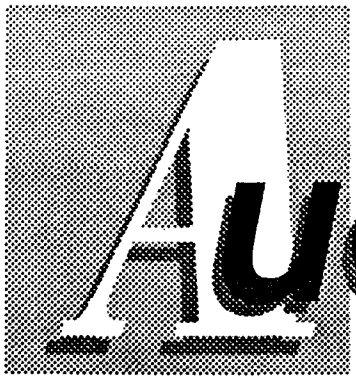

OFFICE OF THE INSPECTOR GENERAL

TELECOMMUNICATIONS CIRCUIT ALLOCATION PROGRAMS - KANSAS CITY AREA

Report No. 94-072 March 31, 1994

Department of Defense

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Acronyms

AFB	Air Force Base
AFNET	Air Force Integrated Telecommunications Network
AUTOVON	Automatic Voice Network
CCSD	Command Communications Service Designator
CISA	Communications Information Services Activity
CONUS	Continental United States
CSA	Communications Service Authorization
DCA	Defense Communications Agency
DCS	Defense Communications System
DCTN	Defense Commercial Telecommunications Network
DDN	Defense Data Network
DECCO	Defense Commercial Communications Office
DISA	Defense Information Systems Agency
DSN	Defense Switched Network
FTS	Federal Telephone System
RFS	Request for Service
TCO	Telecommunications Certification Office
TMSO	Telecommunications Management and Services Office
WWOLS	Worldwide On-Line System

INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
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ARLINGTON, VIRGINIA 22202-2884

March 31, 1994

MEMORANDUM FOR ASSISTANT SECRETARY OF THE NAVY (FINANCIAL MANAGEMENT)
ASSISTANT SECRETARY OF THE AIR FORCE (FINANCIAL MANAGEMENT AND COMPTROLLER)
DIRECTOR, DEFENSE INFORMATION SYSTEMS AGENCY
DIRECTOR, DEFENSE LOGISTICS AGENCY
AUDITOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: Audit Report on Telecommunications Circuit Allocation Programs - Kansas City Area (Report No. 94-072)

We are providing this final report for your review and comments. The report identifies reconfiguration and termination opportunities for leased long-haul, special-purpose telecommunications circuits.

Significant changes, in the form of Defense Management Report Decision No. 918, "Defense Information Infrastructure," and DoD Instruction 4640.14, "Base and Long-Haul Telecommunications Equipment and Services," transferred responsibilities for configuration management for Defense Communications System telecommunications circuits either during our audit or subsequent to the issuance of our draft report. A detailed explanation of the changes is provided in the Background section in Part II of the report. The recommendations in this final audit report have been redirected accordingly.

DoD Directive 7650.3 requires that all audit recommendations be resolved promptly. Recommendations and monetary benefits are subject to resolution in accordance with DoD Directive 7650.3 in the event of nonconcurrence or failure to comment. It is requested that the Defense Information Systems Agency provide comments on Recommendations 1. and 2. and the revised potential monetary benefits, and the Army and Air Force provide comments on Recommendation 2. and the revised potential monetary benefits by May 31, 1994.

The courtesies extended to the audit staff are appreciated. If you have questions on this audit, please contact Mr. Robert M. Murrell at (703) 692-2945 (DSN 222-2945) or Ms. Annie L. Sellers at (703) 692-2890 (DSN 222-2890). The distribution of this report is listed in Appendix L.

David K. Steensma

David K. Steensma
Deputy Assistant Inspector General
for Auditing

Office of the Inspector General, DoD

Report No. 94-072 March 31, 1994
Project No. 0RD-0043.02

TELECOMMUNICATIONS CIRCUIT ALLOCATION PROGRAMS - KANSAS CITY AREA

EXECUTIVE SUMMARY

Introduction. This audit was performed as a segment of our Audit of Telecommunications Circuit Allocation Programs and involved reviews at various DoD and non-DoD organizations in the Kansas City, Missouri, metropolitan area. For this segment of the audit, we evaluated single and multichannel (special-purpose) circuits in the Kansas City area. We performed the audit in two phases based on management responses to the draft of this report. The 292 Defense Communications System (DCS) circuits and associated equipment items we evaluated cost about $3.0 million annually, excluding overhead, rate stabilization, and common-user (general-purpose) subscriber charges.

Objectives. The overall objective of the audit was to determine whether DoD circuit allocation programs identified and used the most effective configurations for leased long-haul, special-purpose telecommunications circuits. The specific objectives of this segment of the audit were to determine whether the most cost-effective circuit configurations were used and whether existing leased telecommunications services were discontinued when no longer required.

Audit Results. For the DCS single and multichannel special-purpose circuits, reconfiguration opportunities were not effectively identified and requirements were not adequately revalidated. Of the 92 sampled circuits, 33 were not cost-effective and 25 were not required. In addition, 21 circuits, not included in our audit universe or sample, could be discontinued.

Internal Controls. The internal control program as it applies to circuit allocation programs is the responsibility of the communications commands within the Military Departments, Defense agencies, and the Defense Information Systems Agency. This audit was performed at the installation and activity level. Therefore, internal controls were not assessed during this audit.

Potential Benefits of Audit. Reconfiguration and termination solutions could reduce the cost of the 292 DCS circuits by a projected $1.7 million annually in FY 1992 dollars (plus or minus 26.1 percent at a 90-percent confidence level). Over FY 1994 through FY 1997, we determined that reconfiguration or termination opportunities in the Kansas City area could reduce costs by $7.9 million. Finally, for that same period, costs of about $1.3 million could be reduced if 21 circuits that were not part of our audit universe or sample are terminated. Appendix J describes the potential benefits resulting from the audit.

Summary of Recommendations. We recommended that the appropriate users initiate Requests for Service to reconfigure or disconnect telecommunications circuits identified for reconfiguration or termination. Recommendation 1.a. in the draft report to determine the technical feasibility of reconfigurations has been deleted in the final report since our reevaluation determined technical feasibility and net cost avoidances for the circuits listed in Appendix C. Also, Recommendation 1.b. in the draft report was incorporated into final report Recommendation 1. Draft report Recommendation 3. was deleted.

Management Comments. The Assistant Secretary of Defense (Health Affairs) concurred with the finding and recommendation to reconfigure a Defense Medical Support Activity circuit and determined the potential monetary benefits of the resulting action. The Department of the Army nonconcurred with the finding, recommendations, and potential monetary benefits. The Department of the Navy concurred with the finding and recommendations and determined the potential monetary benefits of the resulting actions. The Department of the Air Force provided a draft of its management comments; however, those comments could not be included in this final report, but will be available upon request. The Defense Information Systems Agency nonconcurred with the finding, recommendations, and potential monetary benefits. The Defense Logistics Agency nonconcurred with the finding and recommendations because the recommended action in the draft report had already been taken and the potential monetary benefits identified by the Defense Logistics Agency were greater than those identified by the draft report. Overall, comments were not fully responsive because the DoD Components did not consider all technical solutions available for achieving cost-effective configurations and did not include the detailed results of their determinations of the technical feasibility and associated net cost savings for circuits recommended for reconfiguration in the draft report. Consequently, we performed additional evaluations to determine the technical feasibility and associated net cost savings for circuits recommended for reconfiguration. The results of those reevaluation efforts are provided in this final report. Our reevaluation identified opportunities for the Army, the Navy, the Air Force, the Defense Information Systems Agency, and the Defense Logistics Agency to reconfigure or terminate circuits. The details of our reevaluation analysis are shown in Appendix C, and a summary of the results of our reevaluation is shown in Appendix I.

Because of the changes in responsibilities discussed in the transmittal memorandum, we have redirected the recommendations. Therefore, the Defense Information Systems Agency is requested to review the circuits identified in the report for reconfiguration and the associated net cost savings and provide the results of its review only for those circuits determined not technically feasible to reconfigure. The Army, the Air Force, and the Defense Information Systems Agency are requested to review the circuits identified in the report for termination. A full discussion of management comments and audit responses is in Part II, and the complete texts of managements' comments are in Part IV of this report. We request that the addressees provide comments by May 31, 1994.

Table of Contents

This report was prepared by the Readiness and Operational Support Directorate, Office of the Assistant Inspector General for Auditing, Department of Defense.

Part I - Introduction

Background

The Defense Communications System (DCS) is a worldwide composite of DoD-owned and leased telecommunications subsystems and networks composed of facilities, personnel, services, and equipment under the management and operational direction of the Defense Information Systems Agency (DISA). The DCS provides long-haul, common-user or backbone (general-purpose) and dedicated or point-to-point (special-purpose) telecommunications services for the DoD and other Government organizations. The leased services consist of general-purpose networks, such as the Defense Information Systems Network (to be initially composed of the Defense Switched Network [DSN], the Defense Data Network [DDN], and Military Department subnetworks); the Federal Telephone System (FTS 2000); and special-purpose circuits, trunks,[1] and networks. The DCS does not include communications facilities organic to military forces; tactical telecommunications; base communications (communications within the confines of a post, camp, base, and station, including local interconnect trunks to the first commercial central office providing service in the local area); or on-site facilities associated with or integral to weapon systems.

Requirements for telecommunications services are determined through organizations such as the headquarters of the Military Departments and Defense agencies, major commands, communications management offices, and installation-level organizations. The DISA operates the Communications Information Services Activity (CISA) (formerly the Communications Services Industrial Fund) to procure authorized commercial communications services, facilities, and equipment for the DoD and other Government agencies. This procurement function is carried out by the Defense Commercial Communications Office (DECCO), which is the operating arm of the CISA and a subelement of the DISA Acquisition Management Organization. The DECCO issues Communication Service Authorizations (CSAs) as part of the procurement process to obtain telecommunications services.

CSAs are service contracts normally placed against basic ordering agreements established by DECCO with various communications vendors. CSAs are authorized by the Telecommunications Management and Services Office (TMSO) through Telecommunications Service Orders. The TMSO is also a subelement of the DISA Acquisition Management Organization. A Telecommunications Service Order is based on a Telecommunications Service Request that a DoD Component submits to the TMSO through its Telecommunications Certification Office (TCO). Each Telecommunications Service Request is based on a Request for Service (RFS) that a communications manager or user activity official (such as a local commander, a major command's communications manager, or a network's communications manager)

[1]A glossary in Appendix A defines communications terms used in this report.

submits to the responsible TCO. To connect new service or to reconfigure, reroute (rehome), or disconnect existing service, a communications manager or user activity official must prepare an RFS.

Within the Continental United States, the certification functions for the Departments of the Army, Navy, and Air Force are performed by elements of the U.S. Army Information Systems Command (U.S. Army Commercial Communications Office), the Naval Computer and Telecommunications Command (Navy TCO), and the Air Force Command, Control, Communications and Computer Agency[2] (Air Force TCO), respectively.[3] Defense agencies are authorized to have their own internal certification function. The certification officials review each RFS, prepare the subsequent Telecommunications Service Request, and certify that each RFS is valid, approved, and funded.

The TMSO maintains the Worldwide On-Line System (WWOLS), a DCS data base that is composed of existing circuits and trunks, and assigns a Command Communications Service Designator (CCSD) to each circuit and trunk in the WWOLS. The CCSDs identify circuits and trunks leased and owned by the DoD. DECCO maintains a data base[4] that is used to record communications vendors' billings and the resulting payments, and in turn, the charges to DoD customers for communications services and resulting payments.

Objectives

This audit was performed as the second of three segments of Project No. 0RD-0043, "Audit of Telecommunications Circuit Allocation Programs." The other segments of the audit were performed in the San Antonio, Texas, and the Jacksonville, Florida, metropolitan areas. The overall objective of the audit was to determine whether DoD circuit allocation programs identified and used the most effective configurations for leased long-haul, special-purpose telecommunications circuits. Specifically, the audit determined whether the most cost-effective circuit configurations were used and whether existing leased telecommunications services were discontinued when no longer required.

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[2]Formerly the Air Force Communications Command.

[3]Subsequent to our audit field work, the Assistant Secretary of Defense (Command, Control, Communications and Intelligence) directed in a memorandum dated October 1, 1993, that the TCO certification functions be transferred to DISA.

[4]Subsequent to our audit field work, the WWOLS and DECCO data bases, along with other information, were combined to form the Defense Information Services Database System.

In a draft of this report, we provided candidate circuits for reconfiguration to the Military Department and Defense agency communications managers to allow them to evaluate the candidate circuits and develop or propose more cost-effective solutions. However, in responding to the draft report, the Army did not consider all technical solutions available for achieving cost-effective configurations and did not include the detailed results of determinations of the technical feasibility and associated net cost savings for the candidate circuits. Consequently, we initiated a second phase of the audit and revised our universe and sample. We took extensive steps to verify the communication requirements and to reevaluate reconfiguration opportunities for the sampled circuits. This final report discusses our reevaluation of the candidate circuits.

Scope and Methodology

Seventeen DoD and non-DoD organizations in the Kansas City, Missouri, metropolitan area were reviewed. During the first phase of this audit (details were provided in a draft of this report), our universe was comprised of 414 CCSDs in the WWOLS data base for DCS single and multichannel special-purpose circuits. The cutoff date of the universe data was July 28, 1990. General-purpose circuits were excluded from the universe. The special-purpose circuits cost the Government $2.3 million annually. Those costs were exclusive of overhead, rate stabilization, and general-purpose subscriber charges. From the 414 CCSDs, we randomly selected a statistical sample of 201 CCSDs that cost $1.3 million annually.

The universe for the second phase of the audit (discussed in this final report) was comprised of 292 CCSDs that cost $3.0 million annually. The statistical sample was comprised of 92 randomly selected CCSDs that cost $957,000 annually. The major change in the universe for the second phase was the deletion of 109 Automatic Voice Network (AUTOVON) access circuits from the universe and sample. Those circuits were addressed separately in Office of the Inspector General, DoD, Report No. 91-110, "Quick-Reaction Report on the Reconfiguration of Automatic Voice Network Access Circuits - Kansas City Area," July 3, 1991. We did not assess the reliability of computer-processed data obtained from the WWOLS and the DECCO data bases that were used in the audit. Any inaccuracies in those data bases will not affect the results of the audit or the recommendations.

This economy and efficiency audit was made in two phases from September 1990 through May 1991 and from December 1991 through May 1992. The audit was made in accordance with auditing standards issued by the Comptroller General of the United States as implemented by the Inspector General, DoD. We reviewed current and historical records as they related to the audit cutoff date, July 28, 1990. A list of organizations visited or contacted is in Appendix K.

Internal Controls

The internal control program, as it applies to circuit allocation programs, is defined by DoD Directive 5010.38, "Internal Management Control Program," April 14, 1987, and is the responsibility of the communications commands within the Military Departments, Defense agencies, and DISA. Since the responsibility for internal controls for circuit allocation programs is not vested with the installation or activity communications management function, we did not assess internal controls.

Prior Audits and Other Reviews

Eight prior audit reports by the Inspector General, DoD, showed that similar problems occurred regarding uneconomical leases of telecommunications services and equipment and services and equipment no longer required. Those audits are discussed in Appendix B.

Part II - Finding and Recommendations

Reconfiguration and Termination of Special-Purpose Circuits

Government organizations in the Kansas City area are paying for special-purpose circuits and equipment items that are either not cost-effective or no longer required. The Departments of the Army, Navy, and Air Force, the Defense Information Systems Agency, and the Defense Logistics Agency did not effectively identify reconfiguration opportunities and did not adequately revalidate requirements for 292 CCSDs representing telecommunications circuits and equipment items, costing about $3.0 million annually, that were leased or owned by DoD organizations in the Kansas City area. Of the 92 sampled circuits, 33 (35.9 percent) were not cost-effective and 25 (27.2 percent) were not required. During the execution of the FY 1994 through FY 1997 Future Years Defense Program, about $7.9 million could be put to better use if those 58 circuits are either reconfigured or terminated. Finally, for that same period, about $1.3 million could be put to better use if 21 circuits that were not part of our audit universe or sample are terminated.

Background

Reconfiguration Guidance. In March 1973, the function of centralized management and engineering for all DoD nontactical, off-base multiplexing was assigned to the DISA by the Deputy Secretary of Defense. The assignment of that responsibility was incorporated in DoD Directive 5105.19, "Defense Communications Agency (DCA)," August 10, 1978. However, that Directive has since been revised, and the current Directive, "Defense Information Systems Agency (DISA)," June 25, 1991, does not clearly define who is responsible for multiplexing within the DoD. Further, Office of the Inspector General, DoD, Inspection Report No. 91-INS-08, "Defense Communications Agency," May 10, 1991, indicated the lack of clearly defined responsibility and states: "There is no single DCA organization executing the responsibility for circuit allocation, related circuit and trunk transmission engineering, and data base services (i.e., maintenance of the World-Wide On-Line System [WWOLS])." In December 1991, DoD guidance concerning circuit configuration management required the transfer of that responsibility to the DISA.

DoD Instruction 4640.14, "Base and Long-Haul Telecommunications Equipment and Services," December 5, 1991, provided some clarification on responsibility for the reconfiguration of circuits. The Instruction states that the DISA shall manage and acquire long-haul telecommunications equipment and services for the DoD and that this responsibility includes determining which component (the common-user systems such as DDN or DSN) of the DCS or contract (FTS 2000 or new acquisition) will satisfy the DoD Components' long-haul telecommunications requirements. The Instruction further states that the DISA shall work with the DoD Components in planning for the most effective and economical long-haul telecommunications equipment and service

acquisitions for the DoD. The Instruction also states that the DISA and the DoD Components shall ensure that the optimal mix of long-haul telecommunications equipment and services is installed to support mission requirements and that traffic studies, configuration analysis, and engineering shall be conducted for each DoD base, post, camp, station, and installation at least every 2 years.

Defense Management Report Decision No. 918 (Decision 918), "Defense Information Infrastructure," September 15, 1992, redirected additional tasks and functions in the communications area from the Military Departments to the DISA. Decision 918 states that the information structure supporting the Defense mission must provide Department-wide, end-to-end information support capability that encompasses collection, generation, storage, display, and dissemination of information. Under Decision 918, the DISA became the central manager of the Defense information infrastructure, and that role includes network management, engineering, design, and control of long-haul and regional communications, as well as technical management of base-level communications.

