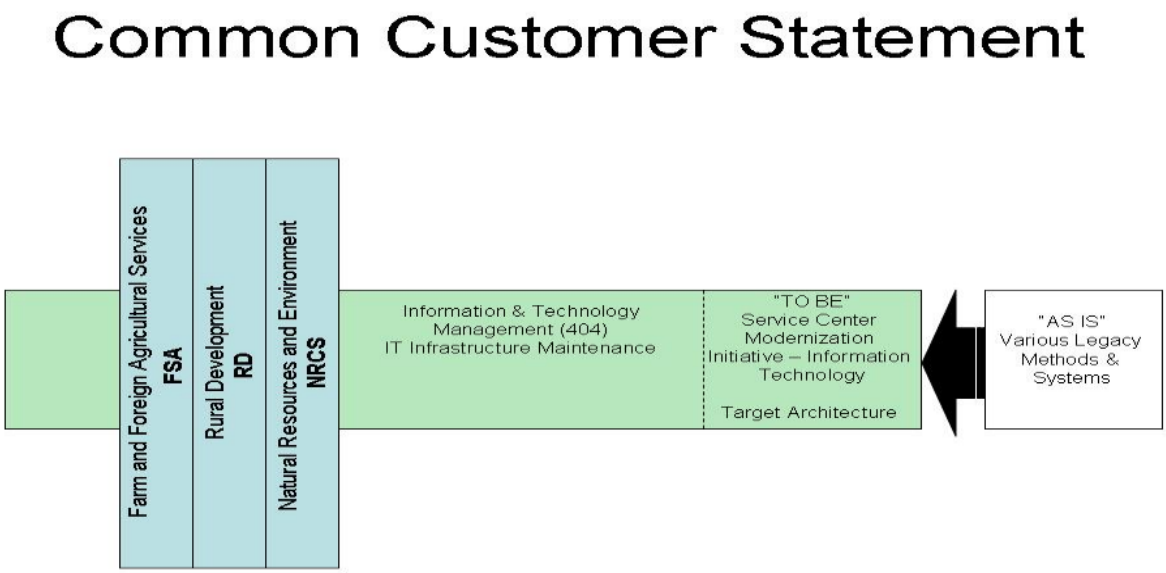
Target Architecture Level: Common Enterprise Wide Application
Related Investment: Service Center Modernization Initiative – Information Technology
Related Unique Project Identifier: 005-03-02-01-01-0113-00

Background and Overview

USDA's Federal assistance for farmers and ranchers is provided through many programs across several agencies. This includes market stabilization and farm aid from the Farm Service Agency, conservation programs from the Natural Resources Conservation Service, and loans and housing assistance from Rural Development agencies. Because these programs are administered by different agencies, customers were required to manage their participation in each separately and were often not able to get a full picture of their relationship with USDA.

To advance the goals of citizen-centered government in the President's Management Agenda and USDA eGovernment Strategic Plan, USDA created a Customer Statement (CS) that allows USDA customers to view information about their participation in many farm, conservation, and rural assistance programs. Customers can now visit one location to view contract and loan amounts, update their contact information, download geospatial data, and use other resources. The CS integrates data from agency, cross-agency, and enterprise databases to provide a unified, customer-centric experience to citizens; is integrated with the USDA eAuthentication Service; and is compliant with USDA Web Style Standards further support this consistent user experience. The CS has been designed to support USDA's Enterprise Architecture vision through its establishment as a standard, single point of access for customers to access resources across three agencies and through its integration with USDA enterprise-wide systems and standards.

The following graphic provides an overview of the USDA Common Customer Statement segment architecture and how it relates to USDA's missions.



As-Is

- Some information on farm aid and conservation assistance programs was available through several uncoordinated systems located on three agencies' Web sites; other information was available only through walk-in visits to USDA Service Centers.
- Data was presented in a variety of formats and did not adhere to any common presentation standards.
- Systems originally used independent user IDs and passwords.
- The CS provides customers' individual participation information for farm aid and land conservation programs across the Farm Service Agency, Natural Resources Conservation Service, and Rural Development. Data resides in cross-agency and program-specific databases and is located and integrated into the CS' format on demand.
- Customers are first presented with a summary view of their participation across all programs. A user can then click on a specific program for detailed transaction and participation information.
- The CS is compliant with USDA's Web Style Standards, allowing a seamless user experience between this and other USDA Web sites and applications. The system supports the main USDA.gov portal and MyUSDA features in providing a seamless, customizable experience where customers can locate information and resources quickly.

- The system is integrated with the USDA eAuthentication Service, allowing customers to use a single user name and password to access the Customer Statement and other USDA systems and services.
- Users can export map data through CS' integr ation with USDA's Geospatial Data Gateway.

Current Baseline

Using the new Customer Statement, users may view:

- Participation and application status i n various conservation programs
- Payments associated with commo dity and conservation programs
- Information on farm loans
- Conservation plan and land unit information.

The system also allows users to :

- Print statements
- Locate their USDA Service Center Office
- Verify contact and profile application
- Access and export map data.

Data is dynamically extracted from s even data warehouses on demand to generate an up-to-the minute statement for each user.

USDA Common Customer Statement Target Performance Goals

To Be Developed

12. USDA Enterprise Architecture Repository (EAR)

Target Architecture Level: Common Enterprise Wide Application
Related Investment: USDA Enterprise Architecture
Related Unique Project Identifier: 005-03-03-81-01-1020-00

Background and Overview

The USDA Enterprise Architecture (EA) defines the agency's business, the information necessary to operate the business, the technologies necessary to support the business operations, and the transitional processes necessary for implementing new technologies in response to changing business needs. Without EAs to guide IT investments, stovepipe operations and systems can emerge. This, in turn, could lead to needless duplication, incompatible technologies, as well as additional – and unnecessary – costs.

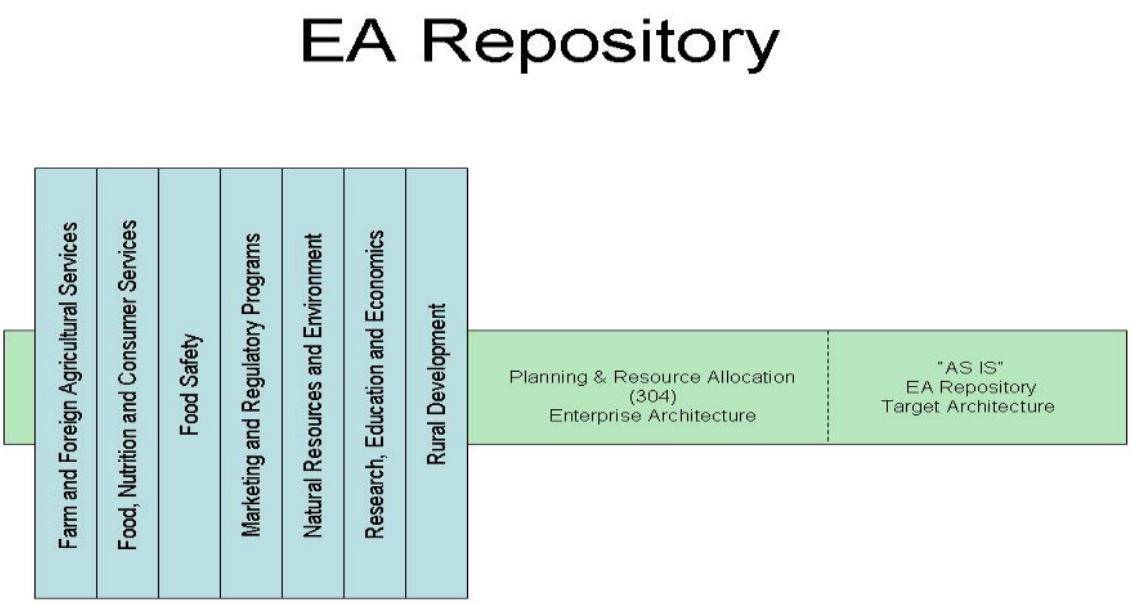
The USDA is developing its EA to establish an agency-wide roadmap to achieve its mission within an efficient IT environment. This will provide a sound foundation to support the capital planning and investment management process. This program will build upon the individual bureaus' existing EA efforts, ensure effective integration, and provide a supportive EA management tool. The investment is a collaborative effort involving the Office of the Chief Information Officer (OCIO), Enterprise Architecture development working groups, Enterprise Architecture governance groups, and a variety of USDA bureaus.

This investment will provide necessary support information that will be used by managers to make key IT investment decisions. The investment decisions made today will impact the way the USDA conducts business well into the next decade. It is imperative that the IT investments selected ultimately improve the performance of the USDA by a considerable amount. This investment in Enterprise Architecture is designed to yield significant results in the areas of business productivity, IT asset productivity, and risk management. Supplying the USDA with this critical information asset will prevent the duplication of IT resources by providing a modernization blueprint for IT investments – and the business capabilities they support – across the agency. Moreover, it will allow managers to quickly identify opportunities to utilize corporate contracting for equipment and consulting services; such practices will significantly reduce costs associated to future IT investments.

This investment is currently in the Control Phase of the Capital Planning Investment Control (CPIC) process, and this Exhibit is submitted with the intention that the project will move forward to the Control phase.

NOTE: This combined USDA Enterprise Architecture investment supports the entire USDA EA Program; and more specifically, the EA Repository tool implementation. In discussions with OMB staff, USDA was permitted to provide cost and schedule information on the tool implementation, and to also calculate earned value and cost/schedule variance. The EA Repo sitory implementation is an essential part of the success of the Department's EA Program, since it will contain both Department and bureau information that will be used for decision-making and in support of collaborative EA efforts.

The following graphic provides an overview of the EA Repository segment architecture and how it relates to USDA's missions.



EAR Baseline (March 2005)

- USDA had limited insight into the information technology components in use at the Department. The limited number of major IT investments and enterprise-wide IT systems was known, but the Office of the Chief Information Officer and other USDA staff offices and agencies did not have a clear picture of the systems in use in other agencies and offices.
- This lack of information often led to duplicative IT investments by agencies, as they were not aware of opportunities to use existing systems or collaborate with other USDA agencies and offices in developing new investments.
- Creation of an "as-is" Enterprise Architecture model was difficult due to USDA's limited understanding of the IT systems in use across agencies and staff offices. Further, the difficulty in creating an "as -is"

architecture complicated the development of a "to-be" target architecture and modernization plan.
- The EA Repository under development includes information on all USDA enterprise-wide IT components and USDA's participation in and use of government-wide systems and initiatives.
- The repository will also include information on agency-specific IT components.
- Each component identified in the EA Repository will include information to understand the systems context and linkages, including alignment with USDA's lines of business and the Federal Enterprise Architecture frameworks and reference models.

Current Baseline

- The number of investment decision-making bodies (USDA and agency) using the EA Repository in their decision-making process stands at 6.
- The percentage of fully-document applications in the EA Repository is 40%.
- The number of standardized USDA EA Repository reports that customers can access on-line is five. The capability exists for more experienced users to generate several additional ad hoc reports.
- The number and/or percentage of organizational entities actively involved in or participating in the development of EA Repository data content stands at 15.
- The number of data instances in the Repository for which standards and definitions exist and guide these instances, including voluntary consensus IT-related standards.
- The number of applications or systems that either can be, or are linked to or are being consolidated with other applications or systems. The baseline number of applications/systems from the C&A inventory is 521.

Future Status

In FY07 and FY08, assuming the availability of funding, the EA Repository plans to implement additional functionality, including dynamic links to the Department's CPIC toolset, the Cyber Security ASSERT toolset, and potentially to other third party modeling toolsets, and to in-house toolsets to assist in management oversight and governance of investments and their outcomes.

Actual EA Repository Target Performance Goals (September 2006)

Fiscal Year	Measurement Area	Measurement Category	Measurement Indicator	Baseline	Planned improvements to the Baseline	Actual Results
2006	Mission and Business Results	Information and Technology Management	Number of investment decision-making bodies using the EA in their decision-making process.	6	Increase to 10	29
2006	Customer Results	Service Quality	Percentage of fully-document applications in the EA	40%	Increase to 60%	80%
2006	Customer Results	Service Accessibility	Number of USDA EA reports that customers can access on-line	5	Increase to 7	10
2006	Processes and Activities	Management and Innovation	Number and/or percentage of organizational entities actively involved in or participating in the development of EA.	15	Increase to 20	26
2006	Technology	Efficiency	Number of applications or systems that either can be or are linked to or consolidated with other applications or systems.	Baseline is 521 per the C&A		Business application count stands at 315 per the C&A inventory

13. Web Content Management Tool, Enterprise Content Management (ECM)

Target Architecture Level: Common Enterprise Wide Application
Related Investment: Enterprise Content Management (ECM)
Related Unique Project Identifier: 005-55-02-81-04-2004-24

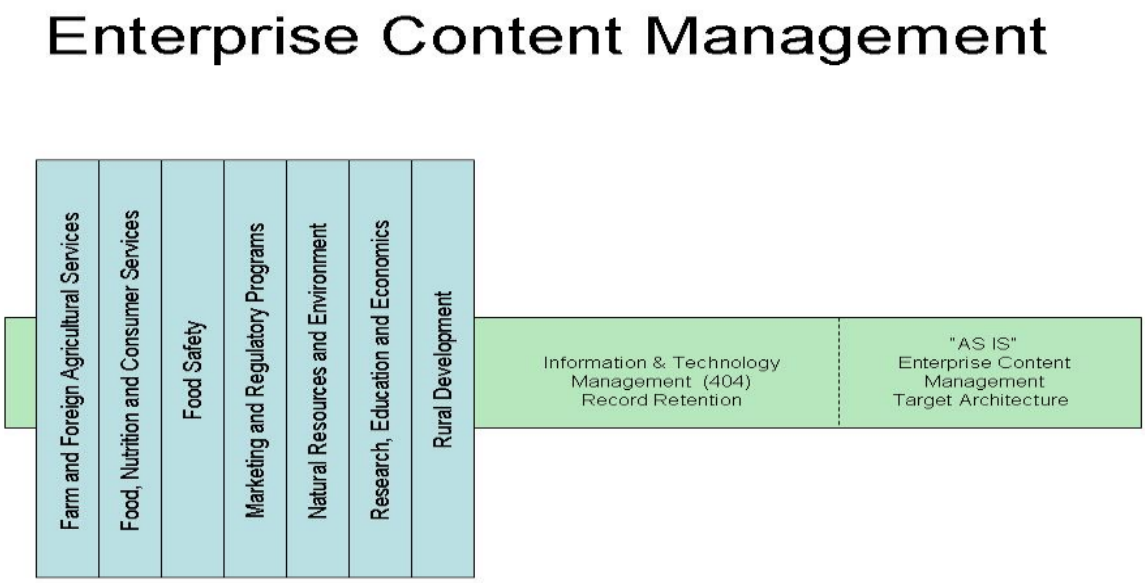
Background and Overview

The USDA Enterprise Content Management (ECM) is an initiative originally defined in USDA's eGovernment Strategic Plan for FY 2002 -2006 as part of eDeployment. This eGovernment Strategic Plan was the result of an intensive Department-wide effort that included individuals at all levels of the enterprise; executives and non-executives, headquarters and the field, domestic and international, and all agencies and staff offices; modeled in many respects after OMB's Presidential Initiatives.

Managed by the Rural Development, Chief Information Officer (CIO), the USDA ECM solution is a suite of technology tools and business processes that enables USDA to achieve its goals for eGovernment; leveraging investments and delivering document management services in a more standard manner. In achieving the goals of our eGovernment Program, the ECM initiative will seek to solve and prevent the following business problems at USDA: Manual business processes are error prone, inefficient and distract our employees from focusing on delivery of programs and services to citizens; duplicative investments in similar information Technology (IT) systems by agencies across USDA; lack of technology and standards to support common business functions across agencies; inability to easily share information; inability to accurately measure performance.

To solve these business problems, the ECM initiative will develop technologies, standards, and processes for a common centralized service to be utilized by all USDA agencies and staff offices for the management of electronic assets. The ECM initiative will help USDA realize the following business objectives: A consistent and easy interface for all applications; the consolidation, discovery, sharing, and management of documents, records, and other electronic media, to allow cross-agency collaboration; the ability to accurately and consistently measure performance and response to citizen requests; access to information and services by area of interest versus USDA's organizational structure; the ability to leverage existing technology investments by utilizing component based architectures; consolidation of customer support services; and adherence to legislative mandates and participation in Presidential Initiatives. The services offered by ECM will be enterprise-wide: Department, Agency, or Federal eGovernment initiatives can leverage the services that ECM will deliver, thus avoiding the higher costs and risk of operating independently.

The following graphic provides an overview of the Enterprise Content Management segment architecture and how it relates to USDA's missions.



As-Is

- No enterprise-wide capabilities for managing documents or Web information and services existed at USDA. USDA had no expandable portal. Infrastructure to support the growing demand for electronic delivery of information and services. USDA's main Web site and agency sites lacked capabilities to personalize content for specific audiences or users.
- USDA had no enterprise-wide standards for look, feel, and navigation of online services. Agency Web sites and the main USDA.gov site used a wide range of site structures and designs, making navigation across agency sites and location of information difficult.
- There was no capability to manage the contribution or review of Web content. All information presented on USDA's Web sites —over 12 million pages—had to be placed on sites by Webmasters or those with knowledge of HTML coding. Review and approval of Web content was manual, with no standard processes within or across agencies. With no central facility to manage Web content, agency Webmasters could not even accurately determine how many Web pages existed.
- USDA had no electronic records management capabilities and very limited guidance and policies on electronic storage and management of official records.

