REPORT BY THE

AUDITOR GENERAL

OF CALIFORNIA

AUDIT OF THE CALIFORNIA NETWORK SYSTEM (CALNET) ACQUISITION

P-949.1

JANUARY 1990

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Acting Auditor General

January 31, 1990 P-949.1

Honorable Elihu M. Harris, Chairman
Members, Joint Legislative
Audit Committee
State Capitol, Room 2148
Sacramento, California 95814

Dear Mr. Chairman and Members:

The Office of the Auditor General presents a report prepared under contract by Deloitte & Touche concerning the Department of General Services' design and procurement of the California Network System (CALNET).

In its response to our consultant's report, the Department of General Services states that the analysis is not accurate and that they cannot agree with the report's conclusions and recommendations. Deloitte and Touche has conducted its work in accordance with governmental auditing standards and is prepared to defend its report. They are also available for legislative testimony if requested.

Respectfully submitted,

KURT R. SJOBERG
Acting Auditor General

Deloitte &
Touche

STATE OF CALIFORNIA

OFFICE OF THE AUDITOR GENERAL

Audit of the
California Network System (CALNET)
Acquisition

January 29, 1990

AUDIT OF THE CALIFORNIA NETWORK SYSTEM (CALNET) PROCUREMENT
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EXECUTIVE SUMMARY

RESULTS IN BRIEF

The CALNET acquisition and associated procurement, involving approximately $100 million of the State's funds, was not executed following normal State policies and generally accepted normal business practices. Department of General Services (DGS) management did not consistently execute good management decisions relative to the basic strategy for designing and procuring CALNET.

In general, the CALNET acquisition and procurement process was inadequately documented. This made it difficult to substantiate the basis for many of the management decisions. During the conduct of our work, we discovered that many strategic decisions were based upon non-existent or missing analyses.

Because normal State oversight and acquisition practices were not followed, a viable business case has not been developed that shows CALNET, and the associated strategy used to acquire CALNET, to be cost effective and to be serving the State agency user needs. While the CALNET concept may be something the State needs to pursue, there should be assurances that it is cost-effective and linked to user agency needs before proceeding with such a significant commitment. Further, the State should be able to show the achievement of specific, documented objectives and results.

PURPOSE OF AUDIT

California's Department of General Services (DGS) has recently awarded a contract to establish the California Network System, known as CALNET. The CALNET procurement process is the subject of review for several reasons:

- The numerous changes made to the CALNET Request for Proposal (RFP)
- The specificity of certain requirements of the proposal
- The complexity of the issue

For these reasons, the Office of the Auditor General (OAG) was directed to conduct an audit of the DGS CALNET procurement. Deloitte Haskins & Sells, now Deloitte and Touche, was retained to conduct this audit.

The objective of this audit was to determine whether the CALNET design, acquisition strategy, and actual procurement process:

- Followed appropriate State laws, regulations, policies, and procedures
- Promoted open competition while still serving the best interest of the State.

This audit was conducted in accordance with the *Standards for Audit of Governmental Organizations, Programs, Activities, and Functions,* published by the Comptroller General of the United States and followed by the California Office of the Auditor General.

BACKGROUND OF THE CALNET PROCUREMENT

In 1964, the Automatic Telecommunications Switching System (ATSS) was built to serve the voice telecommunications needs of the State of California. The ATSS is still serving the State today and is planned to be replaced by CALNET.

The divestiture of American Telephone and Telegraph (AT&T), which began in January 1984, was mandated by the Modified Final Judgement (MFJ) issued by the United States Department of Justice. Divestiture forced the local operating companies (Pacific Bell for California) to operate as separate entities from AT&T. AT&T would be permitted to provide long distance calling service outside of local geographic areas (such as Sacramento). Other long distance carrier companies were also allowed to compete with AT&T for providing long distance service to customers.

Divestiture had a direct effect on ATSS. Two separate and distinct vendors were to provide the same services which was previously provided by one vendor. The long distance portion was to be provided by AT&T and the switching facilities and local access were to be provided by Pacific Bell. The above described definition of ATSS support responsibilities in the post-MFJ era is known as the Shared Network Facility Arrangement (SNFA), and was permitted by the United States

Department of Justice through an approved exception to the MFJ. This agreement is currently set to expire at the end of 1990, although, there have been previous extensions to permit the State to acquire an alternative.

DGS set about to acquire a replacement for ATSS which would be State owned and located on State premises for several reasons:

- The expiring of SNFA (which would probably result in higher tariffed rates charged to the State if nothing were done)
- Advances in telecommunications technology that offer State agencies new features and functions
- The flexibility to manage and control a private telecommunications network with the promise of significant savings to the State

With the assistance of various contractors and based on several consultant studies, a Request for Information was released June 1987. A Request for Proposals was subsequently released September 1987. After a multi-stage submittal, review, and resubmittal process, three vendor teams submitted final proposals in mid-February 1989:

- Electronic Data Systems (EDS)
- GTEL (a subsidiary of General Telephone)
- AT&T

After two protests and one petition to the Superior Court, GTEL was finally awarded the CALNET contract on November 28, 1989.

PRINCIPAL FINDINGS

DGS HAS NOT ADEQUATELY MANAGED THE CALNET PROJECT AND RELATED PROCUREMENT

DGS management did not ensure that normal State checks-and-balances for such a project were followed. Normally, State Administrative Manual (SAM) guidelines would have been followed relative to a Feasibility Study Report (FSR). Because an FSR was not developed, the following problems ensued:

- Specific user needs, or problems to be solved, were not clearly identified and are not traceable to RFP requirements.

- Most claimed benefits were poorly defined, undocumented, and difficult to substantiate.

- All costs associated with the life cycle of the project were never comprehensively or realistically estimated.

THE NEED FOR TWO KEY REQUEST FOR PROPOSALS REQUIREMENTS ARE NOT SUPPORTED

DGS desired to take control of the new telecommunications network, and their desire was expressed via two mandatory RFP requirements: (1) purchase (i.e., hold title to) CALNET equipment and, (2) place CALNET equipment on State premises. There are several ways of implementing control over CALNET resources. However, it is not clear that the level of control desired by DGS (which was not documented) will necessarily be met by these two requirements. By restricting vendors to only propose solutions that included these two requirements, the following problems ensued:

- Major vendors who are restricted by federal mandate from selling telecommunications equipment and software because of the MFJ, could not submit qualifying proposals.

- Other solutions were not examined by DGS which may have been able to meet DGS' objectives.

- Even though SAM states that purchasing is preferable to leasing, DGS assumed, without analysis, that the best financing alternative was to purchase CALNET rather than allowing the vendors to bid their best financing alternative (within State fiscal constraint and cash flow requirements).

While it may be appropriate to purchase CALNET and place it on State premises, no analysis was performed to support these requirements, the impact on competition within the State was not adequately considered, and it was assumed that the only way to meet the objective of control was via these two restrictive requirements. In essence, DGS presupposed a judgement as to what would be made available to satisfy a functional need. The open competition process is supposed to determine this, but it was not allowed to operate.

DGS WAS INCONSISTENT IN DETERMINING MATERIAL DEVIATIONS FROM THE REQUEST FOR PROPOSALS, AND WHETHER THE DEVIATION WAS SIGNIFICANT

A two phase procurement process was conducted by DGS to give bidding vendors and the State an opportunity to point out material deviations in a draft proposal so that it could be modified before final proposals were submitted. While DGS gave no assurances that all material deviations would be pointed out during the draft proposal stages, several material deviations were pointed out by DGS after final proposals had been submitted that should have been pointed out during the draft proposal stages. This is of particular concern since, after final proposals were submitted, the vendors were not allowed to correct their deficiencies. State practice for the last 15 years has been to take whatever steps are necessary to ensure that such deviations are identified for vendors beforehand. Lack of documentation by DGS did not permit us to determine why material deviations were not pointed out until the final proposal stages.

DGS also did not weigh the relative significance of material deviations to the overall procurement. A $20,000 material deviation was found for EDS which is insignificant (.02% of the total purchase price) when compared to the overall price of approximately $100 million. The $20,000 deviation would probably have been resolved via contract negotiations.

VENDOR PROPOSAL EVALUATION GUIDELINES WERE NOT CONSISTENTLY FOLLOWED

SAM and DGS vendor proposal evaluation guidelines relative to meeting notes and documentation were not consistently followed. For example, detailed proposal evaluation work sheets were discarded and many formal and informal meetings with vendors were not documented. It was also impossible to trace the differences of vendor cost information, found in DGS' final Evaluation and Selection Report, to vendor proposals since detail work papers and audit trails were not kept. As a result, the procurement and vendor selection process by DGS cannot be substantiated by the documentation.

CONCLUSIONS

PUBLIC POLICY AND ADMINISTRATION ISSUES WERE NOT ADEQUATELY CONSIDERED BY DGS

In our view, DGS did not adequately consider all aspects of the impact CALNET will have on the State after it is implemented. Specifically:

- Should the State take on the responsibility of a telephone company-like business? The telecommunications technology and services to be provided by CALNET are similar to a public telephone company. The issues of the State competing with private enterprise, and whether the State wants to take on the associated fiduciary and operational responsibilities were not adequately considered by DGS. These issues also were not raised to the Administration or the Legislature.

- Should normal State checks-and-balances have been invoked for such a large project? Since CALNET is such a revolutionary project for the State, oversight control should have not been bypassed.

THERE IS NO ASSURANCE THAT THE MOST COST EFFECTIVE SOLUTION WAS ACQUIRED

Because a comprehensive feasibility study was not conducted, we believe it is impossible for DGS to reliably report to the Administration and the Legislature the expected costs, benefits, and fiscal year cash flow requirements of the CALNET project. Even though current funds are planned to cover CALNET project costs, there should be full and complete analyses to reliably estimate net costs to ensure that adequate funding will be available in the years to come. In addition, we could find no consideration given for the impact of Job Change Orders (JCOs) on the State's budget. On large projects, such as this one, it is reasonable to project some significant level of JCO costs into the budget.

FULL COMPETITION MAY HAVE BEEN LIMITED

In our view, full competition was unnecessarily limited due to the "purchase" and "premise" RFP requirements. It is clear that the State precluded vendors from bidding who are restricted by the Modified Final Judgement from selling equipment. There exists, to our knowledge, no documentation to support the appropriateness of such a decision by DGS/TD.

RECOMMENDATIONS

CONDUCT A FEASIBILITY STUDY BEFORE PROCEEDING

A feasibility study which meets SAM guidelines should be conducted before proceeding with the CALNET project. The Department of Finance Office of Information Technology or the Legislature should be the oversight agency to review and approve the Feasibility Study Report for the entire CALNET project.

USER REQUIREMENTS SHOULD BE CURRENT, DOCUMENTED, AND TRACEABLE

Without analysis of the user requirements, it is not clear that many RFP requirements are important or even necessary. It is important, therefore, for the State to obtain and document user needs so that the success of CALNET can be correctly judged. The costs associated with meeting user needs should be identified and weighed against the importance of the expressed needs. Further, needs should be documented so unnecessary functions and current approaches no longer needed are eliminated once CALNET is implemented.

STATE CODE AND REGULATIONS NEED TO BE MODIFIED TO INSTITUTE OVERSIGHT AND CONTROL

The current confusion regarding the applicability of SAM Sections 4800 through 5180 to DGS/TD needs to be explicitly resolved by amending law, SAM, or both. DGS/TD should be required to follow SAM FSR requirements for DGS/TD projects. In our view, OIT should serve as the oversight agency for DGS/TD projects while DGS/TD can continue being the oversight agency when a State agency/department acquires telecommunications equipment and services.

Alternatively, the Legislature could be the oversight body as is the practice for Department of Finance information system projects.

THE STATE SHOULD DETERMINE THE EXTENT TO WHICH IT WANTS TO ASSUME TELEPHONE COMPANY-LIKE RESPONSIBILITIES

We believe there are two public policy issues that the Administration and the Legislature should resolve before proceeding with the CALNET project:

- Should the State directly compete with private enterprise for public utility services?
- Should the State assume the fiduciary and operational responsibility of CALNET as opposed to just contracting for telecommunications services?

I. INTRODUCTION

BACKGROUND OF CALNET PROCUREMENT

INTRODUCTION

The following narrative provides historical background of major events involving State telecommunications as they relate to the CALNET procurement. The narrative is intended to give the reader a proper historical context and understanding before reading our findings, conclusions, and recommendations. This narrative is also intended to be a factual recount of history that shaped the CALNET project; our interpretation of the effect of those historical events on the CALNET project will be reserved for our discussion of findings.

HISTORICAL SUMMARY

In 1964, the Automatic Telecommunications Switching System (ATSS) was built to serve the voice telecommunications needs of the State of California (State). Today, the ATSS network utilizes three Common Control Switching Arrangement (CCSA) switching nodes which are operated jointly by Pacific Bell and AT&T. The switching nodes are located in telephone central offices in Sacramento, Los Angeles, and Oakland. The ATSS Network utilizes high speed digital facilities to link the three CCSA switching nodes.

In 1975, DGS published *The Statewide Telecommunications Master System* report which recommended the creation of a multiple-user shared network. We understand this recommendation was not implemented as each agency wished to retain control of its independent telecommunications facilities.

In August 1982, the Modified Final Judgement (MFJ), issued by the Federal government, called for AT&T to submit to the United States Department of Justice a plan of reorganization which set the stage for the forthcoming divestiture of AT&T in 1984.

In 1983, the State engaged Contel Information Services to provide an analysis outlining the development of a privately provided integrated telecommunications network for the State. Based on the consultant's work, a Budget Change Proposal (BCP) was approved in the 1982-83 budget to begin work on an integrated network.

In April 1983, the Legislative Analyst Office published a report on technology to the Legislature. Findings in this report included:

- DGS relied too heavily on the telephone company and was remiss for not pursuing the acquisition of equipment and services from other suppliers.

- DGS was not taking advantage of the competitive market, as were other large users, by considering the purchase of network equipment.

In September 1983, Executive Order D-21-83 directed the Office of Information Technology (OIT) in the Department of Finance (DOF), to plan for the effective utilization of telecommunications services in State government.

