United States General Accounting Office

GAO

Report to the Chairman, Subcommittee on National Security, Emerging Threats, and International Relations, Committee on Government Reform, House of Representatives

March 2003

DOD BUSINESS SYSTEMS MODERNIZATION

Continued Investment in Key Accounting Systems Needs to be Justified

GAO-03-465

March 2003

DOD BUSINESS SYSTEMS MODERNIZATION

Continued Investment in Key Accounting Systems Needs to be Justified

GAO Accountability • Integrity • Reliability

Highlights

Highlights of GAO-03-465, a report to the Chairman, Subcommittee on National Security, Emerging Threats, and International Relations, Committee on Government Reform, House of Representatives

Why GAO Did This Study

The Department of Defense's (DOD) long-standing financial management and business systems modernization problems result in a lack of information needed to make sound decisions, hinder the efficiency of operations, and leave the department vulnerable to fraud, waste, and abuse. Such problems led us in 1995 to put financial management and business systems modernization at DOD on our list of high-risk areas in the federal government, a designation that continues today. GAO was asked to (1) provide information on the number and cost of DOD's current business systems and (2) determine if DOD is effectively managing and overseeing selected accounting system investments.

What GAO Recommends

This report recommends that the Secretary of Defense limit future investments by the Defense Finance and Accounting Service (DFAS) in three ongoing system projects we reviewed until each has been adequately justified. The report also recommends that all other DFAS information technology projects be evaluated to ensure they are being implemented at acceptable costs and within reasonable time frames.

DOD concurred with our recommendations and described efforts to address them.

www.gao.gov/cgi-bin/getrpt?GAO-03-465.

To view the full report, including the scope and methodology, click on the link above. For more information, contact Gregory Kutz, (202) 512-9095 (kutzg@gao.gov) or Randolph Hite (202) 512-3439 (hiter@gao.gov).

What GAO Found

DOD estimated that it had 1,731 business systems for its day-to-day operations as of October 2002. As GAO previously reported, these systems have evolved over time into the overly complex, error prone, duplicative, stovepiped environment that exists today. To support the operation, maintenance, and modernization of its business systems, the department requested approximately $18 billion for fiscal year 2003. Funding is only part of the solution to improving DOD's current system environment. A key ingredient to success is effectively managing and overseeing these investments.

DOD has invested approximately $316 million in four key Defense Finance and Accounting Service (DFAS) projects. However, DOD has not demonstrated that this substantial investment will markedly improve DOD financial management information needed for decision-making and financial reporting purposes. In fact, the DOD Comptroller terminated one project in December 2002, after an investment of over $126 million, citing poor program performance and increasing costs. Continued investment in the other three projects has not been justified because requisite analyses of the costs, benefits, and risks of each one do not reflect cost increases and/or schedule delays.

Cost Increases and Schedule Delays for the DFAS Projects Reviewed

Dollars in millions

DFAS system project	Cost increase	Schedule slippage
Corporate Database/Warehouse	$41	4 years
Defense Procurement Payment	$274	4 years
Defense Departmental Reporting	$118	5 years
Defense Standard Disbursing	N/A[a]	4 years

Source: GAO based upon information provided by DFAS

[a] Defense Standard Disbursing System began in 1997; however, a cost estimate was not developed until September 2000 and this estimate has not been updated.

DOD oversight of the four DFAS projects has not been effective. Collectively, DFAS, the DOD Comptroller, and the DOD Chief Information Officer share investment management responsibility for these four projects. However, these DOD oversight entities have not questioned the impact of the cost increases and schedule delays and allowed the projects to proceed absent the requisite analytical justification.

Contents

GAO
Accountability * Integrity * Reliability

United States General Accounting Office
Washington, D.C. 20548

March 28, 2003

The Honorable Christopher Shays
Chairman
Subcommittee on National Defense, Emerging Threats,
and International Relations
Committee on Government Reform
House of Representatives

Dear Mr. Chairman:

The Department of Defense's (DOD) long-standing financial management and business systems[1] modernization problems result in a lack of information needed to make sound decisions, hinder the efficiency of operations, and leave the department vulnerable to fraud, waste, and abuse. Such problems led us in 1995 to put financial management and business systems modernization at DOD on our list of high-risk areas[2] in the federal government, a designation that continues today.[3] DOD's financial management problems are the result of challenges in the area of human capital, processes (internal controls), and its inability to effectively modernize its business systems.

The President has made financial management and the use of technology integral to his fiscal year 2002 *Management Agenda* for making the federal government more focused on results. The *President's Management Agenda* states, "Without accurate and timely information it is not possible to accomplish the President's agenda to secure the best performance and the highest measure of accountability for the American people." Additionally, in September 2002, the Secretary of Defense identified the modernization of DOD's financial management and business operations as one of his top 10 priorities.

[1] Business systems include those that are used for areas such as civilian personnel, finance, health, logistics, military personnel, procurement, and transportation, with the common element being the generation or use of financial data.

[2] U.S. General Accounting Office, *High-Risk Series: An Overview*, GAO-HR-95-263 (Washington, D.C.: February 1995).

[3] U.S. General Accounting Office, *High-Risk Series: An Update*, GAO-03-119 (Washington, D.C.: January 2003).

This report responds to your request for information about DOD's current and planned business systems environment and its management of certain key accounting system projects. As agreed with your office, our objectives were to (1) identify the number of existing business systems and the estimated cost to operate, maintain, and modernize systems and (2) determine if DOD is effectively overseeing selected business system investments made by the Defense Finance and Accounting Service (DFAS)—the centralized accounting agency for DOD.

To evaluate the effectiveness of information technology (IT) investment management and oversight practices, we selected four DFAS system acquisition projects as case studies. We selected these projects because all four were intended to benefit the entire department by addressing DOD's financial management weaknesses in the areas of data accuracy, financial reporting, and problem disbursements. In reviewing these four system projects, we relied on documentation, including cost estimates, provided by DFAS. We did not verify the accuracy and completeness of the cost information provided by DFAS. Our work was performed from November 2001 to January 2003 in accordance with U.S. generally accepted government auditing standards. Details on our scope and methodology are included in appendix I. We requested comments on a draft of this report from the Secretary of Defense or his designee. Written comments from the Under Secretary of Defense (Comptroller) are reprinted in appendix II.

Results in Brief

As part of its ongoing business systems modernization program, DOD is creating a repository of information about its existing systems environment. As of October 2002, DOD reported that its current business system environment consisted of 1,731 DOD systems and system acquisition projects. DOD officials said they believe the inventory is fairly comprehensive, given the in-depth work the department has undertaken over the past 18 months to develop this information, but acknowledge that it likely does not include all systems. More importantly, as we testified before this Subcommittee,[4] these systems are acknowledged by DOD to be error prone, duplicative, and stovepiped. To support its existing business systems environment, the department requested approximately $18 billion for fiscal year 2003. However, funding alone is not the solution to

[4] U.S. General Accounting Office, *DOD Financial Management: Important Steps Underway But Reform Will Require a Long-term Commitment*, GAO-02-784T (Washington, D. C.: June 4, 2002).

improving DOD's current systems environment. A key to success is effectively managing and overseeing its investments in systems.

DOD has not effectively managed and overseen its planned investment of over $1 billion in four DFAS system modernization efforts. Specifically, one project did not have an economic analysis, and the other three did not have approved economic analyses that reflected the fact that expected project costs had increased, while in some cases the benefits had decreased. One project's estimated cost had increased by as much as $274 million, while the schedule slipped by almost 4 years. Such analyses provide the requisite justification for decision makers to use in determining whether to invest additional resources in anticipation of receiving commensurate benefits and mission value. For each of these projects, DOD oversight entities—DFAS, the DOD Comptroller, and the DOD Chief Information Officer (CIO)—could not provide documentation that indicated they questioned the impact of the cost increases and schedule delays, and allowed the projects to proceed in the absence of the requisite analytical justification. For example, in one case, they allowed a $270 million project to proceed without an economic analysis. In another case, they allowed a project to continue despite known concerns with the validity of the project's economic analysis. After spending over $126 million as of September 2002, the DOD Comptroller terminated the latter project in December 2002, citing poor program performance and increasing costs.

This report recommends that the Secretary of Defense limit future investments in the remaining three DFAS system projects until such investments have been adequately justified. Additionally, we are recommending that all remaining DFAS IT projects be evaluated to ensure they are being implemented at acceptable cost and within reasonable time frames. In its comments on a draft of this report, DOD agreed with our recommendations and briefly outlined its actions for addressing them.

Background

DFAS, as DOD's central accounting agency, is responsible for recording and processing accounting transactions; paying vendors, contractors, and military and civilian employees; preparing reports used by DOD managers and by the Congress; and preparing DOD-wide and service-specific financial statements required by the Chief Financial Officers Act. Organizationally, DFAS is under the direction of the Under Secretary of Defense (Comptroller). Table 1 illustrates the enormous scope and importance of DFAS's reported fiscal year 2002 financial operations.

Table 1: DFAS Fiscal Year 2002 Financial Operations

Type of activity	Volume of activity
Accounting transactions	124 million
Disbursements made	$346.6 billion
Invoices paid	11.2 million
Military and civilian employees, retirees, and annuitants paid	5.7 million
Active DOD appropriations	267

Source: DFAS

DFAS's fiscal year 2003 IT budgetary request was approximately $494 million.[5] Of that amount, $353 million relates to the operation and maintenance of existing DFAS systems and the remaining $141 million is for the modernization of systems. The purpose of each DFAS project we reviewed is highlighted below.

DFAS Corporate Database/DFAS Corporate Warehouse (DCD/DCW). DCD and DCW were originally separate initiatives. DCD was initiated in October 1998, and was to be the single DFAS database, meaning it was to contain all DOD financial information required by DFAS systems and would be the central point for all shared data within DFAS. To accomplish this goal, DCD would crosswalk[6] detailed transaction data from nonstandard finance and feeder[7] systems into a standard format. Further, once the department implemented standard systems, the need to perform these crosswalks would be eliminated. In February 2001, the project's scope was revised after DFAS realized that crosswalks of detail transaction data were cumbersome and cost prohibitive. DFAS is planning to crosswalk detailed transaction data only when information from multiple systems must be aggregated to satisfy a cross-service need such as the working capital fund activities.

