Audit Report

INFORMATION TECHNOLOGY FUNDING IN
THE DEPARTMENT OF DEFENSE

Report No. D-2000-063 December 17, 1999

Office of the Inspector General
Department of Defense

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Acronyms

IT	Information Technology
O&M	Operation and Maintenance
RDT&E	Research, Development, Test and Evaluation

INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
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December 17, 1999

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE (COMPTROLLER)
ASSISTANT SECRETARY OF DEFENSE (COMMAND, CONTROL, COMMUNICATIONS AND INTELLIGENCE)

SUBJECT: Audit Report on Information Technology Funding in the Department of Defense (Report No. D-2000-063)

We are providing this report for information and use. We conducted the audit in response to a congressional request. Because this report contains no recommendations, no written comments were required, and none were received.

We appreciate the courtesies extended to the audit staff. For additional information on this report, please contact Mr. Charles M. Santoni at (703) 604-9051 (DSN 664-9051) (csantoni@dodig.osd.mil) or Mr. David M. Wyte at (703) 604-9027 (DSN 664-9027) (dwyte@dodig.osd.mil). See Appendix G for the report distribution. Audit team members are listed inside the back cover.

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Office of the Inspector General, DoD

Report No. D-2000-063 **December 17, 1999**
(Project No. 9AL-5015)

Audit of Information Technology Funding in the Department of Defense

Executive Summary

Introduction. This report discusses information technology funding in DoD in response to a request from the Chairman, Subcommittee on Defense, House Appropriations Committee. The Chairman asked the Inspector General, DoD, to review how DoD funds information technology system development projects and whether the choices of appropriations to be used for financing the systems conflict with DoD Regulation 7000.14-R, "Department of Defense Financial Management Regulation," June 1998. The Chairman expressed concern on whether DoD had taken action to correct development and modernization funding inconsistencies for information technology system acquisitions, as directed by House Appropriations Committee Report 105-591, which accompanied the DoD Appropriations Act for FY 1999.

Objectives. The overall audit objective was to determine whether the FY 2000 budget submission for information technology investments complied with the direction to correct funding inconsistencies from the House Appropriations Committee. Specifically, we determined how DoD funds the development and modernization of information technology system acquisitions and whether the appropriations used for financing complied with the provisions of DoD Regulation 7000.14-R. We also evaluated the effectiveness of the management control program as it applied to the audit objective. See Appendix A for a discussion of the audit scope and methodology and our review of the management control program.

Results. The FY 2000 budget submitted by DoD did not comply with House Appropriations Committee Report 105-591 direction to correct information technology funding inconsistencies. Further, guidance contained in DoD Regulation 7000.14-R, addressing the funding of information technology systems, was inconsistent and unnecessarily broad. As a result, Operation and Maintenance funds, rather than Research, Development, Test and Evaluation funds, were being budgeted for information technology system development. During the audit, Under Secretary of Defense (Comptroller) personnel determined that the guidance on funding information technology and automated information systems needed clarification. Subsequently, on October 26, 1999, the Under Secretary of Defense (Comptroller) issued policy that will clarify procedures for funding information technology systems by requiring development and modernization efforts to be budgeted with Research, Development, Test and Evaluation appropriations. See the finding section for details on the audit results and Appendix A for details on the DoD management control program.

Management Comments. We provided a draft of this report on December 3, 1999. Because this report contains no recommendations, written comments were not required, and none were received. Therefore, we are publishing this report in final form.

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Background

House Appropriations Committee Report (105-591), accompanying the Department of Defense Appropriations Act for FY 1999 expressed the concerns of the House Committee on Appropriations that DoD was funding many of its large-dollar, multi-year developmental information technology (IT) systems with Operation and Maintenance (O&M) appropriations rather than with Procurement or Research, Development, Test and Evaluation (RDT&E) appropriations. Citing criteria in the DoD Regulation 7000.14-R, "Department of Defense Financial Management Regulation," July 1998, that defines development and modernization costs as IT investments, the Committee directed DoD to correct this problem in its FY 2000 budget submission. It is the Committee's belief that ensuring the use of the correct appropriation is the first step in the proper oversight of information technology systems. Its concerns addressing information technology management oversight are in Appendix B.

This audit was initiated in response to a letter from the Chairman, Subcommittee on Defense, House Appropriations Committee, requesting the Inspector General, DoD, to review how DoD funds IT systems and determine whether the choice of appropriations financing those systems conflict with the Financial Management Regulations. The Chairman indicated that he was requesting the review because it did not appear to him that DoD had taken the action directed by the Committee to correct funding inconsistencies in its FY 2000 budget submission.