The divestiture of AT&T was started in January 1984. Prior to divestiture, Pacific Telephone and Telegraph Company (PT&T), a subsidiary of American Telephone and Telegraph (AT&T), operated ATSS through its California operating company, Pacific Bell (Pac Bell). At divestiture, PT&T became Pacific Telesis. Pac Bell, a subsidiary of Pacific Telesis, continued to provide local exchange services to its customers in California but was prohibited from selling telecommunications equipment and providing long distance telephone services. The maintenance and ownership of ATSS was bifurcated between AT&T and Pac Bell. The long distance portion was to be provided by AT&T and the switching facilities and local access were to be provided by Pac Bell.

This Shared Network Facility Arrangement (SNFA) was permitted through a temporary exemption to the Modified Final Judgement (MFJ) at the time of divestiture of AT&T. This agreement is set to expire at the end of 1990.

During 1984, two bills were introduced in the Legislature, neither of which passed, which shows the level of interest the Legislature had about the management of State telecommunications:

- AB 854 which would have established a Department of Communications within the State and Consumer Services Agency

- SB 1395 which would have created "Cal-Com", the California Communications Cooperative, a nonprofit entity incorporating DGS's Office of Telecommunications, local governments, and other nonprofit organizations throughout the State

In response to legislative interest in telecommunications policy, the DOF/OIT and the Department of General Services (DGS) Office of Telecommunications (now Department of General Services/Telecommunications Division) published, with the assistance of Arthur Andersen Consulting, its *Telecommunications Strategy for State Government* report in April 1984. This report broadly outlined three strategies for the State to pursue:

"• Assume management of telecommunications costs and facilities

- Control the use of long distance telecommunications facilities

- Prepare individual agencies for new telecommunications responsibilities."

The report also recommended the addition of $18 million to DGS' budget to begin implementation of an integrated voice and data network. As a result, a BCP was developed and approved for the fiscal year 1984-85 budget. The Legislature later removed this money from the budget stating that further study was needed.

In September 1985, Arthur Andersen Consulting was contracted to conduct a study of the Public Safety Microwave System (PSMS). The purpose of the study was to identify the role of the State's PSMS in future telecommunications system planning and to make recommendations as to its long-range direction. The recommendations included adding technical staff, developing better network management techniques, enhancing training programs, and expanding the network to accommodate more users.

In April 1985, the Little Hoover Commission issued its *Review of the Organization and Management of the State's Telecommunications* which urged the State to create the Department of Telecommunications and Information Technology. The department was to provide a plan for post-divestiture telecommunications. The Little Hoover Commission's recommendations, however, were not implemented.

Also during 1985, AB 808 was introduced. This bill would have established a Department of Communications and Information Resources Management combining the State's telecommunications and data processing units into one organization. AB 808 passed both houses of the Legislature but was vetoed by the Governor.

In October 1986, Touche Ross & Co. studied the feasibility of alternatives to the State practice of renting switching equipment from Pac Bell. From this study the State concluded that basic services (e.g., call transfer, call hold, speed calling) were more cost effectively provided by CENTREX and enhanced services (e.g., call hunting, call queuing, least cost routing) were more cost effectively provided by customer premise equipment (CPE).

In September 1986, DH&S issued a report, on behalf of the Office of Auditor General (OAG), which evaluated the State's plans, policies, and procedures for developing and managing its electronic data processing and telecommunications systems, and for acquiring the related goods and services. The report recommended that DGS have responsibility for planning and managing State telecommunications resources, but that OIT still be retained as the oversight authority for DGS telecommunications projects.

In 1986, AB 816 was introduced to direct DGS to coordinate two regional telecommunications projects, one in northern California and one in southern California. AB 816 did not pass.

In October 1986, SB 1733 authorized DGS to create a Telecommunications Division which would include a policy and planning unit which would provide "... advice and assistance in the selection of telecommunications equipment for State agencies." This bill also established a Telecommunications Advisory Board (TAB) to advise DGS on the following:

- Policies, plans, standards and designs
- Practices for operation of telecommunications systems
- Technology; its implementation and use

The first TAB meeting took place in July 1987.

DGS PROCUREMENT OF CALNET

From May through December 1986 a study was conducted by the joint team of Morrison-Knudsen Engineers, Inc. and W and J Partnership. (This study is now more commonly referred to as the "W and J Study"). The contract for this study was between DGS and Morrison-Knudsen, but Morrison-Knudsen subcontracted the work to W and J Partnership.

The outcome of the 1986 W and J Study was the recommendation for the procurement of an integrated voice, data, and video backbone network with a centralized network management system. During this study, the name CALNET came into being.

In March 1987, the *Telecommunications Strategy for State Government* report, an update of the April 1984 telecommunications strategy report, was prepared by DGS. The report redefined the original strategies and presented the following four strategies:

- Improve the management of the State government telecommunications systems and services which DGS provides
- Advise and support agencies in the development of a telecommunications management program
- Strengthen the State's control of telecommunications costs

- Improve the State's telecommunications emergency preparedness

This report also provided an update on activities developed from the April 1984 report and introduced additional activities to implement these strategies.

In June 1987, the State issued a Request for Information (RFI) asking telecommunications industry vendors to respond with their solutions to the State's telecommunications needs. Eighteen vendors responded to the RFI. The information gathered from the RFI was to be used to modify and finalize a comprehensive Request for Proposal (RFP) for the State to acquire CALNET.

The CALNET RFP was released to 38 vendor organizations in September 1987. During the RFP response process, Pac Bell determined that both the terms of the MFJ and the State's "purchase" requirement prohibited its further participation. Discussions between Pac Bell and DGS/TD were held to review this issue, however, no changes were made to the State's requirements.

In November 1988, DGS published an update to its previous strategy reports. This report reviewed progress on and presented enhancements to the strategic goals developed in the March 1987 report.

After a multi-stage submittal, review, and resubmittal process, only three vendor teams submitted final proposals to the State's RFP in mid-February 1989. The teams were led by:

- Electronic Data Systems (EDS)
- GTEL (subsidiary of General Telephone)
- AT&T

The prices presented in the bids ranged from $93 million to over $153 million.

In mid-February 1989, Pac Bell submitted an "unsolicited proposal" to replace ATSS with an Electronic Tandem Network (ETN)-type solution utilizing central office premise-based switching systems. According to Pac Bell, *TD requested* this "unsolicited proposal" as an alternative if CALNET could not be implemented. In addition, the proposal, according to Pac Bell, was not intended to meet the requirements of the RFP. TD personnel stated that this bid was rejected due to its high cost and lack of complete functionality as specified in the RFP.

On June 16, 1989, DGS issued its *Evaluation and Selection Report* recommending that the CALNET contract be awarded to GTEL, the lowest and only responsive bidder. On the same date, DGS notified the other two vendors of its intent to award the contract to GTEL.

On June 23, 1989, Pac Bell filed a protest of award with the State Board of Control. This protest was denied on July 12. On August 24, Pac Bell petitioned the State Board of Control for standing as an interested party in AT&T's protest. This request was denied on September 8.

On June 23, 1989, EDS filed a protest of award with the State Board of Control and withdrew its protest on July 3. EDS decided not to pursue the protest "...because we do not believe the outcome will change due to the nature of the problems with the procurement and the political entities involved."

On July 3, 1989, AT&T filed a protest of award, incorporating EDS's arguments, with the State Board of Control. AT&T's protest was denied on November 1.

In September 1989, the Office of the Auditor General was requested by the Joint Legislative Audit Committee to conduct an audit of the CALNET procurement. In October 1989, Deloitte Haskins and Sells (now Deloitte & Touche) was contracted by the Office of the Auditor General to conduct the audit.

On October 13, 1989, Pac Bell petitioned to the Superior Court of the State of California for a writ of mandate and complaint for declaratory judgement and waste of public funds. On October 16, the court issued a stay order restraining the State from awarding the CALNET contract to GTEL. On November 6, a hearing was held and on November 27, Pac Bell's petition was tentatively denied. On December 11, the court entered a final judgment denying Pac Bell's petition.

On November 28, DGS awarded the contract for CALNET to GTEL.

SCOPE OF AUDIT

California's Department of General Services (DGS) has recently awarded a contract to establish a California Network System, known as CALNET. The propriety of the CALNET procurement process is the subject of much controversy and debate due to several reasons:

- The numerous changes made to the CALNET Request for Proposal (RFP)
- The specificity of certain key requirements of the proposal
- The complexity of the issue

For these reasons, the Office of the Auditor General (OAG) was directed to conduct an audit of the DGS' CALNET procurement process.

The objective of this audit was to determine whether the CALNET design, acquisition strategy, and actual procurement process:

- Followed appropriate State laws, regulations, policies, and procedures
- Promoted open competition while still serving the best interests of the State

We reviewed and assessed historical documents and events (described in the previous subsection), and reviewed and assessed the events that occurred during the audit using the objectives of the audit as our guide. Because this procurement began several years ago and many strategic decisions were made several years ago, we assessed the CALNET acquisition in the context of where telecommunications technology and services were in the 1986 and 1987 timeframe. Judging the CALNET acquisition by today's available technology and services would be unfair since there have been significant advances.

METHODOLOGY USED TO CONDUCT AUDIT

D&T used a five task approach to conduct this audit:

- Identify Preliminary Issues
- Audit CALNET Design Process
- Audit CALNET Acquisition Strategy
- Audit CALNET Procurement Process
- Develop Audit Report

It is important to note that the CALNET *design was not evaluated from a technical perspective,* but the design process was reviewed to determine whether or not the appropriate steps were followed to develop the design, and whether the design process resulted in requirements which unnecessarily limited competition.

Auditing the CALNET acquisition strategy included reviewing the events and studies which led to the CALNET Request for Proposal (RFP), and reviewing non-technical RFP requirements (such as equipment siting and ownership).

Auditing the CALNET procurement process included reviewing the RFP development and amendment process (and the basis for the amendments), and the evaluation of vendor proposals.

To conduct this study we interviewed more than 35 personnel from the State and bidding vendors in at least 60 separate interviews. We also reviewed more than 300 documents.

This audit was conducted in accordance with *Standards for Audit of Governmental Organizations, Programs, Activities, and Functions,* published by the Comptroller General of the United States. These procedures are also followed by the California Office of the Auditor General.

II. FINDINGS

DGS HAS NOT ADEQUATELY MANAGED THE CALNET PROJECT AND RELATED PROCUREMENT

Overall, we found that DGS has not adequately managed the CALNET project and related procurement. Specific user needs are not traceable to the RFP requirements and most benefits to be generated by CALNET are poorly defined or undocumented. In part this was due to the fact the there was no normal State oversight by agencies outside of DGS, and that a comprehensive feasibility study was not conducted as required.

USER NEEDS NOT FULLY DEVELOPED

Specific user needs, or problems to be solved, cannot be traced to RFP requirements. As a result, the basis of many CALNET requirements is not directly related to State agency needs.

We found the Department of General Services (DGS)/Telecommunications Division (TD) relied on its own experience and input from consultants to develop high level user needs which were incorporated into the CALNET RFP. We were unable to find documentation to verify that TD developed a current, documented, and traceable list of user requirements. Therefore, there is no way of verifying that CALNET will meet agency user needs beyond that which is currently being met (to whatever degree and quality) by the existing ATSS system. However, TD has stated that the majority of user needs were obtained from:

- The *Telecommunications Strategy for State Government* report (April 1984)
- The *State of California Consolidated Exchange Serving Vehicle Feasibility Study* (October 1986)
- The *Network Requirements and Management Project TD-010 Study* (W and J Study - August 1986)
- Agency surveys conducted by TD
- Regional planning meetings
- User agency presentations to Telecommunications Advisory Board (TAB)

The *Telecommunications Strategy for State Government* report of April 1984, prepared by the Department of Finance, Office of Information Technology (OIT), in conjunction with TD, discussed user needs only at a high level, e.g., management of telecommunications costs and facilities, controlling the use of long distance facilities, and preparing individual agencies for new telecommunications responsibilities. This report did not discuss specific agency or individual user needs.

The *State of California Consolidated Exchange Serving Vehicle Feasibility Study* of October 1986 was conducted to determine the current costs of CENTREX service and the costs for alternatives to CENTREX. ("CENTREX" is a tariff-based telecommunications system, offered by local operating companies, which provides basic telephone service comparable to those features offered by Private Branch Exchanges.) This study reviewed basic and enhanced CENTREX features, but did not analyze current user problems or needs.

According to our interviews with the W and J Partnership (W and J), the above two reports were used as the source of user requirements for the W and J Study.

We believe TD's perception of user needs, at the time the RFP was released (September 1987), may be based on outdated information (i.e., three to four years old), and user needs may have changed since those high level requirements studies were developed. Our research did not uncover documentation to support TD's claim that it extensively interviewed key agency personnel to review current system problems, growth requirements, future technology requirements, and to update user requirements to reflect current needs. In addition, we were unable to establish that departmental reviews were conducted by TD. Departmental reviews are used to identify call flow within, to, and from a department; identify functional requirements and feature requirements; and determine ways to improve call handling capabilities. These data are necessary to design a system such as CALNET.

Periodic regional planning meetings were initiated in 1988 to acquaint local government with the State's telecommunications services and programs. We understand these meetings were initiated by TD to learn more about the local agencies' systems and their future plans. However, we could not find documentation to suggest that this information was used to update user requirements for incorporation into the CALNET design. TD personnel referred to surveys conducted by telephone of 12 selected agencies in which user needs were reviewed. No documentation was found to indicate that the results of these surveys were recorded or ended up as part of the requirements for CALNET.

We also understand presentations were made by user agencies to the Telecommunications Advisory Board (TAB) regarding their individual telecommunications systems and requirements. However, this process did not begin until February 1988, *seven months after* the CALNET RFP was issued. We were informed that user requirements were discussed with some agencies; however, there is no documentation of these discussions and no documentation which would have indicated that these requirements have been or will be incorporated into the final CALNET design and implemented.

From interviews with TD staff, we believe that TD used the limited information gathered from the users *within TD* to develop user requirements. It appears TD has assumed that its perception of user needs applies to the entire user population. However, based on our own experience, individual agencies may have different requirements, some of which are not known to TD.

