



STATE OF ILLINOIS

OFFICE OF THE AUDITOR GENERAL

MANAGEMENT AUDIT OF THE
DEPARTMENT OF
CENTRAL MANAGEMENT SERVICES',
TELECOMMUNICATIONS OPERATIONS

MAY 1994

WILLIAM G. HOLLAND

AUDITOR GENERAL

509 SOUTH SIXTH STREET, ROOM 151
SPRINGFIELD, ILLINOIS 62701-1878
PHONE: 217/782-6046
FAX: 217/785-8222
TDD: 217/524-4646



100 WEST RANDOLPH STREET, SUITE 4-100
CHICAGO, ILLINOIS 60601-3219
PHONE: 312/814-4000
FAX: 312/814-4006

OFFICE OF THE AUDITOR GENERAL
WILLIAM G. HOLLAND

*To the Legislative Audit Commission, the
Speaker and Minority Leader of the House
of Representatives, the President and
Minority Leader of the Senate, the members
of the General Assembly, and the Governor:*

This is our report of the Management Audit of the Department of Central Management Services' Telecommunications Operations. The audit was conducted pursuant to Legislative Audit Commission Resolution Number 97, which was adopted April 16, 1992.

This audit was conducted in accordance with generally accepted government auditing standards and the audit standards promulgated by the Office of the Auditor General at 74 Ill. Adm. Code 420.310.

The audit report is transmitted in conformance with Section 3-14 of the Illinois State Auditing Act.

A handwritten signature in black ink, appearing to read "W. G. Holland", with a long, sweeping line extending from the end of the signature upwards and to the left.

WILLIAM G. HOLLAND
Auditor General

Springfield, Illinois
May 1994



OFFICE OF THE AUDITOR GENERAL
WILLIAM G. HOLLAND

REPORT DIGEST
Management Audit
DEPARTMENT OF CENTRAL MANAGEMENT SERVICES'
TELECOMMUNICATIONS OPERATIONS

SYNOPSIS

DCMS is responsible for providing telecommunications services for State agencies. Many of those services are provided through a Statewide Network which was established in May, 1989, through a contract with two telecommunications vendors. We concluded that DCMS' use of a network has been a cost-effective strategy in providing for State telecommunications' needs.

The current Statewide Network contract expires in December, 1995, and DCMS has begun the process of reviewing alternatives to the current strategy. DCMS' review should consider the cost-effectiveness of changes to the existing network architecture, including the implementation of additional technologies. Other issues discussed in this report, include:

- Analysis of State agencies' telecommunications needs. We found DCMS had not completed a formal, comprehensive analysis of State agencies' telecommunications needs since 1987.
- Formal written policies and procedures. We found DCMS lacked formal written policies and procedures to guide it in carrying out many of its telecommunications responsibilities.
- Procurement documentation. We found DCMS needed to improve the consistency of its telecommunications procurement procedures and provide greater documentation for its purchasing decisions.
- Billing to State agencies. We found DCMS' telecommunications accounting system did not generate sufficient cost information to enable DCMS to charge State agencies for services and equipment based on the actual cost, including administrative expenses.
- Vendor invoices. We found that vendor invoices included questionable charges, including taxes for which DCMS, as a State agency, is not liable. A DCMS contractor identified over \$6 million in questionable charges, as a result of which vendors have refunded over \$1 million to DCMS. We identified \$118,000 in taxes on vendor invoices, paid by DCMS, for which it was not liable. The overcharge has since been refunded.
- Timeliness of billings to State agencies. Except at the beginning of a fiscal year, we found bills sent to agencies were generally timely.

INTRODUCTION

On April 16, 1992, the Legislative Audit Commission adopted Audit Resolution 97 which directs the Auditor General to conduct a management audit of the Department of Central Management Services' (DCMS') telecommunications operations. The Audit Resolution directs the Auditor General to determine whether:

1. DCMS has adopted plans and management strategies that promote cost-effective telecommunications operations;
2. DCMS has policies and procedures to effectively guide telecommunications operations;
3. monitoring of telecommunications operations by DCMS is adequate; and
4. telecommunications billings to State agencies, and DCMS' collection of billings, have been timely and accurate.

REPORT CONCLUSIONS

The Department of Central Management Services is responsible for providing telecommunications services for State agencies. In Fiscal Year 1992, DCMS' telecommunications expenditures exceeded \$90 million. The 150,000 lines leased by DCMS average 7.5 million calls per month, which would make it the fifth largest local exchange carrier in Illinois.

Telecommunications operations for the State encompass voice, data, and video services. In recent years, the telecommunications industry has been distinguished by a marked increase in competition and the introduction of new technologies and more service options.

In May 1989, DCMS created a Statewide Network for the provision of telecommunications services to State agencies. In the process, DCMS went from a subscriber of telecommunications services to a manager of a telecommunications operation. We concluded that the establishment of a network has been a cost-effective strategy.

Network services are currently being provided under a contract that expires in 1995. There are a number of issues which the Department should consider in planning for the expiration of the contract. These include alternatives to the existing network architecture, alternative access arrangements, competitive alternatives to Centrex services, and an integrated network management system. In addition, DCMS should undertake or strengthen certain planning steps, including conducting a formal, comprehensive assessment of agencies' telecommunications needs and developing a new Strategic Plan.

The Department lacked written policies and procedures to guide it in carrying out many of its telecommunications responsibilities. DCMS' management information systems cannot provide cost data to identify or allocate specific costs for the

Statewide Network and so cannot set charges for services and equipment to ensure each State agency pays only the cost, including administrative overhead, of the services and equipment used by it. According to DCMS officials, DCMS' accounting system for telecommunications has not been upgraded since 1980. Accounting records have also been inaccurate because of the misclassification or improper recording of some telecommunications transactions.

Although DCMS is not statutorily required to use any competitive method to award telecommunications contracts, it chose to initiate competitive procedures for the six procurements we reviewed. However, in some of these procurements, DCMS used inconsistent or non-standard terms in solicitation documents, did not adequately document and/or fully justify some award decisions, and changed or used inconsistent selection criteria during the selection process.

Some telecommunications invoices from vendors, which are used to charge State agencies, were inaccurate. A contractor hired by DCMS identified over \$6 million in questionable charges by telephone companies; the companies have repaid DCMS over \$1 million. We determined that DCMS paid an additional \$118,000 in taxes for which it was not liable and which has since been refunded.

Billings to agencies were generally on time. However, some agencies did not pay their bills in full, and DCMS had to write off bad debt totaling over \$2.6

million for Fiscal Years 1991 through 1993. However, DCMS also received payments or issued credits which it did not apply to past due account balances; if they had been applied, the amount of bad debt would have been less than \$2.6 million.

During the course of the audit, DCMS addressed some of the matters identified above. DCMS:

- formed a strategic planning committee for telecommunications and an Agency Services section to improve interaction with agencies;
- created some documented policies and procedures;
- reclassified certain accounting transactions;
- issued Requests for Proposals to develop an integrated network management system and to review agency needs, network technologies, and services; and
- initiated planning activities to improve the telecommunications accounting system.

While DCMS has taken some action to improve its operations, other issues need to be addressed. These include comprehensive planning for technical and administrative functions, development of documented policies and procedures for all telecommunications activities, adequate documentation of procurement activities, improved management reporting, and formal evaluation of vendors' performance.

BACKGROUND

DCMS serves as the centralized source of telecommunications services and equipment for State agencies. Illinois statutes give DCMS the power and duty to provide and control the procurement, installation, retention, and maintenance of telecommunications equipment or services used by State agencies (20 ILCS 405/67.18).

Statutes also require DCMS to create an administrative organization to fulfill its responsibilities for telecommunications. The Bureau of Communication and Computer Services (BCCS), a DCMS division, has primary responsibility for providing telecommunications services and equipment to State agencies. BCCS had 86 employees assigned to telecommunications who were paid from the Communications Revolving Fund.

The State Finance Act (30 ILCS 105/6p-2) authorized the establishment of the Communications Revolving Fund (CRF). DCMS uses the Communications Revolving Fund to pay vendors for telecommunications services they provide, charge agencies for those services, and receive payments from the agencies. Under accounting principles a revolving fund is not to retain a profit. However, for Fiscal Year 1992, DCMS reported CRF revenues of \$98.7 million and CRF operating expenses of only \$90.3 million.

DCMS provides telecommunications services to approximately 225 agencies including departments, commissions, and universities. Digest Exhibit 1 presents

various information relating to DCMS' telecommunications operations. (pages 4-10)

Digest Exhibit 1 **DCMS TELECOMMUNICATIONS OPERATING STATISTICS***

<i>Number of Calls/Month</i>	<i>7,500,000</i>
<i>Number of Leased lines</i>	<i>150,000</i>
<i>Data Terminals</i>	<i>25,000</i>
<i>Radio Devices</i>	<i>21,000</i>
<i>Credit Cards</i>	<i>12,000</i>
<i>Cellular Lines</i>	<i>1,000</i>

** reflect approximate figures*

SOURCE: OAG summary of DCMS data.

TECHNICAL AND ADMINISTRATIVE PLANNING

To effectively manage the provision of telecommunications services and equipment to 225 agencies at an annual cost of over \$90 million, DCMS needs to strengthen its technical and administrative planning.

Before DCMS can develop or implement new strategies for telecommunications, it must determine the current and future technical requirements of State agencies. While the Department obtains some input from agencies, it has not conducted a formal, comprehensive assessment of agencies' technical needs

since 1987. DCMS also has not formally updated its Strategic Plan since 1987.

In July 1992, DCMS created a Strategic Planning Committee to address future telecommunications operations. In November 1993, DCMS created an Agency Services section within BCCS to increase interaction with agencies and identify agencies' telecommunications needs. Also, at the end of the audit DCMS issued a Request for Proposal to hire a consultant who would assist the Department in evaluating agencies' telecommunication needs and the applicability of new technologies and services offered by vendors.

Improved planning is also needed to address DCMS' administrative responsibilities. While BCCS has an existing administrative planning group, many sections responsible for telecommunications do not have documented policies and procedures. Given the complexity and range of responsibilities for DCMS' telecommunications operations, documented policies and procedures are crucial to ensure compliance with laws and regulations, efficient use of resources, and the creation of reliable data.

In addition, while DCMS has reorganized its telecommunications operations on several occasions, sections continued to have overlapping responsibilities. In November 1993, DCMS completed another reorganization. It has also initiated plans to eliminate overlapping responsibilities among sections. (pages 14-21)

MANAGEMENT STRATEGIES

In 1989, DCMS implemented a Statewide Network through an agreement with two telecommunications vendors. The Network consists of leased facilities (i.e., groups of lines) which are interconnected at various sites. The lines and the equipment, which route traffic on these lines, make up the Statewide Network.

In May 1989, the Network became operational with the installation and use of long distance facilities between Chicago and Springfield. The Network now extends to cities throughout Illinois - with Carbondale as the most southern point within the Network and Rockford the most northern location.

The move to the Network was a cost-effective strategy. It allowed DCMS to take advantage of volume discounts and economies of scale.

The current contract for the Statewide Network expires in December 1995. There are a number of issues which the Department should consider to improve future operations and increase cost savings, including: the current network architecture; alternative access; the grade of service; competitive alternatives to Centrex services; and an integrated network management system. In addition, DCMS had not analyzed certain cost components of the Statewide Network, such as the aggregate costs of access lines tied to the Network, that are crucial to its ability to analyze the cost effectiveness of

any proposed alternatives to the existing structure.

DCMS should also consider ways to increase the use of the Statewide Network by State agencies. It is estimated that the State, after an initial capital investment of \$3 million, may save as much as \$2.8 million a year if the Department of Lottery and certain universities used all Network services. In January 1994, Department officials announced plans to convert the Lottery onto the Statewide Network. (pages 25-37)

PROCUREMENT ACTIVITIES

While statutes allow DCMS to purchase telecommunications services and equipment without engaging in any competitive process, DCMS generally used a competitive process for the six procurements we reviewed. However, DCMS' procurement of telecommunications services and equipment needs to be improved.

DCMS procurement personnel lacked written policies and procedures. Our review of six specific procurements showed that DCMS used non-standard or inconsistent terms in solicitation documents for four of the six procurements, did not adequately document and/or fully justify award decisions for two procurements, and changed or used inconsistent evaluation criteria for two procurements.

Given that the telecommunications industry is now very competitive and the significant costs related to telecommunications contracts (as shown in

**Digest Exhibit 2
DCMS PROCUREMENT ACTIVITY
FOR TELECOMMUNICATIONS
FY92**

*Number of contracts for
telecommunications equipment
and services:* 608

*Total dollar amount for the
608 contracts:* \$166 million

*FY92 expenditures for the
608 contracts:* \$29.9 million

*Number of master contracts
for telecommunications
equipment and services:* 15

*SOURCE: OAG Summary of data from
DCMS and the Comptroller.*

Digest Exhibit 2), the General Assembly may wish to consider requiring DCMS to use sealed bids or sealed proposal procedures when procuring telecommunications services and equipment. Requiring sealed bids or sealed proposals would help ensure that procurements are in the best interests of the State. A Best and Final process which uses established procedures, in conjunction with a sealed proposal method, would give the Department the ability to further clarify vendor proposals and possibly reduce the prices offered. (pages 39-54)

**MATTER FOR CONSIDERATION
BY THE GENERAL ASSEMBLY**

The General Assembly may wish to revise the Purchasing Act (30 ILCS 505/6) to require DCMS to use a sealed bid or sealed proposal method of procurement for telecommunications services and equipment. The General Assembly also may wish to give DCMS the authority to conduct Best and Final Offer processes according to established procedures when using a sealed proposal method of procurement.

**MANAGEMENT SYSTEMS
AND REPORTING**

DCMS' management information systems for its telecommunications operations and the Communications Revolving Fund need to be improved. DCMS provides approximately 150,000 phone lines to over 225 agencies including departments, commissions, and universities. In addition, the Communications Revolving Fund is DCMS' second largest internal service fund with total operating revenues for Fiscal Year 1992 of almost \$99 million.

DCMS' management information systems do not provide sufficient cost information to set charges for all services and equipment, nor do they allow DCMS to allocate its administrative costs across all services provided. The information system used to create agency bills and pay vendor invoices has not been upgraded since 1980, according to DCMS officials. However, since that time many changes

occurred in telecommunications which increased the demand for more detailed and different accounting information. In June 1992, the Department hired a consultant to review its accounting systems and DCMS subsequently initiated planning efforts to upgrade the telecommunications accounting system.

We identified three instances where DCMS improperly recorded or misclassified accounting transactions. In January 1994, DCMS officials agreed to make the necessary adjustments for these three transactions:

- In Fiscal Year 1990, DCMS improperly classified a lease agreement of approximately \$23 million as an equipment purchase. While there was no effect on the total assets for the Fund, if uncorrected, DCMS' financial statements would have overstated equipment when the lease expired in Fiscal Year 1996.
- In Fiscal Year 1992, DCMS deducted certain revenues owed from vendors to DCMS from amounts owed by DCMS to those vendors. The effect has been an understatement of operating revenues and expenses by over \$3.8 million within financial statements. While this accounting treatment did not misrepresent net income for the CRF, an accurate accounting of revenue and expenses is important for external reporting, as well as for internal budgeting and rate setting purposes.
- In one instance, both DCMS and Illinois State University recorded an equipment purchase of almost \$6.6 million on their accounting records.

Most sections of DCMS performing telecommunications functions provide management with regular activity reports. However, DCMS has limited information regarding the performance of vendors for maintenance contracts and the Department's timeliness in fulfilling agency requests for services. In addition, DCMS did not complete any comprehensive internal audits of telecommunications. (Pages 56-67)

ACCURACY & TIMELINESS OF AGENCY BILLS


Due largely to errors in vendor invoices, some agency billings have been inaccurate. A contractor hired by DCMS to review vendor invoices identified over \$6 million in questionable charges, of which over \$1 million has been refunded to DCMS.

In addition, DCMS received a credit of almost \$118,000 after we identified taxes included on vendor invoices, paid by DCMS, for which it was not liable. Further, DCMS did not have adequate controls over credits sought from vendors or requested by agencies. During the audit, DCMS instituted policies and procedures for credits and also took action to review vendor invoices for appropriate taxes.

Our analysis shows inventory records used to calculate monthly charges to State agencies are not completely accurate. DCMS and the agencies should improve coordination to keep inventory records accurate.

Except at the beginning of a fiscal year, DCMS generally presents agencies with bills that are timely. The Department had to write off over \$2.6 million in bad debt in Fiscal Years 1991 through 1993 because agencies did not pay their telecommunications bills; however, the Department also received payments or issued credits which it had not applied to past due account balances. (Pages 69-85)

This Report contains thirteen recommendations to the Department and one matter for consideration by the General Assembly. The Department generally agreed with the recommendations. Appendix C contains agency responses.



WILLIAM G. HOLLAND
Auditor General

WGH/JAW
May 1994

TABLE OF CONTENTS

Auditor General's Transmittal Letter	i
Report Digest	iii
CHAPTER ONE: INTRODUCTION	1
REPORT CONCLUSIONS	1
BACKGROUND	4
THE DEPARTMENT OF CENTRAL MANAGEMENT SERVICES	4
Procurement Activities	7
Equipment & Services Provided by DCMS	8
Communications Revolving Fund	9
SCOPE AND METHODOLOGY	11
REPORT ORGANIZATION	12
CHAPTER TWO: TELECOMMUNICATIONS PLANNING	13
TECHNICAL PLANNING FOR TELECOMMUNICATIONS	14
1987 Strategic Plan	14
Technical Planning Since 1987	15
<i>Recommendation Number One</i>	16
ADMINISTRATIVE PLANNING FOR TELECOMMUNICATIONS	17
Telecommunications Organizational Structure	18
Documented Policies and Procedures	19
<i>Recommendation Number Two</i>	21
Lease of a Communications Facility	21
<i>Recommendation Number Three</i>	23
CHAPTER THREE: MANAGEMENT STRATEGIES	25
THE STATEWIDE NETWORK	25
Network Architecture	27
Network Technologies	30
Access Costs for the Network	31
Grade of Network Service	32
Network Control Center	33
Centrex Agreement with Illinois Bell	34
Use of the Network by Lottery & Universities	35
Conclusions	36
<i>Recommendation Number Four</i>	36

CHAPTER FOUR: PROCUREMENT ACTIVITIES FOR TELECOMMUNICATIONS	39
DCMS PROCUREMENT ACTIVITIES	39
REVIEW OF SIX DCMS PROCUREMENTS	40
MASTER AGREEMENT FOR THE STATEWIDE NETWORK	43
MASTER AGREEMENT FOR STATEWIDE MAINTENANCE	44
LOGAN CORRECTIONAL CENTER	48
MASTER AGREEMENT - 800 SERVICES	48
SOUTHERN ILLINOIS UNIVERSITY AT EDWARDSVILLE	49
MASTER AGREEMENT - EKS/PBX SYSTEMS	50
CONCLUSIONS - SIX DCMS PROCUREMENTS	51
<i>Recommendation Number Five</i>	52
USE OF A COMPETITIVE PROCUREMENT PROCESS	53
MATTER FOR CONSIDERATION BY THE GENERAL ASSEMBLY	53
CHAPTER FIVE: MANAGEMENT SYSTEMS AND REPORTING	55
MANAGEMENT INFORMATION SYSTEMS	56
Telecommunications Billing & Accounts Receivable System	56
Cost Information for the CRF	57
<i>Recommendation Number Six</i>	59
Management of Network Income Expense Services	60
CONTROLS FOR MANAGEMENT INFORMATION SYSTEMS	60
<i>Recommendation Number Seven</i>	61
MANAGEMENT REPORTS	62
Accounting Practices for the CRF	62
Recording of Equipment	63
<i>Recommendation Number Eight</i>	65
Other Performance Reports	65
Internal Audit Reports	66
<i>Recommendation Number Nine</i>	67
CHAPTER SIX: ACCURACY AND TIMELINESS OF AGENCY BILLS	69
ACCURACY OF AGENCY BILLS	69
The Accounting Division	71
The Division of Administration & Planning	73
The Telecommunications Division	74
<i>Recommendation Number Ten</i>	75
TIMELINESS OF AGENCY BILLS	75
Accounts Receivable	76
<i>Recommendation Number Eleven</i>	79
VENDOR CREDITS	81
<i>Recommendation Number Twelve</i>	82
AGENCY CREDITS	82
PAYMENT OF TAXES	83
<i>Recommendation Number Thirteen</i>	85

CHAPTER SEVEN: OTHER ISSUES	87
CHARGES FOR MAIL MESSENGER SERVICES	87
SCOPE OF DCMS TELECOMMUNICATIONS RESPONSIBILITIES	88
SECURITY FOR EQUIPMENT	89

EXHIBITS

Exhibit 1-1	Chronology of Events-DCMS Telecommunications	5
Exhibit 1-2	DCMS Organizational Structure-Highlighting Sections Responsible for Telecommunications	6
Exhibit 1-3	Comparison of Leased Lines Used by DCMS to Access Lines of the Six Largest Local Exchange Carriers in Illinois	9
Exhibit 1-4	Summary of the Total Operating Revenues, Expenses and Net Income for the Communications Revolving Fund	10
Exhibit 2-1	Sections Responsible for Processing Vendor Invoices	18
Exhibit 2-2	Summary of Policies and Procedures for Telecommunications Operations	20
Exhibit 3-1	Major Responsibilities of Parties in the Statewide Network Master Contract	26
Exhibit 3-2	State of Illinois Telecommunications Network-Overview of Primary Routes	28
Exhibit 3-3	New Technologies Introduced Since the 1987 Strategic Plan	31
Exhibit 3-4	Estimated Potential Savings-Expanded Use of the Statewide Network	35
Exhibit 4-1	Summary of Procurement Review for Six Contracts	42
Exhibit 4-2	Chronology of Events-Statewide Maintenance Contract	46
Exhibit 4-3	Statewide Maintenance Contract-Bid Comparison	47
Exhibit 6-1	Agency Bill Detail	70
Exhibit 6-2	Credits Identified from Vendor Invoices	72
Exhibit 6-3	Inventory Sample Results	73
Exhibit 6-4	Bad Debt Expense for the CRF	76
Exhibit 6-5	Top Ten Agencies with Bad Debt (and Unapplied Payments & Credits) ..	78
Exhibit 6-6	State Taxes Which DCMS Is Not Liable to Pay	84

APPENDICES

Appendix A	Legislative Audit Commission Resolution Number 97	93
Appendix B	Audit Methodology	97
Appendix C	Agency and Vendor Responses	103

GLOSSARY

AMERITECH	Previously known as Illinois Bell Telephone and Illinois Bell Communications.
AT&T	Vendor that supplies the State with 800 services as well as data transmissions for many off-network sites.
BCCS	Bureau of Communication and Computer Services. The Bureau within DCMS responsible for telecommunications operations.
BEST AND FINAL OFFER (BAFO)	A process that allows the State to better define its needs, adjust specifications, or address problems in the procurement process.
CENTREX	A widespread telephone company switching system that uses dedicated central office switching equipment. The service allows extension users to dial outgoing and intercom calls directly as well as receive calls dialed directly from outside.
COMMUNICATIONS REVOLVING FUND (CRF)	The State's internal service fund used to process revenues and expenses for telecommunications services.
ELECTRONIC KEY SYSTEM (EKS)	A small telephone switching system, which operates on smaller wiring, equipped with multiple buttons to permit the user to select an appropriate outgoing or incoming line.
FIBER OPTICS	A transmission technology in which lightwave signals are sent down hair-thin plastic or glass fibers to a receiver at the other end.
FRACTIONAL T1	A technology that allows the leasing of circuits in multiples of six rather than 24.
GRADE OF SERVICE	The quality of a telephone service system, described as the probability that a call will be blocked (busy signal) during the peak busy hour of the day.

ILLINOIS BELL COMMUNICATIONS (IBC)	One of the three co-prime contractors in the Statewide Network contract. IBC provides equipment as well as installation and maintenance services. Now known as Ameritech.
ILLINOIS BELL TELEPHONE (IBT)	One of the three co-prime contractors in the Statewide Network contract. IBT is to provide equipment, support staff, and various types of local services (such as Centrex). Now known as Ameritech. For presentation purposes, this Report will refer to Illinois Bell Telephone and Illinois Bell Communications as Illinois Bell.
INTEGRATED SERVICES DIGITAL NETWORK (ISDN)	A service that allows voice, data, and video to be transmitted over a single line.
LOCAL AREA NETWORK (LAN)	A type of geographically limited communications network intended primarily for high-speed data transmissions.
LOCAL EXCHANGE CARRIER (LEC)	A telephone company that provides services in a specific geographic region. In Illinois there are 56 LECs including Illinois Bell.
MASTER AGREEMENTS	Contracts which contain a description of services, dates, terms of use, and sometimes an estimated contract amount.
MONIES	Management of Network Income Expense Services; acronym for the software product used by DCMS for inventory management, billing, and maintenance of all components in the State telecommunications network. The software was purchased from Stonehouse and Company in 1986.
NEGOTIATION	A procurement method which is considered a competitive procedure if negotiations are conducted with more than one vendor. Negotiation with one or more vendors is allowed for telecommunications contracts.
NETWORK ARCHITECTURE	A framework of principles to facilitate the operation, maintenance, and growth of a communications network.

**NETWORK CONTROL CENTER
(NCC)**

Any centralized network diagnostic and management control site.

**NETWORK STRATEGIES, INC.
(NSI)**

The company hired by DCMS in 1987 to develop a five-year strategic plan for the State telecommunications system. NSI also assisted in the development of the RFP for the Illinois Bell US Sprint master agreement.

**PRIVATE BRANCH EXCHANGE
(PBX)**

Telephone switch located at a customer's site that establishes voice communications with the public telephone network. A PBX also provides switching within the customer site and offers enhanced features such as least-cost routing and call detail recording.

**REQUEST FOR INFORMATION
(RFI)**

A general notification of an intended purchase for goods or services, including computer or communications equipment or services, sent to potential suppliers to determine interest and solicit product materials.

**REQUEST FOR PROPOSAL
(RFP)**

A document supplied to vendors to solicit a proposal, with prices, that meets the State's requirements.

SEALED BID

Procurement method that requires advertising and evaluation of bids with the award made to the lowest responsible bidder whose bid conforms to State specifications.

SEALED PROPOSAL

Procurement method used when specifications are not adequate to award based solely on low cost. Bids evaluated according to predetermined criteria with evaluation showing how the winning proposal is in the best interest of the State.

STATEWIDE NETWORK

The State's network architecture that consists of leased facilities and equipment at various sites throughout the State.

US SPRINT

One of the three co-prime contractors to the Statewide Network contract. US Sprint provides long distance service as well as support staff in the NCC. Now known as Sprint.

TARIFF

The formal schedule of rates and regulations pertaining to communication services, equipment and facilities. Tariffs constitute a contract between the user and the common carrier.

TBAR

Telecommunications Billing and Accounts Receivable. A system used by DCMS' Accounting Division to perform accounting functions for the CRF.

**WIDE AREA NETWORK
(WAN)**

A network spanning a large geographical area. They typically use circuits provided by common carriers.

Chapter One INTRODUCTION

On April 16, 1992, the Legislative Audit Commission adopted Audit Resolution 97 (Appendix A) which directs the Auditor General to conduct a management audit of the Department of Central Management Services' (DCMS') telecommunications operations. The Audit Resolution directs the Auditor General to determine whether:

1. DCMS has adopted plans and management strategies that promote cost-effective telecommunications operations;
2. DCMS has policies and procedures to effectively guide telecommunications operations;
3. monitoring of telecommunications operations by DCMS is adequate; and
4. telecommunications billings to State agencies, and DCMS' collection of billings, have been timely and accurate.

REPORT CONCLUSIONS

The Department of Central Management Services is responsible for providing telecommunications services for State agencies. In Fiscal Year 1992, DCMS' telecommunications expenditures exceeded \$90 million. The 150,000 lines leased by DCMS, which averaged 7.5 million calls per month, would make it the fifth largest local exchange carrier in Illinois. In addition, DCMS operations included 25,000 data terminals, 21,000 radio devices, 12,000 credit cards, and 1,000 cellular lines.

Telecommunications operations for the State, which encompass voice, data (computers, facsimile machines), and video services, have changed since the AT&T breakup in 1984. The breakup has resulted in more competition, new technologies, and more service options being available to the State.

