

Report to Congressional Requesters

February 2012

# DOD FINANCIAL MANAGEMENT

Implementation
Weaknesses in Army
and Air Force
Business Systems
Could Jeopardize
DOD's Auditability
Goals





Highlights of GAO-12-134, a report to congressional requesters

#### Why GAO Did This Study

The Department of Defense (DOD) has stated that successful implementation of its enterprise resource planning (ERP) systems is critical to DOD's auditability goals. An ERP is an automated system that performs a variety of business-related functions. The National Defense Authorization Act for Fiscal Year 2010 mandates that DOD be able to validate its financial statements as audit ready by September 30, 2017. GAO has previously reported that DOD has not effectively employed acquisition management controls to help ensure that the ERPs deliver the promised capabilities on time and within budget. GAO was asked to determine issues being encountered by the Army and the Air Force in the implementation of selected ERPs. GAO reviewed independent assessments and reports and interviewed the systems' users and program management office officials.

#### What GAO Recommends

GAO is making five recommendations to the Secretary of Defense to ensure the correction of system problems prior to further system deployment, including user training. DOD concurred with four and partially concurred with one of the recommendations and described its efforts to address them.

View GAO-12-134. For more information, contact Asif A. Khan at (202) 512-9869 or khana@gao.gov.

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#### DOD FINANCIAL MANAGEMENT

#### Implementation Weaknesses in Army and Air Force Business Systems Could Jeopardize DOD's Auditability Goals

#### What GAO Found

DOD has invested billions of dollars and will invest billions more to develop and implement its ERPs. The ERPs play a key role in DOD's goal of audit readiness by fiscal year 2017. Furthermore, in light of the Secretary of Defense's decision that the Statement of Budgetary Resources is to be audit ready by fiscal year 2014, it is critical that DOD effectively implement the ERPs to support its auditability goals.

Assessments by independent agencies of the Army's General Fund Enterprise Business System (GFEBS) and the Global Combat Support System and the Air Force's Defense Enterprise and Accounting Management System (DEAMS) and Expeditionary Combat Support System identified operational problems, such as deficiencies in data accuracy, inability to generate auditable financial reports, and the need for manual workarounds. Further, according to DFAS users, GFEBS and DEAMS did not provide all expected capabilities in accounting and decision support. For example:

- Approximately two-thirds of invoice and receipt data must be manually entered into GFEBS from the invoicing and receiving system due to interface problems. Army officials explained that the primary cause of the problem is that the interface specification that GFEBS is required by DOD to use does not provide the same level of functionality as the interface specification used by the legacy systems. At the time of our review, Army officials stated that they are working with DOD to resolve the problem, but no time frame for resolution had been established.
- DEAMS cannot produce the monthly accounts receivable aging report as intended. The DEAMS Financial Management Office is aware of the problems and is in the process of resolving them. However, at the time of our review, no timetable had been set for the problems' resolution.

DOD oversight authority has limited the deployment of GFEBS and DEAMS based upon the results of the independent assessments. Continued monitoring of DOD ERPs is essential to identify system weaknesses and to help ensure that the systems provide the promised capabilities. Without timely and effective corrective action, the department is at risk of making investment and system deployment decisions that may not provide the desired results—improvements in the department's business operations.

According to DFAS personnel, the training they received for GFEBS and DEAMS did not fully meet their needs. DFAS personnel informed us that the training focused on an overview of GFEBS and DEAMS and how the systems were supposed to operate. While this was beneficial in identifying how GFEBS and DEAMS were different from the existing legacy systems, the training focused too much on concepts rather than the skills needed for DFAS users to perform their day-to-day operations.

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#### **Abbreviations**

AFOTEC Air Force Operational and Test Evaluation Center

ATEC Army Test and Evaluation Command
BSM Business System Modernization
DAI Defense Agencies Initiative

DCMO Deputy Chief Management Officer

DEAMS Defense Enterprise Accounting and Management System

DFAS Defense Finance and Accounting Service

DLA Defense Logistics Agency
DOD Department of Defense
EBS Enterprise Business System

ECSS Expeditionary Combat Support System

ERP enterprise resource planning

FFMIA Federal Financial Management Improvement Act of 1996

FIAR Financial Improvement and Audit Readiness

FMO Financial Management Office

GCSS-Army Global Combat Support System-Army

GCSS-MC Global Combat Support System-Marine Corps GFEBS General Fund Enterprise Business System

LMP Logistics Modernization Program MDA Milestone Decision Authority

Navy ERP Navy Enterprise Resource Planning

PMO program management office

SFIS Standard Financial Information Structure

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#### United States Government Accountability Office Washington, DC 20548

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#### **Congressional Requesters**

The Department of Defense's (DOD) business systems<sup>1</sup> modernization program has been on GAO's high-risk list<sup>2</sup> since 1995 because of the size and complexity of DOD, the large and complex systems to be developed. and the significant efforts needed to establish effective and efficient business systems departmentwide. DOD's business systems modernization entails purchasing, designing, and implementing comprehensive, integrated business systems for managing its resources. with the concurrent elimination of hundreds of legacy systems. These comprehensive business systems are commonly referred to as enterprise resource planning (ERP) systems.3 According to DOD, the successful implementation of the ERPs is critical for addressing long-standing weaknesses in financial management and for resolving weaknesses in other high-risk areas such as business systems modernization and supply chain management.<sup>4</sup> The department has noted that the successful implementation of ERPs is essential for DOD to be able to validate that its financial statements are audit ready by September 30, 2017, as mandated by the National Defense Authorization Act for Fiscal Year 2010.5 In light of the Secretary of Defense's recent decision that the

<sup>&</sup>lt;sup>1</sup>DOD excludes from its business systems those designated as national security systems under section 2222(j) of Title 10, United States Code. National security systems are information systems where the function, operation, or use of which involves intelligence activities, cryptologic activities related to national security, command and control of military forces, equipment that is an integral part of a weapon or weapon system or is critical to the direct fulfillment of military or intelligence missions (unless used for routine administrative and business applications), or is protected at all times by classification procedures in the interest of national defense or foreign relations, as authorized by law or executive order.

<sup>&</sup>lt;sup>2</sup>GAO, High-Risk Series: An Update, GAO-11-278 (Washington, D.C.: February 2011).

<sup>&</sup>lt;sup>3</sup>An ERP solution is an automated system using commercial off-the-shelf (COTS) software consisting of multiple, integrated functional modules that perform a variety of business-related tasks such as general ledger accounting, payroll, and supply chain management.

<sup>&</sup>lt;sup>4</sup>These areas were designated as high risk in 1995 and 1990, respectively.

<sup>&</sup>lt;sup>5</sup>Pub. L. No. 111-84, § 1003(a), (b), 123 Stat. 2190, 2439-40 (Oct. 28, 2009).

Statement of Budgetary Resources<sup>6</sup> is to be audit ready by fiscal year 2014, it is critical that the department effectively implement the systems to support its auditability goals.

Over the years we have frequently reported<sup>7</sup> that the department has not effectively employed acquisition management controls to help ensure that ERPs deliver the promised capabilities on time and within budget. Delays in the successful implementation of ERPs have extended the funding for existing duplicative, stovepiped systems longer than anticipated. Continued implementation problems can erode savings that were estimated to accrue to DOD as a result of modernizing its business systems and thereby reduce funds that could be used for other DOD priorities. Delays in the successful implementation of the ERPs can also have a negative impact on the department's business operations.