We agree that users should usually not be concerned with the transport and switching issues. However, CALNET is not only a backbone replacement; segments of the design have a potentially significant impact on the individual user.

For example, CALNET incorporates the replacement of the CENTREXes at the three tandem switching nodes (Sacramento, San Francisco, and Los Angeles) which currently serve over 34,000 stations. Therefore, station users will be directly affected. TD argued that the new switching systems replacing the CENTREXes would provide access to the same features, therefore, widespread and detailed user surveys were not required. This argument overlooks the opportunity available to determine user needs, identify problems, if any, and solve user problems by integration of features in the CALNET design. The CALNET design does not appear to have incorporated features to address user problems.

As an example of an RFP requirement that is not traceable to State agency needs, Section 6 of the RFP included the provision for and implementation of Integrated Services Digital Network (ISDN) technology. ISDN is a state-of-the-art network architecture designed to carry voice, data, and video in digitized form at high transmission speeds. It appears that users did not fully understand nor were they briefed on the capabilities and future potential of ISDN. This feature, which was included as a mandatory requirement, may not be needed by most users at this time. ISDN is still evolving in the telecommunications industry today. However, much of the ISDN capabilities and features have yet to be delivered by the telecommunications industry. What DGS made as a mandatory requirement is something not available and not necessarily supported by user requirements.

Two significant RFP requirements were added by TD that affects CALNET costs and benefits; ISDN and Signal System #7 (SS#7). We could find no documentation to determine why the State chose to make ISDN and SS#7 mandatory requirements. Without a user needs analysis and associated cost benefit analysis to justify the additional cost, perhaps these features should have been designated optional in the RFP with the vendor required to show a cost/benefit relationship.

Both features are significant enhancements to CALNET. In the original RFP, little mention was made of these two features. Hardware quantities and software to provide these features to the users were not initially quantified in the RFP. Through subsequent addenda, hardware quantities were quantified. For example, at the Sacramento switch node, TD required that the node be equipped for 148 and wired for 1,475 ISDN ports, respectively. ISDN port quantities in proportion to the total number of ports required were also quantified for the San Francisco, Los Angeles, and San Diego locations. Within the scope of this audit, we were not able to determine the exact cost impact of the ISDN and associated SS#7 features. Based on a review of the various cost schedules containing GTEL's bid response, the minimum ten year costs appear to be at least $3,600,000.

Some of the added requirements may not be cost-effective. Even though the implementation of these features would not occur until Phase 2 of implementation in 1991, certain ISDN applications may not yet be available, cost effective, and justifiable by then. The RFP did not specify or request the costs to provide ISDN applications and ISDN terminals (except on a limited trial basis) for the users. In addition, it is not clear that users will be prepared to take advantage of ISDN when the applications become available. As a result, these features may not be cost-effective.

As a result of not fully developing user needs, there is no assurance to the State that CALNET will deliver telecommunications services which the users need and which are cost effective.

MOST BENEFITS ARE UNDOCUMENTED

Most benefits are poorly defined, undocumented, and cannot be substantiated. They were not subjected to independent review (as required by the SAM FSR process) before becoming the basis for action. At present, they cannot be validated.

Interviews with State personnel indicate the major benefits of the CALNET procurement include:

- Control
- Cost reductions
- Public Safety Microwave System (PSMS) integration
- Improved technology

The benefits of control were not clearly defined in DGS documentation. Via interviews, State personnel identified that some of the elements of control include:

- Dictating that restoration of all State telecommunications is a top priority in the event of an emergency

- Managing voice and data networks with the capability of trouble-shooting communications facilities

- Gaining access at any time to the CALNET equipment for monitoring and maintenance purposes

- Dictating that restoration of the PSMS is a top priority in the event of an emergency

- Expanding functionality, hardware, and software to accommodate growth

While it appears CALNET will give DGS some amount of control over State telecommunications, without adequate documentation it is impossible to determine how much of this benefit will be realized.

Since neither a comprehensive FSR nor a comprehensive cost/benefit analysis was conducted, claimed cost reduction cannot be verified. The benefit of cost reduction is expected to be realized by eliminating costly and obsolete switching equipment and associated maintenance. For a more detailed discussion, see ***"A Comprehensive Feasibility Study was not Conducted as Required by SAM"*** discussion below.

The benefit of integrating the PSMS into the CALNET design is a component of the benefit of cost reduction and control. We understand integration is expected to provide the State with the ability to use the spare capacity on PSMS for routing voice and data traffic under both normal and emergency restoration conditions.

The benefit of improved technology, according to State personnel, is directly related to implementation of ISDN and Common Channel Signalling System #7 (SS#7). SS#7 is a signalling protocol (set of communications procedures) used in high speed digital networks to provide communication between intelligent return nodes, and is part of ISDN implementation. As discussed earlier in this Section, the applications and benefits of these features have neither been clearly identified nor defined.

The benefits of CALNET have been discussed verbally among State personnel and broadly referenced in documents such as the Telecommunications Strategy for State Government reports (April 1984, March 1987, and November 1988) and the 1986 W and J Study. However, without written documentation of any user needs analyses and cost/benefit analyses, these benefits cannot be validated.

CONTROL AGENCY OVERSIGHT OUTSIDE OF DGS WAS NOT EMPLOYED

Normal State checks-and-balances (oversight) by a control agency outside of DGS were not employed, as required by the SAM. The CALNET procurement proceeded without necessary oversight control by agencies which should have been and are normally involved in information technology related procurements.

One main triggering device utilized in State procurements to invoke managerial oversight of major procurements is the Feasibility Study Report. A Feasibility Study Report (FSR) is the first opportunity by State management to assess the implications of a proposed information technology project. Specifically, SAM 4832 states that,

> "Each information technology procurement must be executed in accordance with Sections 4819.3 - 4819.39 of SAM. A signed certification of compliance, per Section 4832, must be attached to each procurement document that is required to initiate, proceed with, or finalize an information technology procurement activity."

SAM 4819.35 states that,

> "All information technology projects must have an approved FSR prior to the encumbrance of funds or the expenditure of resources beyond the feasibility study stage.... An FSR prepared in accordance with SAM Sections 4920 through 4930.1 must be approved for every information technology project."

SAM 4819.32 states that the only exception to the FSR requirement is,

> "...telecommunications equipment used exclusively for voice or video communications (such as single line telephone instruments, private branch exchanges, network control equipment, multiplexers, concentrators, or microwave or satellite communication systems)."

CALNET does provide for voice communications, but it also will include data communications and network management capabilities and features. In this respect, SAM does not exclude the CALNET procurement from SAM requirements. An FSR was not initiated or completed by DGS/TD for the CALNET procurement.

One of the main reasons that oversight control was not present in the CALNET procurement was the TD belief that SAM Sections 4800 - 5180, inclusive, do not apply to the Telecommunications Division. The foundation for this belief is the ambiguity of the wording in the SAM and misinterpretation of Senate Bill 1733 and Public

Contract Code Section 12000. SAM wording is not explicitly clear as to whether TD telecommunication projects and, likewise, CALNET should follow the normal FSR process.

It is the impression of the former Deputy Director-Telecommunications Division (now Assistant Chief) that Senate Bill 1733 relieves TD from compliance with the SAM Sections 4800 - 5180 (4819 is the section that specifically deals with FSRs). We believe that SB 1733 does not preclude the TD from complying with the SAM and this belief is based on an associated Legislative Counsel opinion (see Appendix C) which we solicited during our audit. In summary, Legislative Counsel expressed that SB1733 allows TD to establish policies and procedures which are uniquely applicable to TD. However, TD is responsible for compliance with the SAM as are all other State agencies and entities (except the State supported universities).

Another potential reason for the inherent lack of oversight control is that historically, the Department of Finance - Office of Information Technology (OIT) did not review telecommunication projects. TD has traditionally served as a support agency, fulfilling the requests of State users. If these users require major telecommunication services, they are required to receive approval from the TD and are responsible for the completion of an FSR, where applicable. TD is traditionally a service and control organization which does not normally initiate its own major procurements. Based on our review of SAM, associated Government Code, and the above mentioned Legislative Counsel opinion, we believe CALNET should have been reviewed by the OIT.

The Department of Finance was previously faced with a similar situation. The Office of Information Technology traditionally serves as a control agency for State information system projects, similar to the manner in which TD serves as a control agency for telecommunications projects. Similarly, when Department of Finance needed to procure information systems, there was no oversight agency assigned to review their acquisitions. As a result, the Legislature found it prudent for the Legislature itself to provide oversight control for the Department of Finance.

DGS has also stated that no new funds will be expended for the CALNET project and therefore State oversight control is not needed. CALNET is expected to be funded via agencies' current telecommunications budgets. For this reason a Budget Change Proposal was not required and hence Department of Finance did not review the project budget. However, based on our understanding of SAM, this does not remove the requirement to conduct a feasibility study. In addition, this is not supported by a documented financial analysis.

A COMPREHENSIVE FEASIBILITY STUDY WAS NOT CONDUCTED AS REQUIRED BY SAM

Each agency must follow a systematic, analytical process for evaluating and documenting the feasibility of information technology projects (of which our understanding of SAM and State Government Code would classify CALNET as such), as defined in Section 4819.2 of the SAM. This process must include:

- Developing an understanding of a problem (or opportunity) in terms of its effect on the agency's mission and programs

- Developing an understanding of the organizational, managerial, and technical environment within which a response to the problem or opportunity will be implemented

- Establishing programmatic and administrative objectives against which possible responses will be evaluated

- Preparing concise functional requirements of an acceptable response

- Identifying and evaluating possible alternative responses with respect to the established objectives

- Preparing an economic analysis for the alternatives which meets the established objectives and functional requirements

- Selecting the alternative which is the best response to the problem or opportunity

- Preparing a management plan for the implementation of the proposed response

- Documenting the results of the study in the form of a Feasibility Study Report (FSR), as specified in SAM Sections 4928 through 4928.4

The department proposing a particular course of action via an FSR should have a detailed implementation plan as the basis for much of the information contained in the Feasibility Study Report and, specifically, as the detail behind the Progress Reporting Milestones reflected in the FSR.

Once again, TD believes that historical practices and Senate Bill 1733 relieves TD from developing a FSR. As discussed previously, it is the opinion of the Legislative Counsel that TD is not relieved of following SAM guidelines because of Senate Bill 1733.

Morrison-Knudsen/W and J Partnership Study was not a Feasibility Study Report

In March 1986, TD requested a proposal from Morrison-Knudsen Engineers, Inc. (Morrison-Knudsen) to perform a telecommunications network study. Two major segments of this study were to design and develop requirements for an *integrated voice and data network,* and to design and develop requirements for a *network management system* to support the integrated network. The information in the study was to be used by DGS to develop an RFP to replace the existing ATSS backbone network.

TD provided an extensive list of tasks be performed and to be included in Morrison-Knudsen's proposal. Two of the tasks were to "Prepare and Publish Feasibility Study Report" and "Coordinate with Office of Information Technology on Feasibility Study Report Approval" for the *network management system* segment of the study. We could not find documentation requesting that these tasks be performed for the *network design* segment of the study. *From this document, however, it is apparent that TD was aware that an FSR was required since TD requested it as a deliverable from Morrison-Knudsen for at least a portion of the study.* However, in May 1986 when Morrison-Knudsen was awarded the contract, (W and J was sub-contracted to actually perform the work) the task to specifically develop a "Feasibility Study Report" for the network management system segment of the study *was not listed*. We could not find documentation explaining the change in task scope. Therefore, TD did not task Morrison-Knudsen to conduct any type of Feasibility Study Report as a final deliverable in the Study.

TD did, however, consider three network design alternatives (an alternatives analysis is required by SAM as part of an FSR), but only one was really viable at the time. W and J was tasked to gather and evaluate data on the existing State telecommunications systems, evaluate alternate conceptual networks, and develop a preferred network approach. During this study period, W and J reviewed three alternatives:

- Continue the Status Quo, that is, continue the operation of the jointly provided CCSA network. Under the SNFA (State Network Facility Agreement) agreement the existing CCSA network could only continue through March 1989 (this was later extended through 1990).

- Select AT&T as the prime supplier of equipment and facilities and as network facility manager.

- Negotiate a facilities management contract and plan to procure, implement, and operate a California State Telecommunications System (referred to as "CALNET").

We understand that through meetings with the State, major vendors, and the W and J team members' knowledge and experience, it was determined that the first two alternatives were not viable. Faced with the SNFA agreement expiring in 1989, it appeared at that time that "continuing with the status quo" was not a viable alternative. Based on the conditions in the Modified Final Judgement in effect at that time, W and J did not believe that the agreement could have been extended further. (At a later date, however, the State was able to extend the agreement to January 1991.)

W and J stated in its study that selecting AT&T as the prime supplier and network facility manager would be in conflict with State guidelines on competitive procurement, and therefore should not be considered.

We understand that W and J analyzed various design options associated with the third alternative, such as:

- Private Branch Exchange (PBX) systems rather than Class 4/5 central office grade systems for the switching nodes

- Locating the switching nodes on telephone company premises

Due to the lack of detail in W and J's workpapers, we could not determine to what extent the three alternatives and design options associated with these alternatives were analyzed and discussed with the State.

W and J recommended the third alternative be pursued by the State, which included the following major design considerations:

- Implement a digital transport backbone network to integrate voice, data, and video services

- Replace the ATSS tandem switching systems with Class 4/5 switching systems

- Integrate the Public Safety Microwave System (PSMS) network into the design to utilize its spare channel capacity for voice, video, and data services

- Implement a network management system to monitor and control all major components of the integrated network

We understand that W and J determined that procuring the Class 4/5 central office grade switching systems was the most practical choice at that time based on the following conclusions:

- The current ATSS switching nodes are central office grade; replacement systems should be at least equivalent to the current architecture

- PBX technology had not yet evolved to provide the same degree of reliability and networking functionality as central office grade switching systems

W and J determined the size of the network served (over 200,000 telephones), and the size of the switching systems (growth capacity to over 50,000 ports), could best be accommodated by central office grade systems.

