DEPARTMENT OF DEFENSE

AUDIT REPORT

CHARGE-BACK ACCOUNTING SYSTEMS
FOR THE COST OF INFORMATION TECHNOLOGY RESOURCES

NO. 90-011

NOVEMBER 28, 1989

Office of the
Inspector General

INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202

MEMORANDUM FOR COMPTROLLER OF THE DEPARTMENT OF DEFENSE

SUBJECT: Report on the Audit of Charge-back Accounting Systems for the Cost of Information Technology Resources (Report No. 90-011)

This is our final report on the Audit of Charge-back Accounting Systems for the Cost of Information Technology Resources. The audit objective was to determine if DoD had effectively implemented charge-back cost accounting and recovery systems for information technology facilities as prescribed by Office of Management and Budget (OMB) Circular No. A-130. We also evaluated the adequacy of related internal controls. The audit was made at your request, and was performed from October 1988 through May 1989. DoD spent about $8.3 billion on information technology resources during FY 1988; most of these expenditures supported data processing and related communications. DoD operates more than 3,200 data processing activities.

The audit showed that charge-back internal control systems were effective, but DoD charge-back systems for data processing activities did not fully comply with Federal requirements. The results of the audit are summarized in the following paragraphs, and the details and audit recommendations are in Part II of this report.

Effective internal controls were usually included in operational charge-back systems. Details of charges to users were available for analysis. In charge-back procedures at most activities, computer units actually used were reconciled to the number of units allocated to users during each billing cycle. At the activities where charge-back development was not yet finalized, internal controls were explained in available documentation, and the managers we met with were aware of the need for internal controls.

DoD Components had not identified all data processing activities subject to OMB Circular No. A-130. Additionally, charge-back systems for collecting and allocating data processing costs did not routinely identify and allocate to users the complete costs of services provided. Without adequate cost information, managers of data processing activities and other managers could not make informed and economical decisions on the use of data processing resources. We recommended that DoD

Components identify all data processing activities subject to the OMB Circular, and that DoD modify applicable accounting manuals and other guidance to fully implement the Circular's guidance for cost identification, allocation, and recovery (page 5).

The non-Industrial Fund data processing activities did not have an effective accounting mechanism to recover and retain indirect costs such as depreciation. Accordingly, the costs of services being provided were significantly understated. We recommended that existing non-Industrial Fund activities either be converted to Industrial Fund activities, or that present DoD accounting policies and procedures be amended to fully accommodate non-Industrial Fund data processing activities in meeting the Circular's requirements (page 15).

A draft of this report was issued on August 21, 1989, which requested comments from the Comptroller of the Department of Defense within 60 days. As of November 22, 1989, we had not received a response to the draft report. We therefore request that you respond to the final report indicating concurrence or nonconcurrence with the findings and each recommendation. If you concur, please describe the corrective actions taken or planned, the completion dates for actions already taken, and the estimated dates for completion of planned actions. If you nonconcur, please state your specific reasons. If appropriate, you may propose alternative methods for accomplishing desired improvements. This report quantifies no potential monetary benefits. DoD Directive 7650.3 requires that all audit recommendations be resolved within 6 months of the date of the final report. Accordingly, the Comptroller should provide final comments within 60 days of the date of this memorandum.

The courtesies extended to the audit staff (Appendix C) are appreciated. If you have any questions about this audit, please contact Mr. Terry McKinney at 202-693-0430 (AUTOVON 223-0430) or Mr. James Hutchinson at 202-693-0452 (AUTOVON 223-0452). Copies of the final report will be distributed to the activities listed in Appendix D.

Stephen A. Trodden
Assistant Inspector General
for Auditing

cc:
Secretary of the Army
Secretary of the Navy
Secretary of the Air Force
Director, Defense Logistics Agency

CHARGE-BACK ACCOUNTING SYSTEMS FOR THE COST OF INFORMATION TECHNOLOGY RESOURCES

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REPORT ON THE AUDIT OF CHARGE-BACK ACCOUNTING SYSTEMS FOR THE COST OF INFORMATION TECHNOLOGY RESOURCES

PART I - INTRODUCTION

Background

The Department of Defense invests heavily in information technology resources. DoD spent about $7.5 billion on information technology resources in FY 1986, and plans to spend about $8.9 billion in FY 1990. Most of these expenditures support data processing and related communications. Data processing expenditures amounted to about $8.2 billion in FY 1987 and are projected to be around $8.7 billion in FY 1990. DoD operates more than 3,200 data processing activities worldwide, ranging from very small to very large. All DoD programs benefit from data processing, not only in support of finance and administration functions, but also in other areas such as scientific research and development. Within DoD, data processing resources are usually centrally budgeted and funded, and are often perceived by users as free resources.