In 1987, a DCMS consultant recommended the State establish its own telecommunications network to improve services. DCMS adopted the recommendation and had a network operational by 1989. In the process, DCMS essentially went from a telecommunications user to a manager of a telecommunications operation. DCMS' establishment of a network has been cost-effective.

The contract for network services with Illinois Bell and US Sprint (now called Ameritech and Sprint respectively) expires in 1995. There are a number of issues which the Department should consider in planning for the expiration of the contract. These include alternatives to the existing network architecture, alternative access arrangements, the grade of network service, and an integrated network management system. In addition, while DCMS receives some input from agencies regarding their telecommunications needs, it has not conducted a formal or comprehensive assessment of agencies' telecommunications needs since 1987.

The Department lacked written policies and procedures to guide much of its telecommunications operations. DCMS did not adequately monitor its telecommunications operations. DCMS' management information systems cannot provide cost data to identify or allocate specific costs for the Statewide Network and thus cannot properly set charges for services and equipment. According to DCMS officials, DCMS' accounting system for telecommunications has not been upgraded since 1980. In addition, some accounting transactions were improperly recorded or misclassified.

Although DCMS is not required to conduct competitive selection procedures in awarding telecommunications contracts, it chose to initiate competitive procedures for the six procurements we reviewed. However, for some of the six procurements we reviewed, DCMS used inconsistent or non-standard terms in bidding documents, did not adequately document and/or fully justify award decisions, and changed or used inconsistent criteria.

Some telecommunications invoices from vendors, which were passed through to State agencies, were inaccurate. A contractor hired by DCMS identified over \$6 million in questionable charges by telephone companies; the companies have repaid the Department over \$1 million. We determined that DCMS paid an additional \$118,000 in taxes for which it was not liable. Although billings to agencies were generally on time, some agencies did not pay their bills in full, and DCMS had to write off bad debt of over \$2.6 million in the past three fiscal years. However, DCMS received payments or issued credits which it did not apply to past due account balances.

During the course of the audit, DCMS took the following steps to address some of the matters identified above. DCMS:

- formed a strategic planning committee for telecommunications and revised the organizational structure for telecommunications to better manage its operations;
- created documented policies and procedures for credit cards, cellular phones, vendor credits, and agency credits;

- **implemented security measures for credit card and cellular phone data contained in DCMS information systems;**
- **reclassified accounting transactions;**
- **issued Requests for Proposals to develop an integrated network management system and to review agency needs, network technologies, and services; and**
- **initiated planning activities to improve the telecommunications accounting system and centralize the receipt and processing of vendor invoices.**

While DCMS has taken some action to improve its operations, other issues need to be addressed. These include comprehensive planning for technical and administrative functions, development of documented policies and procedures for all telecommunications activities, adequate documentation of procurement activities, improved management reporting, and formal evaluation of vendors' performance.

BACKGROUND

Over the past ten years, the telecommunications industry has changed dramatically. In 1982, a federal judge ordered AT&T to divest itself of the regional Bell companies. Divestiture allowed State government to choose among several long distance carriers and gave it the option of purchasing telecommunications equipment. New technologies have improved the efficiency and quality of services available.

Divestiture changed DCMS' role from a subscriber of services to a manager of telecommunications services. Before divestiture, the State leased most of its telecommunications equipment directly from AT&T or the Bell Companies (now called Ameritech). Today it can buy telecommunications equipment, circuits, and services from a variety of sources.

State government has the option of selecting long distance services from a number of vendors. Prior to 1984, AT&T was the primary company providing long distance services. By 1988, 36 companies offered long distance services in Illinois and by 1992 the number increased to 126.

In Illinois, local service is generally still a non-competitive aspect of the industry - that is, a local exchange carrier has exclusive rights to sell dial-tone services in a specific region. The exception is that, in 1989, the Illinois Commerce Commission (ICC) approved requests from one carrier seeking to provide local exchange service in the Chicago area - in direct competition with Illinois Bell. Two other carriers were granted similar certificates by the ICC. In total there are 56 local exchange carriers in Illinois with Illinois Bell being the largest provider of local services.

The development of new technologies provides opportunities to DCMS for future cost savings and improved services. Fiber optic cables send voice and data transmissions by using high-speed pulses of light through glass cables. The benefits of fiber optic cables are higher capacity of transmissions, longer service life, and less maintenance. Digital switches use computers and software to route calls whereas the traditional electro-mechanical switches require manual modifications. Digital switches offer greater efficiency, higher quality services, and less maintenance.

THE DEPARTMENT OF CENTRAL MANAGEMENT SERVICES

In 1969, the General Assembly authorized the establishment of the Communications Revolving Fund and gave the Department of Central Management Services (formerly the Department of General Services) control over the State's telecommunications activities. Exhibit 1-1 provides an overview of major events in State telecommunications.

**Exhibit 1-1
CHRONOLOGY OF EVENTS
DCMS TELECOMMUNICATIONS**

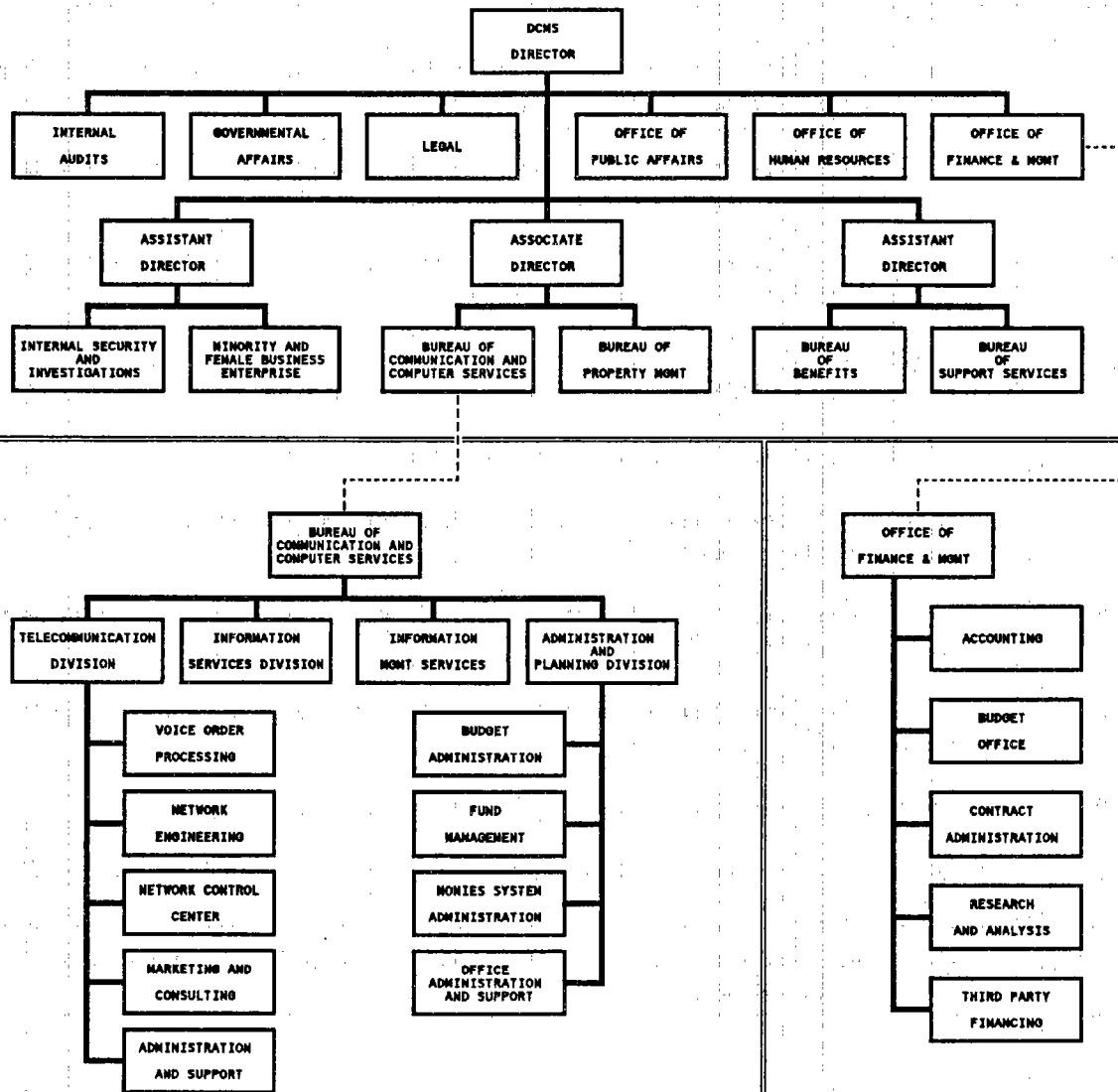
1969	Public Act 76-1029 gives DCMS (formerly the Department of General Services) authority over telecommunication services. (Chapter 1)
	Public Act 76-1030 creates the Communications Revolving Fund to receive payments for telecommunications services to agencies. (Chapters 1 and 5)
1974	DCMS creates the current accounting system for telecommunications (Telecommunications Billing & Accounts Receivable). (Chapter 5)
1982	Modification of Final Judgment requires divestiture of AT&T; results in greater responsibility for DCMS in managing telecommunication operations. (Chapter 1)
1984	AT&T formally divested its local telephone companies. (Chapter 1)
1986	DCMS purchases the Management of Network Income Expense Services (MONIES) to track inventory and bill agencies. (Chapter 5)
1987	A DCMS consultant, Network Strategies, Inc., develops a five-year strategic plan for State telecommunications. (Chapter 2)
1988	DCMS signs a seven-year contract with Illinois Bell and US Sprint to develop a Statewide Network. (Chapters 3 and 4)
1989	DCMS initiates network services in Springfield and Chicago. (Chapter 1)
1990	DCMS moves telecommunications staff into a Communications Facility owned by Illinois Bell. (Chapter 2)

SOURCE: OAG summary of documents from DCMS, Illinois Compiled Statutes, and Illinois Commerce Commission.

The Department of Central Management Services (DCMS) serves as the centralized source of telecommunications services and equipment for State agencies. Illinois statutes give DCMS the power and duty to provide and control the procurement, installation, retention, and maintenance of telecommunications equipment or services used by State agencies (20 ILCS 405/67.18).

Statutes also require DCMS to create an administrative organization to fulfill its responsibilities for telecommunications. Exhibit 1-2 presents an overview of DCMS' organizational structure and shows the sections within DCMS involved with telecommunications.

**Exhibit 1-2
DCMS ORGANIZATIONAL STRUCTURE
HIGHLIGHTING SECTIONS RESPONSIBLE FOR TELECOMMUNICATIONS**



SOURCE: OAG summary of DCMS' documents

The Bureau of Communication and Computer Services (BCCS) has primary responsibility for providing telecommunications services and equipment to State agencies.

BCCS had 86 employees assigned to telecommunications who were paid from the Communications Revolving Fund.

Within BCCS, the Division of Telecommunications has responsibility for:

- fulfilling requests from State agencies for services and equipment (Voice Order Processing and the Network Control Center);
- operating the telecommunications network (Network Control Center);
- procuring equipment and systems for agencies (Marketing and Consulting); and
- designing new segments to the Statewide Network (Network Engineering).

The Division of Administration and Planning performs several functions including:

- receipt and processing of vendor invoices (Budget Administration and Fund Management);
- creation of various parts of agency bills (Fund Management);
- development of budgets and spending plans, and monitoring of expenditures (Budget Administration); and
- administration of a management information system (MONIES).

The Office of Finance and Management has responsibility for the financing (Contract Administration) and accounting activities (Accounting) associated with telecommunications. The Accounting section has ten staff assigned to telecommunications. Contract Administration's employees work on telecommunications contracts on an as-needed basis.

Procurement Activities

Prior to divestiture, State government relied on AT&T and the subsidiary Bell companies to manage the State's telecommunications operations. The broad effect of divestiture was to shift the management of telecommunications, from AT&T and Illinois Bell, to DCMS. This shift meant DCMS would have greater administrative and decision-making responsibilities for selecting the appropriate services for State agencies.

A primary role of DCMS is to serve as a broker between telecommunications vendors offering services and the agencies seeking them. In this capacity DCMS has several responsibilities including:

- consulting with the agencies requesting services and equipment;
- soliciting bids, proposals, and offers from vendors; and
- evaluating vendor proposals and awarding contracts.

During Fiscal Year 1992, DCMS had 608 contracts in effect for telecommunications operations. These 608 contracts totaled almost \$166 million. Over 50 percent of the contracts (329) involved one-time purchases occurring in Fiscal Year 1992. Fiscal Year 1992 expenditures for all telecommunications contracts were over \$29.9 million.

DCMS had 15 master contracts in effect (as of June 1992). Ten of the contracts allowed the Department to purchase services or equipment on an as-needed basis while the remaining five provided revenue for DCMS from phones in State offices or buildings.

Master contracts allow DCMS to obtain volume discounts and reduce the administrative burden associated with individual purchases. Since DCMS purchases services and equipment on an as-needed basis, it does not obligate funds when it executes a master contract. However, the Comptroller's Uniform Statewide Accounting System (CUSAS) manual requires DCMS to file master contracts with the Comptroller's Office.

In addition to contract expenditures, DCMS had other expenditures of \$52.3 million - primarily for services provided by local exchange carriers and long distance companies. DCMS did not have contracts for these services because the carriers provide services based on the demand of State agencies. In addition, carrier charges are based on tariffs rather than a contract amount.

Equipment and Services Provided by DCMS

The State Finance Act (30 ILCS 105/24.3) defines telecommunications services as telecommunications interconnection equipment and related supplies, maintenance, space, and personal services. Equipment includes telephone, radio, teletype, teletypewriter, computer, and other voice, data or video interconnection systems.

Before divestiture, the Department's primary role was to order and pay for services provided by a monopolistic industry. Divestiture forced changes on the Department because conducting business in the traditional manner was not cost-effective. Consequently, DCMS became responsible for identifying alternative methods to providing services and equipment and selecting the most appropriate alternative.

DCMS provides telecommunications services to approximately 225 agencies including departments, commissions, and universities. In comparison to local exchange carriers, the number of State lines would make it the fifth largest local carrier operating in Illinois (as of June 1992). Exhibit 1-3 shows the six largest local carriers operating in Illinois. As of June 1992, the State had 150,000 leased phone lines in operation. These lines transmitted 7,500,000 calls per month.

Not only does DCMS provide standard phone services described above, it also controls other services and equipment used by State agencies. These include 12,158 credit cards, 4,830 pagers, 21,000 radio devices, 1,035 cellular lines, and 953 cellular phones. In addition, the State had 24,552 data terminals connected to State lines.

Besides providing specific services, DCMS is responsible for large scale projects including the development of a Statewide Network. The Network consists of leased lines from Illinois Bell and US Sprint which are interconnected at various sites. The lines and the equipment, which route traffic on these lines, make up the Statewide Network.

In May 1989, the Network became operational with the installation and use of long distance facilities between Chicago and Springfield. The Network now extends to cities throughout Illinois - with Carbondale as the most southern point within the Network and Rockford the most northern location.

Exhibit 1-3 COMPARISON OF LEASED LINES USED BY DCMS TO ACCESS LINES OF THE SIX LARGEST LOCAL EXCHANGE CARRIERS IN ILLINOIS AS OF 1992	
<u>COMPANY</u>	<u>NUMBER OF ACCESS LINES</u>
Illinois Bell Telephone	5,584,936
GTE-North*	583,134
Central Telephone	207,585
Contel of Illinois*	165,236
DCMS (State of Illinois)	150,000
Illinois Consolidated	79,984
Alltel Illinois	40,598

* GTE-North and Contel of Illinois merged on April 1, 1993

Note: Number of DCMS lines as of June 30, 1992; the number of local exchange carrier lines as of December 31, 1992.

SOURCE: OAG summary of data from the Illinois Commerce Commission and DCMS.

Communications Revolving Fund

The State Finance Act (30 ILCS 105/6p-2) authorized the establishment of the Communications Revolving Fund (CRF). DCMS uses the Communications Revolving Fund

to pay for telecommunications services received from vendors, charge agencies for services, and receive payments from the agencies.

The CRF is an internal service fund. According to generally accepted accounting principles, the objective of an internal service fund is not to make a profit but to recover, over a period of time, the total cost of providing services. The total cost of providing services would include administrative costs such as personnel. To recover administrative costs, which amounted to \$5.7 million in Fiscal Year 1992, statutes allow the Department to establish charges for services and equipment provided to the agencies.

Exhibit 1-4 shows that revenues to the CRF increased from \$81.8 million in Fiscal Year 1988 to \$98.7 million in Fiscal Year 1992. Operating expenses also increased from 1988 (\$81.6 million) to 1992 (\$90.3 million).

Exhibit 1-4					
SUMMARY OF TOTAL OPERATING REVENUES, EXPENSES & NET INCOME					
FOR THE COMMUNICATIONS REVOLVING FUND					
FY88 through FY92					
(in thousands)					
	FY88	FY89	FY90	FY91	FY92
Total Operating Revenue	\$81,757	\$86,395	\$92,123	\$97,965	**\$98,672
Total Operating Expenses	<u>81,624</u>	<u>86,387</u>	<u>91,037</u>	<u>96,196</u>	<u>90,257</u>
Net Income	<u>\$133</u>	<u>*\$16</u>	<u>\$1,086</u>	<u>\$1,769</u>	<u>\$8,415</u>
<p>* Includes nonoperating revenues of \$8 thousand.</p> <p>** Includes an accounting adjustment of approximately \$5.6 million. This adjustment reflects an increase to revenues and also increases net income.</p> <p>Note: FY92 revenues and expenses are understated by \$3.8 million. See Chapter Five for further discussion.</p>					
<p>SOURCE: OAG Financial Audits FY88-FY92 for the Department of Central Management Services</p>					

As will be discussed in Chapter Five, Total Operating Revenue for Fiscal Year 1992 in Exhibit 1-4 is understated because DCMS did not record \$3.8 million from commissions and signing bonuses as revenues in the Communications Revolving Fund. Rather, it deducted the \$3.8 million from vendor bills, thereby also understating Total Operating Expenses. While Net Income would remain the same at \$8.4 million for Fiscal Year 1992, both operating revenue and operating expenses would increase by \$3.8 million to \$102.5 million and \$94.1 million respectively. For the purposes of this Report, the figures \$98.7 million and \$90.3 million will be used.

SCOPE AND METHODOLOGY

This audit was conducted in accordance with generally accepted government auditing standards and the audit standards promulgated by the Office of the Auditor General at 74 Ill. Adm. Code 420.310.

Audit work included reviews of statutes and administrative rules, obligation and expenditure reports based on Comptroller data, the Comptroller's Uniform Statewide Accounting System (CUSAS) manual, contract documents filed with the Comptroller's Office, and documents at DCMS. Fieldwork for this audit began in October 1992 and ended in June 1993.

The period under review for this audit generally included Fiscal Years 1992 and 1993. Some contracts, which were executed prior to Fiscal Year 1992, represented major management strategies of DCMS and thus were included under the scope of the audit. Also, in some cases we include information beyond Fiscal Year 1993 to recognize improvements or new activities of the Department.

In conducting the audit, we interviewed officials and/or staff at the Office of the Comptroller, the Illinois Commerce Commission, and the Departments of Central Management Services, Corrections, Revenue, State Police, and Public Aid. We also interviewed officials from private companies including Illinois Bell, US Sprint, and D-Square.

We reviewed DCMS' internal controls and conducted risks assessments for telecommunications operations. We also reviewed the assessments conducted in the Auditor General's financial and compliance audits for DCMS. Our review showed weaknesses in the internal control system for the Telecommunications Division, the Division of Administration and Planning, and the Accounting section which handles telecommunications transactions. We also found inaccuracies in the financial statements for the Communications Revolving Fund. These matters are disclosed in this Report and have been referred to our Compliance Audit Division.

We assessed the application controls for the management information systems used for telecommunications. As a result of our review we noted several control weaknesses within these systems. These are discussed in Chapter Five.

In addition, we tested the accuracy of DCMS' database used to record telecommunications inventory owned or leased by DCMS. Testing included the random selection of a statistical sample of 384 records which provided a confidence level of 95 percent and an error rate of (plus or minus) five percent. (See Appendix B for a description of methodologies for this task and others applied during the audit.)

Audit work included a review of DCMS' procurements for telecommunications services and equipment. Procurements were selected based on dollar amount of contracts and the types of contracts executed by DCMS.

We contracted with Mr. Martin Skeer, Ph.D., of Martin Skeer Associates to assist us in our review of management strategies and certain technical aspects of DCMS' telecommunications operations. Due to the limited cost data and documentation regarding network operations available from DCMS, our consultant's review focused primarily on future opportunities to improve Network operations rather than an analysis of the cost-effectiveness of current operations.

REPORT ORGANIZATION

The remainder of the audit report is organized as follows:

- *Chapter Two* discusses planning efforts for DCMS' technical and administrative functions, its organizational structure, and management controls in place for telecommunications functions;
- *Chapter Three* addresses DCMS' strategic planning efforts to meet the technical needs of State agencies including the development of the Statewide Network;
- *Chapter Four* discusses the procurement systems used by DCMS to obtain services and equipment for agencies;
- *Chapter Five* addresses the management information systems used by the Department;
- *Chapter Six* discusses the systems and methods used to pay vendors and bill agencies for services and equipment;
- *Chapter Seven* discusses issues which were beyond the scope of this audit.

Chapter Two **TELECOMMUNICATIONS PLANNING**

DCMS needs to improve its planning efforts for telecommunications. With responsibilities of meeting State agencies' telecommunications needs, and with total annual telecommunications expenses of over \$90 million, improved technical planning is needed to guide DCMS' development of long term telecommunications strategies.

In July 1992, DCMS created a Strategic Planning Committee to address future telecommunication operations. DCMS provided minutes for only two meetings in 1992 and memos to show two other meetings were scheduled in 1993. Also, the Department received two reviews of the Statewide Network performed by Illinois Bell and US Sprint.

Before DCMS can develop or implement new strategies for telecommunications, it must determine the current and future technical requirements of State agencies. DCMS obtains some input regarding agencies' technical needs. It conducts technology forums and periodic meetings with telecommunications coordinators. There is also some coordination within the Department to assess agencies' needs for transmitting data. However, the Department has not conducted a formal, comprehensive assessment of agencies' technical needs since 1987.

In November 1993, DCMS created an Agency Services section to improve interaction with agencies and identify telecommunications needs. Also, at the end of the audit DCMS issued a Request for Proposal to hire a consultant who would assist the Department in evaluating agencies' telecommunication needs and the applicability of new technologies and services offered by vendors.

Improved planning is also needed to address DCMS' administrative responsibilities. Many sections lacked documented policies and procedures. In addition, while DCMS has reorganized its telecommunications operations on several occasions, sections continued to have overlapping responsibilities. In November 1993, DCMS completed another reorganization. It has also initiated plans to eliminate some overlapping responsibilities among sections.

DCMS did not comply with statutory planning requirements when it agreed to use space in an Illinois Bell facility in December 1988. As part of the master agreement for the Statewide Network, Illinois Bell built a facility for DCMS' use. From August 1990 to December 1995, DCMS will spend an estimated \$9.8 million to house BCCS staff and a Network Control Center. When the current lease expires in December 1995, DCMS will need to renew the lease or seek space elsewhere. Prior to December 1988, DCMS did not conduct a cost-benefit analysis of purchasing or constructing space as required by statutes.

TECHNICAL PLANNING FOR TELECOMMUNICATIONS

Illinois statutes define DCMS' mission and long range goals for telecommunications. DCMS is "to provide for and control the procurement, retention, installation, and maintenance of telecommunications equipment or services used by State agencies in the interest of efficiency and economy." (20 ILCS 405/67.18)

Statutes require DCMS "to develop and implement a comprehensive plan to coordinate or centralize communications among State offices at different locations. The plan shall be updated based on a continuing study of communications problems of State government and shall include but not be limited to telephone, teletypewriter use in computer operations, the use of voice, data, and video communications systems, and any other form of communications system which may be applicable." (20 ILCS 405/67.08)

1987 Strategic Plan

In January 1987, DCMS formed a Blue Ribbon Advisory Committee to help it develop telecommunications strategies. The Blue Ribbon Committee included representation from the Governor's Office, the Board of Higher Education, the Bureau of the Budget, and several State agencies.

In February 1987, DCMS hired a consulting firm, Network Strategies, Inc. (NSI), to analyze the telecommunications needs of State agencies and to develop a formal strategic plan. In consultation with the Blue Ribbon Advisory Committee, NSI completed the Strategic Plan in June 1987.

"The State has only one realistic avenue for ensuring the network remains capable of supporting future requirements: the State must centralize the planning function. This centralization can take the form of a standing committee responsible for high level planning and a planning group responsible for day to day administration."

SOURCE: Network Strategies, Inc., June 1987

The 1987 Strategic Plan addressed the technical needs of State agencies and specific approaches to meet those needs. It contained several recommendations to improve services to agencies including:

- creation of a Statewide Network (Network) with new data and video services;
- local networks for Chicago and Springfield;
- State management of network operations; and
- creation of a planning committee.

To ensure the Network remained capable of supporting future growth and new applications, NSI recommended DCMS develop a permanent planning committee. This would serve DCMS in its long term planning efforts and provide direction for daily activities.

Technical Planning Since 1987

The Department needs to improve its planning efforts for telecommunication operations. Strategic planning requires: a regular assessment of agencies' technical needs; identification of the services and technologies available to serve those needs; and assessments of the costs and benefits of services and technologies considering the competition within the telecommunications industry. DCMS has not formally updated its Strategic Plan since 1987.

After this audit began, DCMS organized a formal strategic planning committee in July 1992. According to DCMS officials, this group meets quarterly; however, DCMS provided minutes for only two meetings in 1992 and memos to show two other meetings were scheduled in 1993.

DCMS obtains some input regarding agencies' needs. The Department conducts periodic meetings with telecommunications coordinators, holds periodic technology forums, and develops spending plans in consultation with agencies. Further, when purchasing specific services or equipment for agencies, DCMS serves as a technical advisor to the agencies.

Also, DCMS' Information Management Services receives annual plans of information systems from State agencies. DCMS officials stated these are forwarded to the Telecommunications Division to review agencies' telecommunications requirements for data services. However, DCMS supplied limited documentation regarding the extent to which these plans are analyzed and used by the Telecommunications Division.

Regarding the review of services and technologies, Illinois Bell and US Sprint are required to conduct evaluations and redesigns of the Network, as part of the master contract for Statewide Network services. Illinois Bell and US Sprint submitted two redesigns: one in 1990 and another in 1992. These redesigns are to identify changing traffic patterns and demands at State locations. DCMS officials noted however, that the recommendations made in these documents are not always implemented because they may not be cost-effective for the State.

While DCMS receives some input regarding agencies' needs, a more formal, comprehensive assessment is needed. A technical needs assessment would require a more thorough and systematic analysis of each agency's technical needs including the suitability of

new services and equipment. Without a comprehensive assessment, DCMS cannot determine if current services are adequate or cost-effective and adequately plan for future operations. An assessment of agency needs would include:

- the full scope of each agency's current and future information requirements including voice, data, and video; and
- current and planned State agency initiatives related to services provided by the Statewide Network and initiatives which are not now within the Network; these include Local Area Networks, Wide Area Networks, and specialized Networks (radio and cellular).

Using information from a technical needs assessment, DCMS could formulate a comprehensive assessment of the needs of State government. This analysis could be revised each year based on changes in goals and strategies of the agencies.

In November 1993, DCMS created an Agency Services Section within the Bureau of Communication and Computer Services (BCCS). According to DCMS officials, this section will have six staff assigned to it. Staff would be responsible for interacting with agencies to identify agencies' needs.

In addition, in December 1993, the Department issued a Request for Proposals to select a consultant who would assist the Department in identifying agencies' technical needs and the appropriate services and technologies to serve those needs. Based on the results of these two tasks, the consultant will be responsible for creating a new strategic plan.

RECOMMENDATION NUMBER ONE

The Department of Central Management Services' strategic planning committee for telecommunications should meet on a regular basis to update its Strategic Plan as required by 20 ILCS 405/67.08 and, on a regular basis, formally assess the telecommunication needs of State agencies as required by 20 ILCS 405/67.18.

