Department of Veterans Affairs

Office of Inspector General

AUDIT OF PROCUREMENT INITIATIVES FOR VA'S INTEGRATED DATA COMMUNICATIONS UTILITY (IDCU) TELECOMMUNICATIONS SUPPORT

While VA initiated action to contract for wide area network support, key transition milestones were delayed that caused VA to extend the use of the existing contract that had unfavorable prices and terms, and lacked effective contract administration.

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Office of Inspector General
Washington DC 20420

DEPARTMENT OF VETERANS AFFAIRS
Office of Inspector General
Washington DC 20420

Memorandum to:

Acting Assistant Secretary for Information and Technology (005)
Assistant Secretary for Financial Management (004)

Audit of Procurement Initiatives for VA's Integrated Data Communications Utility (IDCU) Telecommunications Support

1. The audit examined the current 10-year old contract and planned contract replacement efforts for the Department of Veterans Affairs (VA) Integrated Data Communications Utility (IDCU) telecommunications support for network interface facilities. The purpose of the audit was to: (i) review the IDCU contract award, administration, and price reasonableness; (ii) review efforts to replace the IDCU contract and ensure equitable pricing of future work requirements; and, (iii) identify areas of high risk to the Department that required attention.

2. The IDCU is a Department-wide data communications network enabling VA users to connect from one automated system to another and to access various databases. Maintaining IDCU operations is important because the network provides key data communications support to over 500 VA sites and serves about 60,000 users that are connected to the IDCU. The network enables customers at each of the facilities to communicate with each other, and access and transmit key information and data in support of the Department's mission of providing patient care and delivery of benefits to the nation's veterans. Continued annual growth of VA's telecommunication network requirements is expected.

3. While the Department is taking positive steps to transition to a new wide area network (WAN), the audit identified issues in the current IDCU contract that adversely impacted VA operations and costs. The IDCU system was no longer meeting VA's telecommunication requirements effectively or efficiently. VA paid excessive costs to maintain telecommunication ports on the IDCU network that were not used and lacked a formal capacity management program to manage the IDCU network resources from a national perspective. About 14 percent of the ports were not used consistently throughout the life of the contract. As a result, we estimated that the cost to VA of maintaining unused ports was approximately $3.1 million. Also, the system's current bandwidth is not adequate to support the data flow for many major customers and it lacks sufficient bandwidth capacity needed to accommodate new telemedicine applications. The system

has also experienced network congestion problems. As a result, we found that some VA customers including certain Veterans Integrated Service Networks and Veterans Health Administration (VHA) Chief Information Officer Field Offices were acquiring IDCU type services through alternative sources at lower costs.

4. In addition, the 10-year old IDCU contract contained prices and terms that were no longer favorable to the Department and the contract lacked effective contract administration and oversight. For example, there was no documented support or explanation as to why several contract modifications increased the value of the contract by about $142 million. The Contracting Officer (CO) responsible for administering this contract was unable to provide adequate information during the audit to support the current value of the contract, the amount of contract funding obligated, and the value of paid invoices or outstanding orders. Cost information for the IDCU contract was not complete and difficult to reconstruct because many customer service orders were not priced, work was performed before the contractor provided a priced impact statement, and some impact statements were missing. In addition, we found that some fiscal year end accruals for the IDCU contract were excessive. We concluded that the Department was at risk because accountability and visibility over IDCU contract expenditures was reduced significantly and audit trails were not considered adequate to ensure VA obtained services at reasonable prices. We also found the price reasonableness of new services and technology was not adequately assured, some items that were added to the contract did not appear consistent with the contract's original scope, and procurement sensitive information needed to be better controlled.

5. Based on our audit results, we concluded that although the Department spent almost $2.6 million to assess follow-on telecommunication requirements, a Department-wide customer consensus on future WAN requirements was not achieved for the initial IDCU-Follow On (IDCU-FO) initiative. IDCU representatives from VHA, Veterans Benefits Administration, Office of Acquisition and Materiel Management, and outside vendors complained that the Department's draft solicitation for the future WAN released for industry comments restricted competition, favored the incumbent IDCU contractor, and included requirements that were too prescriptive. We found that the level of dissatisfaction was too high for VA to use the solicitation and its related deliverables prepared by the independent acquisition support contractor. Based on our audit findings, the acquisition support contract was terminated prior to awarding another task order valued at about $1 million. We concluded that VA managers did not have timely, reliable, and sufficient information to make sound management decisions to ensure the continuation of mission critical services while transitioning from one contract vehicle to another. This lack of information and customer consensus over future requirements, especially information needed to identify and manage the system transition risks, resulted in VA exercising the final option year of the IDCU contract instead of proceeding with a more favorably priced interim offer from another vendor team.

6. We advised the Department that it needed to conduct a formal risk assessment to adequately assess, manage, and mitigate the levels of risk associated with transitioning to a new WAN solution. There was also a need to assign risk management accountability within VA program staff to ensure effective management of the Department's national WAN operations and interests. VA needed to provide reasonable assurance that the current system, contractual transition activities, and alternative future solutions could be adequately protected from known threats such as availability, privacy, integrity, and fraud. Also, VA needed to review whether the reimbursable technical support positions for national WAN operations would remain essential as the Department moves to new WAN contract solutions and technology. The Department is currently in the process of completing its risk assessment and migrating to a new WAN contract solution. The Department plans to use the General Services Administration's FTS 2001 network as the future vehicle to replace VA's nationwide data network contract that expired in May 1999. Use of the FTS 2001 network is expected to provide for competitive pricing of future IDCU type requirements.

7. We identified some key business decisions made by the CO at the time the contract was awarded that negatively impacted VA's ability to effectively administer this contract over its 10-year life cycle. The following information should be considered as lessons learned to ensure similar decisions are not replicated in acquiring future WAN services.

- Acceptance of a bundled pricing strategy significantly reduced visibility over IDCU contract costs and service prices and did not provide VA with an adequate ability to assess the price reasonableness for what it was buying over the 10-year life of the contract. The bundled strategy lacked the flexibility the Department needed to effectively acquire and refresh telecommunication requirements.

- The most favorable contract pricing terms made by the incumbent contractor in there Best and Final Offer were never adequately considered. As a result, VA lost the opportunity to save about $27 million by not exercising a purchase option and paid more to lease IDCU equipment than necessary.

- A guarantee was included in the contract that exceeded the value of the contractor's proposed costs by almost $16 million.

8. Vulnerabilities to fraud, waste, and costly billing errors were considered significant on the current IDCU contract. During the course of the audit we identified risk conditions, and events, including identifying several repetitive purchase orders that showed VA consultants were receiving non-competitive work. As a result of these vulnerabilities, we performed selected testing of contract billing information and identified over $1 million in payments for a performance management system that needs to be recovered because the IDCU contractor never provided an acceptable system. We also found that VA could de-obligate as much as $380,000 in contract funds if no additional commitments are

outstanding. Audit testing did not disclose specific examples of fraud in the contract invoice information examined. However, our ability to accomplish adequate testing was limited as a result of incomplete, insufficient, and missing documentation.

9. During the course of the audit, there was significant turnover of key Department officials with direct lines of responsibility for management of the IDCU contract and a new IDCU management team was put in place in 1998. The new team was responsive to the concerns we raised in advisory letters issued during the course of the audit. The team initiated corrective actions and implemented new procedures to address the management control weaknesses identified by the audit. Although significant project and procurement implementation milestones were delayed, ultimately the new team reestablished strategic planning efforts needed to put the IDCU-FO procurement initiative back on track to ensure the continuation of future IDCU telecommunication support to Department personnel.

10. The report contains recommendations to help strengthen VA's future management of WAN services and contract administration. The Assistant Secretary for Financial Management and the Acting Assistant Secretary for Information and Technology concurred with the report recommendations directed to them and provided appropriate implementation actions. The Assistant Secretary for Financial Management provided an acceptable alternative monetary benefits figure concerning the cancellation of a task order on the IDCU acquisition support contract. Also, the Acting Assistant Secretary for Information and Technology provided an alternative methodology for calculating the cost of unused ports over the life of the IDCU contract. Based on the input provided for these issue areas, we revised the monetary benefits figures presented in the report. We consider the report issues resolved and will follow up on planned actions until they are completed.

For the Assistant Inspector General for Auditing

(Original signed by:)

Stephen L. Gaskell
Director, Central Office Operations Division

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RESULTS AND RECOMMENDATIONS

1. Contract Oversight, Administration, And Documentation Needed Strengthening

The 10-year old Integrated Data Communications Utility (IDCU) contract contained prices and terms that were not favorable and the contract lacked effective contract administration and oversight. We were not provided adequate documentation or explanations to support why several contract modifications increased the value of the contract by about $142 million. The responsible Contracting Officer (CO) was unable to provide adequate information during the audit to support the current value of the contract, the amount of contract funding obligated, and the value of paid invoices or outstanding orders. While program officials advised that the contract value increased due to customer requirements, we found that approximately $142 million in contract modifications were not supported with adequate documentation to explain why the contract increases were fair and reasonable.

Available cost information for the IDCU contract was not complete and difficult to reconstruct because many Customer Service Orders (CSO) were not priced, work was performed before the contractor provided a priced impact statement, and some impact statements were missing. We concluded that the Department was at risk because accountability and visibility over IDCU contract expenditures were reduced significantly, audit trails were not considered adequate to validate expenditures, and some year-end accruals for the contract were excessive. In addition, the price reasonableness of new services and technology was not adequately assured and some items that were added to the contract were not consistent with the contract's original scope. We also observed that Department controls over procurement sensitive information during the initial IDCU-Follow On (IDCU-FO) initiative were weak.

The Value of Contract Modifications Were Not Adequately Supported

Certain contract modifications and change orders increased the value of the IDCU contract from $84.3 million to $226.3 million, yet were not supported with adequate documentation or explanations and in other instances were not consistent with the original contract scope. As a result, we identified about $142 million in contract modifications issued that were not adequately supported. Also, there were over 50 modifications each valued in excess of $100,000 that lacked required legal review. *(Additional details on contract modifications is in Appendix III on pages 43 - 46.)*

Funding added for increased traffic was not explained in the contract files in any measurable terms such as actual or estimated traffic levels/bytes. Thus, we concluded the appropriateness of the amount of funding added to the contract lacked sufficient support to draw reasonableness conclusions that the funding increases were appropriate. As an example, two modifications, (Number 14, valued at over $22 million, and Number 70,

valued at just under $10 million) increased the contract value in excess of $32 million. However, adequate pricing information to support the equipment and services acquired was not provided by the CO or program officials. During the course of the audit, the Department took steps to assure that all future contract modifications were properly documented.

Management Controls and Support For CSOs, Logs, and Impact Statements Were Not Complete or Adequate to Ensure VA Paid Reasonable Value For IDCU Contract Expenditures

VA's process used to issue CSOs was not effective. During the past 10 years, procurement officials advised that VA processed approximately 2,000 CSOs under this contract. Most of these orders were not properly defined for a number of reasons. Weaknesses within the contracting process included orders that lacked information such as contract number, accounting data, appropriation data, adequate or accurate description of services, and prices. CSO documentation was so lacking that the process did not support financial accountability or funding decisions. There was no complete record of CSOs available. *(Additional details on processing of CSOs is in Appendix III on pages 47 - 48.)*

As a result, this contract was not funded based on actual Department requirements, e.g., individual orders, logs, or the impact statements. There was no direct link between CSOs and funding modifications. In addition, the contractor frequently performed work before providing a priced impact statement. Therefore, the Department had no means to determine if it paid reasonable prices for IDCU services, and audit trails were inadequate to validate contract expenditures.

Complex Billing Practices Were Used to Administer and Allocate IDCU Costs That Led to User Dissatisfaction

Our review of selected IDCU contract invoices showed that there was insufficient information on invoices to identify how much money had been paid to the prime contractor and subcontractor for program management fees. VA had not required detailed billing information to support the level of effort expended and the personnel costs charged to the existing contract. There was significant dissatisfaction with the billing process by IDCU users because they lacked information on real usage costs. During the course of the audit, the Department took action to have the contractor reformat the IDCU invoices to provide actual user cost information. We concluded that detailed billing information by customer, location, and usage should be a requirement for any future IDCU replacement contract vehicle.

We found that some historical and backup files of invoice verification work performed was lost due to computer failures. As a result, there was no support available to show

that the monthly invoice verification was performed during the initial years of contract performance.

Invoices Were Not Certified by the Designated Contracting Officer's Technical Representative (COTR)

Several Fiscal Year (FY) 1997 IDCU invoices were certified by Office of Information Resources Management (OIRM) budget personnel instead of the designated COTR. Authority to certify these invoices was delegated to the COTR. Without appropriate review and certification of invoices, accountability over contract funds was significantly reduced. We concluded that a segregation of duties over budget administration, i.e. authorization of contract funding, and authorization of payments was needed. In response to our audit results, the Department took immediate action to improve controls over the invoice certification process and appointed new COTRs for the remaining life of the contract. In addition, the new IDCU replacement team leader advised he would recommend a rotation of responsibilities for OIRM budget personnel and ensure an adequate segregation of duties.

The CO assigned to the administration of the IDCU contract was appointed in June 1989 and continued to administer the contract through most of FY 1998. Based on our assessment, we concluded that internal controls over the administration of the IDCU contract could be improved by a rotation of CO responsibilities to enhance internal management control. Office of Acquisition and Materiel Management (OA&MM) managers initiated actions to address this recommendation during the course of the audit.

Some Year-End Accruals For the IDCU Contract Were Excessive

The Department needed to improve the management of it's $50 million Central Office, Office of Telecommunications annual telecommunications operating budget and ensure that payments made on the IDCU contract are adequately supported. The audit found that year-end accruals for the IDCU contract were excessive in both FY 1996 and 1997 and totaled $14.2 and $15.9 million, respectively. A review of selected expenditures also identified instances where expenditures against the accruals were not properly matched to the appropriate FY budget authority. Upon identification of the excessive nature of the accruals during the course of the audit, the Department took action to adequately reduce year-end accruals associated with the IDCU contract. *(Details of review results on year-end accruals is in Appendix III on pages 50 - 51.)*

Procurement Sensitive Information Needed to be Better Controlled

We observed that Department controls over procurement sensitive information during the initial IDCU-FO initiative were weak. Access to source selection and other proprietary information needed to be restricted in order to ensure the Department could conduct a full

and open competition for related work. During the course of the audit, enhanced security measures were instituted in the Acquisition Operations and Analysis Office.

Conclusion

While VA received items and services on the current IDCU contract, we were not provided adequate support to conclude that the contract modifications issued after the contract award provided the Department with fair and reasonable prices for the items and services it acquired. Many items and services in the contract were not priced as part of the original contract, such as the frame relay technology, and other items priced were bundled. Thus, the lack of support for the contract growth was such that we were unable to determine what items, services, and quantities were acquired and whether VA paid fair and reasonable prices, involving $142 million in contract expenditures authorized by contract modifications. Overall, the lack of management controls significantly reduced the Department's ability to ensure the price reasonableness of the services acquired, and reduced accountability over IDCU contract expenditures. The Department needs to assure that an appropriate level of contract administration, oversight, and documentation is exercised on the future VA WAN contracts.

For More Information

- *Details on contract modifications are included in Appendix III on pages 43-46.*
- *Details on the management controls and support for CSOs, logs, and impact statements are included in Appendix III on pages 47-48.*
- *Details on IDCU billing practices are included in Appendix III on page 49.*
- *Details on year-end accruals for the IDCU contract is included in Appendix III on pages 50-51.*

Recommendation 1

We recommend that the Assistant Secretary for Financial Management ensure that an appropriate level of contract administration, oversight, and documentation is exercised on future VA WAN contracts.

