

GAO

Report to the Chairman and Ranking
Minority Member, Subcommittee on
Interior and Related Agencies,
Committee on Appropriations, House of
Representatives

May 1997

TELECOMMUNICATIONS MANAGEMENT

More Effort Needed by
Interior and the Forest
Service to Achieve
Savings





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

Accounting and Information
Management Division

B-274808

May 8, 1997

The Honorable Ralph Regula
Chairman
The Honorable Sidney Yates
Ranking Minority Member
Subcommittee on Interior and Related Agencies
Committee on Appropriations
House of Representatives

As requested, we are reporting to you the results of our review of efforts by the Department of the Interior and the Department of Agriculture's (USDA) Forest Service to reduce costs by consolidating their telecommunications services. As agreed, our objectives were to determine whether (1) Interior has consolidated and optimized telecommunications services to eliminate unnecessary services and maximize savings and (2) Interior and the Forest Service are sharing telecommunications services where they can.

Results in Brief

To its credit, Interior has undertaken a number of telecommunications cost-savings initiatives that have produced significant financial savings and helped reduce the Department's more than \$62 million annual telecommunications investment. However, Interior is not systematically identifying and acting on other opportunities to consolidate and optimize telecommunications resources within and among its bureaus or its 2,000-plus field locations. The cost-savings initiatives that have been undertaken have generally been done on an isolated and ad hoc basis, and have not been replicated throughout the Department. We did not review consolidation and sharing opportunities at all of Interior's field locations. However, at the four sites we visited, we found that telecommunications resources were often not consolidated or shared, and bureaus and offices were paying thousands of dollars annually for unnecessary services. Interior does not know to what extent similar telecommunications savings may exist at its other offices because it lacks the basic information necessary to make such determinations.

Interior and USDA may also be missing opportunities to save millions of dollars by not sharing telecommunications resources. Even though the Departments have a 2-year old agreement to identify and act on sharing opportunities, little has been done to implement this agreement and, accordingly, only limited savings have been realized. Moreover, while

Interior and USDA's Forest Service currently plan to collectively spend up to several hundred million dollars to acquire separate radio systems over the next 8 years, the Departments have not jointly determined the extent to which they can reduce these costs by sharing radio equipment and services.

Background

As the nation's principal conservation agency, Interior has responsibility for managing most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, and preserving the environmental and cultural values of our national parks and historic places. Interior employs about 70,000 full-time equivalent staff¹ and delivers a wide range of services through its bureaus, services, and offices² at over 2,000 field locations across the country. Three Interior bureaus—the Bureau of Land Management (BLM), the National Park Service, and the Fish and Wildlife Service (FWS)—and USDA's Forest Service³ share responsibilities for managing public lands. While all have separate missions, they manage adjacent lands in many areas throughout the country and have some responsibilities that overlap. Over the last several years, Interior and the Forest Service have collocated some offices or shared space with other federal agencies, and have pursued other means of streamlining, sharing resources, and saving rental costs.

To carry out its broad missions, Interior and its bureaus spend more than \$62 million each year on telecommunications resources⁴ that are used to provide a wide array of voice, data, radio, and video services. These include a variety of telecommunications services acquired under the General Services Administration's Federal Telecommunications System (FTS) 2000 contract⁵ as well as from local and long-distance telephone carriers and commercial vendors. Interior was unable to provide us with

¹As a result of streamlining and downsizing at the Department, Interior's fiscal year 1998 budget request shows a total reduction of over 7,500 full-time equivalent staff since fiscal year 1993.

²Interior's components include the Office of the Secretary and eight major bureaus, services, and offices: the Bureau of Land Management, the Bureau of Reclamation, the Office of Surface Mining Reclamation and Enforcement, the National Park Service, the Fish and Wildlife Service, the Minerals Management Service, the Geological Survey, and the Bureau of Indian Affairs. Hereafter, these components will be referred to as "bureaus."

³The Forest Service has over 800 offices across the country.

⁴Telecommunications can be defined as the electronic transmission of information of any type, such as data, sound, television picture, and facsimile.

⁵FTS 2000 is a 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.

its total fiscal year 1996 telecommunications costs because commercial telecommunications costs and costs for some other services are paid directly by Interior bureaus; these costs are not aggregated or tracked at the Department level. However, for 1 year—fiscal year 1995—in response to a survey we conducted, Interior estimated that it spent about \$62 million on telecommunications equipment and services.⁶ This included about \$29 million for FTS 2000 services and about \$33 million for commercial and other services. Estimated fiscal year 1995 costs for radio equipment and service are not included in these totals.

The Forest Service, which employs more than 30,000 full-time staff, spent about \$33 million for telecommunications in fiscal year 1996. The Forest Service and Interior expect to collectively spend up to several hundred million dollars over the next 8 years acquiring new radio equipment and services to convert to narrowband requirements by 2005.⁷

As we previously reported at USDA, consolidating and optimizing telecommunications offers organizations a way to reduce costs by combining resources and services where sharing opportunities exist and by eliminating unnecessary services.⁸ For example, the cost to access FTS 2000 services can sometimes be greatly reduced where there are multiple FTS 2000 service delivery points that can be combined to increase the volume of communications traffic among fewer points, thereby, obtaining volume discounts. Additional savings can be achieved by selecting more efficient service and equipment alternatives. Because there can be additional equipment and transmission costs associated with implementing consolidation and optimization alternatives, such costs will offset some of the savings.

The 1996 Clinger-Cohen Act⁹ and federal guidance¹⁰ highlight the need for federal organizations to acquire and use information technology in the most cost-effective way and identify and act on opportunities to reduce costs by sharing resources where possible. In so doing, federal organizations should identify areas of duplication and work together to

⁶Telecommunications: Costs Reported by Federal Organizations for Fiscal Year 1995 (GAO/AIMD-96-105, June 17, 1996).