Termination Guidance. Guidance on telecommunications services that are no longer required is in DoD Directive 4640.13, "Management of Base and Long-Haul Telecommunications Equipment and Services," December 5, 1991. The Directive states that the DoD Components shall discontinue telecommunications equipment or services for which a bona fide need no longer exists.

Verifying Communications Requirements and Configurations

To accomplish our audit objective, we took extensive steps to verify the communications requirements and configurations for the sample circuits. We reviewed current and historical records addressing the established configuration and requirements justifications, and we examined the physical locations for each of the sample CCSDs. We contacted all organizations within the Military Departments, Defense agencies, and DISA identified to us as having knowledge about the usage or requirement and configuration of a circuit. The contacts helped us to determine whether the requirement for the circuit was valid and to identify reconfiguration opportunities. We applied the following three criteria in determining whether the telecommunications services and configurations were justified.

o A need to communicate must have existed on July 28, 1990, the cutoff date of our audit universe.

o If a need to communicate existed, the sample circuit must have been configured in the most cost-effective manner.

o The user must have been able to physically locate the sample circuit.

If a sample circuit failed to meet any one of the criteria, we concluded that a valid requirement no longer existed for the circuit in its established configuration.

Circuit Reconfigurations and Disconnections

Reconfiguration Techniques. Reconfiguration techniques could include rehoming of circuits, dial-up service, and the use of general-purpose networks. Rehoming of circuits involves the diversion of a transmission medium from one switch or node to another switch or node. Normally, this diversion is made to the nearest location, and the result is either a more cost-effective leased circuit or the disconnection of a leased circuit and the use of a Government-owned transmission medium. Dial-up service is a temporary connection, via the public telephone network and normally precludes the need for a leased circuit. Utilization of general-purpose networks (such as the DSN, the DDN, or the FTS 2000) negates the need for a special-purpose leased circuit. The use of reconfiguration techniques has proved to be a source of significant savings and budgetary reductions for the DoD.

Multiplexing is another reconfiguration technique and consists of combining two or more independent circuits (e.g., voice, data, or video) into a composite signal through the use of equipment, such as a multiplexer or a sophisticated modem. The signal is then sent via the transmission medium to similar multiplexing equipment at the receiving end, where the process is reversed, restoring the circuits to their original state. This technique includes various combinations of single-channel circuits, multichannel circuits with idle capacity, or fully utilized multichannel circuits that can be consolidated into even larger multichannel circuits. It is more economical to use multiplexing techniques when the cost of leasing a number of independent circuits exceeds the cost of acquiring a multiplex system. With the advent of competition in telecommunications services due to the divestiture of the AT&T, multiplexing has become a very cost-effective technique in the management of special-purpose telecommunications services.

Reconfigurations. The potential exists for significant cost avoidances through the use of reconfiguration techniques. The circuits identified as candidates for potential reconfiguration in this audit should be reviewed by DoD communications managers to determine the technical feasibility of reconfigurations and the associated cost avoidances. From our sample of 92 circuits, we identified 33 (35.9 percent) circuits, leased at a cost of $532,296 annually as candidates for potential reconfiguration. If technically feasible, reconfiguration actions could avoid costs of $400,956 annually or 75 percent of the annual leased costs of the 33 sampled circuits and associated equipment items. Results of our analyses of various technical solutions and associated cost avoidances for the circuits in our sample are shown in Appendix C.

Our sampled circuits were identified as candidates for reconfiguration if they were not cost-effective in their established configurations. The specific technical feasibility and associated cost avoidances of reconfiguration solutions, however, need to be determined by DoD communications managers. Communications managers may be able to identify and should seek more viable technical and cost-effective solutions than our proposed options. Technical solutions that need to be considered in achieving cost-effective configurations include: multiplexing, rehoming special-purpose circuits to a general-purpose network, rehoming special-purpose access circuits within a general-purpose network, rehoming special-purpose circuits to a special-purpose network, and purchasing leased communications equipment.

Multiplexing. Two circuits, leased at a cost of $21,420 annually, could be reconfigured by establishing new multichannel trunks through multiplexing techniques. Reconfiguration of the 2 sample circuits could avoid costs of $11,784 annually. The details on reconfiguration solutions are shown in Appendix C, Category 1.

Rehoming Special-Purpose Circuits to a General-Purpose Network. Twenty circuits, leased at a cost of $421,416 annually, were acquired as special-purpose circuits, although the services could be provided by a general-purpose network. Rehoming the 20 sample circuits to a general-purpose network could avoid costs of $332,964 annually. The details on rehoming those circuits are shown in Appendix C, Category 2, Tables 1. through 3.

Rehoming a Special-Purpose Access Circuit Within a General-Purpose Network. We identified one DDN access circuit, leased at a cost of $24,924 annually, that was not connected to the nearest DDN node. Rehoming that sample circuit to the nearest node could avoid costs of $15,444 annually. The details on rehoming that circuit are shown in Appendix C, Category 3.

Rehoming Special-Purpose Circuits to a Special-Purpose Network. Seven circuits, leased at a cost of $52,920 annually, were acquired as special-purpose circuits, although the services could be provided by a special-purpose network. Rehoming the seven sample circuits to a special-purpose network could avoid costs of $29,220 annually. The details on rehoming those circuits are shown in Appendix C, Category 4.

Purchasing Leased Communications Equipment. Three circuits with six modems were leased at a cost of $11,616 annually. Purchase of the modems would be considerably more cost-effective. The modems and associated maintenance could have been obtained through the Codex Bulk Modem Purchase contract maintained by the DECCO. Purchasing the six leased modems could avoid costs of $11,544 annually. The details on purchasing the equipment are shown in Appendix C, Category 5.

Disconnections. Twenty-five circuits and associated equipment items, leased at a cost of $148,164 annually, were no longer required. The 25 circuits represent 27.2 percent of the audit sample reviewed and were being paid for by the Army (18), Navy (2), Air Force (2), Defense Information Systems Agency

(2), and Defense Logistics Agency (1). Sampled items were identified as candidates for disconnection if the need to communicate using the existing service, as of the cutoff date of our audit universe, was no longer required. Requests for Service or Telecommunications Services Requests, as appropriate, should be initiated through designated channels to terminate both the physical connection of the circuit and the payment to the vendor. Disconnecting those 25 circuits could avoid costs of $148,164 annually. Details on the circuits that are candidates for disconnection are shown in Appendix D.

Using statistical sampling techniques, we determined that reconfiguration and termination solutions could reduce the cost of the 292 DCS circuits by a projected $1,742,855 million annually (plus or minus 26.1 percent or plus or minus $455,117 at a 90-percent confidence level). Our method was to add the potential annual cost avoidances for reconfigurations (after first allocating the potential annual cost avoidances to the circuits proportionately to their original costs) identified in Appendix C to the potential annual cost avoidances for terminations identified in Appendix D.

Non-Sample Circuits. Our audit work in the Kansas City area showed that 21 circuits, leased at an annual cost of $198,396, were no longer required. The 21 circuits were not a part of our audit universe or sample and were used by the Army (2) and Navy (19). Disconnecting the 21 circuits could avoid costs of $198,396 annually. Non-sample items were identified as candidates for disconnection if the need to communicate using the existing service was no longer required.

Termination of the 21 non-sample circuits could avoid expenditures of $1,306,223 during the execution of the FY 1992 through FY 1997 Future Years Defense Program. An RFS or Telecommunications Services Request, as appropriate, should be initiated through designated channels to terminate both the physical connection of the circuits and the payments to the vendor. Potential cost avoidances that may be obtained by disconnecting the non-sample circuits are shown in Appendix E.

Local Commercial Lines. To obtain access to the AUTOVON, the 102nd Army Reserve Command Aviation Support Facility, Loathe, Kansas, leased two off-premise-extension circuits through the Fort Leavenworth, Kansas, switchboard. The Army realized cost avoidances by that configuration because it avoided incurring a greater mileage charge through a direct connection to the AUTOVON switch at Fairview, Kansas. Even greater cost avoidances could be achieved, however, by obtaining the AUTOVON connectivity through Richards Gebaur Air Reserve Station, Belton, Missouri, by the use of local commercial lines. Disconnection of the two leased off-premise-extension circuits could avoid leased costs of $5,040 annually and $33,183 during the execution of the FY 1992 through FY 1997 Future Years Defense Program.

Unutilized Access to DDN. Two sample leased circuits at the Naval Reserve Readiness Command, Region 18, Loathe, Kansas were used to make updates to or inquiries from the Naval Reserve Training Support System's data base. One of those circuits continued to be leased although the user had access to the

DDN and the second circuit was no longer required. Communications managers at the parent command, the Naval Reserve Force, New Orleans, Louisiana, told us that the users of 19 other (non-sample) Reserve Training Support System leased special-purpose circuits at other Naval Reserve Readiness Commands also had access to the DDN, but continued to lease the circuits. Communications managers at the Naval Reserve Force agreed that the 19 circuits were no longer required and promptly issued Requests for Service to have the 19 circuits terminated. Those immediate actions by the Naval Reserve Force are commendable. The cost avoidances for the 19 circuits total $193,356 annually and $1,273,240 during the execution of the FY 1992 through FY 1997 Future Years Defense Program.

A summary of all sample and non-sample circuits recommended for reconfiguration and termination is shown in Appendix F. The projected cost avoidances that may be obtained for the Future Years Defense Program are shown in Appendix G for the sampled circuits and in Appendix H for the non-sample circuits. Appendix I shows the result of our reevaluation. Appendix J shows the summary of all potential monetary benefits ($9,221,477) resulting from the audit.

Recommendations, Management Comments, and Audit Responses

1. We recommend that the Director, Defense Information Systems Agency, take appropriate action to reconfigure circuits listed in Appendix C.

Changes to Recommendations for the Final Report. Subsequent to the issuance of the draft audit report, responsibilities for determining technical solutions and performing configuration management for DCS telecommunications circuits were transferred within the DoD, as described in the Background section in Part II. Our position is that the recommendation, if implemented, offers opportunities for substantial communications cost avoidances. We maintain that the DISA is in the best position to take appropriate action whether that action is directing the Military Department and Defense agency communication managers to reconfigure the circuits or instructing DISA communications managers to reconfigure those circuits on behalf of the DoD Components. Further, we maintain that the Director of Information Systems for Command, Control, Communications and Computers, Department of the Army; the Director, Space and Electronic Warfare, Department of the Navy; the Deputy Chief of Staff, Command, Control, Communications and Computers, Department of the Air Force, are in the best position to take appropriate action to terminate circuits in their respective Military Departments. Therefore, the recommendations in this final audit report have been redirected accordingly. Also, Recommendation 1.a. in the draft report has been deleted in the final report since our reevaluation determined technical feasibility and net cost avoidances for the circuits listed in

Appendix C. Further, Recommendation 1.b. in the draft report was incorporated into Recommendation 1., Recommendation 2. in the draft report was redirected to a higher level, and Recommendation 3. was deleted.

Office of the Assistant Secretary of Defense (Health Affairs) Comments. The Assistant Secretary concurred with the recommendation to reconfigure circuit NDHD 7BKC. The response states that in December 1990, the circuit was replaced with a new circuit engineered to provide a more cost-effective configuration and that first-year cost-avoidances for the new circuit is $9,803 compared to the annual leased costs of $25,908 for the old circuit. The response further states that communications personnel in the Defense Medical Systems Support Center were in the process of implementing a newly redesigned network when the audit was in process. The complete text of the comments is in Part IV of this report.

Audit response. We consider the action taken by the Defense Medical Systems Support Center to be responsive to the recommendation. Further, subsequent to audit field work, Defense Medical Systems Support Center gave us a valid approved plan to show that action had been initiated to reconfigure the network before the audit cutoff date. Therefore, we have dropped circuit NDHD 7BKC from our final report. No further comments are required.

Department of the Army Comments. The Army nonconcurred with most of the finding and with the recommendation. The draft report identified 57 Army circuits for reconfiguration; the Army nonconcurred with the reconfiguration solutions for all 57 circuits. The complete text of the Army's comments is in Part IV of this report.

Audit Response. We consider the Army's comments to be nonresponsive to the recommendation. The Army's evaluation of those circuits did not consider all technical solutions available for achieving cost-effective configurations as requested in the draft report. In response to the Army's comments, we have reevaluated the 57 circuits and determined that 16 circuits are no longer reconfiguration candidates (for example, our reevaluation showed that the draft report conclusion for circuit UNJD 7N83 was in error and that a valid configuration for that circuit did exist as of the audit cutoff date). We do not agree with the Army's conclusions on 21 of the circuits shown in the draft report. We agree with the Army that circuit UZGM 7FJ5 should not be disconnected. However, we believe that this circuit could have been reconfigured to a common-user system, and we have added that circuit to the recommended reconfigurations in the final report. We have deleted 20 Army AUTOVON access circuits from this final report because they were previously identified in the Office of the Inspector General, DoD, Report No. 91-110, "Quick-Reaction Report on the Reconfiguration of Automatic Voice Network Access Circuits - Kansas City Area," July 3, 1991. The remaining 22 circuits are shown in Appendix I, and details on our reevaluation are in Appendix C. We ask that the DISA provide comments in response to the final report.

Department of the Navy comments. The Navy concurred with the finding and recommendation. The Navy identified $34,687 as the monetary benefits for the outyears; however, the Navy did not specify which years. The complete text of the Navy's comments is in Part IV of this report.

Audit response. We consider the Navy's comments responsive to the recommendation. The Navy did not provide comments on circuit BABR 7YYA, which we originally recommended for dial-up service. Based on information provided to us after our field work, we concluded this circuit should be terminated. This change was reported to Commander, Navy Reserve Forces, and that organization took prompt action to issue a Telecommunications Service Request to disconnect the circuit. Navy Reserve Forces provided us copies of the Telecommunications Service Requests issued to disconnect the circuits. We consider the Navy's comments and actions to be responsive to the recommendation.

Department of the Air Force Comments. The Air Force provided a draft of its comments in response to a draft of this report, and we discussed those comments with Air Force communications personnel. However, those comments could not be included in this final report.

Audit response. Since we are not certain whether the draft management comments represent the final Air Force position, we did not address those comments in this final report. We request that the DISA provide comments on the final report.

Defense Logistics Agency comments. The Defense Logistics Agency did not provide comments on the finding and recommendation.

Audit Response. We deleted one DLA AUTOVON access circuit from this final report because the circuit was previously identified in the Office of the Inspector General, DoD, Report No. 91-110, "Quick-Reaction Report on the Reconfiguration of Automatic Voice Network Access Circuits - Kansas City Area," July 3, 1991.

2. We recommend that the Director of Information Systems for Command, Control, Communications and Computers, Department of the Army; the Director, Space and Electronic Warfare, Department of the Navy; the Deputy Chief of Staff, Command, Control, Communications and Computers, Department of the Air Force; the Director, Defense Information Systems Agency; and the Director, Defense Logistics Agency require the appropriate user organizations to initiate Requests for Service to disconnect their respective circuits listed in Appendixes D and E.

Department of the Army Comments. The Army nonconcurred with the recommendation and potential monetary benefits identified for 21 of the 23 sample circuits listed in the draft report. The Army also nonconcurred with terminating the two non-sample circuits listed in the draft report. The complete text of the Army's comments is in Part IV of this report.

Audit Response. We do not consider the Army's comments to be fully responsive. Based on information provided to us during our reevaluation (after our field work), we agree that four of the sample circuits listed in the draft report should not be terminated. Those four circuits were deleted from the final report. Also, we agree that circuit UZGM 7FJ5 should not be disconnected. However, we believe that this circuit could have been reconfigured to a common-user system and have added the circuit to the recommended reconfigurations in the final report. Our conclusions did not change for the other 18 sample circuits or for the 2 non-sample circuits. The remaining 20 circuits, therefore, are shown in Appendix I, and details on our reevaluation of the sample circuits and on the non-sample circuits are in Appendixes D and E, respectively. We request the Army provide comments to the final report.

Department of the Air Force Comments. The Air Force provided a draft of its management comments in response to a draft of this report, and we discussed those comments with Air Force communications personnel. Those comments are not in this final report as previously stated.

Audit response. Since we are not certain whether the Air Force's draft comments represent the final Air Force position on the draft report, we request that the Air Force provide comments on the final report.

Department of the Navy Comments. The Navy concurred with the finding, recommendation, and potential monetary benefits in the draft report and stated that the sample circuit was disconnected in January 1991.

Audit Response. We consider the Navy's comments to be responsive, even though the Navy did not discuss the 18 non-sample circuits recommended for termination in its comments. Those 18 non-sample circuits were brought to the attention of the Commander, Naval Reserve Force, during the audit. That organization concurred with the finding, recommendation, and potential monetary benefits and took prompt action to terminate those circuits before the issuance of a draft of this report. The Navy also initiated action to disconnect a sample circuit (BABR 7YYA) that we originally recommended for reconfiguration. However, after our field work, we received information indicating that no valid requirement existed for the circuit on the cutoff date of the audit. No further comments are required.

Defense Information Systems Agency (DISA) Comments. DISA nonconcurred with the recommendation, stating that it was unable to identify the two sample circuits. The complete text of the DISA's comments is in Part IV of this report.

Audit Response. We consider the DISA's comments to be nonresponsive to the recommendation. DISA terminated one sample circuit (DTXX 6H81) on November 15, 1990. We offered to assist DISA in locating the other circuit. DISA did not respond to our offer. We ask that the DISA provide comments on this final report.

Defense Logistics Agency comments. The DLA nonconcurred with the recommendation and potential monetary benefits, but stated that the action had already been taken as a result of assistance provided by our office. The complete text of the DLA's comments is in Part IV of this report

Audit Response. We consider the action taken to be responsive to the recommendation; no further comments are required.