Department of Central Management Services Response:

"This recommendation does not accurately reflect the cited statutes. There is no requirement in those statutes calling for the Department or its strategic planning committee to meet on a regular basis to update the strategic plan, nor is there any requirement that there be a formal assessment on a regular basis of agency telecommunications needs. The way the recommendation was written implies a violation of statute where no such violation exists. (* see Auditor's Comment on next page)

(continued on next page)

AGENCY RESPONSE (continued)

DCMS, nevertheless, concurs with the recommendation that the strategic planning committee should meet on a regular basis to update the strategic plan and formally assess the telecommunication needs of State agencies.

The auditors' assertion notwithstanding, the strategic planning committee was formed before the audit began and has met at least quarterly during the past three years. (** see *Auditor's Comment below*) As we now specifically prepare for the issuance of an RFP to address the period beyond the current statewide network contract, the committee meets at least twice per month. In addition, DCMS has held quarterly telecommunications coordinators meetings and emerging technology forums to keep the coordinators informed of new services offered and to receive input as to additional telecommunications services they require. DCMS agency services staff meets with agencies on an ongoing basis to develop solutions to meet their telecommunications needs."

Auditor's Comments:

- * *20 ILCS 405/67.08 requires DCMS to "develop and implement a comprehensive plan to coordinate or centralize communications among State offices at different locations. The plan shall be updated based on a continuing study of communications problems of State government. . . [emphasis added]." 20 ILCS 405/67.18(e) requires DCMS to "analyze the present and future aims and needs of all State agencies in the area of telecommunications services and plan to serve such aims and needs in the most efficient and effective manner [emphasis added]." Since 1987, DCMS has not formally updated its Strategic Plan or conducted a formal, comprehensive assessment of agencies' telecommunications needs.*
- ** *The first evidence provided by DCMS of its strategic planning committee were minutes from a July 1992 meeting.*

ADMINISTRATIVE PLANNING FOR TELECOMMUNICATIONS

The Department has an existing administrative planning group for the Bureau of Communication and Computer Services. However, DCMS needs to improve its planning activities to administer telecommunications operations. Improved administrative planning is needed to ensure that DCMS has appropriate management controls for telecommunications activities. Management controls provide reasonable assurances that the agency will consistently follow laws and regulations, efficiently use resources, and produce reliable data.

Two important elements of management controls include a suitable organizational structure and documented policies and procedures. An organizational structure is an illustration of how management has allocated resources. Documented policies and

procedures communicate management's objectives as well as specific directives to achieve goals.

Telecommunications Organizational Structure

DCMS has made several organizational revisions to sections responsible for telecommunications operations. However, these changes have not dealt with the overlapping responsibilities among various units.

A DCMS report, completed in March 1991, found that even though DCMS' responsibilities expanded, it had not addressed this expansion in its organization or staffing assignments. It concluded that some functions were performed in multiple organizational units.

"The implementation of the Statewide network in essence made the Bureau of Communication and Computer Services a full service telephone company . . . Even though responsibilities increased significantly, few changes were made to the organization structure or staffing levels . . . Consequently, some business functions are performed in multiple organizational units."

SOURCE: DCMS report "Business Functions and Organization Plan for Statewide Telecommunications Management," March, 1991.

Since the March 1991 report, the Bureau of Communication and Computer Services (BCCS) within DCMS revised its organizational structure (or reassigned personnel) several times: once in 1991 and twice in 1992. In addition, DCMS provided us with a new organization chart in November 1993 after fieldwork ended.

While DCMS has made several revisions to the organizational structure, these have not reduced the overlap of responsibilities among various units. For example, Exhibit 2-1 shows four different sections that receive invoices from vendors: Accounting, Budget Administration, Fund Management, and Voice Order Processing. Three

Exhibit 2-1 SECTIONS RESPONSIBLE FOR PROCESSING VENDOR INVOICES

**Office of Finance
and Management**

- Accounting

**Bureau of Communication
and Computer Services**

- Administration and Planning Division
 - Fund Management
 - Budget Administration
- Telecommunications Division
 - Voice Order Processing

SOURCE: OAG summary of BCCS' documents

sections (Accounting, Fund Management, and Voice Order Processing) currently compile portions of agency bills.

However, these sections review vendor invoices and compile agency billing data using different procedures. This has resulted in DCMS' inability to verify vendor invoices in the same level of detail. In September 1993, after the conclusion of our fieldwork, DCMS started planning activities to centralize the processing of vendor invoices. Chapters Five and Six discuss these issues in greater detail.

Documented Policies and Procedures

Many sections responsible for telecommunications do not have documented policies and procedures. Given the complexity and range of responsibilities for DCMS' telecommunications operations, documented policies and procedures are crucial to ensuring compliance with laws and regulations, efficient use of resources, and the creation of reliable data.

The importance of documented policies and procedures increases with the importance or critical nature of the function. For example, the Marketing and Consulting section within the Telecommunications Division has an important function since it seeks and executes contracts for telecommunications services and equipment for State agencies. In Fiscal Year 1992, expenditures for telecommunications contracts were approximately \$29.9 million. As shown in Exhibit 2-2, Marketing and Consulting did not have written policies and procedures. Chapter Four discusses DCMS' procurement activities for telecommunications in more detail.

"The Division of Telecommunications currently has limited formal policies and procedures. This has often caused confusion and has resulted in degradation of services to agencies."

SOURCE: DCMS report "Business Functions and Organization Plan for Statewide Telecommunications Management"; March, 1991.

Similarly, documented policies and procedures are important for Accounting as it processed approximately 27,000 vendor invoices in Fiscal Year 1992, according to DCMS officials. Accounting creates bills for approximately 225 agencies including departments, commissions, and universities and generates the financial statements for the Communications Revolving Fund. Chapters Five and Six discuss accounting activities in more detail.

Exhibit 2-2 shows only a few units have documented policies and procedures. During the audit, DCMS created some documented policies and procedures for certain vendor invoices, credits cards, and cellular phones. DCMS officials also assigned staff to develop policies and procedures for some sections involved with telecommunications.

**Exhibit 2-2
SUMMARY OF POLICIES AND PROCEDURES
FOR TELECOMMUNICATIONS OPERATIONS**

BUREAU OF COMMUNICATION AND COMPUTER SERVICES		OFFICE OF FINANCE & MANAGEMENT	
<u>TELECOMMUNICATIONS DIVISION</u>	<u>EXISTING POLICIES & PROCEDURES</u>	<u>ADMINISTRATION & PLANNING DIVISION</u>	<u>EXISTING POLICIES & PROCEDURES</u>
			<u>ACCOUNTING</u>
Network Engineering	Yes	MONIES System Admin. (Ch.5)	TBAR (Ch.5)
Voice Order Processing		Budget Administration	Financial Statements (Ch.5)
Miscellaneous Services (Ch.6) ¹	No ²	Obligation Control	
Vendor Invoices (Ch.2,6)	No	Vendor Invoices (Ch.2,6)	Vendor Invoices (Ch.2,6)
Cellular (Ch.2)	No ²		
Credit Cards (Ch.2)	No ²	Fund Management	
		Agency Billings (Ch.6)	Agency Billings (Ch.6)
Marketing & Consulting		Accounts Receivable (Ch.6)	
Procurement (Ch.4)	No ³	Credits (Ch.6)	
		Rate Management (Ch.5)	
		Fund Profit/Loss	
Network Control Center			
Data Provisioning	Yes		
Statewide Maintenance (Ch.2,3)	No		

NOTES:

- ¹ For presentation purposes, miscellaneous services relate to installation, maintenance, or repair of services.
- ² Policies and procedures did not exist initially but were created during or after fieldwork.
- ³ Policies and procedures were provided but were outdated and not being used by staff to perform their tasks.

SOURCE: OAG summary of interviews with BCCS staff and DCMS documents.

RECOMMENDATION NUMBER TWO

The Department of Central Management Services should continue to conduct administrative planning activities to ensure the Department has an appropriate organizational structure and documented policies and procedures for telecommunications functions.

Department of Central Management Services Response:

"DCMS concurs with the recommendation that DCMS should continue to conduct administrative planning activities to ensure that the Department has an appropriate organizational structure and documented policies and procedures for telecommunications functions. The auditors clearly recognize that administrative planning is taking place since the recommendation encourages DCMS to continue to conduct administrative planning activities.

Administrative planning has been conducted within BCCS on an ongoing basis. Examples during the past three years include budget plans, information system plans and a business plan for telecommunications. The DCMS report referenced in the audit draft report is an example of administrative planning. It outlined both organizational structure and staffing plans required to achieve our goals. Most recommendations of that report have been implemented during the past three years as need and resource availability have allowed. DCMS will continue to conduct administrative planning activities to ensure an appropriate organization structure is maintained and policies and procedures for telecommunications functions are documented." (see Appendix C for full response.)

Lease of a Communications Facility

DCMS did not comply with statutory planning requirements when it secured space for telecommunications operations in December 1988. DCMS did not assess the cost-benefits of purchasing or constructing a communications facility prior to December 1988. DCMS will have spent an estimated \$9.8 million, over five and a half years, for this space when the lease expires in December 1995. In December 1995, DCMS will have to renew the lease or find new space.

DCMS uses approximately 83,000 square feet of space in a Communications Facility owned by Illinois Bell. This building houses BCCS' telecommunications and information services staff. It contains the Network Control Center which consists of approximately 10,000 square feet.

The Department was aware of the need for space prior to selecting Illinois Bell and US Sprint to develop the Statewide Network. During the final negotiation process, DCMS

submitted building specifications to the three vendors seeking the Statewide Network contract. DCMS requested price estimates for 69,000 square feet of space from the three vendors. In addition, the master agreement shows DCMS had final approval regarding plans and specifications.

DCMS moved into the Communications Facility in August 1990. The Department did not initially sign a lease for the Communications Facility. Instead, the Illinois Bell US Sprint master agreement for the Statewide Network included a "facilities fee." While DCMS and Illinois Bell regarded payment for the Communications Facility as a "facilities fee," the terms in the master agreement reflect language normally found in a lease agreement. For example, as part of the facilities fee, DCMS was required to pay: real estate taxes, insurance, utilities, tenant repairs and maintenance expenses, as well as other costs incurred by Illinois Bell in connection with the Communications Facility. From August 1990 through December 1992, the State paid Illinois Bell \$4.09 million for the use of this building (in facilities fees).

DCMS officials signed a lease with Illinois Bell on June 30, 1993. The lease document shows the provisions were retroactive to July 1992 and thus the term was for a period of three and one-half years (through December 1995). The lease requires base payments of \$1.06 million for calendar year 1993. The base rent includes an estimated amount for indirect and direct expenses. In addition, DCMS is to pay approximately \$38,000 per month as a result of change orders requested by DCMS when the building was constructed.

In total, DCMS will pay Illinois Bell approximately \$9.8 million for rent and operating expenses for the period from August 1990 to December 1995. The Department's current lease will expire in December 1995. At that time, it will need to negotiate a new lease or find space elsewhere.

DCMS statutes (20 ILCS 405/67.02) require that, for leases over 10,000 square feet, the DCMS Director, in consultation with the Executive Director of the Capital Development Board, must certify that the lease is in the best interest of the State considering other available State-owned property, the user agency's programmatic needs, and the cost-benefits of purchasing or constructing new space.

For the lease signed in June 1993, DCMS documents showed the Director had reviewed the cost-benefits of leasing and that DCMS had consulted with the Executive Director of the Capital Development Board. However, before signing the master agreement for the Statewide Network in December 1988, DCMS did not perform an analysis to determine if purchasing or constructing a building would be more cost-effective. Further, when we requested a review of the leasing files in August 1992, DCMS officials stated the Department did not have any documentation in its leasing files, except a copy of the master contract. Given the estimated payments (\$9.8 million) to Illinois Bell, a cost-benefit analysis would have determined whether leasing was the most cost-effective alternative.

Further, we note that previous audits of DCMS leasing activities have made similar conclusions. A July 1992 management audit of the St. Anne's lease found DCMS did not formally assess the cost-benefits of purchasing or constructing new space prior to leasing St. Anne's Hospital. A 1986 audit of DCMS' lease of the Lottery Building also showed DCMS did not conduct the required cost-benefit analysis.

RECOMMENDATION NUMBER THREE

The Department of Central Management Services should, in consultation with the Capital Development Board, conduct a cost-benefit analysis of constructing or purchasing space prior to leasing space of more than 10,000 square feet as required by statute (20 ILCS 405/67.02).

Department of Central Management Services Response:

"DCMS concurs with the recommendation that, in consultation with the Capital Development Board, a cost-benefit analysis of construction, purchase or lease should be conducted prior to leasing space of more than 10,000 square feet as required by the statute (20 ILCS 405/67.02). The space procurement in 1988 was determined by DCMS not to be a lease procurement. (** see Auditor's Comment below*) In FY93, DCMS determined a lease to be appropriate and conducted a cost-benefit analysis in consultation with the Capital Development Board."

Auditor's Comment:

- * *The terms of the 1988 agreement included language typically contained in a lease agreement. For example, DCMS was required to pay real estate taxes, insurance, utilities, tenant repairs and maintenance expenses, and other costs incurred by Illinois Bell in connection with the facility.*

Chapter Three **MANAGEMENT STRATEGIES**

DCMS began Statewide Network services in May 1989 through a master agreement with Illinois Bell and US Sprint. The move to the Network was a cost-effective strategy. It allowed DCMS to take advantage of volume discounts and economies of scale.

The Illinois Bell US Sprint contract for the Statewide Network expires in December 1995. There are a number of issues which the Department may want to consider to improve future operations and increase cost savings. DCMS should analyze the cost-benefits of the current network architecture and determine if alternatives could provide future cost savings. Issues such as the use of new technologies, alternative access, the grade of service, and competitive alternatives to Centrex services need to be reviewed as potential sources of cost savings.

DCMS has not collected or analyzed detailed costs associated with the Network which is important to determining its cost-effectiveness. For example, DCMS could not provide us with the distribution of costs for voice services and data services or the common costs associated with each. The Department had not analyzed costs associated with access lines.

DCMS should also consider ways to increase the use of the Statewide Network by State agencies. Illinois Bell and US Sprint estimated the State, after an initial capital investment of \$3 million, may save as much as \$2.8 million a year if the Department of the Lottery (Lottery) and certain universities used all Network services. In January 1994, Department officials announced plans to convert the Lottery onto the Statewide Network.

A new strategic plan would provide the Department with a blueprint in choosing future technologies and services for State agencies. As it did when it developed its last strategic plan in 1987, DCMS issued a Request for Proposal in December 1993 to hire a consultant to create a new strategic plan.

THE STATEWIDE NETWORK

To develop a Statewide Network, DCMS, Illinois Bell and US Sprint executed a seven-year contract in December 1988 at an estimated cost of \$108 million. The Network became operational in May 1989. The contract expires in December 1995. Exhibit 3-1 outlines the major responsibilities of the three parties to the contract.

**Exhibit 3-1
MAJOR RESPONSIBILITIES OF PARTIES IN THE
STATEWIDE NETWORK MASTER CONTRACT**

STATE	ILLINOIS BELL	US SPRINT
<ul style="list-style-type: none"> ● Technical design information 	<ul style="list-style-type: none"> ● Network equipment & circuits for intra-LATA voice, data & video services 	<ul style="list-style-type: none"> ● Network equipment & circuits for inter-LATA voice, data, & video services
<ul style="list-style-type: none"> ● Administration of Network Control Center 	<ul style="list-style-type: none"> ● Equipment, software, & staff support for Network Control Center for intraLATA service 	<ul style="list-style-type: none"> ● Equipment, software, & staff support for Network Control Center for interLATA service
<ul style="list-style-type: none"> ● Payment of facility fee & operating expenses of the Communications Facility 	<ul style="list-style-type: none"> ● Training for State personnel ● Analysis of the redesign of the intraLATA portions of the network ● Provide space for Network Control Center & Communications Facility 	<ul style="list-style-type: none"> ● Training for State personnel ● Analysis of the redesign of the interLATA portions of the network
<p><i>Note: IntraLATA services refer to services provided within specific geographic areas - called Market Service Areas. InterLATA services refer to those provided from one Market Service Area to another.</i></p>		
<p><i>Source: Illinois Bell US Sprint Master Contract</i></p>		

In February 1993, DCMS estimated the Network would save State agencies \$76 million over the life of the seven-year contract. While we agree that the move to the Network was a cost-effective strategy, the actual cost savings are difficult to quantify.

To develop its cost-savings estimate, DCMS used data for local, intrastate, and interstate voice traffic which occurred in November 1992. It also used December 1992 figures for data circuits within the Statewide Network. For voice traffic, DCMS compared what it charges agencies to telephone company rates for local, intrastate, and interstate calls. Similarly, for data circuits, DCMS compared its rates to projected AT&T circuit costs.

DCMS developed this estimate of savings based on data from two months and extrapolated this over a seven-year period. This estimate may be subject to variation because it is a "snapshot" of savings for a specific period. Costs to the State and changes in tariffs over a seven-year period would affect this estimate.

DCMS compared its network rate of 11 cents a minute to a tariff rate offered by AT&T for intrastate calls. This comparison assumed that DCMS would not receive discounts from the long distance carriers if it had not developed the Network.

Further, DCMS could not provide us with network costs which are essential to developing a valid estimate of cost savings. An appropriate method for estimating network savings would be a much more complex undertaking. This would require identifying direct and indirect costs associated with network operations. (DCMS' inability to compile cost data is fully discussed in Chapter Five.)

In addition to cost savings associated with the development of the Network, there are further potential savings available. In association with our consultant for this audit, Martin Skeer Associates, we reviewed the Network architecture, the 1987 Strategic Plan, redesigns by Illinois Bell and US Sprint, and several technical areas for cost-effectiveness and efficiencies of operation. Potential areas for further network improvements follow.

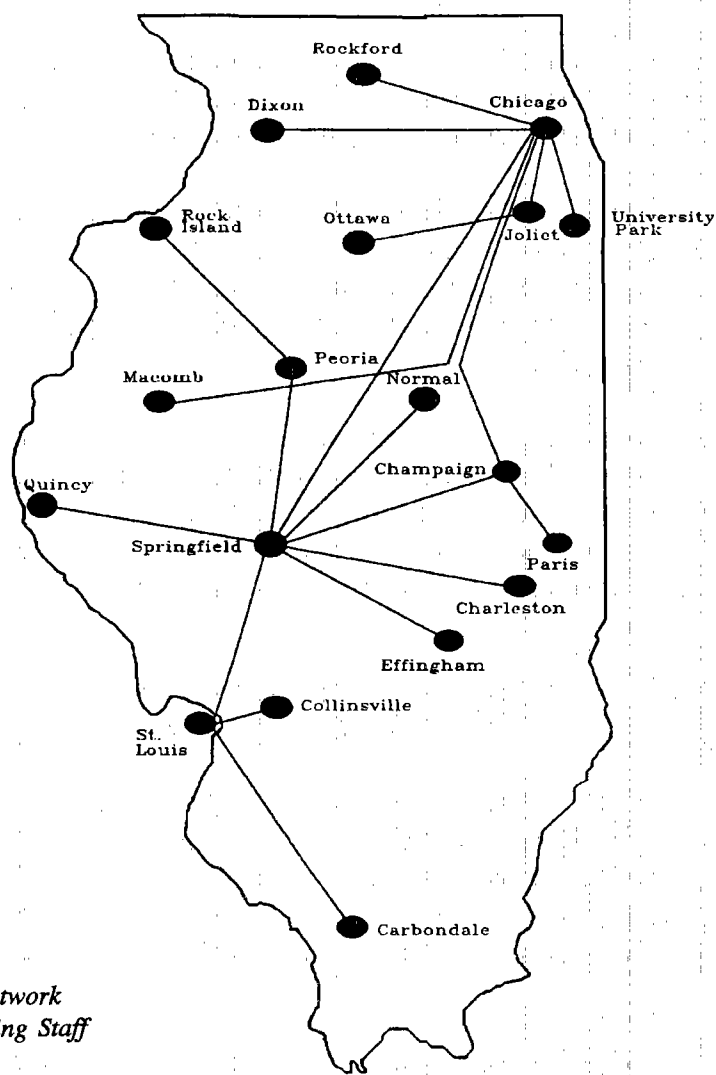
Network Architecture

The Network makes use of leased facilities (i.e., groups of lines) from Illinois Bell, US Sprint, and other interexchange carriers (i.e., long distance carriers). The State Network uses State-owned and leased equipment at various sites throughout the State to route transmissions among State offices. Together, the facilities and equipment make up the backbone of the Statewide Network. Exhibit 3-2 shows the primary routes of the Statewide Network.

The master agreement for the Statewide Network requires DCMS to use Illinois Bell to provide the access lines from a user location to network access points within the area. This condition holds forth when Illinois Bell is the authorized local exchange carrier in areas such as Chicago, Springfield, Champaign, Peoria, and the St. Louis metropolitan area. For long distance services, the Statewide Network makes use of facilities leased from US Sprint. In addition, DCMS uses US Sprint's network to route calls to sites which do not have sufficient traffic to be directly connected to the Network. US Sprint's network is also used as an overflow route to complete calls when the Statewide Network is fully utilized, or in the event of a failure on the Statewide Network.

Although not part of the master agreement for the Statewide Network, the use of Centrex switches, leased from Illinois Bell and General Telephone Company, are also

**Exhibit 3-2
STATE OF ILLINOIS
TELECOMMUNICATIONS NETWORK
OVERVIEW OF PRIMARY ROUTES**



*SOURCE: BCCS Network
Engineering Staff*

important elements in the current network arrangement. These Centrex switches are connected to the Network by facilities from the Centrex to the State's equipment located in Sprint sites. The Centrex switches:

- route voice calls among State offices or to other local destinations;
- receive and route calls originating from remote sites; and
- route calls to Sprint's or other interexchange carriers' lines.

Data traffic is routed differently than voice traffic, since data lines are not switched by the Centrex. An access line is normally leased from a local exchange carrier (such as Illinois Bell) to carry data traffic to another State site. At this site, the data line is combined with other data lines and carried to the State's equipment located at a Sprint location. The data traffic is then sent on facilities leased by the State from Sprint (or another interexchange carrier). The traffic is sent to another Sprint location near the destination point where it is moved to local lines to its final destination.

To route traffic among Sprint's facilities, the Statewide Network uses equipment at the Sprint locations. This equipment directs traffic along predetermined routes to endpoints in the Network. Thus, there is no "per call" switching which occurs in the State's equipment located at Sprint sites.

The Statewide Network also leases facilities for diverse routing of calls. Because DCMS and agencies place a high priority on uninterrupted data services, DCMS has facilities which do not travel the same paths as the primary routes. If a failure occurs on a primary route, data traffic is automatically rerouted to the diverse facilities.

One of the identifiable cost benefits to the Statewide Network is that DCMS leases dedicated lines at fixed monthly rates. This arrangement differs from the traditional method of paying for voice calls based on the duration and time of day of the transmission.

The development of the Network has been cost-effective. However, since 1988, when DCMS signed the contract for the Statewide Network, significant changes have occurred regarding competition within the industry, development of new technologies and applications, as well as new service offerings. All of these issues are important considerations to design the most cost-effective network. Further, agencies' needs have changed since 1988 and will likely continue to change in the future.

The current contract for the Statewide Network with Illinois Bell and US Sprint expires in 1995. Thus, in planning for the procurement of a new contract, DCMS should reexamine its approach to operating the Statewide Network after a formal assessment of agency needs is completed. Specific areas which DCMS should consider include:

- 1) the introduction and use of new technologies and services;
- 2) access costs associated with the Network;
- 3) grade of network service;
- 4) improvements in network control center operations;
- 5) consideration of private branch exchanges as a competitive alternative to Centrexes; and

- 6) greater use of network facilities by the Lottery and State universities.

In December 1993, the Department issued a Request for Proposals to select a consultant to provide recommendations regarding the future of the existing Network and implementation of new technologies over the next five years. In its review of the existing Network, DCMS should examine whether alternate network designs, such as using one or two primary hub switches within the Network, to concentrate traffic from remote sites, route long distance traffic, and serve as a platform for new technologies, would increase the cost-effectiveness of the Statewide Network.

In addition, the Department needs to develop better management information regarding network costs. For example, the Department could not provide us with the distribution of costs for voice services and data services associated with the Network or the common costs related to each. Further, as discussed in the following sections, DCMS had not analyzed network access costs. As managers of the Network, this information is important to identifying and monitoring network costs. (The issues of cost information and DCMS' rates for services are also discussed in Chapter Five.)

Network Technologies

The expiration of the master agreement with Illinois Bell and US Sprint in 1995 gives DCMS the opportunity to evaluate potential improvements to the current network. The May 1992 redesign of the Statewide Network, completed by Illinois Bell and US Sprint, recommended DCMS consider deployment of new technologies in the future. In addition, the Request for Proposals, issued by DCMS in December 1993 for a network consultant, also requires the consultant to identify various technologies based on agencies' needs.

Exhibit 3-3 lists some of the new technologies now available to the State. DCMS officials stated that, on a limited basis, it deploys some of the new technologies listed in Exhibit 3-3, including SONET, SS7, and ISDN. DCMS officials stated that to deploy these new technologies throughout the Network has not been found to be cost-effective. However, as noted in Chapter Two, DCMS has not conducted a formal, comprehensive assessment of agencies' telecommunications needs. A formal assessment, performed by the new network consultant, may find that agencies will have additional needs which require the implementation of new technologies.

**Exhibit 3-3
NEW TECHNOLOGIES INTRODUCED
SINCE THE 1987 STRATEGIC PLAN**

SONET	Synchronous Optical Network. New type of broad band fiber optic network that provides an enhanced capability to monitor network operations and performance.
ISDN	Integrated Services Digital Network is a service that allows voice, data, and video to be transmitted over a single line.
Fractional T-1	A new service that allows large users to lease multiples of six circuits rather than the 24 currently offered by carriers. This technology allows users to lower costs and still efficiently utilize leased circuits.
Asynchronous Transfer Mode	A new switching technology that bundles information into packets before directing a transmission towards a destination.
SS7	Signaling System Seven. A digital switching application that allows a customer to identify the phone number of the caller, block certain calls, and automatically return calls.
<i>SOURCE:</i>	<i>OAG summary of documents from DCMS and OAG consultant</i>

Access Costs for the Network

The Illinois Bell US Sprint master agreement expires in 1995. Until expiration, DCMS has only limited ability to reduce costs associated with local access circuits. DCMS officials estimate local access circuits account for two-thirds of the costs associated with the current network. However, DCMS had not analyzed costs associated with local access circuits.

DCMS' limited ability to reduce these costs is due to the provisions of the master agreement with Illinois Bell and US Sprint for network services. The master agreement requires the State to lease local access lines from Illinois Bell, when Illinois Bell is the local exchange carrier, unless Illinois Bell gives the State permission to obtain alternative access arrangements. In some areas, Illinois Bell is not the local exchange company (such as Carbondale where GTE is the local phone company). In these areas, the master agreement allows DCMS to seek alternate access if it becomes available.

Illinois Bell is the local exchange company in Springfield and Chicago where the State has the most access lines. These local access circuits are, in turn, interconnected to equipment which forwards traffic to long distance lines. DCMS leases long distance lines from US Sprint.

Today, alternative access providers are available in the Chicago area but are not present in Springfield. Companies offering alternative access provide large users with the

means to connect directly to long distance circuits thereby bypassing local telephone company facilities.

DCMS officials stated that they consulted with one of the alternative access providers in March 1992. The Department concluded that it was unable to utilize alternative access services from this provider due to the use of Centrex services in Chicago.

While the Department had not analyzed the costs related to local access, DCMS officials estimated that access costs account for about two-thirds of total network costs. Since alternative access providers now operate in the Chicago area, in the future DCMS should continue to evaluate these alternative access arrangements to determine potential savings associated with this service. (As will be discussed in a subsequent section, the Department should also evaluate the cost-benefits of Centrex services in comparison to private branch exchanges.)

Grade of Network Service

The grade of service for the Statewide Network is generally comparable to that found in the public network. However, this grade of service may not be the most cost-effective. DCMS could reduce network costs if agencies could revise the grade of service according to their needs. State agencies might choose a lower grade of service if it means lower costs.