- A number of systems were used to store employee data, with incomplete information in each and no way for IT systems needing to access this data to efficiently do so.
- USDA had no standard electronic collaboration tools. A small number of agencies used different software to provide virtual workspaces and Web conferencing, but most agencies had no such capabilities. Other electronic communications tools, such as secure instant messaging, did not exist anywhere at USDA.
- Search capabilities were limited. USDA.gov and some agency sites used the FAST search engine operated by FirstGov, but the engine did not allow users to easily find much of the information on USDA Web sites.
- Enterprise-wide services to provide portal, Web content management, and document management functionality are deployed. IBM WebSphere is used to provide portal and application server functionality, while Stellent provides Web content management and FileNet provides document management.
- Products in the ESS suite are available to replace agency-specific technical infrastructure for developing and hosting online services, as well as to serve an additional range of enterprise-wide and agency-specific application needs.
- Agency systems are developed on the ESS infrastructure, including the USDA.gov portal and Enterprise Content Management Module (described in separate overviews). Agency-specific applications include Web sites for GIPSA and FSIS based on ESS' WebSphere architecture.
- Departmental regulations complementing ESS tools require all USDA systems requiring portal, content management, or document management functionality to use ESS' services; they also prohibit redundant investment in similar agency-specific systems.
- Enterprise-wide Web Style Standards provide a consistent set of look, feel, and navigation guidelines for all public-facing USDA Web sites.
- 16 USDA agency web sites using the Web Style Standards are deployed. USDA Departmental Regulations require all public-facing sites to transition to the standards by the end of 2005.
- Enterprise-wide search capabilities, based on an enterprise purchase of industry-leading Google technology, improve searches across USDA public Web sites and allow agencies to use Google search services for their intranet sites.
- An ESS Support site using ESS' document management service, provides USDA agencies seeking to build applications based on ESS services (or migrate existing applications) with technical and business resources to aid their transition.
- A Common Employee Database (CED), based on the Oracle database (a USDA enterprise standard), provides a central, authoritative repository

for all key employee data and supports enterprise-wide systems including AgLearn and the eAuthentication Service. The CED will be used to support HSPD 12 physical and IT security guidelines.
- Enterprise collaboration tools will allow USDA employees to securely exchange instant messages, conduct virtual meetings, and use electronic workspaces while avoiding a proliferation of agency standards and redundant purchases.
- Records management capabilities are planned to be added into ESS by FY 2006.

Current Baseline

- There were 18 Web sites compliant with USDA Web Standards.
- The Google Search appliance is deployed on 7 Agencies and Staff Offices Web sites.
- Five applications have been integrated to use the Common Employee Database.
- 95% availability per server for Infrastructure Services during operational hours. 90% availability per server for Infrastructure Services during non-operational hours.
- ESS has 3 agencies or staff offices are using ESS WebSphere or WebSphere Portal infrastructures.
- Eleven Common Templates were created and completed.
- Enterprise Correspondence Management Module (ECMM) successfully piloted in the FY05 Q2. Users now use detailed workflows to manage USDA correspondence.

Future Status

With the introduction of content management and document management capabilities content owners and creators are empowered to create quality enriched content without requiring deep technical abilities. This has indirectly changed the roles and responsibilities of USDA agency content developers and even those who currently communicate to external audiences through traditional means. Technical resources that were relied upon to create "Web" versions of content, now focus on higher priority and more technical areas and allow non-technical users the ability to publish information directly to Web sites. Likewise, our constituents will more easily navigate and find information that they are looking for through an intentions-based design and use of a common taxonomy across all our online information. Common look and feel standards have been identified and enforced throughout the Department to ensure a higher quality user experience. Within the Department as a whole, agencies have been asked to work in a more collaborative environment to develop online solutions. In the past, agencies have worked independently and have often provided redundant information

to our constituents. With ESS, agencies work together to develop online information and services around our common business functions - a fundamental difference in the way USDA does bus iness, but necessary to achieve our goal of citizen-centric government.

Planned ESS Target Performance Goals

Fiscal Year	Measurement Area	Measurement Category	Measurement Indicator	Baseline	Planned improvements to the Baseline	Actual Results
2006	Customer Results	Customer Benefit	Increase in the number of agency and staff office Web sites that provide agricultural, food, and nutrition related information for citizens, business partners, and employees using USDA's Web Standards.	As of January 2005, there were 7 Web site compliant with USDA Web Standards.	53 total Web sites compliant with USDA Web Standards.	TBD
2006	Technology	Effectiveness	Increase in the number of agencies and staff offices Web sites that are integrated with the Google Search appliance.	There was at least one other search engine available to agencies but not all agency sites had this capability. Further, the previous search engine was sluggish and the results were returned without preference. Finally, it was not interoperable between agency Web sites.	19 total agency/staff office Web sites integrate the Google search appliance to provide enhanced search results to employees and public by the 4th quarter of FY05.	TBD
2006	Mission and Business Results	Human Resource Management	Increase in the number of USDA applications integrated with a single point of access to common employee data.	0 applications were integrated to a single point of access to common employee data.	6 total applications integrated with the Common Employee Database.	TBD

2006	Customer Results	Service Accessibility	Provide ESS Infrastructure services to customers in accordance with USDA's eGovernment vision of making services electronically available, any place, any time.	No baseline prior to the fiscal year.	90% availability per server for Infrastructure Services during operational hours.	TBD
2006	Technology	Information and Data	Standardize infrastructure technologies and skills within USDA to minimize redundant and overlapping technologies.	As of January 2005, there were 2 agencies or staff offices using ESS infrastructure tools.	9 total Agency or Staff Office web applications hosted on the ESS WebSphere or WebSphere Portal infrastructures.	TBD
2006	Customer Results	Customer Benefit	Increase number of standard templates available online.	No current templates exist.	12 Common Templates.	TBD
2006	Technology	Information and Data	Track and report on number of emergency, expedited, and standard changes to better understand (1) the support and operations groups' activities and (2) the current status of customers' change or release requests.	Tracking does not exist	Establish ability to report and track the number of emergency, expedited and standard changes.	TBD
2006	Technology	Reliability and Availability	Improve incident management after core operating hours. Respond to after-hours requests with informed decision-making materials to expedite incident resolution.	No after hours help desk	Track number of calls accepted by the System Network Control Center (SNCC) after hours.	TBD
2006	Technology	Reliability and Availability	Provide Tier 1 Help Desk support on a 24x7 basis and escalate Tier 2 and Tier 3 calls appropriately.	No existing Help Desk specific to ESS.	Establish Tier 1 Help Desk by the end of FY06 Q4.	TBD
2006	Technology	Information and Data	Create a USDA 'repository' of all online content to enable sharing and reuse.	All online content is not sharable.	All Agency and Staff Office main public-facing Web sites (total of 29) migrate content to ESS Web Content Management (Stellent) infrastructure.	TBD

2006	Technology	Information and Data	Users will be able to manage records electronically and manage through defined workflows.	No electronic records management occurs.	Enterprise records management module is operational for the pilot entities in the first quarter of FY06.	TBD

14. WorkLenz Portfolio Manager

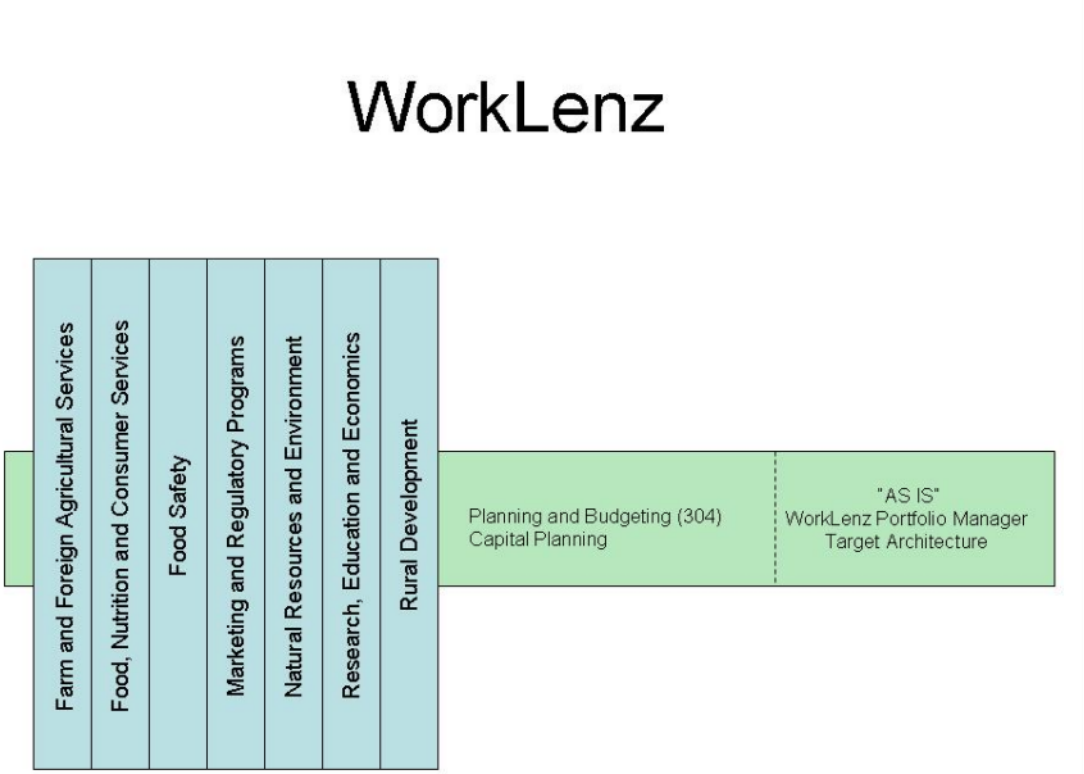
Target Architecture Level: Common Enterprise Wide Application
Related Investment: USDA Capital Planning and Investment Control
Related Unique Project Identifier: 005-03-03-01-02-1010-00

Background and Overview

WorkLenz is a Web-based system providing USDA with project management tools for individual projects and capabilities to manage the Department's portfolio if IT investments. The system also provides features supporting USDA's Capital Planning and Investment Control (CPIC) process. By combining tools to manage individual projects, such as work planning and earned value management features, with statistical approaches to measuring performance across IT investments, WorkLenz allows USDA to actively manage its portfolio and maximize the effectiveness of its IT investment funds. WorkLenz is a Commercial-Off-The-Shelf (COTS) software package, created by Metier Ltd., and has been customized for USDA's needs and CPIC processes.

WorkLenz replaced I-TIPS (Information Technology Investment Portfolio System), the IT portfolio and CPIC process management software previously in use at USDA. WorkLenz has significantly improved USDA's ability to track detailed project management data, aggregate earned value and other budget and performance data across projects, and analyze USDA's overall portfolio. This supports the Department's goals of better tracking the performance of IT projects and more actively using portfolio management to shape systems and applications included in USDA's Enterprise Architecture. As such, WorkLenz is an integral part of USDA's CPIC process and supports the Department's IT transformation efforts.

The following graphic provides an overview of the WorkLenz segment architecture and how it relates to USDA's missions.



Pre-WorkLenz Baseline (2002)

- USDA used the I-TIPS system for Exhibit 300 input and CPIC process management. I-TIPS' lacked most project tracking and management functionality, and only limited project performance data was available.
- I-TIPS did not readily allow USDA CPIC staff to conduct needed portfolio analysis, requiring data to be extracted from the system and manually analyzed using Excel or other tools.
- I-TIPS' Exhibit 300 entry and project data collection functionality was difficult for USDA employees to use and did not synchronize or validate data across sources or locations.

Current Baseline

- WorkLenz is now used to support IT portfolio management at USDA, including the CPIC process.
- Employees from all agencies use WorkLenz to track major IT investments and provide information on their agency's IT portfolio.
- Project managers have begun to be trained on WorkLenz's project management functions for day-to-day project tracking.

WorkLenz provides project management and portfolio management features including:

- Project workplan creation and Microsoft Project integration;
- Web-based project time and expense tracking;
- Calculation of earned value management data;
- Exhibit 300 entry and automatic initial scoring;
- Statistical analysis and graphical presentation of portfolio and performance; and Transmission of Exhibit 300 and portfolio information to OMB.

Future Status

Future enhancements of WorkLenz include additional reporting features, and modifications necessary to reflect OMB Exhibit 300 changes.

Actual WorkLenz Target Performance Goals (2005)

Note: WorkLenz was designated as a "Non-major" Investment in 2006.

Fiscal Year	Measurement Area	Measurement Category	Measurement Indicator	Baseline	Planned improvements to the Baseline	Actual Results
2005	Mission and Business Results	Service Quality	Number of Individuals trained in Project Management	92	Increase of 100 to 192	Total to date is 307.
2005	Processes and Activities	Management and Innovation	% investments reported in WorkLenz whose CPI and SPIs were between .9 and 1.1.	0%	75%	57%
2005	Technology	Information and Data	% required major investments reporting EVM information in WorkLenz effectively.	50%	90%	94%
2005	Processes and Activities	Management and Innovation	Number of projects with certified project managers	3	20	21
2005	Mission and Business Results	Management and Innovation	Number of investments in portfolio.	493	330	292
2005	Technology	Information and Data	Single tool used for managing USDA's portfolio.	80%	100%	100%

15. Universal Telecommunications Network (UTN)

Target Architecture Level: Common Enterprise Wide Application (Technology Layer)
Related Investment: USDA-Wide Consolidated Infrastructure
Related Unique Project Identifier: 005-00-02-01-01-9999-00

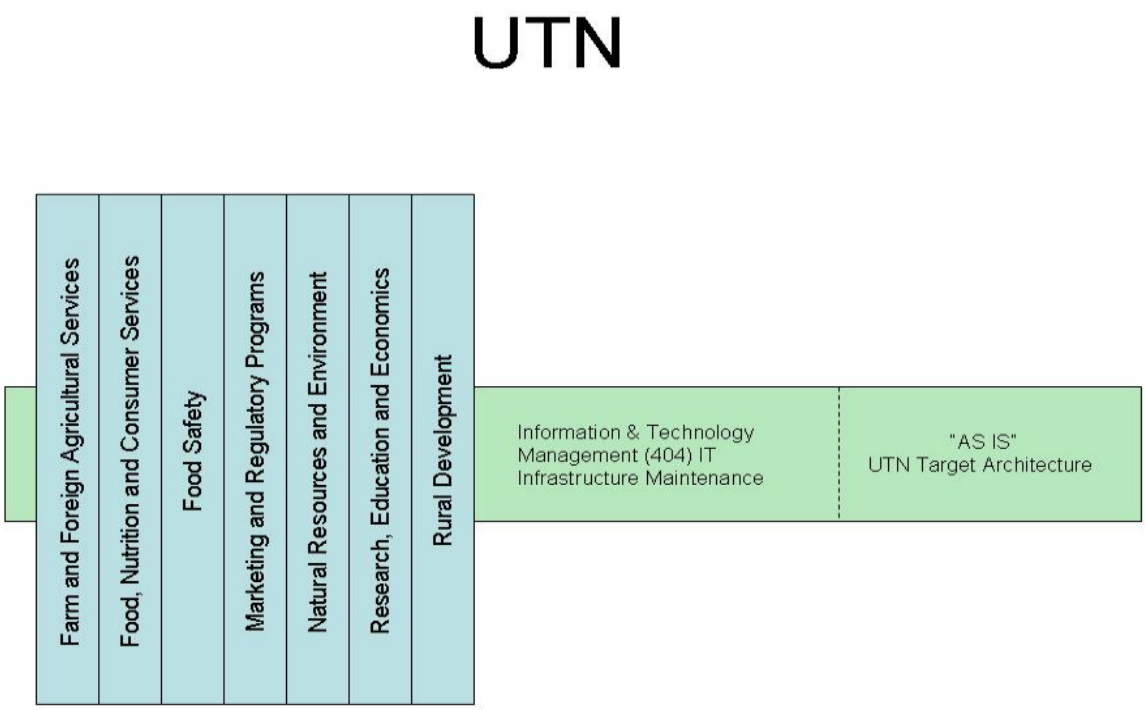
Background and Overview

The Universal Telecommunications Network (UTN) is a robust, coordinated telecommunications infrastructure that provides scalable, reliable, secure, and cost effective services, twenty-four hours a day, seven days a week, to enable USDA Agencies to meet the Department's mission and their goals for serving customers. UTN is creating a shared corporate telecommunications network consistent with the Department's enterprise architecture goal of replacing multiple, redundant systems and technology components with coordinated, enterprise-wide approaches. UTN works collaboratively with USDA agencies and staff offices to transform the current USDA telecommunications environment into one that will better meet the delivery challenges of today and tomorrow.

USDA identified a strong need for the UTN. The increased use of information technology, eGovernment, and the Internet to support the USDA's program and administrative services was pushing the Department's existing telecommunications network to capacity. The Departmental network was comprised of numerous overlapping agency networks that came together around operated Internet access points operated by the Office of the Chief Information Officer (OCIO). Coordinated management of the network proved difficult, as documented by the Government Accountability Office and USDA Inspector General.

UTN was designed to address these needs; it will eliminate USDA's current approach based on stove-piped agency networks by establishing a coordinated approach that focuses on maximizing USDA's collective buying power to develop a modern and efficient corporate telecommunications infrastructure. As the enterprise-wide telecommunications infrastructure for the Department, the UTN is a key fundamental technology enabler of Department-wide efforts such as the USDA eGovernment initiatives. Further, by replacing uncoordinated, stove-piped agency networks and redundant telecom investments with a single enterprise-wide telecom investment, UTN improves USDA's use of IT funding and supports the IT transformation envisioned in USDA's enterprise architecture.

The following graphic provides an overview of the UTN segment architecture and how it relates to USDA's missions.



Pre-UTN Baseline (2000)

- USDA's telecommunications backbone network consisted of a series of interconnected stove-piped agency networks. This infrastructure caused inefficiencies, including inadequate capacity projection capability, unnecessary redundancy between some locations and inadequate redundancy between and others, and uncoordinated telecommunications planning, management, and operations.
- The environment also created bandwidth challenges for the Department, as an absence of up-to-date cross-agency management tools made capacity planning difficult.
- Data security on the previous backbone was a significant concern. Because it was designed first for public access from the Internet to USDA enterprise-wide and agency servers, restrictions on access could not be very strong for fear of excluding legitimate citizen access. As a basic Internet access network, the backbone offered few tools to isolate traffic by type, source, destination, or other potentially useful categories.

