

ALASKA STATE LEGISLATURE

LEGISLATIVE BUDGET AND AUDIT COMMITTEE

Division of Legislative Audit



P.O. Box 113300
Juneau, AK 99811-3300
(907) 465-3830
FAX (907) 465-2347
legaudit@legis.state.ak.us

July 5, 2011

Members of the Legislative Budget
and Audit Committee:

In accordance with the provisions of Title 24 of the Alaska Statutes, the attached report is submitted for your review.

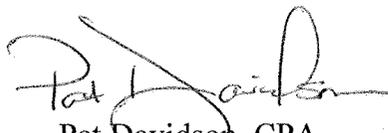
DEPARTMENT OF ADMINISTRATION ENTERPRISE TECHNOLOGY SERVICES DIVISION TELECOMMUNICATION PROCUREMENT AND PURSUIT OF NEW TECHNOLOGIES

May 4, 2011

Audit Control Number
02-30058-11

The primary objectives of this audit were to examine the procurement of telecommunication services by the State's Enterprise Technology Services Division and to report the costs paid for those services. The secondary objective was to evaluate the pursuit of new technology by state agencies.

The audit was conducted in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. Fieldwork procedures utilized in the course of developing the findings and recommendations presented in this report are discussed in the Objectives, Scope, and Methodology.



Pat Davidson, CPA
Legislative Auditor

TABLE OF CONTENTS

	<u>Page</u>
Objectives, Scope, and Methodology	1
Organization and Function	5
Background Information.....	9
Report Conclusions.....	13
Findings and Recommendations.....	19
Agency Response	
Department of Administration	23

OBJECTIVES, SCOPE, AND METHODOLOGY

In accordance with Title 24 of the Alaska Statutes and a special request by the Legislative Budget and Audit Committee, we reviewed the purchase of telecommunication services from the private sector by the Department of Administration (DOA), Enterprise Technology Services Division (ETS). Specifically, we were asked to perform the following.

1. Identify and report the annual cost for services covered under the current core telecommunication services contract (core contract). This includes:
 - The annual cost of services prior to the contract.
 - Expected costs at the time the contract was executed.
 - Annual costs of services under the current contract.
2. Compare the current cost of the core contract to expected costs; and identify and explain variances.
3. Describe contract provisions including: changes to the original scope of services; termination date; and ETS' intent to execute contract extensions.
4. Identify and report any telecommunications work that has been solesourced by ETS to the current contractor or to any other telecommunication provider.
5. Identify and report payments to vendors charged to the "Program Management and Consulting" (73753) accounting code in the Alaska statewide accounting system (AKSAS).
6. Ascertain whether it is ETS' responsibility to provide new telecommunication technologies that increase state employee productivity and/or reduce long-term costs.
7. Describe ETS and state departments' efforts to explore new telecommunication technologies that may increase productivity and/or reduce long-term costs.

Scope

The audit focused on ETS' procurement of telecommunication services during the period of December 2008 through February 28, 2011. Applicable state statutes and regulations did not change significantly during this period.

Our review of ETS' core contract costs was for the period July 2006 through February 28, 2011. This included reviewing costs for the current contract (December 2007 to February 28, 2011) and costs related to the prior contract (July 2006 to December 2007¹).

Methodology

To meet the various audit objectives, our field work included interviewing DOA procurement staff and the State's chief procurement officer to help understand the procurement process. ETS telecommunications specialists and the ETS director were interviewed to help understand ETS' role and responsibility for pursuing new telecommunication technology. ETS procurement staff were interviewed to gain an understanding of the process for procuring telecommunication services.

We also obtained and reviewed the request for proposal and bid documents for the current and interim core contracts. This allowed us to evaluate the extent to which services were competitively sought. In order to identify solesource contracts, we obtained the biannual procurement summary report prepared by DOA. The most recent report covered 2008 through 2009. For solesource contracts after 2009, we requested a listing of solesource contracts from the State's chief procurement officer.

The last two core contracts were obtained and analyzed for their scope and rates. Related contract files were examined to identify changes in the contract terms and any extensions.

Contract costs were not readily available in AKSAS. In order to compare actual costs to contract estimates, we calculated approximate contract costs. This was done by isolating all expenditures made to the contractor and then eliminating costs associated with services that were not part of the core contract. Examples of these services are: wireless services, utility relocation, advertising, and television. Costs to be eliminated were identified based on a review of AKSAS encumbrances and expenditures; discussion with departmental administrative staff; and discussions with ETS staff. Using this methodology along with the knowledge that approximately 50 percent of core telecommunication annual costs are paid by ETS and can be specifically identified in AKSAS, a reasonable approximation of annual core contract expenditures was made. The approximation was compared to a billing summary report provided monthly from the vendor, General Communication, Incorporated (GCI), to evaluate reasonableness. Our approximation was within five percent of the billing summary report.