Assistant Secretary for Financial Management Comments

The Assistant Secretary for Financial Management concurred with the recommendation. The Assistant Secretary also agreed with the statement in the report that "…$142 million in contract modifications were not supported with adequate documentation to explain why the contract increases were fair and reasonable."

Implementation Plan

Our role is limited to conducting oversight and preparing documentation to use in future VA WAN contract competitions. For example, if VA submits a request to add new circuits, our office will verify the Department is receiving a good price, and document our findings. Whether or not the documentation benefits us under our current contract with GSA, it will certainly provide value in our next WAN competition.

We do not have a role in the administration of the current contract. Since this is GSA's contract, they are responsible for assuring price reasonableness of negotiated Contract Line Item Numbers and ensuring any future services are competitive with other FTS2001 vendors. As mentioned above, we will conduct our own price reasonableness verification.

Because this is a GSA contract, all contract administration is the responsibility of GSA's Federal Technology Service contracting personnel. Our contracting officer who supports the Office of Telecommunications has attempted to be appointed as an Administrative Contracting Officer for the FTS2001 Contract. These attempts have been unsuccessful thus far, however, we will continue to pursue this matter.

(See Appendix VII on pages 69-70 for the full text of the Assistant Secretary's comments.)

Office of Inspector General Comments

The Assistant Secretary's implementation actions are acceptable and responsive to the recommendation. While the Department does not have a direct role in the administration of the GSA FTS2001 contract, it is taking actions to assure appropriate oversight and documentation of VA's use of this contract that could be of benefit in future contract competitions. Additionally, the Department plans to complete its own price reasonableness verification of contract purchases that could be of benefit in any future WAN competitions. We consider this report issue resolved and will follow up on planned actions until they are completed.

2. IDCU System Performance No Longer Effectively Or Efficiently Met The Department's Needs

While the department is taking positive steps to transition to a new WAN, risk areas within the current IDCU contract adversely impacted operations and costs. We estimated that VA spent approximately $3.1 million leasing and maintaining an excessive number of unused ports over the life of the IDCU contract. We found that VA lacked a formal capacity management program to manage IDCU network resources on a national level. In addition, IDCU system users were not provided system cost information based on actual system usage and voiced concerns of excessive administrative costs, uneconomical contract provisions, and complex billing practices.

The current IDCU system no longer meets the Department's needs. Much of the system's technology is outdated; the bandwidth available for transmitting data cannot accommodate the current data flow requirements of many customers, and the bandwidth capacity requirements of many newer telemedicine applications exceeds available system bandwidth. In addition, the network has experienced congestion problems. We also found that some system users, such as Veterans Integrated Service Networks (VISN) are acquiring IDCU type services and newer technology through alternative sources at lower costs.

The Department Maintained a Significant Number of Unused Ports

VA paid to maintain telecommunication ports on the IDCU network that were available to system users, but were not used. Based on input provided by the audit client in response to the draft report, about 14 percent of VA's ports were not used throughout the life of the contract. We estimated that the cost to VA for maintaining these unused ports totaled approximately $3.1 million. *(Additional details on unused ports is in Appendix III on pages 52 - 53.)* WAN managers advised that all IDCU ports were put in service based on customer requests. We found that the costs associated with paying for maintaining available, but unused ports, appeared far less significant from an individual system user's perspective than from a Department-wide perspective.

System users had no incentive to take action to minimize unused port charges and other system costs because IDCU historical cost information was generally not shared with them. In addition, while the IDCU contractor had no economic incentive to eliminate unused ports, the contractor did report to VA that significant cost savings could be achieved by deactivating unused ports. The Department is now posting inactive port information on a VA web site that can be accessed by all VA staff. This action should help facilitate customer awareness of inactive ports so that action can be taken to disconnect them.

A Formal WAN Capacity Management Program Was Needed

Capacity planning and system rightsizing is a strategic monitoring and planning function; and, volume and use requirements of the network should be assessed to determine current and future growth needs. VA staff at the Network Service Center (NSC) in Martinsburg, WV, advised that new system applications had been added to the IDCU without notice to NSC managers. The IDCU's contractor Program Manager (PM) also noted that VA does not know the exact number of applications passing traffic through this system and said they are seldom told of new applications coming on line. The contractor's PM advised that there are many examples that demonstrate VA is not adequately managing workload capacity. For example, the PM noted that a new switch was recently installed at a Philadelphia site and that switch reached capacity quickly because traffic requirements were not properly identified or planned.

Some system users at WAN planning meetings consider the lack of capacity planning as the single most unfulfilled need of the IDCU network. Without capacity planning the Department is forced to be reactive to customer requests, and as a consequence the Department must stretch its available financial and technical resources. We concluded that the Department needs a formal capacity management program to effectively manage its future WAN requirements.

IDCU System Technology Was Outdated and Network Performance Was Slow and Congested

Our audit found that some of VA's system users are still dependent on using technology (X.25) that provides medium speed data transport. The technology was mainly used in telephone environments where bandwidth is more costly and the primary usage is to transfer large files. The IDCU was originally an X.25 network exclusively, but with VA user demand for larger bandwidth and faster transmission, the IDCU added a higher speed frame relay service and has most recently added some Asynchronous Transfer Mode (ATM) technology pilots. We found that some WAN system manager and user complaints were tied to the fact that VA was slow to refresh technology on the IDCU contract and take advantage of the competitive and continually evolving telecommunications marketplace.

A migration project was formalized by VHA in June 1998 to ensure the migration of all traffic remaining on the IDCU X.25 network to the frame relay network. However, there were still about 100-150 sites in the National Cemetery Administration (NCA) and the Office of General Counsel that did not have frame relay service installed as of March 1999. As a result, the migration to newer technology in VA has been slow and the IDCU system still utilizes old X.25 technology that is generally inefficient and more costly than other commercially available technology.

System Bandwidth Was Not Adequate For Newer Telemedicine Applications

NSC staff advised that current IDCU system performance weaknesses were that the available system bandwidth[1] was limited and that the contractor was taking too long to implement new services. We were advised that the IDCU bandwidth capacity was no longer adequate to meet videoconferencing requirements. We found that VISN 12 (Hines, IL) reported it was taxing the capacity of the existing frame relay network supplied by the IDCU. We identified an independent study conducted in June 1998 that found that the VHA Chief Information Office Field Offices (CIOFO) traffic was at or near the point of saturation at some times during the normal workday. The study recommended that VHA develop a plan for growth, capacity planning, modeling, and simulation. System users expressed a need to have bandwidth on demand to meet future WAN requirements because they need to support a more diverse range of services, with higher bandwidth requirements such as video conferencing and imaging. As a result, we concluded that the current system was not meeting VA user needs effectively.

IDCU Network Has Experienced Congestion Problems

There have also been significant network user complaints involving network congestion and slow response times at major VHA router sites, such as at Hines, IL; San Francisco, CA; and Albany, NY. System users have also experienced occurrences such as lost server connections, and there are complaints that the delivery of products and services exceeded the 45-day performance measurement included in the IDCU contract. The Department tasked the incumbent IDCU contractor to conduct tests at six major VHA CIOFO locations (Silver Spring, MD; San Francisco, CA; Hines, IL; Birmingham, AL; Albany, NY; and Salt Lake City, UT). The contractor's team confirmed there was congestion on the frame relay network, but did not determine whether the congestion was a factor of the switch capacity, the interconnecting trunks, or the configuration of the network. Another independent study indicated that as the network congestion grows, the end result would be loss of user data. VHA representatives advised us that the CIOFOs took action to buy IDCU type services from a Defense Information Systems Agency contract instead of installing more frame relay lines using the Department's IDCU contract, because it offered a lower cost solution to acquiring the bandwidth necessary to reduce current congestion problems.

[1] The capacity of a network, measured as the number of bites it can transmit every second, is called a bandwidth.

Some VISNs Are Using Alternative Strategies to Acquire IDCU Services

VHA's decentralization to VISN organizational components has resulted in some VISNs proceeding to establish their own networks and other VISN pilot studies are underway that have the potential to impact the Department's WAN workload requirements. Decentralized solutions also have the potential to introduce unforeseen risks, and result in building redundancies into the Department's telecommunications service capabilities.

For example, VISN 12 (Hines, IL) disconnected from the IDCU's frame relay service in favor of an alternative WAN solution at nine of the VISN's facilities. IDCU customers such as VISN 12 are making significant changes in their WAN service and technology without coordinating their efforts with IDCU system managers. Discussions with IDCU officials confirmed that VA's ability to manage the IDCU is currently based on a reactive management approach versus a proactive method because the basic information needed to plan for change such as data traffic requirements is generally not provided, prior to new applications being brought on-line.

During a site visit to the NSC at Martinsburg, WV, NSC managers complained that VISN 12 made significant changes in their WAN service and technology without coordinating their efforts with them. We observed that critical system alerts were flashing on the NSC's computer screens and we were told that NSC personnel spent time troubleshooting the problem. NSC staff called VISN 12 IDCU representatives and were told VISN 12 was running a test and that the customer had powered down frame relay access service to the IDCU until further notice. It took nearly 9 days for the NSC personnel to learn that the reason for turning off frame relay service was not a test, but a switch to another service. Based on our research of this associated trouble ticket, we concluded that this was an example of a disconnect in communication and coordination between the NSC and VA field facilities.

VISN 12 also left the older technology in place as a temporary backup service, which results in maintaining additional system capacity that may not be needed. We concluded that VISN 12's actions had the potential to significantly change IDCU workload requirements, and actions such as this should be coordinated through a formal capacity management program. Addressing network capacity and congestion problems in a timely manner would serve customers better. IDCU representatives from VHA also advised that VISN 15 (Kansas City, MO) has plans to disconnect its frame relay service to the IDCU. As a result of such actions, the IDCU customer base is declining and workload is expected to drop. We were also advised that VISNs 16 (Jackson, MS) and 20 (Portland, OR) had ordered non-IDCU circuits to address the lack of IDCU system capacity rather than install additional IDCU frame relay lines. Thus, to optimize the WAN service Department-wide, information on such significant changes to the system architecture need to be better planned and managed.

Conclusion

A formal capacity management program is needed to manage the IDCU system from a national perspective. OIRM officials should have taken action to eliminate unneeded ports, and better assure that system capacity matched actual user needs. We also concluded that the Department needed better capacity management to ensure the IDCU system was properly designed and configured to give efficient performance, provide optimal customer service, and ensure adequate capacity existed when needed.

For More Information

- *Details on unused ports are included in Appendix III on pages 52- 53.*

Recommendation 2

We recommend that the Acting Assistant Secretary for Information and Technology take action to assure that future WAN system requirements are adequately designed and configured for efficient performance and capacity. Key actions needed include:

a. Deactivating inactive ports that are not needed.

b. Establishing a formal capacity management program to manage the WAN requirements.

c. Considering and evaluating alternative VISN solutions to acquiring WAN requirements to identify and protect against redundant capacity and other system inefficiencies.

Acting Assistant Secretary for Information and Technology Comments

The Acting Assistant Secretary for Information and Technology concurred with the audit recommendations and provided an acceptable alternative methodology for calculating the monetary benefits associated with the cost of inactive ports. While the Acting Assistant Secretary's cost estimate totaled $3.5 million, our revised calculations identified an even more conservative estimate of $3.1 million.

Implementation Plan

The Acting Assistant Secretary provided the following implementation actions that address the recommendation sections a-c.

a. The inactive ports identified in the draft report refer to ports on the IDCU X.25 Packet network. Since the expiration of the IDCU contract in June 1999, X.25 service is no longer supported for data communication in the Department. Customers migrated their service to Frame Relay in anticipation of the IDCU contract's expiration. As customers cut over from IDCU service to FTS2001, ports that customers define as not needed will not be transitioned.

b. The Management Information Systems portion of the FTS2001 program will provide VA the necessary tools to measure network use and performance. Customers will be able to access and query Sprint's network operations data to determine and forecast required network capacity. It is the responsibility of the public network provider, Sprint, to monitor the networks usage and performance and provide capacity for VA requirements. VA customers will work with Sprint in capacity planning and inform them of any new applications that will increase network traffic and effect network capacity.

c. GSA's FTS2001 contract was selected to provide telecommunications services for the entire Department. The selection of a single vendor, Sprint, will help to provide a consistent service through all levels of the Department. There are several established working groups within the Department, most under VHA, focusing on telecommunications issues. The One VA IT Architecture Group incorporates all VA agencies and encompasses all IT areas. The VHA Architecture and Planning Workgroup is a technical team which plans the overall architecture for delivery of telecommunications services within VHA.

(See Appendix VIII on pages 71-74 for the full text of the Acting Assistant Secretary's comments.)

Office of Inspector General Comments

The Acting Assistant Secretary's implementation actions are acceptable and responsive to the recommendation areas. We consider these report issues resolved and will follow up on planned actions until they are completed.

3. Future Network Operations Support Requirements Need To Be Identified And System Performance More Effectively Measured

The audit found that approximately 50 reimbursable technical support positions for national WAN operations need to be reviewed to determine whether they will remain essential in light of changes in WAN responsibilities as VA moves to a new IDCU contract solution. In addition, we found that the Department did not have complete information needed to evaluate network performance, manage, or plan properly for a new network because the IDCU's Telecommunication Information System (TIS) was antiquated, slow and did not meet VA system user needs effectively. This situation occurred because the contractor was unable to provide an acceptable Performance Management System (PMS) as required by the IDCU contract. We found that the Department needs to recover $1,025,660 in payments to the contractor for the PMS that was not accepted.

Reimbursable Support Positions in VA's Office of Telecommunications and the Network Operation Center (NOC) Need to be Reviewed

The Department currently has approximately 50 staff positions that support national WAN operations directed from VA Central Office (VACO), Office of Telecommunications, and the NOC located in Martinsburg, WV. Under the IDCU contract, VA customers are billed for services provided by the incumbent contractor and for overhead support services provided in the VACO and Martinsburg offices. Some of these reimbursable positions, including about 10 VA positions in the NOC perform work that is directly related to the administration of the IDCU contract.

The Department's reimbursable support positions, especially the positions at Martinsburg, WV that are dedicated to managing the IDCU contract, need to be reviewed to determine whether they will remain essential in light of changes in WAN responsibilities as VA moves to a new IDCU contract solution. The Department needs to ensure it maintains an appropriate management and oversight infrastructure to manage the IDCU transition needs and all future WAN requirements efficiently.

The IDCU's TIS is Antiquated, Not User Friendly, and Contains Incomplete Information

While the Department paid for the TIS system consistent with contract terms, VA had to use its own resources to develop information needed to manage network performance. The system does not provide real time data, it is not user friendly, and there were numerous complaints that the system's responsiveness was slow due to the massive amount of data stored in its database. Our researching of information in the TIS found that the system was very slow and difficult to use. Network managers advised that the

responsiveness have been further slowed because TIS was not designed for frame relay protocol traffic service.

Overall, we found that TIS is an antiquated menu driven system and does not effectively meet the Department's current needs. It does not include a complete historical listing of logs, impact statements, or customer service orders. We observed that VA personnel who use TIS on a regular basis have developed a high number of labor intensive ad hoc queries to extract system performance data due to the limited capabilities within TIS to provide useful reports.

The system was designed over 10 years ago and exceeded its 10-year expected database capacity by the fifth year of operation. Although it was upgraded, the new system capacity was also exceeded. The Department needs to assure an effective network management mechanism is in place to track system utilization in future WAN contracts.