[5] DOD Information Technology Fiscal Year 2003 Budget Estimate, February 2002.

[6] Translate information so that systems that define data differently (i.e., use different data schemes) can understand each other and communicate accurately.

[7] Feeder systems are outside the direct control of DFAS. These are the systems used by DOD's various functional areas such as acquisition, logistics, and personnel. DOD has estimated that 80 percent of the department financial management data comes from the feeder systems controlled by the military services and defense agencies.

DCW was initiated in July 2000 to provide a historical database to store and manage official DFAS information for analysis and generation of operational reports and queries. In November 2000, the DFAS CIO combined DCD/DCW into one program. In March 2001, DCD/DCW was designated as a major automated information system.[8]

Defense Procurement Payment System (DPPS). DFAS determined the need for DPPS in April 1995. DPPS was intended to be the standard, automated information system for contract and vendor pay authorization and addressing deficiencies associated with overpayments, negative unliquidated obligations,[9] and unmatched disbursements[10]—all of which are long-standing problems in DOD. DPPS also was to incrementally replace eight contract and vendor systems. In October 1995, the DFAS Director approved proceeding with defining and evaluating the feasibility of alternative concepts and assessing the relative merits of these concepts. In November 1996, the Office of the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence)—DOD's CIO—designated DPPS a major automated information system. DFAS awarded a contract in June 1998 for the acquisition of a system that was intended to address DOD's contract and vendor pay deficiencies.

Defense Standard Disbursing System (DSDS). Disbursing activities for DOD are largely accomplished through systems that were designed 15-20 years ago. In 1997, DFAS launched DSDS to be the single, standard DFAS automated information system for collecting, processing, recording, and reporting disbursement data and transactions for the military services and defense agencies. These disbursing functions are currently being provided

[8] Major automated information systems are defined as IT projects with (1) program costs in any single year that exceed $32 million, (2) total program costs that exceed $126 million, or (3) total life-cycle costs that exceed $378 million. The life-cycle cost is the total cost to the government for an information system over its expected useful life and includes the costs to acquire, operate, maintain, and dispose of the system. DOD Regulation 5000.2-R, *Mandatory Procedures for Major Defense Acquisition Programs and Major Automated Information System Acquisition Programs*, specifies mandatory policies and procedures for major acquisitions. The policy also specifies that the DOD CIO is the milestone decision authority, responsible for program approval, for all major automated information systems, such as DCD/DCW and DPPS.

[9] Negative unliquidated obligations occur when recorded disbursements exceed recorded obligations, indicating that expenditures may exceed amounts obligated.

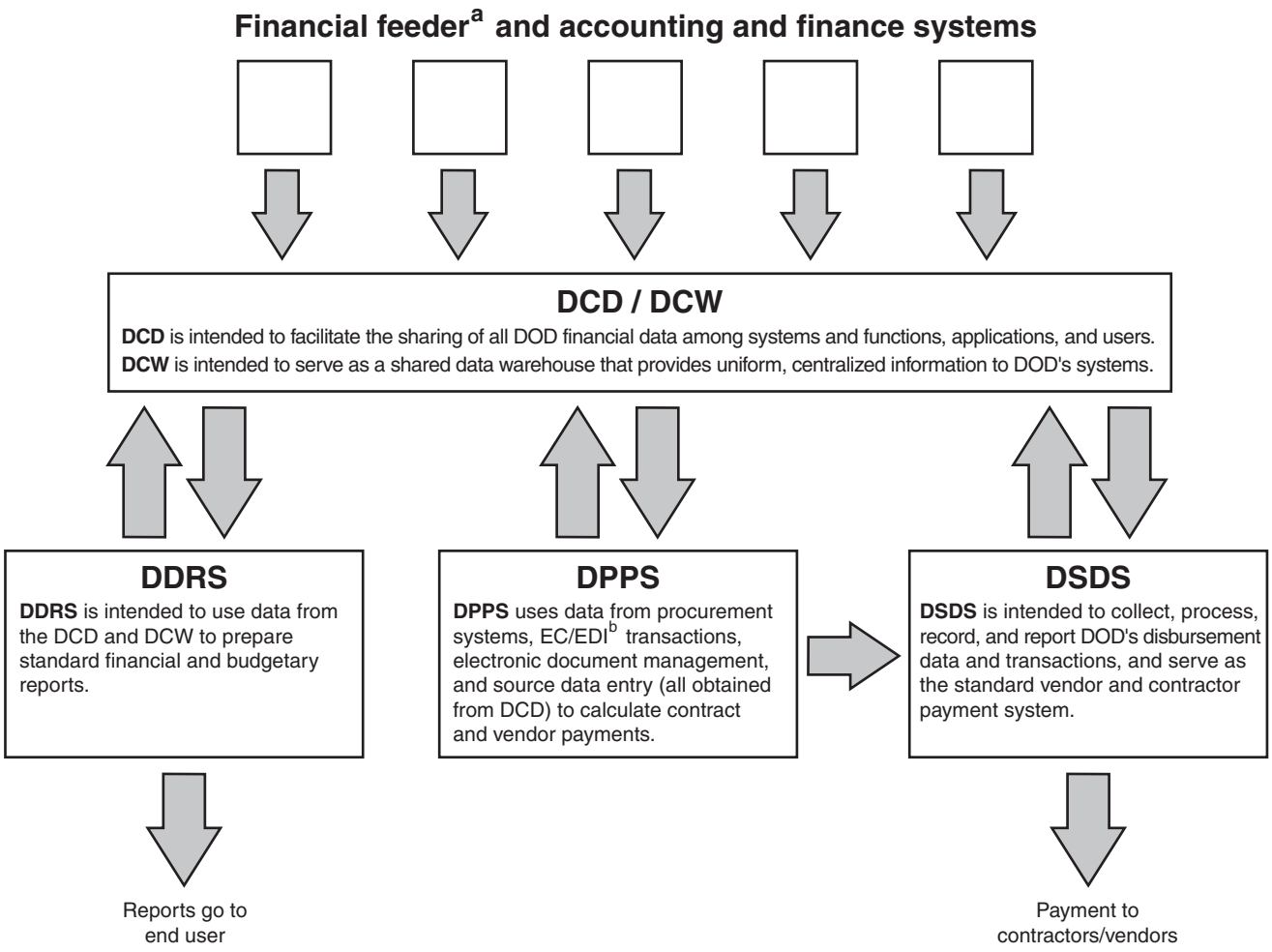
[10] Unmatched disbursements occur when a disbursement cannot be matched to an obligation.

by multiple automated information systems and manual activities at various DFAS locations.

Defense Departmental Reporting System (DDRS). In April 1997, DFAS initiated DDRS to be the standardized departmental reporting system. DDRS has two phases. The first phase—DDRS-AFS (Audited Financial Statements)—is intended to be a departmentwide financial reporting system. The second phase—DDRS-Budgetary—is intended to establish a departmentwide budgetary reporting system. Among other things, DDRS is intended to reduce the number of departmental reporting systems and standardize departmental general ledger processes.

These four projects are part of the DFAS Corporate Information Infrastructure (DCII) program. According to DFAS, DCII is intended to facilitate cross-functional, integrated processes; promote standardized data and reporting; facilitate standardized business practices; reduce cost of operations; and provide timely information for decision making. Figure 1 depicts a high-level view of the interrelationships among these four system projects.

Figure 1: Intended Interrelationship of the Four DFAS Projects



Source: GAO.

[a] Feeder systems are outside the direct control of DFAS. These are the systems used by DOD's various functional areas such as acquisition, logistics, and personnel. DOD has estimated that 80 percent of the department's financial management data comes from the feeder systems controlled by the military services and defense agencies.

[b] Electronic commerce/electronic data interchange. Electronic commerce is the interchange and processing of information using electronic techniques for accomplishing business. Electronic data interchange is the computer-to-computer exchange of business data in a standardized format between entities.

Overview of DFAS and DOD System Acquisition Management and Oversight Process

DOD and DFAS have an established acquisition management and oversight process for acquiring, operating, and maintaining business systems. Among other things, this process requires project managers to provide cost, schedule, and performance data to the DFAS Chief Information Officers/Business Integration Executive (CIO/BIE) Council—DFAS's IT investment board—prior to scheduled milestone[11] reviews. These milestones are intended to be decision points for determining whether a project should continue in the current phase of the system life-cycle, proceed to the next phase, be modified, or be terminated. The results of these reviews are to be set forth in a system decision memorandum which is to be signed by the milestone decision authority. The milestone decision authority for DSDS and DDRS is the Director, DFAS. The DOD CIO is the milestone decision authority for DCD/DCW and DPPS.

Prior Reviews Have Identified Problems With DOD's Management and Oversight of System Acquisitions

We and the DOD Inspector General have continued to report on a variety of long-standing management problems for modernizing DOD's IT systems. Three recent system endeavors that have fallen short of their intended goals illustrate these problems. They are the Standard Procurement System, the Defense Travel System, and the Defense Joint Accounting System. These efforts were aimed at improving the department's financial management and related business operations. Significant resources—in terms of dollars, time, and people—have been invested in these three efforts.

[11] DFAS's system life-cycle process is consistent with DOD's *Defense Acquisition System* guidance, which has three milestones: Milestone A or Concept and Technology Development, Milestone B or System Development and Demonstration, and Milestone C or Production and Deployment. The *Defense Acquisition System* guidance was revised in October 2000. Prior to this, Milestone A was Milestone 0, Milestone B was Milestone I/II, and Milestone C was Milestone III.

Standard Procurement System (SPS). In November 1994, DOD began the SPS program to acquire and deploy a single automated system to perform all contract management-related functions within DOD's procurement process for all DOD organizations and activities. The laudable goal of SPS was to replace 76 existing procurement systems with a single departmental system. DOD estimated that SPS had a life-cycle cost of approximately $3 billion over a 10-year period. According to DOD, SPS was to support about 43,000 users at over 1,000 sites worldwide and was to interface with key financial management functions, such as payment processing. Additionally, SPS was intended to replace the contract administration functions currently performed by the Mechanization of Contract Administration Services, a system implemented in 1968. Our July 2001 report[12] and February 2002 testimony[13] identified weaknesses in the department's management of its investment in SPS. Specifically:

- The department had not economically justified its investment in the program because its latest (January 2000) analysis of costs and benefits was not credible. Further, this analysis showed that the system, as defined, was not a cost-beneficial investment.