Current Baseline

- UTN provides a single, coordinated Wide Area Network (WAN) providing Internet and telecommunications backbone for USDA, based on modern technologies including Virtual Private Networks (VPNs) and Multi-Protocol Label Switching (MPLS). The UTN architecture allows the network to isolate, when required, each Agency's data from other Agencies' traffic, including connections via the Internet. The MPLS technology gives OCIO telecommunications network managers the ability to engineer how traffic flows, increasing the ability of the UTN to offer Service Level Agreements (SLAs) related to maximum latency and packet loss or minimum throughput.
- UTN's baseline services (for example: access to/from the Internet, USDA inter-Agency connectivity, and connectivity to USDA's National Finance Center and National Information Technology Center) are centrally provided for all agencies and staff offices to maximize the collective buying power of the Department and realize best value telecommunication solutions.
- Supplementary UTN services, including Web server farm connections, wireless services, and network management services for USDA agencies and staff offices are will be available to agencies to allow easy migration to enhanced telecommunication service as their business needs dictate.
- UTN baseline services are supported through a cost sharing arrangement among users based upon actual network resource utilization. The network is capable of rapidly increasing network capacity to support a business requirement change while preserving the network attributes under an established enterprise architecture planning process.
- UTN interfaces with agency LANs (local area networks) and USDA's metropolitan area networks. These networks have not been re-engineered as part of UTN but can take advantage of UTN's supplemental services to reduce costs, increase performance, and add new capabilities.
- UTN uses an integrated, outsourced wide-area communications network to provide features including:
  - "24x7x365" Internet Protocol (IP) network shared by USDA Agencies and other authorized users only;
  - Connectivity among users to a defined set of service delivery points;
  - Private intranet data connectivity within the United States; and

- Secure, encrypted data transmission using OCIO Cyber Security Program-approved encryption techniques), suitable for carrying sensitive but unclassified information.

Future Status

Future enhancements of UTN include continued updates and maintenance as supplemental UTN services are adopted by agencies.

Actual UTN Target Performance Goals (2005)

Note: UTN was combined into the USDA-Wide Consolidated Infrastructure investment in 2005.

Goals for Improved efficiencies:

- An improved and enhanced architecture that supports the business, telecommunications, and data networking requirements of the USDA Agencies.
- Competitive outsourcing, which promotes innovation and efficiency and effectiveness of telecommunication services within USDA
- Circuit and/or network consolidation via reduction or elimination of overlapping "stove-pipe" Agency circuit and/or networks,
- Economies of scale by leveraging the USDA's size and collective buying power to reduce costs,
- Implementation of COTS standards based, scalable and reliable state-of-the-art networking technology.

Results of Improved efficiencies:

- Deploying UTN has enabled USDA to retire its previous Inter-Agency Network backbone, saving approximately $9 million per year.
- The UTN business case estimated $38 million in net benefits (as measured by net present value), including reduced productivity losses from network downtime, reduced Internet access and switching costs, and reduced Internet access infrastructure costs. This results in a return on investment of 86%.

UTN Performance Goals for FY 2007:

Metric	Definition / Description / Time Frame	Target Levels	How Measured
Availability	Connectivity on logical circuits between UTN node pairs.	99.9%	Uptime minutes divided by minutes in month
	Connectivity from any UTN node to the Internet	99.9%	
Latency	Speed of transport measured by a ping test between all UTN point pairs, sampled every 5 minutes, and averaged over the "busy hour" each day.	<93 milliseconds	Ping Test
Help Desk	Percentage of calls answered by a live Network Operation Center Help Desk technician	>95%	Total number of Help Desk calls divided by the number of call answered by a live network engineer.

Metric	Definition / Description	Activity Measure	How Measured
Internet	Intrusion Detection services	Number of Shuns	Monthly
Internet	URL and IP address filtering	Number of Blocked attempts	Monthly
Internet	Antivirus detection	Number of Blocked virus'	Monthly

16. Web Farms

Target Architecture Level: Common Enterprise Wide (Multi-agency) Application
Related Investment: Service Center Modernization Initiative – Information Technology
Related Unique Project Identifier: 005-03-02-01-01-0113-00

Background and Overview

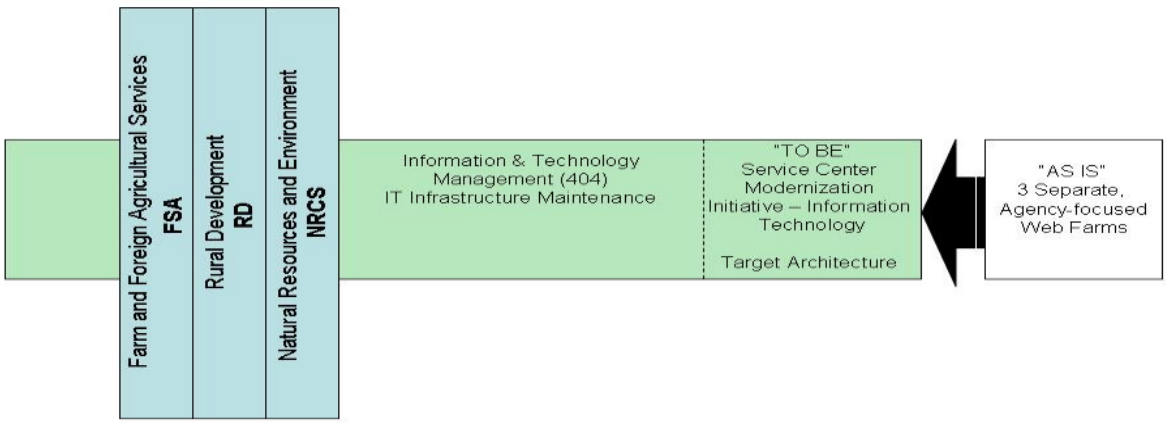
USDA is consolidating three Web Farms (originally created to support USDA's Service Center Modernization Initiative) in to NITC and USDA's National Finance Center (NFC), coordinating these previously separate operations to improve service and reduce cost.

Together, USDA's enhancement of mainframe systems to support current technologies, increasing use of modern hardware platforms, and consolidation with other USDA Web hosting facilities supports USDA's ongoing IT transformation and the consolidation and coordination goals of the Department's enterprise architecture. IT has also enabled improved volume license terms, centralized technical support, feasibility to contract for offsite processing, potential for a greater selection of software, and an improved environment for data sharing.

The ITS Web Farms provide a centralized hosting environment for the Service Center Agencies. Designed to enable secure web access and utilize a common infrastructure, the Web Farms provide a medium to take advantage of electronic web access. This support system provides customers the ability to conduct self-service transactions, electronic procurement, access to information, and dissemination of electronic information. The ITS Web Farms share a common infrastructure design. The FSA web farm is located in Kansas City, the NRCS web farm is in Fort Collins, and RD web farm is in St. Louis.

The following graphic provides an overview of the USDA Common Customer Statement segment architecture and how it relates to USDA's missions.

Web Farms



As-Is

The Fort Collins Web Farm acts as the primary location for hosting NRCS web-based applications and serves as a backup location for FSA and RD applications.

The Kansas City Web Farm acts as the primary location for hosting FSA web-based applications and serves as a backup location for NRCS and RD applications.

The St. Louis Web Farm acts as the primary location for hosting RD web-based applications and serves as a backup location for FSA and NRCS applications.

Target

USDA is consolidating three Web Farms (originally created to support USDA's Service Center Modernization Initiative) into NITC and USDA's National Finance Center (NFC).

Web Farm Target Performance Goals

To Be Developed

Part 2: Segment Architectures Underway

The following segment architectures are underway an d are in the first iteration of the performance improvement life cycle:

1. Corporate Financial Management System
2. Configuration Management Systems
3. Enterprise HR Applications
4. Enterprise Identity Management
5. Enterprise Messaging
6. USDA Grants System
7. Internet Protocol Version 6 (IPv6)
8. IT Infrastructure
9. Industry Sector Income Stabilization
10. Security Profile
11. USDA Travel System
12. Web-Based Supply Chain Management (WBSCM)

1. Corporate Financial Management System

Target Architecture Level: Common Enterprise Wide Application

Related Investment #1: Corporate Financial Management System
Investment #1 Component: Federal Financial Information System
Investment #1 Component State: As-Is
Investment #1 Unique Project Identifier: 005-03-01-01-01-1020-00

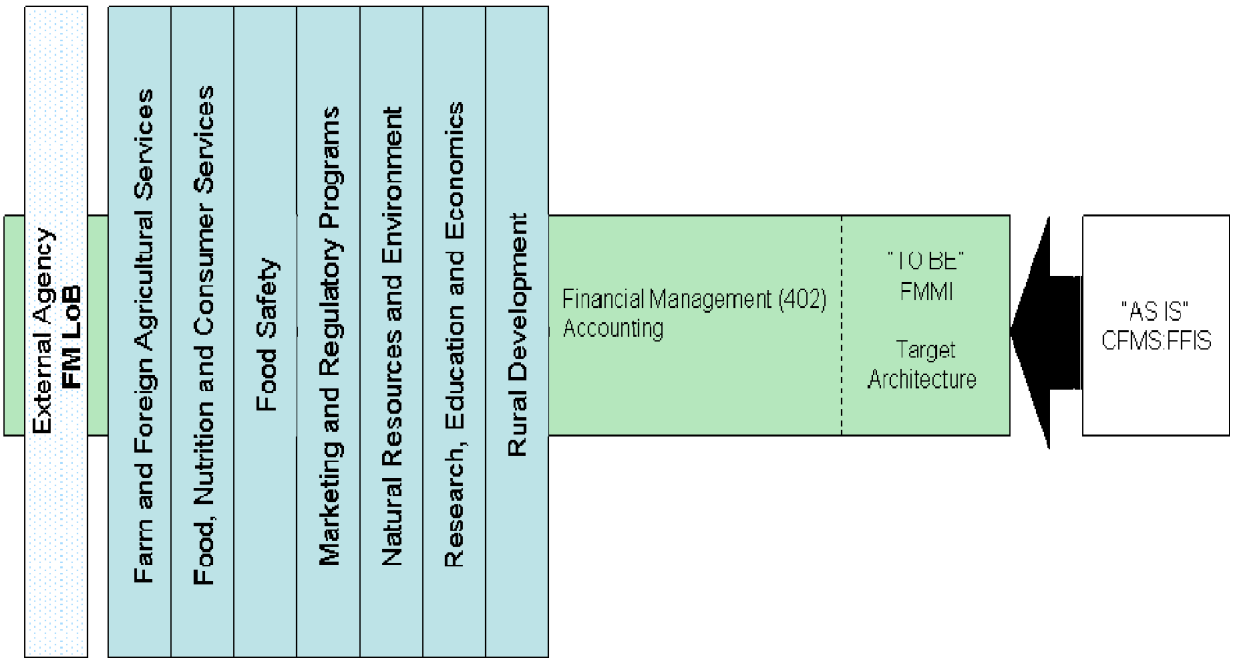
Related Investment #2: Financial Management Modernization Initiative
Investment #2 State: To-Be
Investment #2 Unique Project Identifier: 005-03-01-01-01-1102-00

Background and Overview

USDA manages a budget of nearly $100 billion annually, including hundreds of programs administered by 29 agencies and business units and over 100,000 employees. To effectively execute its budget, as well as, other financial management administrative and program processes, USDA utilizes an enterprise-wide suite of integrated financial management systems. At the core of this suite of systems is the Federal Financial Information System (FFIS) which was fully implemented throughout the Department on October 1, 2002. The FFIS is a USDA-configured version of the commercial off-the-shelf (COTS) Federal Financial System (FFS), a budget execution and accounting application that has been implemented in many other federal agencies.

USDA is planning to replace FFIS and its legacy program financial management processes with a new financial system that is certified as compliant with the requirements of the Financial System Integration Office (formerly the Joint Financial Management Improvement Program). The replacement process must also follow the guidelines prescribed by OMB's Financial Management Line of Business (FMLoB) which requires the selection of an external OMB-approved "Center of Excellence" (COE) to host the new system.

The following graphic provides an overview of the corporate financial management system segment architecture and how it relates to USDA's missions.



As-Is

- USDA is currently operating a department-wide integrated financial management system, the Consolidated Financial Management System (CFMS). The CFMS is comprised of the FFIS, as well as, the department's administrative payment feeder systems which interface with FFIS, the Financial Data Warehouse for agency-specific reporting, the Financial Statements Data Warehouse for external reporting, and the Automated Cash Reconciliation System for reconciling cash general ledger accounts with the fund balance at Treasury.
- FFIS is currently interfacing with the next-generation of USDA systems, Corporate Property Automated Information System (CPAIS) and Integrated Acquisition System (IAS).
- At the end of FY2005 USDA will complete the interfacing of financial information from four major program systems into the Financial Statements Data Warehouse.
- In line with USDA's initiative to retire its legacy feeder systems, the following feeder systems have been eliminated and their functionality incorporated into FFIS: Program Billings and Collection system, GSA's Fedstrip, Motorpool and Federal Telephone systems, and the Transportation System. In FY 2006 the Property and Equipment Management Information systems will be retired with the integration of their functionality into CPAIS and the Government Transportation

system and the temporary duty portion of the Travel system will be eliminated with the deployment of eTravel.

To-Be

- USDA will begin migration to its new financial management system under the auspices of the Financial Management Modernization Initiative (FMMI). The FMMI targets the replacement of FFIS. FFIS is based on outdated mainframe technology and is no longer supported by the vendor for ongoing compliance with federal financial management system requirements, as specified by the Financial Systems Integration Office. The new system will also incorporate the functionality of many of the legacy feeder systems, be capable of processing the financial transactions from the department's program systems, and produce accurate and timely external financial statements.
- The FMMI is fully aligned with and directly incorporates OMB guidance established through the Financial Management Line of Business (FMLoB) initiative. Specifically, while modernizing USDA's core financial management system and associated business processes, the FMMI will accomplish USDA's migration to the emerging cross-governmental "shared services" model. The shared services model will require USDA to select an external OMB-approved "Center of Excellence" (COE) to provide, at a minimum, hardware and software hosting services for the new core financial management system.
- The selected COE will provide USDA with a web-based COTS package that meets core financial management system requirements, provides both batch processing and online, real-time transaction capability, integrates with eGovernment initiatives, such as, eTravel and ePayroll, integrates performance management and budgeting, and provides access to both Department-level offices and all agencies.

Current Status

The procurement to select COTS software and integration support for FMMI is currently underway. FMMI implementation will be based on the selected procurement solution.

Planned FMMI Performance Goals (2008/2009)

Fiscal Year	Measurement Area	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvement to the Baseline	Actual Results
2008	Technology	System Development	Develop Interfaces to USDA Corporate Systems	0% Corporate Systems Interface with FMMI	100% of Corporate Systems Interface with FMMI	TBD
2009	Mission and Business Results	Financial Management	Accounting: Maintain full federal financial system mandatory functionality	Maintaining compliance requires significant enhancements and workarounds to core financial management system	Maintain full compliance through core COTS system	TBD
2009	Customer Results	Financial Management	Customer Satisfaction: Time it takes for customer to access desired data	5 - 10 minutes	Maintain current baseline as metric is contingent upon completion of implementation	TBD
2009	Processes and Activities	Financial Management	Cycle Time: Number of days required to process year-end close of USDA books	3 days	Because FMMI will be in the planning stage during 2008, no improvements to the baseline are anticipated	N/A
2009	Technology	Operations and Maintenance Costs	Operations and Maintenance Costs: Maintenance costs, based on labor hours, required to support corporate systems that duplicate Core Financial functionality (e.g. data warehouse and feeder systems)	73,000 hours	Because FMMI will be in the procurement and beginning of the conversion phase during 2007, no improvements to the baseline are anticipated	N/A

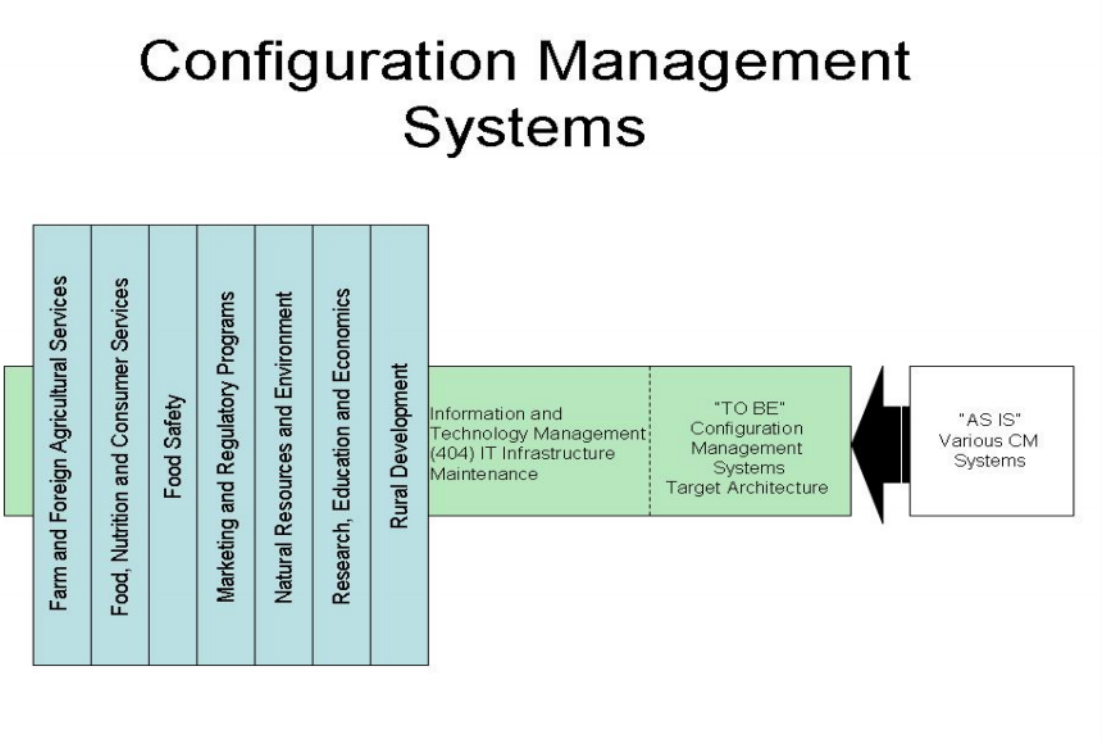
2. Configuration Management Systems

Target Architecture Level: Common Enterprise Wide Application
Related Investment: USDA-Wide Consolidated Infrastructure
Related Unique Project Identifier: 005-00-02-01-01-9999-00

Background and Overview

The Configuration Management Information Tracking System (CMITS) is an interim Configuration Management Database (CMDB) that helps the National Information Technology Center (NITC) personnel document hardware, hardware relationships (infrastructure), installed software and some limited financial information throughout the life-cycle of the stored items. This system along with various other configuration management databases will be replaced by the new configuration management systems initiative.