Part III Additional Information

Appendix A. Glossary

Access Line	A circuit connecting a subscriber directly to a switching center or to a node in a switched network.
Allocation	The process of selecting and designating specific channels and trunks that will be used in routing a circuit or circuits to satisfy a customer requirement.
AUTOVON	Automatic Voice Network. A general-purpose switched voice network that provides unsecured voice communications services to DoD customers.
Bundle	A term often used to mean multiplexing or to consolidate circuits onto a larger trunk.
CCSD	Command Communications Service Designator. A unique identifier for each single service; that is single-channel circuits, multichannel trunk circuits, and interswitch trunk circuits.
Channel	A single unidirectional or bidirectional path for transmitting or receiving (or both) electronic signals, usually in a path that is distinct from other parallel paths.
Circuit	A communication capability between two or more users, between a user terminal and a switching terminal, or between two switches.
Concentrator	A telecommunications device that allows a number of circuits (typically slow-speed ones) to be connected to a smaller number of circuits for transmission under the assumption that not all of the larger group of circuits will be used at the same time.
DDN	Defense Data Network. A general-purpose packet switching network that provides direct data transmission communications services to DoD customers.

DSN	Defense Switched Network. A general-purpose network designed to provide switched voice, digital data, and video teleconferencing services to DoD customers.
FTS 2000	Federal Telephone System 2000. A general-purpose voice, data, and video network procured and managed by the General Services Administration.
General-Purpose Network	A system of circuits or trunks between network switching centers or nodes allocated to provide communications service on a common basis to all connected subscribers. It is sometimes described as a common-user network.
Modem	Modulator/Demodulator. A device that converts digital signals to analog so that they may be transmitted via conventional analog circuits or that converts analog signals to digital so that they may be received by digital terminal equipment or a computer.
Node	A tandem switch that collects data traffic from multiple transmission media and routes the data to other switches or nodes.
Packet Switching	A technique by which digital data are transmitted in packets (composed of a predetermined number of bits) and switched over a logical path, rather than a physical path as in circuit switching.
Rehome	The disconnection of a transmission medium from one switch or node and the reconnection to another switch or node.
Tail Circuit	A circuit that operates from the long-haul vendor's demarcation point.

TCO	Telecommunications Certification Office. An organization designated by a Federal department or agency to certify to the Defense Information Systems Agency (DISA) that a specified telecommunications service or facility is a bona fide requirement, and that the department or agency is prepared to pay mutually acceptable costs to fulfill the requirement.
Trunk	A dedicated circuit connecting two switching centers, central offices, or data concentration devices. This term is often used within the communications community to describe any multichannel circuit.
Switching Center	A point at which two circuits could be interconnected to make a path between two users.
WWOLS	Worldwide On-Line System. The DISA Telecommunications Management and Services Office maintains this data base inventory of Defense Communications System (DCS) circuits and trunks to reflect Telecommunications Service Requests and Telecommunications Service Orders. The WWOLS contains specific engineering, operational, and management data to support the circuit and trunk allocation and transmission engineering functions performed for DCS telecommunications services.

Appendix B. Prior Audits and Other Reviews

Office of the Inspector General, DoD, Report No. 94-051, "Telecommunications Circuit Allocation Programs - San Antonio Area," March 11, 1994. The audit showed that reconfiguration opportunities were not effectively identified and that requirements were not adequately revalidated. The report showed that 47.6 percent of the 193 sample Command Communications Service Designators (CCSDs) reviewed at DoD organizations in the San Antonio, Texas, metropolitan area were potentially not cost-effective in their configurations or were no longer required. For the sampled CCSDs, the report identified 84 (43.5 percent) circuits as candidates for potential reconfiguration. Leases for eight (4.1 percent) other circuits could be terminated because they were no longer required. We determined that $8.9 million could be put to better use if circuits are either reconfigured or terminated in the San Antonio area during the execution of the FY 1994 through FY 1996 Future Years Defense Program. Finally, for that same period, about $.015 million could be put to better use if one circuit that was not part of the audit universe or sample is terminated.

Office of the Inspector General, DoD, Project No. 0RD-0043.03, "Draft Audit Report on Telecommunications Circuit Allocation Programs - Jacksonville Area," December 15, 1993. The audit showed that reconfiguration opportunities were not effectively identified and that requirements were not adequately revalidated. The report showed that 63.9 percent of the 166 sample CCSDs reviewed at DoD and non-DoD organizations in the Jacksonville, Florida, metropolitan area were potentially not cost-effective in their configurations or were no longer required. For the sampled CCSDs, the report identified 74 (44.6 percent) circuits as candidates for potential reconfiguration. Leases for 32 (19.3 percent) other circuits could be terminated because they are no longer required. We determined that $9.5 million could be put to better use if circuits are either reconfigured or terminated in the Jacksonville area during the execution of the FY 1994 through FY 1999 Future Years Defense Program. Finally, for that same period, about $1.5 million could be put to better use if 24 circuits that were not part of the audit universe or sample are reconfigured and terminated.

Office of the Inspector General, DoD, Report No. 93-144, "Management of Leased Modulators/Demodulators by the Air Mobility Command," June 30, 1993. The audit showed that the Air Mobility Command did not prepare documentation required to discontinue payments for modulators/demodulators (modems) no longer in service, purchase rather than lease modems, and disconnect circuits that were no longer required. As a result, about $826,000 was spent for equipment no longer in service; about $1.3 million was spent for leased equipment that should have been purchased; and about $70,000 was spent for leased circuits that were no longer required. The audit also showed that at seven military installations, 53.6 percent of telecommunications equipment could not be accounted for and that the Air Mobility Command could not validate its telecommunications equipment inventories. Action to terminate lease payments, to purchase leased modems,

and to disconnect circuits would reduce costs about $5.3 million (of which $784,000 was previously reported for Dover Air Force Base [AFB]) during the FY 1993 through FY 1998 Future Years Defense Program. We recommended that the Commander, Air Mobility Command, terminate payments for equipment no longer in service, purchase leased modems, disconnect circuits no longer needed, and conduct and maintain inventories of all leased and owned telecommunications equipment and services. The Air Force concurred with the finding and implemented corrective measures.

Office of the Inspector General, DoD, Report No. 93-021, "Management of Leased Modulators/Demodulators at Dover Air Force Base, Delaware," November 9, 1992. The audit showed that payments continued to be made for telecommunications equipment that was no longer in service and that equipment that should have been purchased continued to be leased. As a result, more than $287,000 had been spent unnecessarily from February 1990 through June 1992. Action to terminate leases and purchase modems would reduce costs about $784,000 during the FY 1993 through FY 1998 Future Years Defense Program. We recommended that the Commander, Air Mobility Command, terminate leases for six long-haul modems and purchase replacement modems from the Bulk Modem Contract maintained by the Defense Commercial Communications Office (DECCO). The Air Force concurred with the finding and implemented corrective measures.

Office of the Inspector General, DoD, Report No. 93-019, "Disposition of Telecommunications Services and Equipment at Eaker Air Force Base," November 6, 1992. This audit identified telecommunications services that were not discontinued when service requirements no longer existed. The report showed that 5 (10.6 percent) of 47 long-haul telecommunications circuits reviewed at Eaker AFB, Blytheville, Arkansas, were no longer required. As a result, DoD could have avoided communications costs estimated at $19,000 if action had been taken to discontinue the services. When this matter was brought to management's attention, it took immediate action to discontinue the circuits and avoided additional costs of about $9,000 through December 1992, the planned closure date of the base. The Air Force concurred with the finding and monetary benefits and provided corrective measures to prevent similar conditions.

Office of the Inspector General, DoD, Report No. 93-018, "Disposition of Telecommunications Services and Equipment at Pease Air National Guard Base," November 6, 1992. The audit disclosed that existent services were not discontinued when communication requirements no longer existed. The report showed that 7 (46.7 percent) of 15 long-haul telecommunications circuits reviewed at Pease Air National Guard Base, Portsmouth, New Hampshire, were no longer required. As a result, DoD could have avoided communications costs estimated at $151,000 if action had been taken to discontinue the services. When this matter was brought to management's attention, it took immediate action to discontinue the services and avoided additional costs of about $272,000 during the execution of the FY 1993 through FY 1998 Future Years Defense Program. The Defense Information Systems Agency (DISA) concurred with the finding and monetary benefits projected in the report.

Office of the Inspector General, DoD, Report No. 91-110, "Quick-Reaction Report on the Reconfiguration of Automatic Voice Network Access Circuits - Kansas City Area," July 3, 1991. The audit showed that the DISA neither identified reconfiguration opportunities nor coordinated implementation of reconfiguration solutions when two or more DoD Components were involved. The report showed that less costly reconfiguration opportunities existed, but were not effectively identified or implemented for our universe of 109 CCSDs issued for Automatic Voice Network (AUTOVON) access circuits at 7 DoD organizations in the Kansas City, Missouri, metropolitan area. The report states that 41 (37.6 percent) of the 109 CCSDs reviewed were potentially not cost-effective in their configurations and showed that the 41 circuits were candidates for multiplexing. The reconfigured multiplexed circuits could result in DoD realizing cost avoidances of $658,000 during execution of the FY 1992 through FY 1997 Future Years Defense Program. The report recommended that the DISA initiate immediate action to reconfigure the 41 AUTOVON circuits. DISA agreed that although the recommendation was technically feasible, it was not compliant with the contract or the Defense Commercial Telecommunications Network (DCTN)/AUTOVON merger solution previously proposed by AT&T and agreed to by the Government.

As part of a resolution agreement, the DISA proposed that an audit be performed addressing the AT&T pricing of the DCTN/AUTOVON access lines to assist DISA and DECCO in conducting their annual rate review negotiations with AT&T. The annual rate review is required by the DCTN contract. Although the Assistant Inspector General for Auditing disagreed with DISA's position that it was inappropriate to implement the audit recommendation, both agreed that the audit would be performed to determine that the AT&T prices and approach under the DCTN/AUTOVON merger were adequately supported, cost-effective, and fair. It was also agreed that DISA's support for the audit would be the required action in lieu of implementing the recommendation in Report No. 91-110.

Office of the Inspector General, DoD, Report No. 90-005, "Requirements Validation for Telecommunications Services," October 16, 1989. The audit showed that 21 percent of the 1,323 sample circuits reviewed at 21 DoD installations continued in service although no longer required, were not cost-effective as configured, or could not be identified. For the sampled circuits, the report identified 135 circuits (10.2 percent) that were no longer required, 130 circuits (9.8 percent) that were considered not cost-effective in their configurations, and 12 circuits (1.0 percent) that could not be identified. As a result, leased circuits that are no longer required or not cost-effective may cost DoD as much as $21 million during FY 1989 and $117 million during the execution of the FY 1989 through FY 1993 Five Year Defense Plan. Several recommendations were made to the Assistant Secretary of Defense (Command, Control, Communications and Intelligence) and to the Comptroller of the Department of Defense, one of which was to establish a definitive policy requiring DoD Components to review and revalidate telecommunications circuits leased and owned by the Defense Communications System. The identification of reconfiguration opportunities was not addressed in that audit report. Management concurred in all recommendations in the report.

Appendix C. Schedule of Circuits Recommended for Reconfiguration

Category 1. Establish a New Trunk Through Multiplexing

CCSD [2]	Description	Kb/s [3]	From	To	CSA [4]	Leased Costs [1] Monthly Recurring Costs	Leased Costs [1] Annual Cost To DoD
JQGD FAXQ	NOTAMS CIRCUIT [5]	2.4	CARSWELL [6]	KANSASCY [7]	AMSC D 00562	$959	$11,508
JZRD FAGB	NOTAMS CIRCUIT	9.6	KANSASCY	CARSWELL	WU D 00741	826	9,912
Current Recurring Costs							$21,420
Recurring Costs of Reconfiguration Actions:							
Cost of Leased Circuit (19.2 Kb/s from Carswell to Kansas City)						($801)	($ 9,612) [8]
Maintenance Contracts (2 leased-line modems x $1 = $2 per month)						(2)	(24) [9]
Total Annual Savings Resulting from Reconfiguration Actions							$11,784
Nonrecurring Costs of Reconfiguration Actions:							
Installation of Circuit (19.2 Kb/s from Carswell to Kansas City)							($ 2,960) [8]
Modems (2 leased-line modems x $848 = $1,696)							(1,696) [9]
Installation of Modems (2 leased-line modems x $48 = $96)							(96) [9]
Total Savings in First Year Resulting from Reconfiguration Actions							$ 7,032

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.

2/ Command Communications Service Designator.

3/ Kilobits per second - the standard unit for measuring the rate of data transmission.

4/ Communications Service Authorization - identifies specific contract with vendor for each service.

5/ Federal Aviation Administration Notice to Airman System.

6/ Carswell Air Force Base, Fort Worth, Texas.

7/ Kansas City, Missouri.

8/ Cost estimates obtained at DECCO through a comparison of representative telecommunications vendors' cost estimates.

9/ Cost data obtained through equipment catalog of a representative vendor.

Category 2. Table 1. Establish a New Routing Through the Defense Data Network (DDN)

3/ CCSD	Description	2/ No. of Data Ports Occupied	From	To	4/ CSA	1/ Leased Costs Monthly Recurring Costs	1/ Leased Costs Annual Cost To DoD
UIND 7K4K	JCBIS CIRCUIT5/	12	FTMONROE6/	FTLVNWRT7/	UNKNOWN	$2,436	$ 29,232
UIND 7K4L	JCBIS CIRCUIT	7	FT LEE8/	FTLVNWRT	UNKNOWN	1,421	17,052
UIND 7K4M	JCBIS CIRCUIT	15	FTEUSTIS9/	FTLVNWRT	UNKNOWN	3,045	36,540
UIND 7K4P	JCBIS CIRCUIT	42	FT SILL10/	FTLVNWRT	UNKNOWN	8,526	102,312
UIND 7K4R	JCBIS CIRCUIT	17	FT DIX11/	FTLVNWRT	UNKNOWN	3,451	41,412
UIND 7K4W	JCBIS CIRCUIT	13	FTRUCKER12/	FTLVNWRT	UNKNOWN	2,639	31,668
UIND 7K4Y	JCBIS CIRCUIT	7	FT STORY13/	FTLVNWRT	UNKNOWN	1,421	17,052
UIND 7M96	JCBIS CIRCUIT	2	HAMPTON14/	FTLVNWRT	UNKNOWN	406	4,872
UIND 7MY2	JCBIS CIRCUIT	6	AURORA15/	FTLVNWRT	UNKNOWN	1,218	14,616
Current Recurring Costs							$294,756
Recurring Costs of Reconfiguration Actions:							
Cost of Leased DDN Access Circuits						($3,266)	($ 39,192)16/
Maintenance Contracts	(127 limited-distance freestanding modems x $1 = $127)					(127)	(1,524)17/
	(33 limited-distance modem nests x $2 = $66)					(66)	(792)17/
	(357 limited-distance modem cards x $1 = $357)					(357)	(4,284)17/
	(2 freestanding 4-channel leased-line modems x $8 = $16)					(16)	(192)17/
	(2 freestanding 6-channel leased-line modems x $8 = $16)					(16)	(192)17/
	(4 freestanding 8-channel leased-line modems x $8 = $32)					(32)	(384)17/
	(4 digital multiplexers x $20 = $80)					(80)	(960)17/
Total Annual Savings Resulting from Reconfiguration Actions							$247,236

See footnotes at end of chart.

Category 2. Table 1. Establish a New Routing Through the Defense Data Network (DDN)

	Annual Cost To DoD
Total Annual Savings Resulting from Reconfiguration Actions	$247,236
Nonrecurring Costs of Reconfiguration Actions:	
Basic Termination Liability[18] (121 data ports x $1,648 = $199,408)	($199,408)
Installation of Circuits	(12,987)[19]
Modems (127 limited-distance freestanding modems x $157 = $19,939)	(19,939)[17]
(33 limited-distance modem nests x $660 = $21,780)	(21,780)[17]
(357 limited-distance modem cards x $114 = $40,698)	(40,698)[17]
(2 freestanding 4-channel leased-line modems x $1,653 = $3,306)	(3,306)[17]
(2 freestanding 6-channel leased-line modems x $2,757 = $5,514)	(5,514)[17]
(4 freestanding 8-channel leased-line modems x $2,826 = $11,304)	(11,304)[17]
(4 digital multiplexers x $1,495 = $5,980)	(5,980)[17]
Installation of Modems (127 limited-distance freestanding modems x $30 = $3,810)	(3,810)[17]
(33 limited-distance modem card nests x $48 = $1,584)	(1,584)[17]
(357 limited-distance modem cards x $30 = $10,710)	(10,710)[17]
Total Savings in First Year Resulting from Reconfiguration Actions	($ 89,784)

See footnotes at end of chart.

Category 2. Table 1. Establish a New Routing Through the Defense Data Network (DDN)

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.
2/ Number of data access points required by each circuit.
3/ Command Communications Service Designator.
4/ Communications Service Authorization - identifies specific contract with vendor for each service.
5/ Joint Computer Based Instruction System.
6/ Fort Monroe, Hampton, Virginia.
7/ Fort Leavenworth, Leavenworth, Kansas.
8/ Fort Lee, Petersburg, Virginia.
9/ Fort Eustis, Newport News, Virginia.
10/ Fort Sill, Lawton, Oklahoma.
11/ Fort Dix, Wrightstown, New Jersey.
12/ Fort Rucker, Dothan, Alabama.
13/ Fort Story, Virginia Beach, Virginia.
14/ Allen Corporation of America, Hampton, Virginia.
15/ Fitzsimons Army Medical Center, Aurora, Colorado.
16/ Six circuits will be required to replace the special-purpose leased circuits with access to DDN. Cost estimates were obtained at DECCO through a comparison of representative telecommunications vendors' cost estimates. The estimated monthly recurring costs for the six DDN access circuits are $184 for a 19.2 kilobits per second (Kb/s) circuit from Aurora to Lowry Air Force Base; $271 for a 19.2 Kb/s circuit from Fort Story to Norfolk; $559 for a 19.2 Kb/s circuit from Fort Lee to Norfolk; $963 for a 56 Kb/s circuit from Fort Dix to Philadelphia; $761 for a 56 Kb/s circuit from Fort Monroe to Norfolk; and $528 for a 4.8 Kb/s circuit from Hampton to Norfolk.
17/ Cost data obtained through equipment catalogs of a representative vendor.
18/ Payment made to a vendor for removing data ports from the network prior to the contract expiration date.
19/ Six circuits will be required to replace the special-purpose leased circuits with access to DDN. Cost estimates were obtained at DECCO through a comparison of representative telecommunications vendors' cost estimates. The estimated installation costs for the six DDN access circuits are $1,525 for a 19.2 Kb/s circuit from Aurora to Lowry Air Force Base; $2,761 for a 19.2 circuit Kb/s from Fort Story to Norfolk; $3,095 for a 19.2 Kb/s circuit from Fort Lee to Norfolk; $1,932 for a 56 Kb/s circuit from Fort Dix to Philadelphia; $1,936 for a 56 Kb/s circuit from Fort Monroe to Norfolk; and $1,738 for a 4.8 Kb/s circuit from Hampton to Norfolk.