⁷Narrowband refers to the method of gaining more channels (and hence more capacity) by splitting FM channels into channels that are narrower in bandwidth.

⁸USDA Telecommunications: Missed Opportunities To Save Millions (GAO/AIMD-95-97, April 24, 1995).

⁹P.L. 104-106, Section 5122, 110 Stat. 684 (1996).

¹⁰Executive Order 13011, "Federal Information Technology," July 16, 1996.

best utilize telecommunications and other information technology that can reduce expenditures and redundant functions. Not taking steps that maximize use of telecommunications resources and achieve optimum service at the lowest possible cost can result in the needless waste of government dollars. Our 1995 report noted that USDA had hundreds of field office sites where multiple agencies, located within the same building or geographic area, obtained and used separate and often redundant telecommunications services. Because of this and because USDA had not acted on opportunities to consolidate and optimize telecommunications services, the Department wasted millions of dollars each year paying for redundant services it did not need.¹¹

Interior's acting chief information officer (CIO) is responsible for advising and assisting the Secretary and other senior managers to ensure that the Department's information technology investments are acquired and managed consistent with federal law and the priorities of the Secretary. Under the direction and leadership of the acting CIO, Interior's Office of Information Resources Management (OIRM) is responsible for ensuring that the Department's telecommunications resources are cost effectively managed and for overseeing and guiding Interior bureaus in the acquisition, development, management, and use of such resources. In addition, heads of Interior bureaus are responsible for implementing a program that will ensure compliance with Interior policies and for designating telecommunications managers who plan, implement, and manage telecommunications activities within their respective organizations. The bureaus are also responsible for determining whether their telecommunications requirements can be satisfied through existing resources and for sharing telecommunications services and equipment with other bureaus and agencies to the maximum extent practical. As with Interior, the Forest Service delegates responsibility for telecommunications management and the sharing of these resources to its regional and field components.

Scope and Methodology

To address our objectives, we reviewed documentation reporting telecommunications usage and costs for Interior and USDA's Forest Service and we interviewed Interior and USDA officials to discuss consolidation and sharing activities. To review consolidation and sharing activities, we selected four locations where Interior officials told us offices were collocated and actions were underway to consolidate and optimize telecommunications resources and services. Specifically, we visited

¹¹GAO/AIMD-95-97, April 24, 1995.

Interior bureau offices in Lakewood and Durango, Colorado; Farmington, New Mexico; and Cheyenne, Wyoming. In addition, we discussed sharing projects underway or planned with Interior and Forest Service officials at offices in Lakewood and Durango. We also reviewed reports and billing information showing FTS 2000 and commercial carrier costs to confirm our results. Appendix I provides further details on our scope and methodology.

We conducted our review from August 1996 through March 1997, in accordance with generally accepted government auditing standards. We provided a draft of this report to Interior and USDA for comment. Interior's and USDA's comments are discussed in the report and are included in full in appendixes II and III, respectively.

Savings Opportunities Missed Because Telecommunications Resources Not Consolidated and Optimized

To its credit, Interior has undertaken a number of cost-saving initiatives to eliminate some unused telephone lines and unnecessary data services. While significant savings have been achieved in some cases, such efforts have generally been isolated and ad hoc rather than departmentwide. Savings are being missed because Interior is not systematically identifying and acting on opportunities to consolidate and share telecommunications resources within and among its bureaus or its 2,000-plus field locations. At just four of these field locations, we found that bureaus and offices were paying thousands of dollars annually for telecommunications services that were redundant and unnecessary. Interior does not know to what extent similar telecommunications savings may exist at its other offices because it lacks the basic information necessary to make such determinations.

Consolidating and Optimizing Telecommunications Resources Among Interior Bureaus Is Rare

Interior is not systematically identifying opportunities among collocated bureau offices to consolidate and optimize telecommunications resources. Interior's multiple bureaus have numerous field office sites in the same building or geographic area, but they obtain and use telecommunications equipment and services independently. This can result in the use of redundant and/or more costly telecommunications services than necessary at these sites. Nevertheless, OIRM—which has responsibility for managing and overseeing Interior's telecommunications activities—has not exercised effective leadership by establishing a departmentwide program for systematically identifying telecommunications inefficiencies that may exist and achieving savings among bureaus and offices across the Department. Instead, OIRM relies on each of Interior's separate bureaus to identify and act on such opportunities. Yet, according to bureau

telecommunications officials, this is rarely done and savings opportunities may be lost.

Although we only visited a few of Interior's field sites during our review, we found that bureau offices in Lakewood, Durango, and Farmington spent thousands of dollars over the last several years for unnecessary commercial long-distance telephone and redundant FTS 2000 data services. In one case, billing records show that two bureau offices in the one building in Lakewood were spending about \$4,400 annually for unnecessary FTS 2000 services because these services had not been consolidated and shared. In addition, we found bureau offices in Farmington located close by one another yet still using separate data connections to the same cities; opportunities to share these services in order to reduce costs had not been investigated.

While many bureau telecommunications managers and staff told us they would like to take advantage of savings by consolidating and sharing resources at locations, given their other duties, it is not a priority. Specifically, these officials said that they spend most of their time maintaining current operations and providing their bureau field offices with technical assistance. As a result, they assert that they rarely have time to look for such consolidation opportunities among bureau offices.

Even if pursuing consolidation opportunities was a priority, the bureaus do not have the information necessary to identify where Interior offices are collocated and determine whether telecommunications savings opportunities exist at these locations. Specifically, at the time of our review, neither OIRM nor the bureaus had determined which of the Department's 2,000-plus field sites are located within the same building or geographic area, and OIRM was unable to provide us with a current list of all Interior office sites.¹² Following our exit briefing with Interior at the end of February 1997, the Department began to develop this information by extracting and analyzing data from several of its administrative management databases. These are positive steps that should help the Department begin to identify savings opportunities.