In 1980, the Office of Management and Budget (OMB) issued Circular No. A-121, "Cost Accounting, Cost Recovery, and Interagency Sharing of Data Processing Facilities" (A-121). It required Federal agencies to develop systems and procedures to account for, and allocate to users, the full costs of operating data processing facilities. Relevant Federal guidelines on cost accounting and charging for data processing resources have also existed for some time. In 1978, after concluding that better control was needed over data processing costs, the General Accounting Office issued Federal Government Accounting Pamphlet Number 4 (FGAP 4), "Illustrative Accounting Procedures for Federal Agencies," with guidelines on accounting for automated data processing costs. In 1982, the National Bureau of Standards issued Federal Information Processing Standards Publication 96 (FIPS Pub 96), "Guideline for Developing a Charging System for Data Processing Services," to help managers comply with FGAP 4 and A-121 and to better define the processes involved in developing a charge-back system for data processing activities. Also, charge-back systems for data processing resources have been the subject of articles in professional publications since the 1970's.

OMB issued Circular No. A-130, "Management of Federal Information Resources" (A-130), in 1985. It superseded five previously existing circulars, including A-121. A-130 was applicable to all executive agencies and established uniform policy for the

management of information resources. Appendix II of the Circular redefined A-121 procedural requirements for cost accounting, cost recovery, and interagency sharing of information technology facilities. The definition of information technology in A-130 encompasses various disciplines, but usually refers to data processing. The intent of Appendix II is to encourage cost-effective management of data processing facilities by charging for the resources consumed. Specifically, OMB requires managers of data processing facilities to know the amount of resources devoted to each user through full cost accounting, and requires users to be responsible for their consumption of resources and to control it by actually paying for data processing services.

In 1987, OMB issued Bulletin 87-10, "Federal Information Systems and Technology Planning," which requested that agencies provide summaries of actions taken to comply with A-130. OMB was specifically interested in the agencies' progress in implementing charge-back systems. The official DoD response to the Bulletin stated:

> ... DoD Components have implemented the provisions of Circular A-130 or are awaiting completion of cost effectiveness studies to proceed with final implementation plans...

Accordingly, DoD has informed OMB that it intends to fully implement the provisions of A-130. Within DoD, the Comptroller is responsible for A-130 implementation.

Objectives and Scope

This program audit was made from October 1988 through May 1989 at the request of the Comptroller of the Department of Defense. The audit was made in accordance with auditing standards issued by the Comptroller General of the United States as implemented by the Inspector General, DoD, and accordingly included such tests of the internal controls as were considered necessary. The overall objective of the audit was to determine if DoD had effectively implemented charge-back cost accounting and recovery systems for information technology facilities as prescribed by OMB Circular No. A-130. While the term "information technology" encompasses disciplines such as communications, printing, and publications, our audit was limited to charge-back systems at DoD automated data processing activities.

Our audit focused on whether charge-back cost accounting and recovery systems adequately accounted for the full cost of operations, equitably allocated costs to users based on the resources they used, and fully recovered costs by billing for services provided. In performing these evaluations, we used the

procedural requirements set forth in OMB Circular No. A-130, Appendix II, "Cost Accounting, Cost Recovery and Interagency Sharing of Information Technology Resources," and the guidance for developing charge-back systems presented in FIPS Pub 96.

To determine the extent to which charge-back requirements had been implemented, we visited, and reviewed charge-back systems at 10 data processing activities: 4 Army, 4 Navy, 1 Marine Corps and 1 at the Defense Logistics Agency. We also reviewed two Air Force activities jointly with representatives of the Air Force Audit Agency. During FY 1988, these activities had combined budgets of about $128 million, and recovered over $53 million in user charges. We examined and evaluated accounting and data processing records prepared between October 1987 and May 1989. We discussed charge-back guidance, procedures, and problems with managers of data processing activities. We talked to selected users of data processing services to assess the impact of charge-back systems. We also discussed these issues, as well as the perceived advantages and disadvantages of A-130, with senior DoD management officials. Additionally, we analyzed and evaluated related policies, guidance, and procedures of OSD and the DoD Components. To make sure we understood the intent of the Circular as well as its wording, we visited OMB and other non-DoD federal agencies. A complete list of activities visited or contacted is shown in Appendix B.

Internal Controls

We assessed internal controls related to whether management control objectives and control techniques employed were adequate to reasonably ensure that ADP resources consumed were accounted for and allocated to users at facilities implementing charge-back procedures. In assessing applicable internal control systems, we discussed control objectives with management, evaluated related internal control techniques actually implemented (such as written policies and procedures), and made tests of selected internal control mechanisms. Since they were not unique to the charge-back process nor controlled by the individual data processing activities, we did not evaluate internal controls related to the financial and reimbursement accounting systems used.

Our audit revealed no material internal control weaknesses. Effective internal controls were usually included in operational charge-back systems. Details of charges to users were available for analysis. In charge-back procedures at most activities, computer units actually used were reconciled to the number of units allocated to users during each billing cycle. At the activities where charge-back development was not yet finalized, internal controls were explained in available documentation, and the managers we met were aware of the need for internal controls.