The grade of service means that a network will have a certain percentage of calls that are not completed during the "busy hour" of service. If the grade of service is P.05, then there is a five percent probability of non-completion of a call during the busy-hour.

The Illinois Bell US Sprint master agreement requires a P.05 grade of service. However, the State's Network has a functional grade of service of P.00 since no blocking occurs within the Network. In the State's Network, if no circuits are available, it directs the call to US Sprint's network or the Public Switched Network. While a caller does not experience a reduction in quality of service, the use of other networks increases the costs of the call.

Cost reductions would occur if the Network included some features to block low priority calls. These features hold a call in a queue until a circuit is free. Agencies could also have authorization codes which would allow high priority communications to overflow to the US Sprint network if circuits were busy on the Statewide Network.

The use of queuing and authorization codes, as supplemental features, could allow the Network to use a P.05 (or lower) grade of service. A lower grade of service (P.05) would reduce the total number of circuits required for the Network thereby reducing network costs.

However, DCMS has not performed a formal analysis of the cost benefits of using a P.05 grade of service or sought input from agencies regarding this issue.

Network Control Center

The current activities of the Network Control Center fall short of what is required to manage a modern telecommunications network. In addition, DCMS needs to improve its management systems for network operations.

As stated in the master agreement with Illinois Bell and US Sprint, the primary purpose of the Network Control Center is to administer network operations. Administrative duties include:

- adding new services or equipment to the Network;
- monitoring network services and equipment;
- resolving network problems;
- engineering and design of network components; and
- managing databases.

As recommended by the 1987 Strategic Plan, and defined in the Illinois Bell US Sprint master agreement, DCMS has overall responsibility for the Network Control Center. Illinois Bell and US Sprint staff also work in the Network Control Center to monitor and correct network problems. DCMS management within the Network Control Center stated that most of their work involves problem resolution of data circuits. However, increased involvement by DCMS regarding repair or maintenance activities for voice services would improve DCMS control over these vendor activities.

If an agency has a problem with a voice line or equipment, DCMS requests vendors under contract, such as Illinois Bell, to repair voice equipment or lines. If Illinois Bell is required to make the repair, under the maintenance contracts between DCMS and Illinois Bell, it will dispatch a technician to the site. DCMS relies on Illinois Bell to document its activities and submit reports to DCMS. However, as will be discussed in Chapter Five, DCMS does not produce formal evaluations of maintenance activities performed by Illinois Bell.

DCMS has moved the Statewide Maintenance Section, which monitors vendor maintenance and repair activities for voice services, into the Network Control Center. However, using the Network Control Center to dispatch technicians for voice service problems could also increase DCMS' control over operations.

In addition, the Network Control Center does not have an adequate management information system. Currently, the Network Control Center uses a variety of systems rather

than one integrated system. Thus, daily operations still require manual processes to administer trouble tickets for network service problems. For example, if an agency reports a problem with a network line, Network Control Center staff create a trouble ticket and then use DCMS' management information system to obtain detailed information about the line. Illinois Bell and US Sprint staff then use their own systems to identify the problem. After Illinois Bell or US Sprint staff correct the problem, DCMS staff enter this information into the DCMS information system. The effects are: daily operations are more complex than they need to be; the systems require more data input than necessary; and DCMS is dependent on Illinois Bell's and US Sprint's systems to diagnose and correct network problems.

DCMS previously sought vendor proposals to improve the network management information system although the Department did not act on these offers. In September 1993 the Department issued a Request for Proposal to upgrade its network management system.

Centrex Agreement with Illinois Bell

Cost-effective alternatives may exist to DCMS' current use of Centrex services. In September 1988, DCMS signed an agreement with Illinois Bell, separate from the Illinois Bell US Sprint master agreement, in which Illinois Bell would provide Centrex services in Springfield. DCMS later amended this agreement to provide Centrex services in Chicago. Centrex services provide internal communications and access to network lines through digital switching services.

In November 1989, DCMS secured an installment loan agreement to pay for the Springfield and Chicago Centrex services as well as Centrex services in other cities. The finance agreement shows DCMS was to pay approximately \$23 million for Centrex services in Springfield, Chicago, and four other cities in Illinois.

Department officials stated that Centrex services were not required to allow implementation of Illinois Bell's network proposal. In fact, the State could have used private branch exchanges in place of the Centrex services.

The Illinois Bell US Sprint Statewide Network proposal shows that Illinois Bell offered a lower price for the Centrex services if DCMS chose the Illinois Bell US Sprint proposal for the Statewide Network. Thus while the two transactions were separate, Illinois Bell's Centrex proposal was contingent on the award of the Statewide Network.

The current Centrex agreement expires in December 1995. Other technologies exist which serve the same functions as Centrex. Private branch exchanges, or PBXs, are primarily voice systems which provide similar services. However, customers often purchase

PBXs while Centrex services are leased services. A cost-benefit analysis would enable the Department to determine the most appropriate alternative (e.g. Centrex vs. PBX).

Use of the Network by Lottery and Universities

The Department of the Lottery (Lottery) does not use the Statewide Network to transmit sales data from locations throughout the State to a central computer in Springfield. DCMS officials estimated that the Lottery's expenses for telecommunications services amount to over \$8 million annually. In January 1994, Department officials announced plans to convert the Lottery onto the Statewide Network.

The 1987 Strategic Plan identified the Lottery as an important element to developing a Statewide Network. According to DCMS officials, Lottery had been reluctant to switch to the Statewide Network. However, DCMS officials stated that statutes (20 ILCS 405/67.18) give DCMS the authority to require the Lottery to use the Network.

The Illinois Bell US Sprint contract requires Illinois Bell and US Sprint to perform a yearly evaluation of the Network. Illinois Bell and US Sprint recommended the conversion of the Lottery from using private lines to using the Statewide Network. Illinois Bell and US Sprint, as well as DCMS officials, stated that this conversion would make greater use of Network facilities and lower costs to all users.

The 1992 Illinois Bell US Sprint redesign estimated that if the Lottery, as well as other

agencies, used the Statewide Network, the State could realize savings of almost \$2.5 million annually (see Exhibit 3-4). This would require a one-time capital investment of almost \$2.7 million as well as the allocation of personnel and other resources to accomplish this goal.

Exhibit 3-4		
ESTIMATED POTENTIAL STATE SAVINGS		
EXPANDED USE OF THE STATEWIDE NETWORK		
-ESTIMATED BY ILLINOIS BELL US SPRINT-		
	Estimated <i>Annual</i> <u>Savings</u>	Estimated <i>One-Time</i> Capital <u>Investment</u>
Lottery & Non-Lottery Data Circuits	\$2,493,864	\$2,657,000
Universities:		
Eastern Illinois, Northern Illinois, & Western Illinois	<u>302,280</u>	<u>365,200</u>
Total	<u>\$2,796,144</u>	<u>\$3,022,200</u>

SOURCE: OAG summary of 1992 Redesign Presentation from Illinois Bell US Sprint

In addition, some universities use data services on the Statewide Network but do not use the Network for voice transmissions. These universities are Western Illinois University in Macomb, Northern Illinois University in DeKalb, and Eastern Illinois University in Charleston. As shown in Exhibit 3-4 the 1992 Illinois Bell US Sprint redesign estimated that conversion of these universities would result in savings of over \$300,000 per year.

In Fiscal Year 1993 DCMS submitted a proposal to provide services to the Lottery. In January 1994, Department officials announced plans to convert the Lottery onto the Statewide Network.

Conclusions

The issues discussed in the previous sections could, in the future, provide further cost savings for DCMS and State agencies. A technical planning committee should be responsible for reviewing and analyzing these issues. After completing these analyses, the Department would benefit from the creation of a strategic plan. A new strategic plan would provide the Department with a blueprint in choosing future technologies and services for State agencies. As discussed in Chapter Two, the Department issued a Request for Proposal to hire a consultant to evaluate the technical needs of State agencies, review the appropriateness of new technologies and services, and develop a new strategic plan. The RFP also addresses the need for the consultant to assist the Department in evaluating vendor proposals for new network services.

RECOMMENDATION NUMBER FOUR

The Department of Central Management Services should develop a new strategic plan for telecommunications which addresses and evaluates the following issues:

- *alternatives to the current network architecture;*
- *alternative access arrangements;*
- *the grade of network service;*
- *the use of PBXs vs Centrex services;*
- *the conversion of agencies and universities onto the Statewide Network; and*
- *a network management information system.*

Department of Central Management Services Response:

"DCMS concurs with this recommendation. A detailed plan and schedule have been developed addressing these issues and continue to be followed. We have a strategic planning committee that has been meeting quarterly for three years. As we now specifically prepare for the issuance of an RFP to address the period beyond the current
(continued on next page)

AGENCY RESPONSE (continued)

contract, the committee meets at least twice per month. With the Network Contract now within two years of termination we have issued an RFP to select a consultant to assist us with the effort.

- DCMS has completed comprehensive network reviews in two annual redesigns which included evaluation of new technologies. They were fully examined for applications and cost effectiveness. To date ISDN and SS7 are installed in our network, and ATM is being discussed with some users. New technologies such as these are being used every time where they are determined to be cost-effective. The network is capable of providing for other new technologies when it is determined that they serve a purpose. The State's network utilizes the "switch as a hub" concept or tandem switch. Centrex translations are programmed to provide least cost routing. The majority of the State's network traffic has three routing option choices with the least cost option always selected first.
- Access costs are analyzed regularly and available alternate access solutions continue to be explored. (** see Auditor's Comment below*)
- Installation of an inferior grade of service has been reviewed and deemed as inappropriate.
- Comparisons are routinely completed whenever DCMS reviews the choice of PBX or Centrex.
- With full cooperation of the Lottery, DCMS is converting the Lottery, which is the final and most complex agency, onto the Network. DCMS is planning the conversion of NIU and WIU's voice traffic onto the network. Data traffic from WIU is already on the Network along with video for distance learning. All voice conversions will provide significant savings to the State.
- DCMS already has announced an award to purchase a network management system as a result of a competitive procurement."

Auditor's Comment:

- * *DCMS provided no documentation to show it had summarized or analyzed all access costs associated with the Statewide Network.*

Chapter Four
PROCUREMENT ACTIVITIES FOR TELECOMMUNICATIONS

DCMS' procurement of telecommunications services and equipment needs to be improved. DCMS personnel lacked written policies and procedures for procurement activities. In addition, our review of six specific procurements showed that DCMS: used non-standard or inconsistent terms in bidding documents in four of the six procurements; did not fully document and/or fully justify award decisions in two of the six procurements; and in two cases, changed or used inconsistent evaluation criteria during the selection process.

While procurement of telecommunications equipment and services is exempt from the competitive selection requirements of the Purchasing Act (30 ILCS 505/6), DCMS generally used competitive procedures to select vendors. Multiple vendors participated in the six procurements we reviewed. Given that the telecommunications industry is now very competitive and the significant costs related to telecommunications contracts, the General Assembly may wish to consider requiring DCMS to use sealed bid or sealed proposal procedures to procure telecommunications services and equipment. Requiring sealed bids or sealed proposal procurements would help ensure that procurements are in the best interests of the State.

DCMS PROCUREMENT ACTIVITIES

DCMS serves as the centralized agency for telecommunications procurements. In this capacity DCMS can realize the advantage of volume discounts and economies of scale to reduce costs and promote efficiency for telecommunications operations.

Illinois statutes (20 ILCS 405/67.18) specifically give the Department the authority to purchase telecommunications equipment and services. This authority extends to all departments, officers, universities, and commissions, but does not include the General Assembly, legislative service agencies, and all Officers of the General Assembly.

The Purchasing Act (30 ILCS 505/6) exempts the purchase of telecommunications equipment and services from competitive selection procedures. However, in five of the six procurements we reviewed, DCMS initially used a formal competitive process to seek responses from vendors.

DCMS procurement rules (44 Ill. Adm. Code 1.520) list three methods by which the Department can purchase goods and services. These processes include: 1) a sealed bid in which DCMS must select the lowest responsible bidder that meets specifications; 2) a sealed

proposal in which price and other factors are taken into consideration; and 3) negotiation in which the Department can negotiate with one or more vendors or use a combination of methods to award a contract to a vendor best filling the State's needs. Further, any of the procedures described above, except negotiation with one vendor, are considered competitive procedures and may be used to conduct competitive procurements (44 Ill. Adm. Code 1.515).

During Fiscal Year 1992, DCMS had 608 contracts with vendors providing telecommunications services or equipment. Total dollar amounts for these contracts were almost \$166 million while Fiscal Year 1992 expenditures totaled over \$29.9 million.

DCMS also had 15 master agreements in effect for telecommunications services and equipment as of June 1992. Ten were for the purchase of equipment and services while five provided revenue from phones located in State offices or buildings. Master agreements include a description of services, dates, terms of use, and sometimes an estimated contract amount. DCMS secures master agreements to gain volume discounts and eliminate the administrative burden of starting a procurement process for each purchase.

The Marketing and Consulting section within the Telecommunications Division has primary responsibility for recommending the selection of vendors and negotiating contracts with them. Marketing and Consulting may initiate a procurement for several reasons:

- an agency may request a service or equipment;
- the Department may recognize the need for a service or equipment; or
- a vendor may present an unsolicited proposal to provide a service.

As discussed in Chapter Two, the Marketing and Consulting section did not have documented policies and procedures to guide it in procurement activities.

REVIEW OF SIX DCMS PROCUREMENTS

To test DCMS' compliance with applicable laws and regulations, we reviewed the processes and documentation related to four master agreements and two individual contracts. The four master agreements and two individual contracts examined include:

- the master contract to provide services for the Statewide Network signed in December 1988;
- the master contract for Statewide maintenance of communication systems signed in October 1989;
- an individual contract for a communication system for Logan Correctional Center signed in June 1991;

- the master contract for 800 services used by State agencies signed in October 1991;
- an individual contract for a communication system for Southern Illinois University at Edwardsville (SIU-E) signed in November 1991; and
- the master contracts to provide communication systems (called Electronic Key Systems or EKSs and Private Branch Exchanges or PBXs) signed in December 1992.

Our review of the processes used to procure these contracts showed the following problems:

- inconsistent or non-standard language used in advertisements, Request for Proposal (RFP) documents and Request for Information (RFI) documents in four of six procurements;
- inconsistent criteria used in two of six procurements; and
- inadequate or missing documentation in five of the six procurements.

As shown in Exhibit 4-1, in the procurement of the Statewide Network master contract, DCMS announced in advertisements that it was seeking "sealed bids" from vendors. However, when DCMS developed the RFP for this procurement, it requested "sealed proposals" from the vendors.

There are distinct differences in what is required of DCMS when requesting "sealed bids" as opposed to "sealed proposals." Administrative rules (44 Ill. Adm. Code 1.520) require DCMS to select the lowest responsible bidder that meets specific requirements when it requests "sealed bids" from vendors. If DCMS requests "sealed proposals," DCMS must use pre-established criteria, of which cost may be one consideration, to award a contract. DCMS must also conduct an evaluation of the "sealed proposals" to show the contract award best suits the State's needs.

DCMS also used terms not found in its administrative rules. For example, in advertisements related to the SIU-Edwardsville and Logan Correctional Center procurements, DCMS requested vendors to submit "sealed bids." Within the bid specification documents, DCMS requested "sealed RFPs" from the vendors. The term "sealed RFP" is not found in the administrative rules.

In five of the six procurements reviewed, DCMS did not have adequate documentation regarding bids or proposals received from vendors or decisions reached during the procurement process. When DCMS procured services and equipment for the Statewide Network, it did not adequately document an evaluation which led to contract award. Further, DCMS did not fully justify that the award for Statewide maintenance was in the State's best interests.

DCMS used a Best and Final process in five of the six procurements reviewed. Best and Final offers are requested at the discretion of DCMS. During a Best and Final process,

Exhibit 4-1				
SUMMARY OF PROCUREMENT REVIEW FOR SIX CONTRACTS				
Contract (Date)	Inconsistent Terms Used	Inconsistent Use of Criteria for:	Inadequate or Missing Documentation for:	Contracted Amount or Expenditures FY92
Statewide Network (12/23/88)	<i>Sealed bids</i> requested in advertisement; <i>sealed pro- posals</i> requested in RFP	Best & Final Process	Final Award Evaluation	Unavailable*
Statewide Maintenance (10/17/89)	<i>Sealed proposals</i> requested in advertisement; <i>proposals</i> requested in RFI	_____	Final Award Justification	\$1,429,351
Logan CC Switching System (6/11/91)	<i>Sealed bids</i> requested in advertisement; <i>sealed RFPs</i> requested in RFP	_____	_____	\$165,041
800 Service (10/25/91)	**	_____	Mgmt. Decisions During Process	\$635,091
SIU-E Switching System (11/13/91)	<i>Sealed bids</i> requested in advertisement; <i>sealed RFPs</i> requested in RFP	_____	Mgmt. Decisions During Process	\$274,147
EKS/PBX Equipment (12/18/92)	_____	Best & Final Process	Mgmt. Decisions During Process	Unavailable***
<i>Notes:</i>				
*	<i>DCMS does not track costs associated with the Statewide Network contract (see Chapter Five). In 1988 DCMS estimated seven-year costs at \$108 million.</i>			
**	<i>Not applicable due to the informal negotiation process used to procure this master agreement.</i>			
***	<i>Contract was signed in FY93. Expenditures for this type of equipment for FY92 under the previous master contracts totaled almost \$545,000.</i>			
SOURCE: OAG review of DCMS procurement files.				

DCMS reserves the right to negotiate with one or more vendors. While DCMS rules allow it to negotiate with one or more vendors when procuring telecommunications services, the

Best and Final process is not defined in its rules. In addition, Exhibit 4-1 shows that, during the Best and Final process in two of the six procurements, DCMS changed the criteria from that which was presented in the RFPs.

The following sections provide more detailed discussions of the six procurements we examined.

MASTER AGREEMENT FOR THE STATEWIDE NETWORK

The Department did not adequately document its evaluations and decisions for the procurement of the Statewide Network as required by the State Records Act (5 ILCS 160/8). DCMS used inconsistent evaluation criteria during the Best and Final process.

The Department received "eleven" proposals in response to the RFP developed for the Statewide Network. Four responses were considered complete offerings. The Department had extensive documentation related to initial vendor evaluations. It organized committees to rate the technical aspects of proposals as well as the financial factors related to each. A Blue Ribbon Committee, which was initially established to develop the 1987 Strategic Plan for telecommunications, also participated in the initial technical and financial evaluations completed by DCMS staff. As a result of these evaluations, DCMS narrowed the number of proposals under consideration to three: Illinois Bell and US Sprint, AT&T and Arthur Andersen, and MCI and IBM.

DCMS requested "Best and Final" offers from the three groups of vendors. The Department then met with the three vendor groups and requested technical modifications to each of the three vendors' initial proposals.

DCMS had two documents regarding the Best and Final offers. One document listed whether the three vendors addressed mandatory and suggested technical modifications. In addition, the Department developed a spreadsheet containing cost saving estimates to compare each of the three final offers. DCMS had no documentation, other than the cost savings spreadsheet, to show it evaluated the Best and Final offers and that the Illinois Bell US Sprint offer was the best proposal to fill the State's needs. Given that DCMS requested mandatory changes and recommended other modifications to the vendors' initial proposals, a formal evaluation of the quality of each Best and Final proposal was warranted. The State Records Act (5 ILCS 160/8) requires State agencies to document management decisions.

DCMS also modified a cost estimate presented by Illinois Bell US Sprint when it developed its cost savings spreadsheet. The Best and Final offer of Illinois Bell US Sprint did not include a seven-year cost estimate for a Communications Facility as requested by DCMS. Rather, Illinois Bell US Sprint submitted a one year estimate for 10,000 square feet for a Network Control Center and stated that the cost of 69,000 square feet would be about

\$12.50 per square foot. However, the Illinois Bell US Sprint proposal also noted that a specific square foot rate would have to be negotiated. DCMS used the \$12.50 square foot estimate when it calculated Illinois Bell US Sprint's total costs in the DCMS cost savings spreadsheet which was used to compare the three Best and Final offers. However, MCI and AT&T, in their Best and Final offers, submitted specific costs to provide a Communications Facility.

While administrative rules (44 Ill. Adm. Code 1.1120 (j)) give DCMS the ability to make price adjustments to ensure evaluations are made on the same basis, the Illinois Bell US Sprint estimate for 69,000 square feet in a Communications Facility was subject to negotiation. Thus, Illinois Bell US Sprint did not meet the requirements set by DCMS when it requested costs for a Communications Facility. Also, DCMS documents show that the requirement to submit the costs for a Communications Facility was only partially met by Illinois Bell US Sprint.

DCMS awarded the contract for development of the Statewide Network to Illinois Bell US Sprint in June 1988. Estimated expenditures over the seven-year life of this master contract totaled \$108 million. After the award notification, the two unsuccessful vendors (AT&T and MCI) filed protests to the award in June 1988. DCMS rules (44 Ill. Adm. Code 1.2100) provide vendors the opportunity to file protests.

Among the issues raised in the protests, AT&T asserted that the bids had not been evaluated according to criteria presented in the RFP. In response the Director stated that DCMS followed the criteria in the RFP. However, DCMS had no documentation to show Best and Final offers were evaluated according to RFP criteria. In addition, MCI argued that, due to differences in presentations among the three vendors, the Best and Final offers could not be compared on an equitable basis. When we analyzed the Best and Final offers, we also could not compare specific costs included in DCMS' cost savings estimates.

DCMS conducted meetings with these two groups to discuss their protests in July 1988. The DCMS Director denied these protests in September 1988.

MASTER AGREEMENT FOR STATEWIDE MAINTENANCE

The Department did not fully justify that the award of the Statewide maintenance contract was in the State's best interest.

In July 1988, the Department issued a Request for Information (RFI) to seek information on a prospective master agreement to maintain voice systems located throughout the State. DCMS already had individual contracts with manufacturers of the equipment. DCMS viewed a master agreement as a means to reduce the administrative responsibilities associated with the various contracts and realize cost savings.

The RFI explicitly stated that the State's needs were not as well defined as would be in a Request for Proposal. Vendors could submit information on services for the entire State or for any of the five geographical regions defined in the RFI. Based on information gathered in the RFI process, the State reserved the right to negotiate with one or more vendors. The State also could award contracts to more than one vendor.

DCMS received responses from two vendors, Illinois Bell and Ushman Communications, which were considered compliant bids. Illinois Bell submitted information on the entire State while Ushman submitted information for three areas of the State. DCMS had documentation to show an evaluation of these initial offers.

An October 11, 1988 decision memo to the DCMS Director presented three alternatives as to how BCCS should proceed. The first alternative consisted of requesting a Best and Final offer from Illinois Bell. The remaining two alternatives discussed seeking Best and Final offers from Illinois Bell and Ushman Communications. In discussing the second alternative, the decision memo noted that the Ushman bid for Centrex maintenance provided a savings of \$399,768 over Illinois Bell's bid for the three regions in which Ushman bid.

DCMS did not provide any documentation to show the Director acted on this October 11, 1988 decision memo. On November 29, 1988, DCMS requested a 90-day extension to determine the contract award. Exhibit 4-2 shows a chronology of events for this procurement.

On April 20, 1989, Ushman Communications sent a letter to the DCMS Director inquiring as to the status of this procurement since it had not been informed of the status of the project since the request for a 90-day extension (in November 1988). The DCMS Director responded to Ushman Communications in a May 5, 1989 letter stating "This project is still under evaluation . . . You will be notified as to the disposition of this RFI upon final determination of award."

DCMS documents show that Illinois Bell had submitted a Best and Final offer on April 12, 1989. We found no evidence, however, to show that Ushman was requested or allowed to submit a Best and Final offer. However, as noted above, the RFI allowed DCMS the right to negotiate with one vendor.

Attached to a May 18, 1989 decision memo was a comparison of prices from Illinois Bell's Best and Final offer with Ushman's initial offer, as summarized in Exhibit 4-3. The Ushman proposal included prices for three areas of the State; thus the comparison involved only these three areas. Data included in the cost comparison showed that Ushman had the lowest costs by almost \$51,000 for these areas.

The May 1989 decision memo recommended negotiating with Illinois Bell to provide maintenance for the entire State. The decision memo based the recommendation on savings

that would result from a Statewide contract with this vendor. However, the memo and supporting documentation did not explain how the Illinois Bell proposal would result in lower costs when compared to Ushman's bid.

The DCMS Director agreed with BCCS' recommendation to negotiate further with Illinois Bell to provide Statewide service. DCMS later awarded a contract to Illinois Bell on June 5, 1989. The initial maintenance master agreement term lasted from July 1, 1989 to June 30, 1992. Fiscal Year 1992 expenditures on this contract totaled over \$1.4 million. DCMS extended this contract through June 30, 1993 and at the end of fieldwork were working on a new RFP for Statewide Maintenance.

Ushman filed a protest after the award was announced. A primary issue was that DCMS did not seek a Best and Final offer from this vendor. The protest noted that this was particularly pertinent since the protestor's initial bid was clearly lower than Illinois Bell's Best and Final offer.

Exhibit 4-2
CHRONOLOGY OF EVENTS
STATEWIDE MAINTENANCE CONTRACT

<i>July 12, 1988</i>	Request for Information issued.
<i>October 11, 1988</i>	Decision memo regarding initial proposals.
<i>November 29, 1988</i>	DCMS requests 90-day extension for proposal review.
<i>March 2, 1989</i>	Expiration date for proposal review.
<i>April 12, 1989</i>	Illinois Bell submits amended Best and Final response.
<i>April 20, 1989</i>	Ushman Communications inquires about status of project.
<i>May 5, 1989</i>	DCMS responds to Ushman that evaluation is still on-going.
<i>May 18, 1989</i>	Decision Memo recommends negotiation for a three-year contract with Illinois Bell.
<i>May 30, 1989</i>	Director approves recommendation in decision memo.
<i>June 5, 1989</i>	Contract awarded to Illinois Bell for Statewide Maintenance.
<i>June 12, 1989</i>	Ushman Communication protests the award.
<i>June 23, 1989</i>	DCMS denies protest.
<i>October 17, 1989</i>	Contract signed by DCMS.

SOURCE: OAG summary of DCMS documents

The DCMS Director stated in the protest response that the Department did not dispute that Ushman's bid was lower than Illinois Bell's for three areas of the State. However,

Illinois Bell submitted pricing for the entire State and DCMS deemed this to be advantageous. Further, the Director stated "we did notice the price difference in the three regions and negotiated a price with Illinois Bell to deal with that issue."

The RFI gave DCMS the right to negotiate with a single vendor, as well as choose one vendor for the entire State. However, considering Ushman had a lower bid for three regions of the State, it would have been in the State's best interest to formally solicit a Best and Final offer from Ushman, either for the three regions or the entire State. We found no evidence, however, that DCMS asked Ushman to submit a Best and Final offer or to show that it requested Ushman to amend their initial proposal to provide Statewide coverage.

**Exhibit 4-3
STATEWIDE MAINTENANCE CONTRACT
BID COMPARISON**

	ILLINOIS BELL (Best & Final)	USHMAN (Initial Bid)
Statewide Proposal:		
Areas 3,4,5		
Maintenance	\$621,702	\$562,473
MAC Labor	<u>466,151</u>	<u>517,946</u> *
Sub-Total	<u>\$1,087,853</u>	<u>\$1,080,419</u>
Rolm/Obsolete Equipment:		
Areas 3,4,5		
Maintenance		\$54,870
MAC Labor		<u>34,530</u> *
Sub-Total	<u>\$120,177</u> *	<u>\$89,400</u>
Universities:		
Areas 3,4,5	<u>\$562,955</u>	<u>\$550,481</u>
TOTAL	\$1,770,985	\$1,720,300

* Vendor chose not to bid on this equipment/service and DCMS applied the current costs in the comparison.

SOURCE: OAG summary of DCMS documents

Response from Ushman Communications:

"... we were not even called back for the best and final, even though originally we were approximately \$400,000.00 per year under Illinois Bell Communication's proposal.

Supposedly, one of the main reasons CMS awarded Illinois Bell Communications the project was to get all service under one contract. However, CMS asked us to continue service on several facilities, some of which we had not even installed, because Illinois Bell Communications could not or would not service them (ie Illinois State Police Headquarters, Springfield and Department of Children and Family Services, Quincy among others)." (see Appendix C for full response.)

