

GAO

Report to the Chairman, Subcommittee
on Department Operations, Nutrition,
and Foreign Agriculture, Committee on
Agriculture, House of Representatives

June 1998

USDA TELECOMMUNICATIONS

Strong Leadership Needed to Resolve Management Weaknesses, Achieve Savings





United States
General Accounting Office
Washington, D.C. 20548

Accounting and Information
Management Division

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June 30, 1998

The Honorable Bob Goodlatte
Chairman
Subcommittee on Department Operations,
Nutrition, and Foreign Agriculture
Committee on Agriculture
House of Representatives

Dear Mr. Chairman:

As requested, we are reporting to you the results of our review of the Department of Agriculture's (USDA) efforts to improve its management of telecommunications resources and act on opportunities to achieve savings. As agreed, our objective was to determine what actions USDA has taken to address the telecommunications management problems we identified in reports issued in 1995 and 1996 and to what extent these problems have been resolved.¹ In these reports, we recommended that USDA should act immediately to (1) establish the sound management practices necessary to cost-effectively manage telecommunications and eliminate unnecessary services, (2) consolidate and optimize Federal Telecommunications System (FTS) 2000² resources where opportunities exist to do so, (3) plan networks in support of information and resource sharing needs, and (4) correct telephone abuse and fraud problems and mitigate future risks in this area.

Results in Brief

In response to our reports and recommendations, USDA has taken positive steps to begin correcting its telecommunications management weaknesses—improvements that the department says could reduce its \$200 million-plus reported annual investment in telecommunications by as much as \$70 million each year.³ For example, USDA conducted a departmentwide reengineering study and is beginning to test a redesigned

¹USDA Telecommunications: Missed Opportunities To Save Millions (GAO/AIMD-95-97, April 24, 1995); USDA Telecommunications (GAO/AIMD-95-219R, September 5, 1995); USDA Telecommunications: Better Management and Network Planning Could Save Millions (GAO/AIMD-95-203, September 22, 1995); and USDA Telecommunications: More Effort Needed To Address Telephone Abuse and Fraud (GAO/AIMD-96-59, April 16, 1996).

²FTS 2000 is a General Services Administration (GSA) managed network of long-distance voice, data, and video telecommunications services intended to satisfy the federal government's needs in the continental United States through 1998.

³We did not independently verify the accuracy of USDA's information on telecommunications costs and cost-savings projections.

approach for managing telecommunications resources. USDA has also taken action to eliminate some redundant services and reduce costs.

However, USDA has not achieved significant cost savings or management improvements because many of the department's corrective actions are incomplete or inadequate. Specifically, USDA has not (1) established the sound management practices necessary for ensuring that telecommunications resources are cost-effectively managed and payments for unused, unnecessary, or uneconomical services are stopped, (2) consolidated and optimized telecommunications to achieve savings where opportunities exist to do so, (3) adequately planned integrated networks in support of information sharing needs, and (4) determined the extent to which the department is at risk for telephone abuse and fraud and acted to mitigate those risks nationwide. Further, it is unclear how and when these needed corrective actions will be implemented because the department has not established an effective action plan or strategy for addressing our recommendations with time frames, milestones, and resources for making improvements. A major factor contributing to this situation is that no one at USDA has been given overall responsibility, authority, and accountability for fixing USDA's long-standing telecommunications management problems.

Background

USDA relies on telecommunications systems and services to help it administer federal programs and serve millions of constituents. From telephone calls to video conference meetings to providing nationwide customer access to information, USDA reports that it spends about \$219 million annually for a wide array of telecommunications technology.⁴ Voice and data communications, provided by the federal government's FTS 2000 program, and hundreds of commercial carrier networks help the department's 31 departmental offices and agencies and thousands of field offices carry out USDA's broad missions and serve customer needs.

In 1995 and 1996, we reported that USDA was not cost-effectively managing and planning its substantial telecommunications investments and was wasting millions of dollars each year as a result. Specifically, we found that

⁴In fiscal year 1995, USDA estimated that it spent about \$114 million for telecommunications. More recent estimates by the department report that USDA spends about \$219 million each year, including \$38 million for FTS 2000 data, voice, and video services; \$72 million for commercial services; and \$109 million for equipment and contractual services.

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- USDA was paying for unnecessary or unused telecommunications equipment and services because of breakdowns in management controls. For example, we found that USDA had been paying tens of thousands of dollars annually for leased telecommunications equipment, such as rotary telephones and outdated computer modems, that it no longer even had.
 - USDA was wasting as much as \$5 million to \$10 million annually because the department had not acted on opportunities to consolidate and optimize its FTS 2000 telecommunications services.
 - USDA agencies were spending hundreds of millions of dollars developing redundant networks that perpetuate long-standing information sharing problems because the department was not adequately planning departmentwide telecommunications in support of USDA's information sharing goals.
 - USDA had hundreds of cases of telephone abuse because the department lacked adequate controls over the millions of dollars it spends each year on commercial telephone services. Many of these cases involved inappropriate collect calls made from individuals in 18 correctional institutions, accepted and paid for by USDA, and then possibly transferred to other USDA long-distance lines.

We made numerous recommendations in our reports to help USDA correct these problems. Given the seriousness of these management weaknesses and the waste we found, we also recommended in 1995 that the Secretary of Agriculture report the department's management of telecommunications as a material internal control weakness under the Federal Managers' Financial Integrity Act (FMFIA).

Under federal law, government agencies are required to properly and cost-effectively manage all information technology investments, including telecommunications.⁵ To do this, agencies must have processes and practices established that ensure sound planning and information technology decision-making, and cost-effective management and use of information technology investments. To further strengthen executive leadership in the management of information technology, the Congress enacted the Clinger-Cohen Act of 1996, which created a chief information officer (CIO) position in federal agencies and emphasized the need for instituting sound management practices to maximize the return on information technology investments.

⁵Such laws include the Paperwork Reduction Act of 1995, the Chief Financial Officers Act of 1990, and the Government Performance and Results Act of 1993.

In August 1996, the Secretary of Agriculture established a CIO position and in August 1997 designated the Deputy Assistant Secretary for Administration as USDA's first CIO. The CIO, who reports to the Secretary, is responsible for providing the leadership and oversight necessary to ensure the effective design, acquisition, maintenance, use, and disposal of all information technology by USDA agencies, which include telecommunications, and for monitoring the performance of USDA's information technology programs and activities.

Scope and Methodology

To address our objective, we reviewed agency documentation and interviewed USDA officials to identify the department's actions to address our recommendations to (1) establish sound telecommunications management practices, (2) consolidate and optimize FTS 2000 telecommunications services for savings, (3) plan networks in support of information and resource sharing needs, and (4) correct telephone abuse and fraud. To assess the adequacy of these corrective actions, we reviewed plans, studies, activity reports, and other documentation at USDA headquarters, USDA's National Finance Center (NFC), and agency offices and discussed the status and progress of actions taken with USDA officials. We also reviewed studies as well as vendor billing information for FTS 2000 and commercial services to evaluate the results of USDA's corrective actions. Appendix I provides further details on our objective, scope, and methodology.

We conducted our review from August 1997 through April 1998 in accordance with generally accepted government auditing standards. We provided a draft copy of this report to USDA for comment. USDA's comments are discussed in the report and are included in full in appendix II.

Sound Management Practices for Ensuring Cost-Effective Telecommunications Not Yet Established

In 1995, we reported that USDA lacked sound management practices over its large annual telecommunications investments and was not cost-effectively managing these investments. Because of this, the department wasted millions of dollars each year paying for unnecessary or unused telecommunications services and equipment, and services billed but never provided.⁶ We therefore recommended that USDA should report its management of telecommunications resources as a material internal control weakness under the Federal Managers' Financial Integrity Act (FMFIA) and take immediate and necessary steps to ensure that all

⁶GAO/AIMD-95-203, September 22, 1995.

telecommunications resources are properly managed and costs are effectively controlled.