Prior Audit Coverage

Charge-back cost accounting and recovery, as prescribed by OMB Circular No. A-130, have not been the primary focus of prior audits. However, the DoD Assistant Inspector General for Auditing concluded in Report No. 84-096, "DoD Computer Time Sharing Services," June 20, 1984, that DoD computer centers had inadequate procedures to identify and allocate full and complete costs to their customers. Report No. 84-096 recommended that the Office of the Assistant Secretary of Defense (Comptroller) issue additional policy or improve existing DoD policy to better implement OMB Circular No. A-121 and other guidance for identifying and allocating related costs, especially depreciation and occupancy expenses. Management responded that existing policy and guidance were adequate, but would be re-emphasized throughout DoD. Our report illustrates that similar conditions still exist. Although the Comptroller of the Department of Defense issued "Cost Distribution for Information Technology Facilities," Chapter 75 of the DoD Accounting Manual (DoD 7220.9-M), during the current audit, we believe that present DoD guidance still does not satisfy OMB objectives. Accordingly, our Recommendations A.3. and A.4. are very similar to recommendations made in the 1984 audit report.

PART II - FINDINGS AND RECOMMENDATIONS

A. Implementation and Guidance

FINDING

Office of Management and Budget (OMB) Circular No. A-130 requires that Federal data processing activities accurately account for, equitably allocate, and recover the full costs of services provided to users. DoD data processing activities had not developed procedures to fully identify, distribute, and recover their costs of operations. Additionally, DoD Components had not determined which data processing activities are subject to the charge-back requirements of OMB Circular No. A-130. This occurred because OSD had not specifically directed DoD Components to implement OMB requirements. Also, OSD had not been aggressive in publishing related guidance. Because they lacked central standards and guidance, individual data processing activities developed and operated their own charge-back systems, none of which fully satisfied OMB requirements. Without complete and uniform cost information, managers and users of data processing activities could not make informed and economical decisions.

DISCUSSION OF DETAILS

Background. The concept of accounting for the full costs of data processing is based on laws directed at improved financial management and information resources management. To fulfill the responsibilities set forth in the Budget and Accounting Procedures Act of 1950, the General Accounting Office (GAO) published the "Policy and Procedures Manual for Guidance of Federal Agencies." Title 2 of this guidance, "Accounting," emphasizes that accounting for the full financial cost of an agency's resources, such as automated data processing, greatly aids those who use, operate, or manage the resources. As directed by the Brooks Act (Public Law 89-306), OMB exercises management and policy responsibility for automated data processing. Further, the Paperwork Reduction Act of 1980 tasked OMB with developing data processing guidance and standards for Federal agencies, and ensuring their incorporation in the Federal Information Resources Management Regulation (FIRMR). Part of OMB's guidance is its Circular No. A-130, which the FIRMR specifically requires Federal agencies to follow. A-130 requires that applicable data processing activities account for, allocate to users, and recover the full cost of operations.

In 1980, OMB issued Circular No. A-121, which required Federal agencies to account for the full costs of data processing

activities that operated one or more general management computers, incurred obligations of over $100,000 per year, and had one or more users. It also required these activities to allocate costs to internal users and recover applicable costs from external users. In 1985, OMB issued its Circular No. A-130, which supersedes A-121 and expands its requirements. A-130 contains two major changes to A-121: it raises the threshold for obligations incurred to $3 million per year, and requires data processing activities to recover costs from all users, both internal and external.

A-130 requires that data processing activities account for all significant costs, and equitably allocate these costs based on the data processing resources that each user consumes. A-130 requires DoD's data processing activities to operate very much like commercial providers of data processing services. This dictates that the use of data processing resources, such as computer hours or pages printed, is accounted for. Most large computer systems automatically collect data on the use of resources; these data can be analyzed to produce historical trends. This historical information can be used to project future processing requirements. By considering projected processing requirements and projected costs, charge-back rates can be established. An objective of A-130 is that data processing activities will recover the full costs of operations by billing users for resources consumed, based on applicable rates.

Cost accounting information is used by the public sector to establish production standards. It is also used to make all levels of management more accountable. Because Federal agencies frequently receive congressional requests for cost-related information, and because they realize that cost accounting benefits themselves as well, they now require more often than in the past that cost modules be included in their accounting systems.

DoD Policy Implementing A-130. DoD policy guidance and direction were insufficient to effectively implement A-130. DoD policies, which provide charge-back guidance to managers of data processing activities, were often perceived by managers as conflicting, weak, misleading, and too permissive in language to accomplish the objectives of OMB Circular No. A-130.

Often, when major Federal policy directives and regulations are issued, OSD subsequently requires DoD Components to implement them by issuing a formal DoD Directive or Instruction. This was not the case for charge-back systems for automated data processing services. OSD's reaction to A-121 was to issue policy memorandums in 1980 and 1984, and to provide reimbursement

guidance in the DoD Accounting Manual in 1983. To implement the cost accounting requirements of A-130, DoD issued Chapter 75 ("Cost Distribution for Information Technology Facilities") of the DoD Accounting Manual (DoD 7220.9-M) in October 1988, and altered Chapter 26 ("Reimbursements") during March 1987. However, the applicability criteria, requirements, and definitions in Chapter 75 differed significantly from those in A-130. Similarly, the guidance in Chapter 26 for determining reimbursable costs did not agree with requirements in A-130. Also, we found no references to other Federal charge-back guidelines in either chapter. As a result, DoD Components formulated their own implementation guidance based on DoD's limited policy and requirements, which differed from A-130 in several areas. Accordingly, the basic concepts of A-130 had not been adopted by either OSD or DoD Components.