## Objective, Scope, and Methodology

As requested, this report provides information to support your oversight of DOD's progress in modernizing its business systems to address long-standing financial management weaknesses and ultimately to transform its business operations. As agreed with your offices, our objective was to identify issues being encountered by the Army and the Air Force in the implementation of selected ERPs. Further, as agreed with your offices, we selected the Army's General Fund Enterprise Business System (GFEBS) and the Global Combat Support System (GCSS-Army), and the Air Force's Defense Enterprise Accounting and Management System (DEAMS) and the Expeditionary Combat Support System (ECSS),

<sup>&</sup>lt;sup>6</sup>The Statement of Budgetary Resources is designed to provide information on authorized budgeted spending authority and links to the Budget of the United States Government (President's Budget), including budgetary resources, availability of budgetary resources, and how obligated resources have been used.

<sup>&</sup>lt;sup>7</sup>GAO, Defense Logistics: Actions Needed to Improve Implementation of the Army Logistics Modernization Program, GAO-10-461 (Washington, D.C.: Apr. 30, 2010); DOD Business Systems Modernization: Important Management Controls Being Implemented on Major Navy Program, but Improvements Needed in Key Areas, GAO-08-896 (Washington, D.C.: Sept. 8, 2008); DOD Business Transformation: Air Force's Current Approach Increases Risk That Asset Visibility Goals and Transformation Priorities Will Not Be Achieved, GAO-08-866 (Washington, D.C.: Aug. 8, 2008); DOD Business Systems Modernization: Key Marine Corps System Acquisition Needs to Be Better Justified, Defined, and Managed, GAO-08-822 (Washington, D.C.: July 28, 2008); and DOD Business Transformation: Lack of an Integrated Strategy Puts the Army's Asset Visibility System Investments at Risk, GAO-07-860 (Washington, D.C.: July 27, 2007).

because of the concerns discussed in our October 2010 report,<sup>8</sup> and the importance of these systems to the Army, the Air Force, and the department's audit-readiness goals.

To address our objective, we (1) reviewed the assessment reports on GFEBS and GCSS-Army that were prepared by the Army Test and Evaluation Command (ATEC) and the assessment reports on DEAMS and ECSS that were prepared by the Air Force Operational Test and Evaluation Center (AFOTEC); (2) interviewed system users from the Defense Finance and Accounting Service (DFAS) about the functionality provided by the selected ERPs; (3) reviewed Core Financial System Requirements to identify system requirements for measuring systems capabilities; and (4) met with DOD officials in offices of the DOD Deputy Chief Management Officer (DCMO)<sup>9</sup> and the Army and the Air Force Chief Management Officers, and the project management office (PMO) of the four selected ERPs. In regard to GCSS-Army and ECSS, DFAS officials told us they had just started using the systems for financial reporting purposes, and they were not in a position to evaluate GCSS-Army or ECSS effectiveness in performing day-to-day tasks from a user point of view. Further, we did not separately evaluate these systems, but rather, reviewed the evaluations that had been conducted by ATEC and AFOTEC. Most of the financial information in this report was obtained through interviews or responses to our questions from knowledgeable military service and PMO officials for the four selected ERPs, and we did not perform any separate evaluations of these systems, but rather, reviewed the evaluations that had been conducted by ATEC and AFOTEC.

We conducted this performance audit from October 2010 through February 2012 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our

<sup>&</sup>lt;sup>8</sup>GAO, DOD Business Transformation: Improved Management Oversight of Business System Modernization Efforts Needed, GAO-11-53 (Washington, D.C.: Oct. 7, 2010).

<sup>&</sup>lt;sup>9</sup>The Deputy Chief Management Officer of the department assists the Chief Management Officer (CMO), who is responsible for strategic planning, performance management, process improvement, and defense business system oversight. The individual military services each have a CMO and DCMO, as well.

findings and conclusions based on our audit objective. We requested comments on a draft of this report from the Secretary of Defense or his designee. We received written comments from the Department of Defense Deputy Chief Management Officer, which are reprinted in appendix I.

#### Background

DOD is one of the largest and most complex organizations in the world. For fiscal year 2012, the budget requested for the department was approximately \$671 billion—\$553 billion in discretionary budget authority and \$118 billion to support overseas contingency operations. To support its operations, DOD performs an assortment of interrelated and interdependent business functions, such as logistics, procurement, health care, and financial management. As we have previously reported, the DOD systems environment that supports these business functions has been overly complex and error prone, characterized by (1) little standardization across the department, (2) multiple systems performing the same tasks, (3) the same data stored in multiple systems, and (4) the need for data to be entered manually into multiple systems. For fiscal year 2012, the department requested about \$17.3 billion to operate, maintain, and modernize its business systems. DOD has reported that it relies on 2,258 business systems, including 335 financial management systems, 709 human resource management systems, 645 logistics systems, 243 real property and installation systems, and 281 weapon acquisition management systems.

#### DOD's ERP Efforts

As we reported in our October 2010 report, <sup>10</sup> DOD has identified 10 ERPs as critical to transforming the department's business operations and addressing some of its long-standing weaknesses in financial management, business systems modernization, and supply chain management. The department has estimated that the successful implementation of these 10 ERPs will replace over 500 legacy systems that reportedly cost hundreds of millions of dollars to operate annually. We further reported that, based upon data provided by DOD, 6 of the 10 ERPs DOD had identified as critical to transforming its business operations had experienced schedule delays ranging from 2 to 12 years, and 5 had incurred cost increases totaling an estimated \$6.9 billion. The 4

<sup>&</sup>lt;sup>10</sup>GAO-11-53.

ERPs we reviewed for this report are briefly described below. The 6 ERPs<sup>11</sup> we did not review for this report are described in appendix II.

- **GFEBS** was initiated in October 2004 and is intended to support the Army's standardized financial management and accounting practices for the Army's general fund, 12 with the exception of the Army Corps of Engineers, which will continue to use its existing financial system, the Corps of Engineers Financial Management System. 13 GFEBS is intended to allow the Army to share financial, asset, and accounting data across the active Army, the Army National Guard, and the Army Reserve. The Army estimates that when fully implemented, GFEBS will be used to control and account for about \$140 billion in annual spending. According to the Army DCMO, GFEBS will be fully deployed to all intended users by July 2012. According to the Army, the GFEBS life-cycle cost estimate 14 is approximately \$1.3 billion. As of September 30, 2011, the Army reported that it had obligated approximately \$770 million and expended \$684 million for GFEBS.
- GCSS-Army was initiated in December 2003<sup>15</sup> and is expected to integrate multiple logistics functions by replacing numerous legacy systems and interfaces. The system will provide tactical units with a common authoritative source for financial and related nonfinancial data, such as information related to maintenance and transportation of equipment. The system is also intended to help the Army achieve total

<sup>&</sup>lt;sup>11</sup>The six ERPs are Army—Logistics Modernization Program (LMP); Navy—Navy Enterprise Resource Planning System (Navy ERP) and Global Combat Support System-Marine Corps (GCSS-MC); Defense—Service Specific Integrated Personnel and Pay Systems; Defense Agencies Initiative (DAI); and Defense Logistics Agency—Enterprise Business System (EBS).

<sup>&</sup>lt;sup>12</sup>An agency's general fund accounts are those accounts in the U.S. Treasury holding all federal money administered by an agency that is not allocated by law to any other fund account.

<sup>&</sup>lt;sup>13</sup>According to the GFEBS PMO, once the system is fully operational, the Army will assess the feasibility of GFEBS becoming the system of record for the Corps of Engineers.

<sup>&</sup>lt;sup>14</sup>A life-cycle cost estimate provides an accounting of all resources and associated cost elements required to develop, produce, deploy, and sustain a particular program. The life-cycle cost estimate encompasses all past, present, and future costs for every aspect of the program, regardless of funding source.