USDA agreed that it has to do a significantly better job managing its telecommunications investments. It reported telecommunications management as a material management control weakness in its fiscal year 1996 and fiscal year 1997 FMFIA reports, and began improvement initiatives to reengineer telecommunications management, audit telephone invoices, establish telecommunications inventories, and strengthen departmentwide policy. By implementing improvements such as reengineering telecommunications management, the department reported in November 1997 that its telecommunications costs could be reduced as much as \$30 million annually.

However, to date, USDA has not fully implemented the revised and improved management practices. As a result, it has neither achieved significant savings nor substantially strengthened telecommunications management.

USDA Reports Telecommunications Management as an FMFIA Material Management Control Weakness

Under the Federal Managers' Financial Integrity Act of 1982 (31 U.S.C. 3512), agencies must establish internal controls to reasonably ensure that agency assets are effectively controlled and accounted for. Agencies must also annually report material weaknesses in these controls to the President and the Congress and describe plans and schedules for correcting these weaknesses. Given the lack of sound management practices over telecommunications and the serious management weaknesses we found at USDA, we recommended in our 1995 report that the Secretary of Agriculture report the department's management of telecommunications as a material internal control weakness under FMFIA. We also recommended that this weakness should remain outstanding until USDA institutes effective management controls.

In response to our recommendations, USDA reported its overall management of telecommunications as a material management control weakness in its fiscal year 1996 FMFIA report. Specifically, the report generally discussed corrective actions planned or underway to address (1) inadequate telecommunications management and network planning, (2) opportunities to consolidate and optimize telecommunications services for savings, and (3) telephone abuse.

In USDA's FMFIA report for fiscal year 1997, the department continued to report telecommunications management and network planning and the management of telecommunications services as material weaknesses, stating that estimated completion dates to resolve these weaknesses have been delayed. Specifically, the report states that USDA extended the expected completion date 1 year for resolving its telecommunications management and network planning weaknesses, from fiscal year 1998 to fiscal year 1999, and 2 years for addressing opportunities to consolidate and optimize telecommunications services for savings, from fiscal year 1998 to fiscal year 2000.

Efforts to Reengineer Telecommunications Activities Delayed

In response to our 1995 report, USDA's Deputy Assistant Secretary for Administration—who has since been appointed CIO—and the acting chief financial officer (CFO) established a telecommunications task force in October 1995 to assess and determine actions necessary to address our recommendations and resolve the department's material weaknesses. The task force concurred with our findings and recommendations, noting that department leadership in telecommunications management had been seriously deficient. Specifically, the task force concluded in its February 1996 report that

"The processes of planning, acquiring, ordering, billing, invoicing, inventory control, payments, and management of telecommunications services and equipment [are] chaotic at best and totally out of control at the very least. These processes are disparately performed across agencies and even within agencies. The capability to plan, review, and capitalize on USDA telecommunications investments is far beyond the reach of any USDA manager to make rational decisions based on hard inventory and billing facts. Agency managers who are responsible for telecommunications services have neither the information they need to manage these resources nor the billing/invoice information to ensure that USDA is receiving the services it ordered and for which it is being billed. The systems/processes are outdated and broken."⁷

The task force recommended a series of critical and essential actions to begin to address these problems. It identified business process reengineering of telecommunications management activities across the department as the most critical action for fundamentally improving the processes and systems supporting telecommunications management. The activity included, among other things, redesigning approaches for obtaining and reviewing billing information through electronic data

⁷United States Department of Agriculture: The Report of the Telecommunications Task Force, February 1996.

interchange (EDI) and creating management processes that (1) reduce payments made for services not received and equipment not owned, (2) promote increased resource sharing between agencies, and (3) provide accurate and timely reports to agency managers for monitoring the cost-effective use of all telecommunications resources.

Later in February 1996, the Deputy Assistant Secretary for Administration and the acting CFO accepted the task force's recommendation to complete a telecommunications reengineering study within 6 months, and pilot test and implement reengineered telecommunications management processes throughout the department within 24 months. USDA has reported that it expects to correct its most serious management weaknesses through this effort and, at the same time, save up to \$30 million annually by streamlining administration of telephone bills and validating agency payments made to telephone companies to eliminate unnecessary charges for services, lines, and features that are not in use.

However, USDA did not complete its reengineering study until August 1997 and does not expect to have its reengineered telecommunications management processes fully implemented before September 1999, at the earliest, which is 3-1/2 years after USDA accepted the task force's recommendations. Much of this delay occurred because USDA's reengineering effort, although critical, lacked effective direction and oversight. For example, it took USDA nearly 4 months (from February 1996 to June 1996) to form a project team for the reengineering study. Project officials said further delays resulted from the lack of clear direction over project activities. This was because management responsibility for the work on the study was split among the Deputy Assistant Secretary for Administration and acting CFO and an executive review board made up of program and management officials.

USDA's One-Time Audit Finds Millions of Dollars in Savings

Concurrent with the reengineering effort, USDA began additional initiatives to address other management improvement and cost-savings recommendations we made. For example, because USDA agencies do not generally review commercial telephone bills to verify charges, we reported that the department was paying tens of thousands of dollars for leased telecommunications equipment and other services it had not used for years.⁸ We therefore recommended that USDA review commercial

⁸As we reported in 1995, bills for commercial services are sent directly from the carriers to NFC where the bills are processed and paid. NFC receives thousands of bills in paper form each month and, in most cases, does not forward copies to the agencies for verification of charges.

telephone bills for accounts over 3 years old to identify instances where the department may be paying for services that are no longer being used.

Following the Secretary's direction, in May 1996, USDA's acting CFO and NFC began a one-time audit of all commercial telephone invoices. To do this, copies of all billing invoices paid to telephone companies for a 1-month period in 1996 were sent by NFC to USDA agencies for verification. The audit involved the review of over 25,000 paper invoices. Agencies and offices were asked to identify duplicate services, unnecessary services, and services billed but not received. As of March 1998, the audit was about 90 percent complete and had identified about \$470,000 in annual savings. USDA expects to recoup the overall cost of this audit from the savings achieved during the first year.

Opportunities to save millions more were also identified when it was disclosed that USDA agencies were paying tens of thousands of dollars each month for thousands of unused FTS 2000 e-mail boxes. As a result, more than half of USDA's 15,953 FTS 2000 e-mail accounts were disconnected, reducing USDA's telecommunications costs by about \$3.3 million. In one case, for example, we were told that the Secretary's office found it had been paying monthly storage charges for an FTS 2000 e-mail box for a former Secretary who had left the department in 1993. Efforts to identify and eliminate additional unused e-mail accounts are continuing.

USDA Still Lacks Complete Telecommunications Inventories

In 1995, we reported that USDA and its agencies lacked basic information describing what telecommunications equipment and services USDA uses and what it pays for these resources because telecommunications inventories had not been established by the department. As we pointed out in our report, inventories are fundamental to sound telecommunications management and are necessary, among other things, to identify telecommunications resources that are outdated or no longer used and ensure that agencies pay for only those services that they use. Consequently, we recommended that the department take immediate steps to ensure that departmentwide telecommunications inventories were established and properly maintained.

In response to our report, the CIO's office began work with a contractor to help the department establish telecommunications inventories. As part of this effort, the contractor (1) prepared a plan for conducting inventories departmentwide and (2) initiated a pilot project to conduct a physical inventory of telecommunications equipment at six sites for two USDA

agencies in the Washington, D.C., area. At just these six sites, the contractor found the USDA offices were being billed more than \$200,000 annually for inactive lines, active lines not in use, and lines that could not be identified. However, the department did not implement the contractor's plan and did not act to ensure that all unneeded or unused services were eliminated.

Although the contractor's plan was not implemented, USDA has taken other actions to begin collecting inventory information. Specifically, in connection with efforts now underway to test USDA's reengineered telecommunications management processes and address Year 2000 readiness,⁹ the CIO's office told USDA agencies to have their telecommunications inventories completed by July 1998. Until USDA establishes inventories and fully tests and implements improved telecommunications management processes departmentwide, USDA cannot ensure that unnecessary or unused services have been discontinued.