Applicability Criteria. Two major differences existed between OMB and DoD criteria for determining whether a data processing activity should follow charge-back requirements. The first difference centered on who uses the data processing services. OMB criteria included those data processing activities which provide services to more than one user, while DoD required that services be provided to more than one organizational or accounting entity. OMB defined "user" as anyone outside of the computer facility or the organization that directly manages it. Using a typical military installation as an example, OMB's "user" would be any organization other than the Director of Information Management or an equivalent position, while DoD's "organizational or accounting entity" might include an entire military installation or several installations.

The other major difference in criteria involved the amount of obligations incurred. OMB Circular No. A-130 stated that a data processing activity with obligations exceeding $3 million per year must follow the provisions of A-130. DoD criteria were more restrictive, and stated that operations and maintenance obligations greater than $3 million must have been incurred before the provisions of A-130 were applicable. Operations and maintenance funds do not normally pay for military salaries, capital assets costing more than $15,000, research and development activities, or costs funded by other types of appropriations.

Additionally, Chapter 75 of the Accounting Manual stated that data processing activities with annual reimbursable programs greater than $500,000 must identify the costs of services provided to users. This was not required by A-130. A-130 used the $500,000 threshold in requiring agencies to provide individual written agreements that specify information to be included in interagency sharing arrangements; but having

$500,000 in annual reimbursable programs did not make A-130 applicable to DoD Components. The placement and wording of this sentence in Chapter 75 could easily lead to the conclusion that charge-back systems are not required unless annual reimbursable programs costing more than $500,000 exist. Conversely, Chapter 75 did not require written agreements detailing interagency sharing arrangements, as prescribed by A-130.

Guidance on Cost Reimbursement. DoD guidance for recovering costs did not reflect A-130 requirements. To determine whether a data processing activity should bill for its services and at what price, Chapter 75 referred to Chapter 26 of the Accounting Manual, "Reimbursements." Chapter 26 specified the cost categories which activities may and may not include in their reimbursable charges, depending on the user's type of funding and agency affiliation. A comparison of recoverable cost categories in A-130 and Chapter 26 (Appendix A) showed that DoD set strict limits on costs subject to reimbursement. For instance, most data processing activities are not Industrial Fund activities, so they cannot bill and recover military labor costs from any customer within DoD, but can bill and recover these costs from non-DoD users. Unfunded costs such as depreciation were excluded from the cost categories for services provided to users within the same DoD Component, but were included in the categories applicable to users outside the Federal Government. Similarly, space occupancy was not shown as a cost to be reimbursed. This occurred because the cost categories shown in Chapter 26 were not developed specifically for reimbursement of data processing services, but were developed for DoD-provided services in general. The cost categories in A-130 were developed for data processing activities and were more inclusive.

Activities Subject to A-130. DoD Components had not identified data processing activities subject to A-130. During the audit, we requested that each DoD Component identify data activities subject to A-130. However, responding to our request was difficult, primarily because the Components maintained only summary obligations data at the headquarters level. Also, because data processing activities often received funding from different commands, identifying the total obligation of individual activities was difficult. Further, when major ADP acquisitions were made, the equipment was often located at an individual data processing activity, but funds were obligated at a higher organizational level. This resulted in misleading obligation amounts as reported by the individual activities. When we learned that a listing of applicable data processing activities was not available, we requested that the Components ask their data processing activities to identify themselves if they were subject to A-130.

We also used other sources of information to help better identify applicable activities. The Defense Automation Resources Information Center (DARIC) maintained information related to DoD's data processing activities, including ADP equipment inventories reported by each activity. Using these data, we determined that the Army, Navy, and Air Force had established over 1,100, 1,200, and 500 data processing activities, respectively. To estimate the costs of operating these activities, we randomly selected a sample of activities and analyzed their major computer systems. The sample results were used to project applicable activities for each Component. We also analyzed DARIC data on activities that had reported that they had reserve computer capacity available for sharing with other activities.

The results of the Components' inquiries and our efforts to identify activities showed a wide disparity, as shown below.

Activities Subject to OMB Circular No. A-130

	Results of Component Inquiries	Activities with Reported Computer Time to Share	DoDIG Projection Based on Major Computer Systems
Army	42	60	101
Navy/Marines	14	34	126
Air Force	20	69	122
Totals	76	163	349

Although our efforts were not conclusive, they indicated that many more data processing activities were subject to A-130 than the Components identified. We believe that hundreds of activities meet the criteria of A-130 and should be required to implement charge-back systems. Accordingly, we believe that oversight responsibilities dictate the need to identify each applicable data processing activity.