¹²OIRM did give us an outdated, 2-year-old list from Interior's Division of Space and Facilities Management showing sites. This list was developed for emergency preparedness purposes and does not show collocated offices. In the absence of current information on Interior sites, we attempted to develop this information ourselves by obtaining data on collocated sites from USDA's National Information Technology Center in Fort Collins, Colorado. Initial lists were provided to us in November 1996, but data irregularities—caused by programming difficulties—precluded our using this information. (See appendix I.)

Interior bureaus also lack information needed to adequately analyze cost-savings opportunities that may exist at collocated bureau sites. According to Interior policy, bureaus are required to maintain inventories of all of their telecommunications resources. However, at the time of our review, the bureaus did not maintain up-to-date and complete inventories of all their telecommunications resources and OIRM has not followed up to ensure that they do so. Without information such as this that describes types of telecommunications equipment and services at individual bureau offices, Interior cannot easily determine where it has opportunities to consolidate and optimize telecommunications resources among multiple bureau offices.

In addition, neither OIRM nor the bureaus have used telecommunications tools such as USDA's network analysis model¹³ to help identify potential savings opportunities across the Department. USDA developed and successfully used this model to identify millions of dollars in cost-effective options for reducing telecommunications costs at the Department and at other agencies. USDA gave its model to Interior over a year ago, but Interior never used it. Until OIRM and the bureaus develop the basic information and use the tools available to systematically identify cost-reduction opportunities at collocated bureau offices, Interior will not be able to determine where and to what extent similar savings opportunities may exist in Washington, D.C., and at the Department's hundreds of offices across the country.

Some bureau officials said that, through the normal course of their duties, they have sometimes become aware of opportunities to consolidate and share telecommunications resources. Even in such cases, however, savings opportunities may not be pursued because getting the separate Interior bureaus to agree to make changes in telecommunications arrangements is difficult and time-consuming. In one case, for example, three small bureau offices in Cheyenne, Wyoming, gave up trying to consolidate and share services because no one bureau was willing to spend the approximately \$2,000 needed to purchase the required equipment, even though services would have been upgraded and overall bureau savings would have paid for this equipment in a few months.

¹³An automated tool used by USDA to identify millions of dollars in potential savings, the network analysis model is designed to automate a process in which different telecommunications configurations for given locations can be analyzed to determine where services can be combined for volume discounts and where more cost-effective telecommunications arrangements can be selected for an individual service, on the basis of actual traffic, tariffs, and rates.

During our review, OIRM and the bureaus began identifying some cost-savings opportunities using available FTS 2000 reports and other information. For example, on October 21, 1996, OIRM and the bureaus initiated an agreement with American Telegraph and Telephone (AT&T) to take advantage of FTS 2000 intra-LATA (local access transport area) savings opportunities for local toll call telephone service.¹⁴ In November 1996, further positive steps were taken by OIRM and the bureaus to begin identifying opportunities where Interior bureaus could aggregate some of their FTS 2000 services to obtain volume discounts. As of the end of our review in March 1997, these efforts were still underway and no savings had yet been reported.

Another effort by the Department that was designed to improve data communications by establishing a backbone communications network (DOInet) is also being used to help identify opportunities to reduce costs by eliminating some redundant data services. By building on existing networks and establishing common network node locations at high traffic sites, Interior is establishing DOInet to provide improved interconnectivity and interoperability among its bureaus. Under this initiative, OIRM recently began working with the bureaus to identify and try to eliminate data communications circuits that duplicate DOInet capabilities at high traffic sites. Also, as part of this effort, OIRM began to review FTS 2000 billing records to identify some opportunities for eliminating redundant and unnecessary data circuits in the bureaus themselves.

However, OIRM has not acted to ensure that savings on all opportunities identified as part of the DOInet initiative will be realized. Consequently, some savings opportunities have been missed and others could not be confirmed. For example, after determining from FTS 2000 billing data during the months of August through November 1995 that Interior bureaus were paying over \$1.1 million annually for over 100 duplicate data circuits, OIRM recommended that bureaus either disconnect these data lines or explain why they are needed. But OIRM did not follow up on all its recommendations and, near the end of our review in February 1997, documentation showed that only about \$200,000 of the \$1.1 million in potential savings identified had been achieved. In March, OIRM officials said that further action was underway to eliminate more of these unnecessary circuits and that 19 additional duplicate circuits with an

¹⁴Calls between locations within a LATA but not within the free calling area for the caller's telephone number are defined as intra-LATA toll calls. These calls were originally classified as local exchange carrier business, while calls from one LATA to another (inter-LATA) belong to the interexchange carrier selected by the caller. Changes enacted by some state legislatures offer federal government agencies use of FTS 2000 services in lieu of local exchange carriers for intra-LATA toll calls.

annual cost of over \$100,000 had been eliminated. OIRM did not, however, provide the billing data necessary to confirm any of these reported cost-savings.

Some Savings Achieved Within Bureaus, but Others Missed

Some Interior bureaus have taken positive steps to reduce telecommunications costs within their own organizations and have achieved significant savings by doing so. For example, according to FWS telecommunications officials, they have reduced FTS 2000 usage costs throughout the bureau. In one example, FWS reported saving about \$66,000 annually by moving some commercial telephone service to FTS 2000 Virtual On-Net service to achieve lower cost-per-minute charges at many of its office locations.

