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OFFICE OF INSPECTOR GENERAL

AUDIT OF CONTROLS OVER
THE ADP SUPPORT SERVICES CONTRACT

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OFFICE OF INSPECTOR GENERAL
OFFICE OF AUDIT SERVICES

AUDIT OF CONTROLS OVER
THE ADP SUPPORT SERVICES CONTRACT

Audit Report Number: CR-B-97-04

SUMMARY

The Federal Acquisition Regulation requires the Department of Energy (Department) to ensure that efficient methods and effective cost controls are used over its cost-reimbursement contracts. Our objective was to determine whether the program offices at the Department's Headquarters were managing their Automated Data Processing (ADP) support services contract costs.

The Headquarters program offices did not effectively manage the ADP support services contract by fully evaluating and controlling costs for Automated Office Systems Support and Local Area Network administration (AOSS/LAN) task assignments. Although the AOSS/LAN task assignments reviewed covered similar services in each program office, the number of contractor full time equivalents (FTEs) used and cost to complete the task assignments varied significantly in comparison to the number of computer users that each task assignment supported. This occurred because in all but one instance the AOSS/LAN task assignments were not based on detailed analysis of user requirements and related costs. In addition, none of the task assignments were benchmarked against best practices from internal or external sources. Instead, program offices relied mainly on available budget and historical contractor staffing levels to determine task assignment funding. We estimated that the application of benchmarks could reduce the cost of support services by as much as \$2 million annually with total potential savings over 3 years of more than \$6 million.

We recommended that the Deputy Assistant Secretary for Information Management, in conjunction with the program offices, implement effective costs controls by establishing task assignments for AOSS/LAN support based on a detailed analysis of user requirements and related costs and benchmarking tasks against best internal practices and best practices in other Federal agencies and the private sector.

Management agreed with the recommendations and stated that controls such as analyses of user requirements and benchmarking tasks are effective management tools. However, management did not outline corrective actions taken or planned along with target dates for the actions. Management did state, however, that once they have fully developed the Work Break Down Structure, they will develop an action plan to implement the recommendations for more detailed analysis of user requirements and benchmarking.

_____/s/_____
Office of Inspector General

PART I

APPROACH AND OVERVIEW

INTRODUCTION

In March 1995, the Department awarded a cost-plus-award-fee contract to DynCorp valued at approximately \$246 million over 5 years for ADP support services at Headquarters. The performance period for the contract was a 3-year base period with two 1-year options. The contract statement of work identified 24 information management functional areas that required technical support services, including Automated Office Systems Support and Local Area Network support.

The purpose of our audit was to evaluate the cost-plus-award-fee contract for ADP support services at Headquarters. Our objective was to determine whether the Department's program offices at Headquarters were managing their ADP support services contract costs.

SCOPE AND METHODOLOGY

We reviewed Federal regulations related to contract management, the ADP support services contract, and related Fiscal Year 1996 task assignments. We interviewed personnel from the Office of Procurement and Assistance Management and the Office of Information Management who were responsible for contract administration, including payment of contractor vouchers. We also interviewed Technical Monitors (TMs) in each program office who were responsible for managing the AOSS/LAN task assignments and evaluating contractor performance. Interviews were also conducted with contractor personnel responsible for preparing task management plans and supervising the contractor staff dedicated to supporting the AOSS/ LAN task assignments.

We selected AOSS/LAN task assignments for review because the program offices spent over \$8.5 million on these tasks for FY 96, which represented about 27 percent of the total FY 96 ADP support service contract costs at Headquarters. In addition, these task assignments were common to many program offices, which allowed for comparative analysis of how the program offices provided support to their computer users. The task assignments provide service to over 4,500 Federal and contractor users located in Washington, D.C. and Germantown, Maryland.

Documentation reviewed included task management plans prepared by the contractor that describe the services to be

provided to the program offices under each task assignment. We also reviewed the monthly technical status reports provided by the contractor to the TMs. These technical status reports contained monthly total labor hour and cost data for the period under review as well as narrative information regarding the execution of each task assignment.

The audit was made in accordance with generally accepted Government auditing standards for performance audits and included tests of internal controls and compliance with laws and regulations to the extent necessary to satisfy the audit objective. Because our review was limited, it would not necessarily have disclosed all internal control deficiencies that may have existed. We did not formally assess the reliability of computer-processed data because we did not consider it to be necessary to accomplish our audit objective. We did, however, use such data for limited purposes and performed alternative procedures to satisfy ourselves that such data was reliable.

The audit was performed from August 1996 through June 1997 at the Department's Germantown, Maryland and Washington, D.C. locations. The results of the audit were discussed with officials from the Office of the Deputy Assistant Secretary for Information Management and the Office of the Deputy Assistant Secretary for Procurement and Assistance Management on June 17, 1997.