TD may have used the financial analysis contained in the W and J Report to justify, in part, proceeding with the CALNET RFI/RFP process. Although not containing an FSR-type analysis, the W and J Study did contain a high-level financial analysis of their recommended alternative, the procurement, installation, and implementation of CALNET. In Task 1, page 2A-15, a "Five Year Cost Overview" was presented listing two major capital cost items: Class 4/5 switching systems and IDNX digital channel controllers at three locations, for a total of $9,900,000. In addition, three cost savings projects were listed as offsets to these capital outlays as depicted in Figure II-a.

Figure II-a

Costs Savings Projects Recommended by W and J Study

Fiber Network Backbone	$8,296,000	*to*	$21,193,700
Feature Group B/D	2,632,900	*to*	8,374,600
Megacom at Oakland & L.A.	902,900	*to*	902,900
Total Estimated Gross Savings for 5 years	$11,031,000	*to*	$30,471,200
Deduct Capital Costs	(9,099,200)	*to*	(9,900,000)
Net Estimated Savings for 5 years	$1,931,800	*to*	$20,571,200

Based on our understanding of the current network and interviews with TD personnel, we determined that the three cost savings projects listed are not dependent on the implementation of the Class 4/5 and IDNX equipment (i.e., CALNET). In fact, the listed cost savings projects have either been completed during the last two years or are now in progress. Without these cost savings projects, it appears that there were no direct cost savings to be achieved from implementation of the Class 4/5 and IDNX equipment.

Based on interviews with TD personnel, we believe that TD proceeded with the RFI and RFP process based in part on W and J's cost overview. We could not find financial analyses performed by the State to validate, modify, or expand on the W and J financial analysis. According to TD personnel, these estimates were not verified, because they appeared to be reasonable.

In fact, the financial analysis in the W and J Study contained mathematical errors and may not have been an appropriate guideline for TD to follow. It appears that the low-end savings for the Fiber Network Backbone project was overstated by $4,748,595 and the high-end savings were understated by $90,735. *As a result, the net five year savings should have been estimated to range from -$2,816,795 (a loss) to $20,661,935.* In our review of W and J's workpapers we found no documentation to substantiate the high-level savings calculations listed in the study.

DGS did not Perform its own Feasibility Study

In an interview with the former Deputy Director of TD (now Assistant Chief), he stated that the only way to verify projected CALNET savings was to analyze the vendor bid responses and compare them to existing ATSS costs; any other type of analysis he considered "pure conjecture". He stated that an analysis was performed after the vendor bids were received (nearly three years after the W and J Study was published) and about $1,000,000 per year would be saved compared to current ATSS costs. According to TD personnel this analysis (informally completed on a blackboard) was not completed before June 1989, when the intent to award notice was issued. However, we could not find documentation to verify that the TD performed any form of its own economic analysis to justify proceeding with development and issuance of the CALNET RFI and RFP.

We did obtain and analyze a spreadsheet listing the proposed costs associated with the operation of CALNET. We understand that this spreadsheet is based on GTEL awarded costs and other additional operating costs not part of the contract award. This spreadsheet did not, however, list any comparison to ATSS costs over the same time period or estimate any benefits.

In separate interviews with other TD personnel, it was determined that no other financial analyses were completed by TD. Therefore, the only published financial analysis appears to be in the W and J Study (which is three years old), and TD did not conduct their own comprehensive financial analysis prior to proceeding with issuance of the RFI and RFP. It appears that the CALNET project proceeded all the way through vendor selection without a full understanding of potential costs and benefits.

Major CALNET Costs were not Fully Considered

Major CALNET cost components may not have been included in those vendor cost analyses completed by the State. One major component which may not have been adequately estimated is a reserve fund to be set aside for potential job change orders (JCOs). In procurements of any significant size and design complexity, it is our professional opinion that a 5% to 15% (of the projected contract award) contingency fund is reasonable to include in the budget to cover expected and unexpected changes in final hardware and software configurations, along with labor and other potentially significant cost sensitive items. The total ten year evaluated cost of the GTEL proposal is $109,188,136, of which $38,888,459 represents up-front capital dollars to be financed. Based on the initial up-front financed dollars alone, this contingency could range from $1,944,400 to $5,833,200.

If a nominal 10% contingency allowance were to be established on the entire ten year cost base, the range would be from $5,459,400 to $16,378,220. At this level, the additional cost for JCOs and other unforeseen changes could exceed the savings estimates. If this were to occur, it is not clear from where (agency budgets or DGS/TD) the additional costs would be funded. We noted an "Unanticipated Tasks" category on the most recent GTEL cost spreadsheet listing $250,981. Without sufficient documentation, we do not believe that this is adequate to cover JCOs and other additional costs associated with the entire CALNET project.

We also believe that additional "parallel operational costs" were not included. Parallel operational costs refer to the continuing costs to operate ATSS while CALNET is being phased in. As segments of CALNET are installed and cut over, the segments of ATSS still in operation and not yet disconnected will continue to be billed to the State. These costs should have been listed in a comparative financial analysis (ATSS versus CALNET).

In addition, it appears that any potential costs to remove asbestos from any areas affected by the construction, demolition, rearrangement, or removal activity associated with the installation of telecommunications equipment on State premises were not included in the overall cost of CALNET. Paragraph 5.5.14 (Addendum 11), in Section 5 of the RFP states:

- "The State will provide, under separate contract, at State's expense, a certified asbestos abatement contractor for performing asbestos removal ..."

- "The State will also provide, under separate contract, an Industrial Hygienist to monitor all asbestos removal and provide space clearances for each site."

IMPACT

A comprehensive business case was not presented to the State to validate the cost effectiveness and benefits of CALNET.

Since an FSR was not completed in accordance with the SAM, the Legislature and the Office of Information Technology were never duly notified and allowed to assess the merits of the CALNET procurement. Thus, oversight control was circumvented.

The Department of General Services was able to proceed with an approximately $100 million procurement without review or approval outside its own organization. Millions of dollars of taxpayer and potential vendors' monies have been spent on a procurement that has yet to be reviewed and or approved by the Department of Finance and the Legislature. In addition, these entities were not provided the information needed to determine if implementing CALNET is in the best interests of the State of California.

In addition, without documented, traceable, and substantiated user and agency needs analyses, associated with a cost/benefit analysis, it could not be determined that certain potentially high cost features, such as ISDN and SS#7, are justified.

The SAM may be somewhat ambiguous, and prior practice may have allowed TD to attempt such a large procurement without oversight control, but this does not excuse the Department of General Services from adhering to the SAM and sound business practices.

THE NEED FOR TWO KEY REQUEST FOR PROPOSALS REQUIREMENTS ARE NOT SUPPORTED BY ANALYSIS AND DOCUMENTATION

DGS/TD desires to take control of the new telecommunications network, and their desire was expressed via two RFP requirements: (1) purchase CALNET (i.e., hold title to CALNET) and, (2) place CALNET on State premises.

In Section 4 - Proposed Environment of the CALNET RFP, DGS/TD stated that "This procurement will include the purchase of equipment needed by the State to established an owned, on premises, management control point at which all telecommunications service providers will interface." The State provided a more detailed definition later in the same section: "State premises hubbed, because by definition the initial switching nodes ... will be located in and on state property ..." (Underlined in original text.)

We believe, based on the interviews, the underlying objective of both the "purchase" and "on premise" requirements is to obtain control of CALNET. The State believes that it can only achieve the desired level of control through ownership of State premise-based hardware and software. However, other design and acquisition alternatives for achieving control were not fully considered.

The State did not clearly document their objectives for achieving control and the associated benefits. Based on our interviews, the State's reasons for obtaining control over CALNET are as follows:

- *Emergency restoration* - The ability to, in the event of an emergency, dictate that restoration of State telecommunications is a top priority, i.e., a decision made by the State rather than a decision made by a telephone company

- *Network management functions* - The ability to manage voice and data networks with the capability of identifying, diagnosing, and trouble-shooting the telecommunications facilities e.g., dynamic alternate routing and reallocation of bandwidth to minimize down-time. In addition, the ability to obtain accurate and timely usage and cost information to charge back individual agencies for use of the network

- *Physical Access and Security* - The ability to gain access to CALNET hardware, and the ability to monitor who is permitted entrance into equipment locations

- *Public Safety Microwave System (PSMS) protection* - The ability to, in the event of an emergency, dictate that restoration of PSMS service is a top priority, i.e., a decision made by the State rather than a decision made by a telephone company

- *Expansion* - The ability to add functionality and or hardware and software to accommodate growth

Because the State did not clearly define control and its associated objectives, components, and benefits, the State has no way of knowing if the requirements for purchase of all hardware, software, and equipment (to be located on State property) will satisfy the need for control.

DGS/TD stated the only ways to achieve control of CALNET were by purchasing the hardware and software and by locating the equipment on State property. We believe this to be an assumption on their part and not based on facts and documented analysis. Vendors could have been solicited to provide a security and control approach which would meet State needs.

In our view, the decision to purchase all the hardware and software is one of a financial nature. It should not be confused with control which is an operational and functional requirement. From a financial standpoint, it appears the decision to purchase all the hardware and software was made jointly by TD and the Office of Procurement (OP) based on OP's prior experience analyzing lease versus purchase alternatives. OP staff also stated that, if the CALNET procurement permitted vendors to submit their own creative financing alternatives, *it (OP) would not have the resources* to analyze a potentially large number of financing alternatives. In our experience, this practice is performed by smaller, less sophisticated government purchasing organizations than OP.

Another reason supporting TD's decision to purchase is their interpretation of the SAM from which they infer purchase is more preferable than a lease. *In our opinion an analysis of both alternatives should have been performed by TD and OP.* This is also strongly suggested by the Senate Bill 1579 which states

> "Evaluation of bidders' proposals for the purpose of determining contract award *shall* provide for consideration of a bidder's best financing alternative unless the acquiring agency can demonstrate to the satisfaction of the Department of General Services that a particular financing alternative should not be so considered." (Government Code Section 14816.2.(c), emphasis added)

No such analysis was conducted by TD or OP.

Further, DGS has stated that another reason for the purchase requirement was that the W and J Study recommended it. In an interview with the former Deputy Director of TD, he stated that he had never seen the actual lease versus purchase analysis which he believed was performed as part of the W and J Study. However, he believed that it was in W and J's working papers and said that he verified (in preparation for testimony he, the former Deputy Director of TD, had to give) with the Managing Partner of W and J that it had been done. In a later interview, he stated that the W and J Study says "Buy it; that is the best thing to do".

Perhaps TD assumed that W and J's high level analysis of the three alternatives presented in the report (stay with the status quo; select AT&T as the prime supplier and network facility manager; or plan, implement, and operate an integrated telecommunications system) was a true lease versus purchase analysis. It is our opinion that the three alternatives presented are not financial alternatives, but rather, a list of alternatives from a design and implementation standpoint. This was confirmed in our interviews with the Managing Partner of W and J. The former Deputy Director of TD even confirms this in his deposition in November, 1989 where he categorizes the study as, "*an **engineering** analysis* of State telecommunications systems, the so-called 'W and J' Study." (Emphasis added.)

After an in-depth review of both the W and J Study and W and J's working papers, we were unable to locate a lease versus buy analysis. We also found that W and J was not specifically asked by the State, as part of their contract, to conduct a lease versus buy analysis. In support of this, the Managing Partner of W and J Partnership stated that the intent of the W and J Study was not to preclude the State from considering all possible financing alternatives. The W and J Study used the word "procure". He also stated that he did not recall being tasked by TD to conduct a lease versus purchase analysis and that the report should not have been construed as containing a lease versus purchase analysis. However, he stated that he did recollect discussing the issue of lease versus purchase with the State. He suggested that some items of the CALNET procurement probably should be purchased as a matter of practicality.

In our professional judgement and based on the above requirements, neither purchase of the equipment nor having State premise-based equipment will achieve control (See Exhibit II-1 for a high level illustration of this control issue):

- *Emergency Restoration and PSMS Protection-* Although this is an important issue, the State did not clearly define the objectives of emergency restoration. An updated disaster recovery plan needs to be created as CALNET is phased into service and when it is complete in order to minimize risks. The major components of a successful disaster recovery plan should include:

  .. **Policy -** A written policy set forth by management documenting areas of responsibility

  .. **Network Maps -** Written documentation of the the telecommunications system including network maps which identify major components

  .. **Procedures -** Clearly defined and documented operational procedures

  .. **Assessment -** Business impact assessment which includes the identification of critical applications

  .. **Analysis -** Thorough analysis of component failure and recovery

EXHIBIT II-1

ILLUSTRATION OF KEY RFP REQUIREMENTS NOT NECESSARY TO OBTAIN THE STATE'S OBJECTIVE TO CONTROL CALNET

CONTROL *Capabilities Used To Support The Need For Key Requirements*	*Does The Need For Control Capabilities (First Column) Make The Key Requirements Listed Below) Necessary?* **PURCHASE REQUIREMENT**	**ON STATE PREMISE REQUIREMENT**
Ability to dictate priority of State telecommunications in the event of emergency	No	No
Ability to oversee network management functions	No	No
Ability to control physical access and security	No	No
Ability to dictate priority of PSMS communications in the even of an emergency	No	No
Ability to easily expand	No	No

.. **Disaster Recovery Team -** Establishing a disaster recovery team to include vendors and telecommunications management personnel

.. **Disaster Definition -** Clear definition of disaster, and at what point a situation is declared a disaster

The State has not fully addressed as yet the components of a disaster recovery plan to define emergency restoration objectives. However, it does not follow that one must own the equipment and locate it on one's own property to provide disaster protection. Indeed, ATSS is not owned by the State today, in fact, the State has never owned its own network. It is possible that the TD would perceive some improved ability to operate in a disaster if it had "control" but we could find no analysis to support such a perception.

- *Network Management-* Today's technology provides for sophisticated network management capabilities independent of ownership and location. The State can oversee and manage network management functions without owning all the hardware and software. A remote terminal, for example, could be used to monitor network management activities, without the equipment located on State property.