- The department had not effectively addressed the inherent risks associated with investing in a program as large and lengthy as SPS because it had not divided the program into incremental investment decisions that coincided with incremental releases of system capabilities.

- Although the department committed to fully implementing the system by March 31, 2000, this target date had slipped by over 3 ½ years to September 30, 2003, and program officials have recently stated that this date will also not be met.

[12] U.S. General Accounting Office, *DOD Systems Modernization: Continued Investment in the Standard Procurement System Has Not Been Justified*, GAO-01-682 (Washington, D.C.: July 31, 2001).

[13] U.S. General Accounting Office, *DOD's Standard Procurement System: Continued Investment Has Yet to Be Justified*, GAO-02-392T (Washington, D.C.: Feb. 7, 2002).

Defense Travel System (DTS). In July 2002,[14] the DOD Inspector General raised concerns that DTS remained a program at high risk of not being an effective solution in streamlining the DOD travel management process. The report stated that "The Defense Travel System was being substantially developed without the requisite requirements, cost, performance, and schedule documents and analyses needed as the foundation for assessing the effectiveness of the system and its return on investment." The report further noted there was increased risk that the $114.8 million and 6 years of effort already invested will not fully realize all goals to reengineer temporary duty travel, make better use of IT, and provide an integrated travel system. Additionally, the DOD Inspector General reported that DTS was to cost approximately $491.9 million (approximately 87 percent more than the original contract cost of $263.7 million) and DOD estimates that deployment will not be completed until fiscal year 2006, approximately 4 years behind schedule.

Defense Joint Accounting System (DJAS). In 1997, DOD selected DJAS[15] to be one of three general fund accounting systems. The other two general fund systems were the Standard Accounting and Reporting System and the Standard Accounting and Budgetary Reporting System. As originally envisioned, DJAS would perform the accounting for the Army and the Air Force as well as the DOD transportation and security assistance areas. Subsequently, in February 1998, DFAS decided that the Air Force could withdraw from using DJAS, because either the Air Force processes or the DJAS processes would need significant reengineering to permit use of a joint accounting system. As a result, the Air Force started its own general fund accounting system—General Fund and Finance System—which resulted in the development of a fourth general fund accounting system.

In June 2000, the DOD Inspector General reported[16] that DFAS was developing DJAS at an estimated life-cycle cost of about $700 million

[14] Department of Defense Office of the Inspector General, *Allegations to the Defense Hotline on the Management of the Defense Travel System*, Report No. D-2002-124 (Arlington, Va.: July 1, 2002).

[15] The original name of the system was the Corps of Engineers Financial Management System (CEFMS). After it was determined that CEFMS could be modified to satisfy Army customers and had the potential for supporting the Defense Working Capital Funds, DFAS selected CEFMS to meet the DJAS requirements.

[16] Department of Defense Office of the Inspector General, *Acquisition of the Defense Joint Accounting System*, Report No. D-2000-151 (Arlington, Va.: June 16, 2000).

without demonstrating that the program was the most cost-effective alternative for providing a portion of DOD's general fund accounting. More specifically, the report stated that DFAS had not developed a complete or fully supportable feasibility study, analysis of alternatives, economic analysis, acquisition program baseline, or performance measures, and had not reengineered business processes.

DOD Is Investing Billions of Dollars Annually to Operate, Maintain, and Modernize Its Business Systems

As part of its ongoing business systems modernization program, and consistent with our past recommendation,[17] DOD is creating a repository of information about its existing systems environment. As of October 2002, DOD reported that its current business systems environment consisted of 1,731 systems and system acquisition projects. In particular, DOD reported that it had 374 systems to support civilian and military personnel matters, 335 systems to perform finance and accounting functions, and 310 systems that produce information for management decision making. Table 2 presents the composition of DOD business systems by functional area.

[17] U.S. General Accounting Office, *Financial Management: DOD Improvement Plan Needs Strategic Focus*, GAO-01-764 (Washington, D.C.: Aug. 17, 2001).

Table 2: Reported DOD Business Systems by Functional Area

Functional area	Army	Navy	Air Force	DFAS	DLA	Other	Total
Personnel	266	49	13	19	0	27	**374**
Finance and accounting	79	61	27	131	9	28	**335**
Management information	156	40	50	14	4	46	**310**
Inventory	98	53	40	7	7	17	**222**
Acquisition	18	10	22	0	5	19	**74**
Budget formulation	25	18	10	5	0	10	**68**
Cost	19	29	8	0	1	4	**61**
Logistics	12	6	22	3	7	5	**55**
National defense property management	5	12	25	1	2	1	**46**
Travel	9	13	3	2	0	5	**32**
Real property management	17	4	6	0	0	1	**28**
Time and attendance	3	14	2	2	3	1	**25**
Budget execution	6	4	2	7	0	3	**22**
Personal property management	3	7	7	0	0	4	**21**
Procurement	7	5	1	0	3	4	**20**
Vendor payment	3	3	1	7	0	4	**18**
Transportation	5	1	4	0	0	2	**12**
Other functions combined	12	7	6	3	0	9	**37**
Total	**743**	**336**	**249**	**201**	**41**	**190**	**1,760**[a]

Source: DOD Business Modernization Systems Integration Office.

[a] There are 29 reported duplications within the DOD database (e.g., systems shown in multiple functional areas). Taking this duplication into account provides the reported 1,731 business systems.

As we have previously reported,[18] these numerous systems have evolved into the overly complex and error prone operation that exists today, including (1) little standardization across DOD components, (2) multiple systems performing the same tasks, (3) the same data stored in multiple systems, (4) manual data entry into multiple systems, and (5) a large number of data translations and interfaces that combine to exacerbate problems with data integrity. The department has recognized the uncontrolled proliferation of systems and the need to eliminate as many systems as possible and integrate and standardize those that remain. In

[18] U.S. General Accounting Office, *DOD Financial Management: Important Steps Underway But Reform Will Require a Long-term Commitment*, GAO-02-784T (Washington, D.C.: June 4, 2002).

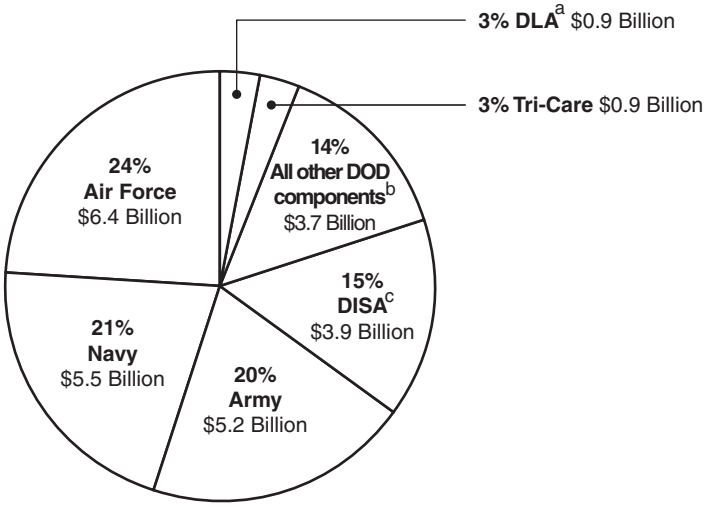
fact, three of the four DFAS projects we reviewed were intended to reduce the number of systems or eliminate a portion of different systems that perform the same function. For example,

- DPPS was intended to consolidate eight contract and vendor pay systems;
- DDRS is intended to reduce the number of departmental reporting systems from seven to one; and
- DSDS is intended to eliminate four different disbursing systems.

Similarly, DTS is intended to be the DOD-wide travel system. According to data reported by DOD, currently there are 32 travel systems operating within the department.

For fiscal year 2003, DOD has requested approximately $26 billion in IT funding to support a wide range of military operations as well as DOD business system operations. As shown in figure 2, the $26 billion is spread across the military services and defense agencies. Each receives its own funding for IT investments.

Figure 2: Distribution of DOD's Fiscal Year 2003 $26 Billion IT Budget Request (dollars in billions)



Source: GAO analysis based on DOD's fiscal year 2003 IT budget request.

[a] Defense Logistics Agency is DOD's logistics manager for all consumable and some repair items; its primary business function is providing supply support to sustain military operations and readiness.

[b] Other DOD components include entities such as DFAS and the Defense Commissary Agency.

[c] Defense Information Systems Agency provides DOD and other organizations a wide range of information services such as data processing, telecommunication services, and database management.

The $26 billion supports three categories of IT—business systems, business systems infrastructure, and national security systems (NSS)—the first two of which comprise the 1,731 business systems. DOD defines these three categories as follows:

- Business systems—used to record the events associated with DOD's functional areas. Such areas include finance, logistics, personnel, and transportation.

- Business systems infrastructure—represents the costs associated with the operations of the department's business systems. Such costs would include transmission lines, network management, and information security.

- National Security System (NSS)—intelligence systems, cryptologic activities related to national security, military command and control

systems, and equipment that is an integral part of a weapon or weapons system, or is critical to the direct fulfillment of military or intelligence mission.

As shown in table 3, approximately $18 billion—the nearly $5.2 billion for business systems and the $12.8 billion for business systems infrastructure—relates to the operation, maintenance, and modernization of DOD's 1,731 business systems.

Table 3: Proposed Allocation of DOD's Fiscal Year 2003 IT Budget

Dollars in millions

Component	Business systems	Business system infrastructure	NSS	Total
Air Force	$578	$3,178	$2,674	**$6,430**
Navy	1,397	2,674	1,444	**5,515**
Army	1,122	2,223	1,823	**5,168**
DISA	45	3,190	648	**3,884**
Tricare	444	452	15	**911**
DLA	434	407	24	**865**
Other DOD components	1,135	676	1,843	**3,653**
Total	**$5,155**	**$12,800**	**$8,471**	**$26,426**

Source: GAO analysis based on DOD's fiscal year 2003 IT budget request

As we have reported,[19] while DOD plans to invest billions of dollars in modernizing its financial management and other business support systems, it does not yet have an overall blueprint—or enterprise architecture—in place to guide and direct these investments. Our review of practices at leading organizations showed they were able to provide reasonable assurance that their business systems addressed corporate—rather than individual business units—objectives by using enterprise architectures to guide and constrain investments.[20]

[19] U.S. General Accounting Office, *Information Technology: Architecture Needed to Guide Modernization of DOD's Financial Operations*, GAO-01-525 (Washington, D.C.: May 17, 2001).