In FY 2000, DoD planned to spend approximately $4.5 billion for development and modernization of IT systems. Approximately $1.2 billion of that amount was to be funded using O&M appropriations. We identified 81 systems that would fund some or all of their development and modernization costs with O&M appropriations. Of those systems, 38 (47 percent) were designated as Acquisition Category IA Major[1] or Special Interest Initiative[2] automated information systems. The appropriations and cumulative development and modernization costs associated with funding the 38 systems were as follows:

Appropriation	**Funding** (millions)
Operation and Maintenance	$ 635
Procurement	520
Research, Development, Test, and Evaluation	39
Military Personnel	2
Defense Working Capital Fund	11
Total	$1,207

[1]Programs are defined as Acquisition Category IA Major automated information systems if costs for any single year exceed $30 million (FY 1996 constant dollars), total acquisition costs exceed $120 million, total life-cycle costs exceed $360 million, or the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) designates them as Acquisition Category IA systems.

[2]Programs are defined as Special Interest Initiative automated information systems if the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) determines their mission or importance deserves special recognition.

As demonstrated in the table, the O&M appropriations would cumulatively finance more than 52 percent ($635 million of $1,207 million) of the amount budgeted to develop and modernize the 38 systems.

Objectives

The overall audit objective was to determine whether the FY 2000 budget submission for IT investments complied with the recommendation to correct funding inconsistencies directed by House Appropriations Committee Report 105-591, which accompanied the DoD Appropriation Act, FY 1999 (H.R. 4103). Specifically, we determined how DoD funds the development and modernization of IT system acquisitions and whether the appropriations used complied with the provisions of DoD Regulation 7000.14-R. We also evaluated the effectiveness of the management control program as it applied to the audit objective. See Appendix A for a discussion of the audit scope and methodology and our review of the management control program.

Funding Development and Modernization Efforts for Information Technology Systems

The FY 2000 budget submitted by DoD did not comply with the House Appropriations Committee Report 105-591 direction to correct IT funding inconsistencies. This occurred because guidance contained in DoD Regulation 7000.14-R, addressing the funding of IT systems, was inconsistent and provided broad exceptions. As a result, O&M appropriations, rather than RDT&E appropriations, were requested in the DoD FY 2000 budget submission for:

- software modifications made to commercial off-the-shelf IT systems; and
- system solution definitions, software license acquisitions and program support.

Although the Under Secretary of Defense (Comptroller) believed that DoD budget policies and procedures addressing system development and modernization efforts were adequate, during the audit he determined that the guidance on funding information technology and automated information systems needed clarification. On October 26, 1999, the Under Secretary of Defense (Comptroller) issued policy that will clarify procedures for funding IT systems by requiring development and modernization efforts to be budgeted with RDT&E appropriations.

Guidance

DoD Regulation 7000.14-R, "Department of Defense Financial Management Regulation," Volume 2A, June 1998, established DoD budget formation and presentation policies and procedures for developing the President's budget request to the Congress. DoD 7000.14-R, Volume 2A, Chapter 1, Section 0102, "Funding Policies," provided that when commercial off-the-shelf items were modified to satisfy users' requirements, the costs of acquiring, modifying, and testing the commercial items would be budgeted with RDT&E appropriations. However, Section 0102 provided an exception for funding commercial off-the-shelf IT systems. The exception allowed development and modernization costs for acquisitions of general purpose IT systems[3] to be financed with either O&M or Procurement appropriations, subject to a $100,000 expense and investment threshold[4]. Further, if subsequent software modifications were required for these systems, those modification costs would be financed with O&M appropriations.

[3]General purpose IT systems are normally commercially available off-the-shelf and are easily adaptable to a variety of applications by configuring existing executive software and programming languages.

[4]For budgeting purposes, capital assets that are not subject to centralized item management and asset control and have a unit cost less than $100,000 are classified as expenses and are financed with O&M appropriations.

Section 0102 also provided for other circumstances and conditions that could be financed with either O&M or RDT&E appropriations. Where guidance defined development and modernization efforts as expenses,[5] O&M or RDT&E appropriations were allowed to pay for:

- defining modifications or solutions to satisfy deficiencies,
- software licenses, and
- direct expenses incurred in support of procurement and production programs.

In summary, guidance contained in DoD Regulation 7000.14-R was inconsistent and provided broad exceptions. Development and modernization costs for IT systems could be funded with O&M appropriations rather than with RDT&E appropriations when general purpose IT systems that require software modifications were acquired. Similarly, program managers could decide to use O&M instead of RDT&E appropriations to fund IT system development and modernization efforts. As a result, O&M appropriations were requested and approved by Congress to fund IT system software modification as well as other acquisition development and modernization efforts.