Category 2. Table 2. Establish a New Routing Through the Defense Data Network (DDN)

2/ CCSD	Description	3/ Kb/s	From	To	4/ CSA	1/ Leased Costs: Monthly Recurring Costs	1/ Leased Costs: Annual Cost To DoD
UTYD 7GJC	TDSS CIRCUIT5/	19.2	FTMONROE6/	FTLVNWRT7/	GTES D 00249	$1,365	$16,380
UTYD 7JR9	TDSS CIRCUIT	9.6	FTLVNWRT	FTRILEY8/	MCIT D 21115 00	343	4,116
UTYD 7JSA	TDSS CIRCUIT	19.2	FTLVNWRT	FT SILL9/	GTES D 00932	700	8,400
UTYD 7KC6	TDSS CIRCUIT	19.2	ABERDEEN10/	FTLVNWRT	LDKN D 00957	723	8,676
					RACMOCY 45226	0	0
UTYD 7KW7	TDSS CIRCUIT	19.2	FT HOOD11/	FTLVNWRT	QWST D 00025	820	9,840
UUED 7YFJ	DATA CIRCUIT	2.4	FTLVNWRT	CMRNSTTN12/	AT D 07D 00119	582	6,984
					CPV 41D 17946	89	1,068
UVID 7HV513/	ASIMS CIRCUIT14/	19.2	FTLVNWRT	KILLEEN15/	AT D 28683 300	744	8,928
UVID 7HV613/	ASIMS CIRCUIT	19.2	FTLVNWRT	KILLEEN	AT D 70619 300	744	8,928
UZGM 7FJ513/	CD NETWORK16/	9.6	FT LEE17/	FTLVNWRT	AT D 84726	997	11,964
Current Recurring Costs							$85,284
Recurring Costs of Reconfiguration Actions:							
Cost of Leased DDN Access Circuits						($2,568)	($30,816)18/
Maintenance Contracts (28 limited-distance modems x $1 = $28 per month)						(28)	(336)18/
(4 leased-line modems x $1 = $4 per month)						(4)	(48)18/
(4 freestanding 8-channel leased line modems x $8 = $32 per month)						(32)	(384)18/
(2 4-channel DSU/CSUs x $12 = $24 per month)19/						(24)	(288)18/
Total Annual Savings Resulting from Reconfiguration Actions							$53,412

See footnotes at end of chart.

Category 2. Table 2. Establish a New Routing Through the Defense Data Network (DDN)

	Annual Cost To DoD
Total Annual Savings Resulting from Reconfiguration Actions	$53,412
Nonrecurring Costs of Reconfiguration Actions:	
Installation of Circuits	($10,437)[20]
Modems (28 limited-distance modems x $157 = $4,396)	(4,396)[18]
(4 leased-line modems x $652 = $2,608)	(2,608)[18]
(4 freestanding 8-channel leased line modems x $2,826 = $11,304)	(11,304)[18]
(2 4-channel DSU/CSUs x $1,921 = $3,842)	(3,842)[18]
Installation of Modems (28 limited-distance modems x $30 = $840)	(840)[18]
(4 leased-line modems x $48 = $192)	(192)[18]
Total Savings in First Year Resulting from Reconfiguration Actions	$19,793

See footnotes on next page.

Category 2. Table 2 Establish a New Routing Through the Defense Data Network (DDN)

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.
2/ Command Communications Service Designator.
3/ Kilobits per second - the standard unit for measuring the rate of data transmission.
4/ Communications Service Authorization - identifies specific contract with vendor for each service.
5/ Training and Doctrine Command (TRADOC) Decision Support System.
6/ Fort Monroe, Hampton, Virginia.
7/ Fort Leavenworth, Leavenworth, Kansas.
8/ Fort Riley, Junction City, Kansas.
9/ Fort Sill, Lawton, Oklahoma.
10/ Aberdeen Proving Ground, Aberdeen, Maryland.
11/ Fort Hood, Killeen, Texas.
12/ Cameron Station, Alexandria, Virginia.
13/ This circuit was disconnected after our cutoff date, July 28, 1990, but could have been reconfigured as of our cutoff date. Therefore, no reconfiguration actions are required for this circuit; however, an opportunity to reduce expenditures was lost for the period before the circuit's disconnection.
14/ Army Standard Information Management System.
15/ Killeen, Texas.
16/ Combat Development Network.
17/ Fort Lee, Petersburg, Virginia.
18/ Five circuits will be required to replace the special-purpose leased circuits with access to DDN. Cost estimates were obtained at DECCO through a comparison of representative telecommunications vendors' cost estimates. The monthly recurring costs for the five DDN access circuits are $528 for 19.2 Kb/s from Fort Monroe to Norfolk; $359 for a 19.2 Kb/s circuit from Killeen to Fort Hood; $359 for a 56 Kb/s circuit from Killeen to Fort Hood; $763 for a 2.4 Kb/s circuit from the Pentagon to Cameron Station; and $559 for a 9.6 Kb/s circuit from Fort Lee to Norfolk.
19/ Cost data obtained through equipment catalogs of a representative vendor.
20/ Data Service Unit/Channel Service Unit - a device allowing data transmission over a digital telecommunications circuit.
21/ Five circuits will be required to replace the special-purpose leased circuits with access to DDN. Cost estimates were obtained at DECCO through a comparison of representative telecommunications vendors' cost estimates. The installation costs for the five DDN access circuits are $1,738 for a 19.2 Kb/s circuit from Fort Monroe to Norfolk; $1,845 for a $19.2 Kb/s circuit from Killeen to Fort Hood; $1,845 for a 56 Kb/s circuit from Killeen to Fort Hood; $1,914 for a 2.4 Kb/s circuit from the Pentagon to Cameron Station; and $3,095 for a 9.6 Kb/s circuit from Fort Lee to Norfolk.

Category 2. Table 3. Establish a New Routing Through the Defense Data Network (DDN)

2/ CCSD	Description	3/ Kb/s	From	To	4/ CSA	1/ Leased Costs: Monthly Recurring Costs	1/ Leased Costs: Annual Cost To DoD
BUED 7BQW	IDFMS CIRCUIT[5/]	9.6	NORLEANS[6/]	OLATHE[7/]	ABI D 97477	$ 977	$11,724
BUED 7HE3	RTSS CIRCUIT[8/]	9.6	NORLEANS	OLATHE	ABI D 37094	2,471	29,652
Current Recurring Costs							$41,376
Recurring Costs of Reconfiguration Actions:							
Cost of Leased DDN Access Circuits						($ 751)	($ 9,012)[9/]
Maintenance Contracts (4 leased-line modems x $1 = $4 per month)						(4)	(48)[10/]
Total Annual Savings Resulting from Reconfiguration Actions							$32,316
Nonrecurring Cost of Reconfiguration Actions:							
Installation of Circuits							($ 1,731)[11/]
Modems (4 leased-line modems x $652 = $2,608)							(2,608)[10/]
Installation of Modems (4 leased-line modems x $48 = $192)							(192)[10/]
Total Savings in First Year Resulting from Reconfiguration Actions							$27,785

See footnotes on next page.

Category 2. Table 3. Establish a New Routing Through the Defense Data Network (DDN)

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.
2/ Command Communications Service Designator.
3/ Kilobits per second - the standard unit for measuring the rate of data transmission.
4/ Communications Service Authorization - identifies specific contract with vendor for each service.
5/ Integrated Data Financial Management System.
6/ Naval Reserve Force, New Orleans, Louisiana.
7/ Naval Readiness Command, Region 18, Olathe, Kansas.
8/ Reserve Training Support System.
9/ Two circuits will be required to replace the special-purpose leased circuits with access to DDN. Cost estimates were obtained at DECCO through a comparison of representative telecommunications vendors' cost estimates. Monthly recurring costs for the two DDN access circuits are $376 for a 19.2 Kb/s circuit from Olathe to Fort Leavenworth and $375 for a 19.2 Kb/s circuit from New Orleans to New Orleans.
10/ Cost data obtained through equipment catalog of a representative vendor.
11/ Two circuits will be required to replace the special-purpose leased circuits with access to DDN. Cost estimates were obtained at DECCO through a comparison of representative telecommunications vendors' cost estimates. Installation costs for the two DDN access circuits are $801 for a 19.2 Kb/s circuit from Olathe to Fort Leavenworth and $930 for a 19.2 Kb/s circuit from New Orleans to New Orleans.

Category 3. Rehome a Defense Data Network Access Circuit

Current Configuration						Proposed	Leased Costs[1]	
CCSD[4]	CSA[5]	Host[2] Administrator Unit	Host Location	Current Node[3] Location	Kb/s[6]	Node Location	Monthly Recurring Costs	Annual Cost To DoD
UUE9 75LE	ABI W 07508 005	TRADOC[7]	FTLVNWRT[8]	SCOTT[9]	56.0	OFFUTT[10]	$2,077	$24,924

Recurring Costs of Rehoming Action:		
Cost of Leased Access Circuit (56 Kb/s from Fort Leavenworth to Offutt Air Force Base)	($ 786)	($ 9,432)[11]
DSU/CSU[12] Maintenance Contracts (2 DSU/CSUs x $2 = $4 per month)	(4)	(48)[13]
Total Annual Savings Resulting from Rehoming Action		$15,444
Nonrecurring Cost of Rehoming Action:		
Installation of Access Circuit (56 Kb/s from Fort Leavenworth to Offutt Air Force Base)		($ 1,387)[13]
DSU/CSUs (2 DSU/CSUs x $415 = $830)		(830)[13]
Installation of DSU/CSUs (2 DSU/CSUs x $42 = $84)		(84)[13]
Total Savings in First Year Resulting from Rehoming Action		$13,143

See footnotes on next page.

Category 3. Rehome a Defense Data Network Access Circuit

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Goverrnment.
2/ The computer or network which is linked into the Defense Data Network (DDN) via the circuit.
3/ The standard point of access for DDN users connected to the network.
4/ Command Communications Service Designator.
5/ Communications Service Authorization - identifies specific contract with vendor for each service.
6/ Kilobits per second - the standard unit for measuring the rate of data transmission.
7/ U.S. Army Training and Doctrine Command Analysis Center.
8/ Fort Leavenworth, Leavenworth, Kansas.
9/ Scott Air Force Base, Bellville, Illinois.
10/ Offutt Air Force Base, Omaha, Nebraska.
11/ Cost estimates were obtained at DECCO through a comparison of representative telecommunications vendors' cost estimates.
12/ Data Service Unit/Channel Service Unit - a device allowing data transmission over a digital telecommunication circuit.
13/ Cost data obtained through equipment catalog of a representative vendor.

Category 4. Establish a New Routing Through the Federal Aviation Administration (FAA) Microwave Network

CCSD[2]	Description	Kb/s	From[3]	To	CSA[4]	Leased Costs[1] Monthly Recurring Costs	Leased Costs[1] Annual Cost To DoD
JNGV 7AVW	VOICE CIRCUIT	.30	JFFRSNBK[5]	OLATHE[6]	ABI P 02553	$593	$7,116
JNGV 7HM4	VOICE CIRCUIT	.30	WICHITA[7]	OLATHE	AT P 42853	739	8,868
JNGV 7HM5	VOICE CIRCUIT	.30	WICHITA	OLATHE	AT P 42852	739	8,868
JNGV 7HM6	VOICE CIRCUIT	.30	WICHITA	OLATHE	AT P 42851	669	8,028
JPDD 7DPH	DATA CIRCUIT	2.40	SCOTT[8]	OLATHE	AMSC D 00847 WU	534	6,408
JPED 7HML	DATA CIRCUIT	.30	MCCONNLL[9]	OLATHE	ABI D 99050	537	6,444
JPED 7JHP	DATA CIRCUIT	.15	SCOTT	OLATHE	AT T 09887	599	7,188
Current Recurring Costs							$52,920
Recurring Costs of Reconfiguration Actions:							
Cost of Leased Access Circuits						($1,963)	($23,556)[10]
Modem Maintenance Contracts (6 modems x $2 = $12 per month)						(12)	(144)[11]
Total Annual Savings Resulting from Reconfiguration Actions:							$29,220
Nonrecurring Costs of Reconfiguration Actions							
Installation of Access Circuits							($ 6,269)[12]
Modems (6 modems x $279 = $1,674)							(1,674)[11]
Installation of Modems (6 modems x $36 = $216)							(216)[11]
Total Savings in the First Year Resulting from Reconfiguration Actions							$ 21,061

See footnotes on next page.

Category 4. Establish a New Routing through Federal Aviation Administration (FAA) Microwave Network

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.

2/ Command Communications Service Designator.

3/ Kilobits per second - the standard unit for measuring the rate of data transmission.

4/ Communications Service Authorization - identifies specific contract with vendor for each service.

5/ Jefferson Barracks, Missouri.

6/ Kansas Air Route Control Center, Olathe, Kansas.

7/ Wichita, Kansas.

8/ Scott Air Force Base, Bellville, Illinois.

9/ McConnell Air Force Base, Wichita, Kansas.

10/ Seven circuits will be required to replace the special-purpose leased circuits with access to the FAA Microwave Network. Cost estimates were obtained at DECCO through a comparison of representative telecommunications vendors' cost estimates. The estimated monthly recurring costs for the seven access circuits are $371 each for two 2.4 Kb/s from Scott Air Force Base to Overland, Missouri; $224 each for three .3 Kb/s from Wichita to Wichita; $244 for a .3 Kb/s circuit from Jefferson Barracks to Overland, Missouri; and $305 for a 2.4 Kb/s circuit from McConnell Air Force Base to Wichita.

11/ Cost data obtained through equipment catalog of a representative vendor.

12/ Seven circuits will be required to replace the special-purpose leased circuits with access to the FAA Microwave Network. Cost estimates were obtained at DECCO through a comparison of representative telecommuncations vendors' cost estimates. The estimated installation costs for the seven access circuits are $801 each two 2.4 Kb/s circuits from Scott Air Force Base to Overland, Missouri; $977 each for three .3 Kb/s circuits from Wichita to Wichita; $972 for a .3 Kb/s circuits from Jefferson Barracks to Overland, Missouri; and $764 for a 2.4 Kb/s circuit from McConnell Air Force Base to Wichita.

Category 5. Purchase Leased Modems

CCSD [2]	Description	Kb/s [3]	From	To	CSA [4]	Leased Costs [1] Monthly Recurring Costs	Leased Costs [1] Annual Cost To DoD
UHN9 77D5	DDN ACCESS CIRCUIT[5]	9.6	FTLVNWRT[6]	FTLVNWRT	GTES Q 70249	$355	$4,260
UIT9 768Z	DDN ACCESS CIRCUIT	9.6	FTLVNWRT	FTLVNWRT	GTES Q 70174	355	4,260
US29 742V	DDN ACCESS CIRCUIT	9.6	FTLVNWRT	FTLVNWRT	GTES Q 73881	258	3,096
Current Recurring Costs							$11,616
Recurring Costs of Modem Purchase Action:							
Modem Maintenance Contracts (6 modems x $1 = $6 per month)						($ 6)	($ 72)[7]
Total Annual Savings Resulting from Purchase Action							$11,544
Nonrecurring Costs of Modem Purchase Action:							
Modems (6 modems x $157 = $942)							(942)[7]
Installation of Modems (6 modems x $30 = $180)							(180)[7]
Total Savings in the First Year Resulting from Modem Purchase Action							$10,422

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.

2/ Command Communicatons Service Designator.

3/ Kilobits per second - the standard unit for measuring the rate of data transmission.

4/ Communications Services Authorization - identifies specific contract with vendor for each service.

5/ Defense Data Network.

6/ Fort Leavenworth, Leavenworth, Kansas.

7/ Cost data obtained through equipment catalog of a representative vendor.

Summary of Circuits Recommended for Reconfiguration

	CIRCUIT COUNT [1]	ANNUAL RECURRING COST [2]	RECURRING COST OF RECONFIGURATION ACTION [3]	ANNUAL RECURRING SAVINGS [4]
Multiplexing[5]	2	$ 21,420	$ 9,636	$ 11,784
Rehome Special-Purpose Circuits to a General-Purpose Network[6]	20	421,416	88,452	332,964
Rehome a Special-Purpose Access Circuit Within a General-Purpose Network[7]	1	24,924	9,480	15,444
Rehome Special-Purpose Circuits to a Special-Purpose Network[8]	7	52,920	23,700	29,220
Purchase Leased Equipment[9]	3	11,616	72	11,544
Total	33	$532,296	$131,340	$400,956

Footnotes:

1/ The number of circuits recommended for reconfiguration or termination.
2/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office to communications vendors. The costs shown on this schedule are net costs to the Government.
3/ The recurring cost to complete the reconfiguration or termination action.
4/ The annual recurring savings resulting from the reconfiguration or termination action.
5/ See Category 1.
6/ See Category 2 (TABLES 1 through 3).
7/ See Category 3.
8/ See Category 4.
9/ See Category 5.