Termination of Services at Closed USDA Offices Is Not Assured

In 1995, we also recommended that USDA establish and implement procedures necessary to ensure that all unneeded telecommunications services are terminated at offices that close or relocate. Since passage of the Federal Crop Insurance Reform and Department of Agriculture Reorganization Act of 1994,¹⁰ USDA has closed or relocated about 1,300 field offices and plans to close or relocate hundreds more in the next few years. Effective procedures are essential to precluding payments for services at offices after they have been closed or relocated.

While the CIO's office revised the department's telecommunications policy in March 1996 to require USDA agencies and offices to ensure the termination of telecommunications services at offices that close or relocate, CIO officials said that they did not monitor agencies' compliance with this policy. Accordingly, USDA does not know whether the policy had been implemented throughout the department. Telecommunications managers at two USDA agencies we spoke with said that they had not done reviews of billing records to ensure that telecommunications services were terminated for all of their offices that had closed or relocated. In fact, cases have been identified by USDA in which the department continued to incur service charges at agency offices that had closed or relocated. For

⁹This involves taking necessary steps to ensure that information technology accurately processes date and time data (including calculating, comparing, and sequencing) from, into, and between the 20th and 21st centuries.

¹⁰Public Law 103-354, 108 Stat. 3178.

example, one USDA agency told us that the department continued to pay a total of about \$90,000 for vendor-provided services for an office in Florida that had been closed since 1984. After identifying this case, the agency telecommunications manager terminated the service in October 1997 and sought reimbursement from the vendor for some of these charges.

USDA Continues to Pay for Redundant FTS 2000 Services

In 1995, we also reported that USDA was missing millions of dollars in savings because the department had not consolidated and optimized FTS 2000 telecommunications services where there were opportunities to do so.¹¹ Such savings opportunities existed because, over the years, hundreds of field office sites across the department had obtained and continued to use separate, and often times redundant, telecommunications services at office sites where multiple USDA agencies are located within the same building or geographic area. Therefore, we recommended that USDA identify and act on opportunities to consolidate and optimize FTS 2000 telecommunications services and preclude departmental agencies and offices from obtaining and using redundant services.

USDA agreed with our recommendation and began a departmentwide initiative, called Initiative 6, that used a network analysis tool¹² to identify instances in which USDA agencies and offices located in the same building could consolidate and optimize FTS 2000 telecommunications services for savings. By November 1995, USDA agencies and offices had been provided with 775 specific opportunities to eliminate FTS 2000 redundant services.

USDA eliminated about \$3.2 million in redundant FTS 2000 services under this effort but took no action on nearly half of the Initiative 6 cost-savings opportunities and terminated the initiative. The CIO's office later reactivated Initiative 6 after we began our review and, once again, identified additional opportunities for savings. However, CIO officials told us that they were not actively following up on these because new priorities, such as the need for USDA agencies to ensure Year 2000 compliance, were consuming most of the agencies' information technology staff resources.

¹¹GAO/AIMD-95-97, April 24, 1995.

¹²An automated tool developed by USDA to analyze telecommunications configurations at specified locations and, on the basis of actual traffic, tariffs, and rates, determine where services can be combined for volume discounts and where more cost-effective telecommunications arrangements can be selected.

USDA also began tracking agency purchases of FTS 2000 services. As part of the department's moratorium on information technology investments, established by the Deputy Secretary in November 1996, the CIO's office began reviewing individual agency requests for new telecommunications services and equipment to help ensure that opportunities to share resources among agencies and offices are considered before telecommunications services are acquired. The CIO's office also created a new centralized management structure for ordering FTS 2000 telecommunications services to help eliminate agency purchases of redundant services. Under these new procedures, which are still being implemented, USDA has reduced the number of individuals throughout the department who are authorized to purchase new telecommunications services and equipment by about 77 percent from 332 to 75 and has required agencies to forecast their planned telecommunications purchases in advance to identify opportunities for savings.

Networks Still Not Planned in Support of Information and Resource Sharing Needs

In September 1995, we reported that USDA had hundreds of stovepipe networks and systems, built by its agencies, that hinder information sharing.¹³ This situation evolved over time because USDA allowed its agencies to build their own separate stovepipe networks. Even though the department had often acknowledged that it had a pressing need to overcome this problem, we found that USDA agencies continued to spend hundreds of millions of dollars to develop redundant networks that could not interoperate and could not share information. We recommended in 1995 that USDA determine the interagency information sharing requirements necessary to effectively carry out the department's crosscutting programs and plan networks in support of information and resource sharing needs.

Despite some initial efforts to develop a draft information systems technology architecture, USDA has not yet identified business data needs and information sharing requirements for the department. The Clinger-Cohen Act of 1996 requires agency CIOs to develop, maintain, and facilitate integrated information systems architectures for evolving or maintaining existing information technology and acquiring new information technology to achieve the agency's strategic goals and information resources management goals.¹⁴ An effective systems architecture should be derived by systematically and thoroughly analyzing and defining agencies' target operating environments, including business

¹³GAO/AIMD-95-203, September 22, 1995.

¹⁴Public Law 104-106, section 5125, 110 Stat. 684 (1996).

functions, information needs and flows across functions, and system characteristics required to support these information needs and flows.

However, according to a contractor's January 1998 assessment, USDA's initial architecture does not identify many of the kinds and/or types of data used in the department and does not provide a clear foundation for a seamless flow of information and interoperability among all agency systems that produce, use, and exchange information. According to the CIO's office, work is still underway to capture data on information flows and needs and this work will not be completed until September 1999.

Concurrent with this ongoing work to identify data requirements, the CIO's office has begun evaluating USDA's current network structure. As a first step, the CIO's office used a contractor's network design tool to identify or map, for the first time, the department's existing data networks so that redundancies may be eliminated and economies may be gained. When this work is complete in June 1998, project officials said the CIO will begin considering design alternatives for migrating to a departmentwide enterprise network¹⁵ that is intended to satisfy the connectivity needs of USDA information technology systems, processes, and users. However, USDA does not plan to have completed its work identifying business data and information sharing requirements by that time. USDA officials stated that while the department does not now and may never fully understand its business requirements, it can nonetheless design its new departmentwide enterprise network.

By moving forward on an enterprise network without completing an architecture that defines USDA's business data and information sharing requirements, USDA runs the risk of investing in a network that may not fully support its strategic business/program and operational needs. As we have reported in the past, agencies have experienced significant problems and cost increases by trying to design and build information and network systems without a systems architecture that defines business needs. For example, we found that incompatibilities among air traffic control systems cost the Federal Aviation Administration (FAA) \$38 million to fix because it began building these systems without completing a systems architecture that defined requirements and standards governing information and data structures and communications.¹⁶ In another case, after the Internal

¹⁵Enterprise network is defined as a unified, standards-based telecommunications infrastructure that serves all organizations of the department.

¹⁶Air Traffic Control: Complete and Enforced Architecture Needed for FAA Systems Modernization (GAO/AIMD-97-30, February 3, 1997).

Revenue Service (IRS) spent \$3 billion attempting to modernize its tax systems without adequately defining its business needs in a systems architecture, it was unable to demonstrate benefits commensurate with these costs and had to restructure its modernization effort.¹⁷

Telephone Abuse Corrected at USDA Headquarters, but Departmentwide Risks Have Not Been Addressed

In April 1996, we reported that USDA lacked adequate controls for ensuring that its telephones were properly used.¹⁸ As a result, the department, which spends tens of millions of dollars each year on commercial telecommunications services, had experienced hundreds of cases of telephone abuse in the Washington, D.C., area and was at risk of further abuse and fraud. We recommended that USDA determine its risk of and vulnerability to telephone fraud, waste, and abuse departmentwide and develop and expeditiously implement an appropriate plan with cost-effective controls to mitigate these risks. In the interim, we recommended that the department identify and implement cost-effective actions to minimize USDA's exposure to telephone abuse.

