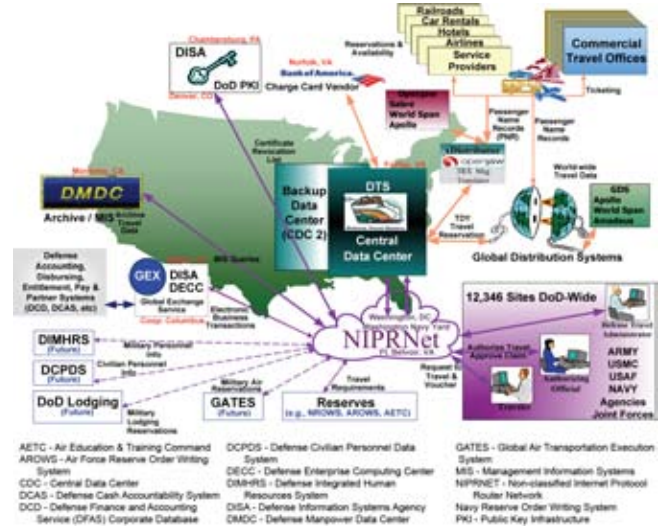


Defense Travel System (DTS)

Executive Summary

- The Army Test and Evaluation Command (ATEC) conducted a Limited User Test (LUT) from Fort Hood, Texas, on the Monroe release of the Defense Travel System (DTS) between September and November 2005. The results of the LUT concluded the release was not operationally effective or suitable. Following extensive fixing and retesting by the program manager in a test bed environment, the Component Acquisition Executive (CAE) decided that the release was low risk and authorized fielding in April 2006.
- ATEC completed an operational assessment of the Centrally Billed Account Version 3 in December 2005. ATEC's system assessment report stated "Centrally Billed Account Reconciliation Module Version 3 is effective, suitable, and survivable for low-volume sites" where the local business processes were in place to efficiently handle changes required on travel documents to reconcile the centrally billed accounts. DOT&E decided the module was not operationally effective or suitable without further enhancements to reduce the burden on transportation officers, especially for those sites with high volume transactions. However, the CAE decided that the module may offer immediate benefits to low transaction volume sites and authorized fielding to low transaction volume sites as determined by the Services and Agencies.



after a U.S. President. The Monroe release (the final Block 1 presidential release) has been fielded. DTS will continue to use a spiral development strategy during FY07 to develop the remaining functionality that was not included in the presidential releases.

System

- DTS is a Major Automated Information System designed to automate and streamline the DoD travel process, support DoD travel requirements, and reduce the associated cost for the Department. With DTS, travelers perform many of the administrative tasks themselves.
- Originally, there were two blocks of software development. Block 1 focuses on Temporary Duty travel. Block 2, which was to focus on Permanent Change of Station travel, has been deferred.
- The program manager is developing DTS in releases of increasing functionality. Each Block 1 release was named

Mission

- DoD travelers use DTS as a single interface to process their end-to-end travel requirements via an internet connection or a Non-classified Internet Protocol Router Network connection using a Common Access Card with Public Key Infrastructure certification. It offers an automated mechanism for travelers to prepare travel authorizations and vouchers, get the documentation approved, and be reimbursed once their travel is completed.
- DTS integrates commercial travel reservation systems and DoD accounting and disbursing systems using secure networks and procedures.

Activity

- ATEC conducted the IOT&E on the DTS Monroe release, in accordance with the DOT&E-approved Test and Evaluation Master Plan and detailed test plan, between September and November in 2005.
- ATEC completed an operational assessment of the Centrally Billed Account Version 3 in December 2005.

Assessment

- For a Major Automated Information System, it is usual to test at selected operational sites with a production system prior to a full fielding decision. Since DTS is a web-based system, the traditional way of conducting an operational test is not practical. Any new release placed on the web server for operational testing is in fact already fielded.

- To mitigate this risk, ATEC conducts a LUT in an end-to-end test environment with production representative hardware and software. More than a dozen real users execute operationally realistic test scenarios developed by ATEC. If the test results are satisfactory, the new release is placed on the operational server for all users. ATEC then conducts a follow-on operational assessment at selected operational sites to confirm the performance of the new release and to identify opportunities for improvement.
- The LUT results for the version of the software tested showed that DTS was not operationally effective or suitable due to a large number of faulty cost computations on obligations, vouchers, debt resolutions, cost entitlements, remittances, waivers, and payroll deductions. These problems led to data exchange rejections by interfacing systems. Unsatisfactory test results led to extensive fixing and retesting by the program manager in a test bed environment, but these fixes were not independently verified by ATEC in a follow-on OT&E.
- Despite the lack of independent verification, the CAE decided that the Monroe release was low risk, primarily because debt management, the major new functionality in the software, was used by only a small percentage of the total users and the remaining components were upgrades to existing functionality in the system, such as Group Travel, Personal Leave in Conjunction with Official Travel, and the Budget Module. The CAE also considered that the follow-on testing to verify fixes, conducted in the test bed environment by the program manager, was sufficient given the perceived adverse impact of further independent OT&E on the program's cost and schedule. Therefore, the CAE fielded the Monroe release in April 2006. ATEC will conduct a follow-on operational assessment of the fielded Monroe capabilities during FY07.
- While the ATEC system assessment report stated that Centrally Billed Account Version 3 was effective, suitable,

and survivable for low-volume sites, DOT&E decided it was not operationally effective or suitable due to extra workload placed upon the transportation officers (especially for high-volume transaction sites) for record reconciliation. Further enhancements to reduce the burden on transportation officers are necessary to make it operationally effective and suitable. However, the CAE decided that the module may offer immediate benefits to low transaction volume sites and authorized fielding to low transaction volume sites as determined by the Services and Agencies.

Recommendations

- Status of Previous Recommendations. The following FY05 recommendations were not adequately addressed. Regarding FY05 #2, the program office fielded the Monroe release prior to ATEC retest. FY05 #3 remains valid.
FY05 #2: The Monroe release should not be fielded until the program manager corrects the deficiencies and ATEC retests the release.
FY05 #3: The Monroe release operational assessment should include the legacy accounting system to avoid problems that were experienced in the past.
- FY06 Recommendations.
 1. DTS should undergo an operational assessment at operational sites specified in the Test and Evaluation Master Plan.
 2. Future releases or enhancements to DTS should be subject to OT&E as determined through a risk assessment conducted by the operational test agency in accordance with DOT&E policy. Follow-on OT&E should focus not only on new capabilities, but also on other enhancements installed since the last OT&E.