BACKGROUND

DynCorp subcontracted specific functional areas of the contract to Computer Data Systems, Incorporated (CDSI). The functional areas subcontracted to CDSI represented, at the time of the award, approximately 50 percent of the estimated labor hours to be utilized under the contract. One of the functional areas that CDSI is responsible for is AOSS/LAN support. AOSS/LAN support is used by all program offices at Headquarters, including services such as dial-in hotline assistance to end users with software problems and questions, software and hardware installation and upgrades, application maintenance and support, and LAN technical administration and support.

Under the ADP support services contract, work to be performed is defined by task assignments. Program offices have Information Management personnel who develop statements of work for ADP support service needs. Each program office also has TMs who are responsible for monitoring the work performed by the contractor. The statements of work are submitted to the Contracting Officer's Representative (COR), who reviews them to ensure that the statements are reasonable and within the scope of the contract. The COR then prepares a task assignment and forwards it to either DynCorp or CDSI, depending on which functional area is involved in the statement of work. Once the task has been assigned, the contractor prepares a management plan that sets forth in general terms what work will be performed and how much it should cost. The management plan must be approved by the COR and TM before the contractor can begin work.

PRIOR AUDIT REPORTS

The Office of Inspector General previously issued a report dealing with management of a prior contract for ADP support services at Headquarters. In report CR-OC-89-1, Oversight of a Support Services Contractor, dated January 11, 1989, we concluded that the Department did not have sufficiently detailed data to evaluate the reasonableness of costs or to identify the specific causes of contract cost overruns. We also concluded that a contractual limitation on the charging of administrative time was not enforced and that criteria for evaluating the contractor's performance for fee determination was not consistently followed.

In addition, the Office of Inspector General issued an audit report regarding selected contracts for information resource management and support at the Federal Energy Regulatory Commission. In report AP-BC-93-01, Audit of Information Resource Management at the Federal Energy Regulatory Commission, dated June 9, 1993, we determined that contractors did not fully comply with contractual provisions, claims for reimbursement were not adequately supported, and services performed may have included inherently governmental functions.

PART II

FINDING AND RECOMMENDATIONS

Management of ADP Support Service Task Assignments

FINDING

The Federal Acquisition Regulation requires the Department to manage its cost-reimbursement contracts to ensure that efficient methods and effective cost controls are used. Headquarters program offices did not effectively manage the contract for ADP support services by fully evaluating and controlling costs for Automated Office Systems Support and Local Area Network administration (AOSS/LAN) task assignments. Although the AOSS/LAN task assignments reviewed covered similar services in each program office, the number of contractor full time equivalents (FTEs) used and cost to complete the task assignments varied significantly in comparison to the number of computer users that each task assignment supported. This occurred because in all but one instance the AOSS/LAN task assignments were not based on detailed analysis of user requirements and related costs. In addition, none of the task assignments were benchmarked against best practices from internal or external sources. Improving the management over task assignments could reduce the Department's AOSS/LAN support costs by as much as \$2 million annually with total potential savings over 3 years of more than \$6 million.

RECOMMENDATIONS

We recommend that the Deputy Assistant Secretary for

Information Management, in conjunction with program offices, implement effective cost controls by:

1. Establishing task assignments for AOSS/LAN support based on a detailed analysis of user requirements and related costs.
2. Benchmarking the AOSS/LAN task assignments against best internal practices and best practices in other Federal agencies and the private sector.

MANAGEMENT REACTION

Management agreed with the recommendations and stated that controls such as analyses of user requirements and benchmarking tasks are effective management tools. Management also provided comments regarding certain facts and statements made in the report. However, they did not outline corrective actions taken or planned or target dates for the actions. They stated that once they have fully developed the Work Break Down Structure, a key to improving effective management of support service tasks, they will develop an action plan to implement the recommendations for more detailed analysis of user requirements and benchmarking. Detailed management and auditor comments are included in Part III of this report.

DETAILS OF FINDING

CONTRACT MANAGEMENT POLICIES AND PRACTICES

The Federal Acquisition Regulation, section 16.301-3(b) requires the Department to effectively manage its cost-reimbursement contracts. Specifically, the regulation directs the Department to provide appropriate oversight during contract performance that ensures efficient methods and effective cost controls are used.

TASK ASSIGNMENT MANAGEMENT

Headquarters program offices did not effectively evaluate and control costs for AOSS/LAN task assignments. Although the program offices contracted for like or similar work in their AOSS/LAN task assignments, the number of contractor FTEs used and cost to complete the task assignments varied significantly in comparison to the number of computer users that each task assignment supported.