LOGAN CORRECTIONAL CENTER

DCMS used terms not found in administrative rules when it sought a voice communication system at Logan Correctional Center. Further, it used different terms in the bid advertisements and the Request for Proposal. However, it did select the vendor with the lowest bid as required of a sealed bid procurement method.

To solicit vendor proposals for a new communication system at Logan Correctional Center, DCMS advertised for "sealed bids." However, in the bid document, DCMS requested the vendors to submit "sealed RFPs." This term is not found in administrative rules which define procurement methods.

Ushman Communications, Illinois Bell and Ficek Electric submitted compliant responses to the RFP. The Department had documentation regarding evaluations of each proposal. Criteria used to evaluate the vendors included cost for equipment, installation, and maintenance over a ten-year period. DCMS selected Ushman Communications as the lowest compliant bid. The Director approved a decision memo to award the contract in March 1991. The Fiscal Year 1992 contract amount for this system was over \$165,000.

MASTER AGREEMENT - 800 SERVICES

The Department used an informal process when it contracted with AT&T for 800 services in October 1991. By obtaining initial bids, and subsequent Best and Final offers from AT&T and two other vendors, the Department obtained the 800 services for 23 percent less than AT&T's initial bid. However, the Department did not adequately document some key decisions that led to a contract award. Expenditures related to this contract exceeded \$635,000 in Fiscal Year 1992.

Rather than formally bidding the 800 contract, AT&T contacted DCMS in June 1990 and initiated a project to examine ways for DCMS to achieve greater discounts for their 800 services. AT&T later submitted proposed rates to DCMS for 800 services. Using this proposal, BCCS staff forwarded a Decision Memorandum to the DCMS Director in November 1990 recommending a conversion to this AT&T service. DCMS had no documentation to show that the Director acted on this recommendation. DCMS staff subsequently solicited proposals from other vendors and received offerings from three vendors: AT&T, US Sprint, and MCI.

After DCMS received and analyzed the vendors' initial proposals, a second Decision Memo to the Director in July 1991 recommended contracting with MCI (based on savings estimates). The memo also recommended that DCMS not initiate a formal bid process because all three vendors confirmed these were their best offers. However, there was no

documentation to show the Director acted on this recommendation. Rather, BCCS staff stated the Director verbally requested them to solicit Best and Final offers from the three vendors.

BCCS staff said they requested Best and Final offers from the three vendors by telephone. When the vendors submitted Best and Final offers, BCCS staff found the AT&T offer was significantly lower than the final offers submitted by US Sprint and MCI. This was a result of AT&T lowering their initial bid by 23 percent. Based on the final offers, DCMS awarded a master contract to AT&T since AT&T's offer would result in the greatest savings.

While the process used for the 800 contract resulted in cost savings for the State, the process could have been better documented. Proper documentation would serve to protect the Department's interests, such as documenting that staff recommendations were actually considered and acted upon by the Director.

SOUTHERN ILLINOIS UNIVERSITY AT EDWARDSVILLE

DCMS had limited documentation regarding evaluations of vendor bids for the procurement of a voice system at Southern Illinois University-Edwardsville. In addition, the Department used terms not found in its administrative rules.

In June 1991, the Department issued a Request for Proposal to procure a PBX for the Alton Dental School campus of Southern Illinois University at Edwardsville. Similar to the RFP for the system procurement at Logan Correctional, this RFP requested "sealed RFPs" from the vendors, which, as stated earlier, is not defined in procurement rules.

DCMS had limited documentation to show it received initial offers from vendors or that it had conducted a formal evaluation of these offers. Other documents show that it requested Best and Final offers from two vendors.

While DCMS did not have documentation to show it formally evaluated the Best and Final offers from Illinois Bell and BellSouth Communications, a decision memo shows that BellSouth Communications submitted the lowest bid in the Best and Final process. The decision memo also noted that BellSouth had provided one other voice system and had maintenance responsibility for systems in use at two SIU-E campuses. The final amount of the contract, which included an option to provide networking between three campuses of SIU-Edwardsville, totaled \$247,147.

MASTER AGREEMENT - EKS/PBX SYSTEMS

During the procurement process for the purchase, installation, and maintenance of voice communication systems [called private branch exchanges (PBX) and electronic key systems (EKS)], the Department changed the criteria, as defined in the Request for Proposals. DCMS permitted Illinois Bell to submit a maintenance bid that was inconsistent with bid specifications.

In February 1992, DCMS issued two Requests for Proposals (RFPs) to secure two master agreements for the purchase, installation, and maintenance of voice communication systems. The language within the RFPs for the EKS/PBX master contracts was also contradictory since, in one passage, they stated that the lowest bid would be accepted after vendors submitted "sealed bids"; however, the RFPs also stated that bids would be evaluated on predetermined criteria which would indicate a "sealed proposal" would be expected from vendors.

DCMS received proposals from seven vendors for the two RFPs. After an initial evaluation, DCMS determined that only four proposals, two for each region, followed all bid specifications listed in the RFP. Ficek Electric and Illinois Bell were the vendors considered in Region One. Ushman Communications and Illinois Bell were compliant with specifications in Region Two. DCMS also conducted an extensive analysis of the costs included in the four proposals. DCMS requested Best and Final offers from these vendors in June 1992.

DCMS selected Illinois Bell to participate in the Best and Final process even though its initial proposal did not comply with the RFP specifications. In its initial proposal Illinois Bell provided multiple service costs to maintain the voice systems. In the correspondence requesting a Best and Final offer, a DCMS official wrote "Your bid response includes various maintenance rates for each system. IBC must provide a single per-station maintenance rate as requested on page 87, paragraph C.1.a" of the RFP (emphasis added).

When Illinois Bell submitted its Best and Final offer, it listed various rates for station maintenance and noted that a DCMS official approved this method. In December 1992, DCMS awarded a master contract to Illinois Bell and another to Ushman Communications to provide and maintain voice systems throughout the State. DCMS documentation showed the Department selected the low bidders for the contract awards.

After DCMS announced the awards, it received protests from two vendors not selected. One protest asserted that Illinois Bell submitted multiple prices for station maintenance. The RFP required a single monthly service cost per station (such as \$3.00 per station per month) for all systems.

In response to the protest, the Director noted that DCMS verbally informed all vendors participating in the Best and Final process that multiple prices for station maintenance were permissible. While DCMS did not have documentation to show all vendors were informed of this alternative, BCCS staff stated that vendors were verbally notified. Using inconsistent criteria (by allowing vendors to submit different price methods than specified in the RFP), and not adequately documenting its correspondence with vendors reduces the control DCMS has over the procurement process. It also increases the risk that every vendor is not given the opportunity to participate in the process.

CONCLUSIONS - SIX DCMS PROCUREMENTS

Our review of six telecommunications procurements showed that DCMS:

- used inconsistent or non-standard language in advertisements, Request for Proposal (RFP) documents and Request for Information (RFI) documents;
- did not adequately document the selection process and management decisions as required by the State Records Act; and
- did not use consistent criteria in the selection process to ensure that all vendors were treated equitably.

Considering the significant costs to the State for the six contracts reviewed, improvements are needed to ensure that the State's best interests are protected in the procurement of telecommunications services and equipment.

Finally, we found no evidence that DCMS filed the Statewide Network contract with the Comptroller's Office. The Comptroller's Uniform Statewide Accounting System (CUSAS) manual requires that agencies file master agreements for reference purposes. DCMS officials stated the contract for the Statewide Network was filed; however, the Comptroller's Office was unable to locate this master contract.

RECOMMENDATION NUMBER FIVE

To ensure that the best interests of the State are secured in the procurement of telecommunications equipment and services, the Department of Central Management Services should:

- 1. Use language and terms in advertisements and solicitation documents which are consistent with the definitions and guidelines specified by DCMS procurement rules;*
- 2. Consistently apply criteria in the evaluation of vendor offerings in the procurement process;*
- 3. Document evaluations to show the winning proposal to be the best of those submitted considering price and any other predetermined criteria;*
- 4. Fully document and justify that decisions related to the procurement process and contract awards are in the best interests of the State; and*
- 5. File contracts with the Comptroller's Office.*

Department of Central Management Services Response:

"DCMS concurs with this recommendation and follows all applicable statutes and administrative rules when procuring telecommunications equipment and services.

- DCMS documents, even when not required, the selection process and management decisions specified by the administrative rules and the State Records Act. (** see Auditor's Comment below*)
- DCMS files all required contracts with the Comptroller's Office.
- DCMS uses consistent criteria in the selection process and treats all vendors equitably, and more importantly, procures in the best interests of the State, as shown by the considerable savings the procurement process provides." (** see Auditor's Comment below*)

Auditor's Comment:

- * *As noted in the text, certain documentation was lacking in five of the six procurements reviewed; also, in two procurements, inconsistent criteria were used.*

USE OF A COMPETITIVE PROCUREMENT PROCESS

The Purchasing Act (30 ILCS 505/6) and procurement rules (44 Ill. Adm. Code 1.520) allow the Department to negotiate telecommunications procurements with one or more vendors. In many procurements, this process may no longer be appropriate considering the extent of competition within the industry. Competition now makes it feasible for the Department to secure "sealed bids" or "sealed proposals" from multiple vendors for major services provided by DCMS including: long distance services, credit cards, cellular phones, and office communication systems. For the procurements listed in Exhibit 4-1, DCMS received offers from multiple vendors in all six cases.

Some services may not be competitively procured because they can only be obtained through a single source. For example, local calling services generally can only be procured from the local telephone company. Current regulations do not allow more than one local phone company to operate in a specific area except in Chicago.

Because of the volume of contracts and the significant costs to the State related to these contracts, the use of a "sealed bid" or "sealed proposal" method of procurement would best protect the State's interest. The use of these two methods would also help ensure that the State receives the lowest offer which either meets the State's specifications or best suits the State needs.

While this revision would eliminate DCMS' authority to negotiate contracts for telecommunications services and equipment, a Best and Final process which uses established procedures, in conjunction with a sealed proposal method, would give the Department the ability to further clarify vendor proposals and possibly reduce the prices offered. This process could be included in any new statutory language.

MATTER FOR CONSIDERATION BY THE GENERAL ASSEMBLY

The General Assembly may wish to revise the Purchasing Act (30 ILCS 505/6) to require DCMS to use a sealed bid or sealed proposal method of procurement for telecommunications services and equipment. The General Assembly also may wish to give DCMS the authority to conduct Best and Final Offer processes according to established procedures when using a sealed proposal method of procurement.

Department of Central Management Services Response:

"DCMS would support legislation mandating competitive procurement procedures since that is consistent with current Department procedures. DCMS also uses a Best and Final
(continued on next page)

AGENCY RESPONSE (continued)

Offer process when appropriate."

Auditor's Comment:

As currently defined, competitive procurement procedures allow methods other than competitive sealed bids or competitive sealed proposals to be used in procuring telecommunications services. These other methods include negotiation with more than one vendor. The Matter for Consideration recommends that procurement methods be limited to either competitive sealed bids or competitive sealed proposals. The Matter for Consideration also recommends that DCMS' current use of a Best and Final process be conducted according to established procedures.

Chapter Five
MANAGEMENT SYSTEMS & REPORTING

DCMS' management information systems are not adequate to manage its telecommunications operations and the Communications Revolving Fund. The systems do not provide sufficient cost information to set charges for all services and equipment, nor do they allow DCMS to allocate its administrative costs across all services provided. Staff must also use manual processes to record and report financial transactions. In June 1992, the Department hired a consultant to review its accounting systems and subsequently initiated planning efforts to upgrade the accounting system used for telecommunications.

We identified three instances where DCMS improperly recorded or misclassified accounting transactions. In January 1994 DCMS officials agreed to make the necessary adjustments for these three transactions:

- In Fiscal Year 1990, DCMS improperly classified a lease agreement of approximately \$23 million as an equipment purchase. This misclassification was not identified in previous audits and has resulted in inaccurate financial statements for the Communications Revolving Fund (CRF). While there was no effect on the total assets for the CRF, if uncorrected, DCMS' financial statements would have overstated equipment when the lease expired in Fiscal Year 1996.
- In Fiscal Year 1992, DCMS deducted revenues received, as a result of commissions and bonuses, from vendor billings. The effect has been an understatement of operating revenues and expenses by over \$3.8 million within financial statements. While this accounting treatment did not misrepresent net income for the CRF, an accurate accounting of revenues and expenses is important for external reporting as well as internal budgeting and rate setting purposes.
- In one instance, both DCMS and Illinois State University recorded an equipment purchase of almost \$6.6 million on their accounting records.

In addition, DCMS has limited information regarding the performance of vendors for maintenance contracts and the Department's timeliness in fulfilling agency requests for services. DCMS did not complete any comprehensive internal audits of telecommunications.

MANAGEMENT INFORMATION SYSTEMS

The Department provides approximately 150,000 phone lines to over 225 agencies including departments, commissions, and universities. In comparison to other local telephone companies, this would make DCMS the fifth largest local telephone company in Illinois. The Communications Revolving Fund is DCMS' second largest internal service fund with total operating revenues for Fiscal Year 1992 of almost \$99 million.

To effectively manage such a large telecommunications operation, accurate and timely information must be available to DCMS managers. DCMS currently relies on two systems to provide management with information. The Division of Administration and Planning uses the Management of Network Income Expense Services (MONIES) system to record and track inventory, process agency orders for services, record network service problems, and compile agency bills. The Accounting Division uses the Telecommunications Billing and Accounts Receivable (TBAR) system to bill agencies and pay vendors. Accounting staff also use TBAR as a source of information for financial statements.

Telecommunications Billing and Accounts Receivable System

TBAR is the Department's primary accounting system for telecommunications. However, TBAR cannot produce financial statements or cost information needed for rate setting which are essential given DCMS' responsibilities for telecommunications. TBAR's limitations also require accounting staff to perform many manual procedures. The volume of transactions, the growth in revenues and expenses associated with telecommunications, and the need for timely and accurate financial information require that DCMS obtain an accounting system which will perform needed functions.

The TBAR system is an on-line/batch computer system that the Department developed in 1974. The Department created this system to pay vendor invoices and create agency bills. Staff enter vendor invoice data and the system then creates a corresponding agency bill and prints a voucher to pay the vendor. According to DCMS officials, the system processes about 27,000 vendor invoices for telecommunications each year.

DCMS designed this system in 1974 and, according to DCMS officials, it made only one change to TBAR (in 1980). This allowed DCMS to better track obligations within the Communications Revolving Fund. However, since 1974 many changes occurred in telecommunications which increased the demand for more detailed and different accounting information. Divestiture meant DCMS could purchase equipment and set its own rates. Also, revenues to the Communications Revolving Fund have increased significantly since divestiture. In Fiscal Year 1984, revenues from agencies to the CRF were about \$53 million. Revenues to the CRF in Fiscal Year 1992 were almost \$99 million or almost an 87 percent increase from Fiscal Year 1984.

TBAR's limitations require staff to manually complete many accounting procedures. For example, to charge agencies a different amount than that listed on the vendor invoice, staff need to make two data entries into the system. Staff responsible for paying vendors must manually identify which vendors can be paid based on fund balances. They must manually input sequentially numbered vouchers into the system. Staff must also perform manual procedures to prepare financial statements.

TBAR cannot compile financial information using the accrual accounting method. An accrual method means income and expenditures are recorded when they are earned/incurred rather than when cash is actually received/paid. Management needs accrual accounting information to properly manage the CRF. Further, accounting principles dictate that internal service funds use accrual accounting methods when recording transactions and generating financial statements. Due to TBAR's limitations, Accounting staff must perform manual procedures to create this information.

The use of manual procedures results in inefficiencies and, in some cases, inaccurate information. For example, TBAR cannot post an expense to the February financial statement if the payment is processed in May. To compensate for this limitation, accounting staff track the larger invoices on computer spreadsheets for accrual purposes. However, staff monitor only the larger invoices for accrual purposes but do not monitor smaller invoices to ensure a complete and accurate posting of all accruals.

Cost Information for the CRF

TBAR cannot provide cost accounting information which is critical to managing the Communications Revolving Fund. In addition, DCMS does not allocate or distribute administrative costs across all services. DCMS officials have stated that obtaining accurate cost information is a top priority. In June 1992, DCMS signed a contract with a consultant to review DCMS' accounting systems including TBAR. The consultant's report, completed in March 1993, recommended changes to TBAR to provide better cost information for telecommunications.

The State Finance Act (30 ILCS 105/6p-2) authorizes DCMS to set charges for telecommunications services. Accounting practices dictate that charges in an internal service fund should be set to recover the cost of providing services including depreciation and administrative costs.

The Department has made an effort to set rates for services and equipment according to costs. We obtained several rate analyses performed by staff and, at one time, DCMS hired a consultant to assist it in developing charges to agencies. However, the Department lacks sufficient cost data to properly set rates.

TBAR does not have the capability to compile cost data for specific services provided by the vendors. Instead, DCMS officials stated that staff identify costs by obtaining expenditure information from TBAR and activity information from MONIES. While these procedures may provide general cost information, they will not identify detailed costs for services.

Two reports, one completed by DCMS and the other by a DCMS consultant, identified system limitations. A March 1991 DCMS report found the Department received insufficient information to control and monitor costs. It noted the Department did not use cost accounting principles to set charges for some services. DCMS also hired a consultant in June 1992 to review DCMS' accounting systems. The consultant's report, completed in March 1993, recommended combining TBAR with another accounting system to identify specific costs and thus enable the Department to properly manage the CRF.

In addition, the Department is currently unable to identify all administrative costs (i.e., overhead) associated with each type of service provided by DCMS. If DCMS is to set rates properly, it needs to identify overhead costs associated with each type of service. For example, overhead costs to provide credit cards to agencies may be different than overhead costs associated with phone calls made on the Statewide Network. Without a distinction between overhead costs among services, some rates may be subsidizing others.

For some services DCMS could not provide an explanation of the specific administrative costs included in a particular agency rate. For example, DCMS estimates costs of about six cents a minute for intrastate calls made on the Statewide Network; DCMS charges State agencies 11 cents per minute. DCMS officials could not provide us with data to show the administrative costs which would require this additional charge of five cents. Similarly, DCMS charges agencies \$16.50 per month for a Centrex line. Illinois Bell charges DCMS \$5.60 for each Centrex line. A DCMS official also could not identify the administrative costs which result in an agency charge of \$16.50.

Staff do not allocate administrative costs to all services provided by the Department. DCMS does not reprice approximately \$28 million in vendor invoices a year and agency bills reflect the same charges submitted by the vendors. Therefore, administrative costs are not recovered for these services and equipment. In effect the Department has set rates for some services to recover all its administrative costs. (See Chapter Six for a listing of vendor invoices which are not repriced.)

The use of some services to recover all administrative costs provides some explanation as to the charges for intrastate calls on the Statewide Network. A DCMS official stated that the Network rate for intrastate calls ensures the solvency of the CRF. While the current rate is 11 cents per minute, it has fluctuated as high as 19 cents per minute depending on the cash needs of the CRF.

The inability to accurately charge agencies is also reflected in the retained earnings of the CRF. Operating revenues for the CRF increased almost 21 percent from Fiscal Year 1988 to Fiscal Year 1992, while operating expenses increased almost 11 percent in the same time frame. The difference resulted in an increase in retained earnings of over \$11 million since Fiscal Year 1988 (although almost \$5.6 million of this was the result of an accounting adjustment). In total, the CRF had retained earnings of over \$17 million at the end of Fiscal Year 1992.

Further, without accurate cost information the State may be required to repay the federal government for reimbursements it made to the State. The federal government reimburses State agencies for a portion of the telecommunications costs associated with federally funded programs administered by the State. Federal agencies are currently reviewing expenditures and costs associated with the CRF. Previously, federal officials conducted a similar review of charges and costs for the Statistical Services Revolving Fund. As a result of this review, DCMS repaid the federal government over \$5 million.

The Department has attempted to compile financial information using manual processes and an automated system (TBAR) that has a limited function. However, DCMS' responsibilities have increased to the extent that the Department needs better management information to properly allocate administrative costs, set rates for services, and monitor fund activity.

RECOMMENDATION NUMBER SIX

The Department of Central Management Services should develop or procure a new accounting system that will provide cost accounting information and perform accrual basis accounting for the Communications Revolving Fund.

Department of Central Management Services Response:

"DCMS concurs with this recommendation that the CRF accounting system should provide for cost accounting information and accrual basis accounting. Actually, DCMS has been involved in an ongoing effort for eighteen months now to accomplish this goal. During the Summer of 1992, we initiated a comprehensive internal review of DCMS accounting systems with the assistance of The Bronner Group in order to identify needed improvements. Study recommendations were finalized in March of 1993. DCMS management accepted the study's general insights and recommendations and assigned responsibility for developing plans to address the issues to the Office of Finance and Management (OOFAM)." (see Appendix C for full response)

Management of Network Income Expense Services

DCMS purchased the Management of Network Income Expense Services (MONIES) system in 1986 to serve as an inventory database and to bill agencies for services and equipment. AT&T's divestiture in 1984 prompted the purchase because, as the manager of telecommunications, DCMS needed to maintain an inventory of both leased and owned telecommunications equipment.

Since 1986, DCMS has upgraded the capability of the MONIES system. Originally, MONIES served as an inventory database and billing function. In March 1990, DCMS initiated a project to expand the use of MONIES and improve the extent of information which could be produced from the system. After completion of the project, DCMS could then use seven of the eleven modules. Currently DCMS uses MONIES for several purposes, including:

- processing calling information from vendors;
- pricing the calls based on DCMS' rates;
- maintaining and updating inventory records;
- processing agency requests for service; and
- compiling agency billing information.

MONIES also serves as a depository for information about the Statewide Network. If a problem occurs on the Network, Network Control Center staff use MONIES to identify specific information regarding network circuits and equipment. After Network Control Center staff resolve a problem, they enter the pertinent information about the network trouble into MONIES. This allows comprehensive analyses of network troubles. In addition, staff use MONIES to access information needed to design network circuits.

CONTROLS FOR MANAGEMENT INFORMATION SYSTEMS

Because the TBAR and MONIES systems are critical to the telecommunications operations, we performed application control reviews on both systems. Neither system had been formally reviewed previously (by DCMS or external auditors) to determine the adequacy of application controls. We concluded that controls needed strengthening for both systems.

We reviewed controls over input, processing, and output to determine whether they were sufficient to promote and preserve data integrity. We also reviewed the adequacy of system security. Primary conclusions of our review of TBAR include the following:

- staff using TBAR did not have access to user manuals;
- there are no documented procedures for handling and processing vendor invoices;
- updates to the master vendor list can occur without management approval; and
- a duplicate edit function should test other data in addition to date, amount, and vendor name.

Major conclusions from our review of MONIES include:

- staff did not have documented policies and procedures for MONIES. Some procedures were being developed but had not been approved by management;
- management did not consistently review access to the system; and
- staff did not review the accuracy of tariff tables used by the system.

In addition, we determined that all BCCS employees with access to MONIES also could access over 12,000 phone credit card numbers (including related Personal Identification Numbers). Access to this information is a security risk. After we informed BCCS officials of this ability to access credit card information, BCCS officials limited this information to only those employees who process credit card requests. A similar condition existed regarding cellular phone information. BCCS officials also limited access to cellular phone information in MONIES.

RECOMMENDATION NUMBER SEVEN

The Department of Central Management Services should ensure that information systems have adequate controls to promote and preserve the integrity of data and information produced by these systems. Also, DCMS should ensure that a new accounting system has adequate controls prior to system implementation.

Department of Central Management Services Response:

"DCMS concurs with the recommendation that we should ensure that information systems have adequate controls to promote and preserve the integrity of data information produced by these systems, and that DCMS should ensure that a new accounting system has adequate
(continued on next page)

AGENCY RESPONSE (continued)

controls prior to system implementation. DCMS has had an ongoing effort in the area of system controls, . . . DCMS will continue to ensure the adequacy of controls over its existing and new systems." (see Appendix C for full response)

MANAGEMENT REPORTS

Current management reports are not adequate to provide BCCS officials with the information needed to monitor telecommunications operations. Accounting transactions have been improperly classified or recorded which has led to inaccurate financial statements. Also, there is limited information regarding the timeliness of processing agency requests and the performance of vendors. Further, DCMS has not completed any comprehensive internal audits of telecommunications.

The purpose of management reports is to evaluate and measure the effectiveness of operations. Based on these evaluations, management can make decisions regarding future plans and strategies. Management reports can take the form of financial statements, performance evaluations, or internal audits.

Accounting Practices for the Communications Revolving Fund

Accounting records and financial statements for the CRF have not been accurate because commission revenue and signing bonuses have been improperly recorded as a reduction of expenses. While this does not affect the resulting net income or loss for the CRF, an accurate accounting of revenues and expenses is necessary for reporting, budgeting, and rate setting purposes.

DCMS has contracts with local exchange and long distance carriers which allow these companies to install their pay phones on State premises. In return DCMS receives a percentage of the revenue from the phones. DCMS has also received revenues from a "signing bonus" for renewing a contract with a vendor.

In Fiscal Year 1992, DCMS started recording the income from these two sources as a reduction of expenses and not as income. Rather than having vendors send DCMS a check, DCMS deducts the commission and signing bonus income from a vendor's billing account. For example, if DCMS owes a company for services provided, but DCMS also earned income from pay phone commissions, DCMS deducts the amount of commission income from the amount owed the vendor. The result is that income from the commissions and

bonuses is not posted to the appropriate accounting records as revenue earned. The effect is an understatement of revenue earned and an understatement of expenses incurred on the financial statements.

DCMS received commission and signing bonus income amounting to over \$3.8 million in Fiscal Year 1992. Thus, while the CRF had reported total operating expenses of almost \$90.3 million in Fiscal Year 1992, actual operating expenses should include an additional \$3.8 million. Also, revenues would increase by \$3.8 million.

The deduction of commissions and bonuses from expenses does not affect net income for the CRF. However, proper accounting requires a matching (or reporting) of revenues and expenses. In addition, understating expenses and revenues affects the representation of activity within the Fund. Further, it would affect the budgeting and rate setting processes as well.

The purpose of an internal service fund (i.e. revolving fund) is to provide a needed service to the agencies and charge them the cost of providing the service. If financial information provided to management understates the cost of the services provided, rates developed using this data may not reflect the true cost of providing the service. In January 1994, after fieldwork ended, a DCMS official stated the Department would make adjustments to CRF financial records to reflect actual revenues and expenses.

Recording of Equipment

DCMS' accounting records and financial statements overstated telecommunications equipment owned by DCMS. In Fiscal Year 1990, DCMS recorded a lease agreement of approximately \$23 million as an equipment purchase. DCMS also incorrectly recorded an equipment purchase, which totaled almost \$6.6 million, for Illinois State University. Further, DCMS needs to maintain greater control over telecommunications purchases for universities.

Accounting staff recorded a \$23 million lease of (and access rights to) Centrex switches as an equipment purchase. Because DCMS leases rather than owns the equipment, it gains no rights to the equipment at the end of the agreement. Also, Illinois Bell has been depreciating the Centrex equipment on its financial statements since it owns the equipment. DCMS should have recorded this transaction as a prepaid expense. The accounting records therefore overstate equipment and understate prepaid expenses.

This misclassification does not affect the amount of total assets of the CRF. However, when the lease agreement expires in Fiscal Year 1996, the financial statements, if uncorrected, would have overstated equipment owned. The misclassification also would have an impact on the budgeting and rate setting processes. Budget personnel may not consider

the replacement cost for the equipment in the budgeting process. When the State replaces the equipment, rates will need to reflect the cost of the new equipment. In January 1994, DCMS revised its financial statements reclassifying \$16.6 million of the \$23 million lease from equipment to prepaid expense.

In another instance, both DCMS and Illinois State University recorded a purchase of telecommunications equipment, which amounted to almost \$6.6 million, on their financial records. Available documentation shows that Illinois State University properly recorded this transaction.

Statutes give DCMS the authority to retain all telecommunications equipment (20 ILCS 405/67.18). Equipment retained by DCMS should be included within the financial statements for the CRF. However, DCMS can delegate to an agency its authority to retain equipment thereby allowing the agency to record the equipment on its financial statements.