The following graphic provides an overview of the target segment architecture and how it relates to USDA's missions.



As-Is

- USDA currently uses CMITS to manage and document hardware, hardware relationships (infrastructure), installed software and other configuration changes at NITC.

To-Be

- Future enhancements of CMITS include continued updates and maintenance as needed.

Current Status

The target segment architecture is currently in the Invest and Define phase of the Performance Improvement Life Cycle. Associated business processes and project details are under development.

Actual Target Performance Goals (2006)

To Be Developed

- Specific performance goals will be developed and managed at the project management office - NITC.

3. Enterprise HR Applications

Target Architecture Level: Common Enterprise Wide Application
Related Investment #1: Human Resources Line of Business: Service Center
Related Unique Project Identifier: 005-03-01-01-01-1226-24

Target Architecture Level: Common Enterprise Wide Application
Related Investment #2: Human Resources Line of Business: e-Payroll
Related Unique Project Identifier: 005-03-01-01-01-1221-24

Background and Overview

The e-Payroll initiative encompasses moving five departments/agencies from their current payroll providers to the NFC Legacy Payroll/Personnel System (PPS) as part of the payroll migration/realignment. Eventually, all NFC customers will be migrated to a replacement (or end state) payroll system. Therefore, this initiative is closely tied to USDA's Legacy PPS and the Human Resources Line of Business (HR-LoB): Service Center initiative. The Legacy PPS business case focuses on operation of the overall PPS system, while the HR-LoB: Service Center business case focuses on the further integration of USDA's PeopleSoft-based HR system (EmpowHR) with PPS, and implementation of a replacement HR/payroll system.

The National Finance Center (NFC) is currently one of the largest payroll providers in the Federal government. The Office of Personnel Management (OPM), in response to Presidential Initiatives, has been designated by OMB as the "managing partner" of the Electronic Payroll (e-Payroll) Initiative - an effort to consolidate the 22 existing payroll providers to two partnerships (four providers), eventually using one common payroll system for the designated providers.

NFC is part of the USDA Working Capital Fund (WCF) and funds all of its operating costs through reimbursed user fees. The WCF also has funds available for capitalized expenses. Migration of e-Payroll customers to USDA's Legacy PPS is funded entirely through the Working Capital Fund. As such, no additional government funding or capital outlay is being requested at this time. NFC budgets approximately 15% of its total ADP budget annually to fund data security/privacy requirements, including labor and all costs associated with disaster recovery and business continuity planning. The IT financial percentage represents estimates to provide interfaces from the Payroll/Personnel System to USDA and Agency financial systems.

As the managing partner of the e-Payroll initiative, OPM's initial business case was dated September 9, 2002, and an updated business case was submitted to OMB on January 13, 2003. OMB approved NFC's Pre-Select

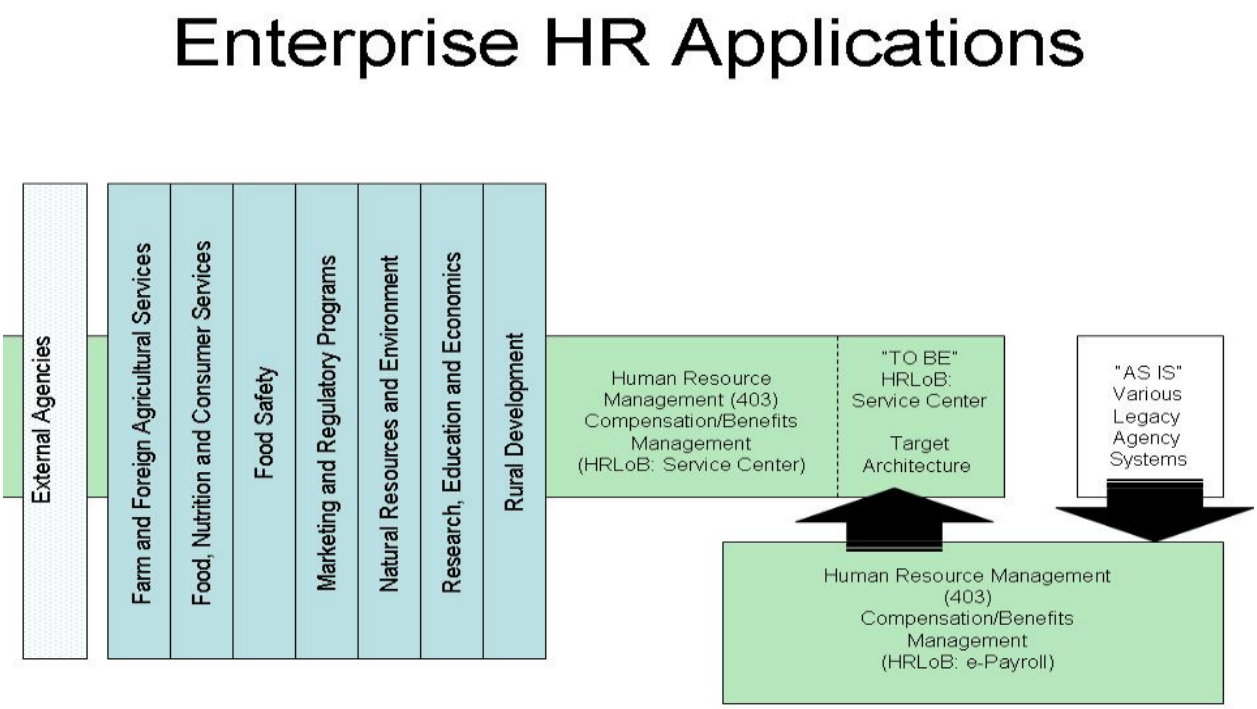
Phase e-Payroll business case for FY 2004, which enabled NFC to compete to be an e-Payroll provider. For FY 2005, OPM submitted a consolidated e-Payroll business case and NFC did not submit a separate one. For FY 2006, OPM is preparing a business case for the program management only, and the four providers are preparing business cases for the completion of e-Payroll migrations. The USDA HR-LoB: e-Payroll initiative is currently in the Control phase of the USDA Capital Planning Investment Control process.

Since the goal of this e-Payroll phase is to transition new customer agencies to PPS, this business case is written from the NFC/PPS point of view. In addition, the cost estimates and EVMS results in this business case represent NFC costs only. The e-Payroll customer agencies are not consistently providing their estimated and/or actual internal costs to NFC.

The implementation of a HRLOB Shared Service Center (SSC) by the NFC that offers standardized HR services on a Federal Government-wide level. In September 2005, NFC was selected as an HRLOB SSC. To be consistent with the managing partner's business case, this business case also incorporates the completion of the e-Payroll migrations. On July 13, 2006, the OPM Project Manager confirmed that they no longer submit a separate Exhibit 300 for e-Payroll and that all e-Payroll costs are included in the HRLOB Exhibit 300. In the near-term, the NFC SSC will provide integrated HR, personnel, and payroll system services to Federal agencies. In addition, NFC will leverage its HR system technology platform to offer a full range of optional employee-centric services to Federal agencies, such as position management, classification, staffing, personnel action processing, employee-relations, labor relations, employee development, benefits administration, EEO case management processing, and other related services. In the long term, OPM anticipates that the Shared Service Centers will utilize a "common solution" that identifies systems, best practices, migration strategies and key interfaces to develop common HRLOB business processes and system solutions. This NFC business case fully supports the OPM near-term and long-term common solution visions. The NFC HR system suite consists of EmpowHR, a PeopleSoft-based Human Resource Management Information System and the Payroll/Personnel System (PPS). This system suite is a solution of integrated applications enabling customer agencies to obtain the core HR system services while supporting HR operational services. Near-term PPS plans for this initiative include only minor enhancements and modifications required to ensure system reliability and to meet customer requirements. NFC is currently implementing Forest Service (FS) into the EmpowHR system for HR processing. Over 4,500 FS employees were implemented in August 2006, while the remaining 46,000 have phased implementations scheduled through September 2007. FS and NFC are working close together to ensure that EmpowHR is integrated with the ConnectHR investment. FS employees and managers will be able to access

EmpowHR through the FS portal. USDA has established a n initiative to analyze and select a department-wide T&A system that meets all USDA agency requirements. NFC and FS have representatives on this department-wide team.

The following graphic provides an overview of the Enterprise HR Applications segment architecture and how it relates to USDA's missions.



As-Is

- As a leader in government-wide shared services, USDA's National Finance Center (NFC) provided payroll processing services to all USDA agencies and over 100 external agencies using a legacy-based Payroll and Personnel System (PPS).
- Human resources processing was accomplished using several systems:
  - USDA's Service Center Agencies used a Common Administrative Management System (CAMS) based on the PeopleSoft platform.
  - The Forest Service used a custom system, ConnectHR, to allow Web-based access to its legacy HR platform and integrate with other HR applications.
  - Most other agencies used several HR systems operated by NFC. These systems were mainly client interfaces to the legacy Payroll and Personnel System (PPS), including the Windows client-sever EPIC front end and the DOS-based PRES front end. PPS was (and remains) the official personnel system of record for USDA.

- NFC also operated a number of HR support applications, including STAR for time and attendance tracking and a Web-based Employee Personal Page allowing employees to update their personnel data.
- HR processing was managed by individual agency personnel offices using the agency-specific and enterprise-wide systems listed above.
- Official Personnel Folders (OPFs) were maintained only in paper format by agency personnel offices.
- USDA has integrated PPS with a number of other enterprise-wide systems, including the Common Employee Database (which receives basic employee profile data from NFC's official personnel roster).
- NFC has been designated as one of four shared-service payroll providers (forming two partnerships) as part of the E-Payroll Presidential Initiative. For a first phase of the initiative, nine agencies migrated to NFC payroll services (based on the current legacy PPS platform). Once the initial realignment of Federal agencies to the E-Payroll services provided by NFC and three other E-Payroll providers is complete, the four providers will begin a transition to modern payroll systems (such as those based on Commercial-Off-The-Shelf (COTS) enterprise resource planning solutions).
- NFC has also been designated a potential HR Shared Service Center as part of the Human Resources Line of Business initiative. Building upon its experience offering payroll services to USDA and external Federal agencies, NFC's service center will provide integrated core HR, payroll, personnel, labor, and other personnel processing services, as well as Equal Employment Opportunity (EEO) case management processing, to Federal customers.
- As a foundation for future HR shared services, NFC has assumed management of I*CAMS, an updated Web-based version of the CAMS system. I*CAMS' transition to NFC management allows for expansion to additional USDA and external agencies; two external agencies have currently migrated to the system.
- I*CAMS (to be renamed EmpowHR) and PPS allow NFC to rapidly provide USDA agencies and other Federal customers integrated HR and payroll system services. In addition, NFC is leveraging these technology platforms to offer a full range of optional employee-centric services to Federal agencies, such as position management, classification, staffing, personnel action processing, employee-relations, labor relations, employee development, benefits administration, EEO case management processing, and other related services. This enables the potential transition of services currently provided by individual agencies to a central, cross-agency service.

To-Be (2009)

- The Shared Service Center is envisioned to utilize a unified, modern, COTS system that provides both HR and payroll services. By consolidating common technology solutions within one Shared Service Center, this effort streamlines multiple eGovernment investments including the PPS and ePayroll.
- A plan for migrating USDA agencies to the single, integrated HR and payroll platform will be developed.
- USDA's participation in the Enterprise HR Integration Presidential Initiative will enable the Department to further streamline and consolidate HR activities by leveraging EHRI's government-wide tools for maintaining OPFs and conducting workforce analysis. This supports USDA's goal of using government-wide solutions when possible and allows for easier inter-departmental employee transfers.
- Similarly, USDA is working with the E-Clearance initiative to transition to its government-wide security clearance management tools, replacing currently un-integrated and paper-based agency-level and Department security clearance processing systems with the government-wide Clearance Verification System (CVS) and Electronic Questionnaires for Investigations Processing (e-QIP) systems.

Future Status

The HRLOB initiative provides opportunities for agencies to collectively identify and adopt best practices to standardize business processes and eliminate redundant systems. OPM's envisioned common solution is citizen centered, results-oriented, and market-based, allowing it to directly support the strategic management of human capital, competitive sourcing, financial performance, expanded e-Government, and budget performance integration PMA initiatives.

Enterprise HR System Target Performance Goals

HRLoB: e-Payroll Target Performance Goals (September 2006)

Fiscal Year	Measurement Area	Measurement Category	Measurement Indicator	Baseline	Planned improvements to the Baseline	Actual Results
2006	Customer Results	Timeliness and Responsiveness	% of technical issues resolved in 24 hours	95%	96% of technical issues resolved in 24 hours	TBD
2006	Customer Results	Service Quality	% paid accounts based on customer-submitted information	100%	100% of payroll payments paid based on data provided	TBD
2006	Customer Results	Service Accessibility	% of system availability during established hours	99%	99% system availability during established hours	TBD

HRLoB: Service Center Target Performance Goals (September 2006)

Fiscal Year	Measurement Area	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvement to the Baseline	Actual Results
2006	Mission and Business Results	Compensation Management	% of paid accounts based on customer-submitted information	100%	100% of payroll payments paid based on data provided.	100%
2006	Technology	Availability	% of system availability during established hours	99%	PPS and EmpowHR available to customers 99% of established business hours.	99%
2006	Customer Results	Timeliness	% of technical issues resolved in 24 hours	95%	Resolve 95% of major technical issues in 24 hours.	95%
2006	Customer Results	Accessibility	Number of employees with access to EmpowHR	62,000	100,000	65,000 (Forest Service migration delayed)
2006	Processes and Activities	Productivity	Number of HR actions completed using EmpowHR	86,000	90,000	273,000 PARs processed
2006	Technology	Functionality	% of HR actions successfully processed by EmpowHR on the first attempt	86%	87%	88%

4. Enterprise Identity Management

Target Architecture Level: Common Enterprise Wide Application
Related Investment: eAuthentication
Related Unique Project Identifier: 005-03-02-01-02-8003-04

Background and Overview

USDA's eAuthentication service is an enabling set of authentication and authorization processes and a technological architecture foundation that will help USDA achieve its goals and objectives for eGovernment by supporting all USDA eGovernment initiatives and applications. The USDA Authentication service provides centralized user registration for employees and customers. Once a user is identity proofed either on-line or via a Local Registration Authority, the user can log into Web services protected by the USDA eAuthentication service.

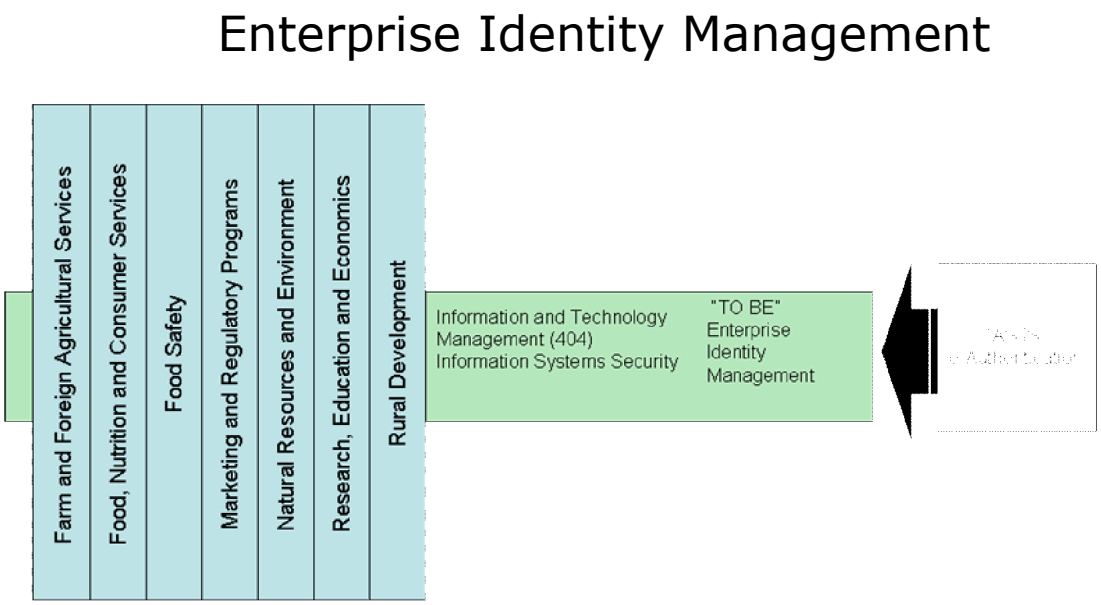
One of the major challenges facing USDA was the need to develop an enterprise approach to eAuthentication that balanced the individual requirements of Agencies with the enterprise-wide need to eliminate redundant activities. Among the more compelling reasons to consolidate authentication services was the leveraging of security best practices. A consolidated, enterprise approach can ensure that each Agency draws upon the best authentication mechanisms to ensure proof of identify and to protect the confidentiality and sensitivity of data.

The USDA eAuthentication initiative has been and will continue to be developed to meet the authentication needs across the department and all Federal, State and local agencies, along with their business partners. The USDA eAuthentication initiative program objectives are the following:

- Strategic: Enabled USDA to start meeting GPEA compliance goals for online transactions by providing common electronic alternatives to ink signatures by the October 2003 deadline. The USDA eAuthentication program will continue to integrate agency applications, continuing to drive USDA towards 100% GPEA compliance. This initiative is fully integrated with the President's Authentication initiative.
- Financial: Reduces management/administration costs by decreasing the time and resources required to manage usernames, passwords, and authentication systems; increases customer usability by providing consistent authentication standards across USDA, along with Federal, State and local agencies and their business partners, enabling customers to use one form of authentication to access many USDA, Government, and partner applications.