Cost Accounting and Allocation. All of the data processing activities we visited had established procedures for cost allocation or were finalizing procedures to do so. However, none of the activities accounted for, and allocated to its users, the full costs of data processing services provided. Generally, we found that costs funded by the data processing activity, such as civilian payroll expenses, were adequately identified and allocated to users, while costs funded by another organization were not identified and allocated to users. This condition was

also reported in our Report No. 84-096, "DoD Computer Timesharing Services," June 20, 1984, and had two primary causes. One cause was the general lack of cost accounting systems; only 3 of the 12 activities visited had a formal cost accounting system. The remaining nine activities were supported by accounting systems that accumulated expenditures by funds, not by cost centers. Since these activities often received funds from more than one source, total amounts spent were not easily tracked. As a result, management was forced to rely on budget information and "best guess" methods in establishing costs to be allocated for services. The other major reason for incomplete cost identification and allocation was that DoD reimbursement policies did not allow full costs to be allocated to each user of a data processing activity. DoD policy excluded certain cost categories that should be considered when determining the full costs required by A-130. Costs for military labor, space occupancy, and asset depreciation were not usually included in the activities' rate structures.

Military Labor. Only 1 of the 12 data processing activities had identified and accounted for military labor costs. Although these costs were not included in the activity's rates, the activity maintained cost records for military labor. Another activity stated that it had the capability to account for military labor costs, but had no military personnel assigned at that time. The other 10 activities did not identify and track the costs of military labor. Military labor costs can be a substantial part of the total costs of operating a data processing activity. For instance, at the activity that maintained military cost data, records showed that military labor costs were about $765,000 during FY 1988, or an average of about $40,000 per person. Another activity employed 29 military personnel, but did not account for the costs of military labor. Using a cost of $40,000 per service member, we estimated the costs of 29 service members to be about $1.2 million. For this DoD activity, DoD reimbursement policy does not allow military personnel costs to be included in data processing rates for users from any DoD activity. This policy resulted in the substantial understatement of rates and led users and other managers to misunderstand this activity's data processing costs.

Space Occupancy. Of the 12 data processing activities we visited, 4 included space occupancy costs in their rates. These activities appropriately included space occupancy costs because they were required to pay these expenses directly, since the activities were not physically located on military installations. Normally, the costs of housing a data processing activity and related utility expenses are funded by the military installation where the activity is located. The managers of the eight activities that did not bill for space occupancy costs had

attempted to identify their applicable costs, but could not accurately quantify these costs because their utilities were not metered separately and applicable building costs were not always available. To identify their total costs of operations, most activities had estimated their occupancy costs, using widely diverse methodologies. The lack of standard estimation procedures resulted in estimates of space occupancy costs that were not comparable. The results indicated, however, that space occupancy costs of data processing activities were significant. The four activities that did account for occupancy expenses incurred costs during FY 1988 ranging from $500,000 to over $2 million.

Depreciation of Assets. Only 3 of the 12 activities accounted for and included applicable hardware and software depreciation expenses in the cost accumulation and allocation process. Although A-130 requires depreciation costs to be considered in developing rates, nine activities did not account for applicable depreciation expenses or include these costs in their rates. These activities were all funded through appropriations, and DoD accounting guidance excluded depreciation costs from being recovered from any Federal Government user. Depreciation of capital assets is a significant expense in data processing. DoD plans to spend an average of about $1.5 billion yearly, or nearly 20 percent of its net ADP obligations, on capital assets during FY 1986 through FY 1990. At one of the activities that did account for depreciation, records indicated that expenses for depreciation of hardware and software were about $2.3 million in FY 1988.

We also noted that none of the activities depreciated assets that supported their users if the data processing activity did not directly procure or own the assets. For example, one activity was recently provided a major computer, which cost about $7 million, by its parent command. Since the data processing activity did not directly acquire this computer, its cost was not included in the rates used to formulate informational statements of usage costs. Assuming a 7-year useful life, depreciation expenses of about $1 million a year should have been allocated to the users of this computer. The activity was allocating only the costs it directly incurred to operate this computer, which amounted to about $450,000 annually. The "full cost" concept of A-130 was not being followed, and the users of this computer were not aware of the true costs of the data processing resources they consumed.

Cost Recovery. Actual costs for services were not being recovered from users. OMB's cost recovery policy is explained in Appendix IV to A-130, "Analysis of Key Sections." This appendix states:

> ...This policy constitutes a revision to policy stated in OMB Circular No. A-121. Whereas Circular No. A-121 required only that costs for automatic data processing facilities be allocated to users, agencies must now recover the costs of information technology facilities from government users...Experience with Circular No. A-121 showed OMB that allocating costs had little effect on agencies' behavior: recovering costs means that actual transfers of funds will take place between suppliers and users of information technology facilities...