We conducted a survey of agency information security officers, or their designees. The survey was administered to all state departments with a response rate of 100 percent.

¹The interim core contract period spanned the period December 2003 through December 2007. For the purposes of this audit, we only reviewed the associated contract costs for the fiscal year immediately preceding the date the current contract was signed. The costs were used to compare the current contract.

The survey measured respondents perception of departmental and ETS responsibilities for telecommunication. It was also designed to determine departmental usage and exploration of emerging telecommunication technologies.

Definition of Telecommunication

Alaska Statute 44.21.305(6) defines *telecommunications* as the transmission and reception of messages, impressions, pictures, and signals by means of electromagnetic transmission with or without benefit of a closed transmission medium including all instrumentalities, facilities, apparatus, and services, whether conveyed by cable or wire, radiated through space, or transmitted through other media within a specified area or between designated points. This definition was used throughout the course of the audit.

(Intentionally left blank)

ORGANIZATION AND FUNCTION

Department of Administration (DOA)

DOA's mission is to provide consistent and efficient support services to state agencies so that they may better serve Alaskans. The department is empowered by AS 44.21.310 to manage telecommunications services. Functionally, the Enterprise Technology Services Division serves as DOA's telecommunication planner, coordinator, and manager.

Enterprise Technology Services Division (ETS)

ETS provides core information technology (IT) services to all state agencies. It supplies the underlying hardware, software, network infrastructure, and enterprise services. Its mission statement is *"to provide a robust and secure information technology infrastructure together with enterprise services that support state agencies' business needs."*

For the purpose of this report, ETS can be thought of as having two, layered, but distinct functions. First, it helps coordinate new telecommunication technologies to be instituted within the departments; second, it supports those new technologies by fulfilling the procurement function. ETS' responsibilities and duties are identified in statute.

Alaska Statute 44.21.020 lists DOA's telecommunication-related duties (carried out by ETS). These include studying, designing, implementing, and managing the State's telecommunications systems and services. DOA's commissioner has the power to direct departmental activities related to telecommunications. A partial list of ETS' telecommunication powers and duties are as follows.

- Coordinate, manage, and supervise state programs in telecommunications including the management of state telecommunication services obtained from common carriers and from the communications industry.
- Prepare and maintain a comprehensive state telecommunication development plan to further state telecommunications development, to meet state telecommunication needs, and to prepare and maintain a comprehensive inventory of all state communication facilities.
- Whenever feasible, procure services from private enterprise or certified and franchised utilities; contract for the construction, management, operation, and maintenance of telecommunication systems; and develop a procurement policy consistent with AS 36.30 (State Procurement Code).

- Provide information and assistance to state agencies to promote governmental coordination and unity in preparing agency plans and programs involving the use of telecommunications.
- Participate with other governmental units in planning, and assist local governments, governmental conferences, and councils in the State with planning and coordinating their telecommunication-related activities.
- Provide for state agencies' orderly transition to new telecommunication services and systems.
- Serve as a clearinghouse for information, data, and other materials that may be necessary or helpful to federal, state, or local governmental agencies in the development of telecommunication systems.