All Department Payments For the PMS Need to be Recovered From the Contractor

Our audit identified that the original contract included a requirement for a PMS to measure and validate network performance. VA never accepted this system. As a result, the Department does not have complete and reliable information needed to evaluate network performance, manage, or plan properly for a new network. Our review of payment records found that VA paid the contractor $1,859,814 for the PMS system. The contractor returned $834,154 to VA in credits. However, we found that a balance of $1,025,660 was not refunded to VA. In May 1998, the contract requirement for PMS was eliminated and the CO has recently issued a demand letter for the refund of $1,025,660. *(Details on VA's PMS payments and recoveries is in Appendix III on pages 54 - 56.)*

Conclusion

The reimbursable support positions for national WAN operations need to be reviewed to determine whether they will remain essential in light of changes in WAN responsibilities as VA moves to a new IDCU contract solution. Also, improved network performance software is needed to effectively and efficiently manage Department-wide WAN operations. The Department also needs to recover all payments for the PMS.

For More Information

- *Details on VA's PMS payments and recoveries are included in Appendix III on pages 54-56.*

Recommendation 3

We recommend that the Acting Assistant Secretary for Information and Technology:

a. Assess the need for the reimbursable support positions directly assigned to the administration and oversight of the IDCU contract, in light of changes in IDCU WAN responsibilities as VA moves to a new IDCU contract solution.

b. Assure that appropriate network management software tools are available to enable adequate management and oversight of future WAN requirements.

c. Recover all payments made to the contractor for the PMS.

Acting Assistant Secretary for Information and Technology Comments

The Acting Assistant Secretary for Information and Technology concurred with the audit recommendations and the monetary benefits associated with the recovery of all payments made to the contractor for the PMS.

Implementation Plan

The Acting Assistant Secretary provided the following implementation actions that address the recommendation sections a-c.

a. Changes are anticipated in the way VA telecommunications services will be acquired and managed under the FTS2001 contract. We have let a contract for an organizational analysis to determine to what extent consolidation of functions and use of vendor resources may be practical to provide the types and quality of services required by the customer and the Department. This analysis will be completed during the fourth quarter of FY 1999.

b. The Management Information Systems portion of the FTS2001 program will provide VA the necessary tools to manage it's WAN requirements. Sprint's network management system includes a Web enabled software interface for pricing, ordering, billing summaries and trouble tickets. The system, which will be restricted to authorized users, can be accessed from any PC with a Web browser and will not have a limited number of connections. Customers will also have access to information about performance, traffic and configuration information by connection point. It is expected that the network management systems provided through the FTS2001 contract will adequately serve VA's needs.

c. The Office of Telecommunications and the Office of Acquisition and Analysis Service, with assistance from the Office of General Counsel, are working to recover the $1,025,660.20 in payments VA made to the contractor for the PMS system.

(See Appendix VIII on pages 71-74 for the full text of the Acting Assistant Secretary's comments.)

Assistant Secretary for Financial Management Comments

The Assistant Secretary for Financial Management also provided comments that concurred with recommendation 3c.

Implementation Plan

The Assistant Secretary advised that the Acquisition and Analysis Service and the Office of Telecommunications, with assistance from the Office of General, are working to recover the $1,025,660 in payments VA made to the contractor for the PMS. A letter was sent to the contractor on June 21, 1999 advising them we would withhold this amount until the issue is resolved. We anticipate a response from the contractor shortly.

(See Appendix VII on pages 69-70 for the full text of the Assistant Secretary's comments.)

Office of Inspector General Comments

The Acting Assistant Secretary for Information and Technology and the Assistant Secretary for Financial Management provided implementation actions that are acceptable and responsive to the recommendation areas. We consider these report issues resolved and will follow up on planned actions until they are completed.

4. VA Needs To Avoid Making Future Contract Award Decisions That Negatively Impacted Administration Of The IDCU Contract

Decisions made at the time the IDCU contract was awarded negatively impacted the Department's ability to administer this long-term contract effectively and to ensure the price reasonableness of the technology and services acquired. These decisions included the acceptance of a bundled pricing strategy, not adequately evaluating the most favorable contract pricing terms offered, and including an excessive contract guarantee in the contract. The weaknesses identified should be considered as lessons learned and not be replicated as the Department acquires future WAN services.

VA Lost Visibility Over IDCU Contract Costs and Service Prices by Accepting a Bundled Pricing Strategy

Our review of the contract documentation found that the CO accepted a bundled pricing strategy proposed by the incumbent contractor at the time of the IDCU contract award. Acceptance of this pricing strategy has been a major reason why the Department could not assure the price reasonableness of the items and services it acquired under the contract. We found that prior to making the contract award, VA's Technical Evaluation Team (TET) tasked with reviewing the vendor offers received, formally advised the CO that the incumbent's cost/price proposal did not have provisions to increase the quantities of individual items. The TET team also noted that this would not allow VA adequate flexibility in modifications to, or network changes required by changing technology, yet the CO awarded the contract since adequate price competition was achieved.

Because there have been numerous contract modifications processed to this contract including technology changes, the bundled pricing strategy used has made the invoice verification process unnecessarily complex and labor intensive. The acceptance of a vendor offer using bundled pricing resulted in a lack of visibility over such contract cost elements as direct labor, fringe benefits, subcontractor fees, program management fees, overhead, and profit. These items do not appear as specific cost claims on the contractor's invoices.

The incumbent contractor's PM also acknowledged that the concept of bundled pricing was based on expectations that the IDCU system would only be expanded. The strategy did not provide an effective mechanism for downsizing, a condition that the Department is currently faced with. We found none of the WAN managers or the CO could demonstrate that the items and services purchased under this contract were reasonably priced. The CO claimed that an independent consultant was used to perform price analysis work on the contract. However, no cost or price analysis documentation was provided to support such reviews had occurred.

The Most Favorable Contract Pricing Terms Offered to VA Were Never Adequately Evaluated

We found that the Department never initiated action to evaluate the most favorable terms of the Best and Final Offer (BAFO) received from the contractor. The incumbent IDCU contractor proposed a lease with option to purchase strategy in response to the Department's request for proposal in its BAFO in 1989. According to the incumbent's offer, month 31 represented the most opportune time for the Department to exercise the purchase option. However, should VA decide not to exercise the purchase option the plan converted to a straight-line lease with monthly lease prices for the remainder of the contract. The incumbent noted that VA would have the knowledge and experience of successful implementation, transition, and network acceptance plan to solidify its decision to reduce costs by exercising its option to purchase a tested, deployed, and operable network solution. Federal Acquisition Regulations provide guidance that indicates agencies should consider whether to lease or purchase equipment on a case-by-case evaluation of costs and other factors.

Interviews with the WAN managers determined that VA did not want ownership of the IDCU equipment and that there were budgetary constraints at the time of award that precluded buying the IDCU system. The price analysis report noted that over the life of the contract individual items installed early in the contract life could be priced as much as 32 percent higher without exercising the Lease With Option to Purchase buyout option. That report also indicated that VA could potentially continue to exercise the buyout option through month 72 without substantially increasing the total contract price or individual item prices. Since the buyout option was not to be exercised until month 31 of the contract, we concluded there was sufficient time to consider and acquire the necessary budget resources. However, we did not find any evidence in the contract files that the buyout option was seriously considered or discussed with Department senior managers. Thus, VA lost the opportunity to save about $27 million ($84,348,332 original contract award price x 32 percent = $26,991,466 potential savings) from the purchase option and paid more to lease IDCU equipment.

There were also other pricing issues that were not resolved prior to the award of the IDCU contract. One issue was that the accepted BAFO offer did not include an apparent charge associated with the FTS 2000 Transition Plan that solicitation amendment 12 specified. We interviewed the price analyst who performed the review of the BAFO offers for the IDCU. That individual advised that a site visit was conducted to the incumbent's corporate offices prior to award, but the pricing issues that VA had concerns about were never resolved. We were unable to find in the CO's Price Negotiation Memorandum or in any other contract documentation that explained what was reviewed or resolved at the pre-award site visit.

The CO Guaranteed Almost $16 Million More Than the Contractor's Proposed IDCU Contract Costs

The Department's contract for the current IDCU system guaranteed the contractor almost $16 million more than the contractor requested in its BAFO for the IDCU contract. Based on the terms of the original solicitation, VA guaranteed to order a minimum $750,000 per month ($9 million annually) in services from the contract beginning in year 3 of the contract. No guarantees were offered during the first 2 years of the contract. We found that this guarantee exceeded the incumbent contractor's proposed life-cycle costs by almost $16 million in the $84 million contract award from 1993 through 1998. *(Details on the contract guarantee is in Appendix III on page 57.)*

The inclusion of the excessive guarantee appeared to be an oversight by the original CO. However, the guarantee put the Department at risk of financial loss. The Department never realized the potential loss because VA ordered services in excess of the stated minimum guarantee in the contract. However, the CO should have recognized the guarantee was in excess of the priced offer received and adjusted the terms of the contract to protect VA's interests. We consider entering into a contractual agreement to pay more than the price offered to perform the contract a poor business decision. However, we consider the issue closed, because the CO is no longer employed by the Department.

Conclusion

The Department needs to assure price reasonableness on future WAN telecommunication procurements. The Department also needs to improve its future contract execution by addressing the lessons learned identified from our review of the IDCU contract.

For More Information

- *Details on the IDCU contract guarantee are included in Appendix III on page 57.*

Recommendation 4

We recommend that the Assistant Secretary for Financial Management take action to assure price reasonableness on future WAN telecommunications procurements and avoid making future contract award decisions that negatively impacted administration of the IDCU contract.

Assistant Secretary for Financial Management Comments

The Assistant Secretary for Financial Management concurred with the recommendation.

Implementation Plan

The Assistant Secretary's response to recommendation 1 discusses actions that are being taken to help assure price reasonableness on future WAN telecommunications procurements. These actions include conduct of VA's own price reasonableness verification involving the current GSA FTS2001 contract.

(See Appendix VII on pages 69-70 for the full text of the Assistant Secretary's comments.)

Office of Inspector General Comments

The Assistant Secretary's implementation actions are acceptable and responsive to the recommendation area. We consider this report issue resolved and will follow up on planned actions until they are completed.

5. The Department Experienced Acquisition Delays In Transitioning To A New WAN Contract Solution

The Department spent over $2.6 million for an acquisition support contractor to facilitate planning for an IDCU-FO initiative. However, after much of the effort was accomplished, IDCU and procurement representatives voiced concerns that a Department-wide customer consensus on future WAN requirements was not achieved. The contractor prepared a draft solicitation that was released to industry for comments. Based on a review of this major deliverable, IDCU representatives from VHA, the Veterans Benefits Administration (VBA), Office of Acquisition and Materiel Management (OA&MM), and outside vendors complained that the Department's draft solicitation for the future WAN released for industry comments restricted competition. In addition, they claimed the Request For Proposal (RFP) favored the incumbent IDCU contractor and included requirements that were too prescriptive. Procurement managers also voiced concerns over the price reasonableness of the support contract and cited deficiencies in the quality of the work products provided.

Customer Consensus Over Future WAN Requirements Was Not Achieved

The level of dissatisfaction with the draft solicitation was too high for VA to use the solicitation and the RFP statement of work had serious deficiencies. Our review confirmed that the RFP was fundamentally flawed and that there was no customer consensus on the initial IDCU-FO strategy. The contractor's own findings document, a major deliverable received by VA, reported it had not obtained customer input. We also found that both VHA and VBA had contracted with another local engineering firm to better define their baseline telecommunications requirements and did not want to proceed with the IDCU-FO initiative without having a better understanding of future baseline requirements. VHA and VBA IDCU representatives viewed their independent contracting initiative as an integral part of planning for future WAN requirements. Some of the independent effort was duplicative to the work the acquisition support contractor was performing, but the major operating components did not want to proceed without the benefit of the information being collected and analyzed.

Based on our audit findings, the acquisition support contract was terminated prior to awarding task order Number 7, that saved VA $944,891. We also found that about $380,000 of these funds still remain as obligations established for this contract. This remaining contract funding should be de-obligated, provided all valid contract claims have been received and paid. *(Details on the acquisition support contract payments is in Appendix III on pages 58 - 59.)*

VA managers did not have timely, reliable, and sufficient information to make sound management decisions that could ensure the continuation of IDCU-FO mission critical services while transitioning from one contract vehicle to another. This lack of

information and customer consensus over future requirements, especially information needed to identify and manage the system transition, resulted in VA exercising the final option year of the existing IDCU contract instead of proceeding with a more favorably priced interim offer from another vendor team.

Duplicate Payments Were Processed on the Acquisition Support Contract

Our audit identified $564,891 in duplicate payments on this acquisition support contract. The funds associated with these overpayments were returned to VA during the course of the audit. We determined that invoices were paid without matching those claims to the appropriate task orders. Neither the CO or OIRM's Budget Analyst identified the overpayments. Documentation showed that the contractor faxed an invoice summary detailing the overpayments by VA to the Department on February 6, 1998 and repaid $564,891 to VA. As a result of identifying three overpayments on this relatively small task order contract, we considered controls over the payment of invoices inadequate and concluded the Department's risk of potential fraud was high. In response to our findings, the Department took action to establish appropriate controls over the certification of invoices.

Conclusion

The Department experienced acquisition delays in transitioning to a new IDCU contract solution. This resulted in VA exercising the final option year of the existing contract instead of proceeding with a more favorably priced interim offer from another vendor team. Remaining funding for the acquisition support contract should be de-obligated.

For More Information

- *Details on the acquisition support contract is included in Appendix III on pages 58-59.*

Recommendation 5

We recommend that the Assistant Secretary for Financial Management take action to de-obligate unused funds remaining for the acquisition support contract.

Assistant Secretary for Financial Management Comments

The Assistant Secretary for Financial Management concurred with the recommendation. The Assistant Secretary also provided an acceptable alternative monetary benefits figure concerning the cancellation of the task order on the IDCU acquisition support contract.

Implementation Plan

The Acquisition Operations and Analysis Service discussed this recommendation with the Office of Telecommunications in mid-June and requested that they deobligate the unused funds.

(See Appendix VII on pages 69-70 for the full text of the Assistant Secretary's comments.)

Office of Inspector General Comments

The Assistant Secretary's implementation action is acceptable and responsive to the recommendation area. We consider this report issue resolved and will follow up on planned actions until they are completed.

6. A Formal Risk Analysis Is Needed To Address Risks Of Transition To A New WAN Contract Solution

The Department had not conducted a comprehensive formal risk assessment during the planning for the IDCU-FO initiative. The Department needed to conduct a formal risk assessment to adequately assess, manage, and mitigate the risks associated with transitioning to a new WAN solution. In addition, VA needed to provide reasonable assurance that the current system, contractual transition activities, and alternative future solutions can be adequately protected from known threats such as availability, privacy, integrity, and fraud.

During the course of the audit, we reviewed a vendor proposal received by the Department that offered an alternative interim contract strategy to bridge its need for WAN services until the Department could better assess its future requirements. We concluded that the Department's bridge acquisition strategy could be considered as a short-term solution, not exceeding 1-year. This bridge strategy identified potential operational savings to VA of approximately $5.1 million for access ports, and $2.8 million in potential circuit savings. The bridge proposal projected current network savings between $4-8 million with the potential for $6-10 million in annual savings.