- Operational: Reduces maintenance of authentication systems by utilizing a central authentication mechanism; and enables productivity gains from single sign-on (single authentication solution) to access multiple accounts throughout USDA, Government, and business partner organizations.

The following graphic provides an overview of the Enterprise Identity Management segment architecture and how it relates to USDA's missions.



Pre- EIM Baseline (May 2002)

- An enterprise-wide electronic authentication solution was not in place at USDA. USDA's Service Center Agencies implemented a web centralized authentication and authorization facility to provide user authentication and authorization for several Web-based applications developed as part of the Service Center Modernization Initia tive.
- A lack of electronic authentication services and electronic signatures was identified by staff across USDA agencies as a major barrier to enabling electronic transactions.
- The few USDA systems with other user authentication features were uncoordinated, required users to use different user names and passwords, and had different security conventions/standards and registration processes.

Current Baseline

- A significant expansion and redevelopment of the Service Center Agencies' eAuthentication Service was completed in FY 2005. It provides an enterprise-wide service to enable employees, citizens and

business partners to conduct secure transactions with the Department and across government in an electronic environment, using a single user ID and password. Through three levels of assurance, the system can provide both basic authentication and electronic alternatives to ink signatures.

- eAuthentication protects more than 180 Web applications, with over 132,000 registered users and authenticating employees and the public nearly one million times each month.
- Security Assertion Markup Language (SAML) -compliant credentials issued by non-USDA credential providers are fully interoperable to access USDA online services.
- Complementing the USDA eAuthentication Service are policies and procedures that require enterprise-wide use of the USDA eAuthentication Service to provide user authentication and authorization for all USDA Web-accessible applications. USDA has developed standard processes for integrating new and existing Web-based applications with the USDA eAuthentication Service, including procedures for determining which level of assurance is appropriate for each application.
- A full-time service desk provides assistance and information to agency customers using the USDA eAuthentication Service.

Future Status

- Implementing the E-Authentication Service for public-facing systems requiring electronic authentication in FY 2007. Including: MyPyramid, eGov National Information Technology Center – USDA Portal/Executive Content Management System, electronic Permits and multifamily housing.
- Increase enrollment of USDA employees from 92,300 to 105,000
- Increase number of applications available via eAuthentication service from 180 to 200
- Increase usage of applications by an averrage of 25% monthly
- Maintain system availability at 99% uptime

eAuthentication Performance Goals (September 2006)

Fiscal Year	Measurement Area	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvement to the Baseline	Actual Results
2006	Mission & Business Results	HR Management – Payroll Management and Expense Reimbursement	Employees with USDA eAuthentication credentials	April 2005, 80,047 USDA Employees enrolled	95,000 USDA Employees enrolled	As of April 2006, 92,281 USDA Employees enrolled
2006	Customer Results	Application Usage	Number of applications available via the USDA eAuthentication service	122 applications integrated	Increase to 170 applications integrated	179 applications integrated
2006	Processes & Activities	Application Usage	Usage of applications protected by the USDA eAuthentication service	June 2005, 1,042,520 logins per month into the USDA eAuthentication service	Average logins per month, increase by 25%	As of April 2006, 1,297,269 logins per month into the USDA eAuthentication service
2006	Technology	System Availability	Uptime at 99%	99%	Maintain Baseline	100%

5. Enterprise Messaging

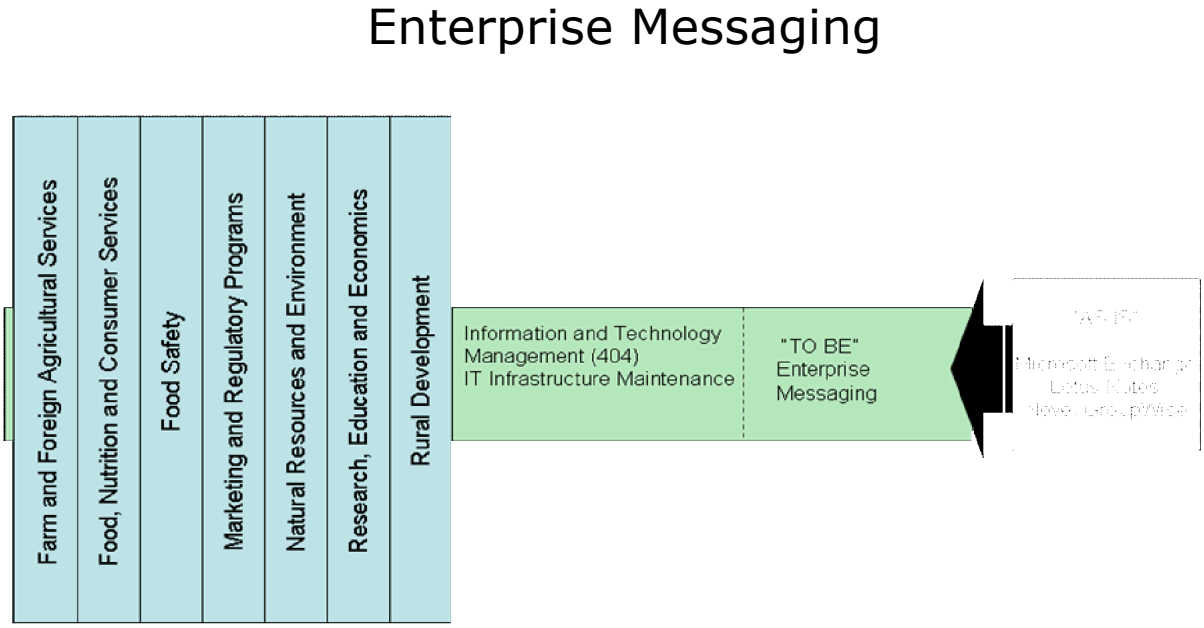
Target Architecture Level: Common Enterprise Wide Application
Related Investment: USDA-Wide Consolidated Infrastructure
Related Unique Project Identifier: 005-00-02-01-01-9999-00

Background and Overview

USDA's CIO signed the EMP project charter in November 2006. Messaging is a business-critical application within USDA. Therefore, USDA endeavors to implement a single messaging service throughout the department. This service will rely on Microsoft Exchange Server 2003 as the core e-mail component, along with other messaging and collaboration applications. Clients will use Outlook 2003, Outlook plug-ins and Web browsers for e-mail and collaboration access.

This service, the Enterprise Messaging Project (EMP), will rely on the USDA's emergent HSPD-12 infrastructure for directory integration and public key infrastructure (PKI) for identity management of appr oximately 150,000 USDA employees and third parties with USDA security identities. In order to implement Exchange and associated functionality, the EMP will require the establishment of a Microsoft Active Directory (AD) resource in the Forest Service for directory services.

The following graphic provides an overview of the Enterprise Messaging segment architecture and how it relates to USDA's missions.



As-Is

- An enterprise-wide electronic authentication solution was not in place at USDA. USDA's Service Center Agencies implemented a web centralized authentication and authorization facility to provide user authentication and authorization for several Web-based applications developed as part of the Service Center Modernization Initiative.
- A lack of electronic authentication services and electronic signatures was identified by staff across USDA agencies as a major barrier to enabling electronic transactions.
- The few USDA systems with other user authentication features were uncoordinated, required users to use different user names and passwords, and had different security conventions/standards and registration processes.

Current Baseline

- A current dedicated USDA enterprise-wide IT infrastructure does not exist. USDA agencies and offices each have their own IT environments (including one shared by three agencies). These are distributed throughout the United States, with a large concentration in the Washington, DC metropolitan area. Additionally, two agencies have offices overseas.
- USDA agencies and offices use Microsoft Exchange 5.5, 2000, and 2003, Lotus Notes, and Novell Groupwise for messaging.
- USDA's core network, the UTN, incorporates a multi-protocol label switching cloud in which all sites are, in theory, only one logical hop (at least six physical hops) from all other sites. Not all USDA locations sit directly on the UTN, and not all agencies and offices directly participate due to cost factors.
- A full-time service desk provides assistance and information to agency customers using the USDA eAuthentication Service.

Future Status

EMP will work to design, configure, test, certify, and implement an Enterprise Messaging System that will address the business needs documented in prior sections of this document. The EMP will ensure that:

- The core system is deployed
- Agency users are migrated onto the system
- Individual agency requirements are met by the system design
- Service Level Agreements (SLA) and Operational Level Agreements (OLA) are in place with all of the appropriate organizations
- The system undergoes Certification and Accreditation (C&A)
- A capable operations staff is in place to operate and maintain the system

following agency migrations.

EMP will be a robust messaging and collaboration system designed to support the USDA user community. The system will provide:

- Rich e-mail functionality
- Numerous collaboration capabilities
- Secure Instant Messaging
- Document and e-mail level security
- Support for Windows Mobile and Blackberry devices
- Protection against e-mail-borne virus attacks
- Protection against unsolicited e-mails (SPAM)
- Centralized system administration and monitoring capabilities.

EMP will reduce messaging related costs by way of:

- Providing for operations size reduction vs. composite of existing distributed systems
- Eliminating waiver preparation costs for messaging related items
- Reducing total server counts
- Providing a single messaging product suite thereby reducing end user training costs
- Eliminating the annual expenditures for NetJunction e-mail connectivity and directory integration support

EMP will provide a unified Global Address List (GAL) containing all e-mail addresses, telephone numbers, and office locations for USDA employees

- Enable the Secretary to easily send "all employee" e-mails
- Enable sub-cabinet members to send organizational e-mails
- Provide consistent application of USDA e-mail address naming standards
- Provide a standardized messaging platform
- Provide efficient information transfer between messaging clients

EMP will create a messaging infrastructure that provides for continued operations in the face of adverse events (e.g., virus attack, natural disaster), including a total site loss

- Enable business communication from any location
- Reduce messaging environment complexity
- Maintain one messaging system, significantly easing maintenance and interoperability among agencies and offices
- Reduce the number of potential failure points associated with messaging
- Increase messaging-related security
- Increase effectiveness and efficiency of employees by enabling cross-agency collaboration capabilities within the messaging system.

EMP will integrate with Active Directory (AD) allowing for integration with the common identification standard of Homeland Security Presidential Directive 12 (HSPD-12), e- Authentication, collaboration and instant messaging applications

- Reduce the points of entry for external access to USDA messaging systems
- Provide accurate handling of non-English language messages
- Facilitate easier implementation of messaging system software patches and updates
- Provide more reliable messaging over slow, unreliable network connections
- Enable department-wide availability of mobile messaging.

Consistent policies and procedures will be established for the operation of Enterprise Messaging System to include:

- Operating roles and responsibilities
- Security procedures
- End-user requirements such as default size limits of server mailbox contents and type and size of permitted attachments
- Messaging services and procedures available on-line
- Change control (Life Cycle Support)
- Integration with other USDA applications.

Enterprise Messaging Planned Performance Measures

To Be Developed

6. USDA Grants System

Target Architecture Level: Common Enterprise Wide Application
Related Investment: USDA Grants Systems and Grants Line of Business
Related Unique Project Identifier: TBD

Background and Overview

USDA is one of the Federal government's significant grant-making agencies, making over 8,000 awards annually for a total of nearly $2 billion in grant funding each year. These grants are managed by 12 agencies across the Department; historically, they have been managed using separate and uncoordinated processes and systems, resulting in redundant effort and expense for USDA and a high burden on grantees.

Both the President's Management Agenda and USDA eGovernment Strategic Plan recognized the need for a more coordinated approach to grants management systems and designated eGrants as high-priority initiatives. USDA's eGrants effort focuses on coordinating USDA grants systems and processes and improving service for customers through development of enterprise-wide application acceptance and processing features. It is also designed to support USDA's compliance with the Federal Financial Assistance Management Improvement Act (FFAMIA) by coordinating pre-award and post-award processes to reduce the information collection burden on grantees, particularly those that work with multiple agencies.

This effort is directly aligned with USDA's participation in the E-Grants Presidential Initiative and Grants Management Line of Business (LoB). USDA utilizes the government-wide Grants.gov Web site both to publish grant announcements and to allow potential grantees to apply electronically. (Grants.gov is integrated with an enterprise-wide Grants Interface Module designed as part of the USDA eGrants initiative to enable application data to be transmitted into agency grant systems.) USDA is also an active participant in the Grants Management Line of Business initiative and is working closely with other agencies to pursue common, consortium-based systems for grants management.

As-Is

- Grants management processes were very paper-intensive, manual, and time-consuming, with little visibility regarding inputs and outcomes. The quality of the electronic systems that did exist, and the quality of the data they contained, varied by agency from excellent to

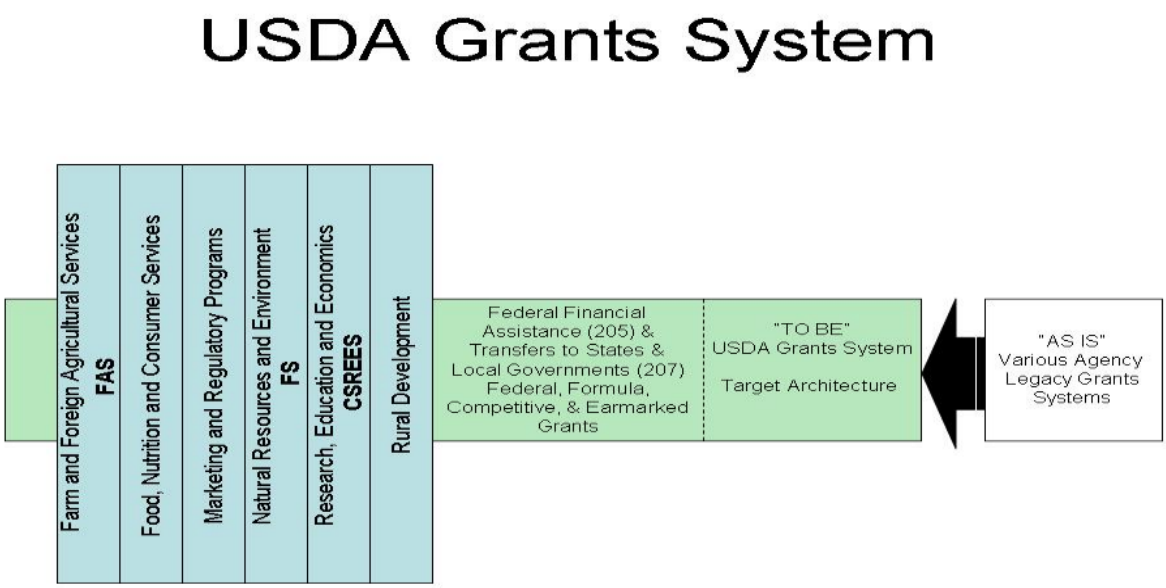
problematic, from end-to-end management of the grants process to simply acting as a tracking tool.
- USDA had no capabilities to accept or process grant applications electronically via the Web, in any agency. All grant applications were submitted in paper formats or via e-mail.
- Grants recipients had no single resource to locate information on USDA grants. Although overview information on grant programs was included in the government-wide Catalog of Federal Domestic Assistance (CFDA), obtaining information on availability of specific grants required individuals to manually contact each agency.
- USDA grant programs were required to report into a variety of systems and to a variety of offices, each of which required different, and often incompatible, calculations and presentation. This complexity and the resulting burden mirror that of the grantees in dealing with complex Federal grants processes.
- Information on individual USDA grants, as well as grant program overview information, is now available on the government-wide Grants.gov Web site.

To-Be

Grant applicants can submit all required forms and information via Grants.gov's "Apply" function, enabling them to avoid submission of paper-based forms but maintaining the application structures and formats with which they are familiar.

- USDA will develop an enterprise-wide Grants Interface Module as part of the USDA eGrants initiative to accept application data from Grants.gov and enable its use in agency grants management systems. The module will allow data to be directly entered into electronic grants processing systems or manually managed in agencies without such systems. (USDA is the first Federal department to integrate with Grants.gov and will offer this functionality to its customers and partners.)
- USDA is coordinating grants processes and data across agencies as part of the USDA eGrants and FFAMIA initiatives; USDA agencies will coordinate data and forms with other Federal agencies through other venues (such as the Research Business Models initiative coordinated by the White House Office of Science and Technology Policy).
- Agency investments for back office systems are being redirected to common service structures through the Grants Management Line of Business. USDA plans to migrate to the joint, multi-agency systems to be developed through this initiative when possible.

The following graphic provides an overview of the USDA Grants System segment architecture and how it relates to USDA's missions.



Current Status
USDA submitted its Outreach Plan and its Ramp -up Plan as required by the Grants.gov Managing Partner in early FY2006, and completed its funds transfer process to the Managing Partner i n the Second Quarter FY2006. USDA is posting all discretionary grant applications packages on Grants.gov, including matching application packages, beginning in FY2007.

USDA Grants System Planned Performance Measures

To Be Developed

7. Internet Protocol Version 6 (IPv6)

Target Architecture Level: Common Enterprise Wide Application
Related Investment: USDA-wide Consolidated Infrastructure (IOAT)
Related Unique Project Identifier: 005-00-02-01-01-9999-00

Background and Overview

On August 2, 2005, the Office of Management Budget (OMB) issued Memorandum M-05-22 "Transition Planning for Internet Protocol Version 6 (IPv6)" requiring that all Federal agencies' infrastructure (network backbones) be IPv4 and IPv6 compatible by June 2008. In order to ensure an orderly and secure transition to IPv6 compatibility, USDA has developed a high-level Impact Analysis to determine the fiscal and operational impacts and risks of this effort.

USDA has considered the costs and risks of developing a new IP addressing plan to support the information technology requirements of over 100,000 employees located in 14,000 offices and field locations; in an organization that spends $77 billion annually and provides $100 billion in loans, significant guarantees and insurance in support of America's farmers and ranchers.

Three years ago, the Department set out to design a cost-effective, centralized, secure, robust, flexible Enterprise Backbone Network for enhanced network support services and telecommunications capabilities to USDA agencies. The product of these efforts is the USDA's Universal Telecommunications Network (UTN), which provides the Department's interface to the Internet.