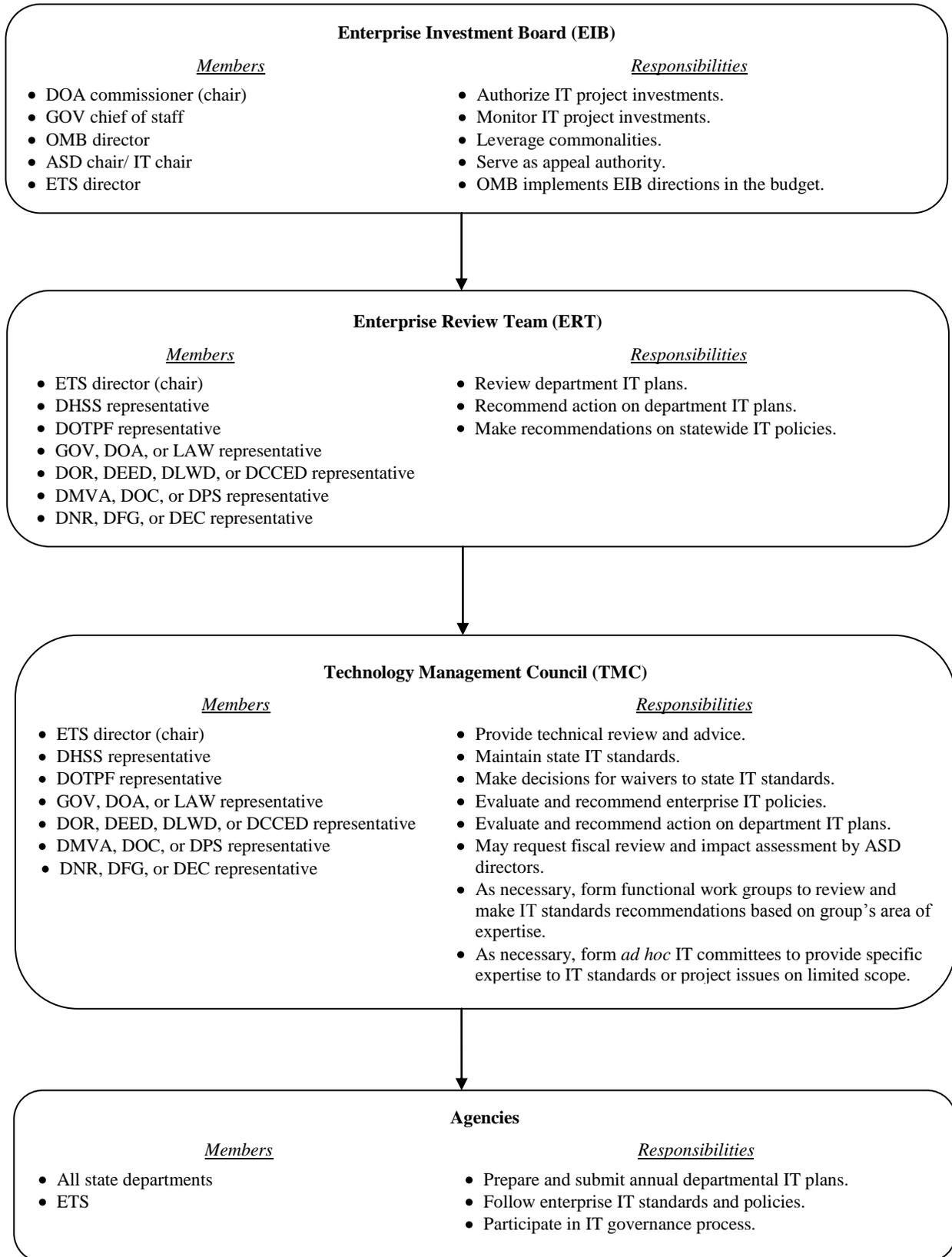
ETS has a procurement section which includes a Contracting Officer III, and four procurement specialists.

IT Planning Process

Planning for the development and integration of new technologies within the State generally happens annually. While ETS is ultimately responsible for implementing core technology, the planning process is carried out by a hierarchical series of boards operating outside of ETS. The IT planning participants and their respective responsibilities are illustrated in Exhibit 1 on the following page.

²Department and division acronyms included in Exhibit 1 are defined as follows: Office of the Governor (GOV); Administrative Services Division (ASD); Department of Health and Social Services (DHSS); Department of Transportation and Public Facilities (DOTPF); Department of Law (LAW); Department of Commerce, Community, and Economic Development (DCCED); Department of Education and Early Development (DEED); Department of Labor and Workforce Development (DLWD); Department of Revenue (DOR); Department of Corrections (DOC); Department of Military and Veterans Affairs (DMVA); Department of Public Safety (DPS); Department of Environmental Conservation (DEC); Department of Fish and Game (DFG); and Department of Natural Resources (DNR).

Exhibit 1
State of Alaska IT Governance Structure²



(Intentionally left blank)

BACKGROUND INFORMATION

State Laws Govern Limited Competitive Procurement

Alaska Statute 36.30.305 and 2 AAC 12.430 govern limited competition procurement. The chief procurement officer's written determination requires that an existing situation makes competitive sealed bidding or competitive sealed proposals impractical or contrary to the public's interest.

Single source contracting is one type of limited competition procurement. Alaska Statute 36.30.300 regulates single source procurements. It states that such procurements may only be awarded if competitive bidding is not "*practicable*" and the award is "*in the State's best interest.*" An agency is required to provide written evidence of these requirements at the time of procurement and to seek approval from the State's chief procurement officer.

A fully competitive bid process can appear to be a limited procurement process when there is only one responsive bidder. In the event that there is only one responsive bid in a fully competitive bid process, 2 ACC 12.190 states that the award may be made to that single bidder if "*the proposal is determined in writing to be the most advantageous to the state, taking into consideration price and evaluation factors.*" Alternatively, the one responsive bid may be rejected, and the agency may decide to re-solicit proposals.