- *Physical Access and Security-* It is not clear what is totally desired by the State. However, we do agree that access to CALNET equipment needs to be limited. This could be potentially controlled by a third party or by State personnel on non-State property.

- *Expansion-* Again, the State desires are not clear. However, other acquisition vehicles (such as lease, etc.) can provide for expansion. For example, expansion clauses could be negotiated and included in lease agreements so that components are coterminus.

Based on our experience, there are other approaches which the State could have taken to achieve its objectives of controlling CALNET without the "purchase" and "premise" requirements. The State could have stated these specific objectives of control without specifying the "purchase" and "premise" requirements, and then negotiated a contract to achieve those objectives.

This arrangement has for years been successful for the Federal Government. In many installations, telecommunications equipment and information systems are not owned by the government and are located on non-government property. Security and physical access is provided and controlled by the government, while the equipment is operated and maintained by vendors. One example of a non-purchase arrangement is the large FTS-2000 recent procurement, where the switching equipment will be leased to the federal government by AT&T.

IMPACT

In our view, it cannot be substantiated that the "purchase" and "premise" RFP requirements will give the State the level of control over the CALNET network it desires.

Vendors were not permitted to submit other alternatives which, potentially, could have been more cost effective for the State. A lower cost design and acquisition method may have been achieved with the State still attaining its desire for control. Therefore, it is our conclusion that competition was unnecessarily restricted. The "purchase" and "premise" requirements precluded any vendor who is restricted by the MFJ from selling telecommunication equipment from bidding, thereby limiting competition.

DGS WAS INCONSISTENT IN DETERMINING MATERIAL DEVIATIONS FROM THE REQUEST FOR PROPOSALS REQUIREMENTS

A potential qualified vendor's final bid may have been rejected because a response to a requirement was evaluated as a material deviation by TD and OP when they had previously evaluated the same response as compliant.

TD issued a two phase RFP for CALNET. The first phase was a compliance phase composed of a conceptual proposal and detailed technical proposal. Because of changes in the technical requirements, a second detailed technical proposal was added during the process by TD. The purpose of this phase was to first, insure that potential vendors were headed on the "right track" and second "to determine at an early stage whether the proposal is totally responsive to all the requirements" contained in the RFP.

The second phase, comprising a draft bid and a final bid, was called the final phase. As stated in the RFP document, the purpose of the second phase was to obtain bids that were responsive in every respect. The draft bids were to provide TD with an "almost final" bid so that "faulty administrative aspects" could be identified and corrected before final bids were submitted.

The vendors' response to each phase was reviewed by the State using the evaluation methodology outlined in the RFP and the SAM. TD's and OP's joint evaluation findings were communicated and discussed with each bidder. As part of this process each vendor was notified whether or not a requirements area was responsive and compliant or if TD and OP needed additional information to fully understand potential ramifications of a particular proposal section. During these discussions with the vendors the State was to maintain a written record of each item discussed and any resolutions or changes that the bidders agreed to make to their proposal, as well as TD and OP's acceptance of said changes. (See the *"Vendor Proposal Guidelines Were Not Consistently Followed"* issue concerning maintenance of meeting notes.)

If TD and OP and a vendor were unable to reach an agreement on an area which TD and OP had determined non-responsive, the vendor was to be notified in writing that a final bid submitted "along the same lines would be non-responsive." The intent of this process was to allow the State and the vendors to work through a complicated design process and to identify and clarify any technically oriented material deviations before draft bids were submitted and to identify administrative material deviations before final bids were submitted. The multi-phased RFP process was time-consuming and expensive for the bidders. The bidders' own estimates of costs involved in the preparation of their proposals range from two million to four million dollars.

The TD and OP stated that this process was a "radical departure" from the traditional "accept or reject" philosophy of competitive bidding. However, as stated in Section 2.3.3.a, "... the state will not provide any warranty [that] all defects have been detected and such notification will not preclude rejection of the Final Bid if defects are found later." This means that, since no assurances were given that previously accepted responses will still be accepted, the final bid stage of phase two is in fact an "accept or reject" process.

For example, EDS proposed providing the Basic Rate Interface (BRI) capability for users on the San Diego Remote Switch Module (RSM) from the Los Angeles Meridian Supernode (RFP Requirement 6.3.5.d.(3)). The RFP specified as a mandatory requirement that this capability be provided directly from the San Diego RSM. EDS believed that the RFP did not specify that this capability had to physically be provided from the San Diego RSM. As long as it was provided to the San Diego RSM users, EDS believed that it would be compliant. During the evolution of the technical bids, TD and OP did not find EDS' solution non-compliant. However, in the final Evaluation and Selection Report, this was listed as a material deviation.

IMPACT

The RFP evaluation process provides no assurance to the vendors that any response is truly compliant until after the final bids are submitted. The disclaimer of warranty is unconscionable because it could provide a potentially qualified vendor with a false sense of security. It is only normal that a bidder, following sound business practices, would review TD's and OP's evaluation of each proposal phase and focus their energies on addressing the areas which had been determined as non-responsive. Little emphasis would be placed on reviewing areas which had already been declared compliant by TD and OP.

In addition, this disclaimer of warranty potentially provides a mechanism for an evaluator to either exercise a bias or to unfairly exclude a bidder. All that is required for this to occur is for an evaluator to designate a response as compliant in the draft proposal evaluation, when in fact it is non-compliant, and then designate it as non-compliant in the final bid evaluation.

It must be noted that since individual proposal evaluation sheets were destroyed it cannot be determined if any member of the evaluation teams used this mechanism to exercise a bias or unfairly exclude a bidder.

THE RFP EVALUATION PROCESS DID NOT ALLOW DGS TO WEIGH THE RELATIVE MATERIALITY AND SIGNIFICANCE OF MATERIAL DEVIATIONS

Material deviations which may have had an insignificant impact on costs or design configuration, potentially resulted in the rejection of an otherwise qualified response by the least expensive vendor.

TD and OP evaluated each vendors' final bid to determine whether or not their responses to each requirement was compliant. RFP paragraph 2.1.1 states:

> "A deviation from a requirement is material if the deficient response is not in substantial accord with the IFB/RFP requirements, provides an advantage to one bidder over other bidders, or has a potential significant effect on the delivery, quantity or quality of items bid, amount paid to the vendor, or on the cost to the State. Material deviations cannot be waived." (Underlined in original text.)

No effort was made by TD and OP to determine either the financial impact or the technical significance of a response and thus if it was a material deviation. For example, EDS proposed to not remove a specific wall, listed as a mandatory task, in the telephone equipment room at the 107 South Broadway, Los Angeles, location (RFP Requirement 6.5.3.d). By not removing the wall, a total of 20 square feet (out of 850 total square feet) of space could not be utilized in the telephone equipment room. EDS decided that "This is not a small task as this wall contains all the existing AC power distributions panels for the computer room." Although EDS could have removed the wall for an additional estimated $20,000 charge, EDS weighed the risk of removal against this cost. In the final Evaluation and Selection Report, this was listed as a material deviation. In interviews with certain TD personnel, they agreed that not moving the wall at 104 South Broadway and utilizing staff more efficiently made good business sense, however, the RFP specifications had to be met and that the State was required to follow established evaluation policies.

A second example involved staffing provided by the bidder for general technical support/network evolution. RFP requirement 5.8.2 states:

> "Since the amount of vendor support required is unknown, the vendor shall provide one engineer and one technician with appropriate skills to meet this requirement." (Underlined in original text.)

EDS determined that assigning network evolution duties to staff that also handles normal network operation and maintenance would be more economical and would satisfy the RFP requirement. EDS's rationale for this arrangement was that, since the State did not know the amount of support required, these individuals could be used to provide on-going operation and maintenance support when not needed to support network evaluation. EDS also believed that the RFP requirement implied only that the staff be specifically identified and that they be included on an organization chart, but did not have to be separate individuals dedicated only to network evolution.

Mandatory RFP Requirement 6.5.3.h states:

> "Vendor will provide commercial grade floor tile in all areas where CALNET equipment is to be installed. Tile must be color coordinated with room environment."

Although no bidder was found to be materially deviant on this requirement, had an otherwise qualified bidder not provided floor tile which the design team deemed color-coordinated, the State would have had no recourse, according to its evaluation policies, but to find the bidder non-compliant and reject the final bid.

IMPACT

The RFP evaluation process did not provide TD and OP with the latitude required to evaluate the relative impact of each material deviation. Nor did TD and OP exercise proper business judgement in its determination of whether or not a feature or function was central to the basic services being provided by CALNET.

VENDOR PROPOSAL EVALUATION GUIDELINES WERE NOT CONSISTENTLY FOLLOWED

SAM PROPOSAL EVALUATION GUIDELINES NOT CONSISTENTLY FOLLOWED

It was impossible to audit the vendor proposal evaluation process because detail work sheets and evaluator working papers were not retained. In addition, discussions with vendors were not, in general, documented as required by SAM.

The Department of General Services Office of Procurement (DGS/OP) publishes a document titled *IFB/RFP Evaluation and Selection Team Procedures*. This document is an outline of procedures and an explanation to the Evaluation and Selection Team of how it shall conduct itself during the evaluation of vendor proposals.

This document, the evaluation work sheet summaries, vendor recommendation, and other materials make up the Evaluation and Recommendation Package. As stated in this document: "It is important to retain all evaluation forms, worksheets, records of conversation, letters of clarification, records of agreement, and any other papers or information relating to the evaluation."

During the evaluation and selection of vendors proposals, each Evaluation and Selection Team member used individual worksheets to record evaluation decisions. These individual worksheets were destroyed after the Evaluation Selection Report was issued. Evaluation and Selection Team worksheets were not retained because the CALNET Project Manager did not feel it was necessary, and because retention of such is not the practice of the Office of Procurement.

The State Administrative Manual Section 5216.4 states that two evaluation team members should be present in any informal discussion with a bidder. The full evaluation team should be present in all formal discussions with the bidder. However, formal discussions with vendors proceeded without the presence of the full Evaluation and Selection Team as is stipulated in the State Administrative Manual.

After proposals were received, but prior to award, EDS discovered they were low bidder; however, they were not awarded the contract because of material deviations found in their proposal. The Department of General Services granted a meeting between EDS and the State to allow EDS to clarify sections in their proposal. Some of the information we have been able to discover about this meeting follows:

- Not all members of the evaluation and selection team were present.
- This meeting was not documented by the State. No minutes exist according to State personnel. However, this meeting was tape recorded by EDS.
- It is highly irregular to hold this type of meeting with any vendor after the final proposals have been received and reviewed by the State.

As a result of the meeting between EDS and the State, EDS was given additional evaluation points for their proposal; however, these points did not alter the position of EDS with regard to the proposal award.

The Department of General Services Procurement Officer in charge of the CALNET procurement stated that some meetings between the State and vendors were not documented because they were of an informal nature.

VENDOR COST ADJUSTMENTS MADE BY DGS LACKED SUPPORTING DOCUMENTATION

Some cost deviations noted on the final Evaluation and Selection Report could not be reconciled to the detailed spreadsheets.

For each proposal, TD and OP prepared detailed computerized spreadsheets to verify the costs of all hardware, software, construction, and other itemized costs contained in the cost sheets from RFP Section 7 and associated Contract Riders. These spreadsheets were used to verify the accuracy of the vendors' cost summary sheets. Upward and downward deviations (both as a result of mathematical errors and compliance deviations) were discovered and determined to be either material or not material. These deviations were then noted and summarized in the final Evaluation and Selection Report.

For GTEL, the evaluated cost was $109,266,195, which was $1,781,950 higher than the submitted costs. The Evaluation and Selection Report listed explanations to account for a $1,861,197 adjustment. We could not determine the reason for the $83,889 difference between these two reported numbers. We understand that all of the backup documents supporting how the deviations were determined by the evaluation team have probably been destroyed.

For AT&T, the evaluated cost was $155,647,023, which was $2,130,130 higher than submitted costs. The final Evaluation and Report listed explanations to account for a $2,754,100 adjustment. Due to the lack of backup documentation, we could not determine the reason for the $623,970 difference between the two reported numbers.

EDS cost deviations listed in the Evaluation and Selection Report were reconcilable to the detailed spreadsheets.

IMPACT

Because the evaluation worksheets were not retained, we cannot determine if the evaluations were completed independently. Therefore, we cannot determine if an unfair advantage was given to one vendor over another. Further, we were unable to determine if "technical leveling" occurred by an evaluator suggesting changes to a vendor's proposal based on things the evaluator had seen in another vendor's proposal. Moreover, the results of some meetings with vendors are not known and if other meetings of the nature of the EDS meeting discussed above, took place.

III. CONCLUSIONS

PUBLIC POLICY AND ADMINISTRATION ISSUES WERE NOT ADEQUATELY CONSIDERED BY DGS

In our view, DGS did not adequately consider all aspects of the impact CALNET will have on the State after it is implemented. Specifically:

- Should the State take on the responsibility of a telephone company-like business?
- Should normal State checks-and-balances have been invoked for such a large project?

The telecommunications technology and services, which the State has purchased for CALNET, is similar to that which is being installed in public networks. This equipment has the capability to offer features and services which are identical to those being provided by telephone companies. The ability to offer credit card service, direct long distance, and other public telephone services positions the State to become a direct competitor of telephone companies. In addition, because the State will own the equipment, they have assumed additional responsibilities and avoided regulatory safeguards. The resources and regulatory oversight of the California Public Utility Commission (CPUC) and the Federal Communications Commission (FCC) will no longer apply because CALNET will be a private network.

In our view, the CALNET procurement will have a significant effect on the way the State conducts its telecommunications business, and that a procurement of this size warrants Administration and Legislative attention and action. While the Administration and Legislature certainly were aware of the CALNET procurement, they were never given the opportunity to assess the project in detail, since normal State checks-and-balances were not followed.

Regardless of whether or not DGS should have explicitly followed SAM RFP requirements (as a legal matter), it is our view that the significance of this project should have led DGS to ensure the Administration and Legislature were fully aware of the responsibilities the State would be assuming, and the associated feasibility of taking on that responsibility.