IT Development and Modernization Costs

We evaluated 14 of 209 IT systems listed in the IT-1 Reports of the DoD FY 2000 Budget Submission to determine whether IT system development and modernization efforts complied with Section 0102 funding criteria.

Criteria for Selecting Systems. To be selected, IT system acquisitions had to be multi-year, development and modernization efforts that were either substantially financed with O&M appropriations or financed solely with Procurement or RDT&E appropriations. The systems had to be classified as Acquisition Category IA Major or Special Interest Initiative Automated Information Systems and had to represent a cross-section of Military Department and major Defense Agency sponsored programs.

Systems Costs. The 14 systems totaled $583 million of the $4.5 Billion requested in the FY 2000 DoD IT development and modernization budget. O&M appropriations cumulatively funded $355 million (61 percent) of the budgeted development and modernization costs for the 14 systems. Appendix C lists the 14 systems by program name, sponsor, and appropriation(s) financing development and modernization costs. Appendix D describes the key aspects of each program including purpose, procurement strategy, and cost.

[5]Costs for consumable items and services such as personal services, maintenance and repair, supplies, and utilities to operate and maintain organizations are defined as expenses.

Results of Evaluation. All 14 of the selected IT system acquisitions complied with Section 0102 funding criteria. However, as discussed in the Chairman's letter to the Inspector General, DoD, O&M appropriations continued to fund IT system development efforts for FY2000. This occurred because the funding criteria in Section 0102 provided broad exceptions permitting the use of O&M appropriations to fund various IT system costs. O&M appropriations financed some or all of the development and modernization costs for 12 of the systems, and Procurement and RDT&E appropriations separately financed the remaining 2 systems.

For the 12 IT system development and modernization efforts financed in whole or in part with O&M appropriations in FY 2000, program managers budgeted O&M appropriations for:

- commercial off-the-shelf software modifications;
- supporting headquarters staff, contracting offices, project offices, and acquisition managers;
- engineering efforts to determine the modifications needed to satisfy a deficiency;
- hardware acquisitions costing less than $100,000;
- proprietary software licenses; and
- evaluations of organizational structures, functions, policies, procedures, methods and systems, and applications of management reforms.

Appendix E details by IT system acquisition and cost the Section 0102 criteria applied by the program managers of the 12 systems for justifying use of O&M appropriations to finance IT development and modernization costs. Approximately 61 percent ($217 million of $355 million) and 22 percent ($79 million of $355 million) of the FY 2000 O&M development and modernization costs budgeted for these systems are for software modifications of general purpose information systems and direct program support.

For the two IT development and modernization efforts not funded with O&M appropriations, program managers applied different funding strategies for system acquisitions. The Reserve Component Automation System development and modernization efforts were budgeted with Procurement appropriations because the Army program manager believed the acquisition was a general purpose IT system requiring no modifications. Conversely, the Air Force budgeted the Global Command Support System's development and modernization efforts with RDT&E appropriations because the program manager believed that his acquisition was a custom designed IT system.

Policy Change

DoD did not initially comply with House Appropriation Committee direction for submitting its FY 2000 IT budget. Under Secretary of Defense (Comptroller) personnel informed us that upon receipt of the House Appropriation Committee Report (105-591) they reviewed the policies and procedures contained in DoD Regulation 7000.14-R relating to funding IT systems and found them to be adequate. By maintaining the existing policies and procedures for budgeting IT systems, DoD continued to provide inconsistent funding information in its FY 2000 budget submission. During the audit, Under Secretary of Defense (Comptroller) personnel acknowledged that the guidance on funding IT and automated information systems needed clarification. Subsequently, on October 26, 1999, the Under Secretary of Defense (Comptroller) issued policy that will clarify procedures for funding IT system development and modernization costs. The complete text of the Clarification of Policy - Budgeting for Information Technology and Automated Information Systems for the FY 2001 budget submission and beyond is in Appendix F.

The budget policy clarification provides that costs for the development of a new capability, including all activities involved in bringing a program to the objective system defined in the requirement documents, would be financed with RDT&E appropriations. Costs for obtaining commercial off-the-shelf systems requiring no modifications would be financed with Procurement appropriations or if budgeted costs are less than $100,000 with O&M appropriations. However, if software modifications were made to commercial off-the-shelf information systems, costs would be financed with RDT&E appropriations.

The budget policy clarification states that program funding realignments for FY 2001 and outyears will be corrected during the FY 2001 budget review and that the Financial Management Regulation will be reviewed and amended in calendar year 2000 to reflect the policy clarification. Accordingly, since the budget policy clarification should correct the funding inconsistencies in DoD budget submissions for IT systems, this report contains no recommendations.