USDA agencies are now migrating to UTN, which currently utilizes Internet Protocol version 4 (IPv4) routing technology in a managed services Multiple Protocol Label Switching (MPLS) environment.

As-Is

- USDA has developed a detailed Risk Assessment for the IPv6 migration in accordance with OMB guidelines. The risk priority levels, probability, and risk scores were developed using NIST 800-30 guidelines. Table 3.1.2 identifies 20 risk items per the requirements identified in the Office of Management Budget (OMB) Memorandum M-05-22. Out of the 20 risk items, only 4 have been scored as medium risk. The remaining 16 items are scored as low risk.

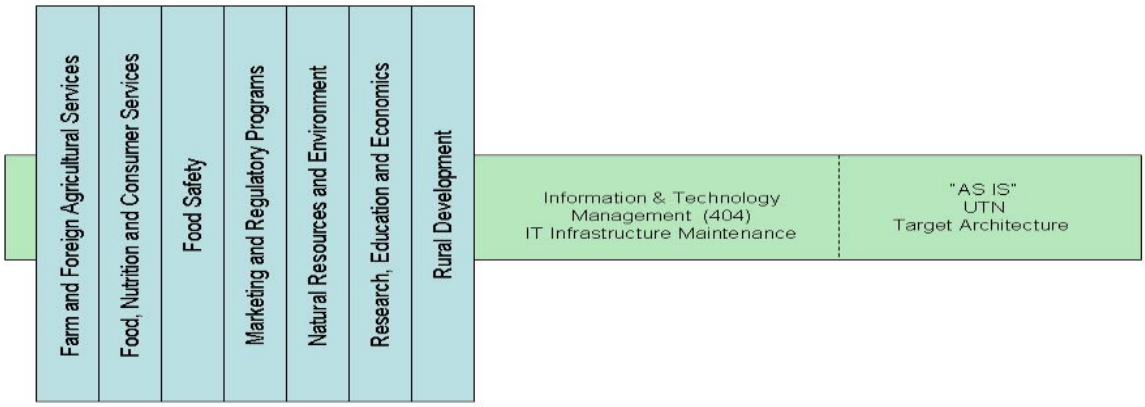
- USDA has taken the following actions to reduce the strategic risk across all the risk elements associated with the Department's migration to IPv6:
    1. Developed an Organizational and Departmental Coordination plan that includes identifying an IPv6 Departmental Lead, establishing a steering committee and creating working groups. Associate CIO for Telecommunications was designated as the department lead role for IPv6 migration. The steering committee and working groups include leadership from all IT business units and agencies.
    2. Developed a High-Level Transition Plan.
    3. Developed Policy Guidance via a Departmental notice.
    4. Performs security initiatives on an ongoing basis.
    5. Is implementing an IP address management system .
    6. Has met all the OMB requirements.
    7. A policy document identifies specific measures that ensure that strategic plans for Procurement, Enterprise Architecture, and Service Level Agreements (SLA)s address IPv6.
    8. To reduce strategic risk, USDA is proposing a staged approach for IPv6 implementation. This approach includes developing a Dual Mode Approach where both IPv4 and IPv6 protocols can co-exist prior to full transition to IPv6
    9. Schedule for Transition: USDA had developed a detailed schedule for migrating from IPv4 to IPv6. Table 2.1.2.0 identifies various tasks and start and finish date for each task. PCIMS operates in an old technological infrastructure, with nearly all operations taking place during a nightly batch process. Batch processing limits flexibility and timely execution and prohibits real-time tracking, reconciliation and close-out functions.

To-Be (FY 2007)

- Complete USDA IP addressing Strategic Plan by 12/01/06
- Complete IPATS Certification and Accreditation by 12/01/06
- Develop on-line stakeholder training program by 03/01/07
- Start lab testing of IPv6 solution with AT&T by 03/01/07

The following graphic provides an overview of the IPv6 segment architecture and how it relates to USDA's missions.

IPv6 Implementation for UTN



Current Status

Policy Development: USDA is issuing policy guidance on transitioning to IPv6, via a Departmental Notice. The notice identifies USDA's roles and responsibilities for planning and implementing the transition of the backbone and the UTN to IPv6 in accordance with OMB guidelines. The draft policy document shows that the USDA CIO will manage the IPv6 transition process within USDA and will ensure that all new IT procurements are IPv6 compliant and IPv4backward compatible. Specifically, any new IP product or system that integrates or interfaces with the USDA network backbone must support both IPv6 and IPv4 protocols. USDA will establish formal, internal review processes to ensure that all IT acquisitions are IPv6 compatible and IPv4 - backward compatible, effective June 30, 2006.

Additionally, USDA is coordinating with vendors, technical leads, program managers, and policy managers to ensure USDA has implemented, documented, and tested all Standard's Compliance Issues.

The Associate CIO (ACIO) for Cyber Security will document the security and privacy impacts and risks of transition to IPv6; describe the changes to network security standards, configurations and security policies; and, describe how IPv6 security issues should be represented in the USDA Enterprise Architecture.

Governance: USDA has developed a strong organization to address the requirements of the IPv6 transition. The following summarizes USDA's efforts:

- The Associate CIO for TSO was designated as the department lead for IPv6 Transition at USDA. The ACIO attends OMB Agency IPv6 Transition Leads meetings and participates in reviewing OMB guidance on IPv6 initiatives. The ACIO and the TSO Management team have also attended technical briefings sponsored by GSA and various industry partners.
- USDA has established an IPv6 Steering Committee, comprised of representatives from each USDA agency, Cyber Security, and Enterprise Architecture, who serve as liaisons for disseminating information and perform reviews/clearances of related IPv6 policies and deliverables.
- The Department has created working groups led by the TSO Management Team, who together with IPv6 Steering Committee members and other agency subject matter experts (SMEs) are addressing the network and address allocation, inventory and business requirements necessary for the IPv6 transition. Additionally, Cyber Security and Enterprise Architecture staff members provide valuable contributions by leading the Security and Enterprise Applications working groups respectively.

Integration with Major Agency Initiatives: USDA is integrating IPv6 migration efforts with the following major agency initiatives.

- COOP: All COOP site devices are outside the scope of this effort because they are not part of the core network.

- Managed Services: Managed-service vendors are aware of the transition to IPv6 and the dual stack approach. AT&T, USDA's managed-service contractor, is actively involved in the transition.

- Transition: An organizational plan is being developed to ensure a methodical transition from IPv4 to dual mode and finally, to IPv6. USDA anticipates that a full migration to IPv6 will extend well beyond 2008 since multiple USDA agencies plan to convert applications and equipment as they reach the end of their life cycles. Because new applications are being developed in IPv4 (HSPD-12 and others), it will be decades before USDA will be able to migrate fully to IPv6, thus requiring a dual stack environment and associated costs for an extended period.

- Customer Adoption: USDA anticipates that customer adoption will follow the phased transition plan and that the transition will be generally transparent to customers. Training will assist customers with the transition as needed.

USDA has established a Technical Review Board (TRB) that will meet regularly to discuss migration to IPv6 as part of normal change control operations. There is no cost associated with TRB activities as they relate to IPv6 because it is a routine part of TRB operations

IPv6 Monitoring (Interim) Performance Metrics (2007)

Sample Metrics	Values
Count of Changes Identified	Number
Count of Action Items	Number
Count of issues categorized by assessment of project impact	Number
Priority/Impact of Change	High, Medium, Low
Issue disposition	Implement, Defer, Disregard
Earned- Value Cost Variance	Number
Earned- Value Schedule Variance	Number
	Pass – complies with plan
	Fail – does not comply with plan

IPv6 Planned Performance Measures (2008)

To Be Developed

8. IT Infrastructure

Target Architecture Level: Common Enterprise Wide Application (Technology Layer)
Related Investment: USDA-Wide Consolidated Infrastructure
Related Unique Project Identifier: 005-00-02-01-01-9999-00

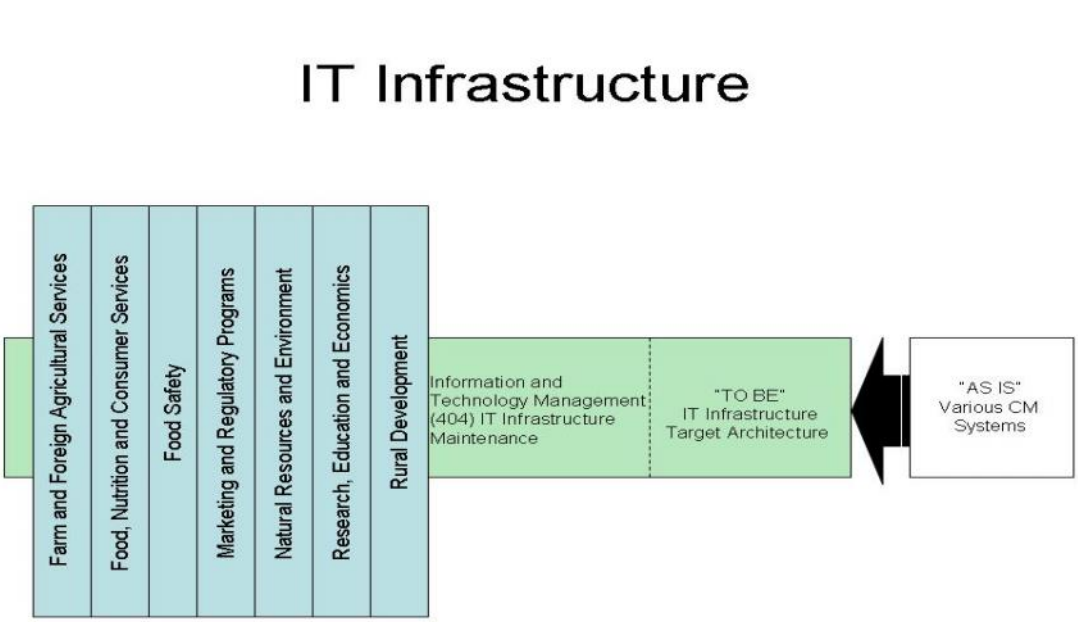
Background and Overview

USDA's IT Infrastructure is highlighted in the Technology Layer of the Target Architecture. It is currently in the Implement and Operate Phase of the Performance Improvement Life Cycle. The initiative is aligned to the Presidential Management Initiative of Infrastructure Optimization, and is funded through the Department's USDA-Wide Consolidated Infrastructure investment.

The alignment of the initiative to Infrastructure Optimization LoB was selected because preliminary analyses demonstrated that it represented a significant opportunity to realize future cost savings through a more coordinated approach to IT infrastructure spending. IT Infrastructure Optimization case studies also demonstrated that agencies could improve IT service levels, and, when relieved of the burden of managing these non-core functions, could concentrate more on mission priorities and results.

A government-wide Task Force was created to develop a common solution to realize the goals and objectives of the LoB. The Task Force solicited information about potential solutions from the public and private sector through a formal Request for Information (RFI). GSA held an industry day to give potential responders an opportunity to better understand the initiative. The Task Force analyzed the RFI responses and conducted analyses of other available information. As a result of these efforts, the Task Force developed an IOI Common Solutions Recommendation, IOI Target Architecture, and an IOI Joint Business Case.

The following graphic provides an overview of the IT Infrastructure segment architecture and how it relates to USDA's missions.



As-Is

The existing environment encompasses disparate and sometime s duplicative investments and initiatives that do not always follow standardized business processes. This environment fosters a climate for stovepipe system development that can hinder interoperabil ity and the sharing of and exchange of data.

Current Baseline

The Exhibit 300 business case encompasses all IT investments that support common user systems, communications and computing infrastructure. It includes investments that are categorized as major as well as those that are not. The focus of the business case is on the planning and implementation of a consolidated and consistent USDA approach towards IOAT investments.

USDA has begun an agency-wide management process to assess and take advantage of consolidation opportunities in the following categories :

- Centralized/consolidated/shared data centers
- Centralized/consolidated/shared data storage and warehousing
- Centralized/consolidated/shared web hosting, housing, and content management
- Centralized/consolidated/shared processing services (e.g., mainframe batch processing)
- Centralized/consolidated/shared data backup and recovery services
- Enterprise software licensing
- Enterprise desktop leasing (bulk pricing)

- Enterprise maintenance contracts
- Consolidated help desks
- Reasonable desktop to peripheral ratios (e.g., 1 network printer or fax per 30 desktops)
- Centralized/consolidated/shared call centers and CRM services
- Centralized/consolidated/shared network backbone
- Centralized/consolidated/shared access circuits
- Centralized/consolidated/shared WAN contract
- Bulk long distance voice contracts
- Bulk local voice contracts
- Centralized/consolidated/shared voice equipment contracts (for PBXs, etc.)
- Shared intrusion detection and firewall services
- Shared disaster recovery services
- Shared network management resources

The effort to consolidate the management and reporting of all USDA IOAT investments in a centralized manner is in the conceptual and planning stages. It is in the pre-selection phase of the USDA Capital Planning and Investment Control (CPIP) Process. However, this business case encompasses numerous investments that are in different life cycle phases. Consequently both the summary of spending and the project and funding plan will reflect a mixed life cycle that includes steady state as well as in the Development, Modernization, and Enhancement (DME) costs. During the conceptual and planning phases of this investment, USDA is identifying more specific milestones and goals, as well as more specific strategies for maximizing the usefulness of this consolidation effort from a strategic management and cost savings perspective.

To-Be

Consistent with OMB's Exhibit 300 guidance, USDA has begun creating and managing a department-wide IT program for office automation, infrastructure and telecommunications. IT investments (both major and non-major) will be coordinated through an agency-wide process and reported in this single business case for the department. This consolidation effort and the alternatives and other analyses it will constitute a critical part of USDA ongoing eGov Strategy review process

The goal of this consolidation effort is to ensure that all infrastructure/office automation/telecommunications (IOAT) projects are integrated into an overall strategy that is consistent with USDA's strategic direction and Enterprise Architecture (EA). However, the intent of this consolidation is not to have every individual project implemented centrally the USDA Office of the Chief Information Officer (OCIO), but rather to identify and prioritize

IOAT investments and acquisition strategies that can benefit USDA as a whole, as well as its customers and the individual USDA business lines. This is consistent with USDA's EA approach, wherein some lines of busin ess (LOBs), applications, and data are enterprise or multi -agency investments, while others remain at the agency level. USDA plans to focus its IT Infrastructure efforts in three definitive areas: (1) Data Center Systems and Services, (2) Telecommunicati ons Systems and Services, and (3) End User Systems and Services. Each area is defined as follows:

Data Center Systems and Services

Data Center Systems and Services include the people, processes, and reliable and secure technology to provide physical or logical centralized or aggregated computer systems and related services to one or more parts of the enterprise(s). Data Centers provide applications processing capabilities; data repositories and archiving resources; and associated development, operations and management services. Data Center Systems and Services may include a housing facility with associated environmental controls (air conditioning, fire suppression, physical security, etc.).

Telecommunications Systems and Services

Telecommunications Sy stems and Services includes the people, processes, and reliable and secure technology to provide "any transmission, emission, or reception of signs, signals, writings, images, sounds, or information of any nature by wire, radio, visual, or other electromag netic systems".

End User Systems and Services

End User Systems and Services include the people, processes, and reliable and secure technology necessary to enable and support an end user in their interaction with information technology services. End Use r Systems and Services include office automation (e.g., word processing, spreadsheets, graphics, messaging, and collaboration) capabilities; workstations (e.g., desktops/laptops, Personal Digital Assistants, telephones, handheld devices, and associated software); printers, copiers, scanners, fax machines, and other similar devices; and workgroup/distributed servers and software. End User Systems and Services include frontline user assistance, often referred to as help desks.

IT Infrastructure Target Perfo rmance Goals

To Be Developed

Currently, target performance goals do not exist. Goals originally considered are being replaced. It was recently decided that the target performance goals would align to those goals being developed for the Infrastructure Optimization Initiative.

9. Industry Sector Income Stabilization

Target Architecture Level: Agency Specific
Related Investment: Farm Program Modernization (MIDAS)
Related Unique Project Identifier: 005-49-01-51-01-0097-00

Background and Overview

USDA's Farm Service Agency (FSA) administers farm commodity, crop insurance, credit, environmental, conservation, and emergency assistance programs for farmers and ranchers. Farm Programs are USDA's largest and most important programs, aimed at the key FSA strategic goals of supporting productive farms and ranches; supporting secure and affordable food and fiber; and conserving natural resources and protecting the environment. This segment architecture, Modernize and Innovate the Delivery of Agricultural Systems (MIDAS), will streamline and modernize the delivery of Farm Programs by eliminating FSA's reliance on aging technology, providing citizen-centered services, and incorporating geo-spatial technology into core business processes. Features for the Modernization effort were derived from the input provided by Farm Programs stakeholders over a 2-year period. Stakeholders were organized into an Integrated Project Team (IPT) and an Extended Integrated Project Team (XIPT). The IPT consists of senior management members who oversee the activities conducted by the XIPT. The XIPT consists of subject matter experts who provide the understanding of current business processes and the recommendations for improvements to those business processes and their translation into system requirements.

The following graphic provides an overview of the MIDAS (Industry Sector Income Stabilization) segment architecture and how it relates to USDA's missions.

MIDAS

Current Baseline

FSA's Farm Program delivery relies on a business model that is highly decentralized, labor-intensive, and facing technological obsolescence. When FSA was originally created during the Great Depression, the goal was to support individual farming communities, county by county, in relocating from dust bowls and infertile lands to more productive fields. As such, FSA's business model was based on an extensive infrastructure of county-based Service Centers. FSA continues to operate with this localized infrastructure, while the U.S. agriculture industry has since grown far beyond local markets, becoming the largest exporter of food in the world. In today's environment, FSA customers need greater access to information in order to compete in a global agriculture market; swift application of Farm Programs to disadvantaged communities and disaster-struck areas; and real-time customer service. The Service Center business model and resulting technology infrastructure is constrained in delivering these dynamic customer needs and in meeting the needs of Farm Program employees and stakeholders in increasing process automation and performance management.