THERE IS NO ASSURANCE THAT THE MOST COST EFFECTIVE SOLUTION WAS ACQUIRED

Because a comprehensive feasibility study was not conducted, we believe it is impossible for DGS to reliably and credibly report to the Administration and to the Legislature the expected costs and benefits of the CALNET project. Even though current funds are planned to cover the cost of CALNET, there must be solid analysis to reliably estimate net costs to ensure that adequate funding will be available in the years to come.

FULL COMPETITION MAY HAVE BEEN LIMITED

In our view, full competition was unnecessarily limited due to the "purchase" and "premise" RFP requirements. Unless the State can present a business case to support these two requirements, the State, in effect, precluded any vendor from bidding who is restricted from selling equipment by the Modified Final Judgement.

IV. RECOMMENDATIONS

CONDUCT A FEASIBILITY STUDY BEFORE PROCEEDING

A comprehensive feasibility study which meets SAM guidelines should be conducted before proceeding with the CALNET project. The Office of Information Technology or the Legislature should be the oversight agency to review and approve the Feasibility Study Report for the entire CALNET project (including all components of the CALNET project, not just network management). The State will benefit from a feasibility study by ensuring that the present CALNET design and implementation approach is cost effective. If it is discovered that the current CALNET design is not cost effective, this will then give DGS/TD the opportunity to adjust the design approach and implementation plan to make it cost effective.

The FSR should be developed with the assistance of an independent organization who was neither involved in the prior CALNET design nor will be involved with the implementation of CALNET and who will deliver an FSR that meets SAM guidelines.

USER REQUIREMENTS SHOULD BE CURRENT, DOCUMENTED, AND TRACEABLE

User needs should be current to ensure that the perception of user needs is correct. Outdated user needs are of limited value if the needs have changed substantially or if the needs no longer exist.

User needs should be documented to facilitate the process of keeping user needs current and a mechanism or methodology should be implemented which enables user needs to be readily revised and updated. Documentation can avoid potential misinterpretations which can result from verbally communicating user needs through several different channels.

The documentation process includes identifying and specifically stating user needs. As a part of the documentation process, user needs should be examined and scrutinized to determine their validity. The expressed needs should be categorized as either critical, important, or optional. In addition, the root cause of the need must be examined to determine if the perceived need can be directly addressed or if it is a symptom or a subset of a larger problem. As part of the examination process, a determination should be made as to whether or not meeting users' needs is feasible. For example:

- Does current technology permit such needs to be met, and is this technology available?

- Are there other alternatives which can satisfy user needs?

The costs associated with meeting user needs should also be identified and weighed against the importance of the expressed need.

Documentation of user requirements will provide a means for verifying that each feature and function included in the RFP is directly traceable to user needs, and therefore satisfies user needs. The benefits of feature-by-feature traceability to user needs gives the State the ability to:

- Avoid potentially unnecessary implementation and maintenance costs

- Ensure the user needs are satisfied

IMPLEMENT PROCEDURES TO INCLUDE TIMELY, COST-EFFECTIVE, AND JUSTIFIABLE MODERNIZATION OF THE CALNET DESIGN

Because the CALNET contract is for a length of 10 years and telecommunications technology is expected to continue changing rapidly, the State should ensure that it has the flexibility to modernize the CALNET design and associated hardware and software. This can be accomplished by periodically reviewing changes in technology and presenting a business case for those technological advances which would be added to CALNET. The contract to implement and manage CALNET can also be modified to include technology insertion on a periodic basis.

The benefit to the State is that a network like CALNET can keep pace with meeting user requirements for new features without having to go through major project cycles, procurements, and contract renegotiations.

FUTURE RFP REQUIREMENTS WHICH SIGNIFICANTLY LIMIT COMPETITION SHOULD BE SUPPORTABLE BY A BUSINESS CASE, OR MADE OPTIONAL

The State's requirements for the purchase of all CALNET hardware and software and for the equipment to be located on State property resulted in unnecessarily limiting competition. To avoid limiting competition, the State should express its requirements in terms of defining the objectives it desires, e.g., the control objective

Defining the objectives rather than specifying requirements facilitates competition and allows potential vendors to be creative in proposing various solutions. The feasibility of the proposed solutions should then be analyzed as a part of the evaluation process.

If, however, the State believes that any RFP requirements which could limit competition are essential to achieving its objectives, a business case should be presented to substantiate the requirements. The State should perform the following activities in its business case:

- Define the requirement
- Define the objectives of the requirement
- Identify the benefits of the requirement
- Identify associated costs, if any, of the requirement
- Identify the impact the requirement has on competition
- Identify why the benefits of the requirement justify limiting competition

We understand that the State plans to replace a majority of its 40 CENTREX systems over the next five to seven years. This replacement process will begin with the creation of an RFP. To avoid specifying requirements which could limit competition (such as "purchase" and "on State premise") the State could instead express its requirements by defining its objectives of the requirements and state the requirements for "purchase and "on State premises" as optional or desirable. This allows the State to facilitate competition by allowing for options which would currently be prohibited. If however, the State believes its RFP requirements are critical to achieving its objectives, the business case activities outlined above should be completed.

STATE CODE AND REGULATIONS NEED TO BE MODIFIED TO INSTITUTE OVERSIGHT AND CONTROL

The current confusion regarding the applicability of SAM Sections 4800 through 5180 to DGS/TD needs to be explicitly resolved by amending law, SAM, or both. DGS/TD should be required to follow SAM FSR requirements for DGS/TD projects. In our view, OIT should serve as the oversight agency for DGS/TD projects while DGS/TD can continue being the oversight agency for State agencies and departments which acquire telecommunications equipment and services.

Another alternative would be for the Legislature to be the oversight body for DGS/TD projects, which is similar to the current practice of the Legislature being the oversight body when Department of Finance wants to conduct an information systems project.

THE STATE SHOULD DETERMINE THE EXTENT TO WHICH IT WANTS TO ASSUME TELEPHONE COMPANY-LIKE RESPONSIBILITIES

As a matter of public policy, we believe the Administration and the Legislature should consider:

- Should the State directly compete with private enterprise for public utility services?
- Should the State assure the fiduciary and operational responsibility of CALNET as opposed to just contracting for telecommunications services?

We believe these issues need to be resolved before the current CALNET project proceeds.

THE STATE SHOULD ALLOW FLEXIBILITY IN THE DETERMINATION OF MATERIAL DEVIATIONS

The State should consider the feasibility of modifying their procurement procedures to allow flexibility in the determination of material deviations. At present, the State has no choice but to disqualify a vendor who fails to adequately respond to a requirement. The evaluation process should differentiate deviations from stated requirements into the categories: mandatory and materially deviant if not met, and mandatory but not material deviant if not met. A vendor whose requirement response was judged to be deviant but not materially would have their prices and/or evaluation point rating adjusted to compensate for the variance. This process provides the State with the flexibility to address minor non-materially deviant responses without being forced to disqualify a vendor entirely.

APPENDICES

Appendix A

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Sacramento, California
November 30, 1989

P-949.1

Mr. Kurt R. Sjoberg
Acting Auditor General
660 J Street, Suite 300
Sacramento, CA 95814

State Procurement: Telecommunications - #25966

Dear Mr. Sjoberg:

QUESTION

Did enactment of Chapter 1499 of the Statutes of 1986 eliminate the requirement in Section 12102 of the Public Contract Code that the policies and procedures set forth in the State Administrative Manual govern the acquisition and disposal of electronic data processing and telecommunications goods and services?

OPINION

The enactment of Chapter 1499 of the Statutes of 1986 did not eliminate the requirement in Section 12102 of the Public Contract Code that the policies and procedures set forth in the State Administrative Manual govern the acquisition and disposal of electronic data processing and telecommunications goods and services.

ANALYSIS

Section 12102 of the Public Contract Code requires the Department of Finance and the Department of General Services to maintain in the State Administrative Manual policies and procedures governing the acquisition and disposal of electronic data processing and telecommunications goods and services, including specific policies and procedures set forth in that section. The State Administrative Manual provides policies and procedures relating to information technology in Sections 4800 to 5953, inclusive.

Chapter 1499 of the Statutes of 1986, among other things, added Section 15277 to the Government Code to establish within the Department of General Services a Division of Telecommunications, to include within the division a policy and planning unit, and to specify the duties of the policy and planning unit. Section 15277 of the Government Code provides as follows:

> "15277. There is hereby established within the department a Division of Telecommunications. The division shall include a policy and planning unit whose duties shall include, but not be limited to, all of the following:
>
> "(a) Assessing the overall long-range telecommunications needs and requirements of the state considering both routine and emergency operations, performance, cost, state-of-the-art technology, multiuser availability, security, reliability, and such other factors deemed to be important to state needs and requirements.
>
> "(b) Developing strategic and tactical policies and plans for telecommunications with consideration for the systems and requirements of state agencies, counties, and other local jurisdictions; and preparing an annual strategic telecommunications plan which includes the feasibility of interfaces with federal and other state telecommunications networks and services.
>
> "(c) Recommending industry standards for telecommunications systems to assure multiuser availability and compatibility.
>
> "(d) Providing advice and assistance in the selection of telecommunications equipment to ensure that the telecommunications needs of state agencies are met and that procurements are compatible throughout state agencies and are consistent with the state's strategic and tactical plans for telecommunications.
>
> "(e) Providing management oversight of statewide telecommunications systems developments.

"(f) Providing for coordination of, and comment on, plans and policies and operational requirements from departments which utilize telecommunications in support of their principal function, such as the Office of Emergency Services, National Guard, health and safety agencies, and others with primary telecommunications programs.

"(g) Monitoring and participating on behalf of the state in the proceedings of federal and state regulatory agencies and in congressional and state legislative deliberations which have an impact on state government telecommunications activities.

"(h) Preparing and transmitting by March 31, 1987, a report to the Legislature which describes the actions taken by the department to plan and advocate the most advantageous use of telecommunications technology in state government operations and efforts to reduce costs.

"(i) Developing plans and policy regarding teleconferencing as an alternative to state travel and regarding emergency communications."

Thus, although Chapter 1499 of the Statutes of 1986 relates to telecommunications and creates a new division with specified duties with regard to telecommunications, there is nothing in Chapter 1499 of the Statutes of 1986 which would amend, repeal, or otherwise affect Section 12102 of the Public Contract Code.

Section 9 of Article IV of the California Constitution provides that a section of a statute may not be amended unless the section is reenacted as amended (see also, <u>Scott A.</u> v. <u>Superior Court</u>, 27 Cal. App. 3d 292, 295). In addition, in enacting any law, the Legislature is presumed to have had knowledge of existing statutory law and judicial decisions pertaining to the subject matter of that law (see <u>Bailey</u> v. <u>Superior Court</u>, 19 Cal. 3d 970, fn. 10, at 978-979).

By not amending Section 12102 of the Public Contract Code in Chapter 1499 of the Statutes of 1986, the Legislature is presumed to have intended that the changes made by Chapter 1499 of the Statutes of 1986 operate in addition to the provisions of Section 12102 of the Public Contract Code.

In addition, Section 12120 of the Public Contract Code requires that all procurements for the acquisition of telecommunications goods and services be accomplished in accordance with Chapter 3 (commencing with Section 12100) of Part 2 of Division 2 of the Public Contract Code, relating to the acquisition of electronic data processing goods and services. Chapter 1499 of the Statutes of 1986 amended Section 12120 of the Public Contract Code to revise the responsibility of the Department of Finance with regard to the establishment of policy and procedures for telecommunications, but did not revise the requirement that acquisitions be made in accordance with Chapter 3 (commencing with Section 12100) of Part 2 of Division 2 of the Public Contract Code, which includes Section 12102 of the Public Contract Code. Thus, by amending Section 12120 of the Public Contract Code by Chapter 1499 of the Statutes of 1986 in a manner that left intact the requirement of complying with Section 12102 of the Public Contract Code, the Legislature reaffirmed its intent that this requirement would continue in effect after the enactment of Chapter 1499 of the Statutes of 1986.

Therefore, the enactment of Chapter 1499 of the Statutes of 1986 did not eliminate the requirement in Section 12102 of the Public Contract Code that the policies and procedures set forth in the State Administrative Manual govern the acquisition and disposal of electronic data processing and telecommunications goods and services.

Very truly yours,

Bion M. Gregory
Legislative Counsel

By Verne L. Oliver
Verne L. Oliver
Deputy Legislative Counsel

VLO:emb

cc: Honorable Elihu M. Harris, Chairman,
Joint Legislative Audit Committee

State of California

State and Consumer Services Agency

Memorandum

To: Kurt R. Sjoberg
Acting Auditor General
660 J Street, Suite 300
Sacramento, CA 95814

Date: January 26, 1990

From: Office of the Secretary
(916) 323-9493
ATSS 473-9493

Subject: Response to Auditor General Report No. P-949.1

Thank you for the opportunity to respond to your report P-949.1 regarding the California Network System (CALNET) acquisition. The attached response from the Department of General Services addresses each of your recommendations.

If you need further information or assistance on this issue, you may wish to have your staff contact W. J. Anthony, Director, Department of General Services, at 445-3441.

Shirley Chilton

SHIRLEY R. CHILTON
Secretary to the Agency

Attached

SRC:ejp

STATE OF CALIFORNIA—STATE AND CONSUMER SERVICES AGENCY GEORGE DEUKMEJIAN, *Governor*

DEPARTMENT OF GENERAL SERVICES
EXECUTIVE OFFICE
915 CAPITOL MALL, SUITE 590
SACRAMENTO, CA 95814

JAN 26 1990

Kurt R. Sjoberg
Acting Auditor General
660 'J' Street, Suite 300
Sacramento, CA 95814

SUBJECT: P-949.1 - AUDIT OF THE CALIFORNIA NETWORK SYSTEM (CALNET) ACQUISITION

Dear Mr. Sjoberg:

Thank you for the opportunity to respond to report P-949.1 which was prepared for you under contract by Deloitte & Touche (D&T). This report addresses recommendations to the Department of General Services (DGS). The following response has been prepared by the DGS to address each of the recommendations as well as the most relevant findings and conclusions.