<sup>&</sup>lt;sup>15</sup>Prior to the initiation of the current ERP effort, the Army had been developing custom software since May 1997.

asset visibility. <sup>16</sup> GCSS-Army will manage over \$49 billion in annual spending by the active Army, National Guard, and the Army Reserve. The May 2011 Financial Improvement and Audit Readiness (FIAR) Plan notes that the full-deployment <sup>17</sup> date has been changed from the fourth quarter of fiscal year 2015 to the fourth quarter of fiscal year 2017 in order to reduce the operational risk of having tactical units in training and combat in a mixed logistics information systems environment. In August 2011, the program received approval to be placed into limited deployment to support operational testing. <sup>18</sup> The Army estimates the life-cycle cost to be approximately \$4.2 billion. As of September 30, 2011, the Army reported that it had obligated approximately \$890 million and expended \$804 million for GCSS-Army.

Air Force with the entire spectrum of financial management capabilities, including collections, commitments and obligations, cost accounting, general ledger, funds control, receipts and acceptance, accounts payable and disbursement, billing, and financial reporting for the general fund. According to Air Force officials, when DEAMS is fully operational, it is expected to maintain control and accountability for about \$160 billion in annual spending. The Air Force anticipates that DEAMS will be fully deployed by July 2016. Air Force officials estimate the DEAMS life-cycle cost estimate to be approximately \$2 billion. As of September 30, 2011, the Air Force reported that it had obligated approximately \$315 million and expended \$301 million for DEAMS.

<sup>&</sup>lt;sup>16</sup>DOD defines total asset visibility as the capability to provide timely, accurate information on the location, movement, status or condition, and identity of units, personnel, equipment, and supplies DOD-wide, and having the capability to act on that information.

<sup>&</sup>lt;sup>17</sup>The National Defense Authorization Act for Fiscal Year 2010, Pub. L. No. 111-84, div. A, § 841, 123 Stat. 2190, 2418 (Oct. 28, 2009), directed that the term "full operational capability" be changed to "full deployment." Full deployment means, with respect to a major automated information system program, the fielding of an increment of the program in accordance with the terms of a full deployment decision—the final decision made by the Milestone Decision Authority authorizing an increment of the program to deploy software for operational use.

<sup>&</sup>lt;sup>18</sup>The program received Milestone C approval, which authorizes entry of the system into the production and deployment phase or into limited deployment in support of operational testing.

**ECSS** was initiated in January 2004 and is intended to provide the Air Force with a single, integrated logistics system—including transportation, supply, maintenance and repair, engineering and acquisition—for both the Air Force's general and working capital funds. ECSS is also intended to provide the financial management and accounting functions for the Air Force's working capital fund operations. When fully implemented, ECSS is expected to control and account for about \$122 billion of inventory. As noted in the May 2011 FIAR Plan, the full-deployment decision and the full deployment for the first release only are scheduled for the first and fourth quarters of fiscal year 2013. According to the May 2011 FIAR Plan, the two events had originally been scheduled for the third guarter of fiscal year 2012 and the third quarter of fiscal year 2013. According to Air Force officials, the ECSS life-cycle cost estimate is approximately \$5.2 billion. As of September 30, 2011, the Air Force reported that it had obligated approximately \$986 million and expended \$876 million for ECSS.

Deficiencies in ERP
Capabilities and
Implementation Could
Jeopardize DOD's
Progress toward
Accountability and
Auditability

Deficiencies in the capability of GFEBS, GCSS-Army, DEAMS, and ECSS to perform essential functions as intended at sites of deployment have impaired the systems' efficiency and effectiveness in accounting for business transactions and reporting reliable financial information. Independent assessments conducted by ATEC<sup>19</sup> and AFOTEC<sup>20</sup> have identified operational problems with each system. The reported problems include areas such as data quality, data conversion, system interfaces, and training. DFAS users of GFEBS and DEAMS also told us they were having difficulties in using the systems to perform their day-to-day operations. The problems identified by DFAS users include interoperability deficiencies between legacy systems and the new ERP systems, lack of query and ad hoc reporting capabilities, and reduced visibility for tracing transactions to resolve accounting differences. To

<sup>&</sup>lt;sup>19</sup>ATEC was established in October 1999. It is responsible for planning, integrating, and conducting independent operational testing, evaluations, and assessments of acquisition programs to provide essential information to decision makers. ATEC develops the strategy, test design and evaluations to address operational effectiveness, suitability and survivability of systems.

<sup>&</sup>lt;sup>20</sup>AFOTEC was established in January 1974 as the Air Force's independent test center responsible for testing, under operationally realistic conditions, new systems being developed for Air Force and multiservice use. Test teams conduct tests at selected sites; collect, analyze and evaluate the data; and prepare formal reports.

compensate, DFAS users were relying on manual workarounds to enter data into the ERPs, thus adversely impacting operational efficiency. Using manual workarounds to accomplish day-to-day tasks falls far short of the vision DOD has for its business system investments, which is to improve the efficiency and effectiveness of its support operations. Army and Air Force officials told us that they have plans to address these issues, and the Army has plans to validate the audit readiness of GFEBS in a series of independent auditor examinations of selected business processes and controls in the GFEBS environment over the next several fiscal years.

While we were told that the Army and the Air Force have corrective actions underway to address identified deficiencies, specific time lines have not been developed for purposes of tracking and monitoring progress. Monitoring the status of the corrective actions, along with the overall progress of DOD ERPs, is essential to help ensure that the systems are implemented on schedule and within budget, and provide the promised capabilities. We have previously reported that if a system is deployed and not providing users with the intended capabilities, it can have an adverse effect on agency operations.<sup>21</sup>

Implementation efforts for both GFEBS and DEAMS have been impacted by inadequate training that did not meet the needs of users. The system training that DFAS users received, officials told us, presented an overview of how the systems were supposed to operate rather than the training necessary for users to perform day-to-day operations. According to DFAS officials, the training was not user role-based and lacked instructions for data mining and managerial reporting.

Independent Assessments and DFAS Users Have Identified Implementation Problems with Army and Air Force ERPs Independent testing and evaluation by ATEC and AFOTEC have identified operational deficiencies in GFEBS, GCSS-Army, DEAMS, and ECSS that impaired the systems' efficiency and effectiveness in accounting for business transactions and reporting reliable financial information. Further, at the time of our review, GFEBS and DEAMS were not providing DFAS users with the expected capabilities in accounting, management information, and decision support. According to the Office of

<sup>&</sup>lt;sup>21</sup>GAO, Defense Logistics: Actions Needed to Improve Implementation of the Army Logistics Modernization Program, GAO-10-461 (Washington, D.C.: Apr. 30, 2010); and Army Depot Maintenance: Ineffective Oversight of Depot Maintenance Operations and System Implementation Efforts, GAO-05-441 (Washington, D.C.: June 30, 2005).

Federal Financial Management, "Core Financial System Requirements," a system must be able to provide consistent, standardized information for program managers, financial managers, agency executives, and oversight organizations.

According to the Army, when completed, GFEBS will be operational at 200 locations and will have approximately 79,000 users. Currently, GFEBS is deployed to about 160 locations and is being used by approximately 38,000 individuals.

In December 2009, <sup>22</sup> ATEC reported on deficiencies in GFEBS Release 1.3<sup>23</sup> data accuracy, reliability, and timeliness. More specifically, the report noted that Army "installations were certifying year-end data with caveats and notes related to inaccurate, incomplete, and missing data." Furthermore, the report noted that "because of incomplete or not implemented business processes, users at times, executed their mission using the workarounds of the legacy systems that the GFEBS is intended to replace or subsume." The report recommended that the deployment of GFEBS be limited until the problems are resolved and the corrective actions have been validated by ATEC. According to the PMO, a plan of action and milestones has been developed in conjunction with ATEC, to address the issues. The PMO noted that GFEBS is undergoing an additional operational test and evaluation limited user test,<sup>24</sup> and at the conclusion of the testing, a determination will be made whether the ATEC issues have been addressed.