Farm Programs are currently delivered through 2,351 county offices spread throughout the country. This heavy infrastructure is creating a drag on FSA's ability to meet the changing demands of customers. FSA Tomorrow, FSA's vision for a more streamlined business process, included a review of the

national infrastructure. The review found that fully two-thirds of the Service Centers are within 30 miles of one another. Such density allows customers to easily interact with their local county Service Center, yet this is the only method customers have to apply for Farm Programs, seek information regarding the status of their applications, resolve issues or update their account information. Online information for customers is limited to general program information and a record of past Farm Program payments.

Service Center employees make the best use of the outdated suite of computer systems running Farm Programs to serve farmers and ranchers, but the business process faces increasing difficulty to maintain FSA's service and performance standards. The Service Center computers inflict cumbersome and redundant processes that use government staff resources inefficiently, restrict the ability to further automate process and management controls, and fail to provide timely centralized data across counties. While all farm programs rely on a core set of information for determining eligibility, status, and payment levels, the current suite of applications allow for minimal reuse of common customer data across programs, resulting in duplicative data entry and inconsistent data across programs. Additionally, in an age where electronic commerce is increasingly becoming the norm and customers expect online access to real-time information, the existing system is incapable of supporting a public interface to transact business via the Internet. Instead, customer data entered at the Service Centers is uploaded twice a week to the mainframe in Kansas City, processed and then relayed back out to the affected Centers. This process requires 3 to 5 days to complete, which limits the timeliness of information and the speed of processing for employees and customers both.

Much of the information gathered in the county office is unavailable to other county, state offices, national headquarters or Division Managers. The legacy technology platform is highly distributed, limiting automated processes and data sharing across program, geographical, and organizational boundaries. As such, it severely inhibits FSA's ability to track individuals against Program eligibility limitations as required by Congress, as well as preventing automation and web-enablement of processes and services in compliance with the PMA and e-gov initiatives.

The stove-piped legacy systems fail to provide appropriate management or data controls, resulting in faulty data, the need to enter data multiple times, and improper payments. A lack of automation limits verification of existing data, for example in land usage. Currently, FSA tracks land usage by visual inspection with aerial photography. Inspectors will typically only be able to manually cross-check 25% of the acres photographed with reported usage. This leaves a majority of reported acreage unverified, limiting FSA's ability to

ensure producer compliance in many Farm Programs. A lack of automation also impacts FSA's ability to monitor Program payments. Programs make payments at the county level, but many producers operate in multiple counties. For Programs that limit payments to one producer, county offices must collaborate to manually track whether or not producers have applied for the same program from different county offices. Due to the increasing amount of multi-county producer applications, such tracking will become overly burdensome, and result in over payment for certain Programs.

Performance Expectations

MIDAS will transform FSA's delivery of farm program benefits, on behalf of the Commodity Credit Corporation (CCC), into a 21st century business model by:

- Deploying a robust customer-facing internet-based self service channel, eliminating FSA's reliance on an obsolete and vulnerable distributed computing hardware platform.
- Streamlining business processes to focus on common services for payment limitation, program funds control, eligibility checking and means testing.
- Centralizing tabular and geospatial data assets in support of Agency business delivery (i.e., Farm Programs, Farm Loan Programs, and Commodity Operations) eliminating non-integrated, distributed data assets resident in USDA Service Centers.
- Upgrading both the program and financial management business practices of the CCC through direct integration with the USDA OCFO's Financial Management Modernization Initiative (FMMI).
- Enabling cross agency program administration and data reconciliation required to control fraud, waste and abuse as being demonstrated through the pilot implementation of the RMA-FSA Comprehensive Information Management System (CIMS).
- Surrounding application software systems and hardware with robust physical security and automated internal controls for FISMA and OMB Circular A-123 compliance. Performance Goals

FSA Strategic Goals Supporting USDA's Mission:

Strategic Goal 1: Supporting productive farms and ranches
Strategic Goal 2: Supporting secure and affordable food and fiber;
Strategic Goal 3: Conserving natural resources and protecting the environment.

The MIDAS investment will provide:

- Expedited compliance with Farm Bills and any other legislative mandates.
- Leverage USDA's investment in geo-spatial computing technologies.
- Incorporate tracking and monitoring processes to generate data for measuring program performance goals and measures.
- Centralize information for accessibility to real-time data for reporting purposes at a national level, improving customer service and enabling a robust web-based customer interface.
- MIDAS will reduce the time and personnel resources required to provide benefits to qualified producers, and provide customers with greater flexibility in terms of service options.
- Directly align with the OCFO's FMMI effort thereby reducing or eliminating erroneous payments while implementing obligation processing at a transactional level and improving financial performance.
- Provide information technology that supports future growth.
- Strategically utilize the Department's information technology by leveraging IT within the Department to facilitate and unify services.
- Realigns Human Capital from an internally focused position to a decision support or citizen facing role thereby enhancing workplace desirability.

MIDAS Planned Performance Measures (2007)

Fiscal Year	Measurement Area	Measurement Category	Measurement Indicator	Baseline	Planned improvements to the Baseline	Actual Results
2007	Mission and Business Results	Public Affairs	% of Farm Program customer-facing transactions available in a web environment (as estimated by MIDAS program managers) This refers to the numbers of producers who do business through a web browser with FSA.	<10% in FY05	Maintain current baseline	Information available 8/2007
2007	Processes and Activities	Financial (Processes and Activities)	% of erroneous payments (from FSA 2005-2010 Strategic Plan)	0.00%	Reduce to 0.0018%	Information available 8/2007
2007	Processes and Activities	Management and Innovation	Knowledge Management: % of IT staff with experience in web design/development (as defined by % of staff who have participated in requirements analysis, design, and/or construction for web-deployed systems) (Based on Production Adjustment and Risk Management Office, which is representative of the other offices)	~10% in FY05	Increase to >20%	Information available 8/2007

2007	Processes and Activities	Productivity and Efficiency	Percentage of internal processes that are streamlined systematically (corresponds to FSA's Cross Cutting Management Initiative "Improving Business Process Effectiveness" in the FSA 2005-2010 Strategic Plan)	1. Less than 10% of internal Farm Programs supporting processes are streamlined systematically	1. Increase to 20% through implementation of Membership and Shares, COC Determinations. Land Management, and Land Usage	Information available 8/2007
2007	Processes and Activities	Productivity and Efficiency	Number of systems developed that follow the Agency's SDLC methodology	Less that 5 percent	Increase to 10 percent	Information available 8/2007
2007	Technology	Reliability and Availability	# of major Farm Programs supported by delivery applications (software applications) residing on legacy technology (IBM S/36).	5 major Farm Program groups (DCP, MAL, NAP, CRP, DRP)	Maintain # of Farm Programs supported by applications residing on legacy platform at =5	Information available 8/2007

10. Security Profile

Target Architecture Level: Common Enterprise Wide Application
Related Investment: OCIO Security Implementation/USDA-wide Consolidated Infrastructure
Related Unique Project Identifier: 005-00-02-01-01-9999-00

Background and Overview

Protection of information assets and maintaining the availability, integrity, and confidentiality of USDA information technology systems and telecommunications resources are vital in meeting USDA's program delivery requirements. Information security has emerged as a top priority for the Department of Agriculture. As technology has enhanced the ability to share information instantaneously between computers and networks, it has also made USDA organizations more vulnerable to a wider family of threats that are unlawful and destructive penetration and disruptions. The Office of the Chief Information Officer is responsible for improvements to USDA's cyber security. A key aspect is the development of a high-level Cyber Security Strategic Plan that must link to the USDA Strategic Plan and the President's Management Agenda Initiatives and a Tactical Plan.

The USDA Cyber Security (CS) program is defined as a unified and tightly integrated business process designed to meet USDA and Office of the Chief Information Officer (OCIO) strategic mission objectives with centralized management and execution. At the same time, the program is structured to provide Enterprise Solutions for CS so that senior leadership, resource managers, Information Technology (IT) asset managers, and security practitioners can collectively make informed business decisions relative to CS architectural guidelines, resource allocation, and acquisition strategies.

As-Is

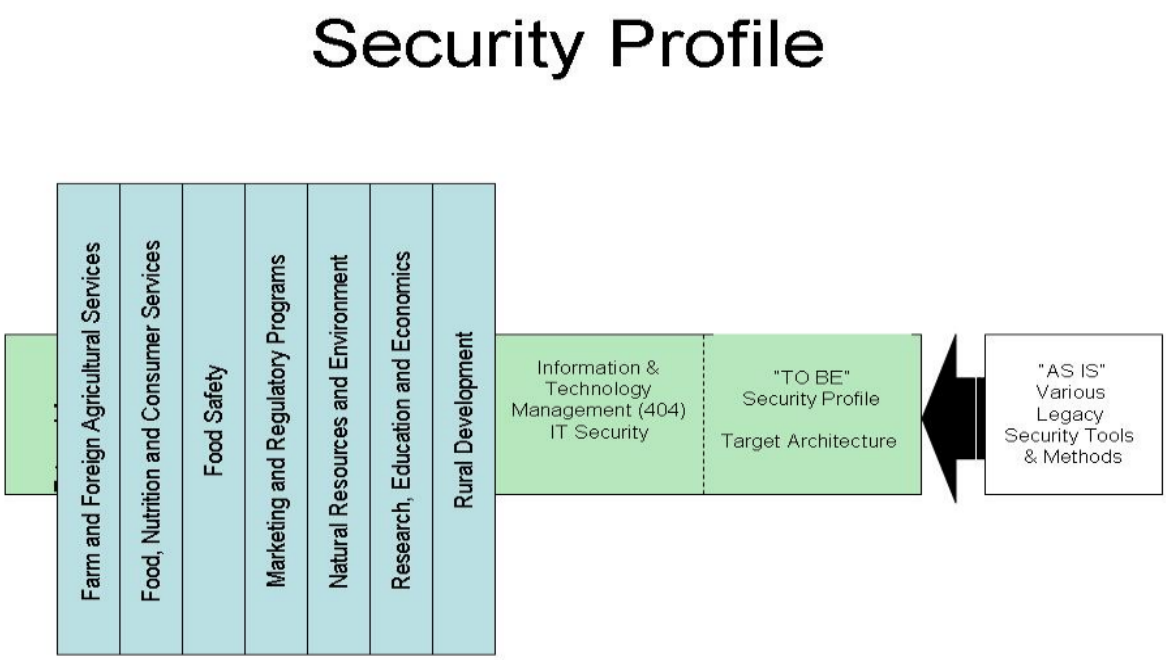
- The value-add of security needs to be apparent.
- Security profile should fill policy holes that OMB and OIG levy, and provide guidance on how to implement security policies and standards, including access control.
- Security needs to have more and be better staffed with people with right credentials, that have a good understanding of USDA business areas and federal security requirements, and that have a customer service/agency partner mentality.
- Security needs to be more "hands-on", have operational experience in various methods (C&A, security testing, software development), and have greater interaction with agencies and their unique issues.

- Security needs to have an active communications function that includes taking a vigorous role in providing a range of security training and best practices methods.
- Reporting/data calls are burdensome, indicating a lack of robust tools to monitor and manage security processes and inventories.
- Security methods need to reduce false positives (currently 50% or more).
- A security profile needs to provide a range of automated enterprise - wide tools (scanning, security, capacity pla nning, etc.), and acquired on an enterprise-wide basis.
- Develop a suite of BPAs/contracts for C&A, Risk Assessments, Penetration Testing, long range security planning, and security tool implementation to support agency security management.
- Security needs to provide a Security Operations Center to support all agencies: forensics, scanning, IDS, security engineering, centralized Change Control Board.

To-Be (FY 2007)

- Promote awareness and understanding of the USDA Cyber Security program by enhancing communica tions within all levels of USDA and implement mechanisms for enhanced information sharing and interoperability between all bureaus within USDA.
- Create a Security Operations Center (SOC) that centrally manages and monitors the network and security systems a cross the diverse USDA IT environment and intelligently and proactively alerts the right people at the right time about critical security events. Create a Change Control Board (CCB) that provides controls for the USDA Enterprise.
- Implement a Cyber Securit y Enterprise Data Management Portal that will enable better management of mandated security controls and documents.
- Employ a Technical Security Strategy that includes the implementation of state-of-the-art tools, processes/procedures, and proactive and reactive security management techniques that not only utilize capabilities within USDA, but works in cooperation with other Federal Programs, other Federal Departments, and the Professional Association realm to build a strong capability for information assura nce.
- Implement a department-wide Cyber Security Training Program that will increase the knowledge and skills of USDA security personnel.
- Establish a Cyber Security Financial Program.

The following graphic provides an overview of the Security Profile segment architecture and how it relates to USDA's missions.



Current Status
The Cyber Security Strategic and Tactical Project Plan s are currently underway and on schedule to deliver the planned Security Profile in FY2007.

Security Profile Tasks and Performance Expectations

USDA Cyber Security Goals, Objectives, Strategies, and Metrics			
Goal	**Objectives**	**Strategies**	**Measures**
Strategic Goal #1: Promote awareness and understanding of the USDA Cyber Security program by enhancing communications within all levels of USDA and implement mechanisms for enhanced information sharing and interoperability between all bureaus within USDA.	Objective #1.1 Create a Communications Plan that provides: ➢ The overall Strategic and tactical goals and objectives of the USDA Cyber Security program. ➢ The near-term goals and priorities. ➢ Details the communication paths and the frequency of communication. ➢ Schedule of regular meetings between all parties, which should include keeping the Communications Plan updated on a regular basis (at least quarterly).	➢ Share the CS goals and objectives with all USDA bureaus/offices via the Communications Plan and CS website ➢ Create an accessible calendar with key dates and meetings with CS. ➢ Conduct a semi-annual survey of CS stakeholders to gauge effectiveness	➢ Percent of stakeholders that rate the effectiveness of the Communications "Good" or better. ➢ Attendance at regular meetings
Strategic Goal #2: Create a Security Operations Center (SOC) that centrally manages and monitors the network and security systems across the diverse USDA IT environment and intelligently and proactively alerts the right people at the right time about critical security events.	Objective #2.1 Reduce Risk and Downtime by implementing tools to actively report security incidents in real-time (via pagers, email, or a centralized security management console) Objective #2.2 Control and Prevent Threats by implementing enterprise-wide Intrusion Prevention Systems (IPS)/Intrusion Detection Systems (IDS). Objective #2.3 Enable fast and effective Incident Response and Recovery by implementing Security Information Management tools that will allow security events to be grouped and annotated, or incidents to be declared and acknowledged to enable the security team to discover the truth about an incident, manage events, and respond effectively. Objective #2.4 Establish an effective Computer Forensics Lab for investigating non-IG related security incidents to provide a technical defense against further attacks of a similar nature. Objective #2.5 Implement a centralized Change Control Board	➢ Implement an Intrusion Detection System/Intrusion Prevention System, with active monitoring and reporting, across the USDA Enterprise. ➢ Create a forensics lab for incident investigation. ➢ Conduct continuous, non-invasive monitoring of the USDA's cyber-security assets ➢ Create a centralized Change Control Board	➢ Number and time required for incident response. ➢ Decrease in the number of successful intrusions. ➢ Increase in knowledge gained through forensic investigations. ➢ Reduction in number of unapproved changes that have a negative impact on the USDA enterprise. ➢ Increase in the number of systems/applications that address Security from the beginning of the lifecycle. ➢ Effectiveness of the USDA in detecting, responding, and recovering to simulated attacks on USDA networks
Strategic Goal #3:	Objective #3.1		

USDA Cyber Security Goals, Objectives, Strategies, and Metrics			
Goal	**Objectives**	**Strategies**	**Measures**
Implement a Cyber Security Enterprise Data Management Portal that will enable better management of mandated security controls and documents.	Create a centralized Cyber Security Portal that will allow for information sharing, information submittals, coordination, and reporting. The Portal should be the main entry point for all items regarding cyber security.	➢ Create (or buy) an internal, web-based system for information gathering, sharing, and reporting. Should contain: ▪ Plan of Action & Milestones (POA&M) database ▪ Security Plans ▪ Incident Tracking ▪ Data Call Management ▪ FISMA Forecasting ▪ Security Architecture ▪ Certification and Accreditation (C&A) activities, including monitoring and management of C&A packages	➢ Percent decrease in time required to request and receive information for data calls ➢ Percent increase in satisfaction, as measured by the semi-annual CS survey ➢ Number of Incidents Reported, Response Time, and Satisfaction of Response ➢ Update monitoring benchmark for Security Plans, Security Architecture ➢ Percent of agencies meeting POA&M Deadline Compliance ➢ Percent of C&As passing compliance reviews and Percent of systems re-certified before expiration of accreditation
Strategic Goal #4: Employ a Technical Security Strategy that includes the implementation of state-of-the-art tools, processes/procedures, and proactive and reactive security management techniques that not only utilize capabilities within USDA, but works in cooperation with other Federal Programs, other Federal Departments, and the Professional Association realm to build a strong capability for information assurance.	Objective #4.1 Implement proactive security management techniques such as an Enterprise-wide Intrusion Detection System, a daily Security update, vulnerability management, etc.	➢ Implement a daily "Security Update" that provides information such as new vulnerabilities, virus/worm outbreaks, US-CERT notices, etc. ➢ Create USDA enterprise-wide processes and procedures that pertain to Cyber Security, i.e., C&A packages, incident response procedures, intrusion detection procedures, etc. ➢ Integrate personnel, physical, and information systems security into a uniform agency-wide methodology	➢ Increase in the number of official CS Policies and Procedures ➢ Degree to which identified information systems security best practices (e.g., SANS Institute Top 20) are uniformly practiced within the USDA ➢ Percent of Vulnerabilites Found and mitigated vs. vulnerabilities ignored ➢ Ratio Number of IDS/IPS events detected over a given period vs. number of systems compromised ➢ Number of systems compromised by warnings contained within the Daily Security Update ➢ Overall trending of system compromises over five years to determine if agencies were proactive in responding to security requirements
Strategic Goal #5: Implement a department-wide Cyber Security Training Program that will increase the knowledge and skills of USDA security personnel.	Objective #5.1 Implement a department-wide Cyber Security (CS) training program. Objective #5.2 Require IT Security Program Managers to Obtain Security Certifications. Objective #5.3 Increase DHS US-CERT Training and Knowledge Objective #5.4 Join the GFIRST Program	➢ Become the recognized experts at USDA in the Cyber Security field. ➢ Establish minimum standards for the information security system workforce (Federal and contractor), including recruiting, training, and certifying key information systems security personnel ➢ Develop a recruiting strategy for capturing and retaining college graduates and experts in government and private industry. ➢ Create and implement a USDA-	➢ Percent of key information systems security personnel that have completed recognized information systems security training ➢ Effectiveness of two-way communications with key government agencies in understanding cyber threats and accidents ➢ Percent increase in staff retention rates ➢ Attendance at Cyber Security training seminars ➢ Percent increase in skills and knowledge portion of the

USDA Cyber Security Goals, Objectives, Strategies, and Metrics			
Goal	**Objectives**	**Strategies**	**Measures**
		wide program where CS personnel provide training to the USDA bureaus. ➢ Continue to foster information sharing with other Federal agencies, especially the Department of Homeland Security, the White House Office of Cyber Security, the Federal Bureau of Investigations, the National Security Agency, and the Department of Defense	semi-annual CS survey.
Strategic Goal #6: Establish a Cyber Security Financial Program.	Objective #6.1 Establishing Cyber Security as a line of business within USDA.	➢ Leverage USDA Cyber Security funds by cooperative research with agencies such as the Department of Defense, FBI, and others, influencing their research programs and adapting their research into the USDA.	➢ Percent increase in CS funding for Strategic Initiatives

Security Profile Planned Performance Goals

To Be Developed

11. USDA Travel System

Target Architecture Level: Common Enterprise Wide Application
Related Investment: Corporate Financial Management Systems (CFMS)
Related Unique Project Identifier: 005-03-01-01-01-1020-00

Background and Overview

USDA has traditionally used a variety of service providers and in-house legacy systems to manage travel arrangements and travel-related financial management. Contracts and pricing with service providers were decentralized, with USDA agencies independently contracting with multiple travel agencies to arrange travel for their employees. Further, USDA uses two legacy-based systems to manage travel obligations and centrally billed accounts. There is no integration between travel management services and the back office paperwork processing that was heavily manual and reliant on legacy systems.