Of the 12 activities visited, only 3 were recovering costs from all users through actual transfers of funds. One of the reasons so few activities were recovering costs was that this requirement had not been clearly set forth in the existing guidance that implements A-130. Although Chapter 75 of the DoD Accounting Manual states that data processing activities should refer to Chapter 26 to determine whether they should bill for their services, Chapter 26 does not specifically state that full cost recovery is required. Also, present DoD guidance on reimbursements, as set forth in Chapter 26 of the DoD Accounting Manual and as discussed above, clearly limits the cost categories that may be recovered from DoD users. Additionally, as discussed in Finding B of this report, the funding mechanism used by most data processing activities does not allow them to retain the costs they recover.

RECOMMENDATIONS FOR CORRECTIVE ACTION

We recommend that the Comptroller of the Department of Defense:

1. Direct the Department of Defense Components to implement procedures that fully satisfy the guidance in Office of Management and Budget Circular No. A-130 by issuing a Directive or Instruction.

2. Require Department of Defense Components to identify all data processing activities that are subject to the provisions of Office of Management and Budget Circular No. A-130.

3. Modify the Department of Defense's existing policy, procedures, and standards for accounting to fully incorporate the cost accounting, allocation, and recovery requirements of Office of Management and Budget Circular No. A-130. Specifically require DoD Components to establish charge-back systems that:

a. Identify and allocate the complete costs, both funded and unfunded, of services provided; and

b. Recover allocated costs from both internal and external users through transfers of funds.

4. Issue guidance and standard procedures for Department of Defense data processing activities to follow in developing estimated costs when actual or historical cost information is not readily available.

MANAGEMENT COMMENTS

The Comptroller of the Department of Defense did not provide comments on a draft of this report.

B. Recovery and Retention of Depreciation

FINDING

Data processing activities funded through appropriations had no effective mechanism for recovering and retaining unfunded costs, such as depreciation of capital assets. OMB Circular No. A-130 required agencies to use reimbursed depreciation for the eventual replacement of capital assets. However, when an activity was funded through appropriations, DoD accounting policies and systems prohibited it from recovering depreciation expenses from most users, and were not designed so that activities can easily retain these expenses once they are recovered. Accordingly, substantial depreciation expenses were not recovered, and sufficient emphasis was not placed on the identification and accountability of capital assets.

DISCUSSION OF DETAILS

Background. OMB Circular No. A-130 required data processing activities to account for full costs and recover those costs from their users. As discussed in Finding A, the data processing activities generally included direct costs in the allocation process, but excluded indirect costs. Large-scale computer systems are expensive. Typically, one of the most significant cost categories is computer hardware and software. To avoid high cost fluctuations and more equitably allocate costs to users over the life of the asset, A-130 and other Federal guidance required that capital assets, such as hardware and software, be capitalized and depreciated rather than recorded as expenses in the year of purchase. DoD activities are funded through two basic mechanisms: appropriations and working capital funds. Industrial Fund activities (activities funded through working capital funds) are self-supporting and operate very much like commercial companies. Their operational costs are not funded, but are recovered by charging their users for all costs incurred, including depreciation of assets. Industrial Fund data processing activities have established procedures to capitalize the costs of computer assets, to account for depreciation expenses, and to record applicable reserves that come from revenue generated through billed depreciation expenses. Revenues resulting from depreciation are "no-year" funds; they can be spent during any time period. Industrial Fund data processing activities have the flexibility of incurring a loss or profit during any particular year, but are required to break even on a long-term basis.

In DoD, activities funded through appropriations are called non-Industrial Fund activities. Accounting rules and procedures for non-Industrial Fund activities differ greatly from those that govern Industrial Fund activities. Appropriated funds are available only for a specific time period, usually 1 year for operations and maintenance funds, and expenditures are specifically limited to the amount of the appropriation. To avoid the unauthorized augmentation of a current fund appropriation, activities are not allowed to retain depreciation proceeds beyond the time period of the appropriation. Non-Industrial Fund activities that collect depreciation expenses are required to deposit the proceeds in the U.S. Treasury as miscellaneous receipts, unless they obtain a specific exemption from the Comptroller of the Department of Defense. While 9 of the 12 data processing activities visited during the audit were funded through appropriations, we believe that an even larger percentage of all DoD data processing activities subject to A-130 are funded through appropriations.

Hardware and Software Depreciation. Of the 12 data processing activities visited, only 4 adequately reflected depreciation of capital assets in their charge-back systems. Three Industrial Fund activities capitalized their acquisitions of hardware and were identifying, allocating, and recovering depreciation expenses related to these acquisitions. The remaining activity (a non-Industrial Fund activity) provided information on hardware depreciation in its charge-back statements, but did not recover any depreciation costs. Only two of the activities visited routinely capitalized applicable software acquisitions; both of these were Industrial fund activities. Upon being informed of the requirement to capitalize the costs of software, the other Industrial Fund activity began actions to capitalize software costs. The non-Industrial Fund activities normally recorded all software costs as expenses at the time of purchase.