Illinois State University purchased a telecommunications system (costing almost \$6.6 million) in Fiscal Year 1992 through an installment purchase agreement with an investment banking firm. The installment purchase agreement shows Illinois State University, through the Board of Regents, was the buyer of the system and would hold title to it. Similarly, Certificates of Participation, used to raise funds for the purchase, also show that Illinois State University would hold title to the equipment. DCMS was a third party to the two documents and thus agreed to the conditions stated within each (including Illinois State University's right to hold title). Further, DCMS had no documentation to show it informed Illinois State University of DCMS' intent to record the purchase on CRF records. Therefore, it was appropriate for Illinois State University to record the transaction. DCMS also recorded the transaction thereby overstating the CRF equipment ledger by almost \$6.6 million. (In January 1994, a DCMS official stated the Department would make adjustments to CRF records with regard to the Centrex transaction and ownership of equipment by Illinois State University.)

In addition, a DCMS official said they may not know about all telecommunications purchases by universities. Since DCMS has statutory authority to retain and hold title to all telecommunications equipment, DCMS needs to establish documented policies to ensure that it maintains control over procurements and the proper recording of those transactions. In addition, policies should inform agencies that, without proper delegation from DCMS, ownership of equipment will be posted to CRF records.

RECOMMENDATION NUMBER EIGHT

The Department of Central Management Services should ensure that accounting transactions are properly recorded in its accounting records and financial statements for the Communications Revolving Fund. DCMS should also establish documented policies which clearly delineate their control over telecommunications equipment procured by State agencies including universities.

Department of Central Management Services Response:

"DCMS concurs with the recommendation that accounting transactions should be properly recorded in accounting records and financial statements for the CRF and that documented policies should be established to delineate the extent of DCMS's control over telecommunications equipment.

We believe the accounting treatments we originally used related to the statewide network purchases and vendor commissions and bonuses were acceptable treatments under Generally Accepted Accounting Principles (GAAP). For example, it is sometimes appropriate to capitalize services necessary to make purchased equipment usable. Our original treatment of these transactions were not raised as concerns or problems during several compliance and financial audits by external auditors which occurred subsequent to the original transactions. However, we also believe that the way you would have preferred these transactions be handled are also acceptable treatments under GAAP.

After discussion with the external auditors doing the FY93 GAAP financial audit, we agree to change our accounting treatment of these transactions and made the necessary adjustments in the GAAP package and in our Accounting treatment procedures. A total of \$17 million was reclassified from equipment to prepaid expense, not the \$23 million amount referred to in the audit narrative. We believe these issues were appropriately resolved in the GAAP financial audit process to everyone's satisfaction."

Auditor's Comment:

The financing agreement for the Statewide Network included an attachment which stated, "The contract for switching services will be with IBT in the approximate amount of \$23,000,000." In January 1994, after the conclusion of audit fieldwork, DCMS revised its financial statements to reclassify \$16.6 of the \$23 million lease from equipment to prepaid expense.

Other Performance Reports

Most sections of DCMS performing telecommunications functions provide management with regular activity reports. In addition, DCMS monitors financial activity by

using spending plans and obligation/expenditure reports. The Department, however, needs to improve its monitoring of vendors that have maintenance contracts.

Some organizational sections interact with the vendors on a regular basis since the vendors provide installation, maintenance, and repair services. DCMS does not produce formal evaluations of vendors under contract. CRF expenses for maintenance services provided by Illinois Bell under two contracts totaled almost \$3.64 million in Fiscal Year 1992. Further, these maintenance contracts require the vendors to respond to DCMS requests within a certain amount of time. For example, the Centrex maintenance contract requires Illinois Bell to perform a move, add, or change of 1 to 5 stations within five working days after it receives the request from DCMS. A formal evaluation of vendor performance could determine the timeliness of Illinois Bell activities and whether Illinois Bell complies with contractual requirements.

In addition, DCMS uses MONIES to generate management reports for many aspects of operations. MONIES produces regular reports on calling data and voice systems covered under warranties or maintenance contracts. DCMS staff also use MONIES for reports on billing and inventory data. MONIES documentation shows that the system can produce other useful reports such as service order activity reports.

Documents produced by various consultants and DCMS staff show that there is insufficient information to manage operational functions. For example, the Department needs to monitor its activities related to fulfilling agency requests. Reports about agency requests for services show only the number of orders received, completed, or pending. We requested information regarding the average time DCMS needs to fulfill an agency request to install, move, or add a service. DCMS did not have documentation readily available and thus wrote a special program to extract this information. However, a review of documentation for MONIES shows this system has the capability to provide reports on this activity.

Further, DCMS' tracking of information regarding credits received from vendors was incomplete. This information would be useful to determine the accuracy of vendor invoices and agency billings created by DCMS.

Internal Audit Reports

DCMS has not conducted any comprehensive internal audits of telecommunications functions. The Fiscal Control and Internal Auditing Act (30 ILCS 10/2003) requires audits of major systems of internal and administrative control at least once every two years. The Communications Revolving Fund is the second largest revolving fund administered by DCMS with revenues of almost \$100 million and expenses of over \$90 million annually.

In 1991, the internal audit unit conducted a limited review of contracting procedures used by the Telecommunications Division. The report noted one control weakness that contracts could be revised without approval of the Director.

DCMS' lack of audit coverage has also been discussed in previous Auditor General's Financial and Compliance audits as well as audits of DCMS' information systems. Since 1980, these audits included 13 findings or deficiencies regarding a lack of internal audit coverage or non-compliance with the Internal Auditing Act (now called the Fiscal Control and Internal Auditing Act).

RECOMMENDATION NUMBER NINE

The Department of Central Management Services should continue to develop management information systems that will allow management to monitor internal activities and those conducted by vendors under contract. The Department should also ensure that internal audits for telecommunications are conducted as required by the Fiscal Control and Internal Auditing Act (30 ILCS 10/2003).

Department of Central Management Services Response:

"DCMS concurs with the recommendation to continue developing management information systems that will provide critical reporting. This system need was conceptually outlined in the March, 1991 DCMS report on telecommunications business functions, and details the report formats and contents.

DCMS assigned resources to work on this system in 1992 and work continues on the system development. Progress towards this goal has been steady, with the MONIES database standards phase nearing full implementation. Reports on internal performance and vendor performance have been completed in both voice and data areas.

This recommendation supports efforts that were already in progress within BCCS before this audit was begun."

Chapter Six
ACCURACY AND TIMELINESS OF AGENCY BILLS

Due largely to errors in vendor invoices, some agency billings have been inaccurate. A contractor hired by DCMS to review vendor invoices identified over \$6 million in questionable charges of which over \$1 million has been refunded to DCMS as of August 1993.

In addition, we identified almost \$118,000 in taxes included on vendor invoices, and paid by DCMS, for which it was not liable. Further, DCMS did not have adequate controls over credits sought from vendors or requested by agencies. During the audit, DCMS instituted policies and procedures for credits and also took action to review vendor invoices for appropriate taxes.

Our analysis shows inventory records used to charge agencies on a recurring basis are not completely accurate. DCMS and the agencies should improve coordination to keep inventory records accurate.

Except for a specific period when the State starts a new fiscal year, DCMS generally presents agencies with bills that are timely. The Department does not collect all receivables due from agencies. The Department had to write off over \$2.6 million in bad debt in the past three fiscal years because agencies did not pay their telecommunications bills; however, as of June 30, 1993, the Department also had not applied \$679,903 in payments or credits to agency account balances. The Department could apply these payments and credits to reduce past due amounts in agency accounts. Further, the Department's accounting system for telecommunications did not distinguish the fiscal years in which these credits had been posted.

ACCURACY OF AGENCY BILLS

Three divisions within DCMS, each using different procedures, review vendor invoices and prepare agency bills. For services and equipment provided to State agencies, vendors send invoices to DCMS rather than directly to the agencies. DCMS then uses information presented in the invoices to create agency bills. To create a complete agency bill may require combining information from several vendor invoices. (For the purposes of clarity, this Chapter will use the term "vendor invoice" to define charges submitted by vendors for telecommunications services and equipment. Charges submitted to the agencies by DCMS will be defined as "agency bills.")

The Accounting Division uses the TBAR system to assemble a complete agency bill from: data received directly from vendors, computer tapes and other hardcopy invoices from the Division of Administration and Planning, and hardcopy invoices from the Division of Telecommunications.

The Accounting Division receives invoices directly from the vendors that are generally for services and equipment unrelated to the Statewide Network. Accounting bills agencies the same amount as included on vendor invoices.

The Division of Administration and Planning in the Bureau of Communication and Computer Services (BCCS) receives invoices for services and equipment used on the Statewide Network. It uses the Management of Network Income Expense Services (MONIES) application system to verify charges are for valid State accounts. MONIES is also used to combine detailed information to charge agencies for services and equipment according to rates set by the Division. After compiling data within MONIES, staff forward two computer tapes to the Accounting Division for processing within TBAR. Administration and Planning also forwards hardcopy invoices for agency charges not included on the computer tapes.

The Division of Telecommunications in BCCS also receives vendor invoices. Invoices include charges for installation, maintenance, or repair services. These charges are commonly referred to as one-time charges. Staff in the Division of Telecommunications use a manual process to create this component of an agency bill (for one-time charges). These invoices are processed through Administration and Planning, and then forwarded to the Accounting Division and manually entered into TBAR.

As shown in Exhibit 6-1, a final agency bill will have several components including: charges for phone calls (or usage) whether it is a local call or long distance call; recurring charges for services (phone lines, data circuits) and equipment (telephones); and

Exhibit 6-1
AGENCY BILL DETAIL

USAGE

- *Local Calls*
- *Intrastate Toll Calls*
- *Interstate Toll Calls*

RECURRING CHARGES

- *Equipment (telephones)*
- *Services (phone lines, data circuits)*

ONE-TIME CHARGES

- *Miscellaneous charges*

SOURCE: *OAG summary of network State agency phone bill.*

miscellaneous charges for one-time services such as installation, maintenance, or repair services.

The Accounting Division

Inaccurate vendor invoices have led to inaccuracies in some agency billings. The Accounting Division directly receives fifteen vendor invoices and accompanying computer tapes. The tapes received by Accounting are generally for charges incurred at off-network sites.

The Accounting Division receives vendor tapes that include summary rather than detailed information. In addition, Accounting does not reprice vendor charges to create the agency bill. Instead, the charges to the agency are the same as prices submitted by the vendor. Invoices submitted to Accounting totaled approximately \$28 million in Fiscal Year 1992. Each month Accounting receives:

- ten invoices/tapes from Illinois Bell totaling approximately \$830,000;
- one invoice/tape from GTE amounting to approximately \$129,000;
- one invoice/tape from Illinois Consolidated Telephone Company (ICTC) amounting to approximately \$26,000;
- three invoices/tapes from AT&T for data circuits, modem rental, and telephone equipment totaling approximately \$1.3 million.

The invoices received from AT&T, Illinois Bell and other local carriers (i.e. GTE and ICTC) are summary level invoices. The tapes do not contain charges for each individual phone line used by State agencies. For example, an Illinois Bell employee estimated the ten summary tapes would include 2,500 to 3,000 accounts if billing would be presented in a detailed format.

Among the AT&T tapes, one tape consists mostly of charges for data circuits used by the Department of the Lottery. Lottery uses these circuits to transmit sales data from its sales agents throughout the State to its Springfield computer. Charges associated with the Lottery average approximately \$700,000 per month.

A review of these vendor invoices, begun in May 1992 by a DCMS contractor, showed they contained significant inaccuracies. Since Accounting does not reprice the invoices or use any additional data to compile an agency bill, the agency bill is the same as the vendor invoice. Thus, because the vendor invoices were inaccurate, the agency bills were inaccurate.

The contractor's review of the vendor invoices resulted in over \$6 million in claims for refunds. These claims are the result of overcharges by vendors. As of August 1993,

DCMS had received almost \$1.4 million in refunds.

The primary source of the claims are the AT&T invoices, received by the Accounting section, for data services provided to Lottery since July 1989. However, AT&T has not yet agreed to provide refunds for most of the claims. A DCMS official stated that the Department may go before the Illinois Commerce Commission to resolve the remaining claims with AT&T.

The Department should be commended for hiring a contractor to review vendor invoices. Review of vendor invoices can be a complex undertaking, and knowledge of the telecommunications industry and various regulatory issues is essential to properly review vendor invoices.

Exhibit 6-2
CREDITS IDENTIFIED FROM VENDOR INVOICES
(through August 1993)

<u>VENDOR</u>	<u>CREDITS SUBMITTED</u>	<u>REFUNDS RECEIVED</u>
AT&T***	\$5,946,845	\$1,018,809
AT&T*	237,154	237,154
Illinois Bell***	32,434	31,515
GTE***	48,381	10,567
ICTC***	3,980	1,418
US Sprint**	<u>82,954</u>	<u>82,954</u>
TOTAL	<u>\$6,351,748</u>	<u>\$1,382,417</u>

Notes:

- * *Identified by DCMS Staff*
- ** *Identified by Vendor*
- *** *Identified by DCMS Contractor*

SOURCE: OAG Summary of DCMS documents

Based on its interaction with the contractor, staff in Administration and Planning have begun to acquire the knowledge necessary to review vendor invoices. As shown in Exhibit 6-2, DCMS staff identified approximately \$237,000 in overcharges on vendor invoices since they began working with DCMS' contractor. We note, however, that Administration and Planning staff have not reviewed the tapes (and invoices) received directly by Accounting due, in part, to the summary level formatting of many of these tapes.

Exhibit 6-2 also shows a refund of almost \$83,000 from US Sprint invoices. A Department official stated that US Sprint's invoices have not been accurate and require a detailed review of itemized charges. However, the refund of \$83,000 was the result of a review by a US Sprint employee rather than a DCMS employee. DCMS and US Sprint each have one employee reviewing the invoices.

During the audit, in May 1993, the Department identified staff to work in a vendor invoice verification unit within the Division of Administration and Planning. This will provide the Department with a greater capability to identify inaccuracies in vendor invoices. In addition, in September 1993 DCMS initiated a formal planning process to have the Division of Administration and Planning within BCCS receive and review the vendor invoices which are currently being received by the Accounting Division.

The Division of Administration and Planning

DCMS uses an inventory database in MONIES to charge agencies for services and equipment used on a recurring basis. Records within the inventory database were not completely accurate for billing purposes.

We selected a random statistical sample to test the accuracy of the records within the inventory database. As shown in Exhibit 6-3, testing showed 18 of the 384 records sampled (4.6875%) did not contain completely accurate information. For 5 cases, we found no equipment or service existed at all although the agencies had been charged. For the remaining 13 cases, inaccuracies related to a piece of equipment not being at the street address listed in the database or it was not identical to the equipment listed on the inventory.

In 14 of the cases this would result in agencies being either undercharged or overcharged by DCMS depending on the reason for the inaccuracy.

DCMS and the agencies should better coordinate activities to ensure the accuracy of the inventory database. For most of the cases (16 of 18), we could not determine if agencies had supporting documentation to show they had requested changes to the inventory.

Exhibit 6-3 INVENTORY SAMPLE RESULTS

Number of Accurate Records	366
Number of Inaccurate Records	<u>18</u>
<ul style="list-style-type: none"> ● Records where equipment/service listed incorrectly in MONIES: 9 ● Records where equipment/service did not exist at the agency: 5 ● Records where address for equipment/service was incorrect: <u>4</u> ● Subtotal: 18 	
Total Number of Records Tested	<u>384</u>

SOURCE: Summary of OAG survey of MONIES database.

Based on this sample, we can infer that, among the 105,925 records in the MONIES database used to charge agencies on a monthly basis, almost five thousand records (4,965) in the MONIES database are not completely accurate. Without accurate records within the database, DCMS and the agencies lose control over the accuracy of agency bills.

The Telecommunications Division

The Telecommunications Division within BCCS receives vendor invoices for one-time charges. These are for miscellaneous services (installation, maintenance, or repair services) provided at agency sites throughout the State. Because staff use information from the vendor invoices to charge agencies, the vendor invoices must be accurate for agency bills to be accurate. The Telecommunications Division processed 4,597 invoices related to miscellaneous services in Fiscal Year 1992.

The Telecommunications Division uses a manual process to review vendor invoices and calculate agency charges. Staff receive hardcopy vendor invoices and check their accuracy to contract prices (if a contract exists). Staff calculate an agency bill by increasing the amount of the vendor invoice by ten percent. Employees forward this information to Administration and Planning for processing and then to Accounting which manually enters the data into TBAR to prepare a third component of an agency bill.

The Telecommunications Division had one employee reviewing these invoices. DCMS did not have written policies and procedures for the staff person who performed this review. Supervisors stated that they did not conduct a review of the invoices because they did not have the time. Without written policies and procedures and supervisory review of staff's work, the likelihood of inaccurate invoices and agency bills increases.

Also, staff did not compare hardcopy invoices to computer data derived from vendor tapes. Administration and Planning created this data to provide a source of verification for staff reviewing these hardcopy invoices.

Our review of vendor invoices showed the Department did not maintain adequate support documentation for 17 (34 percent) of the 50 invoices tested. Of the 33 invoices with adequate documentation, 31 were accurate.

RECOMMENDATION NUMBER TEN

The Department of Central Management Services should ensure the accuracy of agency bills by:

- *centralizing functions responsible for reviewing vendor invoices and preparing agency bills;*
- *improving coordination with agencies to ensure the MONIES inventory database is accurate;*
- *performing regular detailed reviews of vendor invoices; and*
- *maintaining adequate support documentation.*

Department of Central Management Services Response:

"DCMS concurs with the recommendation that DCMS should ensure the accuracy of agency bills. Efforts to accomplish this are in place or in the process of implementation.

- centralizing functions responsible for reviewing vendor invoices and preparing agency bills
- improving coordination with agencies to ensure the MONIES inventory database is accurate
- performing regular detailed reviews of vendor invoices and maintaining adequate support documentation." (see Appendix C for full response)

TIMELINESS OF AGENCY BILLS

Except for a specific period when the State starts a new fiscal year, DCMS generally presents agencies with bills that are timely. However, the Department does not collect all receivables due from agencies in a timely manner. DCMS does not have the authority to ensure agencies make timely payments for services rendered.

The Department formats agency bills in the following manner: recurring charges for services and equipment are for the same month as the bill; charges for phone calls or other types of usage are for the previous month. For example, a July bill would include monthly equipment and service rental for July and usage charges for June.

The July 1992 agency billings for Springfield locations were not processed by TBAR until September 17, 1992. Thus, agencies in Springfield did not receive their bills for July equipment and service rentals, and June's usage charges, until the latter part of September.

This lag in billing at the beginning of a fiscal year increases the difficulty for agencies to verify calling information.

At the start of a new fiscal year, Accounting staff must handle vendor invoices for the previous and current fiscal years. Further, TBAR does not have the capability to concurrently process billings incurred in different fiscal years. Therefore, the creation of agency billings is slowed during the beginning of a new fiscal year. The Department is able to reduce this gap in subsequent months.

In Chapter Five, we recommended the Department develop a new accounting system that would provide cost information and allow for an accrual accounting method. This new accounting system should also allow the Department to create agency bills for different fiscal years.

Accounts Receivable

Over the past three fiscal years, the Department wrote off over \$2.6 million as bad debt because agencies did not pay their telecommunications bills. However, as of June 30, 1993, DCMS documents showed \$679,903 in unapplied payments and credits because agencies either made payments or received credits but DCMS had not applied these to agency account balances. In addition, we could not determine the amount of unapplied credits for specific fiscal years because DCMS' accounting system did not identify the fiscal year in which unapplied credits were posted by DCMS.

Exhibit 6-4 shows the amounts written off by the Department as bad debt during the past three fiscal years. DCMS does not write off a past due amount until one fiscal year has elapsed from the date the bill became past due. Thus, those bad debts written off at the end of Fiscal Year 1993 were past due at the end of Fiscal Year 1992.

Collection of receivables is a shared responsibility between Accounting and the Division of Administration and Planning. Generally, the Division of Administration and Planning has responsibility for contacting agencies or other government entities to collect past due receivables.

**Exhibit 6-4
BAD DEBT EXPENSE
FOR THE CRF
FY91 through FY93**

FY91	\$1,206,828
FY92	810,278
FY93	<u>583,188</u>
TOTAL	<u>\$2,600,294</u>

Source: DCMS Accounting Division

Accounting handles specific accounting problems or problems occurring due to preparation of the bills.

Administration and Planning does not have policies and procedures for the collection of past due accounts. BCCS officials noted, however, that staff are in contact daily with the agencies and past due accounts are generally addressed.

The Department does not have the authority or leverage to ensure the collection of all amounts due. A BCCS official stated that it will not continue to provide services to local government entities if they do not keep the accounts current. For State agencies, however, there is no statutory provision or rule which would allow the Department to discontinue services to a State agency which consistently does not pay its bills.

As of June 30, 1993, the Department's records showed \$679,903 in unapplied payments and credits. Unapplied payments occur when the Department receives a payment but does not know the invoice number related to the payment. Unapplied credits occur when the Department issues credits but there is not sufficient activity, after the credit is issued, to apply to account balances. However, the Department does not apply these credits to past due amounts; rather the credit is applied to agency bills incurred after the credit had been issued.

Unapplied payments occur when DCMS receives a payment but does not know the invoice number related to the payment. According to DCMS officials, staff contact agencies regarding accounts with significant unapplied payments but do not have enough staff to contact agencies for all unapplied payments. DCMS officials stated that agencies receive monthly reports which include a listing of unapplied payments.

Unapplied credits occur after DCMS provides agencies with a one-time credit (or rebate) to reduce retained earnings in the CRF. Some agency accounts will have a credit balance (i.e., the CRF owes the agency) because the credit amount is greater than the amount owed by the agency. However, DCMS does not apply the credits to past due amounts. Rather the credit is applied to current and subsequent agency billings.

In addition, DCMS' accounting system for telecommunications (TBAR) could not produce accurate data on the amount of unapplied credits associated with a specific fiscal year. Rather, the system only shows the outstanding amount of unapplied credits. This amount could include unapplied credits from any past fiscal year. Department officials noted, however, that unapplied credits from past fiscal years are minimized by staff reviews of agency accounts.

Our review of Fiscal Year 1992 CRF accounts showed agencies with past due accounts also made payments or had credits which were not applied to past due account balances as of June 30, 1993. For example, at the end of Fiscal Year 1993, DCMS records showed the Department of Public Aid had a Fiscal Year 1992 past due amount of approximately \$86,000; however, Public Aid also had a Fiscal Year 1992 unapplied payment

amount of \$22,310 and a Fiscal Year 1993 unapplied credit amount of \$184,885. The Fiscal Year 1992 unapplied payments could have been applied to the past due amounts for Fiscal Year 1992. DCMS could have also applied the Fiscal Year 1993 unapplied credit amount to reduce the Public Aid bad debt to zero.

DCMS should improve coordination with agencies to reduce the past due amounts and unapplied payments for agencies. Exhibit 6-5 shows the ten agencies with the greatest bad debt expenses and their unapplied payments and credits. The bad debt was incurred in Fiscal Year 1992; unapplied payments were made by the agencies in Fiscal Year 1992. These balances are then held open through the next fiscal year (i.e. Fiscal Year 1993). Unapplied credits represent those provided to the agencies as of June 30, 1993.

**Exhibit 6-5
TOP TEN AGENCIES WITH BAD DEBT
AND UNAPPLIED PAYMENTS FOR FISCAL YEAR 1992
AND UNAPPLIED CREDITS AS OF JUNE 30, 1993**

<u>AGENCY</u>	<u>BAD DEBT</u>	<u>UNAPPLIED PAYMENTS AND CREDITS</u>	<u>NET</u>
Dept. of Child. & Family Services	\$95,956	\$59,283	\$36,673
Dept. of Public Aid	85,850	207,195	(121,344)
Illinois State Police	51,943	30,293	21,650
Dept. of Mental Health & Dev. Disabilities	49,570	55,546	(5,976)
Attorney General	35,751	6,967	28,784
Dept. of Rehabilitation Services	31,707	4,626	27,081
Dept. of Commerce & Community Affairs	29,316	7,694	21,622
University of Illinois	25,027	24,182	845
Governors State University	20,629	0	20,629
Dept. of Corrections	<u>20,549</u>	<u>345</u>	<u>20,205</u>
TOTALS:	<u>\$446,298</u>	<u>\$396,131</u>	<u>\$50,167</u>

Note: Totals do not add due to rounding. Unapplied credits are as of June 30, 1993 which could be applied to future billings. Unapplied payments and bad debt were incurred in Fiscal Year 1992 but were not written off until the end of Fiscal Year 1993.

SOURCE: OAG summary of DCMS Accounting Division report

RECOMMENDATION NUMBER ELEVEN

The Department of Central Management Services should apply telecommunications payments made by agencies or credits issued to past due agency account balances. The Department should also ensure that its accounting system can identify the fiscal year in which the unapplied credit was posted.

AGENCY RESPONSES:

- **Department of Central Management Services:** "DCMS concurs with the recommendation that unapplied telecommunications payments and credits should be applied to past due agency account balances when appropriate. We also agree that the accounting system should identify the fiscal year in which the credit was posted.

Agencies sometimes make payments to the CRF without identifying the specific billing account to which the payment should be applied. As a temporary measure, such payments are posted to the agency's unapplied payments account. Also, DCMS sometimes issues a credit to specific billing accounts where the billing activity for the fiscal year is less than the amount of the credit. In both cases, the agency gets credit for these payments and credits.

DCMS staff contact agencies to try to resolve unapplied payments and credits which are large and material amounts. In addition, DCMS sends each agency a copy of the monthly Accounts Receivable Posting System (ARPS) Report which shows the outstanding unpaid balance for each of their billing accounts and also shows the amount posted to their unapplied payments account. Agencies are expected to use these ARPS Reports to review past due charges, investigate reasons for delays in payment and identify unapplied payment/credits for which they need to contact the Accounting Division and specify the invoices or billing accounts to which these amounts should be credited.

We stress to agencies the importance of posting unapplied payments and credits to appropriate agency billing accounts. Despite efforts by Accounting Division and BCCS staff to resolve unapplied payment and credit issues and apply these amounts to specific billing agency accounts, some issues remain permanently unresolved." (see Appendix C for full response.)

- **Department of Commerce and Community Affairs:** "We contacted the Department of Central Management Services (DCMS) to obtain supporting documentation (ie. invoice numbers, dates,...) since we were never notified of the alleged bad debt, or of any attempts to collect the debt prior to its write off. DCMS supplied us with the seven invoice vouchers that made up the \$29,315.59 reported in your draft.

The Accounting Office researched the seven invoices and discovered the following:

- 1) In 4 invoices, DCMS recorded a credit amount less than the amount submitted on the credit adjustment form.

(continued on next page)

AGENCY RESPONSES (continued)

- 2) In 2 invoices, DCMS recorded a payment amount less than the actual voucher.
- 3) In 1 invoice there was a separate charge for \$0.25 that DCMS would not let us combine with another charge.

... The Department has supporting documentation on the seven invoices and associated transactions. This additional information clearly shows that the initial accounts receivable and the subsequent write off was erroneous." (see Appendix C for full response.)

- **Department of Corrections:** "A summary accounts receivable aging report dated 6/30/93 listed the bad debt amounts by facility. The business administrators at each of these facilities said that fiscal year 1992 bills received in time to process before the end of the lapse period were paid.

Extra efforts are made each year-end to expedite payment of DCMS telecommunications invoices that are received too late in the lapse period to be processed normally. Our review of the major items comprising the balance of \$20,549 produced the following details:

Forty-five percent of the Department's bad debt total is the \$9,206.39 attributable to the Danville Correctional Center. This balance was for part of the charges for two Centrex lines for which the facility had not been billed since its opening in 1985. The invoice dated 9/29/92 was received on September 30, 1992.

The East Moline Correctional Center vouchered \$2,146.51 and took AT&T credits of \$2,095.81 against an invoice for \$4,242.31. It appears that the credits were not applied against the accounts receivable.

... The Department of Corrections is diligent in paying for its goods and services in a timely manner. The Department, however, sometimes encounters circumstances which make timely payment difficult. Hopefully, the above details will demonstrate that the Department had made good faith efforts to pay the items which are now classified as bad debts." (see Appendix C for full response.)