However, in many cases, bureau efforts to reduce telecommunications costs were done ad hoc, not systematically applied throughout the bureau or replicated among other bureaus. For example, a BLM office in Cheyenne reviewed telecommunications services and associated charges 2 years ago, finding that it had paid an extra \$90,000 because the local carrier had incorrectly applied tariff rates to some of its services. The office received a total reimbursement for these erroneous charges. However, according to the BLM official who completed the review, this was a onetime initiative undertaken after the office upgraded its telecommunications services, and no additional reviews had been performed.

In another case, a Bureau of Reclamation telecommunications official who initiated a review of telephone lines at the office in Lakewood, in September 1995, found that it was paying as much as \$20 per line in monthly charges for lines that were no longer being used. In this case, bureau officials found that the office had 2,656 telephone lines for 1,060 staff and that at least 1,405 of these lines were unnecessary. In July 1996, bureau officials completed work reducing the number of lines to 1,251 and reported annual savings totaling more than \$320,000.¹⁵ Again, however, despite the significant cost-savings achieved by the Bureau of Reclamation, we were unable to find any cases during our review where other bureaus had undertaken similar attempts to identify and eliminate unused telephone lines. March 1997 records from AT&T show that, after downsizing, Interior bureaus currently have almost twice as many

¹⁵Bureau of Reclamation officials said that action is underway at other Reclamation offices to identify unused lines and the Lakewood office is considering making additional system upgrades that may allow even further reductions in lines.

telephone lines as staff—about 137,000 lines for about 70,000 people.¹⁶ Until similar reviews are done throughout the Department, Interior will not know to what extent other headquarters, bureau, and field offices may be paying for lines they do not use.

Because efforts to reduce costs, such as the ones discussed above, are not systematically applied and replicated throughout the Department, some bureaus and offices may also be paying for other telecommunications services that are not used, are uneconomical, or are otherwise not cost-effective. For example, two bureau offices we visited were spending several thousand dollars annually paying for redundant FTS 2000 services they did not need or know they had. In one case, billing records showed that one bureau office in Durango spent about \$4,000 more than necessary during the past year paying for redundant FTS 2000 services that should have been consolidated with other services at that office. Office officials told us they were not aware of the redundant services because bills are not reviewed to identify this kind of problem. In another similar case, one bureau office in Cheyenne paid several thousand dollars annually for unnecessary local telephone services and redundant FTS 2000 services that should also have been consolidated.

Interior and USDA Also Missing Savings Opportunities

Interior and USDA may likewise be missing opportunities to save millions of dollars by not sharing telecommunications resources among Interior bureaus and the Forest Service. While the two departments have a 2-year old agreement to identify and act on sharing opportunities, they have taken little action on this agreement and accordingly, only limited savings have been realized. Moreover, while Interior and USDA's Forest Service plan to spend several hundred million dollars to acquire separate radio systems over the next 8 years, the Departments have not jointly determined the extent to which they can reduce these costs by sharing radio equipment and services.

Inaction on Interior/USDA Sharing Agreement Limits Savings Opportunities

Interior's bureaus (e.g., BLM, FWS, and the Park Service) and USDA's Forest Service recognize that opportunities to share telecommunications resources among their offices exist. While these organizations acquire and use separate telecommunications resources and services to fulfill their individual missions, they work in many of the same geographic areas, overseeing adjacent public lands and natural resources. Because of this,

¹⁶Telephone line information for Interior and its bureaus was extracted from AT&T's inventory of telephone lines. We did not verify the accuracy of this information.

savings may be achieved by sharing resources and services where opportunities exist among these agencies to do so.

In recognition of such sharing opportunities, Interior and USDA established a memorandum of agreement in January 1995 to support interdepartmental cooperative efforts “to seek aggressively, opportunities for sharing telecommunications resources” and institute steps necessary to act on these opportunities. While Interior and USDA were to work together to identify potential candidate sites for aggregating and sharing telecommunications resources, they never did. In fact, they have not yet identified Interior bureaus and the Forest Service sites that are in common areas where it may be possible to share telecommunications resources to reduce costs. Senior Interior and USDA managers could not provide a valid basis for not implementing this sharing agreement.

Despite inaction on the agreement, we found isolated cases in which Interior and Forest Service offices are reducing their telecommunications costs by sharing some resources. For example, as part of a National Performance Review (NPR) pilot called Trading Post, BLM and the Forest Service said they are achieving thousands of dollars in annual savings by sharing voice communications and local telephone services in Durango.¹⁷ In another case, Interior bureaus and the Forest Service have begun sharing common network and telecommunications resources at several Alaska sites under an NPR initiative known as ARTnet.¹⁸ According to initial results, three Interior bureaus and the Forest Service have said they reduced their annual telecommunications costs over 44 percent (from about \$197,000 to \$110,000). While such initiatives are positive, they so far involve only a few sites and are not being replicated across the country in other areas where Interior and USDA likely have similar kinds of sharing opportunities.

Savings Opportunities Not Considered in Upcoming Radio Systems Procurements

Interior bureaus and USDA’s Forest Service plan to collectively spend up to several hundred million dollars over the next 8 years to purchase new radio systems required under new federal narrowband standards. Under a directive from the National Telecommunications and Information

¹⁷The Trading Post is a partnership formed between BLM and the Forest Service to demonstrate and experiment with new and more effective ways of doing business at several office sites in Colorado, Montana, and Oregon. Like the trading posts of the American frontier, this initiative focuses on trying to offer customers a common-sense, one-stop-shopping approach by sharing resources to promote more cost-effective delivery of services.

¹⁸Interior won the Vice President’s Hammer Award and a 1996 Federal Technology Leadership Award for its efforts in leading this National Performance Review initiative.

Administration, all federal radio users are required to begin implementing new narrowband technologies to make additional radio channels available to federal agencies. These new narrowband capabilities are expected to be fully implemented governmentwide by January 1, 2005. Interior bureaus plan to spend about \$270 million making this transition. While the Forest Service has not determined how much its actual transition to narrowband systems will cost, budget estimates show that it expects to spend tens of millions of dollars replacing radio equipment over the next several years.