Following our report, USDA identified telephone abuse at the department as a material management control weakness in its fiscal year 1996 FMFIA report, and took a number of positive steps to reduce telephone abuse in USDA's Washington, D.C., headquarters offices. For example, in October 1996, USDA began blocking collect calls in all of its Washington, D.C., area offices, and the hundreds of inappropriate collect calls from individuals in correctional institutions have been significantly reduced. Also, the CIO's office implemented procedures for obtaining and reviewing the local carrier's monthly telephone bill for the Washington, D.C., area to identify questionable long distance calls as well as other potentially inappropriate charges. After taking these actions, USDA reported in its fiscal year 1997 FMFIA report that corrective actions on telephone abuse were completed.

However, the department has not determined the risk of and vulnerability to telephone fraud, waste, and abuse departmentwide as we recommended, nor has it developed and implemented an appropriate plan with cost-effective controls to mitigate these risks. The CIO official responsible for telecommunications operations told us no further action

¹⁷Tax Systems Modernization: Management and Technical Weaknesses Must Be Corrected If Modernization Is To Succeed (GAO/AIMD-95-156, July 26, 1995); Tax Systems Modernization: Actions Underway But IRS Has Not Yet Corrected Management and Technical Weaknesses (GAO/AIMD-96-106, June 7, 1996); and Tax Systems Modernization: Blueprint Is a Good Start But Not Yet Sufficiently Complete to Build or Acquire Systems (GAO/AIMD/GGD-98-54, February 24, 1998).

¹⁸GAO/AIMD-96-59, April 16, 1996.

was taken on our recommendation because USDA believed that the risks of departmentwide telephone abuse and fraud would be better addressed by implementation of the department's reengineered telecommunications management processes, which will allow agencies and offices to review and verify telephone billing information. However, as discussed earlier, work on this project is not complete and full implementation of the reengineered processes is not expected before September 1999. Therefore, until that time, USDA agencies and offices outside of the Washington, D.C., area remain at risk for telephone abuse and fraud.

USDA Lacks an Effective Action Plan for Resolving Its Telecommunications Management Weaknesses

Although USDA agreed with our 1995 report on the need to resolve its telecommunications management weaknesses and has identified millions in potential savings, it lacks an effective action plan for implementing these necessary improvements. Specifically, USDA has not established a plan that (1) assigns clear responsibility and accountability for initiatives intended to correct the department's telecommunications management weaknesses, (2) coordinates and integrates these initiatives, (3) sets priorities, time frames, and milestones for their completion, (4) establishes procedures for monitoring activities to ensure they are carried out, and (5) allocates necessary resources.

In December 1997, the CIO issued a plan of action for resolving the department's long-standing problems managing information technology. This plan, which was prepared in response to the Secretary's May 1997 request, discusses telecommunications as one of five major areas and provides a general description of the goals and objectives of ongoing initiatives to reengineer and improve departmentwide telecommunications management and lists tasks associated with these efforts.

However, the plan does not adequately describe how needed corrective actions will be implemented, nor does it specify clear time frames, milestones, and resources associated with all these efforts. Specifically, while the plan lists tasks associated with the telecommunications improvement initiatives, it does not describe how USDA intends to carry out all these tasks. For example, the plan lists a project to consolidate and optimize telecommunications services in the Washington, D.C., area to provide more effective and economical telecommunications systems. But the plan provides no information describing the project's activities and how these activities will need to be integrated with numerous other planned or ongoing efforts to consolidate and optimize services, nor does

it discuss milestones, time frames, and resources necessary for carrying them out.

In addition, the CIO's action plan also does not designate a specific senior-level official with overall, day-to-day responsibility, authority, and accountability for managing and coordinating all of the department's separate telecommunications initiatives. Instead, the plan generally assigns responsibility for tasks to the CIO's office and other USDA agencies and offices, but does not identify responsible individuals, provide them requisite authority, and make them accountable for ensuring that these tasks are fully carried out. For example, while the CIO's Associate Director for Telecommunications Services and Operations acknowledged having responsibility within the CIO's office for many corrective actions, this official said she did not have the overall authority necessary to direct and coordinate departmentwide action on all telecommunications improvements and cost-savings efforts. Instead, she could only attempt to get agencies and offices to act on such efforts through a process of consensus-building. Without an action plan that establishes clear lines of responsibility, authority, and accountability for directing and implementing departmentwide telecommunications improvements, many of USDA's corrective actions will likely not be fully implemented.

Conclusions

After more than 2 years, USDA has not fully implemented our recommendations. It continues to miss identified opportunities to achieve the total estimated \$70 million in annual savings and cannot ensure that telecommunications resources are cost-effectively managed across the department. It has undertaken some initiatives that have saved several million dollars, but these initiatives are uncoordinated, poorly managed, and do not address all of USDA's telecommunications weaknesses. Further, USDA has not established an overall plan or strategy for directing and integrating these separate improvement efforts and for ensuring that critical corrective actions are cost-effectively and promptly implemented throughout the department. A major factor contributing to this situation is that no one at USDA has been given overall responsibility, authority, and accountability for doing so.

Recommendations

We recommend that the Secretary of Agriculture direct that the CIO complete and implement a departmentwide corrective action plan that fully addresses all of our recommendations for resolving the department's telecommunications management weaknesses and achieving savings

wherever possible. In addition, we recommend that the Secretary, in consultation with the CIO, assign a senior-level official with day-to-day responsibility and requisite authority for planning, managing, and overseeing implementation of this plan and for ensuring that all telecommunications management improvements and cost-savings activities are effectively and fully carried out. We further recommend that the Secretary of Agriculture direct the CIO to periodically report to the Secretary on the department's progress (1) implementing this corrective action plan and (2) achieving the estimated \$70 million in annual savings identified by the department.

Agency Comments and Our Evaluation

USDA's CIO provided written comments on June 15, 1998, on a draft of this report. USDA's comments are summarized below and reproduced in appendix II.

USDA generally agreed with our findings, conclusions and recommendations. Specifically, USDA agreed that it has not fully implemented recommendations in our previous reports aimed at resolving the department's telecommunications management weaknesses and agreed that the department can improve by placing greater emphasis on planning and coordination of its telecommunications program. USDA also stated that the department has made real progress in telecommunications management and has achieved significant savings, but did not disagree that USDA continues to miss savings opportunities and cannot ensure that telecommunications resources are cost-effectively managed across the department.

In its comments, USDA provided details on actions it is taking to address telecommunications problems we identified, but did not specifically state whether or how the department plans to implement our recommendations. In subsequent discussions with USDA, the Deputy CIO stated that the department plans to fully address and implement all our recommendations.

USDA also raised several additional matters, none of which affect our conclusions and recommendations and thus are not discussed here. These matters and our responses are discussed in appendix II.

As agreed with your office, unless you publicly announce the contents of this report earlier, we will not distribute it until 30 days from the date of

this letter. At that time we will send copies to the Secretary of Agriculture; the Chairmen and Ranking Minority Members of the Senate Committee on Governmental Affairs, the Senate and House Committees on Appropriations, and the House Committee on Government Reform and Oversight; the Director of the Office of Management and Budget; and other interested parties. Copies will also be made available to others upon request.

Please contact me at (202) 512-6408 if you or your staff have any questions concerning this report. I can also be reached by e-mail at *willemssenj.aimd@gao.gov*. Major contributors to this report are listed in appendix III.

Sincerely yours,

A handwritten signature in black ink that reads "Joel Willemssen". The signature is written in a cursive style with a large, stylized initial "J".