Further, in November 2010, ATEC reported that while GFEBS Release 1.4.1 successfully executed core business mission transactions for every functional area, except funds management, the system did not meet

**GFEBS** 

<sup>&</sup>lt;sup>22</sup>U.S. Army Test and Evaluation Command, *Operational Test Agency Evaluation Report* for the General Fund Enterprise Business System (Alexandria, Va.: Dec. 16, 2009).

<sup>&</sup>lt;sup>23</sup>The GFEBS Release 1.3 will replace the Standard Army Finance Information System and the Standard Operations and Maintenance Army Research and Development System.

<sup>&</sup>lt;sup>24</sup>The Limited User Test (LUT) addresses a limited number of operational issues. The LUT is a user test conducted that does not address all of the effectiveness, suitability, and survivability issues and is therefore limited in comparison to an initial operational test (IOT) that must address all effectiveness, suitability, and survivability issues. The LUT may be conducted to provide a data source for system assessments in support of the Milestone C decision and for reviews conducted before IOT. The LUT may be conducted to verify fixes to problems discovered in IOT that must be verified prior to fielding.

standards for generating auditable financial management reports and period-end data. The report further noted that overall GFEBS's limitations significantly affected users' abilities to perform their daily tasks and that GFEBS did not improve accountability and oversight of budgetary resources. The report also stated that GFEBS's reporting capabilities, including ad hoc query reports, were inadequate and unreliable. For example, operational testing found that GFEBS accurately captured user data entries, but internal data processing did not always reflect the original input. There were other cases where missing data caused delays and rework for users, as well as many workarounds, which need programming improvements to GFEBS. According to the Milestone Decision Authority (MDA), ATEC will conduct continuous evaluation to validate any remaining problems and additional operational testing for future releases.

To help identify operational issues with GFEBS, we met with DFAS personnel who use the system in performing their daily duties and responsibilities. According to DFAS, the backlog of unresolved GFEBS trouble tickets<sup>27</sup> increased from about 250 in September 2010 to approximately 400 in May 2011. Most of the problems are related to areas such as system security, the entitlement process, unmatched disbursements, and cash reconciliation with the Fund Balance with Treasury. According to Army officials, this increase in the number of tickets was not unexpected because the number of users and the number of transactions being processed by the system has increased, and the Army and DFAS are taking steps to address the problems identified by DFAS. However, the Army had not developed a specific time frame for completion of the actions.

DFAS users stated that approximately two-thirds of invoice and receipt data must be manually entered into GFEBS from the invoicing and

<sup>&</sup>lt;sup>25</sup>U.S. Army Test and Evaluation Command, *Operational Test Agency (OTA) Follow-on Evaluation Report (OFER) for the General Fund Enterprise Business System (GFEBS)* (Alexandria, Va.: Nov. 19, 2010).

<sup>&</sup>lt;sup>26</sup>The Milestone Decision Authority is the senior DOD official who has overall authority to approve entry of an acquisition program into the next phase of the acquisition process and is accountable for cost, schedule, and performance reporting, including congressional reporting.

<sup>&</sup>lt;sup>27</sup>Trouble tickets represent user questions and problems with transactions or system performance that have not been resolved.

receiving system (i.e., Wide Area Work Flow) due to interface problems.<sup>28</sup> DFAS personnel told us that manual data entry will eventually become infeasible due to increased quantities of data that will have to be manually entered as GFEBS is deployed to additional locations. Army officials explained that the primary cause of the problem is that the interface specification that GFEBS is required to use by the department does not provide the same level of functionality as the interface specification that the legacy systems are allowed to use. Army officials stated they are working with DOD to resolve the problem. Again, the Army had not developed a specific time frame for completion of the corrective actions.

DFAS users also noted that GFEBS does not provide users the ability to run ad hoc queries or to research data to resolve problems or answer questions.<sup>29</sup> The Army has recognized this limitation and is currently developing a system enhancement that Army officials expect will better support the users' needs. However, a specific time frame for completion of corrective actions had not yet been developed. At the time of our review, some reports were created by extracting the data from GFEBS and downloading reports into applications or copying the data into spreadsheets before analyses can be performed. This workaround increases the difficulty in performing some account analyses such as aging analysis. More specifically, DFAS officials told us that the Army has initiated a pilot providing DFAS with 30 enhanced licenses to strengthen connectivity to GFEBS and permit users to pull moderate quantities of data without the system's timing out. However, the limited number of licenses does not fully satisfy DFAS user needs and cannot sustain future GFEBS deployments which will increase the number of transactions.

Another interoperability deficiency is the manual transfer of accounts receivable transactions from legacy financial systems into GFEBS.<sup>30</sup>

<sup>&</sup>lt;sup>28</sup>Office of Federal Financial Management, *Core Financial System Requirements* (Washington, D.C.: January 2006), states that a core financial system must deliver workflow capabilities including integrated workflow, workflow process definition, and processing exception notices.

<sup>&</sup>lt;sup>29</sup>Office of Federal Financial Management, *Core Financial System Requirements* (Washington, D.C.: January 2006), states that a core financial system must provide an integrated ad hoc query capability to support agency access to and analysis of systemmaintained financial data.

<sup>&</sup>lt;sup>30</sup>Office of Federal Financial Management, *Core Financial System Requirements* (Washington, D.C.: January 2006), states that a core financial system must be able to provide interoperability.

According to DFAS officials, this problem is the result of the relevant business processes not being incorporated within GFEBS. Although the Army has debt management pilots under way, debt collection will continue to be nonoptimal until the functionality is developed and operational within GFEBS. DFAS officials were not certain whether or when the functionality would be incorporated.

GCSS-Army

According to the Army DCMO, when fully deployed, GCSS-Army will be operational at 379 locations and will have approximately 170,000 users. Currently, GCSS-Army is undergoing initial operational test and evaluation activities that began in March 2011 and will continue through October 2011 at Ft. Bliss, Texas.

In April 2011,<sup>31</sup> ATEC reported on the results of its user testing of the GCSS-Army Release 1.1.<sup>32</sup> The report noted that its primary purpose was to ascertain whether the system has the potential to be operationally effective, suitable, and survivable.<sup>33</sup> The report noted that the limited testing found that logistics information processing is near real time and that supervisor-level users were satisfied and expressed confidence in the accuracy of the transactions processed by the system. However, the report also noted that at times the users needed to implement manual workarounds to accomplish their mission. Further, at the time of the review, ATEC found that GCSS-Army was not compliant with certain standards in DOD's business enterprise architecture, such as DOD's Standard Financial Information Structure (SFIS),<sup>34</sup> or requirements of the

<sup>&</sup>lt;sup>31</sup>U.S. Army Test and Evaluation Command, *Operational Test Agency (OTA) Milestone Assessment Report (OMAR) for the Global Combat Support System (GCSS-Army)* (Aberdeen Proving Ground, Md.: Apr. 13, 2011).

 $<sup>^{32}</sup>$ GCSS-Army Release 1.1 functionality includes maintenance, supply, property book, and finance.

<sup>&</sup>lt;sup>33</sup>The term "operationally effective" is the overall degree of mission accomplishment of a system when used by representative personnel in the environment planned or expected for operational deployment of the system. The term "operationally suitable" is the degree to which a system can be placed satisfactorily in production given such factors as availability, compatibility, interoperability, reliability, maintainability, and supportability. The term "operationally survivable" is the capability of a system to avoid or withstand a manmade hostile environment without suffering an abortive impairment of its ability to accomplish its designated mission.