Managers of data processing activities funded through appropriations recognized the potential benefits of capitalizing assets, of including depreciation expenses in their rates, and of establishing applicable reserves, but only if they could retain the funds they collected to replace their assets in the future. Since DoD policy prohibited such retention, data processing activity managers felt they could not be responsive to user requests for additional data processing capabilities. At four of the non-Industrial Fund activities, we noted that managers lacking a reserve of funds accumulated through recovery of depreciation often reacted to unanticipated processing requirements by using alternate methods of obtaining the

requisite capital assets. The use of these methods defeats the A-130 requirement for equitable allocation of costs. For example:

- At one site, a major system was procured using a lease-to-ownership acquisition method. Past acquisition studies have shown that this is generally more expensive than outright purchase, since total acquisition costs of this method are normally inflated to account for the cost of money over the term of the lease. Management at this activity indicated that one of the factors affecting the acquisition strategy was that DoD policy permitted recovery of lease costs, while recovery of depreciation costs was not allowed. Management also indicated that if they had been permitted to capitalize this asset, they would have recovered costs more equitably by distributing the costs over the life of the asset instead of the 3 years of the contract.

- At another activity, management did not have funds available to obtain the equipment necessary to fulfill a user's additional requirements. The user had to directly supply the equipment needed to satisfy its broadened processing requirements. The data processing activity did not directly pay for this equipment; therefore, its rates did not reflect the full cost of services provided. Since the equipment provided was used to support all users at this activity, the user who purchased the equipment subsidized other users.

- Another activity's published rates were designed to reflect the expenses of procuring a new computer system during FY 1988. While the activity used these rates to provide information-only cost data to its internal users, reimbursable users actually paid for services based on these rates. Accordingly, reimbursable users subsidized internal users.

The practice of recording capital asset items as expenses over an inappropriately short time period did not equitably distribute costs over the life of the asset. This practice also lessened the ability of data processing activity, user, and higher-level management to make informed decisions based on comparisons of published rates for data processing services.

Accountability for Capital Assets. Asset accountability records were not adequately maintained by the nine non-Industrial Fund activities. We randomly compared selected ADP equipment to available inventory records at the data processing activities visited. Our comparison showed that the accuracy of asset accountability records could be improved. At one activity, we found that five items of equipment, valued at about $140,000, had been declared excess almost a year ago but remained on the

property records. We also found that additional items of equipment, procured within the past year at a cost of about $260,000, had not yet been entered in the accounting records. Another activity had 16 items of ADP equipment, all bought within the past 4 years at a total cost of about $778,000, which were not on the property records. We also noted that eight activities had computer systems that were not on their property records because the systems were funded by other organizations. Acquisition costs for these systems were not readily available. To accurately account for and allocate applicable depreciation expenses, complete and accurate inventory records must be maintained on all assets.

While all data processing activities had established asset accountability procedures and controls, our random comparisons indicated that asset records at Industrial Fund activities were more accurate and complete than those at non-Industrial Fund activities. In discussions with responsible personnel, we learned that Industrial Fund activities placed increased emphasis on maintaining asset records, primarily because these records are so important in determining the amount of depreciation to be recovered. We believe that the ability to recover and retain depreciation costs provides a substantial incentive to maintain accurate records of assets.

Identification of Depreciation Costs. None of the nine non-Industrial Fund activities could readily identify its asset depreciation expenses. As stated in Finding A, asset depreciation is a potentially large portion of total data processing costs. A key portion of OMB Circular No. A-130 is devoted to requiring data processing activities to operate in a businesslike manner by recovering all costs of operations. Additionally, Title 2 ("Accounting") of GAO's "Policy and Procedures Manual for Guidance of Federal Agencies," requires that operations that are similar to commercial companies (such as Industrial Fund activities), and activities that recover costs from reimbursements or user charges, must individually depreciate and report their capital assets. Accordingly, all data processing activities that meet the criteria of A-130 should identify, allocate, and recover applicable depreciation expenses.

DoD accounting guidance did not permit non-Industrial Fund data processing activities to retain the depreciation costs they recovered from users. Additionally, Chapter 36 of the DoD Accounting Manual did not allow non-Industrial Fund Activities to calculate and record depreciation of assets at the activity level. Industrial Fund activities were allowed to compute and record asset depreciation at the activity level. Non-Industrial Fund activities could not quantify applicable expenses for asset depreciation, which represents a significant portion of their

total costs. Without the ability to account for, recover, and retain asset depreciation, non-Industrial Fund activities could not function in a businesslike manner and were not complying with a key portion of A-130.

RECOMMENDATIONS FOR CORRECTIVE ACTION

We recommend that the Comptroller of the Department of Defense designate all data processing activities that are subject to Office of Management and Budget Circular No. A-130 as Industrial Fund activities, or revise appropriate DoD accounting policies, procedures, and systems to fully support non-Industrial Fund activities in recovering and retaining unfunded costs for future use.

MANAGEMENT COMMENTS

The Comptroller of the Department of Defense did not provide comments on a draft of this report.