[20] U.S. General Accounting Office, *Defense Acquisitions: DOD Faces Challenges in Implementing Best Practices*, GAO-02-469T (Washington, D.C.: Feb. 27, 2002).

Consistent with our recommendation,[21] DOD is now working to develop a financial management enterprise architecture, which is a positive step. Further, Section 1004 of the National Defense Authorization Act for Fiscal Year 2003[22] directs DOD to develop an enterprise architecture not later than May 1, 2003, and that a transition plan accompany the architecture that delineates how the architecture will be implemented. The act also directs that we provide an assessment to the congressional defense committees as to whether DOD has complied with the provisions of Section 1004.

Investment Management and Oversight of Key DFAS Accounting Systems Has Not Been Effective

DOD management and oversight authorities for the four case study projects are DFAS, the DOD Comptroller, and the DOD CIO. They permitted each project to proceed despite the absence of the requisite analysis to demonstrate that the projects will produce value commensurate with the costs being incurred. For example, an economic analysis has yet to be prepared for DCD/DCW and the other three projects did not have economic analyses that reflected the fact that project costs, schedules, and/or expected benefits had changed materially. Table 4 highlights these cost increases and schedule delays.

[21] U.S. General Accounting Office, *Information Technology: Architecture Needed to Guide Modernization of DOD's Financial Operations*, GAO-01-525 (Washington, D.C.: May 17, 2001).

[22] P.L. 107-314, December 2, 2002.

Table 4: Reported Cost Increases and Schedule Delays for the Four DFAS Projects Reviewed

Dollars in millions

System	Original cost estimate	Current cost estimate	Original planned date (fiscal year) of full operational capability[a]	Current planned date (fiscal year) of full operational capability
DCD/DCW[b]	$229	$270	2001	2005
DPPS	$278	$552	2002	2006
DDRS	$ 52	$170	1999	2004
DSDS	$151[c]	$151	2002	2006
Total	**$710**	**$1,143**		

Source: GAO based upon information provided by DFAS.

[a]Full operational capability means the system is deployed and operating at all intended locations.

[b]When DFAS initiated the DCW in July 2000, a full operational capability date was not established. The current full operational capability date applies to both DCD and DCW since they were combined into one program in November 2000.

[c]DSDS began in 1997; however, a cost estimate was not developed until September 2000, and this estimate has not been updated.

In the case of DPPS, the estimated costs had increased by $274 million and the schedule had slipped by almost 4 years. In December 2002, following our discussions with DOD Comptroller officials, the DOD Comptroller terminated DPPS after 7 years of effort and an investment of over $126 million. In making this decision, the DOD Comptroller noted that the project was being terminated due to poor program performance and increasing costs.

The Clinger-Cohen Act of 1996 and Office of Management and Budget (OMB) guidance provide an effective framework for IT investment management.[23] They emphasize the need to have investment management processes and information to help ensure that IT projects are being implemented at acceptable costs and within reasonable and expected time frames and that they are contributing to tangible, observable improvements in mission performance. DOD policy also reflects these investment principles by requiring that investments be justified by an economic analysis.[24] More specifically, the policy states that the economic analysis is to reflect both the life-cycle cost and benefit estimates, including a return-on-investment calculation, to demonstrate that the proposed investment is economically justified before it is made.

DCD/DCW Has Not Been Economically Justified

After 4 years of effort and an investment of approximately $93 million, DOD has yet to economically justify that its investment in DCD/DCW will result in tangible improvement in DOD financial management operations. Consistent with the Clinger-Cohen Act, DOD and DFAS systems acquisition guidance[25] requires that certain documentation be prepared at each milestone within the system life-cycle. This documentation is intended to provide relevant information for management oversight and in making decisions as to whether the investment of resources is cost beneficial.

A key piece of information—the economic analysis—was never completed for the DCD/DCW project. In May 2000, the Director, DFAS, granted approval to continue with development of DCD with a condition that a cost benefit analysis be completed by June 2000. DFAS completed a draft cost benefit analysis for DCD in October 2000. This document was not finalized and in November 2000, DCD/DCW were combined into one program. Since that time, DCD/DCW has continued without a valid, well-supported

[23] Clinger-Cohen Act of 1996, P.L. 104-106, Div. E, 110 Stat. 679, February 10, 1996 (originally known as the Information Technology Management Reform Act of 1996) and OMB Circular A-130, *Management of Federal Information Resources* (Nov. 30, 2000).

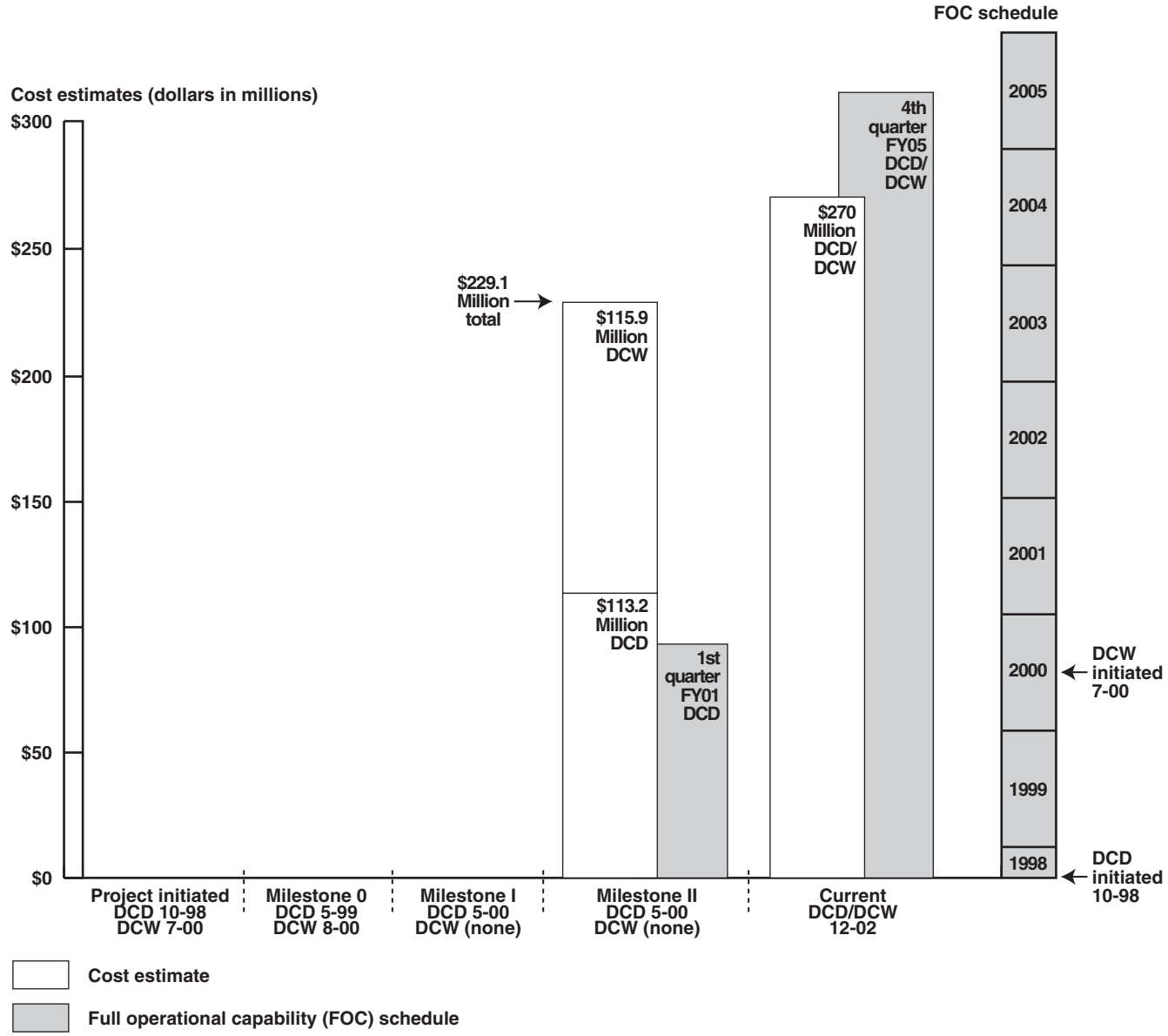
[24] DOD Regulation 5000.2-R, *Mandatory Procedures for Major Defense Acquisition Programs and Major Automated Information System Acquisition Programs* (Apr. 5, 2002).

[25] DOD Regulation 5000.2-R, *Mandatory Procedures for Major Defense Acquisition Programs and Major Automated Information System Acquisition Programs* (Apr. 5, 2002) and DFAS 8000.1-R, Part C, *DFAS Information Technology Life Cycle Management Policy* (May 3, 2002).

economic justification to support continued investment in DCD/DCW. DCD project management officials stated that the economic analysis has not been finalized because they were unable to agree on how to compute the return on investment and demonstrate that benefits exceeded costs.

In March 2001, DCD/DCW was designated a Major Automated Information System, and as such, DOD's Office of Program Analysis and Evaluation (PA&E) is required to assess the economic analysis and provide any recommendations to the DOD CIO. However, after approximately 2 years, the economic analysis still has not been developed and PA&E officials stated that it did not anticipate receiving the economic analysis until May 2003. At the same time, as highlighted in figure 3, the cost and schedule of this project have continued to increase over the years.

Figure 3: DCD/DCW Schedule Slippages and Cost Increases



Source: GAO based on information provided by DFAS.