<sup>&</sup>lt;sup>34</sup>The Standard Financial Information Structure is intended to provide a standard financial management data structure and uniformity throughout DOD in reporting on the results of operations.

Federal Financial Management Improvement Act of 1996 (FFMIA). 35 The report also pointed out that training could be improved through the use of hands-on training in addition to instructor-led training. The PMO is currently implementing a "get-well plan" to ensure that GCSS-Army is effective in the deployed environment and compliance efforts are underway to address the SFIS and FFMIA compliance issues. A specific time frame for the resolution of the identified problems is being developed.

When completed, DEAMS is to be deployed to 179 locations and used by DEAMS

30,000 individuals. DEAMS is currently being tested at Scott Air Force Base and DFAS Limestone and has been in use there since 2010 by about 1.050 individuals.

In January 2011, AFOTEC reported on the Air Force's implementation efforts at Scott Air Force Base and found that substantial manual intervention is required on a daily basis to keep DEAMS working as intended.<sup>36</sup> It was further noted that many interfaces were inoperable and required reports were not being produced or were inaccurate or incomplete. AFOTEC also found that training was inadequate and system deficiencies were present when the assessment started and had continued to accrue. In May 2011, we interviewed the DEAMS PMO who told us that 245 problems needed to be addressed. The Air Force is in the process of developing a time line to show when each problem needs to be addressed and the specific actions that must be taken to resolve the problem. At the time of our review, a specific time frame for completion of the corrective actions had not been developed.

In interviews, DFAS officials and users of DEAMS identified problems in the system's operation. DEAMS is not able to produce the monthly accounts receivable aging report as intended, officials told us, and

<sup>&</sup>lt;sup>35</sup>Pub. L. No. 104-208, div. A, title VIII, § 803, 110 Stat. 3009, 3009-390 (Sept. 30, 1996). FFMIA requires certain federal agencies, including DOD, to implement and maintain financial management systems that comply substantially with federal financial management systems requirements, applicable federal accounting standards, and the United States Government Standard General Ledger at the transaction level.

<sup>&</sup>lt;sup>36</sup>DOD Operational Test and Evaluation, *Defense Enterprise Accounting and Management* System, (Washington, D.C.: Jan. 13, 2011).

therefore, the report is produced manually. <sup>37</sup> According to the officials, the capability to produce the aging report existed in the legacy systems. Manual workarounds are also needed to process certain accounts receivable transactions such as travel debts. DFAS personnel told us that these accounts receivable-related problems are the result of the improper conversion of data transferred from the legacy systems to DEAMS. The DEAMS Financial Management Office (FMO) is aware of the problems and is in the process of resolving them. However, at the time of our review, no timetable had been set for the problem resolution.

DFAS users told us they were experiencing difficulty with some DEAMS system interfaces.<sup>38</sup> For example, the interface problem with the Standard Procurement System had become so serious that the interface had been turned off, and the data were manually entered into DEAMS. In September 2011, the Air Force testified that there were problems with the interface because the data in the procurement system is not accurate.<sup>39</sup> A DOD DCMO official stated that the Standard Procurement System will be replaced, but a time frame has not been established for the system initiative start date or estimated completion date.

DFAS users also told us that DEAMS does not provide the capability—which existed in the legacy systems—to produce ad hoc query reports that can be used to perform the data analysis needed for daily

<sup>&</sup>lt;sup>37</sup>Office of Federal Financial Management, *Core Financial System Requirements* (Washington, D.C.: January 2006), states that a core financial system must "generate an accounts receivable aging report," and DOD Financial Management Regulation 7000.14-R, Volume 4, Chapter 3, *Receivables*, sec. 030504 (Nov. 2009), states "Accounts receivable must be aged. Aging allows for management of collection actions."

<sup>&</sup>lt;sup>38</sup>Office of Federal Financial Management, *Core Financial System Requirements* (Washington, D.C.: January 2006), states that a core financial system financial transactions can be originated using multiple external feeder applications. These feeder systems and the core financial system must interface seamlessly so that data can move effectively between them. The core financial system must be able to process and validate the data independent of origination. There must also be a process for handling erroneous input and correction.

<sup>&</sup>lt;sup>39</sup>Assistant Secretary of the Air Force Financial Management and Comptroller Testimony before the Subcommittee on Federal Financial Management, Government Information, Federal services and International Security, Senate Committee on Homeland Security and Government Affairs (September 15, 2011).

operations.<sup>40</sup> For example, they said that legacy systems had a support-system tool called On-Line Report View that allowed data normally printed to be generated for an electronic report. DFAS considers this a useful tool for viewing fund-status reports and other reports generated from the legacy systems. However, they noted that when some reports are produced, the accuracy of those reports is questionable. According to DFAS officials, they are currently working with the DEAMS FMO to design the type of reports DFAS needs. DFAS personnel further noted that DEAMS' current processes are not streamlined and have not made the process easier. Further, an external survey report issued in April 2011, noted that about 48 percent of DEAMS users said that their workload increased as a result of the tasks they perform in DEAMS, 15 percent felt satisfied with DEAMS, and 10 percent felt their work was more accurate.<sup>41</sup>

According to the Air Force PMO, when fully implemented, ECSS is to be deployed to 186 locations and used by approximately 250,000 individuals. ECSS is currently being tested at 10 locations at Hanscom Air Force Base with a total of 225 users and has been in use there since December 2010.

In April 2010,<sup>42</sup> AFOTEC reported on its review of Release 1 Pilot A<sup>43</sup> for ECSS. The review was conducted to assess the system's progress toward operational effectiveness, suitability, and mission capability. Due to the limited scope of Pilot A (with less than one-tenth of the planned Release 1 capability), AFOTEC was not able to collect sufficient quantitative data to determine whether the program was on track to

**ECSS** 

<sup>&</sup>lt;sup>40</sup>Office of Federal Financial Management, *Core Financial System Requirements* (Washington, D.C.: January 2006), states that a core financial system financial transaction must deliver an integrated ad hoc query capability to support agency access to and analysis of system maintained financial data.

<sup>&</sup>lt;sup>41</sup>Booz/Allen/Hamilton, *Defense Enterprise Accounting and Management System* (DEAMS) Spiral 2 Post-Deployment End-User Survey Report (Fairview Heights, III.: Apr. 13, 2011).

<sup>&</sup>lt;sup>42</sup>Air Force Operational Test and Evaluation Center, *Expeditionary Combat Support System (ECSS) Release 1 (R1) Early Operational Assessment (EOA) Report* (Kirtland Air Force Base, N. Mex.: Apr. 20, 2010).

<sup>&</sup>lt;sup>43</sup>Release 1 provides the initial operational capability to support tools, equipment, vehicle, and base level materiel management, into three incremental pilot releases (Pilots A, B, and C).

deliver desired performance at the conclusion of Release 1. However, interviews with subject matter experts and analysis of the limited data identified several areas of concern, including data quality, data conversion, interoperability, usability, information assurance, and requirements testability. For example, ECSS will have approximately 230 one-way interfaces, with approximately 120 to be implemented in Release 1. However, Pilot A had only implemented two, so there were insufficient data to assess interface development.

The report further noted that many requirements were written at a high level and were not written specifically to address the performance of ECSS and that the ECSS requirements needed to be significantly refined. In a July 2010 memorandum, the Director of the DOD Operational Testing and Evaluation Office noted that the ECSS PMO had taken actions and conducted additional tests to mitigate the areas of concern. In October 2011, the Air Force DCMO testified that "the development and implementation of ECSS have lagged."44 According to the Air Force DCMO, the Air Force raised concerns to the DOD MDA and noted that "the department is now engaged in a strategic reassessment of the overall program." The Air Force DCMO further noted that the reassessment maintains focus on addressing both audit readiness and achievement of genuine return on investment. The joint DOD and Air Force team is to make recommendations on the way ahead for ECSS to the MDA by December 2011. Alternatives under consideration include building on the current ERP software, leveraging other service/defense agency solutions, and/or modifying legacy capability.