According to Interior documentation, its bureaus and the Forest Service run parallel radio systems in some areas, with opportunities to share portions of these systems. Further, Interior and Forest Service officials at headquarters and some field locations said they are interested in sharing radio communications; in some cases, Interior and Forest Service field locations have begun to share mountaintop maintenance, radio frequencies, and dispatch operations. Both agencies have also studied, to some degree, implications of sharing radio communications resources. In fact, Interior determined that sharing radio resources as part of the effort to transition to narrowband standards could reportedly bring about a 25 percent overall cost reduction (including equipment and personnel).¹⁹ However, at the time of our review, no decisions about this had been reached and Interior and the Forest Service are each proceeding with plans to acquire separate radio equipment and services that address their individual needs.

Conclusions

While Interior has taken some positive steps to reduce telecommunications costs, it has not done what is necessary to take advantage of departmentwide opportunities to eliminate unnecessary services and maximize savings, and has no systematic approach for doing so. Until OIRM and the bureaus develop basic information and use the tools available to them to systematically identify cost-savings opportunities, Interior will not be able to determine where and to what extent sharing opportunities may exist throughout the Department and its hundreds of offices across the country. Similarly, until Interior and USDA follow their 1995 agreement to actively pursue opportunities for sharing telecommunications resources among bureaus and the Forest Service, millions of dollars in potential savings will not have a chance of being realized.

¹⁹We could not validate or assess these cost-savings because Interior documentation supporting them was unavailable, and the Forest Service told us that it has prepared no similar estimates.

Recommendations

In order to help bring about significant potential savings from consolidated and shared telecommunications resources, we recommend that the Secretary of the Interior direct—and hold accountable—the Department’s acting CIO to immediately establish and fully implement among Interior’s bureaus, a departmentwide program for systematically identifying and acting on all opportunities to consolidate and optimize telecommunications resources, including voice, data, video, and radio equipment and services, where it is cost-effective to do so. At a minimum, the acting CIO should:

- Determine and maintain a current list of Department field locations that are collocated and the extent to which telecommunications resources and services are shared.
- Direct and ensure that all Interior bureaus and offices establish and maintain up-to-date and complete inventories of their telecommunications resources and services at collocated sites.
- Direct and ensure that all Interior bureaus and offices review and analyze telecommunications bills at regular intervals, using a cost-effective approach to ensure that all charges are appropriate and services needed.
- Identify potential savings opportunities at these sites using inventories and telecommunications tools, such as USDA’s network analysis model.
- Monitor these activities and follow up as needed to ensure that all identified savings opportunities are acted upon.

In addition, we recommend that the Secretary of the Interior direct—and hold accountable—each of the Department’s assistant secretaries to cooperate with the acting CIO and immediately establish and fully implement bureauwide programs for similarly identifying and acting on all opportunities to consolidate and optimize telecommunications resources within each bureau, using the steps discussed.

We also recommend that the acting CIO report to the Secretary every 6 months on the progress of these efforts and savings achieved.

We further recommend that the Secretary of the Interior and the Secretary of Agriculture ensure that their respective acting CIO’s are responsible and accountable for implementing the 1995 joint sharing agreement. At a minimum, the acting CIOs should:

- Determine where Interior and USDA field sites are collocated and the extent to which services are shared.

- Identify potential savings opportunities for all telecommunications equipment and services at these sites using the information specified above and telecommunications tools such as USDA's network analysis model.
- Stop further radio system purchases, except those necessary for meeting immediate technology needs that are critical to ongoing operations, until both departments jointly determine and document where radio equipment and services can be cost-effectively shared and savings achieved.
- Monitor these activities and follow up where needed to ensure that all identified savings opportunities are acted upon.

Agency Comments and Our Evaluation

The Department of the Interior's Assistant Secretary for Policy, Management and Budget provided written comments on April 7, 1997, on a draft of this report. Written comments were also provided by USDA's acting CIO on April 8, 1997. These comments are summarized below, and are reproduced in appendixes II and III, respectively.

Interior's Assistant Secretary for Policy, Management and Budget stated that the Department will use our report to focus additional efforts on eliminating unnecessary telecommunications services and to implement sharing opportunities. Specifically, the Assistant Secretary stated that Interior will use the results of our review to develop guidance and direction needed by bureau telecommunications managers to better manage their acquisition and sharing of telecommunications services and develop a telecommunications management improvement strategy for the Department. The Assistant Secretary also stated that Interior's strategy will be implemented by identifying projects, staffing them with Departmental and bureau managers, prioritizing actions, and monitoring results. She also said that actions have already begun on several of these improvement projects.

We are encouraged by Interior's statements to better manage its acquisition and sharing of telecommunications services. It will now be important for the Department to develop specific actions it plans to take on each of our recommendations as it moves ahead on efforts to better manage and share telecommunications resources. Given Interior's decentralized telecommunications management structure and its reliance on bureaus to identify and act on savings opportunities, it is especially important for the Secretary to implement our recommendations to direct—and hold accountable—the Department's acting CIO and assistant secretaries for establishing and fully implementing, both among and within

Interior's bureaus, programs for systematically identifying and acting on all opportunities to consolidate and optimize telecommunications resources—including voice, data, video, and radio equipment and services—where it is cost-effective to do so.

Interior's Assistant Secretary and USDA's acting CIO stated that their departments plan to work together to share telecommunications resources and achieve savings. While these statements are encouraging, neither department responded to our specific recommendations relating to implementing the 1995 joint sharing agreement. Given the little action taken on this agreement, we believe it is especially important that the Secretary of the Interior and the Secretary of Agriculture ensure that their respective acting CIOs are both held responsible and accountable for fully implementing the 1995 agreement as well as our other recommendations for increasing levels of telecommunications resources sharing between the departments.