Appendix A. Audit Process

Scope and Methodology

We conducted this financial related management audit from April 1999 through November 1999. We gathered documentation and obtained information relating to the funding of information technology programs in the Department of Defense, dated from October 1997 through October 1999. To accomplish the audit objective we took the following steps:

- reviewed Department of Defense FY 2000 Biennial Budget Estimates and DoD Exhibit IT-300b-IT Capital Investment Exhibit for Information and Technology programs in DoD; and
- obtained FY 2000 budget documentation from the Office of the Assistant Secretary of Defense (Comptroller), the Offices of Assistant Secretaries of the Army, Navy and Air Force (Financial Management and Comptroller), and the Defense Agencies, and compared it with the criteria in the DoD Financial Management Regulation to determine compliance.

Audit Standards. We conducted this financial management audit in accordance with auditing standards issued by the Comptroller of the United States as implemented by the Inspector General, DoD. Accordingly, we included such tests of management controls considered necessary.

Use of Computer-Processed Data. We did not rely on computer-processed data or statistical sampling procedures to perform the audit.

Contacts During the Audit. We visited or contacted individuals and organizations within DoD. Further details are available upon request.

DoD-wide Corporate-Level Government Performance and Results Act Goals. In response to the Government Performance and Results Act, the Department of Defense established 2 DoD-wide goals and 7 subordinate performance goals. This report pertains to achievement of the following goal and subordinate performance goal:

> **Goal 2**: Prepare now for an uncertain future by pursuing a focused modernization effort that maintains U.S. qualitative superiority in key warfighting capabilities. Transform the force by exploiting the Revolution in Military Affairs, and reengineer the Department to achieve a 21st century infrastructure. **(00-DoD-2.0)**

DoD Functional Area Reform Goals. Most major DoD functional areas have also established performance improvement reform objectives and goals. This report pertains to achievement of the following functional area objective and goal:

Financial Management Functional Area.

Objective: Reengineer DoD Business Practices. **Goal:** Standardize, reduce, clarify, and reissue financial management polices. (FM-4.1)

Information Technology Management Functional Area.

Objective: Become a mission partner. **Goal:** Facilitate process improvements. (ITM-1.3)

General Accounting Office High-Risk Area. The General Accounting Office has identified several high-risk areas in the DoD. This report provides coverage of the Defense Financial Management and Information Technology high-risk areas.

Management Control Program

DoD Directive 5010.38, "Management Control (MC) Program," August 26, 1996, requires DoD organizations to implement a comprehensive system of management controls that provides a reasonable assurance that programs are operating as intended and to evaluate the adequacy of the controls.

Scope of Review of the Management Control Program. Because our specific objective was to determine how DoD funds the development and modernization of IT system acquisitions, we limited our review to management controls related to the applicable laws and management policies for funding information technology programs. We did not assess the adequacy of management's self-evaluation because it was outside the scope of the audit request.

Adequacy of the Management Control Programs. Management controls, polices and procedures contained in DoD Regulation 7000.14-R, were inadequate to ensure that IT system development and modernization costs were consistently budgeted. On October 26 1999, the Under Secretary of Defense (Comptroller) corrected the weakness by issuing guidance to clarify policy for funding IT system development and modernization efforts.

Summary of Prior Coverage

During the last 5 years, no audits have been performed on the overall funding of DoD IT system acquisitions.

Appendix B: House Committee on Appropriations, Concerns about DoD Information Technology Management

The following text from the Department of Defense Appropriations Act, 1999, H.R. 4103, Report of the House Committee on Appropriations, H.R.105-591, addresses the Committee's concerns.

> The Committee is concerned about the adequacy of the Department's oversight of its information technology systems. In reviewing the budgets of individual systems it is clear that agencies and departments are using Operation and maintenance funds for purposes inconsistent with that appropriation. For example, the Department is spending about $780,000,000 in Operation and maintenance on the development and modernization of information technology systems. According to the Financial Management Regulation (FMR) "Development and Modernization" including "Program costs for new Automated Information Systems" and "any change or modification to an existing Automated Information System which is intended to result in improved capability or performance." However, the same FMR defines the cost of new equipment or systems, the replacement of equipment or systems, and even software changes designed "to improve system performance" as "Investments" if, in total value, they exceed the current $100,000 expense/investment threshold. Thus, they should be paid for with either Procurement or Research, Development, Test and Evaluation funds. The Committee directs the DoD to correct this problem in its fiscal year 2000 budget submission. The Committee is fully prepared to require prior approval reprogramming procedures for such transfers absent the needed corrections.
>
> The Committee believes that ensuring the use of the correct appropriation is but the first step in the proper oversight of information technology systems. The Committee strongly endorses the provisions of the Information Technology Management Reform Act (ITMRA) as essential to improving this process. The Department is apparently considering abolishing the Major Automated Information System Review Council (MAISRC), an organization with potential, but one that fails to meet and instead delegates its review role to working groups. However, given the Department's enormous investment in new information technology systems, it is important that the replacement structure strengthen the process and ensure a level of review and oversight compatible with the ITMRA and closer to that used for weapon systems.