Army and Air Force officials told us that they have plans to address these issues, and the Army has plans to validate the audit readiness of GFEBS in a series of independent auditor examinations auditing selected business processes and controls in the GFEBS environment over the next several fiscal years. Regarding DEAMS, the MDA has directed that the system not be deployed beyond Scott Air Force Base until the known system weaknesses have been corrected and the system has been independently tested to ensure that it is operating as intended.

<sup>&</sup>lt;sup>44</sup>Air Force Deputy Chief Management Officer's Testimony before the Panel on Defense Financial Management and Auditability Reform, Committee on Armed Services, House of Representatives, (Oct. 27, 2011).

Continual Monitoring of ERPs Is Needed to Help Ensure Successful Implementation Monitoring is essential to help ensure that systems are implemented on schedule and within budget, and provide the promised capabilities. It helps to ensure that identified deficiencies are corrected prior to full deployment, and also helps to provide visibility for senior management into investment management activities. Standards for internal control note that monitoring should be ongoing and be performed continually.<sup>45</sup>

At DOD, the MDA plays a crucial role in monitoring as the senior official with overall authority to approve the advancement of ERPs through the phases of the acquisition process. For the ERPs we reviewed, the MDA authority is divided between two officials. For GFEBS and DEAMS, the MDA is the DOD DCMO and for GCSS-Army and ECSS, the MDA is the Under Secretary of Defense for Acquisition, Technology and Logistics. The MDA determines the entry point of an acquisition program in the acquisition process and is accountable for cost, schedule, and performance reporting, including congressional reporting. While factors such as cost, schedule, performance, risk, and technical maturity are considered by the MDA, the entrance criteria for each phase of the life cycle guide the MDA in determining the appropriate entry point for a program.

The MDA for GFEBS and DEAMS has responded to the results of ATEC and AFOTEC reviews with actions to help ensure the systems' readiness for full deployment. The MDA limited the deployment of GFEBS when the two ATEC reports previously mentioned noted deficiencies in the operation of the system. In regard to DEAMS, the MDA has directed that the system not be deployed beyond Scott Air Force Base until the known system weaknesses have been corrected and the system has been independently tested to ensure that it is operating as intended. Regarding GCSS-Army and ECSS, ATEC and AFOTEC have identified implementation issues. Once ATEC and AFOTEC have performed additional testing of the systems, and if deficiencies are identified, the MDA for the systems will have an opportunity to evaluate the results, as did the MDA for GFEBS and DEAMS, and take appropriate corrective actions. The resolution or mitigation of these system deficiencies is critical prior to the approval of further deployment of the systems.

<sup>&</sup>lt;sup>45</sup>GAO, Standards for Internal Control in the Federal Government, GAO/AIMD-00-21.3.1 (Washington, D.C.: November 1999).

While we were informed that the Army and the Air Force have corrective actions underway or planned, they have not established specific time frames for the purposes of tracking and monitoring progress of the corrective actions needed to address the issues identified by DFAS. The timely resolution of these issues is important in order for DFAS users to perform their day-to-day operations as the department's primary accounting entity. The establishment of a time frame and milestone dates by the Army and the Air Force is important for measuring and monitoring progress. If a planned milestone date is not achieved, Army and Air Force management can then ascertain what additional actions are needed to help ensure that the problem is resolved promptly.

Further, given the Secretary of Defense's goal for the department, that the Statement of Budgetary Resources is to be audit ready by fiscal year 2014, the resolution of the issues identified at DFAS is even more critical since GFEBS and DEAMS are an essential part of the ability of the Army and the Air Force to meet the Secretary's goal. Without timely and effective corrective action, the department is at risk of making investment decisions that may not provide the desired results—improvements in the department's business operations—and the ERP efforts could continue to experience unnecessary schedule delays and cost increases.

#### System Training Does Not Fully Meet User Needs

Army and Air Force ERP training strategies were intended to provide ERP users with the skills and knowledge they need to successfully perform their new roles. However, according to DFAS personnel, the training they received for GFEBS and DEAMS, prior to the systems becoming operational at the various DFAS locations, did not fully meet their needs as users. DFAS personnel informed us that the training focused on an overview of GFEBS and DEAMS and how the systems were supposed to operate. While this was beneficial in identifying how GFEBS and DEAMS were different from the existing legacy systems, the instruction focused too much on concepts rather than the skills needed for DFAS users to perform their day-to-day operations. The training problems raised by DFAS, were also reported in an April 2011 external review of the DEAMS program. The report noted that for instructor-led training, 53 percent of the system users that responded to the survey indicated that the training

<sup>&</sup>lt;sup>46</sup>Booz/Allen/Hamilton, *Defense Enterprise Accounting and Management System* (DEAMS) Spiral 2 Post-Deployment End-User Survey Report (Fairview Heights, III.: Apr. 13, 2011).

did not prepare them for using DEAMS. For web-based training, 40 percent of the users indicated that the training did not prepare them to use DEAMS.

To address the training problems, DFAS is in the process of developing training courses and desk guides that would be more beneficial to DFAS employees who have to use GFEBS and DEAMS on a day-to-day basis. DFAS is in the process of developing 4 specific courses related to GFEBS. Besides the courses, DFAS is also in the process of developing desk guides for use by DFAS personnel. These guides are intended to explain further how an individual is to perform an assigned task within GFEBS and DEAMS. Because DFAS is developing these training courses and the operational materials on its own, the cost incurred by DFAS will be billed to the Army and the Air Force through the prices they charge for the services provided. As a working-capital-fund entity, DFAS is required to recover all costs incurred; therefore, the annual amounts billed to the Army and the Air Force for services provided may be higher than anticipated because of the additional training DFAS is developing. As a result, it is incumbent upon the Army and the Air Force to ensure that the training provided to DFAS users of GFEBS and DEAMS prepares them to perform their day-to-day mission effectively. Without this knowledge base and proficiency in the operation of the systems, some of the benefits that were intended with the implementation of GFEBS and DEAMS may not be achieved.

#### Conclusions

Modernizing DOD's business systems is a critical part of transforming DOD's business operations, providing more accurate and reliable financial information to DOD management on the results of the department's operations, and providing the processes and data reliability that DOD needs to produce auditable financial statements. Successful implementation can help to standardize and streamline DOD's financial management and accounting systems, logistics systems, and finance processes, provide asset visibility for accountable items, and integrate personnel and pay systems.

DOD is currently in the midst of implementing numerous ERPs that are critical to improving its business operations and achieving auditability. During its implementation efforts, the department has identified system weaknesses. It is critical that these problems be corrected as early as possible to help ensure that the billions of dollars spent annually are used effectively and to achieve effective implementation of the ERPs so that DOD can begin to fully realize the systems' intended benefits.

The monitoring of the status of DOD's ERPs implementation efforts is an essential part of helping to ensure that the billions of dollars being invested provide the intended capabilities. The MDA for GFEBS and DEAMS has taken steps to help ensure that identified system weaknesses are resolved before full deployment of the systems. The action by the MDA provides an opportunity to prevent known weaknesses from persisting into deployment and negatively affecting the efficiency and effectiveness of the systems in operation. It is equally important that the Army and the Air Force establish time lines and monitor the status of the corrective actions to help ensure that the issues identified by DFAS users are resolved in a timely manner. The implementation of the ERPs is a long-term endeavor that will require the sustained and active involvement of senior management at all levels of the department.