Joel C. Willemssen
Director, Civil Agencies Information Systems

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Abbreviations

AT&T	American Telephone and Telegraph
CIO	chief information officer
CFO	chief financial officer
EDI	electronic data interchange
FAA	Federal Aviation Administration
FMFIA	Federal Managers' Financial Integrity Act
FTS	Federal Telecommunications System
GSA	General Services Administration
IRS	Internal Revenue Service
NFC	National Finance Center
USDA	United States Department of Agriculture

Objective, Scope, and Methodology

Our objective was to determine what actions USDA has taken to address the telecommunications management problems we identified in 1995 and 1996 and to what extent these problems have been resolved. To address our objective, we reviewed studies, reports, plans, and other documentation describing USDA's actions to address our recommendations for (1) correcting telecommunications management weaknesses, (2) identifying and acting on opportunities to consolidate and optimize FTS 2000 telecommunications services, (3) planning networks in support of information and resource sharing needs, and (4) resolving telephone abuse and fraud. We also interviewed CIO, CFO, and agency officials to confirm our understanding of actions taken by the department and to identify whether the actions were complete, underway, or planned. We did not independently verify the accuracy of USDA's overall telecommunications costs or projected cost savings.

To identify USDA's efforts to improve telecommunications management, we examined departmental responses to our report recommendations, USDA FMFIA and interagency task force reports, and reengineering and other studies. We also reviewed project plans, status reports, and other documentation pertaining to telecommunications management improvement initiatives to identify the status of these actions, and we discussed plans for completing them with CIO, agency, and project team officials who are responsible for carrying them out.

We also reviewed other actions taken by USDA to address our recommendations on specific telecommunications management problem areas. To assess the effectiveness of USDA efforts to disconnect telecommunications services at closed offices, we discussed the implementation of revised policy in this area with CIO officials and reviewed procedures followed at two agencies that recently closed offices. In addition, we met with CIO, agency, and contractor officials involved with USDA's 1996 inventory pilot and reviewed project reports and other documentation to determine the results and savings achieved. We also discussed USDA's ongoing one-time audit and procedures used for selecting and auditing billing invoices with officials at USDA's National Finance Center. To test the thoroughness of the audit, we randomly selected several invoices and discussed actions taken to verify billing data on these invoices with the appropriate agency officials. We also reviewed reports and billing data associated with other cost-savings efforts to eliminate unused FTS 2000 e-mail boxes and met with CIO and agency officials to discuss current and future plans for establishing telecommunications inventories.

To assess efforts by USDA to consolidate and optimize FTS 2000 telecommunications services, we reviewed reports and examined billing data showing the results of USDA's Initiative 6 project. We also discussed the overall results of this initiative with CIO and agency officials. We examined documentation and billing data associated with USDA's recent effort to reactivate Initiative 6 and discussed the status of efforts to achieve savings with CIO and agency officials. To assess departmental requirements to preclude agencies from purchasing redundant FTS 2000 telecommunications services, we reviewed procedures established by the department under the November 1996 moratorium and new centralized management structure for ordering FTS 2000 services and discussed their impact on purchases of redundant service with CIO officials.

To assess USDA's efforts to plan integrated networks that address the department's information and resource sharing needs, we reviewed reports showing agency network purchases. We also reviewed USDA's information systems technology architecture and discussed it with CIO officials to determine the extent to which the architecture defines information sharing needs. Finally, we reviewed the department's plans for implementing an enterprise network, including the interim results of a contractor's network design evaluation of telecommunications traffic and performance, and discussed the extent to which USDA's enterprise network plans address departmental information and resource sharing needs.

To assess USDA's efforts to address telephone abuse and fraud in the Washington, D.C., area, we reviewed status reports, internal memos, and other documentation describing actions implementing collect call blocking and establishing billing review procedures. We also discussed these actions with CIO officials who monitor telephone abuse in Washington, D.C., and reviewed documentation on the results of these monitoring efforts to determine whether USDA actions were effective in reducing improper collect calls from correctional institutions and other forms of telephone abuse. In addition, we discussed the extent to which USDA had addressed the risks of telephone abuse and fraud departmentwide with the CIO official responsible for telecommunications operations.

To confirm our understanding of USDA actions to address our recommendations and resolve telecommunications management weaknesses, we discussed the results of our work with USDA's CIO, as well as with representatives from the CIO and CFO offices. We performed our audit work from August 1997 through April 1998, in accordance with generally accepted government auditing standards. Our work was done at

USDA headquarters in Washington, D.C.; USDA's National Finance Center in New Orleans, Louisiana; and USDA Telecommunications Services and Operations offices in Fort Collins, Colorado. We also met with contractor representatives who conducted the inventory pilot in Annapolis, Maryland and we interviewed telecommunications officials at two agency offices where telecommunications and network planning activities are administered, which included the Animal and Plant Health Inspection Service headquarters in Riverdale, Maryland, and the Agricultural Research Service in Greenbelt, Maryland.

Comments From the Department of Agriculture

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



United States
Department of
Agriculture

Office of the Chief
Information Officer

1400 Independence
Avenue SW

Washington, DC
20250

JUN 15 1998

Mr. Gene L. Dodaro
Assistant Comptroller General
General Accounting Office
441 G Street, N.W.
Washington, D.C. 20548

Dear Mr. Dodaro:

Thank you for the opportunity to provide input to your draft report entitled USDA TELECOMMUNICATIONS: Strong Leadership Needed to Resolve Management Weaknesses, Achieve Savings (Job Code 511431). We are enclosing the Department of Agriculture's comments of the draft report. As our comments indicate, the Department has already undertaken significant actions to improve telecommunications management.

Sincerely,

A handwritten signature in dark ink, appearing to read "Anne F. Thomson Reed".

Anne F. Thomson Reed
Chief Information Officer

Enclosure

cc: Janet Potts, OSEC
Linda Delgado, OSEC

AN EQUAL OPPORTUNITY EMPLOYER

STATEMENT OF RESPONSE TO
U.S. GENERAL ACCOUNTING OFFICE DRAFT REPORT
MAY 27, 1998 ENTITLED
“USDA TELECOMMUNICATIONS: STRONG LEADERSHIP NEEDED TO RESOLVE
MANAGEMENT WEAKNESSES, ACHIEVE SAVINGS”

RESULTS IN BRIEF

SUMMARY OF GAO COMMENTS

“In response to our reports and recommendations, USDA has taken positive steps to begin correcting its telecommunications management weaknesses--improvements that the Department says could reduce its \$200 million-plus reported annual investment in telecommunications by as much as \$70 million each year..... However, USDA has not achieved significant cost savings or management improvements because many of the department’s corrective actions are incomplete or inadequate.”

DEPARTMENTAL RESPONSE

Over the past couple of years, USDA has developed a comprehensive, multi-pronged Department-wide approach to addressing telecommunications needs as identified in a series of recommendations by GAO. This approach establishes a programmatic direction which focuses on quick hits, intermediate targets, and long-range activities. We recognize that we cannot do everything recommended by GAO at once. We have attempted to prioritize our activities in a manner that allows maximum return for our efforts.

Our management strategy is composed of four key components. These are:

- Improved management of day-to-day operations and policies;
- Focused effort on optimization and consolidation of telecommunications services as part of the Telecommunications Network Stabilization and Migration Program (TNSMP);
- Implementation of the Telecommunications Business Process Reengineering (TBPR) effort that focused on the redesign of telecommunications administrative processes; and
- Analysis and assessment with respect to the Telecommunications Enterprise Network (TEN) which is allowing USDA to consolidate and evolve agency-specific networks into an enterprise-wide network.

As part of our short-term telecommunications goals, USDA has focused on the improved management of day-to-day operations. USDA has instituted new authorities and procedures

Appendix II

Comments From the Department of Agriculture

which have resulted in improved management of our telecommunications program. We have restructured the reporting lines of our telecommunications operational components and placed them under the authority of our newly created Associate Chief Information Officer for Telecommunication Services and Operations. This centralized management will allow for better decision making and maintain the focus needed for sustained improvements. The Office of the Chief Information Officer (OCIO) implemented a business process reengineering project to reengineer its telecommunications management/administration procedures. Based on previous GAO audits, we acquired a contractor to implement a pilot project (involving three agencies) to validate local exchange carriers' services. OCIO has also undertaken a comprehensive project to update telecommunications and security policies needed to support the improved management program and the telecommunications initiatives currently underway. Lastly, the Chief Information Officer (CIO) has established a Department wide moratorium on the acquisition of telecommunications services. The purchase of telecommunications equipment and services requires a waiver from the CIO and an assessment through an internal data base to ensure that opportunities for sharing telecommunications costs are considered by our agencies. There is a zero dollar threshold in place for purchases of this nature.