Appendix C: Fiscal Year 2000, Development and Modernization Programs Reviewed

Program	Agency	Appropriation (Million) O&M	Procurement	RDT&E	Total
Army Recruiting Information Support System	Army	$ 11	-	-	$ 11
Global Combat Support System	Army	46	$ 28	-	74
Joint Computer-Aided Acquisition and Logistics Support System	Army	85	32	-	117
Reserve Component Automation System	Army	-	59	-	59
Global Command & Control System	Navy	5	2	-	7
Navy Standard Integrated Personnel System	Navy	16	1	-	17
Navy Tactical Command Support System	Navy	1	46	-	47
Global Combat Support System	Air Force	-	-	$19	19
Global Command & Control System	Air Force	12	5	4	21
Integrated Maintenance Data System	Air Force	2	3	20	25
Standard Procurement System	DLA	68	-	-	68
Global Combat Support System	DISA	19	5	-	24
Global Command & Control System	DISA	26	4	-	30
Defense Integrated Military Human Resource System	DHRA	64	-	-	64
Total		**$355***	**$185**	**$43**	**$583**

DLA Defense Logistics Agency
DISA Defense Information Systems Agency
DHRA DoD Human Resources Activity

*Represents 60.9 percent of the $583 million budgeted for the 14 systems in FY 2000.

Appendix D: Descriptions of Information Technology Development and Modernization Programs

Army Recruiting Information Support System

The Army Recruiting Information Support System will provide a single automation system that the Army, Army Reserve, and Army National Guard recruiting organizations will use to support the full range of recruiting, counseling, assessment, and processing functions to efficiently manage the recruiting effort. The system is a mix of commercial-off-the-shelf software, custom application development, and Government provided software. The system is being incrementally developed and deployed at a cost of about $120 million and is scheduled to achieve full operating capability at the end of FY 2001.

Global Combat Support System-Army

The Global Combat Support System-Army is an automated information system that will provide a single, integrated and interactive automation and communication capability to implement the Army Combat Service Support mission. The Global Combat Support System-Army will constitute the Army's portion of the Global Combat Support System for manning, arming, fixing, fueling, moving, and sustaining soldiers and their systems. The program will consist of six major modules incrementally fielded in three tiers. The system, with development and deployment cost of about $590 million, will use commercial off-the-shelf hardware and software and will run on a Windows operating system.

Joint Computer-Aided Acquisition and Logistic Support System

The Joint Computer-Aided Acquisition and Logistics Support System provides a communications and automation infrastructure to create, distribute, and use digitized technical information to support and manage weapons systems throughout their lifecycle for the military departments, defense agencies, and industry. The program includes the automation of technical manuals and provides for the integration of automated business processes. The Joint Computer-Aided Acquisition and Logistics Support system is being implemented in blocks. The system, consisting of approximately 94 percent commercial off-the-shelf products, has an estimated development and deployment cost of $872 million.

Reserve Component Automation System

The Reserve Component Automation System provides an automated business information system to administer, manage, and mobilize Army National Guard and Army Reserve forces. The system will incorporate office automation products to support daily operations, training, and administrative tasks at all Guard and Reserve echelons and will provide the infrastructure to plan and support deployment and demobilization. The Reserve Component Automation System is being developed and deployed in seven increments at an estimated cost of approximately $421 million. The system consists of commercial off-the-shelf hardware and office automation software, government off-the-shelf software, and newly developed software applications integrated into an open system, personal computer-based architecture.

Global Command and Control System-Maritime

The Global Command and Control System-Maritime receives, displays, correlates, merges, and maintains geo-locational track information on friendly, hostile, and neutral forces and integrates it with available intelligence and environmental information. The system is a mix of commercial and government off-the-shelf hardware and software. The system is being incrementally developed and deployed at a cost of about $536 million and is scheduled to be completed by the end of FY 2001.

Navy Standard Integrated Personnel System

The Navy Standard Integrated Personnel System will collect personnel and pay data for all Navy members. It will incorporate the functionality of many Navy systems into an integrated Navy personnel and pay management system for active duty, reserve, and retired Navy personnel. The Navy Standard Integrated Personnel System is being incrementally developed with commercial off-the-shelf hardware and software at a cost of about $161 million. The system is scheduled to achieve full operating capability by the end of FY 2000.