Additionally, the planned functionality of DCD has been drastically reduced since the original concept was set forth. Originally, DCD was to contain all DOD financial information required by DFAS systems, making it the central point for all shared data within DFAS. To accomplish this goal, DCD was to crosswalk[26] detailed transactions from nonstandard finance and feeder systems into a standard format, pending the acquisition and implementation of standard feeder systems. In February 2001, the scope of the DCD project was revised after DFAS realized, through testing of Air Force detailed transactions from feeder systems, that the planned crosswalks were cumbersome and cost prohibitive. Currently, DFAS is planning to crosswalk detailed transaction data only when information from multiple systems must be aggregated to satisfy a cross-service need such as the working capital fund activities. This will result in the originally envisioned capability not being provided. Additionally, DCD/DCW will continue to rely on the error-plagued data in the feeder systems and will not produce financial records that are traceable to transaction-level data. According to the DOD Inspector General, DCD was a high-risk effort because there was no assurance that DCD and other financial management systems would standardize DOD business processes; reduce the number of finance, accounting, and feeder systems; reduce costs; and produce accurate and auditable financial information.[27]

Until the economic analysis is finalized, DOD does not know if its investment in DCD/DCW is justified and the decision to move to the next milestone will continue to be delayed. Nevertheless, DOD continues to spend funds to perform tasks in anticipation of milestone approval being received. In fiscal year 2002, according to DFAS officials, approximately $36 million was spent on DCD/DCW.

Economic Justification for the Other Three Projects Is Not Current

DOD had developed an economic analysis for each of the remaining three projects. However, these analyses had not been updated to reflect schedule delays, cost increases, and changes in scope that have occurred—each of which has an impact on the projected benefits that were originally

[26] Translate information so that systems that define data differently can understand each other and communicate accurately.

[27] Department of Defense Office of the Inspector General, *Development of the Defense Finance and Accounting Service Corporate Database and Other Financial Management Systems*, Report No. D-2002-014 (Arlington, Va.: Nov. 7, 2001).

justified. Nevertheless, as shown in table 5, investment in each project continues.

Table 5: Reported Investment in DPPS, DDRS, and DSDS

Dollars in millions

System	Date of the economic analysis	Fiscal year 2002 investment	Total investment as of September 2002
DPPS	February 1998	$20	$126.5
DDRS	October 1998	$10	$57.5
DSDS	September 2000	$7	$39
Total		**$37**	**$223**

Source: GAO based on information provided by DFAS

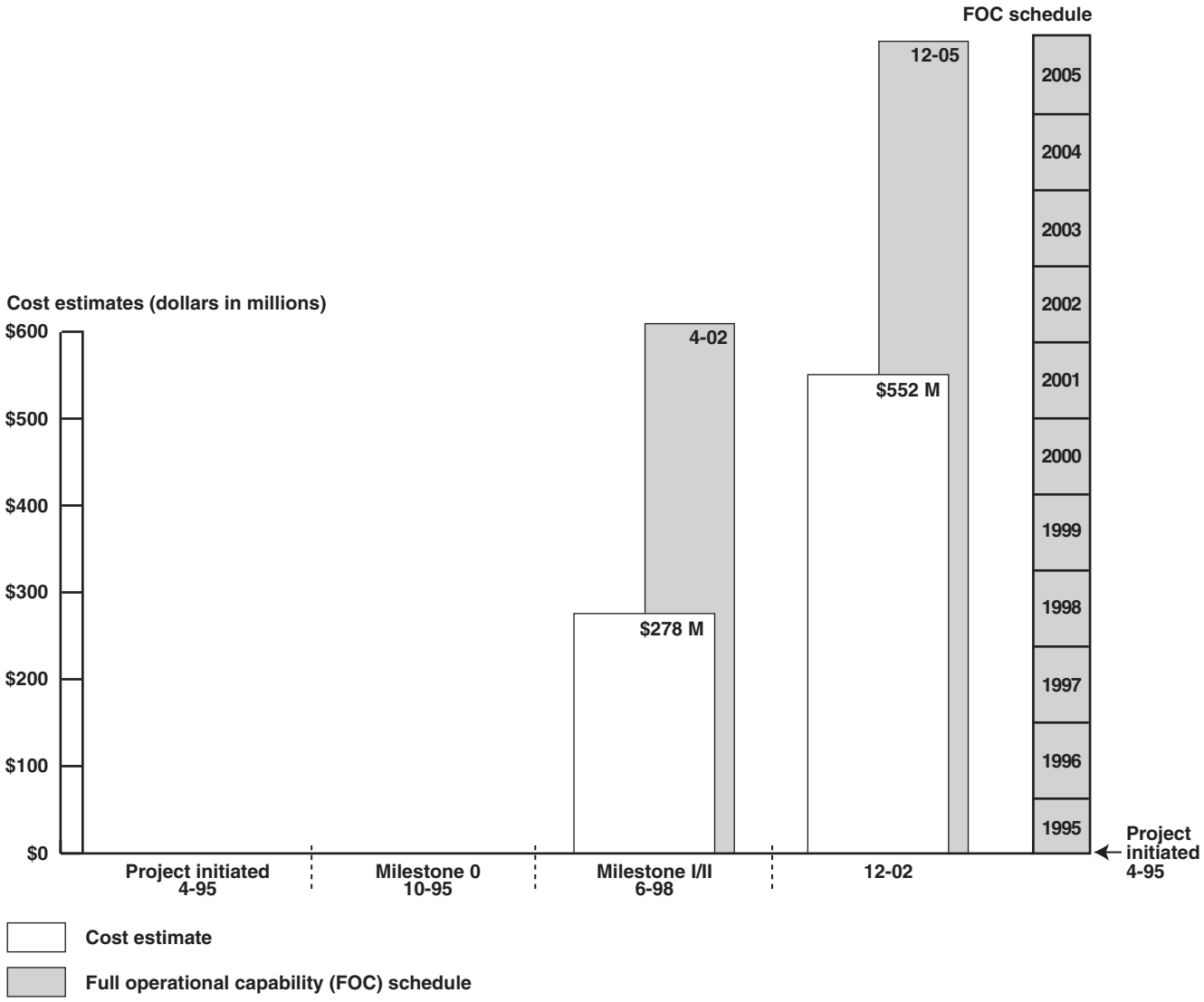
The investment of resources in a system project should be conditional upon analytical justification that the proposed investment will produce commensurate value. As called for in OMB guidance,[28] analyses of investment costs, benefits, and risks should be (1) updated throughout a project's life cycle to reflect material changes in project scope and estimates and (2) used as a basis for ongoing investment selection and control decisions. To do less presents the risk of continued investment in projects on the basis of outdated and invalid economic justification.

In the case of DPPS, PA&E questioned the validity of the economic analysis developed by DFAS. Since DPPS is classified as a major automated information system, the economic analysis is to be reviewed by PA&E. In its May 1998 assessment of the economic analysis, PA&E questioned areas such as the validity of the estimated savings and the ability to implement DPPS within the original estimated cost and schedule. According to DOD officials, these issues were resolved, but they could not provide any documentation to substantiate their position. The DOD CIO subsequently granted permission to continue the project.

Over the years, as shown in figure 4, the DPPS effort has been marked by significant increases in cost and schedule delays.

[28] OMB Circular A-130 (Nov. 30, 2000).

Figure 4: DPPS Schedule Slippages and Cost Increases



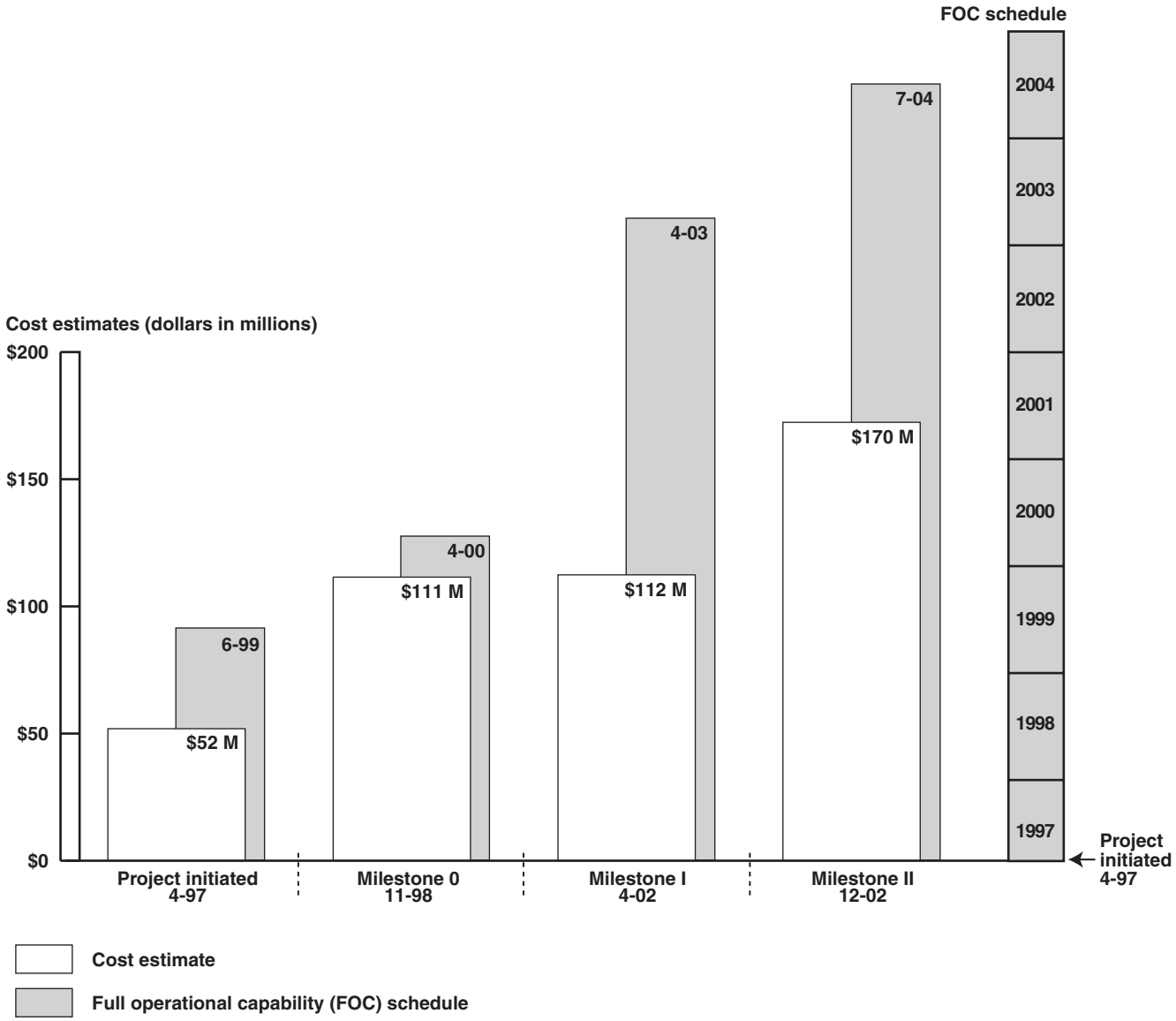
Source: GAO based on information provided by DFAS.