- **Department of State Police:** "A significant part of the outstanding amount was due to billings for the Law Enforcement Agency Data System. . . . The total charges were \$27,323.80, credit unapplied of \$4,080.20 and an outstanding balance of \$23,243.60. These charges are not paid by ISP. Although DCMS uses an "ISP" designator in the billing process, the circuits in question all belong to local police departments using the Law Enforcement Agency Data System network. These users are billed directly by DCMS and payments are made directly to DCMS Telecommunications Revolving Fund. ISP is not involved in this process and has no control over it." (see Appendix C for full response.)

(continued on next page)

AGENCY RESPONSES (continued)

- **Department of Public Aid:** "The amounts identified as IDPA Bad Debt are actually disputed charges that have been communicated to CMS."

Auditor's Comment to Agency Responses:

As discussed in this Chapter, DCMS needs to improve its coordination with agencies regarding past due amounts and unapplied payments. A new accounting system, as recommended in Chapter Five, would also improve DCMS' ability to efficiently process agency billings and record agency payments.

VENDOR CREDITS

The Department did not have adequate controls over credits received from vendors. Two divisions within BCCS and vendors can identify vendor credits. Both Administration and Planning and the Accounting Division receive credit refunds from vendors. Staff within the Division of Administration and Planning did not consistently record credit requests in a central log. In addition, some vendors sent credit refunds, requested by Administration and Planning, directly to Accounting and thus Administration and Planning had no knowledge of their receipt.

During the audit, Administration and Planning created documented policies and procedures to log and track credits requested from vendors. Also, Administration and Planning established a central collection point for credit requests. The Department should be commended for taking steps to correct these control weaknesses.

For most credits related to Illinois Bell off-network accounts, Illinois Bell employees, rather than State employees, identify the credits due. In this situation, the Accounting section relies on Illinois Bell to identify credits. Illinois Bell will submit a debit memo for the credit amount. It offsets this by sending a refund check to Accounting for the credited amount. We did not receive documentation to show DCMS employees review Illinois Bell employees' work related to these credits. Further, Accounting did not have documentation to show Department officials authorized this process.

Accounting also did not deposit the refund checks from Illinois Bell in a timely manner. Accounting staff receive the Illinois Bell refund checks directly from the vendor. Staff do not log the receipt of these checks. Staff forward the refund checks to the cashier to record and deposit the checks. In Fiscal Year 1993, Accounting received 196 refund checks, totaling almost \$31,000, which included 12 checks of over \$500. Because Accounting staff

receive refund checks, and in some cases, due to the workload of the cashier, some refund checks from Illinois Bell were not recorded by the cashier until two to four weeks after the vendor mailed them to Accounting. The State Officers and Employees Money Disposition Act (30 ILCS 230/2) requires staff to deposit checks exceeding an accumulated total of \$10,000 within 24 hours and checks of more than \$500 but less than \$10,000 within 48 hours after receipt.

RECOMMENDATION NUMBER TWELVE

The Department of Central Management Services should review invoices to identify appropriate vendor charges and credits for telecommunications. It should also record and deposit checks, received from telecommunications vendors as refunds, in accordance with the State Officers and Employees Money Disposition Act (30 ILCS 230/2).

Department of Central Management Services Response:

"DCMS concurs with the recommendation that DCMS should review invoices to identify appropriate vendor charges and credits for telecommunications and should also record and deposit checks, received from telecommunications vendors as refunds, in accordance with the State Officers and Employees Money Disposition Act (30 ILCS 230/2).

To meet those needs:

- a central control over CRF vendor invoices is being established in BCCS.
- a central control over credits requested from vendors has been established in BCCS.
- policies and procedures are being developed for both invoice and vendor credit control and tracking.
- Accounting has established procedures for the recording and deposit of vendor refund checks in compliance with the State Officers and Employees Money Disposition Act (30 ILCS 230/2)."

AGENCY CREDITS

The Division of Administration and Planning, which receives and processes agency credit requests, did not have adequate controls over credits requested by agencies. However, during the audit it developed policies and procedures which should correct this condition.

Agency credits can be identified by the agency, BCCS, or the vendor. Agencies requesting credits may request these verbally or in writing.

The Division of Administration and Planning did not maintain an accurate credit log to monitor agency credits. It also did not have documented procedures to process or approve agency credit requests. Formal policies and procedures for agency credits would help ensure a cost-effective process. Agencies can submit credit requests for any amount - including those amounting to less than \$1.00 - and staff must then process the requests. With documented policies and procedures distributed to agencies, agencies could be directed to wait until credits totaled a predefined amount.

Administration and Planning has submitted policies and procedures to Department management for approval. These procedures will require that agencies submit all credit requests on a credit memo form. Credit memos will be assigned sequential numbers to allow monitoring of requests. In addition, credit memos will be recorded in a log to ensure credit requests can be tracked through to resolution.

PAYMENT OF TAXES

DCMS improperly paid taxes included on vendor invoices. During the audit we identified almost \$118,000 in taxes which the State should not have paid. Similarly, a contractor for DCMS identified over \$48,000 in taxes which it concluded were erroneously charged to DCMS.

Various statutes authorize the collection of taxes from either customers or telephone companies providing telecommunications services. DCMS as a customer is liable for taxes or additional charges unless statutes explicitly exempt it. As presented in Exhibit 6-6, DCMS is exempt from paying the Telecommunications Excise Tax (35 ILCS 630/2) and the Municipal Telecommunications Tax (65 ILCS 5/8-11-17).

Our review of vendor invoices shows the State paid the Municipal Telecommunications Tax and the Telecommunications Excise Tax. We selected various invoices from AT&T, GTE, and Illinois Bell to determine if the State had paid the appropriate taxes.

For the Illinois Bell invoices reviewed, most taxes were correctly applied except we could not determine the appropriateness of taxes applied to interstate and intrastate toll calls. For the GTE invoices, we identified the Telecommunications Excise Tax, the Municipal Telecommunications Tax, as well as federal taxes being levied to State accounts. DCMS is exempt from paying all three taxes. However, we did not continue with this task after we learned that a DCMS contractor also had identified improper taxes in GTE invoices. The contractor identified over \$48,000 in taxes which it determined DCMS should not have paid. DCMS had received almost \$11,000 from GTE as of August 1993.

Exhibit 6-6			
STATE TAXES WHICH DCMS IS NOT LIABLE TO PAY			
TYPE OF TAX	STATUTORY CITE	TAX DESCRIPTION	AMOUNT
Telecommunications Excise Tax	35 ILCS 630/2	Tax for originating and receiving intrastate telecommunications.	5% of Gross Charges
Municipal Telecommunications Tax	65 ILCS 5/8-11-17	Tax on intrastate calls made or received from the local municipalities.	5% of Gross Charges

SOURCE: Illinois Compiled Statutes

Our review of AT&T invoices showed DCMS paid almost \$118,000 in municipal and State taxes for which it was not liable. AT&T issued a credit to DCMS as a result of our review. We reviewed another AT&T invoice and found it had included inapplicable State taxes of approximately \$1,300.

The Division of Administration and Planning did not have written policies and procedures to review taxes applied to State accounts. In some cases, Administration and Planning deducted taxes from these invoices; in others, it did not. The Department is now aware of this issue and has taken steps to ensure the Department pays only applicable charges or taxes.

DCMS sought information regarding the applicability of taxes from the Department of Revenue as well as the Comptroller. The most recent correspondence from the Comptroller was October 1991. However, this correspondence only listed the applicable State taxes administered by the Department of Revenue. As shown in Exhibit 6-6, municipal telecommunications taxes also exist.

For some vendor invoices, it is difficult to identify the type of taxes applied to State accounts. Some vendors combine State and local taxes together without specifying the origin of the tax. Without a proper format which provides the specific authority or purpose of the tax, DCMS cannot determine its applicability.

RECOMMENDATION NUMBER THIRTEEN

The Department of Central Management Services should only pay telecommunications taxes or additional charges for which it is liable. The Department should also require telecommunications vendors to identify each tax or additional charge included on vendor invoices.

Department of Central Management Services Response:

"DCMS concurs with this recommendation. DCMS will develop policies and procedures outlining the auditor's tax liability findings and will implement reviews of vendor invoices to ensure compliance."

Chapter Seven
OTHER ISSUES

During the course of this audit, other issues were raised which may require further consideration by the General Assembly or DCMS. These include the validity of charges to agencies for mail and messenger services, a revision to current requirements to allow State agencies to control some telecommunications equipment, and assurances that security is adequate for all telecommunications systems.

CHARGES FOR MAIL AND MESSENGER SERVICES

In Fiscal Year 1992, DCMS instituted a new policy to charge agencies for mail and messenger services provided by the Department. Previously, mail and messenger charges were not processed through the Communications Revolving Fund.

DCMS initiated a policy where agencies would be charged for mail and messenger services according to the number of phone lines used by agencies. Agencies are now charged \$2.50 a month for each phone line for the use of mail and messenger services. Revenues to the CRF for mail and messenger services amount to approximately \$75,000 each month.

DCMS' new policy may not employ a valid methodology to charge agencies. Some agencies may make extraordinary use of mail and messenger services but have a minimum number of phone lines. Conversely, an agency may have a significant number of lines but make only limited use of mail and messenger services.

Department of Central Management Services Response:

"DCMS' policy to charge agencies is a valid methodology because it has a systematic, rational method of allocating cost. No better methodology exists, without the tremendous cost of using stamps and/or the counting of mail pieces. Such methods were studied and were determined to be too costly for any possible benefits of equity to be gained."

SCOPE OF DCMS TELECOMMUNICATIONS RESPONSIBILITIES

As presented in Chapter Five, DCMS does not have adequate cost information and does not allocate administrative costs to all services and equipment provided to agencies. The effect is that DCMS establishes some rates to cover all its administrative costs.

In some cases, DCMS has not offered agencies the option to buy rather than lease equipment. This current policy may not be cost-effective for DCMS and the agencies. For example, DCMS leases standard touch tone phones to agencies for \$3.00 per month. A portion of this cost, for example \$2.25, is to provide maintenance services for the phone.

Due to the age of some phones used by the agencies, DCMS has no remaining costs except those for maintaining the telephone and administrative costs associated with updating inventory records. Thus, for equipment which depreciates and has little value after a period of time, it may be cost-beneficial to allow the agencies to purchase the equipment from DCMS. The purchases and related records could be maintained by agencies. Agencies would be better able to accurately track the inventory. Further, this would reduce the administrative burdens on DCMS.

Department of Central Management Services Response:

"DCMS maintains centralized inventory as a requirement for managing maintenance and repairs. If agencies were allowed to purchase equipment, there could be no savings achieved by statewide maintenance due to all the different types of equipment. Maintenance costs would increase dramatically since vendors would have to inventory so many different types of equipment. Without one centralized inventory, adds, move and change activity would be decentralized relying on the agencies to maintain an accurate inventory. The fact that equipment has been paid for and/or depreciated has nothing to do with its value to the State, so long as equipment works as well as when it was manufactured it has value to the State, and if eliminated, would have to be replaced at current new prices."

Auditor's Comment:

The report narrative states that agencies would "purchase the equipment from DCMS." Since DCMS would continue to control the types of equipment purchased, maintenance costs should not increase due to different types of equipment being purchased.

SECURITY FOR EQUIPMENT

DCMS needs to ensure that telecommunications systems have adequate security arrangements. This issue could affect DCMS or State agencies if security is breached.

Some telecommunications systems used by State agencies may be vulnerable to unauthorized use. For example, lines interconnected or within private branch exchanges (PBXs) can be accessed through outside sources. Generally, access to PBXs can be restricted through the use of security systems. Industry sources contend a lack of security creates a high risk for owners and users of private branch exchanges. DCMS officials stated that, to their knowledge, PBXs in use have the required security.

Department of Central Management Services Response:

"DCMS agrees with the importance of security measures. All procurements are specifically planned by DCMS to provide for the security necessary. DCMS has every intention of continuing this policy, to protect the State from unauthorized calling at State expense."

APPENDICES

Appendix A

AUDIT RESOLUTION

NUMBER 97

Legislative Audit Commission

RESOLUTION NO. 97
Presented by the Office of the Auditor General

WHEREAS, the Department of Central Management Services (DCMS) manages the telecommunications operations for over 100 State agencies, boards, and commissions;

WHEREAS, it cost the State \$88 million in Fiscal Year 1991 for its telecommunication services and these costs have increased 72 percent between Fiscal Years 1984 and 1991;

WHEREAS, in their 1989-90 Annual Report, DCMS projected cost savings of \$25 -30 million after signing a seven year, \$108 million contract with Illinois Bell and Sprint; DCMS also contracted with Ameritech for \$16 million to maintain the Centrex system; however, since that time, costs to the State for telecommunication services have continued to increase.

WHEREAS, past compliance audits have reported a lack of information and analysis for management regarding telecommunication operations;

THEREFORE BE IT RESOLVED, by the Legislative Audit Commission of the State of Illinois, that the Auditor General is directed to conduct a management audit of DCMS's telecommunications operations;

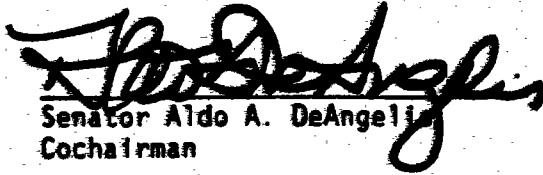
BE IT FURTHER RESOLVED that this audit shall include, but need not be limited to, the following determinations:

1. Whether DCMS has adopted plans and management strategies that promote cost-effective telecommunication operations;
2. Whether DCMS has policies and procedures to effectively guide telecommunication operations;
3. Whether monitoring of telecommunications operations by DCMS is adequate;
4. Whether telecommunication billings to State agencies, and DCMS's collection of billings, have been timely and accurate.

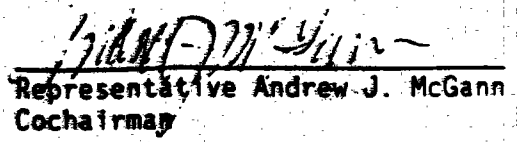
BE IT FURTHER RESOLVED that DCMS and all other State agencies which may have information relevant to this audit shall cooperate fully and promptly with the office of the Auditor General in the conduct of this audit; and

BE IT FURTHER RESOLVED that the Auditor General shall commence the audit immediately and shall report his findings and recommendations as promptly as possible in accordance with the provisions of the Illinois State Auditing Act.

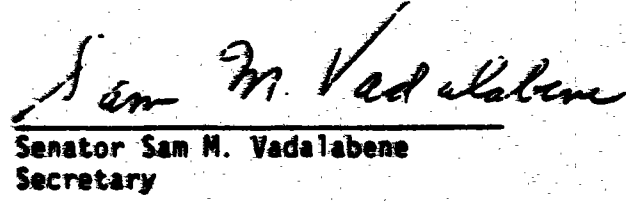
Adopted this 16th day of April, 1992.



Senator Aldo A. DeAngelis
Cochairman



Representative Andrew J. McGann
Cochairman



Senator Sam M. Vadalabene
Secretary

Appendix B

AUDIT METHODOLOGY

Appendix B
AUDIT METHODOLOGY

SAMPLE TO TEST THE ACCURACY OF MONIES INVENTORY DATABASE

DCMS' Bureau of Communication and Computer Services uses the MONIES application to review and process vendor tapes, and compile information for agency bills. MONIES contains a database which lists equipment and services provided to agencies. Various types of records can be found in the database; however, we were only interested in selecting records indicating a service or equipment which had a monthly recurring charge. (Other records, such as credit card records, do not have a monthly recurring charge as agencies are only billed for usage for these items.)

Services and equipment with monthly recurring charges were identified through an initial review and sort of catalog codes. The catalog code has an associated charge if the agency is billed on a monthly basis for the service or equipment. In total, the MONIES database contained 105,925 records that had catalog codes indicating a monthly recurring charge (for a service or piece of equipment).

BCCS actually divides the database into two separate files. One file includes all services and equipment provided to agencies in Springfield. Another file contains records for services and equipment provided to State agencies at all other sites (including Chicago). A count of relevant records in these files showed 55,565 records within the Springfield file (approximately 52% of the relevant records in the database) and 50,360 records (approximately 48%) in the other file.

We selected a sample of 384 records from these two files. A sample of 384 would provide a 95 percent confidence level and an error rate of no larger than ± 5 percent when making inferences to the universe (105,925 records). Based on the percentages above in each file, we selected 202 records from the Springfield file and 182 records from the second file. The sample was randomly selected from the universe (of 105,925 records) using an Easytrieve program. Staff from within the Information Services Division at the Auditor General's Office created the programs to select the sample.

Once the auditors selected the sample, the information contained in the records was verified with State agencies. Various procedures were used to verify equipment and services.

For telephone lines, such as a Centrex line, auditors called the phone number listed in the inventory record. Using this method, the auditors verified the agency using the line and the location of the line.

If a piece of equipment had a charge of more than \$4.00, then the auditors physically verified the equipment. This included: observing the equipment and comparing it to the

description on the inventory record; and verifying the location or street address listed on the inventory record.

For equipment which had a monthly charge of less than \$4.00, it was not cost-effective to physically verify this equipment. Equipment with a charge of less than \$4.00 was verified through phone contacts at the agencies.

Other services and equipment were verified through a variety of methods. Data circuits (and related equipment) and cellular phones were verified through observation. Pagers were verified by calling the pager number and requesting a return call from the individual possessing the pager.

REVIEW OF MISCELLANEOUS INVOICES

Fieldwork tests also included a review of miscellaneous invoices received by the Telecommunications Division. The auditors reviewed miscellaneous invoices because they represent another component of an agency bill. In addition, the auditors performed this task due to the significant number of invoices (4,597 in Fiscal Year 1992) reviewed by one individual, a lack of policies and procedures for this review, and cursory reviews of this individual's work by supervisors.

The miscellaneous invoices are repriced (usually an additional ten percent) and forwarded to the Administration and Planning Division. Administration and Planning processes the vendor invoice for payment and forwards it to Accounting. The auditors selected invoices from a log maintained by the Telecommunications Division. The Division uses the log to show the amount included on the invoice and any changes made resulting from a review.

The auditors selected 50 invoices for testing. Due to a lack of support documentation for the invoices, the auditors found that only 33 of the 50 invoices selected could be verified. However, among this group of 33, the auditors determined that the invoices, and thus agency bills related to these invoices, were generally accurate. In two cases, errors were found amounting to less than one dollar.

SELECTION OF CONTRACTS FOR PROCUREMENT REVIEW

As part of the audit we reviewed the procurement process used by the Telecommunications Division (e.g. the Marketing and Consulting section) within the Bureau of Communication and Computer Services (BCCS). The review included master agreements and individual procurement contracts for telecommunications equipment, services, and their maintenance.

DCMS provided a list of master agreements in effect and individual procurements

made during Fiscal Year 1992. We selected three master agreements for services and equipment, two individual procurements, and one Statewide maintenance master agreement. All contracts were selected due to the expenditures incurred for each contract. Expenditures in Fiscal Year 1992 totaled \$545,000 for the EKS/PBX contracts in effect; over \$635,000 for the 800 Megacom contract, and almost \$440,000 for the two individual procurements. Expenditures for the Statewide Maintenance contract totaled over \$1.4 million in Fiscal Year 1992. In addition, we selected the Illinois Bell US Sprint master agreement due to its significance to DCMS operations.

Our examination involved determining: 1) the advertisements used to solicit bids or proposals; 2) the type of document (RFP or RFI) used to solicit vendor responses; 3) the selection method and relevant criteria described in the RFP or RFI and that used by DCMS; and 4) documentation to show DCMS activities, including evaluations and management decisions, during the procurement process.

The auditors reviewed files on these procurements maintained by the Telecommunications Division and the Contract Administration Division within the Office of Finance and Management.

METHODOLOGY FOR APPLICATION REVIEWS OF MONIES AND TBAR

The Department uses MONIES (Management of Network Income Expense Services) to record, process and store data and information for telecommunications operations. DCMS uses TBAR (Telecommunications Billing & Accounts Receivable) to process and record data related to vendor invoices and agency billings. DCMS also uses data from TBAR to develop financial statements for the Communications Revolving Fund.

Application controls are the methods, policies and procedures adopted by an organization to ensure that all transactions are entered, processed and reported correctly. Application controls ensure that data entered, processed, and stored are complete and accurate. These controls ensure that the output from the computer application are timely and accurate.

Application controls can be grouped into three areas: input, processing and output. Input controls ensure that the data entered into the system are authorized and accurate. These controls include both the manual and computerized techniques. Processing controls are those that are coded into the software program. Manual procedures often supplement the programmed controls to verify that all the processing has taken place as intended. Output controls govern the printing and distribution of the reports.

Auditors performed the reviews in conjunction with the Office of the Auditor General's Division of Information Systems which developed the application audit program. This program allowed the staff of the Performance Division of the Office of the Auditor General to examine the policies and procedures for the MONIES and TBAR Application that

are in place at Administration and Planning, Data Processing, and Accounting.

We examined documentation, conducted interviews, performed observations, assessed risk, and conducted tests of compliance.

We relied upon the Auditor General's BCCS Third Party Review for FY93 issued in July 1993 for the general controls at BCCS. We relied upon the security review that the Division of Information Systems of the Office of the Auditor General performed as part of that Third Party Review.

Appendix C

AGENCY RESPONSES

NOTE: *Following responses are Auditor's Comments. Numbers for comments are in margins of agency responses.*



**DEPARTMENT OF
CENTRAL MANAGEMENT SERVICES**

Stephen B. Schnorf, Director

April 28, 1994

Mr. William G. Holland
Auditor General
State of Illinois
509 South Sixth Street
Springfield, Illinois 62706

Re: Management Audit of DCMS' Telecommunications Operations
LAC Resolution Number 97

Dear Mr. Holland:

The attached responses reflect our position to the aforementioned draft report submitted to us on April 19, 1994.

If I may be of further assistance, please contact William Winberg, Chief Internal Auditor, or me.

Sincerely,

Stephen B. Schnorf
Director

SBS:WW:hs
Attachment

cc: Michael Schwartz
Gary South
William Vetter
William Winberg
Jim Schlouch
John Wolters ✓

APR 28 PM 3 10

AUDIT GENERAL
SERIALIZED

RECOMMENDATION NUMBER ONE

The Department of Central Management Services' strategic planning committee for telecommunications should meet on a regular basis to update its Strategic Plan as required by 20 ILCS 405/67.08, and on a regular basis, formally assess the telecommunication needs of State agencies as required by 20 ILCS 405/67.18.

DCMS Response:

1 This recommendation does not accurately reflect the cited statutes. There is no requirement in those statutes calling for the Department or its strategic planning committee to meet on a regular basis to update the strategic plan, nor is there any requirement that there be a formal assessment on a regular basis of agency telecommunications needs. The way the recommendation was written implies a violation of statute where no such violation exists.

DCMS, nevertheless, concurs with the recommendation that the strategic planning committee should meet on a regular basis to update the strategic plan and formally assess the telecommunication needs of State agencies.

2 The auditors' assertion notwithstanding, the strategic planning committee was formed before the audit began and has met at least quarterly during the past three years. As we now specifically prepare for the issuance of an RFP to address the period beyond the current statewide network contract, the committee meets at least twice per month. In addition, DCMS has held quarterly telecommunications coordinators meetings and emerging technology forums to keep the coordinators informed of new services offered and to receive input as to additional telecommunications services they require. DCMS agency services staff meets with agencies on an ongoing basis to develop solutions to meet their telecommunications needs.

RECOMMENDATION NUMBER TWO

The Department of Central Management Services should continue to conduct administrative planning activities to ensure the Department has an appropriate organizational structure and documented policies and procedures for telecommunications functions.

DCMS Response:

DCMS concurs with the recommendation that DCMS should continue to conduct administrative planning activities to ensure that the Department has an appropriate organizational structure and documented policies and procedures for telecommunications functions. The auditors clearly recognize that administrative planning is taking place since the recommendation encourages DCMS to continue to conduct administrative planning activities.

Administrative planning has been conducted within BCCS on an ongoing basis. Examples during the past three years include budget plans, information system plans and a business plan for telecommunications. The DCMS report referenced in the audit draft report is an example of administrative planning. It outlined both organizational structure and staffing plans required to achieve our goals. Most recommendations of that report have been implemented during the past three years as need and resource availability have allowed. DCMS will continue to conduct administrative planning activities to ensure an appropriate organization structure is maintained and policies and procedures for telecommunications functions are documented.

The resolution calling for the audit specifies, "it cost the State \$88 million in FY91 for its telecommunications services." From FY91 to FY94, significant growth occurred in telecommunications. Good administrative planning, with a positive effect, can be seen in the growth of service compared to total expenditures. For example, the number of telephone lines from our nine largest Centrexes increased approximately 10 percent, and the number of calls increased 45 percent. The number of voice service orders processed increased 166 percent. The total number of data circuits increased 57 percent, and the number of stations services increased 260 percent. All of this growth took place during the same period that actual total expenditures for telecommunications decreased from \$91.8 million in FY91 to \$81.7 million in FY93.

RECOMMENDATION NUMBER THREE

The Department of Central Management Services should, in consultation with the Capital Development Board, conduct a cost-benefit analysis of constructing or purchasing space prior to leasing space of more than 10,000 square feet as required by the statute (20 ILCS 405/67.02).

DCMS Response:

3 DCMS concurs with the recommendation that, in consultation with the Capital Development Board, a cost-benefit analysis of construction, purchase or lease should be conducted prior to leasing space of more than 10,000 square feet as required by the statute (20 ILCS 405/67.02). The space procurement in 1988 was determined by DCMS not to be a lease procurement. In FY93, DCMS determined a lease to be appropriate and conducted a cost-benefit analysis in consultation with the Capital Development Board.

RECOMMENDATION NUMBER FOUR

Department of Central Management Services should develop a new strategic plan for telecommunications which addresses and evaluates the following issues:

- **alternatives to the current network architecture;**
- **alternative access arrangements;**
- **the grade of network service;**
- **the use of PBXs vs. Centrex services;**
- **the conversion of agencies and universities onto the Statewide Network; and**
- **a network management information system.**

DCMS Response:

DCMS concurs with this recommendation. A detailed plan and schedule have been developed addressing these issues and continue to be followed. We have a strategic planning committee that has been meeting quarterly for three years. As we now specifically prepare for the issuance of an RFP to address the period beyond the current contract, the committee meets at least twice per month. With the Network Contract now within two years of termination we have issued an RFP to select a consultant to assist us with the effort.

- DCMS has completed comprehensive network reviews in two annual redesigns which included evaluation of new technologies. They were fully examined for applications and cost effectiveness. To date ISDN and SS7 are installed in our network, and ATM is being discussed with some users. New technologies such as these are being used every time where they are determined to be cost-effective. The network is capable of providing for other new technologies when it is determined that they serve a purpose. The State's network utilizes the "switch as a hub" concept or tandem switch. Centrex translations are programmed to provide least cost routing. The majority of the State's network traffic has three routing option choices with the least cost option always selected first.
- Access costs are analyzed regularly and available alternate access solutions continue to be explored.

4

- Installation of an inferior grade of service has been reviewed and deemed as inappropriate.
- Comparisons are routinely completed whenever DCMS reviews the choice of PBX or Centrex.
- With full cooperation of the Lottery, DCMS is converting the Lottery, which is the final and most complex agency, onto the Network. DCMS is planning the conversion of NIU and WIU's voice traffic onto the network. Data traffic from WIU is already on the Network along with video for distance learning. All voice conversions will provide significant savings to the State.
- DCMS already has announced an award to purchase a network management system as a result of a competitive procurement.

RECOMMENDATION NUMBER FIVE

To ensure that the best interests of the State are secured in the procurement of telecommunications equipment and services, the Department of Central Management Services should:

1. Use language and terms in advertisements and solicitation documents which are consistent with the definitions and guidelines specified by DCMS procurement rules;
2. Consistently apply criteria in the evaluation of vendor offerings in the procurement process;
3. Document evaluations to show the winning proposal to be the best of those submitted considering price and any other predetermined criteria;
4. Fully document and justify that decisions related to the procurement process and contract awards are in the best interests of the State; and
5. File contracts with the Comptroller's Office.

DCMS Response

DCMS concurs with this recommendation and follows all applicable statutes and administrative rules when procuring telecommunications equipment and services.