OVERVIEW OF THE REPORT

The DGS has reviewed the report entitled "Audit of the California Network System (CALNET) Acquisition" and disagrees with its final findings, conclusions and recommendations. The CALNET acquisition was executed in full accordance with State requirements and good business practices. This acquisition process has led to the procurement of a telecommunications system that will save the taxpayers of the State of California approximately $10 million over the ten year term of the contract when compared to current telephone charges. In addition, no new outlay of money will be required since it is being funded by replacing existing expenses. The criticisms of the CALNET acquisition presented in the D&T report are not factual.

The report is presented in a subjective manner with a minimum of firm criteria to support its findings. By primarily using the criterion of "generally accepted normal business practices" instead of existing criteria such as state laws, statutes, and policies, the consultants have the significant responsibility of presenting systematic, objective, and convincing analysis to support their findings. This was not accomplished in this report. Therefore, the DGS is unable to agree with the implementation of any of the proposed recommendations. The following is our response to the key issues presented within the Principal Findings section of the Executive Summary chapter of the report.

FINDING: "DGS Has Not Adequately Managed the CALNET Project and Related Procurement"

The following sections address the major issues raised within this finding.

Feasibility Study Report

The report states that a Feasibility Study Report (FSR) meeting State Administrative Manual (SAM) guidelines was not prepared, alleges that one is necessary and recommends that the CALNET project be stopped while an FSR is developed. The consultant firm is incorrect in its interpretation of State requirements, and the recommendation to initiate an FSR after the fact will not be adopted.

CALNET is exempt from State FSR requirements by SAM which excludes telecommunications equipment from this process when it is used for voice or video applications. The exclusion also includes network control equipment. CALNET is a replacement system for the State's voice network with attendant Network Management Control functions. However, CALNET was designed to integrate the State Data Network under its Network Control system. The State Data Network is the product of direct legislative interaction dating to 1982 when the data network was first conceived and data communications expertise was added to the staff of the Telecommunications Division at the request of the Legislature.

Upon inquiry, the DGS was advised by the Department of Finance that an FSR was not required. Additionally, in relation to transmission facilities for agencies which have an approved FSR that includes the use of data communications, the DGS has been advised that an FSR from the Telecommunications Division is not needed as it is merely providing the transmission facility on which the previously approved data communication project is carried. 1 *

Although an FSR was not required, the DGS did perform extensive analyses in moving toward the CALNET contract. To provide the baseline information for the writing of an RFP, a consultant was retained at a cost of over $400,000 to conduct a much more detailed study than the average FSR would provide. This study took a year to conduct and the eight volume work was a comprehensive analysis of the State's private line telephone network. With the consultants information in hand, an RFI was released to the telecommunications industry seeking their views on the replacement State network. This combination of processes involving consulting work, an RFI, and an RFP provides significantly more information than an FSR alone. 2

The report also states that oversight by the Department of Finances' Office of Information Technology (OIT) is needed. The telecommunications concept which evolved into CALNET was first suggested by OIT in a 1984 strategy document; after which DGS prepared a Budget Change Proposal (BCP) in the amount of $18 million to initiate the project. In addition, the telecommunications specialist on OIT's staff was assigned to the CALNET RFP evaluation team during the RFP process. 3

The report also contains the incorrect conclusion that oversight by the Legislature was not present in this procurement. The Legislative Analyst's Office was invited to attend, and sent a representative to, numerous meetings where the CALNET RFP was formulated. In addition, Assemblywoman Moore was represented at some meetings by one of her staff. Assemblywoman Moore and the Legislative Analyst were also provided with all consultants' reports and the RFP and its addenda. 4

Further, the report indicates that oversight was not provided because a budget change proposal was not submitted for the CALNET project. A BCP was not needed since there was no change in program, function or funding needed as part of the

* References associated to Deloitte & Touche Comments in Appendix C.

budget process. Instead, an installment purchase provision associated with the RFP was developed which completely eliminated the need for a BCP. In addition, the DGS faces budget oversight each fiscal year, and would have been available to answer any questions regarding the CALNET project. 5

Legislatively mandated oversight of the telecommunication's function was also initiated in 1986 with the creation of the Telecommunications Advisory Board. This Board is charged with reviewing and commenting on the policies, plans and procedures of DGS' Telecommunications Division. Legislative consultants and staff of the Legislative Analyst's Office also attended a meeting of the Board in November 1987 during which a briefing on CALNET was provided. 6

By delaying the CALNET project while preparing an after the fact FSR that is neither needed or required, the State would incur millions of dollars in penalties under the contract and face millions of dollars in added telecommunications expense. 7

User Needs

D&T indicates that the CALNET RFP was not responsive to users' needs and as such they are not certain how important many of the RFP requirements are or even if they are necessary. The Telecommunications Division was diligent in ensuring that user needs were determined and that CALNET sufficiently addressed those needs. The report itself acknowledges that the CALNET RFP is for the construction of a long distance network that is transparent to the user and as a result requires no user needs analysis. In addition, the switching facilities that complete long distance calls can be used to switch user calls and user needs must be determined for this function. The basis for these requirements was originally determined by the user group that formulated the original strategy for CALNET in 1984.

The report also omits the fact that user requirements were kept up to date by DGS personnel assigned to the RFP process. Analysts within the Telecommunications Division routinely handle thousands of requests a year for the purchase of user based telephone systems. Representatives of this analytical group were assigned to the CALNET project for the purpose of identifying user needs on an up-to-date basis by taking into account the trends established with their clients. This market research technique is widely used in the business environment.

In addition, the Legislature created a planning unit within the Telecommunications Division in 1986. This unit is charged with assessing the telecommunications needs of the State, developing policies and plans for telecommunications systems, recommending industry standards, and providing assistance and advice in the selection of telecommunications equipment. To perform this role and gain information relative to user needs and requirements, a planning process was developed and questionnaires were sent to all State departments. Interviews were also conducted with each department relative to their telecommunications needs and requirements. 8

If these tactics had not been utilized, it would not have been possible to include current user needs while using the very lengthy procurement process mandated by acquiring a system of this size. If the process suggested in the report is used, the system could never be acquired because the user needs analysis would require updating midway through the procurement. 9

While critical of the lack of user needs and the use of state of the art standards, the report fails to reflect that the CALNET RFP asks only for features that State employees are currently using. Of specific concern to the consultant was the requirement in the RFP for ISDN and SS#7 capabilities. ISDN and SS#7 are industry wide standards that are being implemented throughout the Public Switched Network. Private networks in the very near future will be required to interface to these standards if full compatibility with the Public Network is to be achieved. This capability was provided for 83 cents per line per month only because it was specified within the original bid and not as a later change order.

The DGS is confident that the functionality offered in the CALNET switch is such that it is able to meet current needs effectively and offers increased user features as they become necessary at little added cost. 10

Findings are also made in this section regarding the lack of a business case to proceed or even initiate the CALNET project. In addition, the report states that the State "may" experience a tariff increase if CALNET is not implemented. We believe the consultant would have to agree that divestiture created the need to migrate from the present system. No business case needs to be met other than facing the fact that without a replacement system the State's current costs of $12 million per year would double after December 31, 1990.

A comparison of current costs to the contract rate within CALNET shows that CALNET is less expensive than the current system and results in a minimum of $10 million in savings to taxpayers over the ten year term of the contract. Pacific Bell's tariffed rate (alluded to in the report) for equivalent service would cost the State $40 million more than the CALNET proposal. If the State signed the necessary sole source contract to initiate it, it would also violate State procurement laws. Further, if Pacific Bell provided this service, Interexchange Carriers have threatened court action as it would violate the terms and conditions of divestiture.

In lieu of CALNET, the public switched network is the only alternative. If this approach had been chosen, the 10 year costs to the State would amount to well over $240 million, assuming no rate increases occurred in the 10 years. That is $135 million more than CALNET. If costs were even close, then maybe there would be some justification for the statements made in the report. 11

The report also states that change orders to the original contract "may" have an effect on CALNET's cost effectiveness. There is no doubt that change will occur. However, the majority of changes will be brought about as the result of added lines due to growth. The basic system design was based on the information relative to the network at that time. Because the size of State government has grown 11.8% (238,000 employees in FY 1987/88 to 266,000 employees in FY 1990/91), the final CALNET system design will be revised to accommodate this growth, i.e., we expect a 5-15% increase in the size of CALNET. This growth in the network should not be confused with poor management, just good system design to allow for growth. The added lines bring additional revenue to compensate for the change and have no effect on cost effectiveness. 12

State Code and Regulation Modification

The DGS believes that the current State codes and regulations clearly present the requirements that pertain to telecommunication systems. Specifically, the FSR exemption provisions found in SAM relative to telecommunications systems are clear and were followed. Two issues were raised in litigation on the CALNET RFP; one was the lack of an FSR and the other pertained to financing alternatives. Both issues were resolved in favor of the State which tends to indicate that the courts agree that confusion does not exist. 13

State Policy Relative to Telephone Company-Like Responsibilities

By implementing the CALNET project, the State is making a sound business decision and is not becoming a telephone company. Current practices by any number of large users in the country parallel the direction taken by the State in the CALNET proposal. In fact, thirty other states are also managing their own network. Most major banks within California including the Bank of America, Wells Fargo, First Interstate and Security Pacific operate similar private line networks. Most large retail stores also have a similar architecture as do most large cities and counties as well as the State Colleges and Universities. The fact that divestiture has occurred and all users of the telephone system in this country must actively manage their systems does not mean that each is becoming a telephone company. The CALNET proposal is unique in that, unlike other users, the State does not intend to operate its own system. Instead, the State is relying on the private sector to perform this task.

The statement made in the report regarding the State directly competing with private enterprise is misleading and not supported by the facts. CALNET will continue the practice of providing mandated access to the State telephone system by other government organizations as the present system has done for the past twenty years. However, the State has no intention of directly competing with the private sector by offering its network facilities to other entities. This is consistent with good business practices in all areas of private or government enterprise. Services that can be performed more cost effectively by the State have often been assumed by the State. 14

FINDING: "The Need for Two Key Request for Proposals Requirements Are Not Supported"

This finding primarily states that the purchase and premise RFP requirements limited competition. Specifically, the report indicates that the purchase requirement of the CALNET RFP restricted the competitive nature of the procurement and that the requirement was placed in the RFP for State control purposes. Based on all the information available prior to the release of the RFP, including the analysis in the W&J Study, DGS concluded that purchase was the best alternative. No factual information available since that time has caused the State to change this opinion. The requirement for installation on State premises follows logically from the purchase decision. It makes little sense to buy equipment and then lease space for it when space is available in State facilities where the equipment will be used. Additional factors for both purchase and premise based equipment focus on the use of the CALNET switch by the Public Safety Community for switching requirements in the State Microwave System.

The issue pertaining to financing alternatives still appears to be misunderstood. This issue was the subject of a hearing before an Administrative Law Judge as a result of AT&T's appeal, and before the Superior Court as a result of Pacific Bell's appeal. The position of the DGS was upheld in both actions. A copy of the Attorney General's points and authorities was provided to the consultant. A review of that document should resolve any doubt that the consultant's position presented in the report is not valid.

The purchase and premise based requirements did not limit competition. Pacific Bell's inability to bid is a result of restrictions placed on them by Federal Judge Harold Green as a result of divestiture, and not as a result of restrictions imposed by the State of California. The Judge also provided a way for them to bid by providing an outlet for a waiver to the rules adopted by the modified final judgement. Pacific Bell could have sought such a waiver but chose not to do so. Another option available to Pacific Bell, but not attempted, was to have an unregulated subsidiary of its parent company, Pacific Telesis, bid as a prime or sub-contractor.

The report's statements relative to limited competition center around the fact that Pacific Bell could not bid. It is our opinion that the information presented above demonstrates that the State did not stop Pacific Bell from competing. 15

FINDING: "DGS Was Inconsistent in Determining Material Deviations from the Request for Proposals, and Whether the Deviation Was Significant."

Appropriate procurement practices were followed in all phases of this acquisition. The reported facts surrounding the RFP evaluation process are not completely accurate. Specifically, many of the material deviations found in the EDS bid during the final phase were not uncovered during draft submittals because EDS changed their bid from the draft form previously submitted. The report infers that the EDS bid was not accepted as a result of their failing to remove a wall at a cost of $20,000. This deviation is deemed to be insignificant in terms of the total bid price. What is not discussed in the report's analysis is that, in addition to this item, there were seven other material deviations, ten immaterial deviations, forty four items not validated from the bid response and twelve categories of equipment not found in the cost sheets.

The courts have decided what is a material deviation through numerous decisions which are regarded as case law. Neither the State or any other public entity has the discretion to ignore the court's definition of a material deviation nor does the State have any discretion to waive a material deviation. 16

FINDING: "Vendor Proposal Evaluation Guidelines Were Not Consistently Followed"

In our opinion, this major procurement is fully documented. All documentation required to be maintained by State statutes, SAM and Office of Procurement policies is available for the CALNET procurement. 17

CONCLUSION

The DGS has provided the consultant with all relevant information. In our opinion, the consultant failed to consider all information in preparing this report and, therefore, their analysis not accurate. We cannot agree with the report's conclusions and recommendations.

If you need further information or assistance on this issue, you may wish to have your staff contact me at 445-3441.

Sincerely,

W. J. ANTHONY, Director
Department of General Services

cc: Shirley Chilton, Secretary to the Agency

Appendix C

DELOITTE & TOUCHE'S COMMENTS ON THE DEPARTMENT OF GENERAL SERVICES' RESPONSE TO THE REPORT

OVERALL COMMENT

The arguments that the Department of General Services (DGS) has presented in their response are the same presented to us during our audit. However, in their response as throughout the audit, we could not find nor did they present adequate documentation to support their arguments. Whenever requests were made during the audit for data or documents to substantiate a claim, one of three things occurred:

- Supplied documents did not contain the reported information or so little data was present as to be useless in substantiating the claims of DGS.

- Documents were not available either through loss, destruction, or were determined to be nonexistent originally.

- Persons who were supposed to have completed work or made statements supporting a position reported to the contrary when interviewed.

In DGS' response in Appendix B, the facts (of unsupported and undocumented DGS decisions) in our report are ignored and the unsupportable claims are still being made.