Appendix D. Schedule of Circuits Recommended for Termination

CCSD [2]	Description	From	To	CSA [3]	Leased Costs [1] Monthly Recurring Costs	Leased Costs [1] Annual Cost To DoD
Army						
UDLD 7D3U [4]	DATA CIRCUIT	PENTAGON [5]	FTLVNWRT [6]	AT D 13274	$973	$ 11,676
UDLD 7YCT	CHANNEL ON 6H1A	FTLVNWRT	FTMONROE [7]	Z [8]	0	0
UDLD 7YCU	CHANNEL ON 6H1A	FTLVNWRT	FTMONROE	Z [8]	0	0
UDLD 7YDR	DATA CIRCUIT	FTLVNWRT	FTEUSTIS [9]	AT D 11192	655	7,860
UDLD 7YHK	CHANNEL ON 6H2C	FTLVNWRT	FT HOOD [10]	Z [8]	0	0
UDLD 7YHL	CHANNEL ON 6H2C	FTLVNWRT	FT HOOD	Z [8]	0	0
UDLD 7YHR	CHANNEL ON 6H2F	FTLVNWRT	FT SILL [11]	Z [8]	0	0
UDLD 7YHS	CHANNEL ON 6H2F	FTLVNWRT	FT SILL	Z [8]	0	0
UDLD 7YJH	DATA CIRCUIT	FTLVNWRT	FTRUCKER [12]	AT D 11153	963	11,556
UDLD 7YJM [4]	DATA CIRCUIT	FTLVNWRT	FT LEE [13]	AT D 11169	970	11,640
UDLM 7ECD	CHANNEL ON 6H2F	FTLVNWRT	FT SILL	Z [8]	0	0
UINM 7TZW	DATA CIRCUIT	FTLVNWRT	SHEPPARD [14]	AT 07D 0012	646	7,752
UINM 7TZX	DATA CIRCUIT	FTLVNWRT	SHEPPARD	AT 07D 00125	646	7,752
UINM 7TZZ	DATA CIRCUIT	FTLVNWRT	SHEPPARD	AT 07D 00126	637	7,644
UTNX 6H1A	TRUNK CIRCUIT	FTMONROE	FTLVNWRT	AT D 11191	768	9,216
UTNX 6H2C	TRUNK CIRCUIT	FTLVNWRT	FT HOOD	AT 07D 00118	802	9,624
UTNX 6H2F	TRUNK CIRCUIT	FTLVNWRT	FT SILL	AT 07D 00117	744	8,928
UUE9 74L3	DDN ACCESS CIRCUIT	FTLVNWRT	FTLVNWRT	Z [15]	0	0
Navy						
BABV 7YYB [4]	VOICE CIRCUIT	OLATHE [16]	MINNEPLS [17]	AT PD 15334 014	642	7,704
BABR 7YYA [4]	RTSS CIRCUIT [18]	OLATHE	NORLEANS [19]	ABI PD 15334 005	784	9,408

See Footnotes at end of chart.

CCSD [2]	Description	From	To	CSA [3]	Leased Costs [1] Monthly Recurring Costs	Leased Costs [1] Annual Cost To DoD
Air Force						
JUE9 779D	DDN ACCESS CIRCUIT	MCCONNLL[20]	FTLVNWRT	GTES D 00327	618	7,416
JUE9 78MG	DDN ACCESS CIRCUIT	WICHITA[21]	LEVNWRTH[22]	GTES D 00739 001	932	11,184
Defense Information Systems Agency						
DORA 2T01	TELETYPE	SITE R[23]	FTLVNWRT	Z[8]	0	0
DTXX 6H81	TRUNK CIRCUIT	SITE R	FTLVNWRT	AT D 19090	806	9,672
Defense Logistics Agency						
NSUD 7CD6	DATA CIRCUIT	ST LOUIS[24]	KANSASCY[25]	ABI D 51690	761	9,132
Total Annual Savings Resulting from Termination Actions						$148,164

See footnotes at end of chart.

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.
2/ Command Communications Service Designator.
3/ Communications Service Authorization - identifies specific contract with vendor for each service.
4/ This circuit was disconnected after our cutoff date, July 28, 1990, therefore, no termination action is required for this circuit.
5/ The Pentagon, Arlington, Virginia.
6/ Fort Leavenworth, Leavenworth, Kansas.
7/ Fort Monroe, Hampton, Virginia.
8/ Channel on a multichannel circuit or trunk. Each channel may have a unique requirement and CCSD identifier. Costs are often identified for the CCSD and CSA of the trunk, rather than for each channel.
9/ Fort Eustis, Newport News, Virginia.
10/ Fort Hood, Killeen, Texas.
11/ Fort Sill, Lawton, Oklahoma.
12/ Fort Rucker, Dothan, Alabama.
13/ Fort Lee, Petersburg, Virginia.
14/ Sheppard Air Force Base, Wichita Falls, Texas.
15/ Circuit is owned by the DoD. Disconnection provides the potential to utilize the circuit for other existing communications requirements and to disconnect a leased circuit, or to utilize the circuit for a future requirement and avoid connecting a leased circuit.
16/ Naval Readiness Command, Region 18, Olathe, Kansas.
17/ Minneapolis, Minnesota.
18/ Reserve Training Support System.
19/ Naval Reserve Force, New Orleans, Louisiana.
20/ McConnell Air Force Base, Wichita, Kansas.
21/ Wichita, Kansas.
22/ Leavenworth, Kansas.
23/ Site R, Fort Ritchie, Maryland.
24/ St. Louis, Missouri.
25/ Kansas City, Missouri.

Appendix E. Schedule of Non-Sample Circuits Recommended for Termination

CCSD [2]	Description	From	To	CSA [3]	Leased Costs [1] Monthly Recurring Costs	Leased Costs [1] Annual Cost To DoD
Army [4]						
UUBV 7SWK	VOICE CIRCUIT	FTLVNWRT [5]	OLATHE [6]	SW 07P 00662	$ 210	$ 2,520
UUBV 7WQX	VOICE CIRCUIT	FTLVNWRT	OLATHE	SW 07P 00674	210	2,520
Navy [7]						
BABR 7AGD	VOICE/RECORD CIRCUIT	NORLEANS [8]	WASHGTN [9]	AT XD 15340 004	687	8,244
BABR 7F7S	VOICE/RECORD CIRCUIT	SANDIEGO [10]	PT MUGU [11]	ABI PD 15334 022	1,257	15,084
BABR 7YWW	VOICE/RECORD CIRCUIT	NORFOLK [12]	NORLEANS	ABI PD 15334 002	864	10,368
BABR 7YWX	VOICE/RECORD CIRCUIT	CHARLSTN [13]	NORFOLK	AT PD 15334 013	698	8,376
BABR 7YWY	VOICE/RECORD CIRCUIT	WASHGTN	NORLEANS	AT XD 15340 003	687	8,244
BABR 7YWZ	VOICE/RECORD CIRCUIT	PHILDLPH [14]	NORLEANS	ABI PD 15334 004	902	10,824
BABR 7YXA	VOICE/RECORD CIRCUIT	PHILDLPH	SOWEYMTH [15]	AT PD 15334 007	679	8,148
BABR 7YXD	VOICE/RECORD CIRCUIT	SCOTIA [16]	NORLEANS	AT XD 15340 001	763	9,156
BABR 7YXE	VOICE/RECORD CIRCUIT	NEWPORT [17]	SCOTIA	AT XD 15340 002	532	6,384
BABR 7YXW	VOICE/RECORD CIRCUIT	GT L [18]	NORLEANS	ABI PD 15334 017	857	10,284
BABR 7YYC	VOICE/RECORD CIRCUIT	RAVENNA [19]	NORLEANS	ABI PD 15334 008	1,014	12,168
BABR 7YYD	VOICE/RECORD CIRCUIT	RAVENNA	DETROIT [20]	AT PD 15334 009	740	8,880
BABR 7YYG	VOICE/RECORD CIRCUIT	SNFRNCSC [21]	NORLEANS	ABI PD 15334 012	1,125	13,500
BABR 7YYH	VOICE/RECORD CIRCUIT	SANDIEGO	NORLEANS	ABI PD 15334 015	1,079	12,948
BABR 7YYJ	VOICE/RECORD CIRCUIT	SANDIEGO	NORLEANS	ABI PD 15334 016	1,112	13,344
BABR 7ZDS	VOICE/RECORD CIRCUIT	SAND PT [22]	NORLEANS	ABI PD 15334 018	1,186	14,232
BABV 7UDE	VOICE CIRCUIT	PHILDLPH	WILLWGRV [23]	BP 03P 03141	163	1,956
BABV 7YXX	VOICE CIRCUIT	GT L	GLENVIEW [24]	IL 70P 68824	70	840
BUED 7YPC	DATA CIRCUIT	DALLAS [25]	NORLEANS	ABI 15299 001	1,698	20,376
Total Annual Savings Resulting From Termination Actions						$198,396

See footnotes on next page.

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.
2/ Command Communications Service Designator.
3/ Communications Service Authorization - identifies specific contract with vendor for each service.
4/ Replace with local commercial service to obtain access to the Automatic Voice Network.
5/ Fort Leavenworth, Leavenworth, Kansas.
6/ 102 Army Reserve Command Aviation Support Facility, Olathe, Kansas.
7/ Replace with existing Navy access to the Defense Data Network.
8/ Naval Reserve Force, New Orleans, Louisiana.
9/ AT&T central office, Washington, D.C.
10/ Naval Supply Center, San Diego, California.
11/ Naval Air Station, Point Mugu, California.
12/ Naval Communications Detachment, Central Office Exchange Service (CENTREX) switch, Norfolk, Virginia.
13/ Naval Reserve Readiness Command, Region Seven, Charleston, South Carolina.
14/ Naval Station, Philadelphia, Pennsylvania.
15/ Naval Air Station, South Weymouth, Massachusetts.
16/ AT&T central office, Scotia, New York.
17/ Naval Reserve Readiness Command, Region One, Newport, Rhode Island.
18/ Naval Training Center, Great Lakes, Illinois.
19/ Naval Reserve Readiness Command, Region Five, Ravenna, Ohio.
20/ Naval Air Facility Detroit, Mt. Clemens, Michigan.
21/ Naval Station Treasure Island, San Francisco, California.
22/ General Services Administration, Seattle, Washington.
23/ Naval Air Station, Willow Grove, Pennsylvania.
24/ Naval Air Station, Glennview, Illinois.
25/ Naval Air Station, Dallas, Texas.

Appendix F. Summary of Circuits Recommended for Reconfiguration and Termination

	CIRCUIT COUNT[1]	ANNUAL RECURRING COST[2]	RECURRING COST OF RECONFIGURATION ACTION[3]	ANNUAL RECURRING SAVINGS[4]
Sample Circuits Recommended for Reconfiguration[5]	33	$532,296	$131,340	$400,956
Sample Circuits Recommended for Termination[6]	25	148,164	0	148,164
Total	58	$680,460	$131,340	$549,120
Non-Sample Circuits Recommended for Termination[7]	21	198,396	0	198,396
Total	21	$198,396	$ 0	$198,396

Footnotes:

1/ The number of circuits recommended for reconfiguration or termination.
2/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office to communications vendors. The costs shown on this schedule are net costs to the Government.
3/ The recurring cost to complete the reconfiguration or termination action.
4/ The annual recurring savings resulting from the reconfiguration or termination action.
5/ See Appendix C.
6/ See Appendix D.
7/ See Appendix E.

Appendix G. Schedule of Future Years Defense Program Impact of Reconfiguration and Termination Opportunities

Program	Element No.	Element Title	FY 1992	FY 1993	FY 1994	FY 1995	FY 1996	FY 1997	6-Year Total
Recurring Savings (Operation and Maintenance)									
Intelligence and Communications	0303126	Long-Haul Communications	$1,742,855[1/]	$1,806,469	$1,872,947	$1,942,433	$2,015,663	$2,094,475	$11,474,842
Total Recurring Savings			$1,742,855	$1,806,469	$1,872,947	$1,942,433	$2,015,663	$2,094,475	$11,474,842
Nonrecurring Savings (Operation and Maintenance)									
Intelligence and Communications	0303126	Long-Haul Communications	($ 391,504)						($ 391,504)
Total Nonrecurring Savings			($ 391,504)						($ 391,504)
Net Recurring Savings			$1,351,351	$1,806,469	$1,872,947	$1,942,433	$2,015,663	$2,094,475	$11,083,338[2/]

1/ The amount shown is a projection of a statistical sample that is plus or minus 26.1 percent or plus or minus $455,117 at a 90-percent confidence level.

2/ This chart summarizes results identified in Appendixes C and D. Net savings in the first year are based on estimated costs to lease the circuits and to buy and install the equipment needed for the reconfigurations proposed in this report. Using the FY 1992 recurring savings ($1,742,855) for the base year, we applied the established DoD inflation factors (3.65 percent for FY 1993, 3.68 percent for FY 1994, 3.71 percent for FY 1995, 3.77 percent for FY 1996, and 3.91 percent for FY 1997) for the next 5 fiscal years and calculated the total net savings for the Future Years Defense Program to be approximately $11 million.

Appendix H. Schedule of Future Years Defense Program Impact of Termination Opportunities for Non-Sample Circuits

Program	Element No.	Element Title	FY 1992	FY 1993	FY 1994	FY 1995	FY 1996	FY 1997	6-Year Total
Recurring Savings (Operation and Maintenance)									
Intelligence and	0303126A	Long-Haul	$ 5,040	$ 5,224	$ 5,416	$ 5,617	$ 5,829	$ 6,057	$ 33,183
Communications	0303126N	Communications	193,356	200,413	207,788	215,497	223,621	232,365	1,273,040
Total Recurring Savings			$198,396	$205,637	$213,204	$221,114	$229,450	$238,422	$1,306,223

Note: The non-sample circuits were identified during our audit work in the Kansas City area. Since the circuits were not part of our audit sample, cost savings for them were projected separately for the Future Years Defense Program and were not included in the statistical projection of our results for sample circuits in the Kansas City area. Using the FY 1992 recurring savings ($198,396) for the base year, we applied the established DoD inflation factors (3.65 percent for FY 1993, 3.68 percent for FY 1994, 3.71 percent for FY 1995, 3.77 percent for FY 1996, and 3.91 percent for FY 1997) for the next 5 fiscal years and calculated the total net savings for the Future Years Defense Program to be approximately $1.3 million.

Appendix I. Results of Reevaluation

The CCSDs in italics are shown in Appendix D, and the remainder of the CCSDs are listed in Appendix C under various categories and tables.

Sample CCSDs[1/] Retained from Draft Report

Department of the Army

CCSD	CCSD	CCSD	CCSD
UHN9 77D5	US29 742V	*UDLD 7D3U*	*UDLD 7YJM*
UIND 7K4K	UTYD 7GJC	*UDLD 7YCT*	*UDLM 7ECD*
UIND 7K4L	UTYD 7JR9	*UDLD 7YCU*	*UINM 7TZW*
UIND 7K4M	UTYD 7JSA	*UDLD 7YDR*	*UINM 7TZX*
UIND 7K4P	UTYD 7KC6	*UDLD 7YHK*	*UINM 7TZZ*
UIND 7K4R	UTYD 7KW7	*UDLD 7YHL*	*UTNX 6H1A*
UIND 7K4W	UUE9 75LE	*UDLD 7YHR*	*UTNX 6H2C*
UIND 7K4Y	UUED 7YFJ	*UDLD 7YHS*	*UTNX 6H2F*
UIND 7M96	UVID 7HV5	*UDLD 7YJH*	*UUE9 74L3*
UIND 7MY2	UVID 7HV6		
UIT9 768Z	UZGM 7FJ5 [2/]		

Department of the Navy

CCSD	CCSD
BUED 7BQW	*BABR 7YYA* [3/]
BUED 7HE3	*BABV 7YYB*

Department of the Air Force

CCSD	CCSD
JNGV 7AVW	*JUE9 779D*
JNGV 7HM4	*JUE9 78MG*
JNGV 7HM5	
JNGV 7HM6	
JPDD 7DPH	
JPED 7HML	
JPED 7JHP	
JQGD FAXQ	
JZRD FAGB	

Defense Information Systems Agency

CCSD
DORA 2TO1
DTXX 6H81

Defense Logistics Agency

CCSD
NSUD 7CD6

1/ Command Communications Service Designator.
2/ This circuit, which was initially recommended for termination in the draft report, is now recommended for reconfiguration.
3/ This circuit, which was initially recommended for reconfiguration in the draft report, is now recommended for termination.

Non-Sample CCSDs Retained from Draft Report

Department of the Army

CCSD
UUBV 7SWK
UUBV 7WQX

Department of the Navy

CCSD	CCSD
BABR 7AGD	*BABR 7YYC*
BABR 7F7S	*BABR 7YYD*
BABR 7YWW	*BABR 7YYG*
BABR 7YWX	*BABR 7YYH*
BABR 7YWY	*BABR 7YYJ*
BABR 7YWZ	*BABR 7ZDS*
BABR 7YXA	*BABV 7UDE*
BABR 7YXD	*BABV 7YXX*
BABR 7YXE	*BUED 7YPC*
BABR 7YXW	

Appendix J. Summary of Potential Benefits Resulting from Audit

Recommendation Reference	Description of Benefit	Amount and/or Type of Benefit
1. and 2.	Economy and Efficiency. Reconsidering and terminating the circuits identified help ensure that the most effective, efficient, and least costly service is obtained. Disconnecting circuits that no longer have a valid requirement will result in immediate savings.	Monetary benefits of $9,221,477* (Funds put to better use-Budget year 1994). Appropriation-Operation and Maintenance

*Using statistical sampling techniques, we determined that reconfiguration and termination solutions could reduce the cost of the 292 DCS circuits by a projected $1,742,855 annually (plus or minus 26.1 percent or plus or minus $455,117 at a 90-percent confidence level). The 6-year total net cost reductions and net recurring cost reductions over the Future Years Defense Program (FY 1992 through FY 1997) pertaining to the cutoff date for the audit as shown in Appendixes G and H totaled $12,389,561. However, because of the time elapsed since the audit universe cutoff date, the date that the circuit reconfigurations and terminations were identified to management in our draft report, and the nature of the management comments on the draft report, the potential cost avoidances of about $3.1 million for FY 1992 through FY 1993 may not have been realized and have been deleted from the total net recurring savings. The remaining $9.2 million should be put to better use.