The Comprehensive Telecommunication Contract (April 2001 – December 2003)

The comprehensive telecommunication contract was designed to "*address comprehensive telecommunications needs and requirements, improve service levels, reduce costs and achieve a vision of enhanced accessibility for citizens and state employees alike via an integrated electronic infrastructure.*" The contract required the following ten bundles³ to be provided by service providers:

- Wired telephone services
- Data network services
- Video conferencing services
- Paging services
- Cellular telecommunication services
- Satellite broadcasting services
- State of Alaska Telecommunications System microwave maintenance and repair
- Satellite telephony services
- Satellite earth-state maintenance and repair

Beginning in April 1, 2001, Alaska Communications Systems (ACS) was contracted to provide the ten service bundles. The ACS contract was scheduled to span five years and total over \$104 million. However, early in the contract, ACS failed to deliver contracted services

³A bundle represents two or more similar telecommunication services.

within deadlines. In response, the State withdrew from the contract and entered into an “interim contract.”

The Interim Core Telecommunication Services Contract (December 2003 – December 2007)

In late October 2003, the State issued a limited competition request for proposal (RFP) for an interim core telecommunication services contract (core contract). The limited competition RFP was approved because the upcoming deadline for disentanglement from ACS prevented a longer open competitive bidding process.

The number of services to be provided by the contract was reduced from ten bundles to four bundles. The interim core contract was awarded to General Communication, Incorporated (GCI) in December of 2003. The initial term of the contract spanned 18 months and allowed two, one-year extensions and one, six-month extension. All three extensions were exercised, and the final extension ended December 2007.

Current Core Contract (December 2007 – Present)

In April of 2007, the State issued an RFP to replace the interim core contract. The RFP resulted in two bidders, but only one was deemed responsive. In December 2007, GCI was awarded the contract. The core contract awarded to GCI included four bundles. The bundle definitions remained nearly the same as those defined in the interim contract. (See Exhibit 2 below.)

Exhibit 2

BUNDLE DEFINITIONS FROM THE CURRENT CORE CONTRACT	
Bundle	Components
Telephony	Private branch exchanges (PBX) and voice-over internet protocol (VoIP) phone systems, voicemail, local telephone services, long distance services, toll free services, calling cards, audio conferencing, and maintenance and repairs.
Data Network	Wide area network (WAN) including routers, hub routers, data switches, firewalls, intrusion detection systems, and modem pools; internet connectivity; dedicated and shared line connectivity; network monitoring, management, maintenance, and repair.
Video Conferencing	Video conferencing including bridges, video over internet protocol packet network, maintenance, and repair.
End-User Support	Help desk, system administration, system requests, support services, and reporting.

The bundles consist of fixed price (fixed) costs as well as time and materials priced (variable) costs. Fixed costs were mainly billed to the Enterprise Technology Services Division (ETS), and variable costs were billed to ETS and other state agencies. State agencies residing in state-owned facilities located in Anchorage, Fairbanks, and Juneau receive the majority of telecommunication services through the fixed price portion of the contract.

The fixed portion of the contract is charged to the “Program Management and Consulting” account code in the Alaska state accounting system. ETS’ use of that account code is not unique. For example, in FY 10, 1,235 vendors had expenditures recorded to the account.

The core contract included estimates for annual costs that were based on usage figures provided by ETS. By the terms of the contract, GCI was to provide telecommunication services for three years, beginning in December of 2007. The contract also contained three, one-year extensions – the first of which was exercised in December 2010 and extends the contract through December 2011. Two, one-year optional extensions remain. ETS plans to exercise the final two extensions provided GCI continues to meet contract requirements. Total costs for the initial three-year term of the contract were not to exceed \$30 million. The first extension increased the amount “*not to exceed*” limit to \$40 million.

Changes to the Scope of the Current Core Contract

As shown below in Exhibit 3, between the signing of the contract and the first extension, there were several increases in internet connectivity which increased the fixed costs billed to ETS. The rates for these increases were provided for within the terms of the core contract. All of the connectivity increases ceased when the first extension was exercised. The first extension increased the base internet connectivity to 150 MB.⁴

Other than the increase in connectivity, changes in scope have been largely due to the anticipated change in telephone system technology and have not resulted in an increase in estimated contract costs.

Exhibit 3

Core Contract – Annual Costs of Increases in Internet Connectivity							
Date	Connectivity Increase	Monthly Increase	FY 08	FY 09	FY 10	FY 11 ⁵	Total
December 21, 2007	12 MB	6,000.00	\$36,000	\$72,000	\$ 72,000	\$36,000	\$216,000
August 21, 2008	22 MB	11,000.00	-	110,000	132,000	66,000	308,000
May 1, 2009	20 MB	10,000.00	-	20,000	120,000	60,000	200,000
December 1, 2009	21 MB	10,500.00	-	-	73,500	63,000	136,500
			\$36,000	\$202,000	\$397,500	\$225,000	\$860,500

⁴The original contract established the base internet connectivity at 45 MB.

⁵The FY 11 costs only include July 2010 through December 2010.

Expected Annual Contract Costs

The expected annual cost of the core contract was \$9,047,226. Exhibit 4 lists the expected costs by type of service for the original contract in December 2007 and the first extension in December 2010. The expected annual costs dropped to \$7,676,748 with the first extension.