Interior's Assistant Secretary stated that Interior did not agree with our recommendation to stop further radio purchases, except those necessary for meeting immediate technology needs that are critical to ongoing operation, until both departments jointly determine and document where radio equipment and services can be cost effectively shared and savings achieved. The Assistant Secretary did state, though, that Interior supports the goal of implementing shared radio systems, and will implement procedures within Interior and with the Forest Service to ensure that all land mobile radio systems designs are reviewed for sharing and other savings potential prior to radio purchase. USDA's acting CIO stated that additional work on sharing radio systems is needed by the Forest Service and Interior, but did not comment on our specific recommendation.

We are also encouraged by Interior's and USDA's statements indicating their willingness to work toward increased levels of radio sharing. Nevertheless, we stand by our recommendation that Interior and USDA should stop further radio system purchases, except those necessary for meeting immediate technology needs that are critical to ongoing operations, until both Departments jointly determine and document where radio equipment and services can be cost effectively shared and savings achieved. Regarding the costs of Interior's transition to narrowband radio systems, Interior's Assistant Secretary also stated that the Department now plans to spend \$270 million for the narrowband radio system transition; not the \$200 million we were told during our review. We have amended the report to reflect Interior's revised estimate of \$270 million.

Interior's Assistant Secretary also provided several specific comments. Regarding use of USDA's network analysis model tool to identify cost savings opportunities, the Assistant Secretary stated that the Department had used USDA's model to eliminate \$100,000 in addition to what is stated in the report and that the tool had also been used to identify \$750,000 in redundant data circuits at the Bureau of Indian Affairs.

Our information, however, continues to indicate otherwise. Specifically, in February 1997, and again on April 8, 1997, the official responsible for the network analysis model at USDA stated that while he had given Interior a copy of the model in September 1995, Interior had never used it.²⁰ Even so, our report does recognize the more than \$1.1 million in duplicate circuits that Interior said it identified by reviewing FTS 2000 billing records and this amount includes circuits at the Bureau of Indian Affairs. However, as the report also states, OIRM did not provide us with the billing records necessary to confirm that the Department had actually achieved any of these savings, despite several requests during our review for these records.

The Assistant Secretary also commented that Interior believes AT&T's records include some telephone lines that are not active or being billed to the Department. However, the Assistant Secretary agreed with the report's premise that Interior may have unused telephone lines and, as a result, the Department will conduct a thorough review of AT&T's records to verify the number of telephone lines it has and take corrective action where necessary. We agree that AT&T's records may include inactive lines in some cases. However, as we discuss in our report, hundreds of thousands of dollars in savings have been achieved at one Bureau of Reclamation office where AT&T's records were used to identify and eliminate unnecessary telephone lines. Given this and the fact that Interior does not know to what extent it may be paying for unnecessary or inactive telephone lines, we believe that this action by Interior, if fully carried out across the Department, could achieve additional savings by helping to identify and eliminate further unnecessary telephone lines and services.

Finally, Interior's Assistant Secretary named numerous examples that were not cited in our report in which radio service is being shared between Interior bureaus and USDA agencies. Our report recognizes that Interior and USDA have taken some steps to share radio services, but have done little to ensure that radio and other telecommunications resources

²⁰According to this official, the model was not used by Interior because Interior officials had never requested and obtained the input data necessary to operate it. The USDA official further stated that on April 3, 1997, Interior requested input data for the model and asked to be trained in its use.

are shared in all cases throughout the country where there are opportunities to do so.

As agreed with your offices, 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 the Interior; 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 IV.

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

Joel C. Willemssen
Director, Information Resources Management

Contents

Letter	1
Appendix I Scope and Methodology	20
Appendix II Comments From the Department of the Interior	23
Appendix III Comments From the Department of Agriculture	26
Appendix IV Major Contributors to This Report	28

Abbreviations

AIMD	Accounting and Information Management Division
AT&T	American Telephone and Telegraph
BLM	Bureau of Land Management
BOR	Bureau of Reclamation
CIO	chief information officer
DOInet	DOI communications network
FTS	Federal Telecommunications System
FWS	Fish and Wildlife Service
GAO	General Accounting Office
LATA	local access transport area
NPR	National Performance Review
OIRM	Office of Information Resources Management
USDA	United States Department of Agriculture

Scope and Methodology

To address our objectives, we reviewed Interior policies on telecommunications management, various memoranda and reports discussing telecommunications management activities at the Department, vendor billing data showing Interior telecommunications usage and costs, and other materials outlining plans and efforts by OIRM and the bureaus to identify opportunities to consolidate and optimize telecommunications resources and services and implement cost-savings solutions. To identify Interior's overall telecommunications costs, we obtained the Department's estimated costs for fiscal year 1995, as it does not track costs for voice, data, video, and other services. We also reviewed documentation relating to interagency efforts by Interior and USDA's Forest Service to combine and share resources and obtained current estimated radio replacement costs for Interior bureaus and the Forest Service.

To determine whether Interior had consolidated and optimized telecommunications resources to eliminate unnecessary services and maximize savings, we interviewed OIRM officials responsible for Departmentwide telecommunications management activities as well as telecommunications managers and/or staff in Interior's major bureaus. In addition, we reviewed internal correspondence and other documents describing actions taken to identify Departmentwide opportunities to consolidate and optimize telecommunications services.

Because Interior did not have a current list of sites where its bureau offices are collocated with one another and with Forest Service offices, we attempted to develop this information by contacting USDA's National Information Technology Center in Fort Collins, Colorado, which assists the General Services Administration in managing the government's FTS 2000 billing database. Because all Interior bureaus and the Forest Service obtain services under the government's FTS 2000 contract, in September 1996, we asked the National Information Technology Center to develop information from the FTS 2000 billing database showing addresses for Interior and Forest Service offices, from which collocated sites could be identified. Initial lists were provided to us in November 1996, but programming problems that caused some data irregularities precluded us from using this information.