Appendix K. Organizations Visited or Contacted

Office of the Secretary of Defense

Office of the Assistant Secretary of Defense (Command, Control, Communications and Intelligence), Washington, DC
Office of the Assistant Secretary of Defense (Health Affairs), Washington, DC
Defense Medical Systems Support Center, Falls Church, VA

Department of the Army

Office of the Director of Information Systems for Command, Control, Communications and Computers, Washington, DC
Headquarters, U.S. Army Forces Command, Fort McPherson, GA
Headquarters, U.S. Army Training and Doctrine Command, Fort Monroe, VA
Headquarters, U.S. Army Information Systems Command, Fort Huachuca, AZ
U.S. Army Commercial Communications Office, Fort Huachuca, AZ
Headquarters, U.S. Army National Guard Bureau, Falls Church, VA
Fort Leavenworth, KS
Fort Riley, Junction City, KS
Atchison Army Ammunition Plant, Atchison, KS
Lake City Army Ammunition Plant, Independence, MO
Sunflower Army Ammunition Plant, De Soto, KS
102nd Army Reserve Command Aviation Support Facility, Olathe, KS

Department of the Navy

Office of the Director, Space and Electronic Warfare, Washington, DC
Naval Computer and Telecommunications Command, Washington, DC
Naval Reserve Readiness Command, Region 18, Olathe, KS

Department of the Air Force

Office of the Assistant Chief of Staff, Systems for Command, Control, Communications and Computers, Washington, DC
Headquarters, Air Force Communications Command, Scott Air Force Base, IL
Air Force Telecommunications Certification Office, Scott Air Force Base, IL
Air Weather Service, Scott Air Force Base, IL
Richards Gebaur Air Reserve Station, Belton, MO
Rosecrans Memorial Airport, Air Guard Station, St. Joseph, MO

Marine Corps

Headquarters, U.S. Marine Corps, Arlington, VA
Marine Corps Finance Center, Kansas City, MO
Marine Corps Central Design and Programming Activity, Kansas City, MO

Defense Agencies

Defense Communications Agency *
- Acquisition Management Organization, Washington, DC
  - Defense Commercial Communications Office, Scott Air Force Base, IL
  - Telecommunications Management and Services Office, Scott Air Force Base, IL
- Resource Management Directorate, Washington, DC
- Defense Communications Systems Organization, Washington, DC
- Information Management Organization, Washington, DC

Defense Logistics Agency

Defense Contract Management Area Operations Residency, Kansas City, MO

Non-DoD Activities

Federal Aviation Administration, Kansas City, MO
National Communications Center, Kansas City, MO
Olathe Air Traffic Control Center, Olathe, KS
Federal Reserve Bank, Kansas City, MO
National Oceanic and Atmospheric Administration, Satellite Field Service Station, Kansas City, MO

* Now the Defense Information Systems Agency

Appendix L. Report Distribution

Office of the Secretary of Defense

Comptroller of the Department of Defense
Assistant Secretary of Defense (Command, Control, Communications and Intelligence)
Assistant Secretary of Defense (Health Affairs)
Assistant to the Secretary of Defense for Public Affairs

Department of the Army

Secretary of the Army
Auditor General, Department of the Army

Department of the Navy

Secretary of the Navy
Assistant Secretary of the Navy (Financial Management)
Auditor General, Naval Audit Service

Department of the Air Force

Secretary of the Air Force
Assistant Secretary of the Air Force (Financial Management and Comptroller)
Auditor General, U.S. Air Force Audit Agency

Defense Agencies

Director, Defense Contract Audit Agency
Director, Defense Information Systems Agency
Director, Defense Logistics Agency
Director, Defense Mapping Agency
Inspector General, Defense Intelligence Agency
Inspector General, National Security Agency
Director, Defense Logistics Studies Information Exchange
Director, Defense Medical Systems Support Center

Non-DoD Organizations

Office of Management and Budget
U.S. General Accounting Office
National Security and International Affairs Division
Technical Information Center

Chairman and Ranking Minority Member of Each of the Following Congressional Committees and Subcommittees:

Senate Committee on Appropriations
Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services
Senate Committee on Commerce, Science, and Transportation
Senate Subcommittee on Communications, Committee on Commerce, Science, and Transportation
Senate Committee on Governmental Affairs
House Committee on Appropriations
House Subcommittee on Defense, Committee on Appropriations
House Committee on Armed Services
House Subcommittee on Oversight and Investigations, Committee on Armed Services
House Committee on Energy and Commerce
House Subcommittee on Telecommunications and Finance, Committee on Energy and Commerce
House Committee on Government Operations
House Subcommittee on Legislation and National Security, Committee on Government Operations

Part IV - Management Comments

Office of the Assistant Secretary of Defense (Health Affairs)

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
HEALTH AFFAIRS
WASHINGTON, DC 20301-1200

DEFENSE MEDICAL SUPPORT ACTIVITY

12 SEP 1991

MEMORANDUM FOR OFFICE OF INSPECTOR GENERAL, DEPARTMENT OF DEFENSE
ATTENTION: DIRECTOR, READINESS AND OPERATIONAL SUPPORT

SUBJECT: Draft Audit Report on Telecommunications Circuit Allocation Programs - Kansas City Area (Project No. ORD-0043.02)

Reference your memorandum dated July 5, 1991, subject as above, which tasked the Defense Medical Systems Support Center (DMSSC) to review the draft audit report and provide comments. DMSSC personnel reviewed the subject draft report and found one item requiring action. Appendix C (page 31) recommended that a DMSSC circuit (Command Communications Service Designator NDHD 7BKC) be evaluated for reconfiguration to obtain a more cost-effective configuration.

DMSSC concurs with the recommendation that the circuit NDHD 7BKC be reconfigured. This circuit was replaced in December 1990 by a new circuit (EA077) which was engineered to provide a more cost-effective configuration. A telecommunications service request (TSR), number DR09NOV900662, was submitted to the Defense Commercial Communications Office (DECCO) in December 1990 to disconnect this circuit. A copy of this TSR is at attachment 1. Circuit NDHD 7BKC was disconnected on 21 February 1991 as evidenced by attachment 2, which is a copy of the DECCO Completed Leasing Action Message (CLAM). DMSSC communications personnel were in the process of implementing a newly-redesigned network while the audit was in process. This new network was designed to provide a more cost-effective communications transport medium for the DMSSC customers in the continental United States (CONUS) to include Alaska, Hawaii, Puerto Rico, Cuba, and Bermuda.

The new DMSSC Network (DMSSC*NET) implementation was completed on 22 March 1991. It is estimated that the implementation of the newly-redesigned DMSSC*NET will result in a yearly communications cost savings to the Department of Defense of $3 million. The first year cost savings for the new DMSSC circuit (EA077), compared to the old circuit (NDHD 7BKC) is $9,803, after subtracting the installation cost. The DMSSC communications office is continuing to find better, more cost-effective ways to provide data communications capabilities for our customers.

We appreciate the opportunity to respond to the subject report. If you have any questions concerning this response, please contact David Leapley at (703) 756-1124.

Diana G. Tabler

Diana G. Tabler
Principal Director

Attachments

Department of the Army

DEPARTMENT OF THE ARMY
OFFICE OF THE SECRETARY OF THE ARMY
WASHINGTON, DC 20310-0107

Office, Director of Information Systems for Command, Control, Communications, & Computers

SAIS-PPX

04 DEC 1991

MEMORANDUM FOR OFFICE OF THE ASSISTANT INSPECTOR GENERAL FOR AUDITING, DOD, READINESS AND OPERATIONAL SUPPORT DIRECTORATE, ATTN: MR. GANNON

SUBJECT: Draft Audit Report on Telecommunications Circuit Allocation Programs - Kansas City Area (Project No. ORD-0043.02)

1. This summarizes Army's response to the subject draft audit.

2. Army nonconcurs with most of the findings and recommendations. Encl 1 addresses each finding/recommendation in detail. The US Army Commercial Communications Office provided a draft of Encl 1 to the DOD-IG audit team during extensive meetings in September. Encl 2 addresses the remaining concerns that the DOD-IG audit team raised in meetings with the ODISC4 point of contact in October.

3. The timing of the audit coupled with DOD's subsequent movement towards the Defense Information Systems Network (DISN) preclude extrapolating any audit savings to the future. The DOD efforts of DISN and the Telecommunications Management Program should achieve future savings potential. Generally, no additional savings should be available as a result of this audit.

4. Army stands ready to answer additional questions you provide. However, the Army position is that the remaining concerns raised by the audit team relate to system problems. Solutions to these problems are already underway and involve programs external to the Army, such as Defense Information Systems Agency's (DISA) Telecommunications Management Program (TMP). TMP and other system-wide efforts require joint action on the part of DISA, MILDEPs, and OASD(C3I) resulting in new policy, new and uniform procedures throughout DOD, and accurate requirements from user scrubs. For process improvements to be truly effective, they need to be worked as community projects.

SAIS-PPX
SUBJECT: Draft Audit Report on Telecommunications Circuit Allocation Programs - Kansas City Area (Project No. ORD-0043.02)

5. Army recommends remaining issues be worked through a new working group, an adjunct of the Joint Services Telecommunications Working Group, established to deal with audit issues. This group includes representatives from OASD(C3I), the Joint Staff, DISA, and the MILDEPs.

6. ODISC4 POC is Charlie Colello, SAIS-PPX, (703) 614-0430.

FOR THE DIRECTOR:

2 Encls

ROBERT F. MANNING
Colonel, GS
Deputy Director for Policy

CF:
SAIG-PA (ATTN: Ms Flanagan)
JSTWG (ATTN: Mr Lavietes)

Final Report Reference

ASQA-DS (ASIR/30 Aug 91) (25) 1st End Ms. Adams/87906
SUBJECT: Draft Audit Report on Telecommunications Circuit Allocation - Kansas City Area (Project No. ORD-0043.02) and Final Quick-Reaction Report on the Reconfiguration of Automatic Voice Network Access Circuits - Kansas City Area (91-110)

22 NOV 1991

Director, U.S. Army Commercial Communications Office, Fort Huachuca, AZ 85613-5330

FOR Commander, U.S. Army Information Systems Command, ATTN: ASIR, Fort Huachuca, AZ 85613-5000

1. The USARCCO reviewed the subject report, and since the report provides recommendations for corrective actions in Appendix C through G, responses are keyed to each Appendix as follows:

a. APPENDIX C: (Army findings only)

Appendix C Page 26

(1) FINDING: Establish new trunks through multiplexing Automatic Voice Network single-channel access circuits.

NONCONCUR: This office provided information to the Defense Information Systems Agency (DISA) in response to the DODIG Quick Reaction Report on the Reconfiguration of the Automatic Voice Network Access Lines-Kansas City Area, 24 Apr 91 that agreed in part with the proposed reconfiguration, but did not agree completely with the DODIG cost savings analysis. That response provided a cost analysis, and brought up the possibility of contractual problems that might prevent full implementation of the recommended reconfiguration. Also, a very important point that has apparently been overlooked is the fact that the cost savings potential reported by this office was made possible by the new DCTN DSO tariff which allows special pricing for non-DCTN T-1. The DODIG comment that an estimated $656,000 was needlessly spent over the last 6 years is incorrect as far as the Army portion of the finding is concerned because the DCTN DSO tariff only became effective 9 May 90. Reconfiguration under regular tariff rates did not prove to be cost effective. It should also be noted that under single system management, the Army is no longer responsible for DSN access. Consequently, this finding cannot be implemented by the Army and must be answered by the proponent, DISA.

Appendix C Page 27

(2) FINDING: Establish a new routing through a general purpose network.

NONCONCUR: Most of the circuits recommended for reconfiguration to a general purpose network are waivered from DDN for technical reasons, and FTS2000 historically is costing the Army 30 percent more than the existing configurations. Since

2

ENCL 1

ASQA-DS
SUBJECT: Draft Audit Report on Telecommunications Circuit Allocation - Kansas City Area (Project No. ORD-0043.02) and Final Quick-Reaction Report on the Reconfiguration of Automatic Voice Network Access Circuits - Kansas City Area (91-110)

cost is not a factor in the legal requirement to use FTS2000, the non-Warner exempt circuits listed will transition to FTS2000 when existing contracts expire in accordance with the Army FTS2000 transition plan which is designed to allow orderly transition using available resources. Please note that of all the non-Warner exempt circuits listed, a cost analysis indicates that only one can be cost effectively transitioned to FTS2000, and FTS2000 is not cost effective for any of the Warner-exempt circuits included. Also, it is interesting to note that one of the circuits recommended for reconfiguration to a general purpose network was initially awarded to FTS2000, a general purpose network. The following specific information is provided for the recommended circuit reconfigurations:

(a) Circuits UIND7K4K, UIND7K4L, UIND7K4M, UIND7K4P, UIND7K4R, UIND7K4W, UIND7K4Y, UIND7MY2, UIND7M96, and UIND7ND0 are part of the Joint Computer Based Instructional System (JCBIS) for which the U.S. Army Training and Doctrine Command (TRADOC) is the proponent. These circuits are part of a multiplexed network that was designed and is operated by SMS Data Systems, Inc., under DCA200-89-C-00067. This is a 3-year contract administered by DECCO that expires in May 92, and is subject to a basic termination liability. This contract was awarded because the JCBIS network was waivered from DDN. As an educational network, the JCBIS carries non-Warner exempt traffic that is subject to FTS2000 when the current contract expires. Telecommunications Service Requests (TSRs) WF14NOV912009, WF14NOV912010, WF14NOV912011, WF14NOV912012, WF15NOV912014, WF15NOV912015, WF17NOV912016, and WF17NOV912017 have been submitted for testing designated JCBIS users on FTS2000 during the entire month of Feb 92. Upon successful completion of the test, the entire JCBIS network will be transitioned to FTS2000 in compliance with public law.

(b) The proposal to route circuit UNJD7N83 through a general purpose network is redundant. The circuit was ordered by TSR WA24JAN900853, and awarded to FTS2000, a general purpose network. The monthly recurring cost (MRC) for this FTS2000 circuit is $1,280.38.

(c) UTNX6C69 is a trunk that carries 2 sub-trunks, UTNX6C70 and UTNX6C71 at no additional cost. These trunks were installed as a cost effective method of multiplexing eight U.S. Army Forces Command (FORSCOM) Warner-exempt WWMCCS circuits. WWMCCS circuits are waivered from DDN because the terminal

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protocol (VIP 7705) cannot be supported by DDN DISNET 2. The above trunks are part of a planned reconfiguration/restructuring of the WWMCCS network. Network redesign plans were developed prior to the audit by the WWMCCS Program Manager in order to optimize the network in the most cost effective, technically sufficient configuration possible. Implementation of the redesign plans made it possible to either rehome or disconnect all circuits carried by above trunks except UWJD24DZ which is pending rehome to a host computer in Hawaii. Once the rehome is complete, the entire trunk configuration will be discontinued. The MRC of trunk UTNX6C69 is $790.11, and the two sub-trunks are carried at no additional cost. Similar service under FTS2000 would incur an estimated MRC of $1,029.85 which would increase costs considerably. The above actions are a result of those plans, not the audit recommendations.

(d) UTNX6N88 is a trunk carrying 8 Warner-exempt command and control WWMCCS circuits that were also recommended for reconfiguration in this section of the report. The only cost incurred is for the trunk, and the 8 circuits (UWJD26PA, UWJD26PB, UWJD26PC, UWJD26PD, UWJD26PE, UWJD26PF, UWJD26PG, and UWJD26PH) ride the trunk at no additional cost. This trunk is a cost effective path between the Pentagon and Fort Leavenworth that operates at the TOP SECRET level. The WWMCCS terminal protocol (VIP 7705) cannot be supported by DDN DISNET 2 at this time. Although these circuits have periods of little usage, each circuit requires real time transmission and receipt of traffic at the TOP SECRET level in support of mobilization or crisis situations. The present MRC for the trunk is $779.91, and the estimated MRC for similar service under FTS2000 is $961.70.

(e) Circuits UTYD7GJC, UTYD7JR9, UTYD7JSA, UTYD7KC6, and UTYD7KW7 are part of the TRADOC Decision Support System (TDSS), a non-Warner exempt network. The TRADOC Combat Developments (CD) network is in the process of merging with the TDSS network. The merger can only be accomplished through equipment changeout because of compatibility problems. As soon as a CD network user changes to IBM compatible hardware, action is taken to transfer that user to the TDSS network. Equipment changeouts are expected to be completed by the end of the second quarter (FY 92), and the CD network will cease to exist. In the interim, however, both networks are valid requirements that must continue to coexist. Since the contract has expired for the TDSS circuits in question, TRADOC has submitted Requests for Service (RFS) for reaward to FTS2000. The cost analysis provided below

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shows that with one exception, circuit UTYD7KW7, FTS2000 is not the most cost effective alternative:

CCSD	CURRENT MRC	ESTIMATED FTS2000 MRC
UTYD7GJC	$ 830.94	$ 961.70
UTYD7JR9	$ 342.59	$ 541.91
UTYD7JSA	$ 673.00	$ 694.56
UTYD7KC6	$ 722.00	$ 961.70
UTYD7KW7	$1013.17	$ 872.66

Circuit UUED7YFJ is a 2.4kb channel on a multiplexed trunk, UTNX6H0D. The circuit provides education services from a TRADOC user at Fort Leavenworth to the Defense Technical Information Center, Cameron Station, VA. The circuit rides a trunk that carries a variety of circuits between St Louis and the Pentagon. The only cost involved is for access which currently has a MRC of $561.00, and the estimated FTS2000 MRC would be $694.56. DDN connection at the time of the audit would have been $776 MRC.

(f) ASIMS circuits UVID7HV5 and UVID7HV6 were disconnected by TSR's WA28MAR911457 and WA28MAR911458 as a part of a planned ASIMS network reconfiguration. At the time of the audit, the ASIMS network was not compatible with DDN; however, a project to convert ASIMS to Government owned and operated facilities was underway. Under the project, action was initiated to install DDN connections from all ASIMS front end processors; however, since the ASIMS network is sized based on bulk data transfer requirements, DDN connectivity did not provide adequate throughput. In compliance with public law and policy, this problem was solved by increasing access line and connection speeds at locations that could be supported by DDN (primarily used as backup), and using FTS2000 at locations with traffic volume that exceeded DDN capabilities. Every connection was studied, and bandwidth was shared when possible. The ASIMS reconfiguration was completed and all dedicated circuits discontinued by Aug 91. The traffic volume at Fort Leavenworth exceeded DDN capabilities, so FTS2000 was used to replace the above dedicated circuits. These actions were independent of the DODIG audit recommendations.