The original contract included flat fees for PBX and VoIP telephone systems. The PBX system has been discontinued thereby decreasing the total contract cost. This drop in the total is despite an increase in internet connectivity of over 100 MB from the original contract to the first extension. The estimated costs for long-distance and other variable costs billed to agencies did not change with the first extension.

Exhibit 4

Core Contract Estimated Annual Costs by Service Type		
	Original	1st Extension
Fixed Costs - Billed to ETS		
<i>Telephony</i>		
PBX	\$1,801,554	-
VoIP	1,282,463	\$1,282,463
<i>Data Network</i>		
WAN Services	681,391	681,391
Internet Connectivity ⁶	268,800	360,000
Backbone Connectivity	654,570	1,085,646
<i>Video Conferencing Services</i>	346,298	346,298
<i>Help Desk Services</i>	1,307,729	1,307,729
Total Fixed Costs	\$6,342,805	\$5,063,527
Variable Costs - Billed to Agencies		
<i>Telephony</i>		
Long-Distance	\$1,440,000	\$1,440,000
Toll Free Service	650,000	650,000
Calling Card Services	33,000	33,000
Teleconferencing Services	500,000	500,000
<i>Data Network</i>		
Broadband Access	26,031	26,031
Internet Access	55,390	55,390
Total Variable Costs	2,704,421	2,704,421
Annual Total	\$9,047,226	\$7,767,948

Source: Core Telecommunication Services Contracts

⁶The original contract was for 45 MB of internet connectivity at an annual cost of \$268,800. However, as shown in Exhibit 3, there were several interim connectivity increases each adding additional costs. With the last interim increase, the total annual internet connectivity charges would total over \$700,000. When the first extension was signed, internet connectivity was again increased, but actual costs dropped to \$360,000.

REPORT CONCLUSIONS

The primary objective of this audit was to examine the procurement of telecommunication services by the State's Enterprise Technology Services Division (ETS) and to report the costs paid for those services. Core telecommunication services contract (core contract) costs could not be identified using the Alaska statewide accounting system (AKSAS), but they could be estimated. The audit found that annual core contract costs did not exceed contract limits.

A secondary objective was to evaluate the pursuit of new telecommunication technology by state agencies. ETS and state departments share the responsibility for pursuing new telecommunication technology. The audit found that new telecommunication technologies are being pursued in varying degrees by departments. The conclusions are discussed in more detail below.

Approximate annual core contract expenditures were less than \$10 million a year.

The core contract expenditures are not specifically tracked in AKSAS to allow for the reporting and monitoring of costs. The fixed costs billed to ETS⁷ are identifiable within AKSAS. However, the remaining contract expenditures, billed separately to other state agencies, are not readily identifiable. ETS has not designated any accounting structure within AKSAS to identify the expenditures made by agencies other than ETS. (See Recommendation No. 1.) Although core contract expenditures are not comprehensively tracked in AKSAS, annual contract expenditures can be reasonably calculated.⁸

Exhibit 5 (following page) reports the core contract expenditures for the period FY 07 through February 2011. FY 07 amounts represent a full year of expenditures under the interim core contract. Amounts for FY 08 are for expenditures under the interim core contract and the current core contract effective December 2007. Combining the two contracts is reasonable since the services provided were generally the same. FY 09 through February 2011 report the current core contract costs.

⁷Contract costs paid by ETS represent approximately 50-60 percent of annual contract expenditures.

⁸The methodology used to calculate the approximate core contract expenditures is discussed in the Objectives, Scope, and Methodology section of the report.

Exhibit 5

Approximate Interim and Current Core Contract Expenditures FY 07 – February 28, 2011					
	Interim FY 07	Interim & Current FY 08	Current FY 09	Current FY 10	Current FY 11 - Feb. 2011
ETS Fixed	\$ 5,809,081	\$ 6,132,783	\$ 5,661,496	\$ 4,938,751	\$ 2,924,814
Long-Distance	2,221,123	2,087,611	2,210,304	2,207,204	1,140,746
Other Costs	985,039	1,431,199	1,657,659	1,730,097	1,701,662
	<u>\$ 9,015,243</u>	<u>\$ 9,651,593</u>	<u>\$ 9,529,459</u>	<u>\$ 8,876,052</u>	<u>\$ 5,767,222</u>

ETS fixed costs decreased significantly in FY 10, reflecting the completed transition from a private branch exchange (PBX) telephone system to a voice-over internet protocol (VoIP) telephone system. Costs reported as “Other” include broadband access, internet access, toll free services, calling cards, and managed audio teleconferencing service.

Annual expenditures were less than expected contract costs.