In April 1997, OCIO implemented the TNSMP which was established to stabilize the USDA network environment and place us in a position to achieve the Departmental objective of designing and implementing a USDA enterprise network. Further, the TNSMP included actions to: (1) establish written telecommunications management plans which demonstrate the agencies' approach to centralization and better control of the planning, acquisition, and management of telecommunications resources; (2) ensure proper planning of telecommunications services and equipment are driven by the business needs as defined by mission programs; and (3) ensure plans are available to all USDA agencies to heighten an awareness of opportunities to share services and equipment in any given USDA office location. As part of the TNSMP strategy, we have reduced the number of persons with ordering capabilities for telecommunications services from approximately 330 to 17 department wide. This advances the centralization concept significantly and adds to our ability to exercise greater control over services being requested. Further, each person with this authority must be part of a quarterly training program that is designed to enhance awareness, competencies, and efficiencies in requesting delivery of telecommunications services.

The implementation of the results of the TBPR effort is also a key component of our mid-term telecommunications strategy. A major initiative under the TBPR is to implement the Telecommunications Ordering, Billing and Inventory (TOBI) system which will enable us to integrate the recently reengineered administrative processes with an automated management information system allowing for greater control and accounting of USDA telecommunications acquisitions. Extensive preparations are underway to begin a pilot of TOBI in several locations in Colorado, Wyoming, and Oregon.

As part of our long-term telecommunications strategy, the TEN project will develop, implement, and manage a unified, standards-based telecommunications infrastructure that will satisfy the connectivity requirements of USDA information technology systems, processes, and users, while employing the most cost effective telecommunications services. To accomplish this, USDA has

Appendix II Comments From the Department of Agriculture

also been working on a comprehensive effort that accurately documents our telecommunications requirements. Products which have been developed relate to detailed information about current networks, analysis of our traffic flows and patterns, and preliminary design of a USDA network. While taking some time, this analysis has been a necessary first step toward developing a cost effective enterprise network plan.

The improved management strategies have already afforded us an opportunity to capture some savings and avoid some costs in our current program. Through our efforts USDA has, over the course of the last two years, achieved savings of \$3,136,929 through elimination of redundant FTS2000 services; \$3,328,066 through the discontinuance of unused FTS2000 E-Mail service; \$126,080 through the Telecommunications Network Stabilization and Migration Program (TNSMP) initiative; and, \$946,389 through our Washington Metro Area Optimization project (Phase I). We are projecting \$468,329 yearly savings in TNSMP consolidation and optimization projects, and during fiscal year (FY) 1998 to date have identified \$694,000 in FTS2000 billing errors through our ongoing management of telecommunications operations. We view these savings as significant and expect to see them increase as the mid and long term strategies we have set in motion come to fruition.

BACKGROUND

SUMMARY OF GAO COMMENTS

"In 1995 and 1996, we reported that USDA was not cost-effectively managing and planning its substantial telecommunications investments and was wasting millions of dollars each year as a result. In August 1996, the Secretary of Agriculture established a CIO position and in August 1997 designated a CIO, who reports to the Secretary. The CIO is responsible for providing the leadership and oversight necessary to ensure the effective design, acquisition, maintenance, use, and disposal of all information technology by USDA agencies, which include telecommunications, and for monitoring the performance of USDA's information technology programs and activities."

DEPARTMENTAL RESPONSE

We have taken previous GAO recommendations seriously and have implemented a comprehensive telecommunications program that establishes centralized management of Departmental telecommunications assets. We continue to work diligently at reducing costs in our overall program. USDA has and will continue to pursue the steps necessary to identify and address weaknesses in the management of its telecommunications program and to pursue strategies that include sharing of resources and cost-savings opportunities.

There are some inconsistencies in this section that require clarification. As the summary above correctly states, "In August, 1996, the Secretary of Agriculture established a CIO position and in August, 1997, designated a CIO, who reports to the Secretary." However, in the last paragraph on Page 9, the draft states, "In response to our 1995 report, USDA established a

See comment 1.
Now on p. 6.

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Now on p. 6.

telecommunications task force in October 1995 under the joint executive leadership of the acting CIO and the acting chief financial officer (CFO) to assess and determine actions necessary to address our recommendations and resolve the department's material weaknesses." Since the CIO position was not established until August, 1996, the reference on Page 9 to an acting CIO is incorrect. The correct information is as follows:

In October, 1995, in response to a General Accounting Office (GAO) audit and a September 5, 1995 letter from GAO to the Office of the Chief Financial Officer, USDA established the Telecommunications Executive Committee chaired jointly by the Deputy Assistant Secretary for Administration and the Acting CFO. The Telecommunications Executive Committee established the Telecommunications Task Force under the joint executive leadership of the Acting Director- Office of Information Resources Management (OIRM) and the Associate CFO to assess and determine actions necessary to address our recommendations and resolve the department's material weaknesses.

Now on p. 7.

Also, similar references to the acting CIO on Pages 11 and 12 should be changed to the Acting Director-OIRM.

SCOPE AND METHODOLOGY

SUMMARY OF GAO COMMENTS

"To address our objective, we reviewed agency documentation and interviewed USDA officials to identify the department's actions to address our recommendations.... We conducted our review from August 1997 through April 1998 in accordance with generally accepted government auditing standards. We provided a draft of the report to USDA for comment."

DEPARTMENTAL RESPONSE

No comment.

SOUND MANAGEMENT PRACTICES FOR ENSURING COST-EFFECTIVE TELECOMMUNICATIONS NOT YET ESTABLISHED

SUMMARY OF GAO COMMENTS

In 1995, we reported that USDA lacked sound management practices over its large annual telecommunications investments and was not cost-effectively managing these investments. However, to date, USDA has not fully implemented the revised and improved management practices. As a result, it has neither achieved significant savings nor substantially strengthened telecommunications management."

DEPARTMENTAL RESPONSE

As indicated under the Results in Brief section, USDA has developed a comprehensive program. Stronger emphasis has been placed on centralized management of telecommunications and the savings that can be achieved through the sharing of resources. As reported previously, USDA has undertaken a number of initiatives and has made significant progress on those initiatives. Full implementation of these initiatives will better reflect the improved management practices that are being put in place as well as cost savings. Thus far we have achieved savings of over \$7.5 million.

USDA REPORTS TELECOMMUNICATIONS MANAGEMENT AS AN FMFIA
MATERIAL MANAGEMENT CONTROL WEAKNESS

SUMMARY OF GAO COMMENTS

..... Given the lack of sound management practices over telecommunications and the serious management weaknesses we found at USDA, we recommended in our 1995 report that the Secretary of Agriculture report the department's management of telecommunications as a material internal control weakness under the FMFIA. In response to our recommendations, USDA reported its overall management of telecommunications as a material management control weakness in its fiscal year 1996 FMFIA report. In USDA's FMFIA report for fiscal year 1997, the department continued to report telecommunications management and network planning, and the management of telecommunications services as material weaknesses, stating that estimated completion dates to resolve these weaknesses have been delayed."

DEPARTMENTAL RESPONSE

USDA continues to view telecommunications management as a material management control weakness. While we believe we have made great strides, we agree that we are neither where we want or need to be at this time. Implementing the results of the TBPR and all of the recommendations put forth by GAO has been a highly complex undertaking for a Department as large and diverse as USDA. Initial plans for achieving progress in this area did not take into consideration the level of complexity at the outset and many of the original estimates were unrealistic. Our focus is on improvement and forward progress. We believe that focus is clear from the sustained commitment to the initiatives we have undertaken.