The one overriding theme of our audit report is that DGS did not perform adequate documented analysis that supports the reasoning behind the key decisions that were made. For example, the requirement to purchase (e.g., hold title to) CALNET, in our view, unnecessarily limits competition and the State's objectives could still be met via other vendor financing alternatives. There could, however, be justifiable reasons for the State needing to hold title to CALNET equipment. However, DGS has not yet provided justifiable or supportable reasons while all the time knowing the end effect – limiting competition.

On page 1 of the DGS response to our report (found in Appendix B), DGS states that the "The CALNET acquisition was executed in full accordance with State requirements and good business practices". We refer the reader to the following sections of our report which state otherwise:

- "Specific user needs, or problems to be solved, cannot be traced to RFP requirements...As a result of not fully developing user needs, there is no assurance to the State that CALNET will deliver telecommunications services which the users need and which are cost effective". (Section II, pages 1-5) *This was ignored in the DGS response.*

- Most benefits are poorly defined, undocumented, and cannot be substantiated" (Section II,pages 5 - 6. *This was ignored in the DGS response.*

- "...the enactment of [certain] Statutes...did not eliminate the requirement that the ... State Administrative Manual govern..." (Legislative Counsel opinion, Appendix A, emphasis added) *This was ignored in the DGS response.*

- "One of the main reasons that oversight control was not present in the CALNET procurement was the TD belief that SAM...do[es] not apply to the Telecommunications Division". (Section II, page 9). *DGS Acknowledges this in their response.*

- Major CALNET costs were not fully considered". (Section II, page 15). *This was ignored in the DGS response.*

The excerpts above are indicative of the problems associated with the CALNET procurement process. These clearly show that applicable statutes were ignored and that good business practices (such as establishing an audit trail supporting technical and financial analyses) were not followed.

SPECIFIC COMMENTS (cross-referenced to DGS' response in Appendix B)

1. The Department itself acknowledges that CALNET is "both a voice and data" network (see pages II-7/8 of the report and page 2, paragraph 2 of their response in Appendix B).

   The former Director of the OIT reported that DGS was told an FSR would be required for at least the information systems portion of the network.

   The Legislative Counsel's opinion (Appendix A) confirms that DGS was in no way exempted from following the relevant portions of SAM regarding acquisition of EDP and Telecommunications equipment. (see page 1, paragraph 3 and page 4, paragraph 1). DGS has presented no record or report of any legal opinion to the contrary.

   Despite all this, an FSR was not accomplished for any part of this project.

2. The W and J Study listed by DGS was not a feasibility study even in the most general context of SAM requirements. It was an engineering study for the CALNET backbone network alone. Some overly generalized financial analyses were conducted, but they were not adequately detailed, documented, or supported. They were not comprehensive enough to support DGS business decisions. (Reference page II-10 through page 14)

   The DGS response on page 2, paragraph 4 states the combination of the W and J Study and RFI, and an RFP "provides significantly more information than an FSR alone". Despite their paper volume, in fact, the combination of processes fail to adequately address:

   - Viable alternatives other than the one in the RFP

   - Current detail costs and consequences of failure to act other than those related to the MFJ

- Legislative and regulatory changes required for other viable alternatives *(none presented)*

- Prospective implementation strategies for viable alternatives *(none presented)*

- Substantiation for any claimed benefits

- Substantiation for claimed costs

3. OIT input into the 1984 strategy document does not constitute oversight control for the CALNET project itself; it simply constitutes their approval of the "telecommunications concept which evolved into CALNET" (DGS response, Appendix B, page 2, paragraph 5).

   As told to us by the then director of OIT, a professional from OIT was loaned to the DGS team to work as a team member under their supervision. He was not, during that time, a representative of OIT nor was he performing any aspect of OIT functions. His participation did not carry with it any approval or authorization to proceed. The DGS response in Appendix B ignores this reality.

4. As discussed on page III-1, paragraph 3 of this report, "While the Administration and Legislature certainly were aware of the CALNET procurement, they were never given the opportunity to assess the project in detail, since normal State checks-and-balances were not followed." In fact, the reported $18 million BCP for CALNET was not approved by the Legislature. One could argue that since it was not, it was clear that legislative approval of the project was lacking.

   Legislative oversight derives from more than one LAO person attending meetings. LAO staff do not set policy or establish budget priorities; only the Legislature has this responsibility.

5. As discussed on page II-9, paragraph 1 of this report, we do not suggest a BCP should have been submitted for the CALNET project. However, "...this does not remove the requirement to conduct a feasibility study". The issue is not whether a BCP was submitted, but whether a feasibility study was conducted.

6. The Telecommunication Advisory Board (TAB) role, as defined in Government Code Section 15278, is **advisory** and not oversight control similar to OIT's role. Section 15278 contains no mention of roles such as advising on economics of projects, the feasibility of projects, or having the authority to deny a project.

7. The State must assure its constituents that the public funds are being spent wisely. Without an FSR, a business case cannot be presented to ensure public funds are being expended efficiently and effectively.

The State has long acknowledged that its agencies have a responsibility to ensure that large or sophisticated EDP and telecommunications expenditures are:

- Well planned
- Based on sound justifications and need
- Clearly understood and supportable
- Openly reviewed and approved by appropriate entities
- Able to be evaluated on the basis of objective documented evidence

To that end, extensive legislation has over the years established a series of checks-and-balances even to the extent of creating whole agencies or functions to do so. Every State agency, except the courts, the Universities (CSU and UC), and the Legislature is subject to these checks-and-balances. DGS is not exempt from them and in fact performs some of the control functions themselves.

8. DGS claims in their response that they were diligent in determining user needs (although no supporting documentation or analysis was ever produced) and even incorporated those requirements into the CALNET RFP. In the very next sentence, it is then implied that CALNET requires no user needs analysis since it is only a "long distance network." We do not agree or acknowledge this as a fact. The reader should refer to our report page II-3 which says:

> "We agree that users should usually not be concerned with the transport and switching issues. However, CALNET is not only a backbone replacement; segments of the design have potentially significant impact on the individual user."

and Page II-2, first paragraph:

> "The *Telecommunications Strategy for State Government* report of April 1984, prepared by the Department of Finance, Office of Information Technology (OIT), in conjunction with TD, discussed user needs only at a high level, e.g., management of telecommunications costs and facilities, controlling the use of long distance facilities, and preparing individual agencies for new telecommunications responsibilities. This report did not discuss specific agency or individual user needs."

CALNET is more than a "backbone replacement" as claimed by TD and segments of the design have a potentially significant impact on the user. The impact on users served by 34,000 CENTREX stations should have been taken into consideration.

In order to demonstrate that CALNET represents prudent deployment of State funds, documentation of user requirements is the minimum one would expect for a $100 million commitment. The DGS' claims notwithstanding, during our audit, repeated requests for supporting analysis and documentation were made but none was forthcoming that could be construed as user requirements. Reference our report pages II-2, 3.

Also, the DGS indicates in their response that the TD handles thousands of requests to purchase user based telephone systems and that their requests are used to identify "user needs on an up-to-date basis by taking into account the trends established with their clients." Once again, we could not find documentation that traces the "thousands of requests" to the CALNET design. Further, asking for current service support in no way equates with determining future needs.

9. It is suggested by the DGS that changing user needs could not be incorporated into the lengthy CALNET procurement process because the process would never have been completed. We disagree. In fact, our own involvement with even larger procurements than CALNET suggests that the process could have been designed to assess future user needs at some midpoint. These would be such things as new capability requirements, changes in volume, geographic location, etc. and then amending the RFP accordingly to make it more current and timely.

   This process is similar to the TD's efforts in incorporating changing technology in the industry. It is a well-known and documented fact that the TD made numerous modifications to the RFP to incorporate new and state-of-the-art definitions of features for ISDN. We do not believe it would have been a burdensome task to incorporate changing user requirements at the same time.

10. The DGS response states that the "report fails to reflect that the CALNET RFP asks only for features that the State employees are currently using." We disagree with this statement. In Phase 2 of the RFP, the ISDN and associated SS#7 signalling features were listed as mandatory. These are not being used in the ATSS network today. As stated on Page II-6:

    > "The benefit of improved technology, according to State personnel, is directly related to implementation of ISDN and Common Channel Signalling System #7 (SS#7). ...the applications and benefits of these features have neither been clearly identified nor defined."

    TD also stated that "ISDN and SS#7 are industry wide standards that are being implemented throughout Public Switched Networks. Private networks in the very near future will be required to interface to these standards if full compatibility with the Public Network is to be achieved." We agree that implementation is occurring, however, we believe it will take three to five years before standards are finalized and applications are even available on a widespread and economic basis. It is likely that the $3,600,000 investment for ISDN, which is incorporated in the CALNET design, will require additional expenditures for software and/or hardware in order for the State to take full advantage of ISDN's potential. Further, we believe not having these features will not preclude connectivity to public networks which use them.

11. We do not agree with the statement that "...divestiture created <u>the</u> need to migrate from the present system." (underlining added.) We do agree that divestiture was **one** of the motivations to migrate from ATSS. If a comprehensive, supportable business case had been developed, it would have analyzed the costs and savings of staying with ATSS versus moving to CALNET, as well as the costs related to control and purchasing state-of-the-art features. It is only conjecture that the State's current costs will double after 1990 without a replacement system. A business case did not need to be completed solely to show that something like CALNET had to be implemented versus staying with ATSS, but instead to present the business case for the CALNET project itself. Just because CALNET may appear less expensive than ATSS on the surface does not mean that the cost **effectiveness** of CALNET should not be analyzed and examined by the Administration and Legislature.

    We have not been able to validate these monetary claims because documentation simply does not exist. In addition, D&T did not suggest the State enter into a "sole source contract" with any vendor. The issue is that business decisions need to be supportable and documented. It is also unclear how the $240 million for a public switched network was calculated. Finally, we do not necessarily agree that the public switched network is the only alternative to CALNET **today** when considering vendor volume discount contracts and Virtual Private Network offerings. There is no record of such an analysis being accomplished by DGS.

12. DGS' response implies that a reserve fund be set aside for Job Change Orders (JCOs) is not relevant to CALNET; the only changes which could occur would result from expected growth in State government personnel. Therefore, additional revenues from this growth would offset higher costs. In our view, a fund for JCO's should be set aside for both expected and unexpected changes, as stated on Page II-15. It should also be considered in an analysis.

    CALNET JCOs will result from many sources, e.g. growth, the use of new features, technology change, vendor support limitations, etc. It is not clear from DGS documentation how many of these JCOs will be funded from growth revenue since there was no economic analysis performed by the TD. Once again, the assertion that "the majority of changes will be brought about as the result of added lines due to growth" is not supported by analysis and documentation.

13. As discussed on page II-7, CALNET includes both voice and data features and functions and therefore does not exclude CALNET from SAM FSR requirements. See SAM Section 4819.32.

14. The issue is the effect CALNET will have on State procedures, responsibility, and public policy was never allowed to be discussed by the Administration (Governor's Office and Department of Finance) and the Legislature. Implementing some type of private network is probably a sound plan for the State, but because the implications of implementing such a network are so significant (e.g., the State taking the responsibility to provide service rather than simply paying for service), the implications should have been explicitly brought to the attention of the Administration and the Legislature. If an FSR had been prepared, this would have occurred. This issue is further discussed in this report Section III, page 1.

After three years DGS has the option to take over "hands on" operations of CALNET. During the first three years GTEL will actually operate the system, but DGS still holds the responsibility for the success of implementing and maintaining CALNET.

The Legislature obviously is concerned about the associated public policy issues as is witnessed by Senate Bill 1543 (Chaptered September 27, 1989) which states:

> "The reports shall also include information compiled, after consultation with the Public Utilities Commission, regarding the impact the implementation of CALNET has had, if any, on the rates charged and services provided by regulated local telephone utilities."

15. Under oath, W and J Partnership told us that their study did not recommend to "purchase" (e.g., hold title to) CALNET, but that their study said to "procure" CALNET and that as a practical matter certain portions of CALNET may be purchased. Our review of the W and J Study confirms the above statement by the W and J Partnership.

    We could find no other documentation that supported DGS' decision to purchase CALNET and place it on State premises. Once again, DGS' arguments put forth in their response to this report cannot be supported by analysis and documentation.

    The issue raised in our report is not primarily a legal one. There may, of course, be legal consequences if a reviewing court decides DGS had an obligation to construct its procurement in the way best suited to maximize competition, and that by excluding lease financing proposals that obligation was not satisfied. Put another way, the question is whether procurement methodology was designed on a sound and well-thought out basis. Put another way, the issue is whether the "purchase" and "premise" RFP requirements were arbitrarily set by DGS. We could find no supporting evidence that showed the two requirements were not arbitrary. The net effect is that all telecommunications companies that were limited by the MFJ from selling equipment and systems, could not be part of the competition.

    The denial of Pacific Bell's motion should not be interpreted that an FSR and a lease versus purchase analysis did not have to be completed by DGS. It should be interpreted that the State's argument of laches took precedence over Pacific Bell's argument in its request to set aside the procurement. There is never a case where not following good business practices and State guidelines can be excused.

16. The issue is whether proper judgement was used by DGS in determining whether a deviation was material or not. We agree that law does not allow material deviations to be waived but judgement has to be exercised by the State in determining whether a deviation is material or making a requirement mandatory. As discussed in this report on page II-26 "No effort was made by TD and OP to determine either the financial impact or the technical significance of a response and thus if it was a material deviation."

    This issue is not about whether EDS should have been removed from the competition because of all their many material deviations, it is about applying consistent judgement as to whether a deviation is material or not.

17. The CALNET procurement does not meet SAM and OP requirements for documentation as is discussed on pages II-28, 29 of this report. Once again, adequate documentation does not exist to audit the DGS decision process. In this case only the Evaluation and Recommendation Package exists and it contains mostly summary information that was based on work sheets that have been discarded.

cc: Members of the Legislature
Office of the Governor
Office of the Lieutenant Governor
State Controller
Legislative Analyst
Assembly Office of Research
Senate Office of Research
Assembly Majority/Minority Consultants
Senate Majority/Minority Consultants
Capitol Press Corps