Exhibit 6

The core contract included estimates for annual costs. When the contract was signed in December 2007, costs were estimated at \$9,047,226 each year with costs for the three-year period not to exceed \$30 million. Exhibit 6 shows annual core contract expenditures compared to contract estimates. As shown in the table, actual costs exceeded the estimates in FY 08 and FY 09 but did not exceed the \$10 million contract maximum. Actual ETS-related fixed costs are lower than what was estimated in the contract. Long distance and other contract costs are considerably higher than contract estimates. The

Contract Expenditures Compared to Contract Estimates FY 08 – FY 10			
	Estimates	Actual	Difference
FY 08			
ETS Fixed Costs	\$ 6,342,805	\$ 6,132,783	\$ (210,022)
Long-Distance	1,440,000	2,087,611	647,611
Other Costs	1,264,421	1,431,199	166,778
	<u>\$ 9,047,226</u>	<u>\$ 9,651,593</u>	<u>\$ 604,367</u>
FY 09			
ETS Fixed Costs	\$ 6,342,805	\$ 5,661,496	\$ (681,309)
Long-Distance	1,440,000	2,210,304	770,304
Other Costs	1,264,421	1,590,046	325,625
	<u>\$ 9,047,226</u>	<u>9,461,846</u>	<u>\$ 414,620</u>
FY 10			
ETS Fixed Costs	\$ 6,342,805	\$ 4,938,751	\$ (1,404,054)
Long-Distance	1,440,000	2,207,204	767,204
Other Costs	1,264,421	1,730,097	465,676
	<u>\$ 9,047,226</u>	<u>\$ 8,876,052</u>	<u>\$ (171,174)</u>

The significant variance for FY 10 in ETS fixed price costs reflects the elimination of PBX-related fees since transition to VoIP was complete.

Most of ETS' solesource telecommunication contracts are for software licensing.

There have been 35 solesource contracts issued by ETS between FY 08 and February 28, 2011. Thirty of these contracts were licensing agreements for proprietary software, and five were for telecommunication services. All solesource contracts received approval from the State's chief procurement officer.

The five solesource contracts for telecommunications services were with three vendors: Alaska Public Broadcasting, Incorporated; Symantec Corporation; and Tier Technologies, Incorporated. There was no solesource contract with the State's core contract vendor, General Communication, Incorporated (GCI), during this period. The core contract was the result of having one responsive bidder to a competitive RFP. It is not considered a solesource contract. See Appendix A for a summary table of solesource telecommunications contracts.

Departments and ETS have a joint responsibility for pursuing telecommunication technology.

Alaska Statutes give ETS the responsibility to act as coordinator, manager and supervisor of state telecommunication programs. ETS perceives its role in telecommunications as that of a foundation utility and provider of infrastructure. ETS' mission statement echoes this perception when stating that the function of ETS is *"to provide a robust and secure information technology infrastructure together with enterprise services that support state agencies' business needs."*

We surveyed state departments to gauge their perception of ETS in regards to its role in telecommunication services.⁹ Survey respondents agreed that it is ETS' responsibility, rather than the departments' responsibility, to provide telecommunication infrastructure. However, respondents indicated that it was a joint responsibility of ETS and departments to provide telecommunication technology to help make state employees more efficient in performing their daily tasks. They also believed that pursuing new telecommunication technology was a joint responsibility.

ETS management regards their role as reactive in meeting departmental business needs. Departments regard ETS as a partner rather than strictly a service agency.

Statutes make it clear that ETS must provide a telecommunication infrastructure, but there is no statutory requirement to provide new technologies to make state employees more efficient or more productive in daily tasks. Exhibit 7 (following page) summarizes survey responses regarding ETS and departmental responsibilities for telecommunications.

⁹All 15 departments were surveyed; the response rate was 100 percent.

Exhibit 7

Survey Response Summary - Telecommunication Responsibility						
		Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
It is ETS' Responsibility to...	Pursue New Telecommunication Technologies	5 (33.3%)	8 (53.3%)	1 (6.7%)	1 (6.7%)	0 (0.0%)
	Provide Technology to Make State Employees More Efficient	3 (20.0%)	7 (46.7%)	1 (6.7%)	3 (20.0%)	1 (6.7%)
	Provide Needed Telecommunication Infrastructure	10 (66.7%)	4 (26.7%)	1 (6.7%)	0 (0.0%)	0 (0.0%)
It is the Department's Responsibility to...	Pursue New Telecommunication Technologies	2 (13.3%)	10 (66.7%)	0 (0.0%)	3 (20.0%)	0 (0.0%)
	Provide Technology to Make State Employees More Efficient	9 (60.0%)	6 (40.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
	Provide Needed Telecommunication Infrastructure	0 (0.0%)	4 (26.7%)	3 (20.0%)	6 (40.0%)	2 (13.3%)

Pursuit of new telecommunication technology is occurring both at departments and at ETS.