- DCMS documents, even when not required, the selection process and management decisions specified by the administrative rules and the State Records Act. 5
- DCMS files all required contracts with the Comptroller's Office.
- DCMS uses consistent criteria in the selection process and treats all vendors equitably, and more importantly, procures in the best interests of the State, as shown by the considerable savings the procurement process provides. 5

**MATTER FOR CONSIDERATION BY THE
GENERAL ASSEMBLY**

The General Assembly may wish to revise the Purchasing Act (30 ILCS 505/6) to require DCMS to use a sealed bid or sealed proposal method of procurement for telecommunication services and equipment. The General Assembly also may wish to give DCMS the authority to conduct Best and Final Offer processes according to established procedures when using a sealed proposal method of procurement.

DCMS Response:

6 DCMS would support legislation mandating competitive procurement procedures since that is consistent with current Department procedures. DCMS also uses a Best and Final Offer process when appropriate.

RECOMMENDATION NUMBER SIX

The Department of Central Management Services should develop or procure a new accounting system that will provide cost accounting information and perform accrual basis accounting for the Communications Revolving Fund.

DCMS Response:

DCMS concurs with this recommendation that the CRF accounting system should provide for cost accounting information and accrual basis accounting. Actually, DCMS has been involved in an ongoing effort for eighteen months now to accomplish this goal. During the Summer of 1992, we initiated a comprehensive internal review of DCMS accounting systems with the assistance of The Bronner Group in order to identify needed improvements. Study recommendations were finalized in March of 1993. DCMS management accepted the study's general insights and recommendations and assigned responsibility for developing plans to address the issues to the Office of Finance and Management (OOFAM).

Since then:

- A specific plan has been developed to have all vendor billing information (paper bills, summary tapes, etc.) reviewed, processed and approved by BCCS prior to being received in Accounting. The plan also includes specific steps to, where possible, eliminate summary tapes and replace them with detail tapes from the vendor. This plan is currently being implemented and is expected to be completed during the Summer of 1994.
- A specific plan has been developed to create an automated Accounting Information System (AIS) as a feeder system of automated obligation and expenditure information which will originate in Bureaus and flow to Accounting and, after approval, directly into the Generalized Accounting System (GAS) without having to rekey the information. All CRF vendor invoice information will go to BCCS for review, processing and approval prior to being sent to Accounting via AIS. We expect the AIS application to be ready for initial testing in May, 1994, with some Bureaus and funds using the system before the end of FY94.
- In the Fall of 1993, DCMS hired a computer programming consultant to specifically assist with development of the AIS computer application and subsequent move of the CRF from TBAR to GAS.

- A specific planning group has been formed to develop a plan to move the CRF accounting from TBAR to the GAS system once AIS has been implemented. The initial process has been focused on how to modify what is good in TBAR to use as a feeder system to AIS. We hope to move CRF accounting from TBAR to GAS as early as possible in FY95. Moving to GAS will allow the CRF to utilize sub-accounts and project codes which offer an opportunity for detailed profit/cost center and other cost accounting benefits.
- The final stage of AIS prior to entry into GAS is an Accounts Payable Pending File for Accounting review and processing. A specific planning group has been formed to develop a plan for automating most accounting ledgers (and eliminating manual ledgers) in this processing stage. Implementation of AIS where liabilities will be entered early in the processing cycle by Bureaus as goods and services are received along with automation of Accounting's ledgers will facilitate enhanced accrual basis accounting information.
- BCCS created a position to focus specifically on establishing cost accounting procedures in the CRF as the above changes are being finalized and implemented. This position was filled on February 1, 1994. An RFP has been developed and advertised to select a consultant and appropriate software to collect, analyze and report cost accounting information.

11

As the above activities indicate, we have been engaged in a long-term project to improve the CRF accounting systems, including cost accounting and accrual basis accounting enhancements. This project began before the current audit process began.

RECOMMENDATION NUMBER SEVEN

The Department of Central Management Services should ensure that information systems have adequate controls to promote and preserve the integrity of data and information produced by these systems. Also, DCMS should ensure that a new accounting system has adequate controls prior to system implementation.

DCMS Response:

DCMS concurs with the recommendation that we should ensure that information systems have adequate controls to promote and preserve the integrity of data information produced by these systems, and that DCMS should ensure that a new accounting system has adequate controls prior to system implementation. DCMS has had an ongoing effort in the area of system controls, specifically:

- System Security - in addition to the MONIES system access security, DCMS placed MONIES under RACF security. These two levels of security provide MONIES a twofold control over access. TBAR, besides limiting access by user, also has RACF security.
- Tariff tables are obtained from an independent vendor who provides accurate tariffs to nationwide customers.
- Data Base standards were established after a thorough review of all parts of the MONIES inventory. Both an inventory file clean-up and audit system are in place to ensure conformance to these standards.
- An internal audit review and sign-off of the MONIES system documentation and audit controls had been completed.
- Two separate management reviews of MONIES system use were performed by BCCS staff. An independent consultant reviewed TBAR system use and provided recommendations that management is acting upon.
- A MONIES system administrator had been hired to ensure effective planning for optimal system performance and to preserve the integrity of data and information produced by this system.
- Controls over file updates are segregated to appropriate staff, to ensure unauthorized access.

DCMS will continue to ensure the adequacy of controls over its existing and new systems.

7

The audit's narrative conclusions regarding the TBAR suggest that Accounting manually overrides the TBAR system to make payments to vendors which have not been approved for payment by Accounting management. This is not correct. Accounting does occasionally manually process vouchers for payment without waiting for the next scheduled TBAR computer run. However, the manually processed vouchers have been reviewed and approved for payment by Accounting management prior to processing.

RECOMMENDATION NUMBER EIGHT

The Department of Central Management Services should ensure that accounting transactions are properly recorded in its accounting records and financial statements for the Communications Revolving Fund. DCMS should also establish documented policies which clearly delineate their control over telecommunications equipment procured by State agencies including universities.

DCMS Response:

DCMS concurs with the recommendation that accounting transactions should be properly recorded in accounting records and financial statements for the CRF and that documented policies should be established to delineate the extent of DCMS's control over telecommunications equipment.

We believe the accounting treatments we originally used related to the statewide network purchases and vendor commissions and bonuses were acceptable treatments under Generally Accepted Accounting Principles (GAAP). For example, it is sometimes appropriate to capitalize services necessary to make purchased equipment usable. Our original treatment of these transactions were not raised as concerns or problems during several compliance and financial audits by external auditors which occurred subsequent to the original transactions. However, we also believe that the way you would have preferred these transactions be handled are also acceptable treatments under GAAP.

After discussion with the external auditors doing the FY93 GAAP financial audit, we agree to change our accounting treatment of these transactions and made the necessary adjustments in the GAAP package and in our Accounting treatment procedures. A total of \$17 million was reclassified from equipment to prepaid expense, not the \$23 million amount referred to in the audit narrative. We believe these issues were appropriately resolved in the GAAP financial audit process to everyone's satisfaction.

8

RECOMMENDATION NUMBER NINE

The Department of Central Management Services should continue to develop management information systems that will allow management to monitor internal activities and those conducted by vendors under contract. The Department should also ensure that internal audits for telecommunications are conducted as required by the Fiscal Control and Internal Auditing Act (30 ILCS 10/2003).

DCMS Response:

DCMS concurs with the recommendation to continue developing management information systems that will provide critical reporting. This system need was conceptually outlined in the March, 1991 DCMS report on telecommunications business functions, and details the report formats and contents.

DCMS assigned resources to work on this system in 1992 and work continues on the system development. Progress towards this goal has been steady, with the MONIES database standards phase nearing full implementation. Reports on internal performance and vendor performance have been completed in both voice and data areas.

This recommendation supports efforts that were already in progress within BCCS before this audit was begun.

RECOMMENDATION NUMBER TEN

The Department of Central Management Services should ensure the accuracy of agency bills by:

- **centralizing functions responsible for reviewing vendor invoices and preparing agency bills;**
- **improving coordination with agencies to ensure the MONIES inventory database is accurate;**
- **performing regular reviews of vendor invoices; and**
- **maintaining adequate support documentation.**

DCMS Response:

DCMS concurs with the recommendation that DCMS should ensure the accuracy of agency bills. Efforts to accomplish this are in place or in process of implementation.

- **centralizing functions responsible for reviewing vendor invoices and preparing agency bills**
- **improving coordination with agencies to ensure the MONIES inventory database is accurate**
- **performing regular detailed reviews of vendor invoices and maintaining adequate support documentation.**

Some agencies had chosen not to bring services onto the Network and were therefore responsible for verifying the accuracy of invoices for those services. However, in May, 1992, DCMS contracted with a vendor to conduct a review of AT&T invoices for such service. As a result of that review, DCMS was able to gain refunds for those agencies and for the State. As noted by the auditors "The Department should be commended for hiring a contractor to review vendor invoices."

RECOMMENDATION NUMBER ELEVEN

The Department of Central Management Services should apply telecommunications payments made by agencies or credits issued to past due agency account balances. The Department should also ensure that its accounting systems can identify the fiscal year in which the unapplied credit was posted.

DCMS Response:

DCMS concurs with the recommendation that unapplied telecommunications payments and credits should be applied to past due agency account balances when appropriate. We also agree that the accounting system should identify the fiscal year in which the credit was posted.

Agencies sometimes make payments to the CRF without identifying the specific billing account to which the payment should be applied. As a temporary measure, such payments are posted to the agency's unapplied payments account. Also, DCMS sometimes issues a credit to specific billing accounts where the billing activity for the fiscal year is less than the amount of the credit. In both cases, the agency gets credit for these payments and credits.

DCMS staff contact agencies to try to resolve unapplied payments and credits which are large and material amounts. In addition, DCMS sends each agency a copy of the monthly Accounts Receivable Posting System (ARPS) Report which shows the outstanding unpaid balance for each of their billing accounts and also shows the amount posted to their unapplied payments account. Agencies are expected to use these ARPS Reports to review past due charges, investigate reasons for delays in payment and identify unapplied payment/credits for which they need to contact the Accounting Division and specify the invoices or billing accounts to which these amounts should be credited.

We stress to agencies the importance of posting unapplied payments and credits to appropriate agency billing accounts. Despite efforts by Accounting Division and BCCS staff to resolve unapplied payment and credit issues and apply these amounts to specific billing agency accounts, some issues remain permanently unresolved.

DCMS would like to clarify the audit narrative (page 71, fifth full paragraph) which is potentially misleading in that it states, "Public Aid actually had a [FY92] credit balance of about \$121,000." The auditors apparently intended to point out that FY92 bad debt expense could be reduced or eliminated by application of FY92

unapplied payments and any appropriate FY93 billing credits against past due amounts.

We suggest the changes in wording to this paragraph to the following:

"Our review of FY92 CRF accounts showed agencies with past due accounts also made payments or had credits which were not applied to past due account balances as of June 30, 1993. For example, at the end of FY93, DCMS records show the Department of Public Aid had a past due FY92 amount of approximately \$86,000, however, Public Aid also had an FY92 unapplied payment amount of \$22,310, and an FY93 unapplied credit amount of \$184,885. The FY92 unapplied payments could have been applied to the past due FY92 amounts. The FY93 unapplied credit could also have been applied to reduce the Public Aid bad debt to zero." 7

It would also be helpful to clarify Exhibit 6-5 to separate FY92 bad debt and unapplied payments from FY93 unapplied credits. Attached is the suggested revised Exhibit 6-5.

Exhibit 6-5
TOP TEN AGENCIES WITH BAD DEBT
AND UNAPPLIED PAYMENTS FOR FISCAL YEAR 1992
AND UNAPPLIED CREDITS AS OF JUNE 30, 1993

<u>AGENCY</u>	<u>FY92 BAD DEBT</u>	<u>UNAPPLIED FY92 PAYMENTS</u>	<u>FY92 NET</u>	<u>UNAPPLIED CREDITS 6/30/93</u>
Dept. of Child. & Family Services	\$95,956	\$ 5,463	\$90,493	\$53,820
Dept. of Public Aid	85,850	22,310	63,540	184,885
Illinois State Police	51,943	5,593	46,350	24,700
Dept. of Mental Health & Dev. Disabilities	49,570	17,106	32,464	38,440
Attorney General	35,751	0	35,751	6,967
Dept. of Rehabilitation Services	31,707	0	31,707	4,626
Dept. of Commerce & Community Affairs	29,316	733	28,583	6,961
University of Illinois	25,027	21,828	3,199	2,354
Governors State University	20,629	0	20,629	0
Dept. of Corrections	<u>20,549</u>	0	<u>20,549</u>	<u>345</u>
TOTALS:	<u>\$446,298</u>	<u>\$73,033</u>	<u>\$373,265</u>	<u>\$323,098</u>

Note: Totals do not add due to rounding. Unapplied credits are as of June 30, 1993. Unapplied payments and bad debt were incurred in Fiscal Year 1992, but were not written off until the end of Fiscal Year 1993.

SOURCE: OAG summary of DCMS Accounting Division report

RECOMMENDATION NUMBER TWELVE

The Department of Central Management Services should review invoices to identify appropriate vendor charges and credits for telecommunications. It should also record and deposit checks, received from telecommunications vendors as refunds, in accordance with the State Officers and Employees Money Disposition Act (30 ILCS 230/2).

DCMS Response:

DCMS concurs with the recommendation that DCMS should review invoices to identify appropriate vendor charges and credits for telecommunications and should also record and deposit checks, received from telecommunications vendors as refunds, in accordance with the State Officers and Employees Money Disposition Act (30 ILCS 230/2).

To meet those needs:

- a central control over CRF vendor invoices is being established in BCCS.
- a central control over credits requested from vendors has been established in BCCS.
- policies and procedures are being developed for both invoice and vendor credit control and tracking.
- Accounting has established procedures for the recording and deposit of vendor refund checks in compliance with the State Officers and Employees Money Disposition Act (30 ILCS 230/2).

RECOMMENDATION NUMBER THIRTEEN

The Department of Central Management Services should only pay telecommunication taxes or additional charges for which it is liable. The Department should also require telecommunication vendors to identify each tax or additional charge included on vendor invoices.

DCMS Response:

DCMS concurs with this recommendation. DCMS will develop policies and procedures outlining the auditor's tax liability findings and will implement reviews of vendor invoices to ensure compliance.

CHAPTER SEVEN - OTHER ISSUES

CHARGES FOR MAIL MESSENGER SERVICES

DCMS' policy to charge agencies is a valid methodology because it has a systematic, rational method of allocating cost. No better methodology exists, without the tremendous cost of using stamps and/or the counting of mailing pieces. Such methods were studied and were determined to be too costly for any possible benefits of equity to be gained.

SCOPE OF DCMS TELECOMMUNICATIONS RESPONSIBILITIES

10 DCMS maintains centralized inventory as a requirement for managing maintenance and repairs. If agencies were allowed to purchase equipment, there could be no savings achieved by statewide maintenance due to all the different types of equipment. Maintenance costs would increase dramatically since vendors would have to inventory so many different types of equipment. Without one centralized inventory, adds, move and change activity would be decentralized relying on the agencies to maintain an accurate inventory. The fact that equipment has been paid for and/or depreciated has nothing to do with its value to the State, so long as equipment works as well as when it was manufactured it has value to the State, and if eliminated, would have to be replaced at current new prices.

SECURITY FOR EQUIPMENT

DCMS agrees with the importance of security measures. All procurements are specifically planned by DCMS to provide for the security necessary. DCMS has every intention of continuing this policy, to protect the State from unauthorized calling at State expense.



Illinois Department of Commerce and Community Affairs

REC
AUDITOR GENERAL

Jim Edgar
Governor

'94 FEB 29 AM 8:55
an M. Grayson
Director

February 25, 1994

Mr. John A. Wolters
Audit Manager
509 South Sixth Street - Rm. 151
Springfield, Illinois 62701-1878

Dear Mr. Wolters:

The Department has reviewed our section of the draft report and has prepared the following response.

We contacted the Department of Central Management Services (DCMS) to obtain supporting documentation (ie. invoice numbers, dates,...) since we were never notified of the alleged bad debt, or of any attempts to collect the debt prior to its write off. DCMS supplied us with the seven invoice vouchers that made up the \$29,315.59 reported in your draft.

The Accounting Office researched the seven invoices and discovered the following:

- 1) In 4 invoices, DCMS recorded a credit amount less than the amount submitted on the credit adjustment form.
- 2) In 2 invoices, DCMS recorded a payment amount less than the actual voucher.
- 3) In 1 invoice there was a separate charge for \$0.25 that DCMS would not let us combine with another charge. Since the \$0.25 charge was from a separate funding source, we could not pay the charge because the Comptroller would not process a voucher for less than \$1.00.

The Department has supporting documentation on the seven invoices and associated transactions. This additional information clearly shows that the initial accounts receivable and the subsequent write off was erroneous.

I hope we can work together to correct this section of the audit draft to reflect this additional information. I also hope that the circumstances that allowed this potential problem to go undetected for an extended period of time is addressed and rectified during this management audit.

620 East Adams Street
Springfield, Illinois 62701

217/782-7500
Fax: 217/785-6454

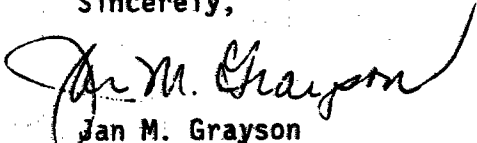
James R. Thompson Center
100 West Randolph Street, Suite 3-400
Chicago, Illinois 60601

312/814-7179
Fax: 312/814-6732
Telex: 910-221-5559

TDD Relay
Springfield: 217/785-6055
Chicago: 312/419-0667

Please inform me of the final resolution in this matter. If you need additional information or support, please contact Nancy Hilger (217) 785-6481 or Kevin Byrne at (312) 814-4277. Thank you for your consideration in this matter.

Sincerely,


Jan M. Grayson
Director

JMG:SV:mls

cc: Nancy Hilger
Kevin Byrne
Lynda Coker
Steve Valasek



**ILLINOIS
DEPARTMENT
OF
CORRECTIONS**



Jim Edgar
Governor

Howard A. Peters III
Director

1301 Concordia Court / P.O. Box 19277 / Springfield, IL 62794-9277 / Telephone: (217) 522-2666
TDD: (800) 526-0844

February 16, 1994

Mr. John A. Wolters
Office of the Auditor General
509 South Sixth Street, Room 151
Springfield, Illinois 62701-1878

Dear Mr. Wolters:

This letter is in response to the reference to the Department of Corrections' bad debt reported in the management audit of the telecommunications operations at the Department of Central Management Services.

The report's Exhibit 6-6, Top Ten Agencies with Bad Debt, lists a Department of Corrections unpaid balance of \$20,549 for fiscal year 1992. A summary accounts receivable aging report dated 6/30/93 listed the bad debt amounts by facility. The business administrators at each of these facilities said that fiscal year 1992 bills received in time to process before the end of the lapse period were paid.

Extra efforts are made each year-end to expedite payment of DCMS telecommunications invoices that are received too late in the lapse period to be processed normally. Our review of the major items comprising the balance of \$20,549 produced the following details:

Forty-five percent of the Department's bad debt total is the \$9,206.39 attributable to the Danville Correctional Center. This balance was for part of the charges for two Centrex lines for which the facility had not been billed since its opening in 1985. The invoice dated 9/29/92 was received on September 30, 1992.

The East Moline Correctional Center vouchered \$2,146.51 and took AT&T credits of \$2,095.81 against an invoice for \$4,242.31. It appears that the credits were not applied against the accounts receivable.

The bad debt amount for the Dixon Correctional Center is \$1,814.27. The center received a DCMS credit adjustment form dated 4/8/92 giving it a credit of \$1,817.27 for a line billed to the center instead of the medical contractor. Apparently the credit was not applied against the accounts receivable.

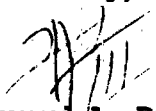
Page 2
Mr. Wolters

End of fiscal year 1992 budget projections for IYC-St. Charles indicated it would owe approximately \$4,000 for services for which billings had not been received. The aging report dated 10/1/92 indicated the center was billed \$5,010 on 9/17/92, but the center has no record of receiving this invoice.

The Taylorville Correctional Center total of \$1,058.26 represented credits taken for invoicing errors by a third-party contractor. The center was not aware that these credits were not processed. Disputed invoices are now paid as billed with corrective action pursued separately.

The Department of Corrections is diligent in paying for its goods and services in a timely manner. The Department, however, sometimes encounters circumstances which make timely payment difficult. Hopefully, the above details will demonstrate that the Department had made good faith efforts to pay the items which are now classified as bad debts.

Sincerely,



Howard A. Peters III
Director



Robert W. Wright
Director

Illinois Department of Public Aid

Jesse B. Harris Building
100 South Grand Avenue East
Springfield, Illinois 62762-0001

May 6, 1994

Mr. John A. Wolters, Audit Manager
Office of the Auditor General
509 South Sixth Street, Room 151
Springfield, Illinois 62701-1878

Dear Mr. ^{John}Wolters:

I have reviewed the revised text you provided on your audit of the Central Management Services (CMS) Telecommunications Operations and am providing the following comment.

The amounts identified as IDPA Bad Debt are actually disputed charges that have been communicated to CMS.

If you have any questions, please contact Mary Fritz at 782-1156.

Sincerely,

James R. Donkin, CIA
Chief Internal Auditor

JRD:mkf



ILLINOIS STATE POLICE

Office of the Director

Jim Edgar
Governor

March 4, 1994

RECEIVED
AUDITOR GENERAL
TERRANCE W. GAINER
DIRECTOR
SPRINGFIELD
PM 8 55
94 APR 16

Mr. John A. Wolters, Audit Manager
Office of the Auditor General
509 South Sixth Street, Room 151
Springfield, Illinois 62701-1878

Dear Mr. Wolters:

My staff reviewed the ISP portion of the DCMS telecommunications management audit. Following your discussion with Mrs. Juanita Charlton and your suggestion, she contacted CMS to request details of the reported ISP bad debt. CMS was able to supply summary reports only. Enclosed are copies of the reports for your review. Pages 94 through 98 are ISP accounts. Of the total past due, credits exceeded the billings by \$1,593.72. Regrettably, an explanation of how credits were applied cannot be provided due to the lack of details in the enclosed reports.

A significant part of the outstanding amount was due to billings for the Law Enforcement Agency Data System (see enclosed pages 166 through 169). The total charges were \$27,323.80, credit unapplied of \$4,080.20 and an outstanding balance of \$23,243.60. These charges are not paid by ISP. Although DCMS uses an "ISP" designator in the billing process, the circuits in question all belong to local police departments using the Law Enforcement Agency Data System network. These users are billed directly by DCMS and payments are made directly to DCMS Telecommunications Revolving Fund. ISP is not involved in this process and has no control over it.

Please do not hesitate to call Mr. Bud Pruett, Bureau of Fiscal Management, at (217) 782-4143 should you have any questions or wish to discuss this matter further.

Respectfully,

Terrance W. Gainer
Director

Enclosures

130

103 Armory Building, P.O. Box 19461 • Springfield, IL 62794-9461
(217) 782-7263 (voice) • 1 (800) 255-3323 (TDD)



USHMAN
COMMUNICATIONS CO.

217-535-2400

February 25, 1994

Office of the Auditor General
509 South Sixth Street
1st Floor
Springfield, Illinois 62701-1878
ATTN: John A. Wolters

Dear Sirs,

We are writing in response to your request for any additional information we may be able to offer your office, regarding CMS Telecom, and the Illinois Bell Communications Situation. I am sure you understand our firm feels it has been treated unfairly over the past 5 years. We were probably the largest supplier of telecom equipment to CMS of the approximately 30 small companies who had been bidding and servicing state equipment prior to 1989. Now, due to the present situation, hardly any of these small companies even bid to supply this equipment to the state. Our type of companies need new sales, but our life blood is ongoing maintenance and Move, Add, Change (MAC) activity. It is next to impossible to compete with Illinois Bell Communications when you know that after the first year you will have no maintenance or MAC activity.

CMS would never accept any used or refurbished equipment for the maintenance and MAC work. However, when I brought up the fact that Illinois Bell Communications would not be able to purchase new equipment from the manufacturers of the systems we had installed because they were not distributors and had no factory trained technicians, CMS changed the rules and allowed Illinois Bell Communications to utilize used and refurbished equipment. AND at only 10% below our price for the new equipment. We would gladly have offered a 25% discount, under these circumstances, if given the opportunity. However, we were not even called back for the best and final, even though originally we were approximately \$400,000.00 per year under Illinois Bell Communication's proposal.

Supposedly, one of the main reasons CMS awarded Illinois Bell Communications the project was to get all service under one contract. However, CMS asked us to continue service on several facilities, some of which we had not even installed, because Illinois Bell Communications could not or would not service them

405 NORTH WALNUT STREET • SPRINGFIELD, IL 62702

(ie Illinois State Police Headquarters, Springfield and Department of Children and Family Services, Quincy among others).

A perfectly good EPBX, only 3 years old which we had installed, was removed from service in Decatur when Macon County Public Aid relocated. When Illinois Bell Communications quoted a price to move the system CMS thought it was too expensive. They came to us for a quote and our price was about one half that of Illinois Bell Communications, and we received an order to relocate the system. We had people on the job preparing to wire the new building when the order was recended. Somehow Illinois Bell Communications and CMS decided to install centrex with new equipment and remove the EPBX.

Centrex brings up another disturbing situation. Several small companies throughout Illinois, including Ushman Communications, are Authorized Centrex Distributors for Illinois Bell Telephone Company (now Ameritech). However, CMS will not or can not purchase Centrex lines from these companies. For some unknown reason all this work is given to Illinois Bell Communications, who is also an authorized agent. We receive very good commissions on Centrex sales and would very much like to be involved with stat business.

These have only been a few examples of the problems we have encountered over the past 5 years, while trying to retain some state accounts. As I mentioned before most companies have chosen not to participate in state business because of the apparent lack of fairness they have experienced.

Should you have any questions concering this response or need any further information we would be very happy to sit down and converse.

Thank You,



Charles R. Ushman
President/ CEO

AUDITOR'S COMMENTS

1. 20 ILCS 405/67.08 requires DCMS to "develop and implement a comprehensive plan to coordinate or centralize communications among State offices at different locations. The plan shall be updated based on a continuing study of communications problems of State government. . . [emphasis added]." 20 ILCS 405/67.18(e) requires DCMS to "analyze the present and future aims and needs of all State agencies in the area of telecommunications services and plan to serve such aims and needs in the most efficient and effective manner [emphasis added]." Since 1987, DCMS has not formally updated its Strategic Plan or conducted a formal, comprehensive assessment of agencies' telecommunications needs.
2. The first evidence provided by DCMS of its strategic planning committee were minutes from a July 1992 meeting.
3. The terms of the 1988 agreement included language typically contained in a lease agreement. For example, DCMS was required to pay real estate taxes, insurance, utilities, tenant repairs and maintenance expenses, and other costs incurred by Illinois Bell in connection with the facility.
4. DCMS provided no documentation to show it had summarized or analyzed all access costs associated with the Statewide Network.
5. As noted in the text, certain documentation was lacking in five of the six procurements reviewed; also, in two procurements, inconsistent criteria were used.
6. As currently defined, competitive procurement procedures allow methods other than competitive sealed bids or competitive sealed proposals to be used in procuring telecommunications services. These other methods include negotiation with more than one vendor. The Matter for Consideration recommends that procurement methods be limited to either competitive sealed bids or competitive sealed proposals. The Matter for Consideration also recommends that DCMS' current use of a Best and Final process be conducted according to established procedures.
7. Text changed in report.
8. The financing agreement for the Statewide Network included an attachment which stated, "The contract for switching services will be with IBT in the approximate amount of \$23,000,000." In January 1994, after the conclusion of audit fieldwork, DCMS revised its financial statements to reclassify \$16.6 million of the \$23 million lease from equipment to prepaid expense.
9. As discussed in this Chapter, DCMS needs to improve its coordination with agencies regarding past due amounts and unapplied payments. A new accounting system, as recommended in Chapter Five, would also improve DCMS' ability to efficiently process agency billings and record agency payments.

10. The report narrative states that agencies would "purchase the equipment from DCMS." Since DCMS would continue to control the types of equipment purchased, maintenance costs should not increase due to different types of equipment being purchased.
11. The audit began in April 1992 with the passage of the Legislative Audit Commission Resolution Number 97; the Bronner contract, cited by the Department as the first step to review its accounting system, began during the summer of 1992.