EFFORTS TO REENGINEER TELECOMMUNICATIONS ACTIVITIES DELAYED

SUMMARY OF GAO COMMENTS

"In response to our 1995 report, USDA established a telecommunications task force in October 1995 under the joint executive leadership of the acting CIO and acting chief financial officer (CFO) to assess and determine actions necessary to address our recommendations and resolve

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the department's material weaknesses. However, USDA did not complete its reengineering study until August 1997 and does not expect to have its reengineered telecommunications management process fully implemented before September 1999, at the earliest, which is 3 and ½ years after USDA accepted the task force's recommendations."

DEPARTMENTAL RESPONSE

We acknowledge and accept responsibility for the internal delays associated with the BPR study.

USDA'S ONE-TIME AUDIT FINDS MILLIONS OF DOLLARS IN SAVINGS

SUMMARY OF GAO COMMENTS

"Following the Secretary's direction, in May 1996, USDA's acting CFO and the National Finance Center (NFC) began a one-time audit of all commercial telephone invoices. Opportunities to save millions more were also identified when it was disclosed that USDA agencies were paying tens-of-thousands of dollars each month for thousands of unused FTS2000 e-mail boxes."

DEPARTMENTAL RESPONSE

As noted, the one-time audit and intensive review and subsequent disconnecting of more than half of USDA's FTS 2000 e-mail accounts did result in significant savings to the Department. These savings will be annualized in terms of significant future cost avoidances within the Department. We continue to monitor on a monthly basis all FTS 2000 e-mail boxes that are still in use by the Department. Where opportunities exist for additional savings, we are closing those boxes in accordance with newly established policies and procedures.

USDA STILL LACKS COMPLETE TELECOMMUNICATIONS INVENTORIES

SUMMARY OF GAO COMMENTS

"In 1995, we reported that USDA and its agencies lacked basic information describing what telecommunications equipment and services USDA uses and what it pays for these resources because telecommunications inventories had not been established by the department. Consequently, we recommended that the department take immediate steps to ensure that department wide telecommunications inventories were established and properly maintained. In response to our report, the CIO's office began work with a contractor to help the department establish telecommunications inventories. Although the contractor's plan was not implemented, USDA has taken other actions to begin collecting inventory information."

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See comment 2.
Now on p. 8.

DEPARTMENTAL RESPONSE

The agencies have been directed to complete a physical inventory of all telecommunications services and equipment by July, 1998. The OCIO is continuing to monitor the status of this inventory effort which will also accommodate Year 2000 compliance requirements and an assessment of any corrective action that must be taken. The agencies are entering the information into a database which is part of a department-wide pilot started as a result of the TBPR. USDA is training agency personnel in the use of this system as part of our effort to maintain a current up-to-date inventory of telecommunications assets.

An example of an earlier inventory activity (Page 14) references the CIO's effort to establish telecommunications inventories by performing a pilot at six sites for two USDA agencies in the Washington, D.C. area. The report states, "... the contractor found that USDA offices were being billed more than \$200,000 annually for inactive lines, active lines not in use, and lines that could not be identified." The report does not mention that one of those agencies (Agricultural Research Service) completed a more thorough analysis of the lines and found that many of the lines identified by the contractor as not in use or inactive were in fact needed for various agency mission requirements. It would appear that the \$200,000 in annual over billings or incorrect billings reported by the contractor was overstated. In addition, USDA evaluated the contractor's strategy, determined it was not cost-effective for nation-wide inventory deployment, and moved to implementing the results of the TBPR as a means of developing a telecommunications inventory for the Department.

TERMINATION OF SERVICES AT CLOSED USDA OFFICES ARE NOT ASSURED

SUMMARY OF GAO COMMENTS

"In 1995, we also recommended that USDA establish and implement procedures necessary to ensure that all unneeded telecommunications services are terminated at offices that close or relocate. While the CIO's office revised the department's policy in March 1996 to require USDA agencies and offices to ensure the termination of telecommunications services at offices that close or relocate, CIO officials said they did not monitor agencies' compliance with this policy. Accordingly, USDA does not know whether the policy has been implemented throughout the department."

DEPARTMENTAL RESPONSE

USDA does have policies in place for the termination of services at offices that are being closed or relocated as a direct result of recommendations from GAO. The centralized management structure that we put in place during 1997 has streamlined responsibilities through the establishment of Telecommunications Mission Area Control Officers (TMACOs). These individuals represent the single point of ordering for telecommunications services within their respective Mission Area. The TMACOs and other program managers are responsible for executing the established policies in this area. We recognize, however, that part of our

responsibility is to ensure that policies developed are implemented by Departmental agencies. We will be more vigilant in the monitoring of this activity nationwide. We will continue to work with our Office of Inspector General as it conducts telecommunications-related field site visits and audits of USDA agencies.

USDA CONTINUES TO PAY FOR REDUNDANT FTS 2000 SERVICES

SUMMARY OF GAO COMMENTS

"In 1995, we reported that USDA was missing millions of dollars in savings because the department had not consolidated and optimized FTS 2000 telecommunications services where there were opportunities to do so. USDA eliminated about \$3.3 million in redundant FTS 2000 services under this effort but took no action on nearly half of the Initiative 6 cost-savings opportunities and terminated the initiative. The CIO's office later reactivated Initiative 6 after we began our review and, once again, identified additional opportunities for savings. However, CIO officials told us that they were not actively following up on these because new priorities, such as the need for USDA agencies to ensure Year 2000 compliance, were consuming most of the agencies' information technology staff resources."

DEPARTMENTAL RESPONSE

USDA believes the statement, "USDA eliminated about \$3.2 million in redundant FTS 2000 services under this effort but took no action on nearly half of the Initiative 6 cost-saving opportunities and terminated the initiative" is misleading. Initiative 6 (Network Aggregation Planning) was an early attempt, by departmental management, to identify cost savings opportunities and solicit agency cooperation in their implementation. This was moderately successful, as indicated by the \$3.2 million cost reduction. However, Initiative 6 also demonstrated that stronger direction from the Department would be necessary to ensure continued cooperation among USDA Agencies and Staff Offices. In addition, Initiative 6 identified issues related to changing technology, such as the availability of frame relay services, that could not be resolved by simply sharing the service access arrangements. Combined, this led to the development of the current telecommunications management program and the absorption of Initiative 6 activities into this program. While Initiative 6 was not formally completed, the experience gained was institutionalized within USDA as evidenced by the following examples:

- Service Aggregation Point (SAP) billing disputes are identified and filed monthly by the Department, on behalf of all Offices and Agencies. This has led to an additional \$126,000 in cost reductions since the termination of Initiative 6. The low number, compared to the over \$1 million in SAP billing dispute savings that was part of Initiative 6, indicates that USDA has almost eliminated SAP billing mistakes received from the vendor (AT&T).

See comment 3.

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- Analysis techniques developed and applied in Initiative 6 are used daily by the TMACOs in the identification of service sharing opportunities as part of the TNSMP.

USDA is committed and will pursue all opportunities that will result in cost savings and avoidances for our programs. Year 2000 compliance is, however, the highest information technology priority we have within the Department.

**NETWORKS STILL NOT PLANNED IN SUPPORT OF INFORMATION AND
RESOURCE SHARING NEEDS**

SUMMARY OF GAO COMMENTS

In September 1995, we reported that USDA had hundreds of stovepipe networks and systems, built by the agencies, that hinder information sharing. This situation evolved over time because USDA allowed its agencies to build their own separate stovepipe networks. By moving forward on an enterprise network without completing an architecture that defines USDA's business data and information sharing requirements, USDA runs the risk of investing in a network that may not fully support the department's strategic business/program and operational needs."

DEPARTMENTAL RESPONSE

USDA, like most diverse government organizations, has an existing telecommunications infrastructure built by its 31 agencies over many years at a cost of billions of dollars. In addition, USDA, like most organizations, works in a dynamic environment providing services in an information intense world.