The original full operational capability date of April 2002 slipped to December 2005—a delay of almost 4 years—with the estimated cost almost doubling to $552 million. In December 2002, following our discussion with DOD Comptroller officials of DPPS cost increases and schedule slippages, the DOD Comptroller terminated DPPS. In making this decision, the DOD

Comptroller noted that the project was being terminated due to poor program performance and increasing costs.

With regard to DDRS, the economic analysis used to justify this initiative was developed in October 1998—over 4 years ago. At that time, it was estimated that DDRS would cost $111 million and be fully operational by April 2000. However, based upon information provided by DFAS, and as shown in figure 5, DDRS has experienced increased cost and schedule delays. However, the economic analysis has not been updated to reflect the known changes in the project's costs and schedule.

Figure 5: DDRS Cost Increases and Schedule Delays



Source: GAO based on information provided by DFAS.

Moreover, the intended capability of DDRS as originally envisioned has been reduced. For example, DDRS is no longer intended to provide the capability to build an audit trail so that financial data can be tracked back to its transaction-based support, as originally planned. The Federal Financial Management Improvement Act of 1996[29] requires that agency financial management systems comply with federal financial management systems requirements, applicable federal accounting standards, and the *U.S. Government Standard General Ledger* at the transaction level. Systems meeting these requirements should be able to produce auditable financial statements and otherwise have audit trail capability. However, DDRS system users will have to rely on the audit trail capabilities of feeder systems in order to trace individual transactions to their source documents. As we have previously reported,[30] the data from the feeder systems, which are outside the control of DFAS and provide approximately 80 percent of the data that DOD needs for financial reporting purposes, are not reliable. Additionally, until DCD is operational, DDRS will be receiving data from the feeder systems in order to prepare the department's financial reports on the results of its operations. Therefore, DOD's financial reports produced by DDRS will (1) continue to be incomplete and inaccurate and thus not useful for decision-making purposes and (2) remain unable to withstand the scrutiny of a financial audit.

For DSDS, an economic analysis was prepared in September 2000. However, it has not been updated to reflect material changes in the project. For example, as shown in figure 6, the full operational capability (FOC) date[31] at the time the economic analysis was prepared was February 2003. However, according to information provided by DFAS, the current FOC date is December 2005—a schedule slippage of almost 3 years.[32] Such delays postpone the delivery of promised benefits. DFAS has stated that the cost information is being updated to support a Milestone C decision, which they anticipate will occur in early fiscal year 2004.

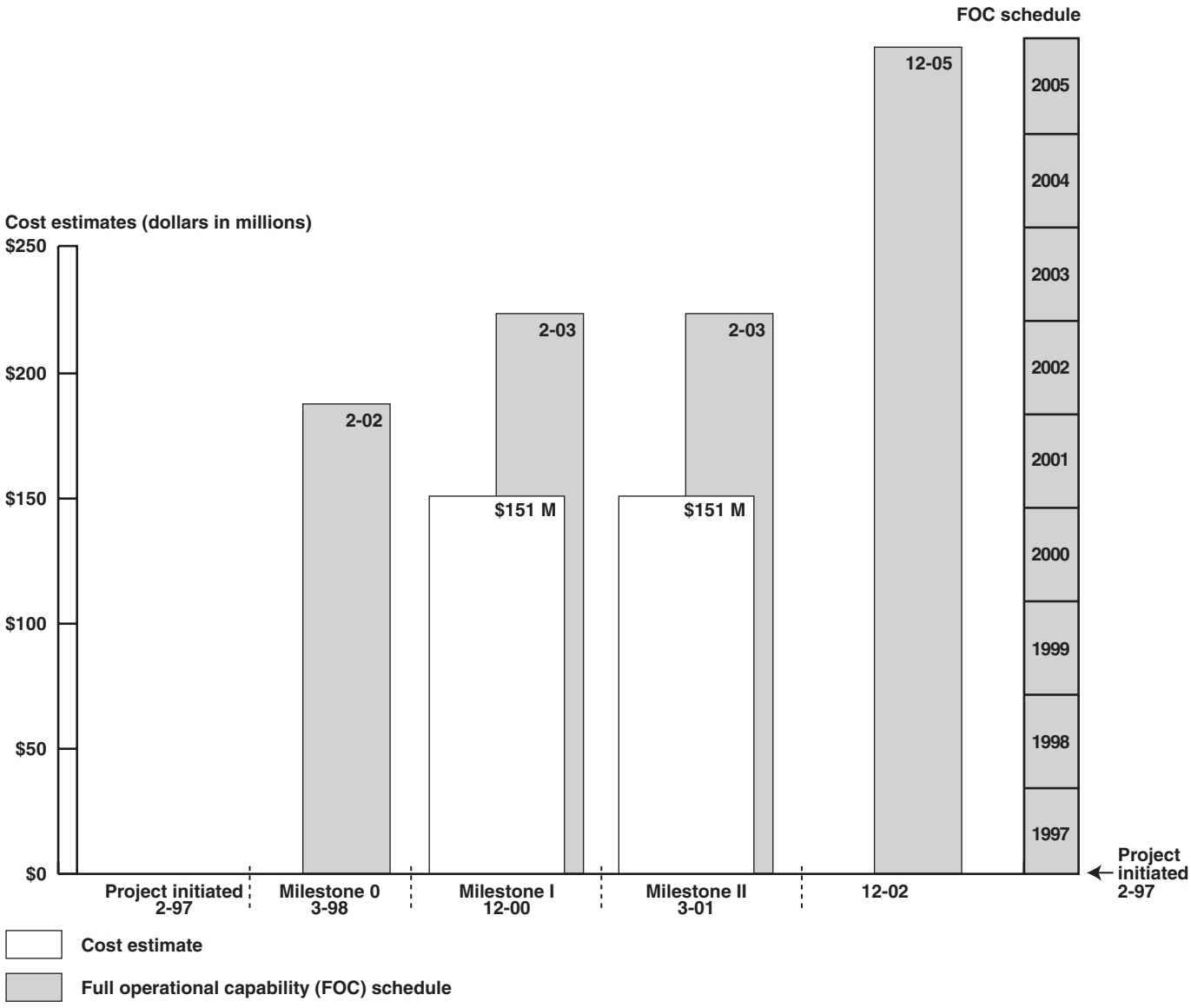
[29] P.L. 104-208, Div. A, 110 Stat. 3009-389, Sept. 30, 1996.

[30] U.S. General Accounting Office, *DOD Financial Management: Important Steps Underway But Reform Will Require a Long-term Commitment*, GAO-02-784T (Washington, D. C.: June 4, 2002).

[31] The full operational capability date represents the date that a system will be operating at all intended locations.

[32] In March 1998, DFAS estimated the FOC date would be February 2002.

Figure 6: DSDS Schedule Delays



Source: GAO based on information provided by DFAS.

Additionally, DSDS delivery of promised benefits depends upon the DCD/DCW being implemented on time. However, as previously discussed, DCD/DCW implementation has been fraught with difficulties, which has a corresponding adverse effect on DSDS schedule delays. For example,

DCD/DCW project management officials are in the process of addressing 102 requests for requirement changes. According to the DCD/DCW program manager, the date for resolving these changes and approving the Operational Requirements Document is November 2003. Until this process is completed, affected systems integration testing for other DCD/DCW dependent systems, such as DSDS, cannot be finalized. Further, according to DFAS officials, the continued operation of existing legacy systems may result in an increase to the DSDS life-cycle cost estimate by approximately $14 million for each 6-month delay. This would quickly erode the savings of $171 million that DFAS estimated in September 2000, and reconfirmed in January 2003.

Without an updated economic analysis to justify continued investment in DDRS and DSDS, DOD does not have reasonable assurance that continued investment will result in commensurate improvement in the financial management operations of the department.

DOD Oversight of DFAS IT Projects Has Not Been Effective

DOD's oversight over the four DFAS projects we reviewed has been ineffective. Investment management responsibility for the four projects rests with DFAS, the DOD Comptroller, and the DOD CIO. In discharging this responsibility, each has allowed project investments to continue year after year, even though the projects have been marked by cost increases, schedule slippages, and capability changes. As a result, DOD has invested approximately $316 million in the four projects without adequately knowing if these efforts will resolve some of DOD's financial management difficulties—the rationale upon which each initiative was undertaken. In fact, as previously noted, after an investment of over $126 million and 7 years of effort, the DOD Comptroller terminated DPPS in December 2002.

GAO's *Information Technology Investment Management* (ITIM) maturity framework[33] defines critical processes pertaining to IT investment management and oversight. Among other things these processes provide for establishing investment decision-making bodies responsible for selecting and controlling IT investments by (1) understanding, for example, each project's expected return on investment and associated costs, schedule, and performance commitments, (2) regularly determining each

[33] U.S. General Accounting Office, *Information Technology Investment Management: A Framework for Assessing and Improving Process Maturity* (Exposure Draft), GAO/AIMD-10.1.23 (Washington, D.C.: May 2000).

project's progress toward these expectations and commitments, and (3) taking corrective actions to address deviations. Additionally, the Clinger-Cohen Act and OMB guidance similarly emphasize the need to have investment management processes and information to help ensure that IT projects are being implemented at acceptable costs and within reasonable and expected time frames and that they are contributing to tangible, observable improvements in mission performance (i.e., that projects are meeting the cost, schedule, and performance commitments upon which their approval was justified).