COMPARISON OF COSTS REQUIRED TO BE RECOVERED FROM SALE OF ADP SERVICES

Cost Categories:	Recoverable Costs Per A-130 (Note 3)	Recoverable Costs Per DoD Accounting Manual, Chapter 26 (Notes 1, 2)		
		Within Same DoD Component by: Industrial Activity / Non-Industrial Activity	To Another DoD Component by: Industrial Activity / Non-Industrial Activity	To Another Federal Agency by: Industrial Activity / Non-Industrial Activity
Personnel:				
- Civilian labor	Yes	Yes / No	Yes / Yes	Yes / Yes
- Military labor	Yes	Yes / No	Yes / No	Yes / Yes
- Travel	Yes	Yes / Yes	Yes / Yes	Yes / Yes
Equipment:				
- Depreciation	Yes	Yes / No	Yes / No	Yes / Yes
- Rental/Lease	Yes	Not Specified (Note 4)	Not Specified (Note 4)	Not Specified (Note 4)
Software:				
- Depreciation	Yes	Yes / No	Yes / No	Yes / No
- Rental/Lease	Yes	Not Specified (Note 4)	Not Specified (Note 4)	Not Specified (Note 4)
Supplies:	Yes	Not Specified (Note 4)	Not Specified (Note 4)	Not Specified (Note 4)
Contracted Services:	Yes	Not Specified (Note 4)	Not Specified (Note 4)	Not Specified (Note 4)
Space Occupancy:				
- Rental/Lease	Yes	Not Specified (Note 4)	Not Specified (Note 4)	Not Specified (Note 4)
- Utilities	Yes	Not Specified (Note 4)	Not Specified (Note 4)	Not Specified (Note 4)
Interagency Services:	Yes	Not Specified (Note 4)	Not Specified (Note 4)	Not Specified (Note 4)
Intra-Agency Services:	Yes	Not Specified (Note 4)	Not Specified (Note 4)	Not Specified (Note 4)

Notes:

(1) Chapter 26 gives the same guidance for both direct and indirect labor costs. Indirect costs, if significant, are accumulated in a cost pool and allocated to overhead. In the absence of a cost accounting system, applicable costs may be estimated. Non-Industrial Fund activities normally do not charge overhead costs to other DoD activities, but charge overhead costs to other Federal agencies and private parties.

(2) Chapter 26 directs all activities, regardless of type of funding, to recover all specified costs from their sales to private parties.

(3) A-130 requires recovery of all applicable costs from all users, regardless of agency affiliation.

(4) Shown as a potential cost in Chapter 75 of the DoD Accounting Manual, which provides requirements for the accounting and allocation of ADP costs, but not specifically addressed in Chapter 26, which contains cost recovery requirements.

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Assistant Secretary of Defense (Public Affairs)

Department of the Army

Secretary of the Army
The Auditor General, U.S. Army Audit Agency

Department of the Navy

Secretary of the Navy
The Auditor General, Naval Audit Service

Department of the Air Force

Secretary of the Air Force
Air Force Audit Agency

Other Defense Activities

Director, Defense Contract Audit Agency
Director, Defense Logistics Agency
Director, Defense Logistics Studies Information Exchange

Non-DoD

Office of Management and Budget
U.S. General Accounting Office, NSIAD Technical Information Center
Congressional Committees:

- Senate Subcommittee on Defense, Committee on Appropriations
- Senate Committee on Armed Services
- Senate Committee on Governmental Affairs
- Senate Ranking Minority Member, Committee on Armed Services
- House Committee on Appropriations
- House Subcommittee on Defense, Committee on Appropriations
- House Ranking Minority Member, Committee on Appropriations
- House Committee on Armed Services
- House Committee on Government Operations
- House Subcommittee on Legislation and National Security, Committee on Government Operations

ACTIVITIES VISITED OR CONTACTED

Office of the Secretary of Defense

Comptroller of the Department of Defense

Department of the Army

Assistant Secretary of the Army (Financial Management)
Army Information Systems Command, Fort Huachuca, AZ
7th Signal Command, Fort Ritchie, MD
Army Missile Command, Redstone Arsenal, AL
Belvoir Research, Development and Engineering Center, Fort Belvoir, VA
North Pacific Division, Army Corps of Engineers, Portland, OR
Army Personnel Information Systems Command, Alexandria, VA

Department of the Navy

Naval Data Automation Command, Washington, DC
Naval Automation Regional Data Center, Pensacola, FL
Naval Aviation Supply Office, Philadelphia, PA
Naval Finance Center, Cleveland, OH
Naval Ocean Systems Center, San Diego, CA
Marine Corps Air Station, Cherry Point, Havelock, NC

Department of the Air Force

Air Force Communications Command, Scott Air Force Base, IL
Tinker Data Services Center, Tinker Air Force Base, OK
2nd Computer Services Group, San Antonio, TX
Air Force Audit Agency, Norton Air Force Base, CA

Defense Agencies

Defense Logistics Agency
- Defense Technical Information Center, Alexandria, VA
- Defense Automation Resources Information Center, Alexandria, VA

Non-DoD Activities

General Accounting Office, Washington, DC
General Services Administration, Federal Systems Integration and Management Center, Falls Church, VA
Department of Agriculture, Washington, DC
National Institutes of Health, Bethesda, MD
Office of Management and Budget, Washington, DC

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