The most significant aspects of the bridge proposal was that it identified to VA that there was a potential to realize immediate cost savings. However, the strategy did not provide for full and open competition of WAN requirements. We found however that Department managers were unable to assess the merits of the bridge strategy because it lacked sufficient information on the risks of changing from one WAN to another WAN solution. Adequate risk information was not available because the original IDCU-FO team had not conducted a formal risk analysis. As a result, we concluded that in order for the Department to be in a position to make an informed best value decision in the future, WAN managers needed to have more comprehensive information on risks and appropriate plans to mitigate risks of this mission critical telecommunications system. We concluded that WAN risk management accountability needed to be assigned within VACO to ensure the Department-wide telecommunications interests are adequately protected.

The Department's new IDCU replacement team took action to contract for a formal risk assessment as we had recommended in an interim advisory. The Department then requested our assistance to assess the completeness of the statement of work prepared for a formal risk assessment. Our review found that the statement of work needed to be revised to specifically address the need for the contractor to identify mitigating alternatives and strategies, considering short and long term solutions, in addition to evaluating each alternative against known risks. *(Details on VA's risks associated with transitioning to a new WAN contract solution is in Appendix IV on pages 61 - 62.)* Also, there was a need to assign risk management accountability for WAN operations within

VA program staff in order to continue to monitor the internal and external environments for the changes in conditions and compliance with controls, regardless of the future solutions used.

The Department is currently in the process of completing its risk assessment and migrating to a new WAN contract solution. Unfortunately, the Department's transition efforts have taken a considerable time to implement and the existing IDCU contract is no longer meeting the needs of all Department users.

Conclusion

The Department took responsive action to obtain a formal risk assessment of the risks of transitioning to a new WAN contract solution. However, there is still a need to assign risk management accountability for WAN operations within VA program staff to effectively monitor the dynamic changes impacting operations within the Department.

For More Information

- *Details on VA's risks associated with transitioning to a new WAN contract solution is in Appendix IV on pages 61-62.*

Recommendation 6

We recommend that the Acting Assistant Secretary for Information and Technology take action to assign risk management accountability for the Department's national WAN operations.

Acting Assistant Secretary for Information and Technology Comments

The Acting Assistant Secretary for Information and Technology concurred with the recommendation.

Implementation Plan

The final Risk Analysis report is due from the contractor to VA at the end of July. The Associate Deputy Assistant Secretary for Telecommunications will be responsible for ensuring the mitigation of any risks identified in the report.

(See Appendix VIII on pages 71-74 for the full text of the Acting Assistant Secretary's comments.)

Office of Inspector General Comments

The Acting Assistant Secretary's implementation action is acceptable and responsive to the recommendation area. We consider this report issue resolved and will follow up on planned actions until they are completed.

6. VA Consultants Were Provided Non-Competitive Work

Audit results identified that a prior VA employee received $300,000 in non-competitive purchase orders for work supporting the existing IDCU contract and IDCU-FO activities. OIRM staff issued a series of purchase orders to provide a steady stream of work to this former employee and another independent consultant.

In June 1991, the employee retired from VA leaving a number of management and oversight functions incomplete in OIRM's WAN Service. The Office of Telecommunications proposed and obtained approval in August 1991 to bring the former employee back on a short-term consultant basis to complete work only he had the expertise to finish. Thus, the Department approved a purchase order of $25,000 for the services and issued a purchase order for $25,000 on September 26, 1991 supported by a statement of work that included a provision that the consultant submit monthly status reports. However, the Department issued 10 more purchase orders to the same consultant between February 12, 1992 and September 17, 1997 and only the first and last purchase order included a statement of work. VA paid the consultant almost $300,000. We concluded that there may have been a genuine need for VA to acquire this ex-employee's expertise when he retired. However, a long-term relationship evolved and took on the appearance of favoritism with an employer-employee relationship based on the routine nature of the work performed. We also found that this individual was included within the project budget as a consultant on the IDCU-FO acquisition support contract for services valued at over $141,000.

We were also advised that similar purchase orders exist for another consultant to support the pricing reviews performed on the IDCU contract. Although requested, documentation of these orders was not provided. However, our discussion with the consultant confirmed that a steady stream of work was provided to this individual without the auspices of competition. We found that this individual was also included within the project budget as a consultant on the IDCU-FO acquisition support contract for services valued at about $114,000. In response to our audit findings, the Department took action to stop issuing non-competitive purchase orders to both of these individuals.

VA's repetitive use of non-competitive purchase orders did not ensure it received the best value for services provided. Review of the invoices found that there was insufficient documentation on the invoices to conclude the actual amounts billed were fair and reasonable. However, we did identify some work products relating to the paid invoices. We concluded that the management controls over the award of these purchase orders and the payment of the invoices were too lax. Some of the purchase order requirements appeared to be split inappropriately, while others had overlapping performance dates, and lacked specific statements of work. In response to our audit findings, Department officials advised that to the maximum extent possible, COs will obtain services through competition and took action to stop any future purchase orders. According to the General

Accounting Office (GAO), competition can reduce the costs to the government by an average of 20 to 35 percent. As a result, we estimate that $60,000 (conservative GAO estimate that 20 percent savings $300,000 = $60,000) in monetary benefits that could be achieved if these requirements were acquired through competitive means.

Conclusion

We concluded that action was needed to stop the splitting of purchase order requirements and to eliminate the appearances that a prior VA employee and consultant were being favored by receiving non-competitive work. The Department took timely action to stop issuing non-competitive purchase orders to these two individuals.

Recommendation 7

We recommend that the Assistant Secretary for Financial Management take action to ensure that competition is obtained to the maximum extent possible for acquiring future WAN requirements.

Assistant Secretary for Financial Management Comments

The Assistant Secretary for Financial Management concurred with the recommendation and the monetary benefits figure.

Implementation Plan

The Assistant Secretary's response to recommendation 1 discusses actions that are being taken to help ensure that competition is obtained to the maximum extent possible for acquiring future WAN requirements. These actions include conducting oversight and preparing documentation concerning the current GSA FTS2001 contract to use in future VA WAN contract competitions.

(See Appendix VII on pages 69-70 for the full text of the Assistant Secretary's comments.)

Office of Inspector General Comments

The Assistant Secretary's implementation actions are acceptable and responsive to the recommendation area. We consider this report issue resolved and will follow up on planned actions until they are completed.

APPENDIX I

OBJECTIVES, SCOPE, AND METHODOLOGY

Objectives

The audit examined the current and planned contract replacement efforts for the Department of Veterans Affairs (VA) Integrated Data Communications Utility (IDCU). The purpose of the audit was to: (i) review the IDCU contract award, administration, and price reasonableness; (ii) review efforts to replace the IDCU contract and ensure equitable pricing of future work requirements; and, (iii) identify areas of high risk to the Department that required attention.

Scope and Methodology

Audit work was performed in VA Central Office (VACO) involving VA's Office of Information Resources Management (OIRM) and the Office of Acquisition and Materiel Management (OA&MM). Interviews were conducted with OIRM program and OA&MM procurement officials and with selected representatives and members of wide area network (WAN) teams within VA organizational components using IDCU services. In addition, interviews were conducted with certain IDCU contractors and independent consultants supporting the Department's WAN procurement initiatives.

Field visits were made to the IDCU Network Service Center (NSC) in Martinsburg, WV and Veterans Health Administration's (VHA) Chief Information Officer's Field Office (CIOFO) in Silver Spring, MD. Work performed at the NSC assessed the effectiveness and appropriateness of IDCU network administration and performance. We reviewed selected system controls, information in the IDCU's Telecommunication Information System (TIS) and various management and performance reports, in addition to conducting interviews with NSC managers. We also examined the NSC's effectiveness for capacity management, configuration management, and technical control of IDCU services. At the CIOFO, we conducted additional interviews, observed IDCU system equipment, and assessed the adequacy of revised invoice review practices for the current IDCU contract. We also discussed user needs, Veterans Integrated Service Network (VISN) alternative strategies to acquire future WAN services, and reviewed an Asynchronous Transfer Mode (ATM) telecommunications solution in place for acquiring IDCU type services. Several recent independent management and system performance studies addressing network performance issues were also reviewed.

Our review of the IDCU contract encompassed a review of original acquisition plans and files, solicitation documents, procurement authority approvals, pricing issues, and other key decisions leading to the award of the contract. In addition, we reviewed the contract scope, funding, modifications, and changes orders. Other pertinent contract orders, pricing support, cost benefit analysis, studies, and protest documentation were also

reviewed as deemed appropriate. Certain high value items on the contractor's invoices were identified and selected for review. We also reviewed the Department's IDCU management, organization, and staffing including OIRM's reimbursable telecommunications support positions, and the procurement authority of the Contracting Officers (CO) and the designations of the Contracting Officer's Technical Representatives (COTR) assigned to the project. Interviews were conducted with the COs, COTRs and appropriate budget personnel tasked with awarding and administering the IDCU contract.

Vulnerabilities to fraud, waste, and costly billing errors were considered significant on the current IDCU contract. During the course of the audit, we identified the risk conditions, events, and fraud indicators. Audit testing did not disclose specific examples of fraud. However, our ability to accomplish adequate testing was limited by the following conditions:

- Incomplete, insufficient, and missing documentation.
- Numerous contract modifications lacked justification and pricing support.
- Some historical and backup files of invoice verification work performed by OIRM staff was lost due to computer failures.
- Unpriced orders were accepted and accomplished without VA having information to determine, review, and obligate the cost of work performed.
- Incomplete, complex, and labor intensive audit trails between key contract documentation including contract modifications, orders, and invoices.
- Built in complexities within the billing process including use of a bundled pricing strategy.

During the course of the audit, we assessed the Department's efforts to migrate to a new contract vehicle for the provision of its corporate WAN. Work entailed conducting a series of interviews with VHA, the Veterans Benefits Administration (VBA), OA&MM, and OIRM officials to assess the IDCU-Follow On (IDCU-FO) procurement initiative's progress, schedule, and user concerns related to the procurement initiative. We also observed access controls over procurement sensitive information related to the IDCU-FO initiative. In addition, we reviewed the Department's contract and the contract deliverables provided by an independent acquisition support contractor supporting the IDCU-FO effort and examined the payment record and invoice controls for the acquisition support contract. In addition, we reviewed purchase orders issued to consultants supporting the IDCU-FO effort and aspects of a bridge proposal received from another contractor team to perform IDCU type services on an interim basis as the Department took action to migrate to a new contract vehicle.

The contract was at high risk since few management controls were in place to ensure program integrity and accountability. Because the lack of controls and oversight

heightened the potential risk of fraud, we referred information regarding our concerns to the Office of the Inspector General, Office of Investigations. The audit was made in accordance with generally accepted Government Auditing Standards.

BACKGROUND

IDCU Wide Area Network (WAN)

The IDCU is a Department-wide end-to-end data communications network enabling VA users to connect from one automated system to another and to access various agency databases. The IDCU network provides data communications to more than 500 sites and 60,000 users. The WAN architecture was designed and configured to integrate several existing networks supporting multiple applications into a single communications utility network. The IDCU was the replacement for VA's Data Transmission System (VADATS) which was acquired from the General Services Administration (GSA) in January 1984.

The network enables customers at VA facilities to communicate with each other, and to access and transmit key information and data in support of the Department's mission of providing patient care and delivery of benefits to the nation's veterans. The WAN is able to connect sites from remote locations. VA WAN requirements include video teleconferencing, high-speed imaging, electronic data interchange for invoicing, computer-telephone integration, and electronic mail.

There are three major components of the IDCU: (i) the X.25 packet switching service, (ii) the frame relay service, and (iii) the Network Service Center (NSC). The X.25 service is the IDCU's original wide area networking technology. The IDCU's X.25 Packet Network is the largest single agency-wide dedicated WAN serving the U.S. government, outside of the Department of Defense. The frame relay network is a newer technology with a higher speed connection-oriented protocol that defines the connections of terminals and computers to packet-switching networks. The frame relay protocol uses pre-defined permanent virtual circuits to communicate between endpoints. It provides a high-speed bandwidth data transport and switching network to VA users. The frame relay service uses the majority of the same equipment, procedures, processes, management systems, and support services provided by the IDCU X.25 service. Frame relay service implementation into the IDCU began in 1995. However, as of March 1999, service implementation had not been fully accomplished Department-wide. The Network Service Center (NSC) is the operational focal point responsible for the IDCU network management and is comprised of three operational entities; (i) VA's Network Operations Center (NOC), (ii) Customer Service Center (CSC), and (iii) a Network Control Center (NCC).

The IDCU network is designed around US Sprint's fiber optic system of four major backbone nodes located in the three major VA data processing centers and VACO, and twenty-two tributary nodes. Network interfaces, known as User Service Points (USP) are located at key locations (usually a computer room) at customer sites. The USP is the

point at which the customer site connects to the IDCU. The IDCU provides all necessary services to transport data from the customer's USP to a destination USP on the IDCU or to a gateway to another network. Network interface facilities (NIFs) are calculated by USPs and are comprised of ports and protocols.

The network is controlled and monitored from the NSC in Martinsburg, WV, or from the back-up site in Falls Church, VA. The NSC offers contractor provided, 7-day; 24 hour services. Customer calls are handled via an FTS 2000-800 service (toll free) number.

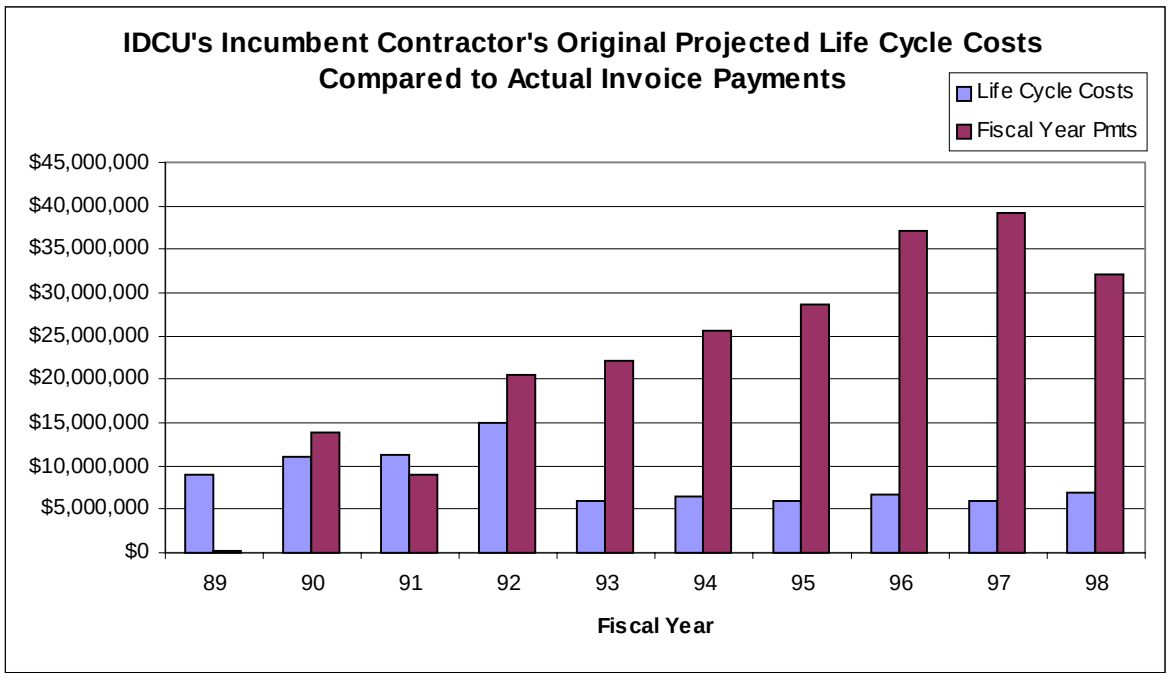
IDCU Contract Award

The contract for the IDCU network was awarded in 1989 to replace the VADATS system. GSA approved a Delegation of Procurement Authority (DPA) for $330 million in 1989. After receipt of three offers in response to VA's Request For Proposal (RFP), VA awarded a firm fixed price, indefinite quantity contract valued at $84,348,332 based on the Best and Final Offer (BAFO) received from the lowest bidder. The contract was awarded for 10 years to provide both a technical and management solution to the Department's WAN requirements. The lowest offer received was valued just under VA's life cycle cost projections of $87,142,004 in the Department's Cost Benefit Analysis Report dated February 1, 1988.