In order to determine the extent new technology has been implemented and explored, each departmental information security officer, or their designee, was asked to complete a survey regarding the extent their respective departments were using or pursuing the use of specific emerging telecommunication technologies.¹⁰ The results of the survey are described on the following pages.

Virtualization: making data and network resources available irrespective of hardware or physical network constraints. This includes virtualization of desktops, servers, storage, computing, and data centers.

Respondents perceived that virtualization showed the most promise for lowering long term costs and increasing state employee efficiency. As indicated by survey results, virtualization has already been heavily implemented within the State.

- Ninety-three percent of respondents stated that their departments already use the technology or are exploring its use.
- Eighty-seven percent of respondents agreed that virtualization has the potential to reduce long term operational costs.
- Ninety-three percent of respondents agreed it had the potential to increase state worker productivity.

¹⁰Emerging technologies were identified based on discussions with ETS staff and review of industry literature.

Other reasons for using virtualization were security back-ups, flexibility, and faster deployment of new services.

Social Networking: the collaboration and participation in applications such as Web 2.0 and Government 2.0, blogs, wikis, Twitter, Facebook, LinkedIn, public dialogues, and next-generation web applications.

There is great interest concerning the increased use of social networking as a telecommunications tool within state government.

- Eighty-six percent of departments are using the technology or exploring its use.
- Fifty-four percent of respondents stated that social networking increased worker productivity.

Many respondents cited other reasons why social networking benefited the State (i.e., constituent demand, the ability to reach out to rural parts of the state, speed and ease of information distribution, interactive training capabilities, and monitoring probationers and parolees.) Social networking is not without its pitfalls. As several respondents noted, the services take up valuable bandwidth space.

Metro Ethernet: Ethernet¹¹ access and services across a metropolitan area network.

Respondents had mixed feelings on the benefits of the technology.

- Forty-seven percent of departments are using Metro Ethernet
- Forty percent of departments believe Metro Ethernet has the potential to decrease long term operational costs.
- Forty percent of respondents stated that it had the potential to increase employee productivity.

Another benefit was the ability to increase bandwidth. ETS noted that the state network utilizes Metro Ethernet. Therefore, any department utilizing the telecommunication backbone uses the technology.

Cloud Computing: the computing capability that eliminates the direct link between the computing resource and its underlying technical architecture (e.g., servers, storage, networks), enabling on-demand network access to a shared pool of configurable computing resources that can be rapidly provisioned and released.

Cloud computing is not used widely throughout the State.

- Eighty-seven percent of survey respondents indicated they do not use the technology.

¹¹Ethernet is a family of frame-based computer networking technologies for local area networks. The most common form of Ethernet is twisted pair cables to connect end systems, and fiber optic versions for site backbones.

- Fifty-three percent of respondents stated they were exploring the use of this technology.

Respondents had mixed feelings about the benefits of cloud computing.

- Fifty-four percent stated that it has the potential to decrease long term operational costs.
- Twenty-seven percent stated that it has the potential to increase state employee productivity.

Other benefits of cloud computing were economies of scale, the ability to easily share information across the state network, and disaster recovery.

Multi-Protocol Label Switching (MPLS): a mechanism in high-performance telecommunications networks which directs and carries data from one network node to the next with the help of labels. MPLS creates virtual links between distant nodes and can encapsulate packets of various network protocols.

MPLS is not widely used in the State. Eighty percent of survey respondents indicated they do not use the technology. Survey responses revealed no known benefits of MPLS. ETS largely agreed with these findings, noting that MPLS is not practical for Alaska as the State does not have a complicated enough network web to benefit from a route-searching technology such as MPLS.

Session Initiation Protocol (SIP) Trunking: a signaling protocol for telephony.

ETS and many survey respondents noted that the state VoIP system utilizes SIP trunking. SIP trunking is part of the state telecommunications backbone and is, therefore, used by all agencies as part of that service.

FINDINGS AND RECOMMENDATIONS

Recommendation No. 1

The Department of Administration (DOA) procurement staff should work with the State's chief procurement officer to ensure compliance with the "not to exceed" provision in the core telecommunications services contract (core contract).

The core contract stipulates the "*contract shall not exceed \$30,000,000*," yet DOA's Enterprise Technology Services Division (ETS) cannot track the contract expenditures in the Alaska statewide accounting system (AKSAS). Instead, they rely on a report from the vendor which includes the amounts billed to all state agencies under the contract.

The core contract is based on a standard contract form provided by DOA's Division of General Services (DGS) which includes the "*not to exceed*" language. Under non-statewide contracts, the use of a "*not to exceed*" provision is appropriate. It allows DGS to implement requirements for approvals if changes to contracts exceed a set percentage. Without a "*not to exceed*" provision, there would be no amount upon which to base a percentage calculation. Typically, the maximum spending limits are enforced by state agencies through the use of encumbrances and accounting codes to track and monitor expenditures in AKSAS.