The training provided to DFAS users did not adequately demonstrate how users were to perform their expected duties using the systems. While the training explained how the systems were different than the existing legacy systems, it did not completely provide them with the skills needed to perform their day-to-day operations.

In light of the Secretary of Defense's recent decision that the Statement of Budgetary Resources is to be audit ready by fiscal year 2014, it is critical that the department have effective business systems in place to support its auditability goals. If these business systems do not provide the intended capabilities by the expected deadlines, DOD's goal of improving financial management operations and becoming audit ready could be jeopardized.

## Recommendations for Executive Action

To help provide for the successful implementation of Army and Air Force ERPs, and to help ensure that DFAS users have the training needed, we recommend that the Secretary of Defense take the following five actions:

- Direct that the MDA for GFEBS, GCSS-Army, DEAMS, and ECSS ensure that any future system deficiencies identified through independent assessments are resolved or mitigated prior to further deployment of the systems.
- Direct the Secretary of the Army to ensure that time lines are established and monitored for those issues identified by DFAS that are impacting their efficient and effective use of GFEBS.

- Direct the Secretary of the Air Force to ensure that time lines are established and monitored for those issues identified by DFAS that are impacting their efficient and effective use of DEAMS.
- Direct the Secretary of the Army to improve training for GFEBS users by providing training on actual job processes in a manner that allows users to understand how the new processes support their job responsibilities and the work they are expected to perform.
- Direct the Secretary of the Air Force to improve training for DEAMS
  users by providing training on actual job processes in a manner that
  allows users to understand how the new processes support their job
  responsibilities and the work they are expected to perform.

### Agency Comments and Our Evaluation

DOD concurred with four and partially concurred with one of the recommendations in our draft report. In regard to the four recommendations with which the department concurred, DOD identified specific actions that it has completed, underway, or planned to establish time lines for addressing GFEBS and DEAMS issues identified by DFAS users and for improving training provided to GFEBS and DEAMS users. For example, with respect to our recommendations concerning the establishment of time lines for GFEBS and DEAMS issues, the department cited actions taken or underway to provide for greater DFAS involvement in the ERP systems' implementation. Also, regarding recommendations to improve training provided to GFEBS and DEAMS users, DOD cited actions taken or underway to provide additional or expanded user training on roles and job responsibilities under the new ERP systems' environments.

DOD partially concurred with our recommendation that the Milestone Decision Authority for GFEBS, GCSS-Army, DEAMS, and ECSS ensure that any future system deficiencies identified through independent assessments are resolved or mitigated prior to further deployment of the systems. The department agreed that high severity system deficiencies identified through independent assessments should be resolved or mitigated prior to deployment. DOD cited Army and Air Force progress towards the resolution of the deficiencies noted in our report. For example, DOD stated that the Air Force is aggressively resolving the 245 DEAMS deficiencies identified in the January 2011 independent assessment. However, it also commented that all system deficiencies are not required to be remediated prior to deployment. In this regard, DOD commented that lower severity level deficiencies may be deferred, if an

acceptable workaround exists, to avoid schedule slippages and added cost.

Prioritization is an important part of an effective risk-based process for addressing deficiencies. As such, the most severe deficiencies should be fully addressed prior to deployment. To the extent that any deficiencies are designated as "lower priority" and allowed to continue, at a minimum, acceptable short-term workarounds should be in place to mitigate the impact on operational efficiency. However, as discussed in our report, it is also essential that corrective actions for all identified deficiencies include specific time lines for tracking and monitoring progress. Consequently, we continue to believe that comprehensive corrective actions should be established for all identified deficiencies. Until DOD takes such action to fully address all identified deficiencies, the department's ERP systems are at risk of not being implemented on schedule, within budget, or with the intended capabilities. The written comments on a draft of this report received from the Department of Defense Deputy Chief Management Officer are reprinted in appendix I.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies of this report to the Secretary of Defense; the Secretary of the Army; the Secretary of the Air Force; the Deputy Secretary of Defense; the Deputy Chief Management Officer; the Under Secretary of Defense (Comptroller); the Under Secretary of the Army and the Under Secretary of the Air Force, in their capacity as the Chief Management Officer of their respective service; the program management office for each business system that was included in the audit; and other interested congressional committees and members. This report also is available at no charge on the GAO website at http://www.gao.gov.

Please contact Asif A. Khan at (202) 512-9869 or khana@gao.gov or Nabajyoti Barkakati at (202) 512-4499 or barkakatin@gao.gov if you or your staff have questions on matters discussed in this report. Contact points for our Offices of Congressional Relations and Public Affairs may

be found on the last page of this report. Key contributors to this report are listed in appendix III.

Asif A. Khan

Director

Financial Management and Assurance

Nabajyoti Barkakati Chief Technologist

Applied Research and Methods

Center for Science, Technology, and Engineering

Barkeketi

#### List of Requesters

The Honorable Thomas R. Carper
Chairman
The Honorable Scott Brown
Ranking Member
Subcommittee on Federal Financial Management, Government
Information, Federal Services, and International Security
Committee on Homeland Security and Governmental Affairs
United States Senate

The Honorable Claire McCaskill
Chairman
Subcommittee on Contracting Oversight
Committee on Homeland Security and Governmental Affairs
United States Senate

The Honorable Tom Coburn
Ranking Member
Permanent Subcommittee on Investigations
Committee on Homeland Security and Governmental Affairs
United States Senate

The Honorable John McCain United States Senate

## Appendix I: Comments from the Department of Defense



#### DEPUTY CHIEF MANAGEMENT OFFICER 9010 DEFENSE PENTAGON WASHINGTON, DC 20301-9010

FEB 6 2012

Mr. Asif A. Khan Director, Financial Management and Assurance U.S. Government Accountability Office 441 G Street, NW Washington, DC 20548

Dear Mr. Khan,

This is the Department of Defense (DoD) response to the Government Accountability Office (GAO) draft report GAO-12-134, "DOD Financial Management: Implementation Weaknesses in Army and Air Force Business Systems Could Jeopardize DOD's Auditability Goals," dated December 22, 2011, (GAO Code 197095). The Department partially concurs with the first recommendation and concurs with the other four recommendations contained in the draft report.

The Department appreciates the opportunity to respond to your draft report. We look forward to your continued cooperation and dialog toward our common goal of improving business systems throughout the Departments of Army and Air Force, and ultimately throughout the Department of Defense. Should you have any questions, please contact Mr. Bryan Kitchens, 571-371-3182, bryan.kitchens@osd.mil.

Sincerely,

Elizabeth A. McGrath

Enclosures: As stated



#### GAO DRAFT REPORT DATED DECEMBER 22, 2011 GAO-12-134 (GAO CODE 197095)

"DOD FINANCIAL MANAGEMENT: IMPLEMENTATION WEAKNESSES IN ARMY AND AIR FORCE BUSINESS SYSTEMS COULD JEOPARDIZE DOD'S AUDITABILITY GOALS"

#### DEPARTMENT OF DEFENSE COMMENTS TO THE GAO RECOMMENDATIONS

**RECOMMENDATION 1:** The GAO recommends that the Secretary of Defense direct that the MDA for GFEBS, GCSS-Army, DEAMS, and ECSS ensure that any future system deficiencies identified through independent assessments are resolved or mitigated prior to further deployment of the systems.

**DoD RESPONSE**: The DoD partially concurs with this recommendation.

DoD concurs that high severity and showstopper (high priority) system deficiencies identified through independent assessments should be resolved or mitigated; DoD has documented practices/policies similar to software industry procedures that assess severity levels and apply prioritization. Accordingly, *all* system deficiencies are not required to be remediated prior to deployment. It is DoD's existing practice to close all severity one (Sev 1) deficiencies prior to implementation. Lower severity level deficiencies may be deferred if an acceptable work-around exists that allows the process to continue. If remediation of all deficiencies is required before deployment of a system, then unnecessary schedule slips and additional costs are incurred.