The original contract included a restriction that the contract value could not exceed 200 percent of the BAFO and guaranteed to order a minimum of $750,000 per month worth of services from the contract beginning in month 1 of year 3 of the 10-year contract. The BAFO accepted was $84 million, thus the maximum ordering limitation of the contract was just over $168 million. The maximum ordering limitation was changed in 1992 to $330 million. There were 70 modifications issued to the contract through December 10, 1997. System implementation was phased in over Fiscal Years (FY) 1990 and 1991. The IDCU contract expired on May 31, 1999. As of February 1999, VA had paid the contractor about $240.5 million on the contract.

The IDCU contract experienced significant growth that far exceeded the Department's original plan and emerging technologies have exceeded anything imagined at the time the RFP for the IDCU was developed. Utilization has outpaced original traffic projections by more than 100 percent.

The chart on the next page shows the significant growth of the contract since it was awarded and provides a comparison of the incumbent contractor's projected costs in response to the Department's RFP and actual payments made on the contract.



Departmental Telecommunication Strategic Plans

In March 1998, the Department issued the telecommunications strategic plan as a guide for planning the future evolution of VA's telecommunications infrastructure through the year 2004. The plan recommended that VA's Office of the Chief Information Officer should manage a Department-level effort to accomplish the following:

- Develop a VA-wide telecommunications architecture.
- Develop a VA-wide security plan.
- Implement a VA-wide security policy by devising procedures and acquiring mechanisms that can cost effectively achieve the security objectives expressed in the policy.
- Integrate these procedures and mechanisms into the network architecture in a coordinated fashion.

Actions have been initiated by the Department's new IDCU replacement team to define VA's WAN architecture as part of the team's effort to replace the WAN. In addition, to support the WAN replacement effort, VA has contracted to develop a WAN management process model. Four major tasks of this effort include:

- Identifying VA WAN management process requirements.
- Reviewing best practices for WAN management.

- Developing a VA WAN management process model.
- Identifying organizational options to support the VA WAN process model.

Key elements of the planning effort also include defining the critical success factors, describing the high-level process for WAN management and associating the related requirements, performance measures, and issues with the process. As part of the effort, VA users identified two critical success factors for the WAN management: (i) ensuring reasonableness of costs and fair allocation to users, and (ii) ensuring responsive WAN service to meet user needs. The effort is also focusing on ensuring that accountability for external and internal risk management of WAN operations is assigned and that adequate procedures are in place to manage risks accordingly, as recommended in an interim advisory letter during the course of this audit *(Additional information on VA's risk analysis is in Appendix IV on pages 61 - 62.)*

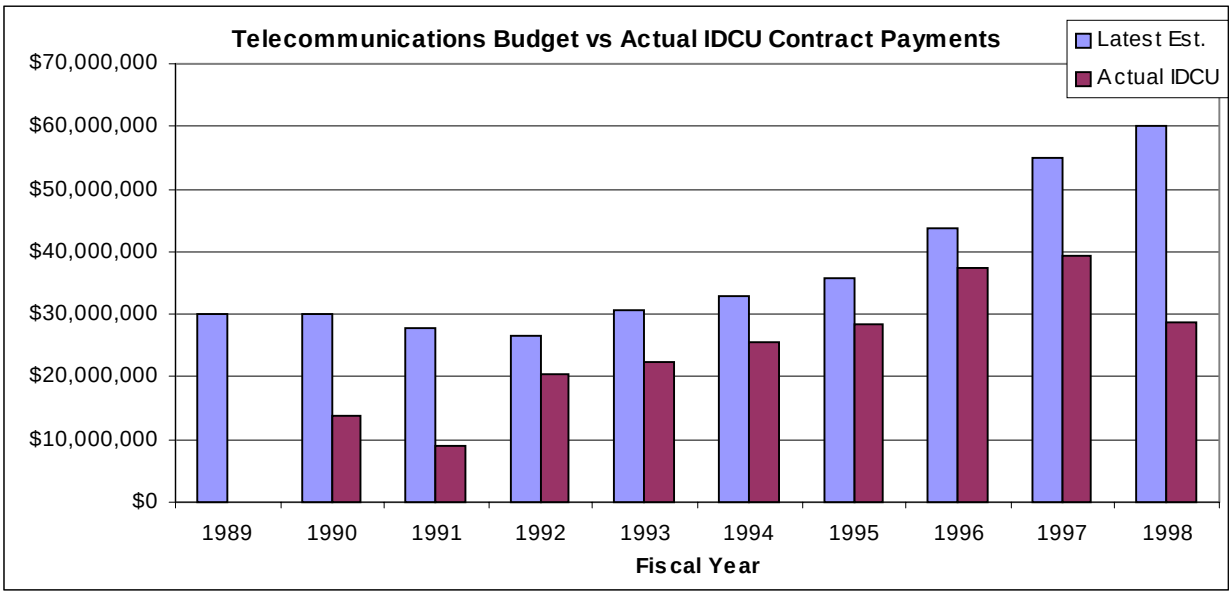
The Department plans to use the GSA's FTS 2001 network as a future vehicle to replace the IDCU contract.

Wide Area Network and Contract Administration

VA's OA&MM is responsible for the award and administration of the IDCU contract. This office is responsible for major acquisitions of systems, goods, and services for VACO including the acquisition of WAN support services.

VA's Office of Telecommunications is responsible for providing WAN and local area network (LAN) assistance and for administering the full range of VA's FTS 2000 program. This office has authority to make corporate-wide decisions on WAN changes and is responsible for formulating and overseeing the implementation of nationwide telecommunications policy and the development of VA's telecommunications strategic planning to address national integration and planning issues.

The Office of Telecommunications also administers VA's annual telecommunications budget that totaled over $50 million in FY 1997. Included within the FY 1997 budget was about $39 million for IDCU contract payments, representing almost 79 percent of the entire VACO Telecommunications budget authority. The chart on the following page provides a comparison of the annual telecommunications budget and actual IDCU contract payments for FY 1989-1998.



There are approximately 50 positions allocated in VACO and at the NSC in Martinsburg, WV, that manage the IDCU operation to provide technical support to customers nationwide for telecommunications requirements. The majority of these positions are reimbursable, paid for by VA's operating components. Work entails processing and overseeing the implementation of customer requests for new or modified IDCU service requirements including real time analysis of IDCU service, engineering analysis of customer requirements, and on-site engineering and consultative support to assist customers with defining the need for and obtaining WAN data communication services.

The Office of Telecommunications is responsible for maintaining security features on the network. Maintaining appropriate security and continuity of operations is important because this network provides key data communications support to more than 500 VA facilities currently connected to the IDCU. These security measures are important given the significance of the financial transactions and data associated with VA's $42.6 billion budget that are transmitted over the IDCU annually.

IDCU organization system management consists of functional management layers for network infrastructure and the interfaces between the network and users, telemanagement of control processors and systems operations, and the system contractor technical support. The IDCU contract ends the contractor's boundary of responsibility at VA facilities USPs and its network management capability cannot probe beyond a USP into a VA facility router or local area network. This is considered to be VA local facility's network management responsibility.

Major IDCU Customers

The size of the VHA and emerging high capacity medical applications make it the largest user of IDCU services. VHA processes approximately 80 percent of all IDCU traffic. When VHA reorganized into 22 VISNs, the reorganization created a new class of traffic, Intra-VISN traffic. This traffic makes up approximately 30 percent of all IDCU traffic. Monthly traffic by VA operating components support that VHA, VBA, National Cemetery Administration (NCA) and OIRM account for more than 95 percent of the total Department's traffic, while small user groups such as the Office of General Counsel account for the remaining Department traffic.

VHA's reorganization to decentralized VISN elements gave the individual VISNs responsibility for their data communications budget, but administering that budget authority was problematic because VISN officials lacked real user IDCU cost information. In FY 1998, the Department attempted to transfer the administration of IDCU budget authority to the VISNs, however IDCU funds were returned to VACO after VISN officials complained they could not effectively manage these funds without some understanding of service and usage costs. The Department recognized that a disconnect between the decision making and funding in response to needs and unique business requirements exists. The new IDCU management team is working toward developing a WAN management process that supports agreement by users on policy and organization and still maintains an acceptable level of support for the system's small users.

IDCU Network Use and Demand

IDCU System traffic volume has grown from 20 billion characters per month in March 1991 to over 293 billion by August 1997. VA reached its 10-year traffic projection in year 4 of the contract.

IDCU Management Services and Performance Monitoring

VA's Office of Telecommunications manages the IDCU operations in conjunction with a primary contractor and a subcontractor. System management activities conducted on the network include requirements tracking, configuration control, fault management, performance monitoring and reporting, utilization and traffic monitoring and reporting, and security management. The IDCU's prime contractor developed a network software monitoring tool to provide system data-gathering capabilities for:

- System engineering.
- Requirements, implementation, and operation.
- Change management.
- Configuration management.

- Problem and maintenance management.
- Performance management.
- Resource management.
- Security management.

The support tool developed and used to manage the IDCU is the Telemanagement Information System (TIS). The TIS system is used by VA staff, the IDCU contractor, and other subcontractors, to support a variety of project responsibilities. It is the central repository of all operational and management information designed to support IDCU activities.

ADDITIONAL AUDIT DETAILS IN SELECTED FINDING AREAS

A. IDCU CONTRACT MODIFICATIONS

The Department awarded a firm-fixed priced indefinite quantity contract on June 1, 1988, for $84,348,322. Our audit could not obtain reasonable assurance that contract modifications: (i) met technical and legal requirements, (ii) reflected the Department's needs, (iii) culminated from proper negotiations, when required, or (iv) facilitated financial accountability. There was no support that the Contracting Officer (CO) ensured that the contract was technically and legally sufficient and complied with Federal Acquisition Regulations (FAR) and VA policies and regulations. Also, support was lacking that changes were properly negotiated and approved, and documentation was inadequate to support contract modifications that added significant funds to the contract.

We found that 70 modifications to the contract were issued through December 10, 1997. On 19 different occasions, funds totaling $141,943,422 were added to the contract without identifying contract items. The following table identifies the unsupported modifications by number, date, and dollar value.

Number	Date	Funds Added
12	9/29/91	$1,500,000
20	6/1/92	4,000,000
23	9/15/92	5,000,000
34	9/30/93	6,120,000
38	1/25/94	12,800,000
39	5/10/94	6,749,000
45	12/7/94	12,299,999
46	5/3/95	5,971,900
48	6/21/95	3,000,000
49	8/9/95	6,126,000
51	9/19/95	5,250,000
53	12/20/95	5,200,000
54	2/20/96	4,900,000
56	4/22/96	5,800,000
58	7/9/96	10,000,000
60	9/29/96	8,416,524
62	3/7/97	17,710,000
63	5/6/97	11,100,000
70	12/10/97	9,999,999
Total		**$141,943,422**

The CO stated in general terms only that the contract growth was a result of increased traffic, new technology, adding additional projects, and inflation. We were advised that

an independent consultant was used to perform price reasonableness reviews during the contract. We requested the consultant's work products but support was never provided. The contract files lacked evidence that changes proposed by the contractor were negotiated to assure price reasonableness and the contractor was allowed to change prices without oversight by the CO.

Documentation certifying fund availability was usually not in the contract file. Appropriate documentation was included for 6 modifications, but none was seen for the 19 funding increases listed on the previous page. We also found that supplemental agreements and change orders to the contract were made without technical and legal review, or concurrence. Most modifications required legal review and concurrence of the Office of General Counsel. Accounting and appropriation information was not appropriately noted on Standard Form (SF) 30. On the 42 modifications we identified that required accounting information, only 4 included accounting classification information.

The Department could have improved financial accountability for this contract by ensuring that contract modifications were properly executed and documented. Forms used to execute modifications were usually not numbered properly or filled out properly. For example, the contract modification master number, with one exception, did not follow the VA Acquisition Regulation classification that makes distinctions between supplemental agreements, change orders, and time extensions. Only one change order (C/O #A) was numbered as prescribed by VA policy.

Supporting documentation for one contract modification showed that the CO increased the value of the modification from $342,000 to $634,000. This was accomplished by initialing a pen and ink change without any justification of price reasonableness or documentation supporting the increase or change.

Our review of contract modifications identified numerous modifications that placed the Department at risk of being unable to ensure this procurement was effectuated legally. We identified over 50 contract modifications valued in excess of $100,000 each that lacked legal and technical review required by Department policy.

The CO responsible for administering this contract was unable to provide adequate information during the audit to support the status of the following:

- Current value of the contract.
- Amount of funding obligated.
- Complete record of Customer Service Orders (CSO) issued under the contract.

- Complete record of logs and impact statements issued under the contract.
- Value of outstanding orders payable to the contractor.
- Value of invoices paid.
- Price support for two randomly selected contract modifications was not provided:

#14 dated 11/22/91 valued @	$22,148,903
#70 dated 12/10/97 valued @	$ 9,999,999
Total	**$32,148,902**

As a result, we concluded that the Department had no way of adequately assuring that it obtained a reasonable value for the services purchased. There was also no way of ensuring, at the time of modification, that there was actually funding available to support a modification due to the lack of accounting appropriation information.

IDCU Contract Scope Was Changed Without Benefit of Technical Review

On at least the three occasions described below, the scope of the contract was significantly changed without the benefit of technical review.

- A change order (C/O #A), dated September 27, 1990, was issued to prepare a proposal for a lower gateway facility in accordance with a statement of work for a test and integration site and a pilot facility.

- A supplemental agreement dated May 29, 1991, provided funding for a test and integration site and a pilot facility for the proposed regional office gateway for a firm fixed price of $3,487,522 for materials. The parties agreed to install materials on a time and material basis. However, no documentation was prepared to support the use of a cost type contract or the modification of a firm fixed price contract into a cost type contract.

- A modification was issued on June 4, 1993 to definitize previous negotiations for the Hines Benefits Delivery Center redundancy.

Items Added to Contract Were Inconsistent With Original Contract Scope

Items added to the contract also did not appear consistent with the contract's original scope. The new CO advised that this contract had too many changes and it had become extremely difficult to sort out what was to be done at what cost. During the course of the audit, we brought our concerns to OA&MM management, who took action to ensure the business risks to the Department were minimized to the extent possible. Examples of

modifications that inappropriately changed the contract scope and items that we considered were inconsistent with the original contract scope are discussed below.

- The current contract exceeded its maximum ordering limitation of $168 million. We found that although GSA approved a Delegation of Procurement Authority for $330 million in 1989, the CO had included a restriction in the original contract award that the contract value could not exceed 200 percent of the BAFO. Thus, the maximum ordering limitation was established in the original contract at just over $168 million. The CO changed the maximum ordering limitation to $330 million in 1992 using contract modification #21. Our discussions with the CO's supervisor, confirmed that the CO lacked the authority to make such a cardinal change. We also found that the modification had not been reviewed by the Office of General Counsel. CO's are responsible for the technical and administrative sufficiency of the contracts they enter into and ensuring that all legal and technical reviews are accomplished. FAR Section 16.504 indicates that the contract shall require the Government to order and the contractor to furnish at least stated minimum quantities and the contractor is to furnish any additional quantities not to exceed a stated maximum.