To review consolidation and sharing activities, we selected four locations where OIRM and bureau officials told us bureau offices were collocated and where some actions had been taken to consolidate and optimize telecommunications resources and services. Specifically, we visited Interior bureau offices in Lakewood and Durango, Colorado; Farmington,

New Mexico; and Cheyenne, Wyoming. To determine the extent to which telecommunications resources and services had been consolidated at these locations, we interviewed bureau officials and observed ongoing operations.

At our site visits, we found cases in which Interior and the bureaus had additional opportunities to consolidate and optimize telecommunications services and had lost savings because no one had identified and acted on these opportunities. However, we were unable to identify precise dollar amounts for these lost savings because up-to-date, comprehensive information describing telecommunications services and costs were generally not available at these offices. Therefore, in the absence of this information, we attempted to estimate the lost savings by analyzing Interior telecommunications usage and cost data that we had also obtained from USDA's National Information Technology Center and commercial telephone company vendors.¹

To determine whether Interior and the Forest Service were sharing telecommunications services where possible, we interviewed telecommunications managers involved in these activities and reviewed the status of plans intended to expand sharing. In addition, we discussed sharing projects underway or planned with Interior and Forest Service officials at offices in Lakewood and Durango and opportunities for sharing voice, data, and radio equipment and services. We also reviewed telecommunications usage and cost data obtained from USDA's National Information Technology Center and commercial telephone company vendors to determine the extent to which telecommunications resources had been consolidated and optimized.

We performed our audit work from August 1996 through March 1997, in accordance with generally accepted government auditing standards. Our work was primarily done at Interior and USDA headquarters offices in Washington, D.C. We also worked at Interior offices for the National Park Service, the Bureau of Reclamation, and the Office of Surface Mining Reclamation and Enforcement in Washington, D.C.; the Bureau of Land Management, the Bureau of Reclamation, and the U.S. Fish and Wildlife Service in Lakewood; the Minerals Management Service in Herndon, Virginia; and the U.S. Geological Survey in Reston, Virginia. Our work also included visits to selected Interior bureau offices in Farmington and

¹The National Information Technology Center's Telecommunications Services Division had developed significant expertise in the cost-based analysis of telecommunications services; its personnel have been recognized for their technical excellence by the General Services Administration and by the Interagency Committee on Information Resources Management.

Appendix I
Scope and Methodology

Cheyenne; Interior and USDA Forest Service offices in Durango; and Forest Service offices in Lakewood.

Comments From the Department of the Interior



United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, D.C. 20240

APR 7 1997

Mr. Gene L. Dodaro
Assistant Comptroller General
Accounting and Information Management Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Dodaro:

Thank you for the opportunity to comment on the draft report titled "More Effort Needed by Interior and the Forest Service to Achieve Savings." We appreciate your recognition of some of the work we have accomplished to achieve savings through telecommunications service consolidation and optimization. We will use this report for focusing additional efforts to eliminate unnecessary telecommunications services and implement sharing opportunities to the extent where feasible and cost effective.

By combining the results of your study and our experience with savings initiatives in other areas, we are developing a telecommunications management improvement strategy containing project plans and milestones. The strategy will provide well-defined guidelines to our bureau managers so they may focus their limited resources on specific activities for achieving cost savings and efficiencies. We will implement the strategy by identifying projects, staffing them with Departmental and bureau managers, prioritizing actions, and monitoring results. Actions have already begun on several projects, such as efforts to reduce FTS2000 circuit redundancies, identifying opportunities for sharing services with the Forest Service, and determining the accuracy and applicability of multiple facility data bases and telecommunications inventories.

Specific comments on the report findings are as follows:

- The report correctly states that our bureau telecommunications managers want to achieve savings through consolidation and sharing but have as a higher priority the maintaining of current operations and providing of technical assistance. By implementing our telecommunications management improvement strategy we will ensure our efforts, which include consolidation and sharing, are concentrated on savings opportunities which have the highest potential benefit.
- Contrary to the report's statement that we have not used the USDA Network Analysis Tool to identify cost saving opportunities across Interior, we have used it successfully to eliminate \$100,000, in addition to what is stated in your findings, for point-to-point data circuits that duplicated DOINET capabilities. This tool was also used to identify \$750,000 in redundant data circuits that the Bureau of Indian Affairs had acquired for their multiple data systems. These circuits are now being replaced with less expensive connections through DOINET node sites. We will use the USDA Tool more systematically in the future as we implement our telecommunications management improvement strategy.