Since initiation of the GAO survey, the Army and Air Force have made significant strides towards the resolution of the deficiencies noted in the report. The Army initiated a series of independent public accountant (IPA) assessments and plans to address identified critical items for GFEBS before the next assessment targeted for June 2012, prior to entering into an operational assessment. The Air Force has been aggressively resolving the DEAMS deficiencies identified in the January 2011 independent assessment and as of December 30, 2011, 156 of the 245 system changes have been resolved or mitigated with a plan to implement the remaining changes by the end of April 2012. The MDA will continue to evaluate results of the independent assessments and take appropriate corrective actions based on the severity and materiality of the system deficiencies.

**RECOMMENDATION 2:** The GAO recommends that the Secretary of Defense direct the Secretary of the Army to ensure that timelines are established and

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monitored for those issues identified by DFAS that are impacting their efficient and effective use of GFEBS.

DoD RESPONSE: The DoD concurs with this recommendation.

The Army has established a collaborative relationship with DFAS leadership and functional representatives. To date, DFAS personnel have actively participated in all software design, development, test and implementation activities which have significantly influenced how business processes are implemented to include DFAS operations. Additionally, DFAS is a voting member in numerous oversight bodies and functional forums for GFEBS. The oversight bodies include: Executive Steering Committee, Process Owners Group, Council of Colonels, Functional Governance Board, and GFEBS-DFAS weekly synchronization meetings.

**RECOMMENDATION 3:** The GAO recommends that the Secretary of Defense direct the Secretary of the Air Force to ensure that timelines are established and monitored for those issues identified by DFAS that are impacting their efficient and effective use of DEAMS.

**DoD RESPONSE**: DoD concurs with this recommendation.

The Air Force has established a collaborative relationship with DFAS leadership and representatives. To date, DFAS personnel have actively participated in all software design, development, test and implementation activities which have significantly influenced how business processes are implemented to include DFAS operations.

The Air Force has also implemented controls and oversight bodies to ensure all issues are identified and resolved/ mitigated in a timely manner. Below are some of the actions the Air Force has taken to address this recommendation:

- A collaborative team consists of representatives from the User Community, DFAS Enterprise Readiness Office (ERO), DEAMS Functional Management Office (FMO), SAF/FMP, and the DEAMS Program Management Office was formed to prioritize system patches identified to resolve known system deficiencies.
  - Prioritization efforts focused initially on requirements to improve fiscal year end processing capabilities. Improvements were recognized in the assessment report for FY2011 Fiscal Year End (FYE) issued by the Air Force Operational Test and Evaluation Center (AFOTEC).
  - Daily Triage and Prioritization meetings are conducted by the FMO and focus on user-identified issues submitted via the Help Desk

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An Air Force stabilization plan is under development. Plan places a
focus on metrics reporting, accurate general ledger posting of
transactions required to produce reliable trial balances, and reduction
of manual workarounds.

**RECOMMENDATION 4:** The GAO recommends that the Secretary of Defense direct the Secretary of the Army to improve training for GFEBS users by providing training on actual job processes in a manner that allows users to understand how the new processes support their job responsibilities and the work they are expected to perform.

**DoD RESPONSE**: The DoD concurs with this recommendation.

The GFEBS project has focused on the "roles" necessary to accomplish all the tasks associated with entering transactions, approval and oversight of these transactions, and subsequently pulling reports from the system. GFEBS currently provides training on 159 roles. The GFEBS Operations & Support team and the Functional team also conduct supplemental training activities for end users and respond to specific requests to provide additional self-help training for Army and GFEBS end users. Additional training includes Refresher Training, Functional Forums, and Day in the Life examples of end-to-end operations and all of the additional training provides scenarios and tools related to the work users perform.

**RECOMMENDATION 5:** The GAO recommends that the Secretary of Defense direct the Secretary of the Air Force to improve training for DEAMS users by providing training on actual job processes in a manner that allows users to understand how the new processes support their job responsibilities and the work they are expected to perform.

DoD RESPONSE: DoD concurs with this recommendation.

The Air Force has expanded the training capabilities for DEAMS with support provided by the DFAS Enterprise Readiness Office (ERO) and the DEAMS Functional Management Office (FMO). The Air Force has also implemented processes and controls to ensure DEAMS User training requirements are developed to address specific job responsibilities.

In fact, a training team was formed at DFAS Limestone, Maine which conducted 4 On-the-Job training sessions for the General Accounting; and 9 Classroom training sessions, 7 for General Accounting and 2 for Procure to Pay. They also developed and deployed 11 Reference Guides that incorporated manual workarounds as necessary. In addition, the Air Force developed a plan and introduced a team to

Appendix I: Comments from the Department of Defense

support development and deployment of training guides as requirements and functionality changes are identified. This Training Team is deployed to perform training classes at Limestone on specific DFAS processes. In addition to the Desk-Top Training Guides, FMO SMEs developed 32 process-specific desktop guides. They converted User training guides and desktop guides to Oracle's User Productivity Kit. They also updated the training prerequisites and added Project, Task, Expenditure, Organization (PTEO) training to assist in familiarization of terms and lines of accounting used in DEAMS.

## Appendix II: Six ERPs Not Discussed In This Report

Provided below is a brief description of the six critical enterprise resource planning (ERP) systems for addressing long-standing weaknesses in financial management and resolving weaknesses in other high-risk areas such as business systems modernization and supply chain management. (See the background section of this report for brief descriptions of the four ERPs discussed in this report.)

- The Logistics Modernization Program (LMP) was initiated in December 1999 and is intended to provide order fulfillment, demand and supply planning, procurement, asset management, material maintenance, and financial management capabilities for Army's working capital fund. The third and final deployment occurred in October 2010.
- The Navy Enterprise Resource Planning System (Navy ERP) was initiated in July 2003 and is intended to standardize the acquisition, financial, program management, maintenance, plant and wholesale supply, and workforce management capabilities at Navy commands.
- The Global Combat Support System-Marine Corps (GCSS-MC)
  was initiated in September 2003 and is intended to provide the
  deployed warfighter with enhanced capabilities in the areas of
  warehousing, distribution, logistical planning, depot maintenance, and
  improved asset visibility.
- Each of the military departments is in the process of developing its own Service Specific Integrated Personnel and Pay System. The military departments' integrated personnel and pay systems replace the Defense Integrated Military Human Resources System that was initiated in February 1998 and intended to provide a joint, integrated, standardized personnel and pay system for all military personnel.
- The Defense Agencies Initiative (DAI) was initiated in January 2007
  and is intended to modernize the defense agencies' financial
  management processes by streamlining financial management
  capabilities and transforming the budget, finance, and accounting
  operations. When DAI is fully implemented, it is expected to have the
  capability to control and account for all appropriated, working capital,
  and revolving funds at the defense agencies implementing the
  system.
- The Enterprise Business System (EBS) is the second phase of the Defense Logistics Agency's (DLA) Business System Modernization (BSM) effort, which was initiated in November 1999 and implemented

Appendix II: Six ERPs Not Discussed In This Report

in July 2007. BSM focused on DLA's operations in five core business processes: order fulfillment, demand and supply planning, procurement, technical/quality assurance, and financial management. In September 2007, the name of the program was changed to Enterprise Business System as it entered the second phase, and according to the agency, EBS will further enhance DLA's supply chain management of nearly 6 million hardware and troop support items.

# Appendix III: GAO Contacts and Staff Acknowledgments

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