USDA is migrating from this non-centralized, agency-specific approach to using an end-to-end, integrated travel management solution obtained through the E-Travel Presidential eGovernment Initiative. USDA's Electronic Travel System (ETS) will use an E-Travel service provider to allow employees to directly book travel and allow supervisors to approve travel expenses and allowances via the Web. Further, the system will support travel financial management, interfacing directly with USDA's Foundation Financial Information System to post travel obligations and expenses to agency accounts and provide the functionality to payment the USDA Smartpay credit card vendor for the individually billed travel cards.

USDA's migration to the government-wide E-Travel solution is based on the Department's Enterprise Architecture objective of using government-wide solutions and systems whenever possible to avoid duplicative IT investments and to more efficiently and effectively conduct business.

As-Is

- USDA agencies independently contracted with Travel Management Centers approved by the General Services Administration (GSA) to arrange air transportation and other travel services.
- USDA's National Finance Center operates the USDA Travel System (TRVL), which is used to process travel authorizations, travel advances, and travel vouchers for temporary duty (TDY) and relocation travel.
- Several supplementary systems supported TRVL, including PC-TRVL (a PC-based client application used to prepare and transmit travel authorizations, advance requests, and travel vouchers for processing in

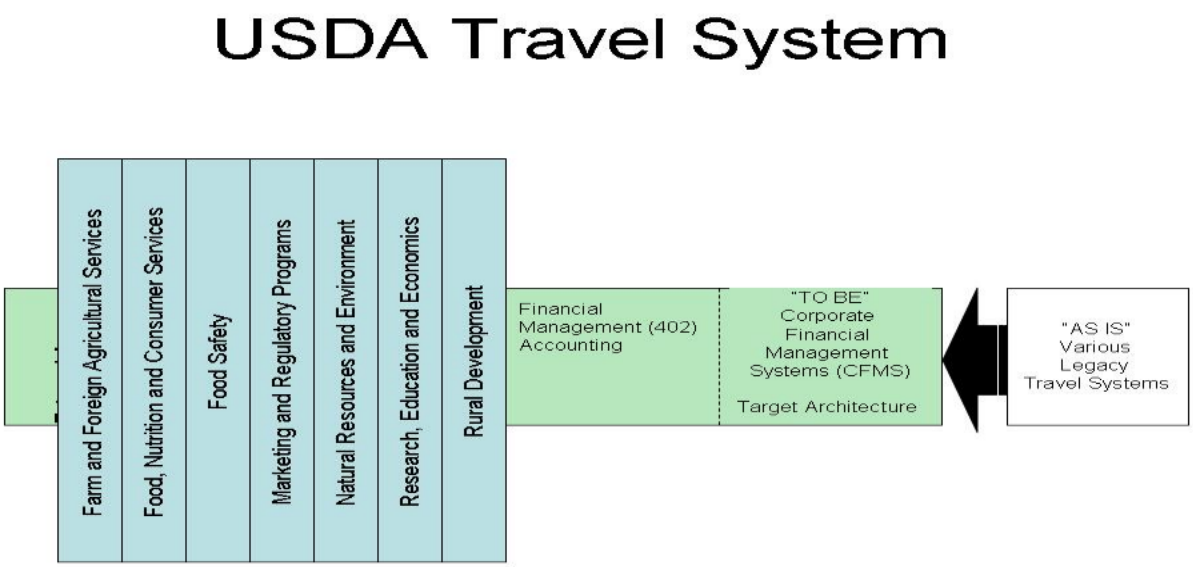
TRVL), TRAVENT (used by agencies to directly enter travel authorizations, advances, and vouchers into TRVL), and TRAVINQ (used to query the travel records stored in TRVL).

- A separate Government Transportation System (GVTS) is used by agencies to obtain transportation tickets for official travel and charge the tickets to the agency centrally billed accounts instead of the individual travelers' travel charge cards.
- Agency travel arrangers or administrative personnel are the only users authorized to manually enter travel authorization and, advance and vouchers into TRVL to process travel payments (in addition to any air reservations or other travel arrangements made through a Travel Management Center).
- A batch interface is used to exchange data between the TRVL system and the Foundation Financial Information System (FFIS), U SDA's corporate financial management system.

To-Be (FY 2007)

- USDA selected Electronic Data Systems (EDS), one of the three service providers selected through the GSA-led E-Travel initiative, to provide end-to-end travel services for USDA.
- EDS is currently performing the technical work required to integrate with USDA's corporate financial system and USDA's eAuthentication Service. USDA will fully migrate all agencies to ETS by September 30, 2006.
- New (and renewal) Travel Management Center (TMC) contrac ts were discontinued for USDA agencies beginning in December 2004 through August 2005. These expiring contracts are replaced by a Travel Bridge solution provided by EDS.
- USDA is migrating to the Travel Bridge Solution, also provided by EDS, as their current TMC contracts expire. The Travel Bridge Solution is the EDS on line booking engine (OBE), Web-based travel arrangement service USDA agencies will use until the eventual ETS system is ready for use. TRVL, GVTS, and their supporting systems continue to provide support for travel authorizations, travel voucher processing, and the interface to the corporate financial system until the full ETS solution is available.
- The USDA-specific TRVL and GVTS systems will be retired after September 30, 2006 when any travel reconciliations or vouchers have been completed and processed through these systems and the agencies are fully operational on the ETS. Portions of TRVL must be maintained beyond that date to provide "permanent change of station" capabilities until a new solution for that function is identified. (E-Travel systems do not provide this functionality.)

The following graphic provides an overview of the USDA Travel System segment architecture and how it relates to USDA's missions.



Current Status
ETS is a commercially-hosted service that gives USDA travelers the ability to manage their travel from end-to-end through a common, web based government-wide service that integrates travel planning and cost estimating; travel authorization; reservations; fulfill ment services; filing, processing, and approving official travel claims; travel reimbursement data; and reporting and data exchange.

Activities are currently underway to integrate ETS with the Department's Corporate Financial Management Systems (CFMS) in itiative.

USDA Travel System Performance Expectations

- Migrating from a custom, USDA-specific set of multiple travel support systems to the government-wide E-Travel service will allow USDA to retire the TDY portion of TRVL and GVTS systems, eliminating th eir operations and maintenance costs. However, because these systems are extremely antiquated, the system costs are extremely low, thus system savings are not great. However, savings related to reduce transaction fees for the eTravel services which inclu de the back office functions will show an overall reduction over time once the system is fully implemented.
- Elimination of separate agency Travel Management Center contracts and a transition to the central, Web-based E-Travel service will reduce travel service fees from as much as $27 per transaction to just $11 per

transaction for the self-serve transactions. Thus, increasing the on-line booking adoption rate will be an important objective for USDA and its agencies.

- Consolidation of travel management to one comprehensive automated system, will allow USDA to provide more standardized travel reporting and meet GSA's and congressional calls for data, because these systems meet GSA's FTR standards for data, USDA legacy systems do not. USDA will be able to manage travel services through analysis of travel spend and this will allow USDA managers to use travel efficiently in program delivery.

USDA Travel System Planned Performance Goals (2007)

To Be Developed

12. Web-Based Supply Chain Management (WBSCM)

Target Architecture Level: Common Enterprise Wide Application
Related Investment: Web-Based Supply Chain Management
Related Unique Project Identifier: 005-45-01-61-01-8012-00

Background and Overview

The Web Based Supply Chain Management (WBSCM) system is the proposed replacement for the existing Processed Commodity Inventory Management System (PCIMS). PCIMS, an aging system based on antiquated technology is cumbersome, manual, paper-intensive, and limits the efficiency and effectiveness of USDA's supply chain. At the inter-agency level, AMS, FNS, and FSA are working together to replace the PCIMS with WBSCM.

WBSCM will support expanded electronic government by providing one system supporting multiple commodity programs managed by multiple agencies with a single electronic point of access for federal employees, cooperating agencies and vendors. This integration will help USDA manage these programs more closely across agencies and automate many manual processes. One integrated system will minimize the cost of the investment and reduce duplicative systems, replacing the aging mainframe-based PCIMS.

WBSCM will be used to manage USDA's commodity operations including the purchasing and distribution of approximately $2.5 billion in product for distribution to needy recipients through a number of domestic and foreign feeding programs. It will be used to manage inventory of products in support of these programs as well as for price support products, including the School Lunch Program (and other child nutrition programs) serving Americans in need and international food aid programs helping people in over 60 countries around the world. These programs serve two purposes, reducing hunger by distributing commodities to schools and other recipient agencies that serve needy families and supporting American agriculture by using commodities purchased through surplus removal, price support, and other market stabilization programs.

As-Is

- Commodity supply chain operations center on the aging PCIMS system. PCIMS supports the purchasing and ordering for all USDA domestic food aid programs. Part of a tri-agency collaboration between FNS, AMS, and FSA, and first designed in the 1980's, PCIMS supports the annual purchase of approximately $2.5 billion worth of USDA commodities for domestic and foreign food assistance programs.

- Over the past few years, PCIMS has been augmented by several add-on systems designed to enable some Web-based and other Internet interactions and to mitigate several key shortcomings in the system.
- PCIMS operates in an old technological infrastructure, with nearly all operations taking place during a nightly batch process. Batch processing limits flexibility and timely execution and prohibits real-time tracking, reconciliation and close-out functions.

To-Be (FY 2010)

- The modern, integrated WBSCM system currently proposed will replace PCIMS, improve the ability of USDA agencies and the US Agency for International Development (USAID) to carry out their mission, and enhance interactions with customers, suppliers, and business partners. Further, the system's state of the art technology and architecture will greatly streamline the flow of commodities and related information.
- WBSCM will include 28 major supply chain management capabilities, adding 18 new electronic capabilities and significantly expanding on the 10 capabilities currently available in PCIMS. These capabilities span all major functional areas of supply chain management, including supply chain planning, procurement, order management, fulfillment , and transportation management.
- To achieve these capabilities, WBSCM will be designed on COTS technologies and a layered, service oriented architecture to enable flexibility and ensure a future upgrade path.
- WBSCM will enable the elimination of several agency-specific systems developed to address specific PCIMS problems through the additional capabilities its coordinated approach will provide.
- WBSCM will create a single platform for food supply chain management across USDA and its partner agencies, expanding the number of agencies using a single system from three to eight and eliminating cumbersome, manual, uncoordinated processes in used to coordinate across agencies.
- WBSCM is designed to leverage USDA enterprise-wide components when possible, including the eAuthentication Service and Portal Service.

The following graphic provides an overview of the WBSCM segment architecture and how it relates to USDA's missions.

WBSCM

Current Status

After award of the contract to proceed with the development of WBSCM, the project began with meetings between the government and support contractor staff in Washington, DC and Kansas City in November 2006. USDA management and program staff, and contractor staff reviewed the project's scope, timeline, key deliverables, roles , and critical success factors.

Subsequently, domestic and international workshops were held in Washington, DC and Kansas City during December and January. Here participants walked through the domestic and international "As Is" business processes and confirmed and updated the 2003 Business Profile Functional Requirements and the cross-process requirements. The outcome from these workshops will be used to analyze potential commercial-off-the-shelf (COTS) enterprise resource planning (ERP) tools to support WBSCM.

WBSCM Performance Expectations as of September 2006

As a new system that features modern technology and streamlined, commercially-oriented business practices, WBSCM will allow USDA food purchase agencies to:

- Reduce costs for customers by eliminating or reducing storage costs paid by school districts for late deliveries
- Reduce the cost of commodities
- Reduce transportation costs
- Reduce inventory and warehouse costs and investments
- Reduce Federal information technology costs

- Improve timely delivery of USDA commodities and reduce processing delays
- Improve collaboration and integration across agencies and departments
- Ensure timely financial management and reconciliation and improved reporting capabilities
- Reduce USDA nutrition programs operational costs, maintenance costs, and purchase and shipping costs

WBSCM Planned Performance Goals (2010)

Fiscal Year	Measurement Area	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvement to the Baseline	Actual Results
2010	Mission and Business Results	Overall Costs	Increased level of nutrition assistance provided (additional aid recipients added to programs or increased food proved to current participants)	Export programs:4.7 billion metric tons	Overall decrease in commodity purchase and transportation costs will enable USDA to purchase 5-10% more food at same level of non-price support/non-bonus spending (assuming commodity prices and other factors remain constant)This target is for FY10 an	N/A (System in control phase)
2010	Customer Results	Timeliness	Delivery window cycle time reduction	Domestic Programs: 30-60 days Export Programs: 120-180 days (longer lead time required due to ocean shipping)	20-30% increase in domestic orders received by customers in requested time period 20-30% increase in export orders received by customer within 120 days. This target is for FY10 and beyond.	N/A (System in control phase)

2010	Customer Results	IT Contribution to Process, Customer, or Mission	% of paperless customer transactions(orders)	At least 50% of export orders placed electronically; maintain current level of electronic domestic orders. This target is for FY10 and beyond.	At least 50% of export orders placed electronically; maintain current level of electronic domestic orders. This target is for FY10 and beyond.	N/A (System in control phase)
2010	Customer Results	IT Contribution to Process, Customer, or Mission	% of paperless supplier transactions(invitations, bids, awards, contracts, notices-to-deliver, and invoices)	Invoices and disbursement data currently electronic; commodity bids are electronic; all other transactions and forms currently paper-based	20-40% increase in share of electronic supplier transactions. (excluding receipt of paper proofs-of-delivery and records following initial electronic transaction)This target is for FY10 and beyond.	N/A (System in control phase)
2010	Customer Results	User Satisfaction	Percentage of perfect orders received by customers(% orders received on time and complete – order fill rate)	90-95% (varies based on program and agency)	Increase in perfect order rates to industry best-practice levels (90-95%).This target is for FY10 and beyond.	N/A (System in control phase)
2010	Processes and Activities	Service Efficiency	Average product purchase cost per unit of commodity	Varies by commodity (over 200 commodities purchased annually)	Reduction in commodity cost for select commodities:3-6% overall reduction in commodity cost from long-term contracting. This target is for FY10 and beyond.	N/A (System in control phase)

2010	Processes and Activities	Service Efficiency	USDA-procured transportation cost as a percentage of commodity distribution program budget	Export Programs: 15% Domestic Programs: Estimate of 10-15%	Reduction in export transportation spend of 10-15% (based on long-term contracting and other means).Reduction in overall domestic commodity cost of 3-7% (based on decrease in cost of transportation component).This target is for FY10 and beyond.	N/A (System in control phase)
2010	Processes and Activities	Timeliness	"Procure-to-pay" cycle time (average time from award to payment of supplier)	Varies, but approximately 30-90 days	Reduction in overall cycle time of 5-10%.This target is for FY10 and beyond.	N/A (System in control phase)
2010	Processes and Activities	IT Contribution to Process, Customer, or Mission	Number of food aid programs using the WBSCM system	Three agencies representing approx. 8 household-based and child nutrition programs	Six agencies (across USDA, USAID, and MARAD) representing 16 domestic and international food aid programs This target is for FY10 and beyond.	N/A (System in control phase)
2010	Processes and Activities	Efficiency	Total staff time devoted to procurement operations	Current per-acquisition processing time approx. 1 – 10 staff days	10-20% reduction in overall staff time devoted to bid and contract management processes. This target is for FY10 and beyond.	N/A (System in control phase)
2010	Technology	Operations and Maintenance Costs	Total cost of commodity distribution IT systems	$12 Million annual cost for current PCIMS system	$6 million annual operations and maintenance cost for WBSCM system (with currently-defined scope). This target is for FY10 and beyond.	N/A (System in control phase)

2010	Technology	IT Contribution to Process, Customer, or Mission	System uptime(percentage of time system is fully functional)	System currently available for limited hours per day – approx. 13 hours/day	24 x 7 operation, 99.9% overall uptime and reliability (allowing for scheduled maintenance).This target is for FY10 and beyond.	N/A (System in control phase)