Task Assignment Staffing

For the 12 program offices included in our review, the contractor FTE levels and users supported for the task assignments did not compare with one another even though the tasks included like or similar functions. We reviewed the AOSS/LAN task management plans of the different program offices and found that the task assignments included similar types of functions. For example, for the most part, all the tasks

included the functional areas of:

- o Maintenance and support of automated information systems;
- o Helpdesk problem solving/troubleshooting for end-user software and hardware problems;
- o Installation and configuration of hardware and software;
- o Backup, recovery, and protective procedures; and LAN administration and support, development and maintenance of small systems applications, and system reviews/analytical support.

According to Departmental TMs and contractor Task Leaders, the majority of contractor FTE labor was used in the helpdesk and LAN administration functions. These two functions were covered in all of the task assignments. The task assignments also supported similar types of software applications used by each program office such as word processing, spreadsheet, communications, scheduling, database, and graphics software.

Significant inconsistencies existed in the number of users supported by each contractor FTE assigned to perform the AOSS/LAN support tasks. For example, one program office used 15 contractor FTEs to support 628 computer users, while another used 25 contractor FTEs to support 708 users. In contrast, some program offices supported different number of users but charged almost the same number of contractor FTEs. For example, one program office used 8 contractor FTEs to support 270 users, while another program office used the same number of FTEs to support over 1,200 users. Officials from the program office that supported over 1,200 computer users stated that their contractor FTE-to-user ratio was different because budget constraints would not support additional contractor FTEs. However, even though the program office indicated that they could have used more contractor FTEs, they were able to use a lower number of contractor FTEs by making adjustments such as accepting longer response time to problems reported to the helpdesk.

To illustrate the significant differences in the number of contractor FTEs used to support task assignments, the Table below compares the number of users for all 12 program offices to the number of contractor FTEs providing support. The last column of the Table also shows the number of users supported per contractor FTE.

Table 1

Computer Users Supported Compared to Contractor FTE Used	Estimated (1)		Users Per Contractor FTE
	Computer Users Supported	Contractor FTEs Per Task	
Nuclear Energy	169	9	19

Office of the Secretary	116	5	23
Energy Research	409	17	24
Field Management	74	3	25
Nonproliferation and Nat. Security (2)	708	25	28
Fossil Energy	225	7	32
Energy Efficiency/Renewable Energy	423	13	33
Chief Financial Officer	270	8	34
Defense Programs	628	15	42
Environment, Safety and Health	100	2	50
General Counsel	220	4	55
Human Resources and Administration	1,233	8	154
Totals	4,575	116	(3) 39

- (1) Contractor FTE calculated by determining total labor hours charged to each task divided by 1,880 hours. We arrived at 1,880 hours by taking a typical man-year of 2,080 hours and deducting a factor of 200 hours for indirect hours such as annual leave.
- (2) Nonproliferation and National Security task assignments were combined.
- (3) Average number of FTEs.

User Support Cost

The costs to support computer users varied significantly among the program offices. For example, one program office spent about \$780,000 to support 423 users, while another program office spent over \$1.3 million to support 409 users. Overall, the AOSS/LAN task assignment costs ranged from about \$440 to over \$3,500 per user with an average of about \$1,800 annually to support each user in the program offices. Since most program offices did not develop detailed cost estimates for how much the task assignments should cost, we could not evaluate the reasonableness of \$1,800. Table 2 shows the task assignment cost, the number of computer users, and cost-per-user for each of the 12 program offices.

Table 2
Cost Per User Supported

Program Office	Task Assignment FY 1996 Cost	Estimated Computer Users Supported	Cost per User Supported
Human Resources and Administration	\$538,800	1,233	\$ 437
General Counsel	235,300	220	1,070

Environmental, Safety and Health	145,100	100	1,451
Defense Programs	1,014,500	628	1,615
Chief Financial Officer	462,200	270	1,712
Energy Efficiency/ Renewable Energy	787,400	423	1,861
Fossil Energy	506,100	225	2,249
Office of the Secretary	344,800	116	2,972
Field Management	223,300	74	3,018
Nonproliferation and National Security	2,298,900	708	3,247
Energy Research	1,377,200	409	3,367
Nuclear Energy	595,400	169	3,523
Totals			(1)
	\$8,529,000	4,575	\$1,864

(1) Average user cost.

The significant cost differences to support a user is an indicator that the number of users was not a factor when determining what the Department should pay for AOSS/LAN support. Also, it should be expected that each program office would receive AOSS/LAN support services at similar costs since the same contractor provides the technical staff.

PROGRAM OFFICES USE OF DETAILED REQUIREMENTS AND BENCHMARKS

With the exception of Energy Research, program offices did not establish task assignments based on a detailed analysis of user support requirements and related costs. Furthermore, none of the program offices benchmarked their AOSS/LAN support costs with other program offices or external entities with similar needs. Instead, the program offices relied mainly on available budget and historical staffing levels in determining current year needs. In some cases, the program office TMs stated that the contractor was aware of the available budget before they developed the management plan. This could allow the contractor to, in effect, "back in" to the task assignment cost for the fiscal year and spend the budgeted amount available.