Navy Tactical Command Support System

The Navy Tactical Command Support System will provide full-range, responsive mission-support automated data processing hardware and software to support management of information, personnel, material, and funds required to maintain and operate ships, submarines, and aircraft. The program is being incrementally developed and deployed using commercial off-the-shelf hardware and software. The system, costing about $569 million, is scheduled to achieve full operating capability by the end FY 2004.

Global Combat Support System-Air Force

The Global Combat Support System-Air Force will develop, modernize and integrate legacy based-level standard Air Force and Department of Defense combat support information systems into a shared data environment for various command and control decision support systems. The modernized systems will be implemented worldwide and will support both wartime and peacetime requirements using commercial off-the-shelf hardware, software, and communications available from standard open systems, government contracts, and communications infrastructure programs. The program is being incrementally developed and deployed at a cost of about $259 million. Initial operating capability for Increment I is scheduled for the fourth quarter of FY 2000.

Global Command and Control System-Air Force

The Global Command and Control System-Air Force will provide the warfighter a merged, integrated, near real-time picture of the battlespace through use of an integrated set of analytic tools and flexible data transfer capabilities. The program supports the "Command, Control, Communication, Computer and Intelligence for the Warrior" concept and integrates commercial off-the-shelf products to the maximum extent possible. The system achieved initial operating capability in August 1996 and is being incrementally developed and deployed at a cost of about $77 million through FY 2001.

Integrated Maintenance Data System

The Integrated Maintenance Data System provides real-time operational readiness information on Air Force weapon systems in the field. The program will also provide flightline and other point of maintenance improvements such as interactive electronic technical manuals with hypertext linking, smart diagnostics, and portable maintenance aids. The program will acquire and integrate commercial off-the-shelf software to the maximum extent possible. The system is being incrementally developed at a cost of about $254 million and is scheduled to achieve full operating capability in January 2004.

Standard Procurement System

The Standard Procurement System is a Defense Logistics Agency acquisition program that will standardize jointly defined automated procurement business processes and will contribute to the DoD paperless contracting initiative by providing a modern integrated automated information system for contract placement and contract administration. The system will consist of modified commercial off-the-shelf software and will be deployed to approximately 46,000 worldwide users by the end of FY 2003. Standard Procurement System development cost is expected to be approximately $362 million.

Global Combat Support System

The Global Combat Support System being acquired by the Defense Information Systems Agency will provide end-to-end information interoperability across and between the combat support and command and control functions. Through system interoperability, the Global Combat Support System will use a mix of commercial and government off-the-shelf applications to provide improved communications between forward elements and the sustaining bases. The Defense Information Systems Agency is responsible for system's infrastructure, integration, facilities, and communications. Development of the system is expected to cost about $200 million.

Global Command and Control System

The Global Command and Control System being acquired by the Defense Information Systems Agency is a joint automated information system designed to provide the warfighter a fused, integrated, near real-time picture of the battlespace through use of an integrated set of analytic tools and flexible data transfer capabilities. The Global Command and Control System will consist of all necessary hardware, software, procedures, standards, and interfaces for worldwide connectivity at all levels of command. The program will make maximum use of commercial off-the-shelf software to support and manage a wide variety of inter-service, service-unique, site-specific databases, and office automation tools. The system is being incrementally developed and deployed at a cost of about $414 million through FY 2005.

Defense Integrated Military Human Resources System

The Defense Integrated Military Human Resources System will fully integrate military personnel and pay management functions. Managed by the Navy for the DoD Human Resources Activity, the system's core business functionally will be provided by a commercial off-the-shelf human resource package, supplemented by other commercial and government off-the-shelf custom-built applications at a cost of about $458 million. The system will be incrementally developed and is scheduled to achieve full operating capability by the end of FY 2005.

Appendix E. Program Managers' Justifications for Using Operation and Maintenance Appropriations

Activity/ Program	Conditional Circumstances and Special Guidance Criteria (Million)						
	A	B	C	D	E	F	Total
Department of the Army							
Army Recruiting Information Support System	-	-	-	-	$11	-	$11
Global Combat Support System	-	-	-	-	46	-	46
Joint Computer Aided Acquisition and Logistics Support System	-	-	-	-	85	-	85
Department of the Navy							
Global Command and Control System	-	-	$5	-	-	-	5
Navy Standard Integrated Personnel System	$2	-	1	-	9	$4	16
Navy Tactical Command Support System	-	-	1	-	-	-	1
Department of the Air Force							
Global Command and Control System	-	$2	2	-	6	2	12
Integrated Maintenance Data System	-	-	2	-	-	-	2
Defense Logistics Agency							
Standard Procurement System	-	1	31	-	33	3	68
Defense Information Systems Agency							
Global Combat Support System	-	2	8	-	9		19
Global Command and Control System	-	-	8	-	18	-	26
DoD Human Resource Activity							
Defense Integrated Military Human Resource System	-	35	21	$8	-	-	64
Total	**$2**	**$40**	**$79**	**$8**	**$217**	**$9**	**$355**