(g) WWMCCS circuits UWJD24R4 and UWJD24VL were disconnected (Aug and Oct 91) as a result of a planned reconfiguration/restructuring of the WWMCCS network. These Warner-Exempt circuits were waivered from the DDN because the

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terminal protocol (VIP 7705) could not be supported by DISNET 2. Network redesign plans were developed prior to the audit by the WWMCCS Program Manager in order to optimize the network in the most cost effective, technically sufficient configuration possible. The above disconnects did not result from audit recommendations. The configuration prior to disconnect was more cost effective than FTS2000:

CCSD	CURRENT MRC	ESTIMATED FTS2000 MRC
UWJD24R4	$670.33	$1161.42
UWJD24VL	$621.33	$ 964.25

Appendix C Page 35

(3) FINDING: Rehome a DDN Access Circuit:

NONCONCUR: At the time of the audit, the suggested rehome was not possible because the circuit required connection to a SECRET DISNET 1 PSN, a capability that did not become fully operational at Offut until Nov 90. Also, since current DISA policy restricts rehome TSR submissions to modeled circuits, this office cannot comment to feasibility or cost savings potential from the suggested rehome because modeling is scheduled and accomplished by DISA. Recommend this finding be directed to DISA.

Appendix C Page 39

(4) FINDING: Purchase leased modems.

NONCONCUR: All the modems associated with these circuits have already been purchased and maintenance contracts do not exist.

The modems associated with UTNX6C69, UWJD24R4, and UWJD24VL were purchased before the DODIG inspection and prior to the receipt of a GSA Delegation of Procurement Authority that released the bulk modem contract for ordering purposes in Feb 90. The CODEX maintenance CSA was discontinued in Jun 90. Since the modems were new, FORSCOM elected not to replace them through the bulk modem contract, especially since the existing modems are compatible with the WWMCCS network.

Circuits UHN977D5, UIT9768Z, and US29742V are DDN, and even though the Army recently purchased new DDN modems, installation can only occur when DISA replaces the PSN modems with compatible equipment. The Army purchased the equipment to be ready to interface with equipment purchased by DISA as a part of an ongoing project to replace DDN equipment with Government-

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owned, state-of-the-art equipment available from the bulk modem contract. The circuits are being considered for a gateway that was recently activated at Fort Leavenworth; however, this option was not available during the audit window. None of the above equipment purchases had anything to do with the DODIG audit, and the maintenance CSAs were discontinued before the audit universe was determined; consequently, the $17,784 cost savings quoted in the report as a result of the audit does not apply.

b. APPENDIX D - Schedule of Sample Circuits Recommended for Termination (Army Circuits Only).

Appendix D Page 41

FINDING: Recommend termination.

CONCUR: The requirement for UDLD7D3U was cancelled effective 29 Mar 91.

NONCONCUR: UDLD7YCT and UDLD7YCU are circuits that ride trunk UTNX6H1A, a part of the TRADOC Combat Developments (CD) network, a non-Warner exempt network. The network is being transitioned to the TRADOC Decision Support System (TDSS) network as quickly as possible; however, the merger can only be accomplished through equipment changeout because of compatibility problems. As soon as a CD network user changes to IBM compatible hardware, action is taken to transfer that user to the TDSS network. Equipment changeouts are expected to be completed by the end of the second quarter (FY 92), and the CD network will cease to exist. In the interim, however, both networks are valid requirements that must continue to coexist. Since this is a valid requirement that cannot be terminated and cannot be transitioned until compatible equipment is installed, the $9,216 cost savings quoted in the report for discontinuing the trunk and circuits is not valid.

NONCONCUR: UDLD7YDR is a part of the TRADOC Combat Developments (CD) network, a non-Warner exempt network. The network is being transitioned to the TRADOC Decision Support System (TDSS) network as quickly as possible; however, the merger can only be accomplished through equipment changeout because of compatibility problems. As soon as a CD network user changes to IBM compatible hardware, action is taken to transfer that user to the TDSS network. Equipment changeouts are expected to be completed by the end of the second quarter (FY 92), and the CD network will cease to exist. In the interim, however, both networks are valid requirements that must continue to coexist.

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Since this is a valid requirement that cannot be terminated, the $7,860 cost savings quoted in the report is not valid.

NONCONCUR: UDLD7YHK and UDLD7YHL are circuits that ride trunk UTNX6H2C, a part of the TRADOC Combat Developments (CD) network, a non-Warner exempt network. The network is being transitioned to the TRADOC Decision Support System (TDSS) network as quickly as possible; however, the merger can only be accomplished through equipment changeout because of compatibility problems. As soon as a CD network user changes to IBM compatible hardware, action is taken to transfer that user to the TDSS network. Equipment changeouts are expected to be completed by the end of the second quarter (FY 92), and the CD network will cease to exist. In the interim, however, both networks are valid requirements that must continue to coexist. Since this is a requirement that cannot be terminated, the $9,624 cost savings quoted in the report is not valid.

NONCONCUR: UDLD7YHR, UDLD7YHS, and UDLD7ECD are circuits that ride trunk UTNX6H2F, a part of the TRADOC Combat Developments (CD) network, a non-Warner exempt network. The network is being transitioned to the TRADOC Decision Support System (TDSS) network as quickly as possible; however, the merger can only be accomplished through equipment changeout because of compatibility problems. As soon as a CD network user changes to IBM compatible hardware, action is taken to transfer that user to the TDSS network. Equipment changeouts are expected to be completed by the end of the second quarter (FY 92), and the CD network will cease to exist. In the interim, hoever, both networks are valid requirements that must continue to coexist. Since this is a valid requirement that cannot be terminated, the $8,928 cost savings quoted in the report for discontinuing the trunk and circuits is not valid.

NONCONCUR: UDLD7YJH is part of the TRADOC Combat Developments (CD) network, a non-Warner exempt network. The network is being transitioned to the TRADOC Decision Support System (TDSS) network as quickly as possible; however, the merger can only be accomplished through equipment changeout because of compatibility problems. As soon as a CD network user changes to IBM compatible hardware, action is taken to transfer that user to the TDSS network. Equipment changeouts are expected to be completed by the end of the second quarter (FY 92), and the CD network will cease to exist. In the interim, however, both networks are valid requirements that must continue to coexist.

Final Report Reference

ASQA-DS
SUBJECT: Draft Audit Report on Telecommunications Circuit Allocation - Kansas City Area (Project No. ORD-0043.02) and Final Quick-Reaction Report on the Reconfiguration of Automatic Voice Network Access Circuits - Kansas City Area (91-110)

Since this is a valid requirement that cannot be terminated, the $11,556 cost savings quoted in the report for discontinuing the circuit is not valid.

NONCONCUR: UDLD7YJM is a 9.6 secure data circuit serving secure users, and UZGM7FJ5 is a non-secure circuit serving non-secure users at Fort Lee, VA. Even though both circuits terminate at Fort Leavenworth, they could not be multiplexed because one circuit was secure and the other was non-secure. To alleviate this problem, TRADOC submitted a project (CAPR NT-LEE-1-071 and NT-LVN-1-051) to changeout the COMSEC so the circuits could be replaced with a multiplexed arrangement for a cost savings. This has been accomplished and TSR WA03SEP912877 has been submitted to replace the circuits (UDLD7YJM and UZGM7FJ5) with a multiplexed arrangement. The target date for completion is 15 Dec 91. Once IBM compatible equipment is obtained for the CD network user (UDLD7YJM), that circuit will be transitioned to the TDSS network. The multiplexing action was project related, and the TDSS network is not compatible for this requirement; consequently, the auditor's recommendations and projected cost savings ($11,640 for UDLD7YJM and $11,724 for UZGM7FJ5) do not apply.

NONCONCUR: UINM7TZW, UINM7TZX, and UINM7TZZ were JCBIS circuits that were discontinued 30 Mar 90 by after the fact TSRs WA23OCT900169, WA23OCT900170, and WA23OCT900171. The annual cost savings indicated in the report of $7,752 for each circuit does not apply because these circuits were discontinued before the audit began and credit was received to the date of disconnect.

CONCUR: UUE974L3 is a DDN circuit that was discontinued by TSR XA01FEB910145. There was no cost associated with this circuit.

c. APPENDIX E - Schedule of Payments Recommended for Termination (Army Circuits Only). Deleted

FINDING: Stop payment for terminated circuits.

NONCONCUR: UWJD24RU, UWJD24VM, UWJD24VN, and UWJD24VP were WWMCCS circuits that were discontinued 30 Apr 90, 30 Apr 90, 26 Sep 88, and 12 Sep 88 respectively. The costs reflected in the data base were for a maintenance CSA that was discontinued in Jun 90. The data base was not corrected at the time the audit universe was selected; however, the CSA did not exist and billing

Final Report Reference

ASQA-DS
SUBJECT: Draft Audit Report on Telecommunications Circuit Allocation - Kansas City Area (Project No. ORD-0043.02) and Final Quick-Reaction Report on the Reconfiguration of Automatic Voice Network Access Circuits - Kansas City Area (91-110)

was later credited to the date of disconnect. Consequently, the $3,696 annual savings reflected in the report did not result from the audit.

Appendix E

d. APPENDIX F - Schedule of Non-Sample Circuits Recommended for Termination (Army Circuits Only).

Appendix E
Page 44

FINDING: Provide AUTOVON access to the 102d Army Reserve Command Aviation Support Facility, Olanthe, KS, through Richards-Gebar Air Reserve Station by the use of local commercial lines (UUBV7SWK and UUBV7WQX).

NONCONCUR: The USARCCO objects to obtaining AUTOVON access for the 102d ARCOM from Richards-Gebar Air Reserve Station based upon a telephone inquiry which indicated that their circuits are already overused to support on-base requirements. The only support they might be able to provide would be through the base operator who competes with direct users for available circuits. This would make it extremely difficult for an Army customer to ever complete a call because of severe blockage. Richards-Gebar will consider a written request, but support potential is not favorable. When asked if AUTOVON facilities could be expanded to support this requirement, the reply was that expansion was highly unlikely because Richards-Gebar Air Reserve Station will close in Jan 94. Since this finding is not operationally feasible, will not provide adequate service, and cannot be implemented, the auditor's projected $5040 cost savings will not apply.

Appendix J

f. APPENDIX G. The monetary benefits identified in this appendix are totally incorrect from an Army perspective. Implementation of the recommendation in Appendix C that does not include monetary benefits would increase Army costs significantly because of the legal requirement to use FTS2000. Of the monetary benefits identified for "all other circuits" in Appendix C, the $32,460 in annual costs applied to Army circuits is not valid. Of the monetary benefits identified for circuits in Appendix D and E, $105,252 in annual costs of the amount applied to Army circuits is not valid. Of the monetary benefits identified for circuits shown in Appendix F, the $5,040 in annual costs applied to Army circuits is not valid.

ASQA-DS
SUBJECT: Draft Audit Report on Telecommunications Circuit Allocation - Kansas City Area (Project No. ORD-0043.02) and Final Quick-Reaction Report on the Reconfiguration of Automatic Voice Network Access Circuits - Kansas City Area (Q1-110)

2. The USARCCO point of contact for this matter is Jeri Adams, commercial 602-538-7906, DSN 879-7906, FAX 879-7912, e-mail address asqa-ds@HUACHUCA-ARCCO.ARMY.MIL.

2 Encls
wd

for JOHN J. SULLIVAN
Director

11

DOD-IG DRAFT AUDIT REPORT ON TELECOMMUNICATION CIRCUIT ALLOCATION
DOD-IG CONCERNS PER 2-8 OCT 91 MEETINGS WITH ODISC4

DOD-IG concerns as posed to ODISC4 and Army positions follow:

1. Joint Computer Based Instruction System (JCBIS). The audit team questioned the Defense Data Network (DDN) waiver and says the circuits could have gone to DDN. Encl 1 shows that the Army user, TRADOC, had been informed in Apr 90 that the DDN waiver for JCBIS was in effect through Dec 90. Army subsequently submitted an RFS/TSR to effect a test to determine if DDN could support JCBIS. Recommend the finding be dropped. If there is a systemic or procedural issue remaining, recommend DOD-IG pursue it through the Joint Services Telecommunications Working Group (JSTWG) audit subgroup.

2. Worldwide Military Command and Control System (WWMCCS) circuits. The audit team questioned why dial-up service was not in place. According to DISA's WWMCCS Security POC, the WWMCCS policy was and is that no dial-up circuits are allowed. When STU-IIIs were introduced for data application in the 1990 time frame, dial up capability became technically feasible. At that time, Army began pursuing dial-up capability where cost effective by seeking special exemptions to policy. Recommend the finding be dropped.

3. Combat Development (CD)/TRADOC Decision Support System (TDSS). The audit team questioned whether both sets of circuits were required in July 90. Encl 2 is Army functional user input showing that both sets of circuits were required. The Army TDSS network manager had been implementing a plan to transition CD traffic to TDSS circuits when technically feasible. Recommend the finding be dropped.

4. Army Standard Information Management System (ASIMS). The audit team questioned why DDN wasn't used exclusively to support ASIMS. The bulk data transfer times available through DDN are approximately triple those achieved over a dedicated circuit with the same bandwidth. The reduced time allows completion of processing within an eight hour working day. Doing the same processing over DDN would take beyond an eight hour working day to complete. The longer processing time is acceptable only during infrequent contingencies or commercial circuit outages. This strategy is supported by a throughput analysis. Recommend the finding be dropped.

5. Rehoming Defense Data Network (DDN) circuits. The audit team stated that it caused the placement of the concentrator at Offutt AFB and therefore should be given credit for potential savings. To be consistent, only savings available in July 90 should be included in the audit. Recommend that addition of concentrators and rehoming policy and procedures be addressed by the Joint Services Telecommunications Working Group (JSTWG) audit subgroup. Specifically, DISA and Air Force should address this.

ENCL 2

6. Purchase Leased Modems. The audit team questioned whether the Ft Leavenworth DDN gateway was operational at the time of the audit. The gateway became operational 1 Apr 91. Therefore, no savings were available at the time of the audit. Recommend the finding be dropped.

7. Discontinued Joint Computer Based Instruction System (JCBIS) circuits. The audit team questioned whether DECCO paid for these circuits after disconnect without later reimbursement. Recommend DOD-IG pursue this through the JSTWG audit subgroup. Specifically, DECCO would have to answer. Army did submit necessary documentation and get reimbursement as appropriate.

8. Defense Switched Network (DSN) support through Richards Gebaur. The audit team stated that DSN access through Richards Gebaur Air Reserve Station would provide savings for the 102d Army Reserve Command Aviation Support Facility. USARCCO efforts/response indicate this is not operationally feasible unless Air Force secures additional circuits. This upgrade to Richards-Gebar is unlikely because it is due to close in 2 years. Recommend this be pursued through the JSTWG subgroup. The outcome depends on an Air Force decision.

2 Encls

Charlie Colello 2 Dec 91
Charlie Colello/SAIS-PPX/2 Dec 91

DEPARTMENT OF THE ARMY
UNITED STATES ARMY INFORMATION SYSTEMS COMMAND
FORT HUACHUCA, ARIZONA 85613-6000

REPLY TO ATTENTION OF

ASOP-OI

APR 9 1990

MEMORANDUM FOR Director, Defense Communications Agency, ATTN: DDC, % Mitre Corp., McLean, VA 22102

SUBJECT: Transition of the Joint Computer Based Instruction System (JCBIS) to the Defense Data Network (DDN)

1. References:

a. HQ, TRADOC, ATIM-ISP memorandum, 21 March 1990, subject: Transition of the Joint Computer Based Instruction System (JCBIS) To Use Of The Defense Data Network, enclosure 1.

b. USAISC, memorandum, ASOP-OI, 5 April 1990, subject as above, enclosure 2.

2. Headquarters, United States Army Training and Doctrine Command developed and forwarded the subject transition plan to this headquarters for approval. This headquarters recommends approval of the JCBIS transition plan. The user has been advised that it is responsible of the user to meet the DDN with an approved interface. Reference 1b requests TRADOC forward required RFSs for connection of the JCBIS to the DDN not later than 1 June 1990.

3. Request that DCA coordinate with Headquarters, TRADOC and schedule a mutually agreed to test schedule to insure that the JCBIS functional requirements can be met to the satisfaction of TRADOC (see JCBIS transition plan, paragraph 1-D, page two (2) and enclosure 2. This test date must be arranged at the earliest possible date because the existing waiver expires on 30 December 1990. The JCBIS requirements will need to be included in the next scheduled network model and RFS/TSR action completed well ahead of that date.

4. Request DCA approval of the attached JCBIS transition plan.

ENCL 1

ASOPK-OI
SUBJECT: Transition of the Joint Computer Based Instruction System (JCBIS) to the Defense Data Network (DDN)

5. The USAISC point of contact is Dick Hagen, ASOP-OI, DSN 879-8084.

FOR THE DCSOPS:

2 Encls
1. JCBIS Transition Plan
2. USAISC Memo

JAMES W. SMITH
LTC, GS
Chief, Current Operations Division

CF:
HQ TRADOC, ATTN: ATIM-ISP

2

2 December 1991

COMBAT DEVELOPMENTS (CD) NETWORK USERS

1. The UNISYS Mainframe at Fort Leavenworth, KS is currently used to support Batch Transfer for Combat Developments (CD) users. The users access the TOE/BOIP applications on the UNISYS via leased long haul circuits known as the CD Network. The network was developed to support both secure and non secure users. However, only one secure user remains. The net provides direct connection from the user to the UNISYS via a multiplex scheme, or point to point circuits.

a. The TRADOC Decision-Support System (TDSS) Network is an SNA based network and provides interactive support for users at both TRADOC and Non-TRADOC installations. The supporting leased circuits connect IBM Computers and other IBM compatible hardware in support of the interactive users. In addition the TDSS provides a gateway to the DDN.

b. At the present time we are in the process of converting the CD net applications from the UNISYS to the IBM 3084 which is also located at Fort Leavenworth. This application which is known as the TRADOC Documentation System (TDS) will replace the TOE/BOIP applications.

c. Our target for conversion from the UNISYS to the IBM 3084 is not later than the end of 1st quarter CY 1992. When converted CD users will be able to access the TDS application via the TDSS Network. Total transition of users to the IBM via the TDSS is contingent upon all users having compatible Hardware/Software. As stated above, our target for conversion is the end of 1st quarters CY 1992. As a result of the transition of CD users to the TDSS all existing CD Net circuits will be considered for discontinuation.