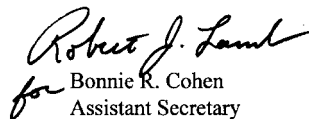
- While we agree with the report's premise that we may have unused telephone lines, we also know the 137,000 telephone numbers in the AT&T data base are not all active or being billed to Interior. There is a distinct difference between designated telephone numbers and active telephone lines. The data base not only contains active telephone numbers but also includes blocks of numbers held in reserve, fictitious 555 exchange numbers needed to activate telephone Calling Cards when the FTS2000 contract was first implemented, numbers which have been disconnected, numbers which have been disconnected but reassigned to other agencies (a major problem for us and other agencies), and numbers which belonged to Interior prior to our transition to the Washington Interagency Telecommunications System (WITS). A recent Office of Surface Mining review of this database exemplifies the problem by showing they had 4,692 telephone numbers serving 800 employees nationwide. We found in this case that a block of 3,500 numbers was incorrectly assigned to Surface Mining in Pittsburgh, and there were numerous 343 exchange numbers in the database from when they transitioned to WITS approximately 5 years ago. AT&T's position is that if the numbers are not in use or being billed, there is no harm in keeping them in the data base. Despite AT&T's position, we will conduct a thorough review of the data base and, after verification, request AT&T's immediate correction.
- The report states that we have taken little action in pursuit of our 1995 agreement to share telecommunications services with the Agriculture Department. There are many examples not cited in the report where we are sharing radio services and facilities. These include: the 89 shared Bureau of Land Management (BLM) and Forest Service fire radio dispatch centers; the Fish and Wildlife Service's 13 shared radio repeater locations with Agriculture's Animal and Plant Health Inspection Service, BLM, and other agencies; and the Bureau of Indian Affairs' 24 shared radio facilities with Federal Aviation Administration, Federal Bureau of Investigation, Forest Service, and other agencies.
- The report also understates our expected expenditures for narrowband radio system transition. Our most recent estimate (June 1996) was to spend approximately \$270 million for narrowband equipment, not \$200 million. This expected large expenditure is why we have taken the initiative to competitively award a contract in early fiscal year 1998. This contract will be available to all Federal agencies, including Forest Service, for narrowband radios meeting the federally adopted Project-25 standard.
- We do not agree with the recommendation that Interior and Agriculture stop further radio system purchases until we jointly agree as to where radio equipment and services can be cost-effectively shared. We will, though, implement procedures within Interior and with Forest Service to ensure that all land mobile radio system designs are reviewed for sharing or other savings potential prior to radio purchase. We are supportive of the goal of implementing shared radio systems wherever practical and cost-effective.

The report is correct in stating the Department relies on bureau managers to identify and act on savings opportunities. This is in keeping with the individual program responsibilities which range in breadth from managing the resources of national parks, wildlife refuges, and public lands to collecting billions of dollars of revenue from onshore and offshore oil leasing. While

this separation of bureau responsibilities will likely not change, we are using the report to develop specific guidance and direction needed by our telecommunications managers to better manage their acquisitions and share services.

In summary, our Chief Information Officer will oversee the actions resulting from the GAO review and our telecommunications improvement strategy. We will work with the Department of Agriculture to identify and achieve savings and efficiencies in a cost beneficial manner for both our agencies. As recommended in the report, we will provide the Secretary the first semiannual status of our telecommunications improvements and savings in November 1997. We appreciate your efforts in conducting this review and identifying additional opportunities for improving our telecommunications program.

Regards,


for Bonnie R. Cohen
Assistant Secretary
Policy, Management and Budget

Comments From the Department of Agriculture



**United States
Department of
Agriculture**

**Office of the Chief
Information Officer**

1400 Independence
Avenue SW

Washington, DC
20250

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

APR - 8 1997

Dear Mr. Dodaro:

Thank you for the opportunity to provide input to your draft report entitled: Telecommunications Management: More Effort Needed by Interior and the Forest Service To Achieve Savings. The Department of Agriculture has already taken a number of actions to reduce costs by sharing its telecommunications service in the Forest Service with the Department of Interior where this is possible and practical.

We are enclosing the Department's comments on the issues which the General Accounting Office addressed in this draft report.

Sincerely,

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

Anne F. Thomson Reed
Acting Chief Information Officer

Enclosure

**STATEMENT OF RESPONSE TO
U.S. GENERAL ACCOUNTING OFFICE DRAFT REPORT
GAO/AIMD-97-67, MAY 1997 ENTITLED:
TELECOMMUNICATIONS MANAGEMENT:
MORE EFFORT NEEDED BY INTERIOR
TO ACHIEVE SAVINGS**

General Comments:

The Department of Agriculture appreciates the opportunity to provide comments on the General Accounting Office (GAO) Draft Report entitled: Telecommunications Management: More Effort Needed by Interior and Forest Service to Achieve Savings.

The GAO Report highlights concerns that the Department of Interior and the Forest Service have not moved aggressively toward sharing radio and telecommunications resources. The Forest Service recognizes the need for additional work to be accomplished in this area and fully supports the GAO initiative to achieve savings.

The Department's Acting Chief Information Officer and Forest Service support the GAO Report findings to collaborate and plan with Department of Interior Bureaus to achieve cost effective and efficient solutions.

Major Contributors to This Report

Accounting and
Information
Management Division,
Washington D.C.

Stephen A. Schwartz, Senior Assistant Director
William D. Hadesty, Technical Director
Mark D. Shaw, Assistant Director
Mirko J. Dolak, Technical Assistant Director
Patricia Macauley, Senior Information Systems Analyst
Michael P. Fruitman, Communications Analyst

Ordering Information

The first copy of each GAO report and testimony is free. Additional copies are \$2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. VISA and MasterCard credit cards are accepted, also. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

Orders by mail:

**U.S. General Accounting Office
P.O. Box 6015
Gaithersburg, MD 20884-6015**

or visit:

**Room 1100
700 4th St. NW (corner of 4th and G Sts. NW)
U.S. General Accounting Office
Washington, DC**

**Orders may also be placed by calling (202) 512-6000
or by using fax number (301) 258-4066, or TDD (301) 413-0006.**

Each day, GAO issues a list of newly available reports and testimony. To receive facsimile copies of the daily list or any list from the past 30 days, please call (202) 512-6000 using a touchtone phone. A recorded menu will provide information on how to obtain these lists.

For information on how to access GAO reports on the INTERNET, send an e-mail message with "info" in the body to:

info@www.gao.gov

or visit GAO's World Wide Web Home Page at:

<http://www.gao.gov>

**United States
General Accounting Office
Washington, D.C. 20548-0001**

**Bulk Rate
Postage & Fees Paid
GAO
Permit No. G100**

**Official Business
Penalty for Private Use \$300**

Address Correction Requested