Key to Conditional Circumstances and Special Guidance Criteria

A. Equipment that is not centrally managed and controlled and has a system unit cost less than $100,000 for expense and investment determinations (FMR 010201 D.1), and subsequently budgeted with O&M appropriations (FMR 010201 C.3)

B. Engineering efforts to determine the modifications ultimately needed to satisfy a deficiency are expenses. (FMR 010201 D.1)

C. Direct expenses in support of procurement programs by headquarters staff, contracting offices, project offices and acquisition managers are expenses. (FMR 010201 D.3)

D. Evaluation of organizational structure, function, policies, procedures, methods and systems and applications of management reforms are financed with operation and maintenance appropriations (FMR 010212 C.1.e)

E. Normally, general-purpose information systems are commercially available off-the-shelf, and are easily adaptable to a variety of applications. Subsequent modification to software and development of application programs should be financed in operation and maintenance appropriations. (FMR 010212 C.10.b(1)(a))

F. Proprietary software licenses financed on an "annual fee" basis are an expense item financed with research, development, test and evaluation or operation and maintenance appropriations. (FMR 010212 C.10.b(4))

Appendix F. Information Technology and Automated Information Systems Budgeting Policy Clarification

UNDER SECRETARY OF DEFENSE
1100 DEFENSE PENTAGON
WASHINGTON, DC 20301-1100

COMPTROLLER

OCT 26 1999

MEMORANDUM FOR UNDER SECRETARIES OF DEFENSE
ASSISTANT SECRETARIES OF DEFENSE
GENERAL COUNSEL OF THE DEPARTMENT OF DEFENSE
INSPECTOR GENERAL OF THE DEPARTMENT OF DEFENSE
DIRECTOR, OPERATIONAL TEST AND EVALUATION
COMMANDER IN CHIEF, U.S. SPECIAL OPERATIONS COMMAND
DIRECTOR, ADMINISTRATION AND MANAGEMENT
COMPTROLLERS OF THE DEFENSE AGENCIES
COMPTROLLERS OF THE DOD FIELD ACTIVITIES
JOINT STAFF COMPTROLLER
ASSISTANT SECRETARY OF THE ARMY (FINANCIAL MANAGEMENT AND COMPTROLLER)
SENIOR CIVILIAN OFFICIAL, ASSISTANT SECRETARY OF THE NAVY (FINANCIAL MANAGEMENT AND COMPTROLLER)
ASSISTANT SECRETARY OF THE AIR FORCE (FINANCIAL MANAGEMENT AND COMPTROLLER)

SUBJECT: Clarification of Policy -- Budgeting for Information Technology and Automated Information Systems

The purpose of this memorandum is to clarify the Department's guidance on budgeting for Information Technology (IT) and Automated Information Systems (AIS). The House Appropriations Committee (Report 106-244) is concerned that the Department is not complying with existing financial management regulations on IT/AIS development and acquisition. Conforming with this guidance will ensure that the correct appropriations are used in programming and budgeting for these systems. As a result of this policy clarification, there will likely be a migration of funds from the Operation and Maintenance (O&M) appropriations to the Research, Development, Test and Evaluation (RDT&E) and Procurement appropriations. Cross-Service and Agency consistency is important. Services and Agencies that are participating jointly in the development and/or acquisition of new systems should fund their efforts in like appropriations. Funding transfers for FY 2001 and the outyears will be identified during the FY 2001 budget review process and documented in Program Budget Decisions (PBDs).

In determining what appropriation to use, the purpose of the funding must fall logically within the appropriation's purpose and conform with the expense and investment criteria. The RDT&E funds are typically used for developing new capability. Expenses -- the resources used to operate and maintain organizations and current services -- are generally budgeted in the O&M appropriations. Investments are costs to acquire capital assets and have a long-term benefit; the current expense/investment threshold is $100,000.

Complete IT systems that cost $100,000 or more are acquired with Procurement appropriation funding; those systems that have a cost below the threshold are budgeted in the O&M appropriations. Complete system cost is the aggregate cost of all components that are part of, and function together, as a system to meet a documented requirement.

The following budgeting guidelines help determine how to program and budget for IT systems:

(a) RDT&E appropriations: Development, test and evaluation costs, including designing prototypes and processes, should be budgeted in the RDT&E appropriations. The RDT&E funds also should be used to develop major upgrades increasing the performance envelope of existing systems, purchase test articles, and conduct developmental testing and/or initial operational test and evaluation prior to system acceptance. In general, all developmental activities involved in bringing a program to its objective system are to be budgeted in RDT&E.

