

Defense Enterprise Accounting and Management System (DEAMS)

Executive Summary

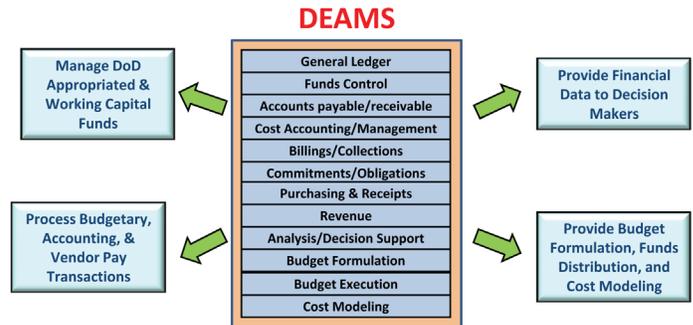
- The Air Force Operational Test and Evaluation Center (AFOTEC) conducted Operational User Evaluation (OUE) phase one testing from July 31 to August 18, 2017.
- The initial results from phase one of the OUE demonstrated significant operational effectiveness and suitability improvements from the Defense Enterprise Accounting and Management System (DEAMS) Increment 1 IOT&E. Following IOT&E, DOT&E assessed DEAMS Increment 1 as not operationally effective, not operationally suitable, and not survivable.
- DEAMS remains not survivable in a contested cyber environment, based on cybersecurity testing conducted during the OUE.

System

- DEAMS Increment 1 is a Major Automated Information System that uses commercial off-the-shelf enterprise resource planning software to provide accounting and management services.
- The DEAMS Increment 1 Program Management Office (PMO) is following an evolutionary acquisition strategy that adds additional capabilities and users incrementally. There are six scheduled releases. The Air Force anticipates over 15,000 users worldwide will use DEAMS by the end of the increment.
- DEAMS Increment 1 is intended to improve financial accountability by providing a single, standard, automated financial management system that is compliant with the Chief Financial Officers Act of 1990 and other mandates. DEAMS Increment 1 performs the following core accounting functions:
 - Core Financial System Management
 - General Ledger Management
 - Funds Management
 - Payment Management
 - Receivable Management

Activity

- AFOTEC conducted phase one of the OUE from July 31 to August 18, 2017, in accordance with a DOT&E-approved plan. The Air Force plans to conduct phase two in the second and third quarters of FY18. OUE phase one testing collected day-to-day operations data at the following locations: Scott AFB, Illinois; MacDill AFB, Florida; Barksdale AFB, Louisiana; Nellis AFB, Nevada; Joint Base San Antonio-Randolph, Texas; Defense Finance and Accounting Service, Limestone, Maine.



- Cost Management
- Reporting
- DEAMS interfaces with approximately 40 other systems that provide travel, payroll, disbursing, transportation, logistics, acquisition, and accounting support.
- DEAMS supports financial management requirements in the Federal Financial Management Improvement Act of 1996 and the DOD Business Enterprise Architecture.

Mission

Air Force financial managers and tenant organizations use DEAMS Increment 1 to do the following across the Air Force, U.S. Transportation Command, and other U.S. component commands:

- Compile and share accurate, up-to-the-minute financial management data and information
- Satisfy congressional and DOD requirements for auditing of funds, standardizing of financial ledgers, timely reporting, and reduction of costly rework

Major Contractors

- DSD Laboratories – Sudbury, Massachusetts
- Accenture Federal Services – Dayton, Ohio

Assessment

- The initial results from phase one of the OUE demonstrated significant improvement from the DEAMS Increment 1

FY17 AIR FORCE PROGRAMS

IOT&E (conducted in 2015) and the Verification of Fixes test (conducted in early 2016), during which DEAMS did not effectively perform several critical accounting and management tasks, four of which were Key Performance Parameters (KPPs). Some key effectiveness findings from the OUE test are:

- DEAMS provided an accurate balance of available funds to meet the KPP requirement. During the OUE, 97.5 percent of the balance queries were accurate, which is a significant improvement from the 62 percent demonstrated during the Verification of Fixes test.
- The PMO provided a new reporting tool to supplement the existing Discoverer reporting tool. Users found the new reporting tool to be useful. However, some users continue to rely on the Commanders' Resource Integration System and other legacy systems for reporting instead of using the DEAMS-provided reporting tools. Previous operational testing has found the Discoverer tool is not operationally suitable and has reached end of life.
- Transaction backlog continues to be a problem with DEAMS. During FY17, DEAMS posted over 99 percent of all transactions received from interface partners. Researching backlog transactions from interfacing systems is a manual process. The source data quality at the interfacing system may not be well controlled and can require the development of scripts to reprocess data.
- The DEAMS Program Office has made significant progress in the area of regression testing, which helps verify that enhancements or defect fixes to software do not adversely

affect overall system performance. As of August 2017, regression scripts covered 22 of the 24 critical interfaces. In March 2016, regression scripts covered only four critical interfaces.

- At the start of the OUE in July 2017, the PMO reported 47 Severity 2 defects that adversely affect DEAMS. Severity 2 defects do not have a sustainable work around.
- DEAMS remains not survivable in a contested cyber environment. While the PMO has added cybersecurity to the deficiency management system for visibility and action, instituted dedicated cybersecurity patch releases on a quarterly basis, and reprioritized all cybersecurity findings for correction or risk acceptance, the CVPA showed that several high impact vulnerabilities continue to degrade DEAMS cybersecurity.

Recommendations

- Status of Previous Recommendations. The PMO did not completely satisfy the FY16 recommendations and should:
 1. Complete integration and testing of the Oracle Business Intelligence Enterprise Edition (OBIEE) reporting tool and demonstrate effectiveness through operational testing to allow the retirement of Discoverer and fielding of OBIEE.
 2. Complete mitigation of all cybersecurity vulnerabilities.
- FY17 Recommendations. The DEAMS Program Manager should:
 1. Continue efforts to reduce severity 2 defects in DEAMS.
 2. Continue efforts to reduce transaction backlog including the development of reusable scripts to fix transaction errors to ensure transaction ledgers are accurate and complete.