Organizationally, within DOD, the Comptroller has overall management and oversight responsibility for DFAS's activities—including system investments. However, DOD Comptroller officials told us that they were unaware of the cost increases and schedule slippages on the projects until we brought them to their attention. Further, these officials said that they do not review DFAS's system investments to ensure that they are meeting cost, schedule, and performance commitments, stating that DFAS is responsible for ensuring that projects stay on target in terms of cost, schedule, and performance. Additionally, they told us that their review is limited to a review of budgetary information and budget exhibits, and that they compare the current year budget request to the previous year's request to determine if any significant funding increases are being requested for the coming fiscal year. If the budget request is generally consistent from year to year, they said that they do not raise questions about the project. According to these officials, the review of DFAS's fiscal year 2003 budget did not result in the identification of issues that warranted further review.

While the DOD Comptroller is the responsible authority for DFAS activities, DFAS is also responsible for ensuring that its proposed investments will result in systems that are implemented at acceptable costs and within reasonable and expected time frames. To fulfill this responsibility, DFAS established the CIO/BIE Council to oversee system investments. As outlined in the CIO/BIE Council charter, members of the council are responsible for, among other things, advising the Leadership Council—DFAS's senior decision-making body—on IT investment decisions. The CIO/BIE Council membership includes representatives of DFAS's business lines, such as accounting services and commercial pay, as well as IT management.

In order to assure that the roles, responsibilities, and authorities of the IT investment board are well defined and that board processes are clear, the ITIM Framework states that an IT investment process guide should be

created to direct IT investment board operations. While DFAS has endeavored to give the CIO/BIE a role in the acquisition management and oversight process, it has not provided clear, consistent guidance to describe that role and the associated operating procedure. Though the council charter does mention the CIO/BIE Council's responsibilities, it does not adequately describe them, address the council's authority, or describe how the council is to fulfill its responsibilities. The DFAS 8000 series also addresses CIO/BIE responsibilities (DFAS 8000.1-R, Part C). However, the 8000 series does not describe how the CIO/BIE is expected to execute its responsibilities, including providing corporate oversight and reviewing capital budget proposals. The lack of clear definition of responsibilities and authority limits the council's ability to effectively perform oversight-related activities. For the four IT investment projects we reviewed, we found no evidence that the CIO/BIE effectively monitored the cost, schedule, or performance goals of the four projects.

As previously noted, the DOD CIO is responsible for overseeing major automated information systems. As such, this office is responsible for ensuring that the investments being made in DCD/DCW and DPPS are justified. However, the DOD CIO did not effectively exercise this authority. In regard to DPPS, the DOD CIO was designated the milestone decision authority in November 1996. While DOD CIO officials told us that they were aware of the problems with DPPS, they were unable to provide any documentation that indicated they had raised concerns with the DPPS effort.

DCD/DCW was not brought under the purview of the DOD CIO until March 2001— approximately 2½ years after the project began. DOD CIO officials expressed concerns about the viability of DCD/DCW and questioned DFAS's decision to move forward absent an economic analysis. However, they were unable to provide us with documentation that indicated they had carried out their oversight responsibilities and independently determined whether DCD/DCW was a viable investment.

According to DOD CIO officials, despite being the milestone decision authority for major projects, they have little practical authority in influencing component agency IT projects. As such, they said they try to work with the program managers to ensure that all of the required documentation for passing the next milestone is prepared, but the department's culture, which rests organizational authority and funding control with the components, precludes them from exercising effective IT investment oversight. The comments of the DOD CIO officials support the fact that the current stovepiped, parochial management of DOD's IT investments has led to the previously discussed proliferation of business systems. As we previously reported,[34] DOD's organizational structure and embedded culture have made it difficult to implement departmentwide oversight or visibility over information resources.

[34] U.S. General Accounting Office, *Defense IRM: Poor Implementation of Management Controls Has Put the Migration Strategy at Risk*, GAO/AIMD-98-5 (Washington, D.C.: Oct. 20, 1997).

Similarly, we recently reported[35] that DOD does not yet have the departmental investment governance structure and process controls needed to adequately align ongoing investments with DOD's architectural goals and direction. Instead, DOD continues to allow its component organizations to make their own investment decisions, following different approaches and criteria. We reported that this stovepiped decision-making process has contributed to the department's current complex, error prone environment of over 1,700 systems. In particular, DOD has not yet established and applied common investment criteria to its ongoing IT system projects using a hierarchy of investment review and funding decision-making bodies, each composed of representatives from across the department. DOD also has not yet conducted a comprehensive review of its ongoing IT investments to ensure that they are consistent with its architecture development efforts. Until it does these things, DOD will likely continue to lack effective control over the billions of dollars it is currently spending on IT projects. To address this problem we recommended that DOD establish a series of investment review boards, each responsible and accountable for selecting and controlling investments that meet defined threshold criteria, and each composed of the appropriate level of executive representatives, depending on the threshold criteria, from across the department. We also reiterated our open recommendations governing limitations in business system investments pending development of the architecture.[36]

Conclusions

DOD is investing billions of dollars annually in hundreds of systems that perform the same function spread across numerous DOD components. As we have previously reported, this proliferation of systems has resulted in part because DOD's embedded culture and parochial operations have permitted each of the military services and DOD agencies to manage and oversee their IT investments apart from one another. It has also occurred because DOD has not effectively managed its investments in IT business systems, as our past work and the DOD Inspector General work have demonstrated. As a result, DOD runs a high risk that hundreds of millions

[35] U.S. General Accounting Office, *DOD Business Systems Modernization: Improvements to Enterprise Architecture Development and Implementation Efforts Needed*, GAO-03-458 (Washington, D.C.: Feb. 28, 2003).

[36] U.S. General Accounting Office, *Information Technology: Architecture Needed to Guide Modernization of DOD's Financial Operations*, GAO-01-525 (Washington, D.C.: May 17, 2001).

of dollars will continue to be invested annually in modernization efforts that will not result in improvements in the department's operations.

In each of the four system projects we discuss in the report, DOD has invested millions of dollars without economically justifying its investments, in large part because those entities responsible for managing and overseeing these investments have not required such justification despite schedule slippages, cost overruns, and reductions in planned capability. Urgent need for effective investment control is exemplified by DPPS—$126 million for a terminated project. More vigorous oversight of DPPS could have precluded the substantial investment in this failed effort. Until it has effective investment management and oversight, DOD will not have reasonable assurance that its continued investment in the remaining three projects discussed in this report, as well as its other system projects, are justified.

Recommendations for Executive Action

We recommend that the Secretary of Defense direct the Under Secretary of Defense (Comptroller) to limit funding in the DFAS Corporate Database/ Corporate Warehouse, the Defense Standard Disbursing System, and the Defense Departmental Reporting System until the DOD Comptroller, in collaboration with the Assistant Secretary of Defense (Command, Control, Communications & Intelligence), and the Director, Program Analysis and Evaluation, demonstrates on the basis of credible analysis and data that continued investment in these three projects will produce benefits that exceed costs.

We further recommend that the Secretary of Defense, in light of the department's ongoing efforts to modernize its business systems, direct the Under Secretary of Defense (Comptroller) to evaluate all remaining DFAS IT projects and ensure that each project is being implemented at acceptable costs, within reasonable time frames, and is contributing to tangible, observable improvements in mission performance.

Agency Comments and Our Evaluation

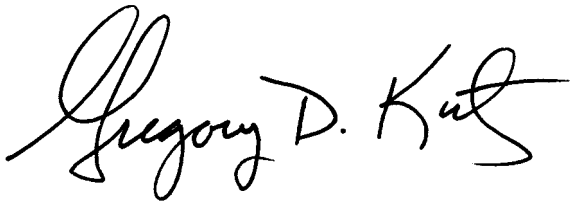
DOD provided written comments on a draft of this report. DOD concurred with our recommendations and identified actions it planned to take to ensure that future investments in DFAS's systems are justified. For example, the Under Secretary of Defense (Comptroller) noted that the review of DCD/DCW, DDRS, and DSDS would be completed by June 15, 2003. Additionally, the Under Secretary of Defense (Comptroller) stated that all systems would be reviewed as part of the department's effort to establish a financial management enterprise architecture governance structure. As discussed in our February 2003 report,[37] the governance structure is intended to provide DOD the means to gain control over its IT investments. However, as noted in our report, we have not verified or evaluated the extent to which the planned governance structure will address our recommendation. DOD comments are reprinted in appendix II.

As agreed with your office, unless you announce the contents of this report earlier, we will not distribute this report until 30 days from its date. At that time, we will send copies to the Chairman and Ranking Minority Member, Senate Committee on Armed Services; Chairman and Ranking Minority Member, Senate Appropriations Subcommittee on Defense; Chairman and Ranking Minority Member, House Armed Services Committee; Chairman and Ranking Minority Member, House Appropriations Subcommittee on Defense; Chairman and Ranking Minority Member, Senate Committee on Governmental Affairs; Chairman and Ranking Minority Member, House Committee on Government Reform; the Director, Office of Management and Budget; the Under Secretary of Defense (Comptroller); the Assistant Secretary of Defense (Command, Control, Communications & Intelligence); and the Director, Defense Finance and Accounting Service. Copies of this report will be made available to others upon request. The report will also be available on GAO's Web site at http://www.gao.gov.

If you or your staff have any questions on matters discussed in this report, please contact Gregory D. Kutz at (202) 512-9505 or kutzg@gao.gov or

[37] U.S. General Accounting Office, *DOD Business Systems Modernization: Improvements to Enterprise Architecture Development and Implementation Efforts Needed*, GAO-03-458 (Washington, D.C.: Feb. 28, 2003).

Randolph C. Hite at (202) 512-3439 or hiter@gao.gov. Major contributors to this report are acknowledged in appendix III.