-- Reaching the objective system, as defined in the requirements documents, is a critical determinant. Some software programs, particularly those following a spiral or incremental development pattern, may be approved for initial fielding even though the early capability is below the objective system requirements. The follow-on development and test activities required to reach the objective system performance will be budgeted in RDT&E.

-- Commercial-off-the-shelf (COTS) systems that require engineering design, integration, test and evaluation to achieve the objective performance will be budgeted in RDT&E. The COTS items bought as end-items (i.e., no changes are needed) will be funded in either Procurement or O&M subject to the expense/investment criterion.

-- The acquisition, operation and maintenance of IT systems that are used exclusively in support of RDT&E activities will be funded within an RDT&E appropriation.

(b) Procurement appropriations: Acquiring and deploying a complete system (as defined above) with a cost of $100,000 or more is an investment and should be budgeted in a Procurement appropriation.

-- For modification efforts, only the cost of the upgrade (e.g., new software licenses, hardware and labor) associated with the improvement is counted towards the investment threshold. The total cumulative cost of the system is not considered when deciding what appropriation to use to fund modernization.

-- Procurement of fully developed and tested modification kits, associated installation, and associated labor costs (both direct and indirect) should be financed from Procurement appropriations. For example, equipment purchased after successful

system testing and a favorable fielding decision should be bought with Procurement funding.

-- Equipment, kits, spare and repair parts (not managed by the Defense Working Capital Funds) that are subject to centralized item management and asset control should be bought with Procurement funding.

(c) Operation and Maintenance appropriations: Expenses incurred in continuing operations and current performance levels are budgeted in the O&M appropriations.

-- Modernization costs under $100,000 are considered expenses, as are one-time projects such as developing planning documents and studies.

-- Software releases categorized as iterations on the basic release and not involving significant performance improvements or extensive testing should be considered as maintenance efforts. Minor improvements in functionality which are performed during routine maintenance are not considered development; O&M funding is appropriate. For example, the costs of rehosting software to an upgraded operating system that provides incidental performance improvements may be funded in the O&M appropriation. Post-production software support which improves the way a system processes but does not entail extensive code revisions is also an appropriate O&M expenditure.

-- Items purchased from a commercial source that can be used without modification (i.e., commercial off-the-shelf and nondevelopmental items) will be funded in either the Procurement or O&M appropriations, as determined by the expense and investment criterion.

(d) The Defense Working Capital Fund: This policy does not change budgeting for IT systems within the Defense Working Capital fund. The IT systems developed and acquired through the Defense Working Capital Fund will be reflected in the Capital Budget if the system cost is $100,000 or more. Systems costing less than $100,000 are funded through the Operating Budget.

(e) Capitalization of Software Cost: For accounting purposes, the total cost of software should be capitalized when the total cost of the system exceeds the Department's capitalization threshold amount, which is currently $100,000. The full cost of enhancements to existing internal use software is to be considered when determining if the capitalization threshold has been reached. Capitalization of software is not dependent on the appropriation used to fund its purchase or development. Further information on capitalization may be found in the Statement of Federal Financial Accounting Standard 11, "Accounting for Internal Use Software."

These guidelines apply to all AIS/IT systems. Information technology systems embedded in weapons systems and major end-items are not affected by this policy. Funding realignments to correct the FY 2001-2005 program will be addressed during this fall's budget review. The DoD Financial Management Regulation will be reviewed and amended next year as needed to reflect this policy clarification. My staff point of contact for this matter is Ms. Ellen Maldonado (phone: 703-697-3553).

William J. Lynn

Appendix G. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense (Comptroller)
  Deputy Chief Financial Officer
  Deputy Comptroller (Program/Budget)
  Director, Accounting Policy
Assistant Secretary of Defense (Command, Control, Communications and Intelligence)
Director, Defense Logistics Studies Information Exchange

Department of the Army

Auditor General, Department of the Army
Chief Information Officer, Department of the Army

Department of the Navy

Naval Inspector General
Auditor General, Department of the Navy
Chief Information Officer, Department of the Navy

Department of the Air Force

Assistant Secretary of the Air Force (Financial Management and Comptroller)
Assistant Secretary of the Air Force (Acquisition)
Auditor General, Department of the Air Force
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Senate Subcommittee on Defense, Committee on Appropriations
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House Committee on Appropriations
House Subcommittee on Defense, Committee on Appropriations
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House Committee on Government Reform
House Subcommittee on Government Management, Information, and Technology, Committee on Government Reform
House Subcommittee on National Security, Veterans Affairs, and International Relations, Committee on Government Reform

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