For those contracts that set rates for services or supplies that can be used by all state agencies (statewide contracts), "*not to exceed*" provisions are not usually included. DGS is typically the division that procures statewide contracts. DGS does not use a "*not to exceed*" provision in such contracts. Because state agencies use their own accounting structures, a great deal of coordination is necessary to identify costs across agencies for a specific contract. Often, the benefits of tracking such costs do not outweigh the costs.

ETS did not consciously make the decision to use the "*not to exceed*" provision. Rather it was simply part of the standard contract language. As the contract is currently worded, ETS must rely on a vendor supplied billing report to ensure state agencies do not exceed the contract maximum. Given that billing information provided by a vendor is not as reliable and objective as information generated from AKSAS, relying on a vendor's billing information is not prudent management of the contract.

We recommend DOA/ETS procurement staff work with the State's chief procurement officer to ensure compliance with the "*not to exceed*" provision in the core contract.

(Intentionally left blank)

Appendix A
ETS Solesource Telecommunications Contracts,
FY 08 – February 28, 2011

Vendor Name	Contract Description	Services Provided	Contract Award Date	Fiscal Year	Amount of Contract	Solesource Justification	Additional Information
Alaska Public Broadcasting, Incorporated	System monitoring and maintenance service and for state satellite television/broadcasting system at \$6,700 per month for 36 months	Telecommunication monitoring, maintenance and repair services.	6/23/2010	2010	\$241,200 total with extension options	Intent to award issued on 5/10 received no responses. Prior contract with contractor.	
Symantec Corporation	Consulting services \$43,200, fifty training credits for \$28,429	Consulting and training services for net backup solution which includes enterprise email and archiving system.	5/3/2010	2010	\$71,629	No other vendors had a comprehensive solution that could address current issues. Also warranty validation requires certified consultants for installation, of which Symantec is the sole provider.	Contract cancelled by the State in August 2010.
Tier Technologies, Incorporated	One year with two renewal options for hardware and software maintenance for two Interactive Voice Response Systems (IVRs)	Production and development of Interactive Voice Recognition (IVR) services.	4/22/2009	2009	\$150,000	Maintenance is intended to support two existing Tier IVR systems. No other resellers are available through any source since it is Tier's proprietary product.	
Tier Technologies, Incorporated	One year of hardware and software maintenance for two Interactive IVRs systems - necessary since prior contract expired prior to extension.	Production and development of IVR services.	7/7/2010	2010	\$41,268	Maintenance is intended to support two existing Tier IVR systems. No other resellers are available through any source since it is Tier's proprietary product.	
Symantec Corporation	Two and a half years to implement an email archiving system with three components. Covered expenses include consultation, installation, configuration as well as travel.	Consultation, installation and configuration services for email archiving system.	12/16/2008	2009	\$611,628	No other companies have the expertise to design and install a solution that incorporates the three software components from Symantec required to meet the scope of the state's email archiving project.	

(Intentionally left blank)

STATE OF ALASKA

DEPARTMENT OF ADMINISTRATION

BECKY HULTBERG, COMMISSIONER

SEAN PARNELL, GOVERNOR

P.O. BOX 110200
JUNEAU, ALASKA 99811-0200
PHONE: (907) 465-2200
FAX: (907) 465-2135

August 9, 2011

RECEIVED

AUG 09 2011

LEGISLATIVE AUDIT

Ms. Pat Davidson, CPA
Legislative Auditor
Division of Legislative Audit
PO Box 113300
Juneau, AK 99811-3300

Re: Department of Administration, Enterprise Technology Services Division, Telecommunication Procurement and Pursuit of New Technologies

Dear Ms. Davidson:

Recommendation No. 1

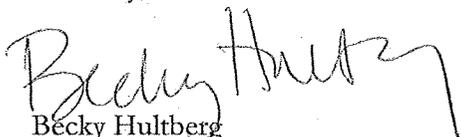
The Department of Administration (DOA) procurement staff should work with the State's chief procurement officer to ensure compliance with the "not to exceed" provision in the core telecommunications services contract (core contract).

Agency Response:

The Department of Administration, Enterprise Technology Services (ETS) Division concurs with this recommendation. ETS discussed this issue with the State of Alaska's Chief Procurement Officer, who confirmed with the Attorney General's Office, that it would be allowable for ETS to execute a bilateral amendment to the core contract to change the "not to exceed" provision to an "estimated cost" provision within the core contract. This would be the only change to the existing contract and ETS expects to execute this contract amendment by October 31, 2011.

The purpose of the "estimated cost" language would remain the same, which is to place a value on the contract of approximately \$10 million for accounting and appropriation purposes and to serve as a benchmark in the event an amendment is needed.

Sincerely,


Becky Hultberg
Commissioner