- Our review of the FY 1997 paid invoice information also showed that the scope of the contract work was exceeded. We found that items such as ATM pilots (valued at almost $400,000), an IDCU Security Penetration Study (valued at $68,200), and a Business Case Development for Internet Service Study (valued at $66,000) were added to the contract. During the course of the audit, we advised the Department that while it administers the final option year of the IDCU contract, items such as those identified should not be added to the contract. Discussions with the new CO confirmed that these services should have been acquired using full and open competition or other appropriate contracting mechanisms. OA&MM management put appropriate controls in place to stop ordering services that did not meet the intent of the original contract while ensuring mission critical services to the Department continue to be provided.

A newly assigned CO has initiated actions to address the contract administration deficiencies noted and is working to reconstruct the incomplete records associated with work performed. However, we concluded that overall this contract lacked effective contract administration and oversight because the CO that administered this contract from 1989 through 1998 did not ensure compliance with the terms of the contract or support the price reasonableness of the services being acquired under the contract. In addition, the CO did not ensure that audit trails were adequate to validate expenditures.

B. PROCESSING CUSTOMER SERVICE ORDERS (CSO)

We found that available cost information for the IDCU contract was not complete and difficult to reconstruct because many CSOs were not priced and work was performed before the contractor provided a priced impact statement. Also, some impact statements were missing or never prepared. We concluded that VA's process used to issue IDCU CSOs was not effective to ensure accountability over contract expenditures because the documentation available was incomplete or missing and audit trails were inadequate.

We found that the IDCU contract was never funded based on actual Department requirements included in individual orders, logs, or impact statements. The CO confirmed that contract funding was added to the contract in aggregate amounts based on a predetermined budget, while CSOs were used to identify the actual work obligations. There was no direct link between CSOs and funding modifications. As a result, there were inadequate audit trails to support increases in the contract and the Department had no means to determine if it paid reasonable prices for IDCU services it purchased.

Based on our review of CSOs issued during FY 1997, we found examples where the CSOs contained the following types of deficiencies:

- CSOs did not clearly describe all services to be performed.
- CSOs were issued prior to obtaining impact statements when services did not fit within the existing contract line item number (CLIN) structure, thus requiring a proposal.
- Impact statements did not always include CLIN numbers.
- CSO and impact statements listed different CLIN numbers.
- Unexplained costs were included on CSOs.
- CSOs did not include pricing information.
- Pricing information on impact statements differed from that on CSOs.

During the past 10 years, VA processed approximately 2,000 CSOs under the IDCU contract. Almost none of the CSOs were properly definitized for a number of reasons. CSOs lacked required information such as the contract number, accounting data, appropriation data, adequate or accurate description of services and prices. In fact, the CSO documentation was so lacking that the process did not adequately support financial accountability or funding decisions.

The following is an abbreviated description of the process. A log is a customer request for IDCU service. Logs are sent to the contractor. Using logs, the contractor prepares cost estimates for requested services called impact statements. If the CO agrees with the estimate or negotiates a better price, a CSO is issued authorizing the contractor to

proceed with the work. There can be exceptions to this process if justified. Emergency situations might justify issuing CSOs before receiving impact statements.

We found that the process did not take place according to procurement policy regulations. The Department's recently assigned CO evaluated the previous CSOs issued and related documentation and estimated that approximately 2,000 CSOs were not properly definitized, which essentially represents most of the orders placed against this contract. The CO assigned to improve administration of the IDCU contract was unable to obtain information in a format appropriate for assessing orders and payments, since neither the prior CO nor program staff in OIRM maintained a complete database to track orders.

We requested copies of all CSOs placed against this contract. However, OIRM officials were unable to provide them because many orders pre-dated the implementation of the Telemanagement Information System (TIS) in 1995 and were not recorded in the system. The CO recently built several different databases of LOGs, CSOs, and impact statements in an attempt to establish a complete record of contract actions. While we see that improvements over the process are being implemented, our review of CSOs supports that management controls were weak and OIRM staff frequently issued CSOs prior to receiving impact statements from the contractor that delineated prices.

Systematically accounting for CSOs was important because they are obligation documents used for authorizing work on the IDCU contract. As obligation documents, they guaranteed payment based on the availability of funds. The system for generating CSOs, the auto log system, had many faults. CSOs are automatically priced and generated after CLIN number(s) and quantities are entered into the system, but there was no assurance that the prices were correct because price changes may not have been entered into the system. In addition, the system only generates non-recurring costs. Lastly, the ordering documentation omitted critical information.

Poor documentation had an adverse effect on funding this contract. The CSO documentation was so lacking that the process did not support funding decisions. As a result, the Department has no means to determine if it paid reasonable prices for IDCU services.

C. CONTRACT BILLING PRACTICES

The IDCU contract contained complex billing practices that did not provide system users with real usage costs. Our review of selected IDCU invoices determined that there was insufficient information on the invoices to identify how much money was paid to the prime contractor and subcontractor for program management fees. The bundled pricing strategy did not provide sufficient visibility over major cost items. The Department experienced problems updating the bundled items and it had no billing mechanism to extend prices.

The Department tasked a billing review team in July 1997 to help IDCU customers resolve FY 1997, 1998, and 1999 telecommunications billing issues. The team agreed there was a need for direct allocation of costs to WAN users to the maximum extent possible. The team noted that about 50 percent of the costs on the incumbent's invoices were shared in nature, and required VA agreement on the allocation method for distribution to users. The team agreed that billing procedures should assure that each organization pay their fair share of costs. A new invoice system was established in response to VA's request that the IDCU contractor provide agency/administration-specific invoice detail based on charge-back system account codes. In addition, OIRM instituted new IDCU invoice review procedures effective in September 1998.

D. YEAR-END ACCRUALS

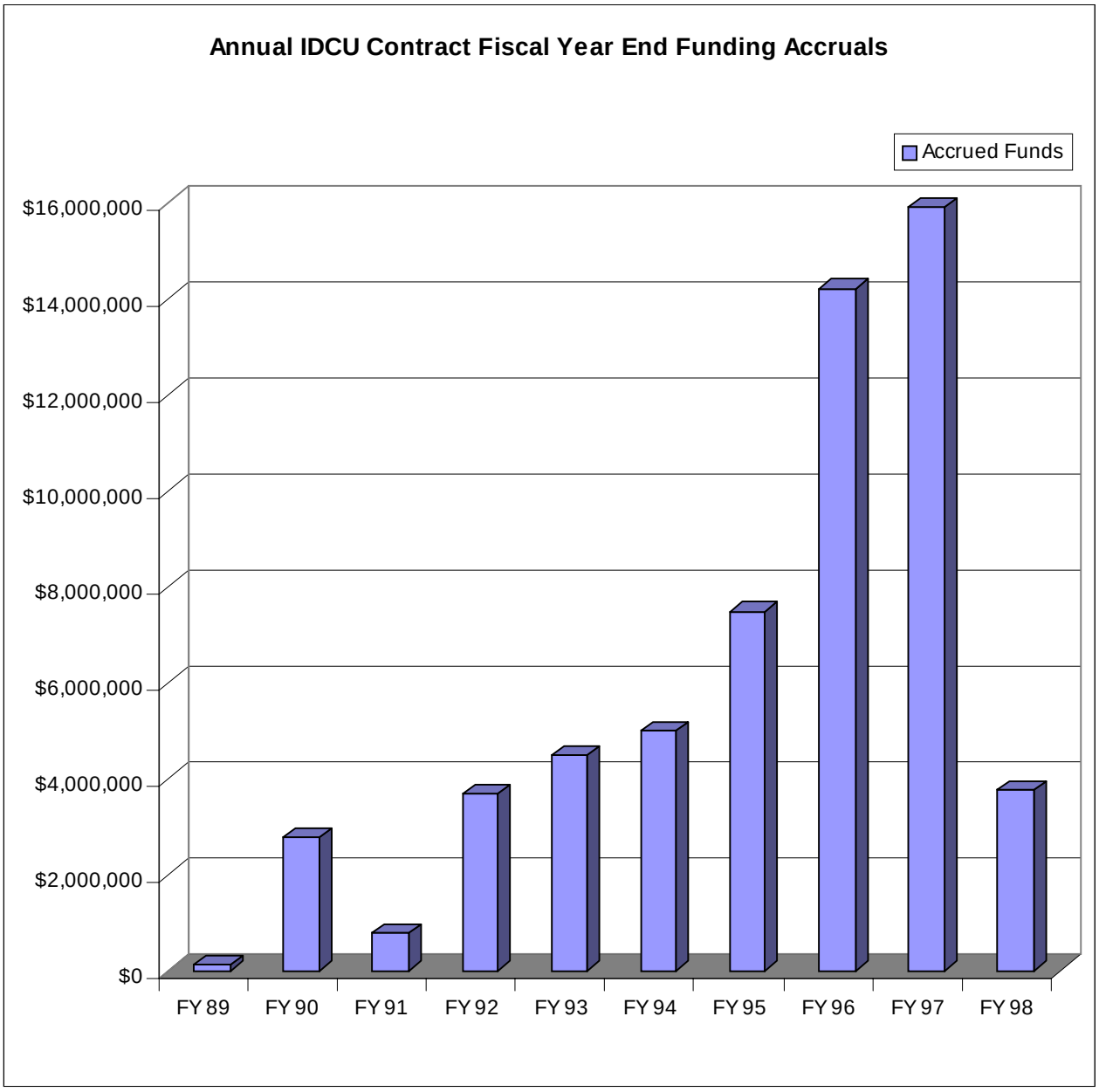
The Department needed improvements in the management of the VACO, Office of Telecommunications annual telecommunications budget that totaled over $50 million in FY 1997. The IDCU contract obligations totaled $39 million, and represented almost 79 percent of the entire budget authority. Approximately $16 million of the $39 million that was available for FY 1997 IDCU operations was not spent during FY 97, and thus was established as an accrual at the end of FY 97. Given the significant amount of annual IDCU contract funds set-aside as an accrual, we examined how IDCU funds within the FY 97 accrual were spent to determine if expenditures were properly matched to FY 97 obligations consistent with annual funding restrictions.

Our review of a sample of selected expenditures indicated that the expenditures against the accrual did not always have a logical relationship to the annual appropriation. We identified $684,500 of FY 97 payments that should have been paid using a different annual appropriation. This occurred because program officials did not properly match IDCU contract expenses to the annual budget authority. Transactions authorized by the Economy Act are limited by the statutory requirements and must occur within the time limits applicable to the appropriation. Generally, for contracts involving recurring services, the contract covers only the period funded and obligations should be recorded for the full amount of the contract for these services. However, the full cost and performance information of the IDCU contract was extremely difficult to reconstruct because contract modifications did not identify why funding was added to the contract, many CSOs were not priced, and work was performed before the contractor provided a priced impact statement. While our testing of accrual payments was limited, we believe that the value of IDCU contract expenses that were not properly matched to their annual appropriation had the potential to be significantly higher. Management action was needed to require that future IDCU contract expenses are properly identified and matched with the annual budget authority. In response to our findings, the Department's new IDCU replacement team took corrective actions that resulted in a significant reduction in the FY 98 year-end accrual as shown in the chart on the next page.

We also identified $1,013,514 in expenditures for frame relay circuit charges were appropriately charged against the FY 96 appropriation, but were later credited from that appropriation and charged against the funds remaining in the FY 95 accrual as an invoice adjustment. Since the CSOs for the circuit charges were issued in FY 96; we concluded the related expenditures should not have been paid against the FY 95 appropriation. Program officials advised that the invoice adjustment was made because FY 95 funding was still available to cover these charges.

APPENDIX III

The chart below shows the significant amount of annual IDCU contract funds set-aside as an accrual for payments.



E. UNUSED IDCU PORTS

Our review found that VA leases five types of X.25 telecommunication ports called NIFs. NIFs contains 4, 8, 16, 20, or 44 ports. We calculated the average cost of ports associated with each type of NIF using the pricing information on the IDCU contractor's recent invoices. We determined that VA was charged for 17,964 ports on the contractor's September 1998 invoice at a cost of $252,948, including maintenance and leasing charges. Based on the invoice information available, we calculated the average monthly port cost was $14.08. Based on input provided by the audit client in response to the draft report, about 14 percent of VA's ports were not used throughout the life of the contract. We calculated that the level of unused ports over the life of the contract cost VA $3.1 million as summarized below:

- 17,964 ports x 14 percent = 2,514 unused ports
- 2,514 x $14.08 average cost = $35,397/month
- $35,397 times 84 contract months[2] = $2,973,348
- 6,400 ports[3] x 14 percent =896 unused ports
- 896 x $14.08 = average cost of $12,616/month
- $12,616. X 12 contract months = $151,392
- $ 2,973,348 plus $151,392 = $ 3,124,740

More recently we found that approximately 46 percent of all X.25 ports were inactive in October 1997 and for the period May 1998 through July 1998. Nearly half of the USPs (the point at which the customer connects to the IDCU) had one to as many as 62 ports that passed no traffic during the 90 day period. There were 2,945 unused ports identified in the TIS that had not passed traffic since July 1998 at USPs. The following ten USPs with the greatest number of ports passing no traffic included one VISN and one medical center.

USP Location	ADDRESS	No. of Unused Ports
688.70	IFO Silver Spring, MD	62
120.07	VBA 1800 G Street Washington DC	60
200.00	IRM Austin, TX	57
566.80	VISN Fort Howard, MD	54

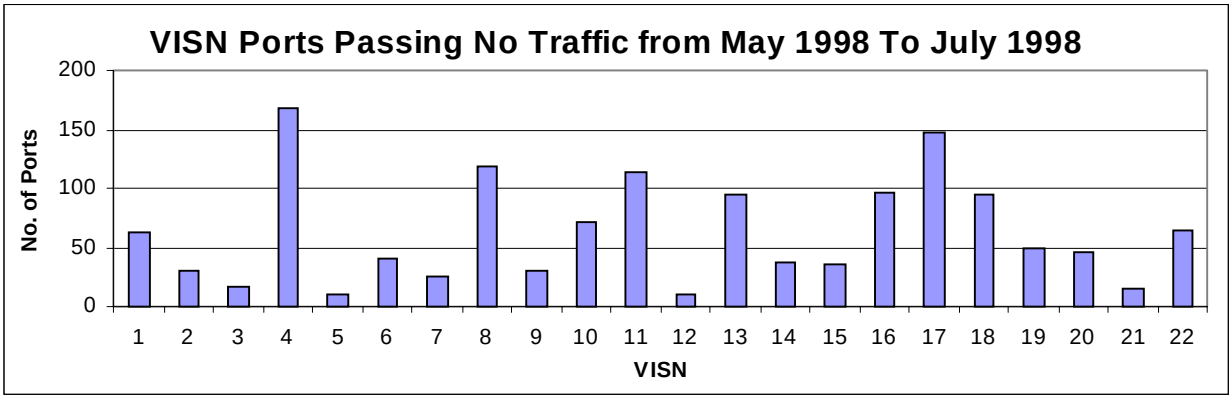
[2] Covers contract months 25 through 108–the first 24 months were used for system development, thus no port costs were calculated for this period.

[3] IDCU 1998 Annual Engineering Analysis Report projected that the number of ports in the final option year of the contract would drop below 6,400. We used this estimate of ports for the last 12 months of the contract to account for the Department's efforts to deactivate unused ports.