2. In summary, due to the difference in the applications, the difference in the architecture of the CD Net and the TDSS Net, and the incompatibility of equipment the TDSS can not support CD users until the TDS application is resident on the IBM 3084 and users have IBM compability equipment.

3. POC is George De Haven, DSN 680-3239, Commercial (804) 727-3239.

George De Haven

ENCL 2

Department of the Navy

THE ASSISTANT SECRETARY OF THE NAVY
(Research, Development and Acquisition)
WASHINGTON, D.C. 20350-1000

SEP 20 1991

MEMORANDUM FOR THE DEPARTMENT OF DEFENSE ASSISTANT INSPECTOR GENERAL FOR AUDITING

Subj: DRAFT REPORT ON TELECOMMUNICATIONS CIRCUIT ALLOCATION PROGRAMS - KANSAS CITY AREA (PROJECT NO. 0RD-0043.02) - ACTION MEMORANDUM

Ref: (a) DODIG memo of 5 July 1991

Encl: (1) DON Response to Draft Audit Report

I am responding to the draft audit report forwarded by reference (a) concerning telecommunications circuit allocation programs in the Kansas City area.

The Department of the Navy response is provided at enclosure (1). We concur with the final report findings and recommendations. As outlined in the enclosed comments, the Department has taken and is planning to take specific actions to reconfigure in the most cost effective manner those circuits identified.

Gerald A. Cann

Copy to:
NAVINSGEN
NAVCOMPT (NCB-53)

Final Report Reference

Department of the Navy Response
to
DODIG Draft Report of July 5 1991
on
Telecommunications Circuit Allocation Programs -
Kansas City Area (ORD-0043.02)

Finding:
Reconfiguration opportunities were not effectively identified and requirements were not adequately revalidated for 414 telecommunications circuits and equipment items, costing about $3.1 million annually, that are leased or owned by DoD activities in the Kansas City area. A review of 203 randomly selected circuits and equipment items showed that 60.6% were not cost-effective in their current configuration or were no longer required. Ninety four circuits and equipment items were identified as candidates for potential reconfiguration. If technically feasible, reconfiguring 48 of these could save $161,000 annually. Leases for another 29 circuits and associated equipment items could be terminated saving $154,000 annually. Finally, the current configuration of an additional 21 circuits, not included in the random sample, were found to not be cost-effective. Reconfiguration or termination of those 21 circuits could save over $198,000 annually or more than $1.3 million during the execution of the FY 1992 through FY 1997 Future Years Defense Program.

Readdressed to DISA

Recommendation 1.a,b.:

We recommend that the Commander, U.S. Army Information System Command; the Commander, Naval Computer and Telecommunications Command; the Commander, Air Force Communications Command; the Director, Defense Logistics Agency and the Director, Defense Medical Systems Support Center:

Deleted

a. Determine the technical feasibility for and the associated net cost savings from reconfiguration of the respective circuits identified as potential reconfiguration candidates in Appendix C, and provide the detailed results by circuit to the Office of the Inspector General, DoD.

Recommendation 1.

b. Require the appropriate user activity to initiate Requests for Service to reconfigure those circuits identified as technically feasible and cost-effective so that the most effective, efficient, and least costly service is obtained.

DON Position:

Concur. Details and net cost savings for circuits are attached. To determine the technical feasibility of reconfiguration COMNAVCOMTELCOM is exploring the following options:

a. DECCO awarded a sole source contract to Communications Transmissions, Inc. (CTI DCA200-91-D-0025) specifically for bundling circuits. They are currently identifying circuits for

rerouting using this contract. In order to be considered eligible, the circuits must be exempt from the Warner Amendment and be within a few months of expiration. Circuit BUED7HE3 has already been identified for reconfiguring using this contract. COMNAVCOMTELCOM is currently confirming this circuit along with several others as candidates for this contract. Their input has been submitted to DECCO. DECCO will submit their list of circuits to CTI for an estimate of costs per circuit. They will then make a final decision on which circuits will be reconfigured. If CTI can provide the same grade of service on each of these circuits at a lower cost, DECCO will issue the order to reroute them. Estimate 4 - 6 months from the time DECCO receives COMNAVCOMTELCOM recommendations to the time new service is installed.

b. FTS2000 offers dedicated data service as well as switched voice. With the user's concurrence, COMNAVCOMTELCOM will submit TSRs on the circuits in Appendix C not exempt from the Warner Amendment moving them to FTS2000.

c. Other options to reduce long haul costs, such as DISN, including NAVNET, have been approached, however, because there is no switch or node in the Kansas City area, they do not appear to be feasible.

TECHNICAL FEASIBILITY AND NET SAVINGS DETERMINATION

All figures, cost estimates and planned actions are based on the following:

a. All "Change" TSRs are evaluated by DECCO automatically. If the requirement can be satisfied by FTS2000 and the circuits do not meet the criteria for Warner exemption, the leasing action stops and FTS2000 action begins. If the requirement cannot be satisfied by FTS2000, DECCO considers DDN, DISN, or other DCA networks. If none of these networks can satisfy the requirement, DECCO proceeds with individual lease actions.

b. The local loop charges, i.e., the cost of extending a circuit from the nearest commercial point of presence to the user, will not change significantly, and were not factors in the net savings estimates.

c. Cost estimates for new services over FTS2000 or the CTI contract are not obtainable at this time. For the purposes of this document, an arbitrary figure of 25% was used to calculate the savings of the longlines portion of these circuits.

d. When estimating savings for the first year, the non-recurring charge used equals one month's "Monthly Recurring Charge". The purchase price of modems and Data Service Units were obtained from the US Department of Defense Bulk Modem Contract Catalog, August 29, 1990 - August 28, 1991.

The following information is submitted for each circuit listed in Appendix C.

a. BUED7BQW:

(1) This circuit goes from New Orleans to Olathe, KS, and is paid for by COMNAVRESFOR, New Orleans. The lease on this circuit became effective in October 1987 and has expired.

Total Line Charge	= $622.38	(Including local loops at both ends)
Total Equip Charge	= $355.11	($276 of which is for modems and modem mounts)
DECCO surcharge (1.5%)	= $ 14.66	
Total Monthly Cost	= $ 992.15	(Annual = $ 11,904.83)

The long line charges are $413.42 from New Orleans to Olathe. The local loop charges will probably be incurred regardless of the long haul carrier. Assuming a 25% savings by reconfiguring the long haul portion of the circuit, $1240.26 could be saved annually. The leased modems can be replaced by modems purchased

on the Codex "Bulk" Modem contract at an annual savings of $3,312.

(2) First Year savings possible: $ 3,443.26
Savings possible in outlying years: $ 4,552.26

The first year's savings is calculated by deducting an estimated non- recurring cost for installing the new longlines and the purchase price of two modems.

(3) Technical feasibility: Great. This is a dedicated single user to single user circuit and can easily be reconfigured.

(4) A Telecommunications Service Request (TSR) will be issued on this circuit immediately to recompete the lease. If the requirement can be satisfied using NAVNET, appropriate actions will be taken to immediately reroute the circuit. Since there are no NAVNET nodes near Kansas City, it may not be cost effective to use NAVNET. In that case, the TSR will be forwarded to DECCO, who will determine if the requirement can be satisfied using FTS2000. If not, DECCO will follow the normal leasing procedures and award the lease to the lowest bidder who meets all technical specifications. Normal lead time to accomplish this type of action is 89 days from the time DECCO receives the TSR.

b. BUED7HE3:

(1) This multipoint circuit provides DDS service from New Orleans to three points in Olathe, one in Kansas City, and one in Bridgeton, MO, and is paid for by COMNAVRESFOR, New Orleans. The lease on this circuit became effective in December 1986 and expires in December, 1996.

Total Line Charge	=	$1,762.99	(Including local loops at each end)
Total Equip Charge	=	$1,059.06	($604 of which is for leased DSUs and DDS access charges)
DECCO surcharge (1.5%)	=	$ 42.33	
Total Monthly Cost	=	$2,864.38	(Annual = $ 34,372.56)

The long haul line charges are $361.45 from St. Louis to Kansas City and $531.33 from New Orleans to St. Louis. The local loop charges will probably remain constant regardless of the long haul carrier. Assuming a 25% savings by reconfiguring the long haul portion of the circuit, $2678.34 could be saved annually. The leased DSUs can be replaced by DSUs purchased on the Codex "Bulk" Modem contract. Installing dedicated lines over a multiplexed system would eliminate the DDS access charges resulting in an annual savings of $7,250.40.

(2) First Year savings possible: $ 6,796.74

Savings possible in outlying years: $ 9,928.74

The first year's savings is calculated by deducting an estimated non- recurring cost for installing the new longlines and the cost of purchasing six DSUs.

(3) Technical feasibility: Good. Reconfiguring the circuit as discussed above depends on the carrier's ability to provide digital service end-to-end. If they cannot, the DSUs can be replaced by modems purchased through the Codex Bulk Modem contract.

(4) This circuit has already been identified as a candidate for rerouting by Communications Transmissions, Inc. under the contract mentioned in paragraph 3a.

c. BUED7J6Z:

(1) This multipoint circuit provides service from Kansas City to three points in the Chicago area, two in Milwaukee, WI, and one each in Madison, WI and Green Bay, WI and is paid for by the Commandant, Marine Corps. The lease on this circuit became effective in September 1989 and expires in July, 1994.

Total Line Charge	=	$2,297.12	(Including local loops at each end)
Total Equip Charge	=	$ 310.02	(all of which are for conditioning and access charges)
DECCO surcharge (1.5%)	=	$ 39.11	
Total Monthly Cost	=	$2,646.25	(Annual = $ 31,754.96)

The long haul line charges are $1,354.16 from Appleton, WI to Kansas City. The local loop costs will probably remain constant regardless of the long haul carrier. Assuming a 25% savings by reconfiguring the long haul portion of the circuit, $4,062.48 could be saved annually. There is no leased equipment on this circuit. The conditioning and access charges would probably remain constant even if the circuits were reconfigured.

(2) First Year savings possible: $ 2,712.48
Savings possible in outlying years: $ 4,062.48

The first year's savings is calculated by deducting an estimated non- recurring cost for installing the new longlines.

(3) Technical feasibility: Great. Since no leased equipment is involved, this circuit can easily be reconfigured.

(4) With concurrence of the user, COMNAVCOMTELCOM will issue a TSR to route this circuit over FTS2000.

d. BUED7J7F:

(1) This multipoint circuit provides service from Kansas City to two points in Des Moines, IA, two in Minneapolis, MN, and one each in Twin Cities, MN and Waterloo, IA and is paid for by the Commandant, Marine Corps. The lease on this circuit became effective in October 1989 and expires in Jul 1994.

Total Line Charge	=	$1,536.48	(Including local loops at each end)
Total Equip Charge	=	$ 195.35	(all of which are for conditioning and access charges)
DECCO surcharge (1.5%)	=	$ 25.98	
Total Monthly Cost	=	$1,757.81	(Annual = $ 21,093.69)

The long haul line charges are $754.30 from Minneapolis, MN to Kansas City. Assuming a 25% savings by reconfiguring the long haul portion of the circuit, $2,262.90 could be saved annually. There is no leased equipment on this circuit. The conditioning and access charges would probably remain constant even if the circuits were reconfigured.

(2) First year savings possible: $1,512.90
Savings possible outlying years: $2,262.90

The first year's savings is calculated by deducting an estimated non- recurring cost for installing the new longlines.

(3) Technical feasibility: Great. Since no leased equipment is involved, this circuit can easily be reconfigured.

(4) With concurrence of the user, COMNAVCOMTELCOM will issue a TSR to route this circuit over FTS2000.

e. BUED7J8Z

(1) This multipoint circuit provides service from Kansas City to four points in the Chicago area, and one each in Grand Rapids, MI, Battle Creek, MI, South Bend, IN, and Gary, IN, and is paid for by the Commandant, Marine Corps. The lease on this circuit became effective in October 1989 and expires in July, 1994.

Total Line Charge	=	$2,064.84	(Including local loops at each end)
Total Equip Charge	=	$ 259.44	(Including $136 for a bridge.)
DECCO surcharge (1.5%)	=	$ 34.86	
Total Monthly Cost	=	$2,359.14	(Annual = $ 28,309.73)

The long line charges are $173.26 from Chicago to So. Bend IN, $390.26 from Chicago to Kansas City, $191.26 from Chicago to Grand Rapids, MI, and $192.26 from Chicago to Battle Creek, MI.

Assuming a 25% savings by reconfiguring the long haul portion of the circuit, $2,841.12 could be saved annually. The only equipment on this circuit is a 4-wire bridge at Kansas City. This bridge may or may not be retained depending on the configuration of the new circuit. If a new vendor can provide the service without using the bridge, it would result in an additional savings of $1,632 annually.

(2) First Year savings possible: $ 3,527.12
Savings possible in outlying years: $ 4,473.12

The first year's savings is calculated by deducting an estimated non- recurring cost for installing the new longlines.

(3) Technical feasibility: Reconfiguring this circuit is technically feasible.

(4) With concurrence of the user, COMNAVCOMTELCOM will issue a TSR to route this circuit over FTS2000.

f. BABR7YYA: This circuit was disconnected in January, 1991.

Defense Communications Agency

DEFENSE COMMUNICATIONS AGENCY
WASHINGTON, D.C. 20305-2000

REPLY REFER TO: CEA

9 SEP 1991

MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL, DEPARTMENT OF DEFENSE

SUBJECT: Draft Audit Report Response on Telecommunications Circuit Allocation Programs - Kansas City Area (Project No. ORD-0043.02)

Reference: DoDIG Memo, subject as above, 5 Jul 91

1. The Defense Information Systems Agency has reviewed the subject draft audit report and does not concur. Our nonconcurrence is based on the IG's recommendation in Appendix D of the reference to disconnect two circuits which DISA is unable to identify either because of incorrect circuit numbers or to the fact that the circuits have already been disconnected.

2. DISA will take immediate action to disconnect any correctly identified circuits where a requirement no longer exists.

3. The POC for this response is Audrey Moore on 692-2171.

FOR THE DIRECTOR:

GEORGE J. HOFFMAN
Comptroller

Defense Logistics Agency

DEFENSE LOGISTICS AGENCY
HEADQUARTERS
CAMERON STATION
ALEXANDRIA, VIRGINIA 22304-6100

IN REPLY REFER TO DLA-CI

MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL FOR AUDITNG,
DEPARTMENT OF DEFENSE

SUBJECT: Draft Report on the Audit of the Telecommunications Circuit Allocation Programs - Kansas City Area (Project Number ORD-0043.02)

This is in response to your 5 July 1991 memorandum requesting information on Recommendation 2 of subject report. The enclosed position has been approved by Ms. Helen T. McCoy, Deputy Comptroller, Defense Logistics Agency.

1 Encl

Jacqueline G. Bryant
JACQUELINE G. BRYANT
Chief, Internal Review Division
Office of Comptroller

TYPE OF REPORT: AUDIT DATE OF POSITION: 20 Sep 91

PURPOSE OF INPUT: INITIAL POSITION

AUDIT TITLE AND NO.: Draft Report on the Telecommunications Circuit Allocation Programs - Kansas City Area (Project No. ORD-0043.02)

RECOMMENDATION NUMBER: 2. We recommend that the Director, DLA, require the appropriate user activities to expeditiously initiate Requests for Service to disconnect their respective circuits listed in Appendix D.

DLA COMMENTS: Nonconcur. This action has already been taken. The Defense Contract Management Area Operations Residency, Kansas City, MO requested the Transition Management Office (TMO) St. Louis, IL to initiate appropriate action to discontinue circuit GD 51690. TMO St. Louis initiated the actual Telecommunications Service Request (TSR) feeder to our DLA Systems Automation Center, Columbus, OH on 21 March 91. TSR DF28MAR910590 was initiated on 28 March 91. The circuit was discontinued and service removed effective 20 June 91. With the assistance of the DoDIG, our DLA Kansas City user was able to transfer the specific application that had been run on the discontinued circuit to an existing DLA Corporate Network circuit located in the same office.

MONETARY BENEFITS:
DLA COMMENTS: The circuit identified by the DoDIG as 'No longer required', was being utilized by the customer prior to the identification of the ability to transfer to the DLA Corporate Network (DCN). Since the actual finding identified an annual cost, this report also reflects DLA's annual amount.

ESTIMATED REALIZATION DATE: 20 June 91
AMOUNT REALIZED: $800.30 monthly; $9603.30 yearly
DATE BENEFITS REALIZED: 20 June 91

INTERNAL MANAGEMENT CONTROL WEAKNESS:
( ) Nonconcur. (Rationale must be reflected in the DLA Comments and documentation must be maintained with your copy of the response.)
(X) Concur; however, weakness is not considered material. (Rationale must be reflected in the DLA Comments and documentation must be maintained with your copy of the response.

The DLA Kansas City user continued to utilize the dedicated circuit, recommended by the DoDIG for discontinuance, for the specific application for which the circuit was originally established. The DoDIG asked a question of the user that resulted in the actual transfer of the application to an existing DCN circuit. This Agency is participating with OASD, the DoDIG, the Military Departments, and other DoD Agency telecommunications managers in the implementation of the DoD Telecommunications Program (TMP). One prospective initiative of

the TMP is to finalize a new DoD Directive, subject: Management of Base & Long Haul Telecommunications Services. Would the new policy have been implemented by the DoD, our PLFA telecommunications manager would have had the responsibility to revalidate the original dedicated circuit of the user or recommend the circuit for deactivation as was done by the DoDIG. In view of the fact that the user was still using the dedicated circuit for the application as originally validated, and that the identified DoD policy on revalidation has not been implemented, we feel that even though there was an internal management control weakness, the weakness is not considered material.

( ) Concur; weakness is material and will be reported in the DLA Annual Statement of Assurance.

ACTION OFFICER: James W. Livengood, DLA-ZIC, 274-5157, 9/5/91
PSE REVIEW/APPROVAL: Bobby L. Parsons, DLA-ZD, x46257, 9/9/91

DLA APPROVAL: Helen T. McCoy, Deputy Comptroller

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