Contractor personnel responsible for generating the task management plans concurred that available funding plays a major role in how much each program office spends on AOSS/LAN support. While available funding and previous staffing levels play a role in determining the appropriate staffing level and costs, the main determinant of the cost of these task assignments should be a detailed analysis of specific projects or functions to be supported by the task assignment along with estimates of what the tasks are going to cost. In addition, a comparison against a benchmark to help validate the estimates should be used. Performance indicators, such as benchmarks, are consistent with the intent of the Government Performance and Results Act and should help the Department measure the relative effectiveness and efficiency of resources devoted to ADP support activities.

In commenting to our initial draft report, management

indicated that in conjunction with the Headquarters Collaboration Group, the Department is developing a Work Break Down Structure that will allow for improved ADP support service task assignments. The Department also believed that these improved task assignments will be indicative of substantial differences in the tasks that are not currently apparent because of the lack of precision in task descriptions. While we agree that the Work Break Down Structure will allow for improved task assignments and that differences exist among the tasks, we believe, based on our audit, that there will continue to be a high degree of similarity among the AOSS/LAN task assignments.

ESTABLISHING NEEDS, BENCHMARKS, AND COST ESTIMATES

Until the program offices establish task assignment requirements based on a detailed analysis of user requirements and related costs and benchmark their tasks against best practices, they will not have assurance that costs paid for AOSS/LAN support services are reasonable and cost effective. At the minimum, we estimate that AOSS/LAN costs could be reduced if the program offices used benchmarks to establish an acceptable ratio of contractor FTE-to-users. For example, the contractor FTE-to-user ratio in the program offices ranged from 1 FTE to support 19 users to 1 contractor FTE to support 154 users. The average of this range was 1 FTE to support 39 users. If each program office used this average as a benchmark and applied it to their task assignments, the Department could reduce their AOSS/LAN support costs by as much as \$2 million annually with total potential savings over 3 years of more than \$6 million. Although cost savings would increase proportionally as the ratio of contractor FTE-to-user increased, we applied the average because it represented the most conservative approach to establishing a benchmark of FTE-to-user ratio.

In responding to the initial draft report, management agreed that there may be opportunities to achieve savings through benchmarking. However, management added that the estimated cost savings cannot be supported because it was not based on benchmarking, but rather it was based on an average ratio of contractor FTE to number of users supported. As explained in the report, the average ratio was used because it represented a reasonable estimate of the savings available to the Department through benchmarking because if the program offices were to benchmark their task assignments against one another, it would be reasonable to assume that the benchmark would fall within the range of ratios used.

PART III

MANAGEMENT AND AUDITOR COMMENTS

The Office of the Deputy Assistant Secretary for Information Management and the Headquarters program offices agreed with the report's recommendations and stated that controls such as analyses of user requirements and benchmarking tasks are effective management tools. However, management did not outline

corrective actions taken or planned or target dates for the actions. Management added that once they have fully developed the Work Break Down Structure, a key to improving effective management of support service tasks, they will develop an action plan to implement the recommendations for more detailed analysis of user requirements and benchmarking. A summary of management's comments and auditor's response follows.

GENERAL COMMENTS

Although management agreed that the report's recommendations were sound, they included specific comments about certain statements made in the report.

Management Comments. Management believed that the statements "the number of contractor full time equivalents (FTEs) used and cost to complete the task assignments varied significantly" and "This occurred because in all but one instance the AOSS/LAN task assignments were not based on detailed analysis of user requirements and related costs" were misleading. Management added that these statements were misleading because there was no detailed analysis of each task in the draft report and that program offices require differing levels of AOSS/LAN support due to sophistication of users, response times, expertise requirements, and multiple locations of users.

Auditor Comments. We agree with management that there were no detailed task analyses of the task assignments related to user requirements and costs. As stated in the report, the lack of detailed task analyses was one of the main reasons why the FTE levels varied significantly. Even though management believes that sophistication of users, response times, expertise requirements, etc., affects the ratio of FTE-to-user levels, these issues were not quantified in any of the program offices task assignments, management plans, or technical status reports. The program offices, in conjunction with the support service contractor, must address the impact of these factors in future task assignments and management plans to effectively determine the needed FTE and associated cost.

Management Comments. Management stated that Tables 1 and 2 were misleading because the estimated users shown for the Office of the Secretary was far greater than the number of employees in that organization, and that this was probably true for other organizations as well.

Auditor Comments. The estimated number of computer users supported shown in the Tables were provided by the contractor, the Office of Human Resources and Administration, and the program offices. Included in the estimates for the Office of the Secretary were the Secretary of Energy Advisory Board, the Office of Executive Secretariat, and the Office of Scheduling and Logistics. The task was listed as "Office of the Secretary" because they were responsible for the management of the task.

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