600.12	RME Long Beach, CA	54
111.00	VAH Martinsburg, WV	51
999.00	IRM IDCU	50
632.12	RME Northport NY	47
516.00	MC Bay Pines FL	46
132.01	IRM Austin	45

Our review identified 18 USPs that had been inactive for at least 6 months from October 1996 through December 1998. We contacted IDCU representatives at some sites to determine why these locations were not passing traffic. At three sites, we found that program entities had physically moved to new locations without disconnecting service. As a result, the Department spent almost $63,300 to provide service at the vacated sites because the network was not disconnected in a timely manner.

The following chart depicts the number of unused ports by VISN locations. Of the 1,379 unused ports at VISN locations, VISNs 4 (Pittsburgh, PA), 8 (Bay Pines, FL), 11 (Ann Arbor, MI), and 17 (Grand Prairie, TX) had over 100 ports each not passing traffic from May through July 1998.



F. PERFORMANCE MANAGEMENT SYSTEM (PMS)

We examined the IDCU contractor's invoices and found that VA overpaid the IDCU contractor $1,025,660 for the development of the PMS. The contractor was provided 2 years from the start of the contract to develop performance management software for the IDCU network. The PMS was expected to provide VA with the following benefits:

- Ensure compliance with stated performance standards by providing performance and capacity validation.
- Identify traffic patterns to help avoid potential bottlenecks.
- Provide accurate statistics on network component and access line utilization, thereby allowing maximum performance with minimum resources.
- Provide a proactive approach to maintaining high service levels.

However, we concluded these benefits were lost since the contractor was unable to develop an acceptable system.

Performance management software is generally focused on the quality, effectiveness, and efficiency of network communications. Information obtained from performance management, such as the long-term collection of statistical data is used for trend analysis and capacity planning. As a result of not having the information the PMS system was expected to provide, the Department did not have complete and reliable information needed to evaluate network performance and usage to adequately manage its current system, or plan effectively for a new network. The chart below identifies payments made by the Department for the PMS that VA should ensure are recovered from the IDCU contractor.

Analysis of Payments and Applicable Credits for the Department's PMS

Month of Service	Invoice #	$ Charge	$ Credit	Net Diff. $ (+/-) Overpayment
Sep-97	102A	$24,592.60	$24,592.60	$0.00
Aug-97	101A	$24,592.60	$24,592.60	$0.00
Jul-97	100A	$24,592.60	$24,592.60	$0.00
Jul-97	100AA	$24,592.60	$24,592.60	$0.00
Jun-97	99A	$24,592.60	$24,592.60	$0.00
May-97	98A	$24,554.10	$24,554.10	$0.00
Apr-97	97A	$24,554.10	$24,554.10	$0.00
Mar-97	96A	$24,554.10	$24,554.10	$0.00
Feb-97	95A	$24,554.10	$24,554.10	$0.00
Jan-97	94A	$24,554.10	$24,554.10	$0.00

Dec-96	93A	$24,554.10	$24,554.10	$0.00
Nov-96	92A	$24,554.10	$24,554.10	$0.00
Oct-96	91A	$24,554.10	$24,554.10	$0.00
Sep-96	90A	$24,554.10	$24,554.10	$0.00
Aug-96	89A	$24,554.10	$24,554.10	$0.00
Jul-96	88A	$24,554.10	$24,554.10	$0.00
Jun-96	87A	$24,554.10	$24,554.10	$0.00
May-96	86A	$24,515.90	$24,515.90	$0.00
Apr-96	85A	$24,515.90	$24,515.90	$0.00
Mar-96	84A	$24,515.90	$24,515.90	$0.00
Feb-96	83A	$24,515.90	$24,515.90	$0.00
Jan-96	82A	$24,515.90	$24,515.90	$0.00
Dec-95	81A	$24,515.90	$24,515.90	$0.00
Nov-95	80A	$24,515.90	$24,515.90	$0.00
Oct-95	79A	$24,515.90	$24,515.90	$0.00
Sep-95	78A	$24,515.90	$24,515.90	$0.00
Aug-95	77A	$24,515.90	$24,515.90	$0.00
Jul-95	76A	$24,515.90	$24,515.90	$0.00
May-95	74A		$146,867.40	-$146,867.40
Feb-95	71A	$24,477.90	$0.00	$24,477.90
Jan-95	70A	$24,477.90	$0.00	$24,477.90
Dec-94	69A	$24,477.90	$0.00	$24,477.90
Nov-94	68A	$24,477.90	$0.00	$24,477.90
Oct-94	67A	$24,477.90	$0.00	$24,477.90
Sep-94	66A	$24,477.90	$0.00	$24,477.90
Mar-94	60A	$24,440.20	$0.00	$24,440.20
Feb-94	59A	$24,440.20	$0.00	$24,440.20
Jan-94	58A	$24,440.20	$0.00	$24,440.20
Dec-93	57A	$24,440.20	$0.00	$24,440.20
Nov-93	56A	$24,440.20	$0.00	$24,440.20
Oct-93	55A	$24,440.20	$0.00	$24,440.20
Sep-93	54A	$24,440.20	$0.00	$24,440.20
Aug-93	53A	$24,440.20	$0.00	$24,440.20
Jul-93	52A	$24,440.20	$0.00	$24,440.20
Jun-93	51A	$24,440.20	$0.00	$24,440.20
Dec-91	31 & 31R	$36,611.50	$0.00	$36,611.50
Nov-91	29	$36,611.50	$0.00	$36,611.50
Oct-91	28	$36,611.50	$0.00	$36,611.50
Aug-91	25A	$36,611.50	$0.00	$36,611.50
Jul-91	24	$36,611.50	$0.00	$36,611.50
Jun-91	23	$36,611.50	$0.00	$36,611.50

May-91	22	$36,574.40	$0.00	$36,574.40
Apr-91	21	$36,574.40	$0.00	$36,574.40
Mar-91	20	$36,574.40	$0.00	$36,574.40
Feb-91	19	$36,574.40	$0.00	$36,574.40
Jan-91	18	$36,574.40	$0.00	$36,574.40
Dec-90	17A	$36,574.40	$0.00	$36,574.40
Nov-90	16	$36,574.40	$0.00	$36,574.40
Oct-90	15	$36,574.40	$0.00	$36,574.40
Sep-90	14	$36,574.40	$0.00	$36,574.40
Aug-90	13	$36,574.40	$0.00	$36,574.40
Jul-90	12	$36,574.40	$0.00	$36,574.40
Jun-90	11	$36,574.40	$0.00	$36,574.40
May-90	10	$30,674.10	$0.00	$30,674.10
Apr-90	9	$30,674.10	$0.00	$30,674.10
Mar-90	8	$30,674.10	$0.00	$30,674.10
Feb-90	7	$30,674.10	$0.00	$30,674.10
TOTAL		**$1,859,814.70**	**$834,154.50**	**$1,025,660.20**

G. IDCU CONTRACT GUARANTEE

The original IDCU contract award in 1989 guaranteed the contractor almost $16 million more than the contractor requested in its BAFO that was accepted. The chart below compares the minimum guarantee in the contract by Fiscal Year (FY) to the contractor's BAFO. This comparison shows that in FYs 1993-1998 the contract guarantee was excessive. Because the actual services ordered by the Department exceeded the minimum guarantee in the contract, the Department never realized a potential loss because of the excessive guarantee. However, this decision put the Department at unnecessary risk, and should be considered as lessons learned to ensure similar decisions are not replicated in acquiring future WAN services.

FY	Minimum Guarantee @$750K/mo.	Contractor's Proposed Life Cycle Costs	Annualized Excessive Guarantee
1989	None	$8,904,298	N/A
1990	None	$11,125,122	N/A
1991	$9,000,000	$11,263,090	None
1992	$9,000,000	$14,936,470	None
1993	$9,000,000	$5,990,860	$3,009,140
1994	$9,000,000	$6,377,636	$2,662,364
1995	$9,000,000	$6,059,944	$2,940,056
1996	$9,000,000	$6,774,491	$2,225,509
1997	$9,000,000	$6,026,839	$2,973,161
1998	$9,000,000	$6,889,188	$2,110,812
Total		**$84,348,332**	**$15,921,042**

H. ACQUISITION SUPPORT CONTRACT INVOICE RECORDS

The Department spent almost $2.6 million to develop a draft RFP for an IDCU-FO contract, but it received products that did not adequately address major customer requirements. VA estimated the value of this procurement to be $2.8 million. The Department awarded a support contract to a Small Business Set Aside, Section 8(a) contractor to facilitate the acquisition support needed to award an IDCU-FO contract. However, we found that VA received a proposal from this contractor that priced only part of the work requirements (task orders 1-5).

The COTR advised that the primary deliverable in the acquisition contract was the development of a RFP. Documentation in the contracting files showed that the development of the RFP was in task order # 6. The cumulative price for task orders #1-5 was $2,055,755. This value fell below the $3 million competition threshold for awarding contracts to small 8(a) eligible firms. However, prices to perform tasks 6 and 7 raised the value of the total contract requirements to exceed the competition threshold to $3,830,593. Although the estimated value of the proposed 8(a) requirement did not exceed the competition threshold, the CO should have ensured that all of the work requirements were priced in the initial proposal. The original estimate for this 8(a) requirement was undervalued and the CO should have obtained prices for all of the requirements prior to award. The contractor's proposal would have better identified a need to compete the proposed requirements.

A draft RFP was received from the contractor on December 23, 1997, and released for industry comments and review by IDCU representatives in VA's operating components. Both VBA and VHA also complained that the RFP prescribed in excruciating detail the current existing IDCU management structure and operations. VBA managers noted that there was no consensus on a unified set of customer requirements and no substantial customer involvement in developing a statement of work for the future WAN requirements. VHA's Associate Chief Information Officer advised that VHA staff reviewed the draft RFP and were dissatisfied with the product. As a result of their dissatisfaction with the draft RFP, each operating component proceeded on a separate initiative to define their future requirements using another independent contractor. VA received additional complaints from vendors that the RFP was too prescriptive and favored the incumbent IDCU contractor.

OA&MM officials expressed concern that the prices VA paid for the work performed developing the RFP were excessive and the quality of work product received was not acceptable. The RFP used incorrect contract clauses and proposed to deviate from FAR clauses, by tailoring contract clauses to have competitors waive protest rights. In addition, procurement officials voiced added concerns that their review of the draft RFP found that it included prescriptive requirements and appeared skewed to the incumbent

IDCU contractor, because the incumbent was the only firm that could effectively price the same network. OA&MM officials took action to address their concerns by issuing a termination for convenience action.

We confirmed that the contractor returned $564,891 to VA in overpayments identified during the course of the audit. Our analysis of the funds remaining in the Department's obligations for this contract showed that about $380,000 could be de-obligated if no additional contract commitments are outstanding.

RISK ANALYSIS FOR THE TRANSITION OF THE DEPARTMENT'S WAN REQUIREMENTS

During the course of the audit, we determined that the Department needed more information to identify and assess the business risks associated with transitioning to a new contract mechanism or solution. We advised the then Acting Assistant Secretary for Management that a formal risk analysis was needed to consider the impact of VHA reorganization into VISN operations. The analysis was also needed to identify the risks associated with using alternative strategies for acquiring future WAN requirements. In response to our audit findings, the Department's IDCU replacement team developed a statement of work to contract for a formal risk analysis that could effectively address the transition of the Department's existing WAN contract to a new contract solution.

In response to the IDCU replacement team's request, we reviewed the statement of work the Department developed for the formal risk analysis. We found that VA needed to adequately assess, manage, and mitigate the level of risks associated with transitioning to a new telecommunications service solution. In addition, the Department needed to provide reasonable assurance that the current system, contractual transition activities, and alternative future solutions could be adequately protected from known threats such as availability, privacy, integrity, and fraud.

We advised that risks could best be managed by taking a broad business oriented view of both risk and the management of risk. Thus, we noted that the statement of work provided for our review was too narrowly focused on addressing the Department's immediate contract transition needs and did not appear to provide a comprehensive risk analysis effort that the Department needed. As a result, we recommended that the statement of work be revised to specifically address the need for the contractor to identify mitigating alternatives and strategies, considering short and long term solutions, in addition to evaluating each alternative against known risks. Also, there was a need to assign risk management accountability for IDCU operations within VA program staff to continue to monitor the internal and external environments for the changes in conditions and compliance with controls.

We advised that a risk assessment also needed to consider the impact of VHA's decentralization to VISN operations. Some VISNs had already begun implementing alternative telecommunications strategies. The effort needed to examine the pre-existing operational constraints associated with applications currently being processed over the network and risks to other automated systems. For example, the IDCU provides an important link to finance customers and will play a key role when projects like *HR Links*, *FMS*, and *IFCAP* are linked. The risks associated with complying with mandatory requirements to use GSA's Federal Telecommunication Services support services must be considered. Also, work needed to entail identifying other existing or potential external

factors in order to provide a better strategic plan for proceeding with the implementation of an alternative follow-on service solution.

Special attention was needed to ensure system security and sensitivity risks were carefully addressed in terms of recommended safeguards, backup and contingency plans, and other security-related procedures that may be required to mitigate risks. Intentional and accidental errors and malicious acts by employees and insiders can potentially cause a considerable amount of damage and losses. There is a high potential that the Department's future strategy may result in VA employees and/or staff from the incumbent IDCU contractor being displaced, thus resulting in a potentially hostile environment. Based on our previous audit work, we found that there was too much technical reliance on the incumbent contractor and there are only a limited number of personnel that understand the complexities of VA's current IDCU contract and the needs associated with implementing and managing a national WAN. As a result, we concluded that the statement of work needed to specifically request an assessment of the adequacy of existing controls over employees and contractors having administrative roles with respect to IDCU network service that have a high level of knowledge and/or privileges that could potentially pose a threat.

We also saw that the Department's WAN architecture was changing at a rapid pace based on the implementation of VISN strategies to implement alternative ATM pilots, use of established contracts administered by other Federal agencies, and acquiring telecommunication support through alternative sources. As a result, new risks were inevitable and needed to be identified along with plans to control the relationship of such risks. Thus, the Department needed a more comprehensive risk assessment than the statement of work had provided for. We concluded the Department could be better served by restructuring the statement of work to ensure the work provided the Department with clear objectives designed to answer the following questions relating to risks:

- What risks are present regardless of strategy or solution?
- What new risks are unique to a contractual transition?
- What are the principal elements of risks within the following life cycle phases (i.e. current contract performance, administrative closure of the existing IDCU contract, transition to a new solution and contract, and future solutions)?
- Does any one solution control and mitigate risks to the Department such as maintaining a centrally managed IDCU system?

The Department took positive actions to address the concerns we raised and revised the statement of work to incorporate our input. The Department is currently in the process of completing its risk assessment.

MONETARY BENEFITS
IN ACCORDANCE WITH IG ACT AMENDMENTS

REPORT TITLE: Audit of Procurement Initiatives for VA's Integrated Data Communications Utility (IDCU) Telecommunications Support

PROJECT NUMBER: 1998-02130-D2-0197

Recommendation Number	Category/Explanation of Benefits	Better Use of Funds	Questioned Costs
1	Better use of funds, by ensuring the Department pays fair and reasonable prices for services and items added by contract modification.	$142 million	
2(a)	Better use of funds, by assuring that the Department deactivates unused and unnecessary IDCU ports.	$3,124,740	
3(c)	Better use of funds, by recovering all payments made to the IDCU contractor for the PMS.	$1 million	
5	Better use of funds, by canceling task order #7 on the IDCU acquisition support contract.	$944,891	
7	Better use of funds by not splitting purchase order requirements and ensuring competition for WAN work requirements.	$ 60,000	
Total		**$ 147,129,631**	

APPENDIX VI

GLOSSARY OF IDCU TERMS

This glossary includes standard definitions for common WAN and IDCU terminology.