Gregory D. Kutz
Director, Financial Management
and Assurance

Randolph C. Hite
Director, Information Technology Architecture and Systems Issues

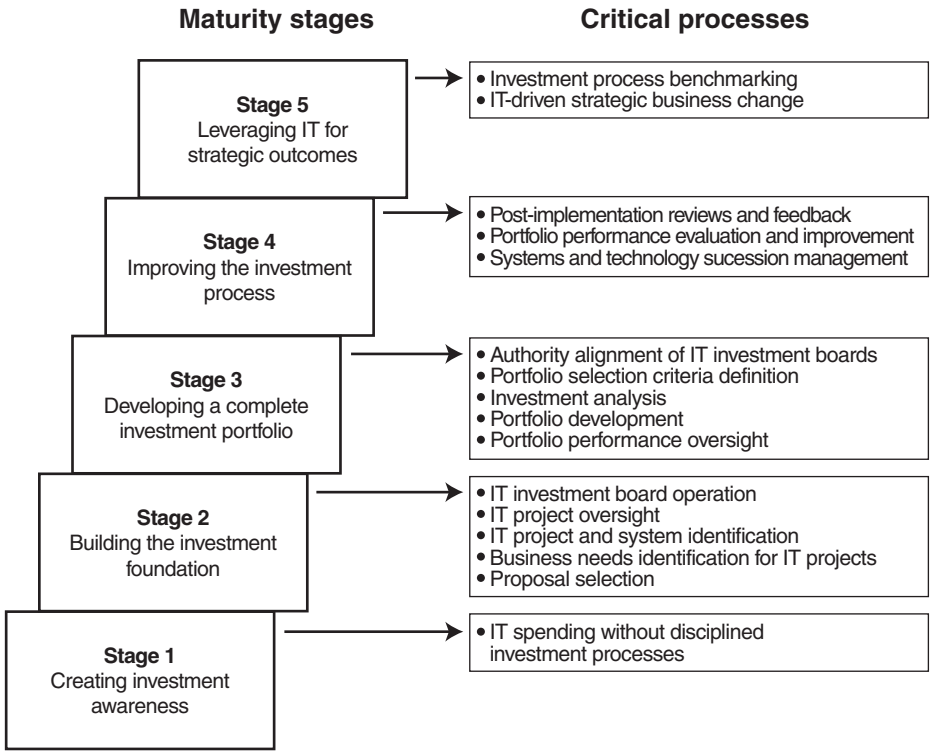
Scope and Methodology

To obtain an overview of DOD's current business systems environment we met with representatives of the then Financial Management Modernization Program Office[1] to obtain information on the number of systems that are part of the current systems environment. We also reviewed DOD's $26 billion fiscal year 2003 IT budget request to determine what portion of the budget relates to DOD business systems. Additionally, we reviewed the IT budget to determine the reported operations, maintenance, development, and infrastructure costs for DOD's business systems.

To determine if DOD was effectively managing and overseeing its IT investments, we focused on the four system projects previously noted. To assist us in our evaluation, we used our *Information Technology Investment Management* (ITIM) framework. The ITIM identifies critical processes for successful IT investment and organizes these processes into a framework of increasingly mature stages. We focused on the Stage 2 critical processes of IT project oversight and IT investment board practices based on DFAS's self assessment that it was at Stage 2. Figure 7 shows ITIM's five stages of maturity.

[1] This office has been renamed the Business Modernization Systems Integration Office.

Figure 7: ITIM Stages of Maturity



Source: GAO.

In addition, we also evaluated DOD's and DFAS's guidance on systems acquisition, as it relates to life-cycle management and milestones for proceeding to the next phase of the system acquisition process.[2] To verify application of the critical processes and practices, we selected projects that (1) were in different life-cycle phases of systems development (2) required oversight by a DOD authority outside of the DOD Comptroller, such as the Office of the Assistant Secretary of Defense (Command, Control, Communications & Intelligence)—DOD's CIO, and (3) supported different DFAS business areas such as disbursements and departmental

[2]DOD Regulation 5000.2-R, *Mandatory Procedures for Major Defense Acquisition Programs and Major Automated Information System Acquisition Programs* (Apr. 5, 2002), DOD Instruction 5000.2, *Operation of the Defense Acquisition System* (Apr. 5, 2002), DFAS 8000.1-R, Part C, *DFAS Life Cycle Management Policy* (May 3, 2002), and DFAS 8000-1-R, *Information Systems Life Cycle Management*, policies for 1996, 1997, and 1998.

reporting. For these four projects we reviewed documentation, such as mission needs statements, acquisition program baseline updates, and project management plans. According to DOD, it provided estimates for DCD/DCW and DDRS in constant dollars and DPPS and DSDS in escalated dollars. We also reviewed and analyzed charters and meeting minutes of the DFAS investment oversight boards and working groups. To supplement our document reviews, we interviewed senior DFAS officials in the CIO and Systems Integration Offices, as well as the program managers for the four projects. We also met with officials in the offices of the DOD Comptroller and DOD CIO to obtain an understanding of their specific duties and responsibilities in approving, reviewing, and overseeing investments in the four DFAS systems modernization projects.

We conducted our work at DFAS Headquarters; the Office of the Under Secretary of Defense (Comptroller); the Office of the Secretary of Defense Program Analysis and Evaluation; and the Office of the Assistant Secretary of Defense (Command, Control, Communications & Intelligence) from November 2001 through January 2003, in accordance with U.S. generally accepted government auditing standards. We did not verify the accuracy and completeness of the cost information provided by DFAS for the four projects we reviewed. We requested comments on a draft of this report from the Secretary of Defense or his designee. We received written comments on a draft of this report from the Under Secretary of Defense (Comptroller), which are reprinted in appendix II.

Comments From the Under Secretary of Defense

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

COMPTROLLER

MAR 19 2003

Mr. Gregory Kutz
Director, Financial Management and Assurance
United States General Accounting Office
Washington, DC 20548

Dear Mr. Kutz:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "DoD Business Systems Modernization: Continued Investment in Key Accounting Systems Needs to be Justified," dated February 14, 2003, (GAO Code 192043/ GAO-03-465).

We concur with the two recommendations of the draft report. The DoD comments to the draft GAO recommendations are enclosed. My point of contact for this matter is Mr. Steven Worton, Director for Business Modernization and Systems Integration. Mr. Worton may be contacted by e-mail at wortons@osd.pentagon.mil or by telephone at (703) 607-3380.

Dov S. Zakheim

Enclosure

DoD Comments to GAO Draft Report, "DoD Business Systems Modernization: Continued Investment in Key Accounting Systems Needs to be Justified," dated February 14, 2003, (GAO Code 192043/GAO-03-465)

GAO Recommendation 1: The GAO recommended that the Secretary of Defense direct the Under Secretary of Defense (Comptroller) to limit funding in the Defense Corporate Database/ Defense Corporate Warehouse, the Defense Standard Disbursing System, and the Defense Departmental Reporting System, until the DoD Comptroller, in collaboration with the Assistant Secretary of Defense (Command, Control, Communications and Intelligence), and the Director, Program Analysis and Evaluation demonstrates, on the basis of credible analysis and data, that continued investment in these three projects will produce benefits that exceed costs.

DoD Comment to GAO Recommendation 1: Concur. During the development of the fiscal years (FY) 2004/2005 President's Biennial budget, the Department terminated the Defense Procurement and Payment System and limited related funding for Defense Corporate Database and Defense Corporate Warehouse (DCD/DCW). We are now revising the DCD/DCW strategy and plan to review it along with Defense Departmental Reporting System, and Defense Standard Disbursing System. These reviews will be coordinated with the Assistant Secretary of Defense (Command, Control, Communications and Intelligence), and the Director, Program Analysis and Evaluation as appropriate. We will provide a status of these reviews by June 15, 2003. The status will include an update and schedule to complete the reviews. The reviews will validate scope, direction, cost, and benefit for each system. It is important to note that investment decisions may be based on nonmonetary benefits, such as the need for timely and accurate financial information for decisionmaking or a clean audit opinion, and may not always exceed costs.

GAO Recommendation 2: The GAO recommended that the Secretary of Defense direct the Under Secretary of Defense (Comptroller) to evaluate all remaining Defense Finance and Accounting Service Information Technology projects and provide assurance that each project is being implemented at acceptable costs and within reasonable time frames and are contributing to tangible, observable improvements in mission performance.

DoD Response to GAO Recommendation 2: Concur. The USD(C) and other Domain Owners, as necessary, will review all systems. The Department is inventorying all systems. The inventory will be validated by Domain Owners and provide the basis for them to stratify systems for review to ensure that the critical ones are reviewed first. Vehicles for the reviews will include the Architecture Review Board and Investment Review Board being established as part of the Financial Management Enterprise Architecture governance structure.

Enclosure

GAO Contacts and Staff Acknowledgments

GAO Contacts

Darby Smith, (202) 512-7803
Jenniffer Wilson, (202) 512-9192

Acknowledgments

In addition to the individuals named above, key contributors to this report included Beatrice Alff, Joseph Cruz, Francine DelVecchio, Lester Diamond, Jason Kelly, J. Christopher Martin, Stacey Smith, and Robert Wagner.

GAO's Mission

The General Accounting Office, the audit, evaluation and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through the Internet. GAO's Web site (www.gao.gov) contains abstracts and full-text files of current reports and testimony and an expanding archive of older products. The Web site features a search engine to help you locate documents using key words and phrases. You can print these documents in their entirety, including charts and other graphics.

Each day, GAO issues a list of newly released reports, testimony, and correspondence. GAO posts this list, known as "Today's Reports," on its Web site daily. The list contains links to the full-text document files. To have GAO e-mail this list to you every afternoon, go to www.gao.gov and select "Subscribe to GAO Mailing Lists" under "Order GAO Products" heading.

Order by Mail or Phone

The first copy of each printed report is free. Additional copies are $2 each. A check or money order should be made out to the Superintendent of Documents. GAO also accepts VISA and Mastercard. Orders for 100 or more copies mailed to a single address are discounted 25 percent. Orders should be sent to:

U.S. General Accounting Office
441 G Street NW, Room LM
Washington, D.C. 20548

To order by Phone: Voice: (202) 512-6000
TDD: (202) 512-2537
Fax: (202) 512-6061

To Report Fraud, Waste, and Abuse in Federal Programs

Contact:

Web site: www.gao.gov/fraudnet/fraudnet.htm
E-mail: fraudnet@gao.gov
Automated answering system: (800) 424-5454 or (202) 512-7470

Public Affairs

Jeff Nelligan, Managing Director, NelliganJ@gao.gov (202) 512-4800
U.S. General Accounting Office, 441 G Street NW, Room 7149
Washington, D.C. 20548

United States
General Accounting Office
Washington, D.C. 20548-0001

Official Business
Penalty for Private Use $300

Address Service Requested

Presorted Standard
Postage & Fees Paid
GAO
Permit No. GI00