USDA agrees with GAO that the desirable approach to the development of an enterprise network is based upon a comprehensive business architecture. We do have a high level business architecture in place that is based on the USDA Strategic Plan and forms the basis for the definition of requirements for an enterprise-wide network. USDA strongly believes that further development of the business architecture and the development of the TEN, which is designed to migrate the agency-specific networks to a uniform Departmental network, must continue as a coordinated and integrated effort. Our efforts are based upon what we understand about our business needs today and our current strategic plan. As the strategic plan changes, we will re-assess our telecommunication requirements as a matter of ongoing business practice.

As part of the ongoing assignment, OCIO is updating the February 1997 version of the USDA Information Systems Technology Architecture (ISTA), which will include additional information regarding business data needs and information sharing requirements for the Department. The scheduled completion date is August 1998. The USDA ISTA project update will survey agencies regarding information requirements and information flows. The information obtained from this survey will provide additional information for network resource planning.

See comment 4.

OCIO has implemented a network design process that has a sound technical foundation, is flexible and adaptable to changing technologies, and provides USDA with defensible designs from a technical and economic perspective. By implementing this process USDA not only documents existing network elements, but also identifies the network applications generating the demand for network transport. These application demands can then be linked to systems that support the business functions within USDA.

The bottom line is that the current telecommunications infrastructure is fragmented and expensive to maintain. Significant savings can be achieved by moving forward to establish the enterprise network based on the extensive analysis which have been developed over the last year. As it is established, we will have a process by which we reassess requirements and implement changes as program and mission objectives change. Given the size of the Department and the scope of its missions, this process of change will be constant. By operating an enterprise network, we will be better positioned to make adaptation in the most cost effective manner. It does not make business sense to slow the pace.

**TELEPHONE ABUSE CORRECTED AT USDA HEADQUARTERS, BUT
DEPARTMENT WIDE RISKS HAVE NOT BEEN ADDRESSED**

SUMMARY OF GAO COMMENTS

In April 1996, we reported that USDA lacked adequate controls for ensuring that its telephones were properly used. Following our report, USDA identified telephone abuse at the department as a material management control weakness in its fiscal year 1996 FMFIA report, and took a number of positive steps to reduce telephone abuse in USDA's Washington, D.C., headquarters offices. However, the department has not determined the risk of and vulnerability to telephone fraud, waste, and abuse department wide as we recommended, nor has it developed and implemented an appropriate plan with cost-effective controls to mitigate these risks."

DEPARTMENTAL RESPONSE

The GAO comment is correct in that the telephone abuse issues were corrected at USDA headquarters but Department wide risks have not been fully addressed. We are working to ensure appropriate steps are taken to mitigate this issue on a nationwide basis.

**USDA LACKS EFFECTIVE ACTION PLAN FOR RESOLVING ITS
TELECOMMUNICATIONS MANAGEMENT WEAKNESSES**

SUMMARY OF GAO COMMENTS

"Although USDA agreed with our 1995 report on the need to resolve its telecommunications management weaknesses and has identified millions in potential savings, it lacks an effective

Appendix II Comments From the Department of Agriculture

action plan for implementing these necessary improvements. In December 1997, the CIO issued a plan of action for resolving the department's longstanding problems managing information technology. However, the plan does not adequately describe how needed corrective actions will be implemented, nor does it specify clear time frames, milestones, and resources associated with all these efforts."

DEPARTMENTAL RESPONSE

Issued in December 1997, the OCIO Plan of Action was intended as a high level document for the Secretary. We are continuing to refine and expand this plan based on internal project management needs, which include the implementation of more detailed project plans and tracking mechanisms for the various subparts of the Plan of Action.

CONCLUSIONS

SUMMARY OF GAO COMMENTS

"After more than two years, USDA has not fully implemented our recommendations. It continues to miss identified opportunities to achieve the total estimated \$70 million in annual savings and cannot ensure that telecommunications resources are cost-effectively managed across the department. It has undertaken some initiatives that have saved several million dollars, but these initiatives are uncoordinated, poorly managed, and do not address all of USDA's telecommunications weaknesses. Further, USDA has not established an overall plan or strategy for directing and integrating these separate improvement efforts and for ensuring that critical corrective actions are cost-effectively and promptly implemented throughout the department. A major factor contributing to this situation is that no one at USDA has been given overall responsibility, authority, and accountability for doing so."

DEPARTMENTAL RESPONSE

USDA agrees that we have not fully implemented all of the recommendations. However, as we have stated throughout our comments, USDA has made real progress in telecommunications management and has achieved significant savings within the last 2 years. The \$70 million was a savings projection which was expected to be achieved over the life of the initiatives - not within a 2-year period. We agree that we can improve, and we are placing greater emphasis on the planning and coordination of the USDA telecommunications program. Plans are underway to replace the recently departed senior-level telecommunications official who has day-to-day responsibility for the USDA operational components of the telecommunications program. Meanwhile, these projects have primary attention from the Deputy CIO.

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RECOMMENDATIONS

SUMMARY OF GAO COMMENTS

"We recommend that the Secretary of Agriculture direct the CIO to complete and implement a department wide corrective action plan that fully addresses all of our recommendations for resolving the department's telecommunications management weaknesses and achieving savings wherever possible. In addition, we recommend that the Secretary, in consultation with the CIO, should assign a senior-level official with day-to-day responsibility and requisite authority for planning, managing, and overseeing implementation of this plan and for ensuring that all telecommunications management improvements and cost-savings activities are effectively and fully carried out. We further recommend that the Secretary of Agriculture direct the CIO to periodically report to the Secretary on the department's progress (1) implementing this corrective action plan and (2) achieving the estimated \$70 million in annual savings identified by the department."

DEPARTMENTAL RESPONSE

The CIO has responsibility for establishing the structure for comprehensive management of USDA's telecommunications resources. This structure includes assigning the proper leadership, developing plans and monitoring progress, taking corrective action, and reporting progress to the Secretary on a regular basis. Bringing a senior official on board to assume day-to-day responsibility for telecommunications at the operational level is a high priority. During this interim period, the Deputy CIO has assumed the responsibilities of this position and is providing leadership and oversight in this critical area.

The following are GAO's comments on the Department of Agriculture's letter dated June 15, 1998.

GAO Comments

1. We modified the report as appropriate to more accurately reflect the agency official's title.
2. Regarding the inventory pilot, USDA stated that the report does not mention that one agency completed a more thorough analysis of the lines and found that many of the lines identified by the contractor as not in use or inactive were in fact needed for various agency mission requirements. Therefore, USDA stated that the \$200,000 in annual overbillings identified by the contractor may have been overstated. While we agree that there may have been cases where the contractor's findings were overstated, USDA did not investigate many of the overbillings identified by the contractor to determine the total actual savings possible, nor did it act to ensure that all unneeded or unused services were eliminated.
3. Our statement is accurate. The department explains that it gained valuable experience through Initiative 6, but does not dispute the facts that USDA took no action on nearly half of the cost savings opportunities identified under Initiative 6 and that the initiative was terminated.
4. USDA agreed that it is desirable to develop an enterprise network based on a comprehensive business architecture and contends that it currently has a high-level business architecture in place that is based on USDA's strategic plan and forms the basis for the definition of requirements for an enterprise network. USDA also strongly believes that further development of the department's business architecture and development of the enterprise network must continue as a coordinated and integrated effort and, given that the current telecommunications infrastructure is fragmented and expensive to maintain, it does not make business sense to slow the pace of developing an enterprise network. Therefore, as the department moves forward on its enterprise network, USDA stated that it intends to update the architecture to include additional information on business data needs and information sharing requirements and to reassess telecommunications requirements as a matter of ongoing business practice.

USDA's position is inaccurate and misses the point of our recommendation. The department's current architecture is incomplete. For example, it does not identify many of the kinds and/or types of data used in the department

and does not provide a clear foundation for a seamless flow of information and interoperability among all agency systems that produce, use, and exchange information. As a result, it cannot provide an adequate basis for defining requirements for an enterprise network. By moving forward on an enterprise network without completing the architecture, USDA risks repeating past mistakes, i.e., investing in telecommunications that do not effectively support the department's strategic business/program and operational needs.

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