Protocol
A set of formal rules describing how to transmit data, especially across a network. Low level protocols define the electrical and physical standards to be observed, bit- and byte-ordering and the transmission and error detection and correction of the bit stream. High level protocols deal with the data formatting, including the syntax of messages, the terminal to computer dialogue, character sets, sequencing of messages, etc.

Synchronous
One of two general types of data transmission using several coding schemes. Synchronous transmission is the faster rate and requires the receiving terminal to be synchronized bit-for-bit with the sending terminal. This eliminates the need for start and stop bits thereby improving the efficiency (speed) of data transmission.

Asynchronous
Asynchronous is the second general type of data transmission. This type of transmission is at a slower rate as in telegraph communications with a start and stop of each character. Asynchronous codes are further classified into baudot and binary coded decimal (BCD). Baudot is a 5-level code with 32 possible combinations. This code is used with some teletype machines. The term baud in baudot means one pulse or code element per second. Baudot uses five bits for the character plus a start and stop bit. BCD is similar to baudot but has a 6-level code. The extended binary-coded decimal interchange code (EBCDIC) uses an 8-bit data code on IBM mainframe computers. American standard code for information interchange (ASCII) uses 7 or 8 character bits plus two or three bits for starting and stopping. ASCII is used in personal computers.

X.25 Packet Network
X.25 is a connection-oriented protocol that defines the connections of terminals and computers to packet-switching networks. The protocol can provide any-to-any connections for simultaneous users. Signals from different users can be multiplexed through the X.25 interface into the network.

The IDCU's X.25 Packet Network provides a medium speed; extremely reliable, fault tolerant data transport and switching network for all of VA. The X.25 network works with single terminal and/or PC workstation users who perform such tasks as; host-to-single-user file transfers, e-mail, and single user updates of remote databases. The IDCU service provides standard network interfaces, access services (direct, 800, FTS2000 gateway), switching/routing, telemanagement, and performance guarantees for

availability. The X.25 service also permits LAN-to-LAN interconnectivity between routers at data rates up to T1 (1.544 Mbps) speed.

Frame Relay Network

Frame Relay is a modern connection-oriented protocol that defines the connections of terminals and computers to packet-switching networks. The Frame Relay protocol uses pre-defined permanent virtual circuits (PVC) to communicate between endpoints. These circuits remain continuously active and are guaranteed to provide a specified level of service that is negotiated with the customer.

The IDCU's Frame Relay Network provides a high-speed, bandwidth efficient data transport and switching network to VA users. This new service uses a majority of the same equipment, procedures, processes, management systems, and support services provided by the IDCU X.25 service. Frame Relay provides a broader technology offering and extends the overall service capability of the IDCU network.

800 Dial-In Service

800 Dial-In is an access method that users of a network can use to connect to the network remotely. This service provides the VA user community the ability to use FTS2000 1-800 service to dial into the IDCU network. A single 800 number is used to access the ports and the calls are serviced using Sprint's "shortest distance" algorithm. When the caller dials the 800 number, the call will be routed to the closest access site. If a closest access site is busy, the call is automatically routed to the other access site.

Internet Connectivity

The Internet is a global web of interconnected computers and computer networks. The underlying connections include the dial-up telephone network, satellite and ground-based microwave links and fiber optic networks. The Internet allows users to send and receive information anywhere in the world. Sophisticated browsers allow quick access to almost any topic. The Internet has allowed businesses to become global due to the ability to communicate and share ideas quickly and easily.

Asynchronous Transfer Mode (ATM)

ATM is currently the data transmission technology that can potentially revolutionize the way computer networks are built. ATM is based on transferring data in small cells, or packets of a fixed size. Current implementations of ATM can support data transfer rates from 25 Mbps to 622 Mbps. The use of high-speed microprocessors allows ATM switches to read the address of a cell and make routing decisions quickly. ATM switches, combined with fiber-optic transmission media, can allow multiple real-time, full motion video information cells to be transmitted and switched over the network concurrently with real-time voice traffic and conventional high-speed data.

APPENDIX VI

The IDCU's ATM network provides optimum high-speed data transmission rates, and supports many types of traffic including video, voice, and data for VA users. The IDCU ATM service can provide constant bit rate, variable bit rate, quality of service, network fault resolution and PVC configuration and testing. ATM works well with telemedicine applications such as LAN-to-LAN data transfers, video teleconferencing, and distance learning, in addition to voice application.

LAN/WAN Connectivity

LAN/WAN Connectivity allows people to communicate over the same network. Local Area Networks (LAN) are confined to a single department, workgroup, or building. Wide Area Networks (WAN) are able to connect sites from remote locations. The IDCU provides Ethernet LAN/WAN services, which can provide a high capacity (about 10 Mbps), low-delay, point-to-point link between sites. The IDCU service also provides several alternatives to establish redundant Ethernet LAN/WAN connectivity to sites sharing critical information.

Network Security

Network security involves the physical security of network devices as well as security of network applications. With the high volume of sensitive data that is passed across networks, network security is a necessary benefit. The IDCU provides network security through Network Access Control and secures network elements such as switches and routers. The overall security of the network is monitored through security analysis and assessments.

Systems Management

Systems Management encompasses a wide variety of areas. In order to keep networks up-to-date, Systems Management is essential to meet the needs of the users. The primary duties performed by Systems Management within the IDCU is Network Requirements-Forecasting and New Technology Assessments. Other areas that fall under Systems Management in the IDCU include requirements tracking and management, implementation management, configuration management, network performance measurement and management, security management, and systems integration.

ASSISTANT SECRETARY FOR FINANCIAL MANAGEMENT COMMENTS

Department of Veterans Affairs **Memorandum**

Date: AUG 4, 1999

From: Assistant Secretary for Financial Management (004)

Subj: Response to Draft Report of Audit of Procurement Initiatives for VA's Integrated Data Communications Utility (IDCU) Telecommunications Support

To: Assistant Inspector General for Auditing (52)

1. The following is in response to the subject report:

Recommendation #1: Ensure that an appropriate level of contract administration, oversight, and documentation is exercised on future VA WAN contracts.

We concur with this recommendation. However, our role is limited to conducting oversight and preparing documentation to use in future VA WAN contract competitions. For example, if VA submits a request to add new circuits, our office will verify the Department is receiving a good price, and document our findings. Whether or not the documentation benefits us under our current contract with GSA, it will certainly provide value in our next WAN competition.

We do not have a role in the administration of the current contract. In using the General Services Administration's FTS2001 contract with Sprint, VA will realize significant cost savings through aggressive pricing obtained by GSA in this competitively awarded contract. In addition, substantial savings are gained through use of Sprint's public network versus the prior private network under the Integrated Data Communications Utility with SAIC. Accordingly, it is anticipated VA will realize approximately 30 percent savings over the prior contract. Since this is GSA's contract, they are responsible for assuring price reasonableness of negotiated Contract Line Item Numbers (CLINs) and ensuring any future services are competitive with other FTS2001 vendors. As mentioned above, we will conduct our own price reasonableness verification.

The FTS2001 contract has established pricing for services (with over 14,000 CLINs). These services are not ordered by a contracting officer. Instead, the contract requires Designated Agency Representatives (DAR) to place orders directly with the vendor. Under the FTS2001 contract, DARs are trained to place orders for the agency (similar to GSA's FTS2000 contract). Because this is a GSA contract, all contract administration is the responsibility of GSA's Federal Technology Service contracting personnel. Our contracting officer who supports the Office of Telecommunications has attempted to be appointed as an Administrative Contracting Officer for the FTS2001 Contract. These attempts have been unsuccessful thus far; however, we will continue to pursue this matter.

ASSISTANT SECRETARY FOR FINANCIAL MANAGEMENT COMMENTS

Estimated Dollar Impact for Recommendation #1: We agree with the statement in the Report, "…$142 million in contract modifications were not supported with adequate documentation to explain why the contract increases were fair and reasonable." We will ensure adequate documentation is provided in future competitions.

Recommendation #3c: Recover all payments made to the contractor for the Performance Management System (PMS).

We concur. The Acquisition Operations and Analysis Service and the Office of Telecommunications, with assistance from the Office of the General Counsel, are working to recover the $1,025,660 in payments VA made to SAIC for the PMS system. A letter was sent to SAIC on June 21, 1999, advising them that we would withhold this amount until the issue is resolved. We anticipate a response from SAIC shortly.

Recommendation #4: Assure price reasonableness on future WAN telecommunications procurements and avoid making future contract award decisions that negatively impact administration of future IDCU contracts.

We concur.

Recommendation #5: Take action to deobligate unused funds remaining for the acquisition support contract.

We concur. The Acquisition Operations and Analysis Service discussed this recommendation with the Office of Telecommunications in mid-June and requested that they deobligate the unused funds.

Estimated Dollar Impact for Recommendation #5: A review of the payments show a recovery of a duplicate payment to the vendor in the amount of $564,891, and the deobligation of $380,000 from the contract, due to the cancellation of a task order. Therefore, the estimated dollar impact should be $944,891 (not $1.1 million).

Recommendation #7: Take action to ensure that competition is obtained to the maximum extent possible for acquiring future WAN requirements.

We concur.

Estimated Dollar Impact for Recommendation #7: We agree with the $60,000 figure.

2. We appreciate your recognition of the actions that the Office of Acquisition and Materiel Management has taken to remedy previous problems and the opportunity to provide comments on the audit. Should you have any questions, please contact Ms. Arlyce Dubbin at 273-8792.

(Original signed by:)
Edward A. Powell, Jr.

ACTING ASSISTANT SECRETARY FOR INFORMATION AND TECHNOLOGY COMMENTS

Department of Veterans Affairs

Memorandum

Date: JUL 30, 1999

From: Acting Assistant Secretary for Information and Technology (005)

Subj: Draft Report of Audit of Procurement Initiatives for VA IDCU Telecommunications Support, EDMS #54807

To: Assistant Inspector General for Auditing (52)

1. We appreciate the opportunity to provide comments on subject audit, which provides many business management lessons-learned for the Department. During the course of subject audit, the IDCU program has undergone tremendous changes. In fact, VA's IDCU contract with SAIC no longer exists, it expired on May 31, 1999. The IDCU replacement procurement also a subject of this audit has been awarded. In January 1999, the Wide Area Network Replacement team selected the General Services Administration's (GSA) Federal Technology Service (FTS) 2001 contract, with Sprint as the vendor, to provide WAN services for the Department.

2. As requested in your transmittal memorandum dated June 23, 1999, we have responded to recommendations 2, 3, and 6 in the draft audit report. Our comments and suggestions are attached to this memorandum.

3. Should you have any questions, please call me or have a member of your staff contact Mr. Robert P. Bubniak's at (202) 273-8130.

(Original signed by:)

Harold F. Gracey, Jr.

Attachment

ACTING ASSISTANT SECRETARY FOR INFORMATION AND TECHNOLOGY COMMENTS

045B Response to Draft Report of Audit Procurement Initiatives for VA's IDCU Support

IG Recommendation 2: We recommend that the Acting Assistant Secretary for Information and Technology take action to assure that future WAN system requirements are adequately designed and configured for efficient performance and capacity. Key actions needed include:

a. Deactivating inactive ports that are not needed.

We concur with the statement that inactive ports that are not needed should be deactivated.

[This section of the Acting Assistant Secretary's comments have been deleted as a result of changes made to the report]

Implementation Plan: The inactive ports identified in the draft audit report refer to ports on the IDCU X.25 Packet network. Since the expiration of the IDCU contract in June 1999, X.25 service is no longer supported for data communications in the Department. Customers migrated their service to Frame Relay in anticipation of the IDCU contract's expiration. As customers cut over from IDCU service to FTS2000, ports that customers define as not needed will not be transitioned.

b. Establishing a formal capacity management program to manage the WAN requirements.

Concur.

Implementation Plan: The Management Information Systems portion of the FTS2001 program will provide VA the necessary tools to measure network use and performance. Customers will be able to access and query Sprint's network operations data to determine and forecast required network capacity. It is the responsibility of the public network provider, Sprint, to monitor the networks usage and performance and provide capacity for VA requirements. VA customers will work with Sprint in capacity planning and inform them of any new applications that will increase network traffic and effect network capacity.

c. Considering and evaluating alternative VISN solutions to acquiring WAN requirements to identify and protect against redundant capacity and other system inefficiencies.

Concur.

Implementation Plan: GSA's FTS2001 contract was selected to provide telecommunications services for the entire Department. The selection of a single vendor, Sprint, will help to provide a consistent service through all levels of the Department. There are several established working groups within the Department, most under VHA, focusing on telecommunications issues. The One VA IT Architecture Group incorporates all VA agencies and encompasses all IT areas. The VHA Architecture and Planning Workgroup is a technical team which plans the overall architecture for delivery of telecommunications services within VHA.

IG Recommendation 3: We recommend that the Acting Assistant Secretary for Information and Technology:

a. Assess the need for the reimbursable support positions directly assigned to the administration and oversight of the IDCU contract, in light of changes in IDCU WAN responsibilities as VA moves to a new IDCU contract solution.

Concur.

ACTING ASSISTANT SECRETARY FOR INFORMATION AND TECHNOLOGY COMMENTS

Implementation Plan: Changes are anticipated in the way VA telecommunications services will be acquired and managed under the FTS2001 contract. We have let a contract for an organizational analysis to determine to what extent consolidation of functions and use of vendor resources may be practical to provide the types and quality of services required by the customer and the Department. This analysis will be complete during the fourth quarter of fiscal year 1999.

b. Assure that appropriate network management software tools are available to enable adequate management and oversight of future WAN requirements.

Concur.

[*This section of the Acting Assistant Secretary's comments have been deleted as a result of changes made to the report]*

Requirements for the IDCU network management system were defined over ten years ago. The TIS satisfied all of these requirements. The system was never intended to be an on-line network monitor or an electronic order processing system. We agree with the IG that the TIS could be slow, namely due to a decade-old design. We expect that the system designed for FTS2001 will be an improvement over the IDCU TIS, to include a modern user interface. However, the TIS has been a major asset to VA, and over the last 10 years has served the Department well.

ACTING ASSISTANT SECRETARY FOR INFORMATION AND TECHNOLOGY COMMENTS

Implementation Plan: The Management Information Systems portion of the FTS2001 program will provide VA the necessary tools to manage it's WAN requirements. Sprint's network management system includes a Web enabled software interface for pricing, ordering, billing summaries and trouble tickets. The system, which will be restricted to authorized users, can be accessed from any PC with a Web browser and will not have a limited number of connections. Customers will also have access to information about performance, traffic and configuration information by connection point. It is expected that the network management systems provided through the FTS2001 contract will adequately serve VA's needs.

c. Recover all payments made to the contractor for the PMS.

Concur.

Implementation Plan: The Office of Telecommunications and the Office of Acquisition and Analysis Service, with assistance from the Office of General Counsel, are working to recover the $1,025,660.20 in payments VA made to SAIC for the PMS system.

IG Recommendation 6: We recommend that the Acting Assistant Secretary for Information and Technology take action to assign risk management accountability for the Department's national WAN operations.

Concur.

Implementation Plan: The final Risk Analysis report by Rainbow Technologies is due to the VA at the end of July. The ADAS for Telecommunications (045B) will be responsible for ensuring the mitigation of any risks identified in the report.

[*The remainder of the Acting Assistant Secretary's comments have been deleted as a result of changes made to the report]*

APPENDIX IX

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