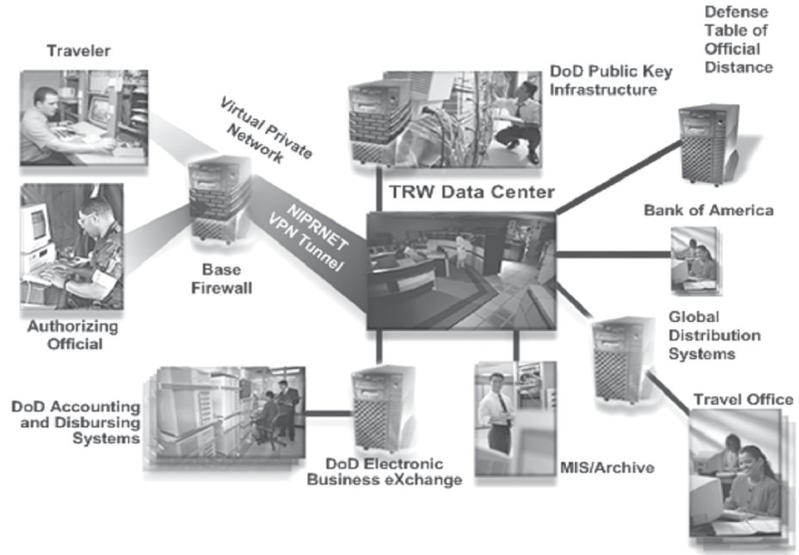


Defense Travel System (DTS)

SUMMARY

- The Office of the Secretary of Defense approved the Enhanced Jefferson version of the Defense Travel System (DTS) for Production and Deployment in October 2003. We consider the Enhanced Jefferson version of DTS effective, suitable, and survivable.
- Subsequently, we approved a risk assessment that recommended a full operational test and evaluation (OT&E) of the core functions of the most recent software version, called Madison.
- We approved an updated Test and Evaluation Master Plan to support testing of Madison. We also approved a detailed Event Design Plan to support the OT&E of Madison core functions.
- The Army Test and Evaluation Command completed a successful system assessment of Madison's Deployment Tools functionality. The program director began fielding this minor enhancement while incorporating several recommended improvements.



DTS is a seamless, paperless, automated information system for supporting travel requirements.

SYSTEM DESCRIPTION AND MISSION

DTS is a seamless, paperless, automated information system for supporting travel requirements. It also reduces cost. DTS integrates commercial travel reservation systems and DoD accounting and disbursing systems via a virtual, private network to provide travelers with an end-to-end travel process. The program director is developing DTS as an evolutionary acquisition, using a spiral development strategy. This strategy fields the system in increments of increasing functionality. There are two blocks of development. The initial focus is on Temporary Duty travel (Block 1). The names of the releases match early U.S. Presidents. After Block 1, the focus will shift to Permanent Change of Station travel (Block 2).

The travel process begins with the users accessing the DTS via a web portal. There they create and digitally sign travel requests based on real-time transportation, lodging, and rental car availability. DTS interfaces with various commercial reservation systems. The user-generated travel authorization contains a "should cost" estimate of the trip. DTS enforces compliance with DoD travel policies based on simplified entitlements using audit alerts. Next, DTS routes the authorizations to Authorizing Officials for approval. After concluding travel, the user prepares an on-line voucher. DTS validates it through appropriate financial systems that generate reimbursement.

OSD assumed acquisition oversight in May 2002. At that time, the Adams release was already in use, or soon to be installed, at 20 pilot sites. It used a client-server architecture. During 2002 and 2003, the program director developed a new, primarily web-based version. It became known as Enhanced Jefferson. The Army Test and Evaluation Command completed the IOT&E on this version in two phases that culminated with an in-field operational assessment in August 2003. The Army testers reported that the Enhanced Jefferson version was operationally effective, operationally suitable, and survivable. However, some features (such as group travel) still required time-consuming workarounds. In addition, the system needed to be more intuitive to the user and training needed improvement. We also noted that DTS changes

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several business processes. Its success often depends on vigorous implementation and full support from the using commands and activities.

TEST AND EVALUATION ACTIVITY



We concurred with an Army risk assessment of Madison that recommended a full OT&E of its core functions. Significantly less operational testing will be required for some minor functions.

In July 2004, Army testers and the program director updated the 2003 Test and Evaluation Master Plan to support the Madison version. We approved both the original plan and the update. In September 2004, we approved a detailed Event Design Plan to support the OT&E of Madison core functions.

Developmental test and evaluation of four sub-releases of Madison proceeded during 2004. Two of the low risk sub-releases, Deployment Tools and Centrally Billed Accounts 2.0, entered a period of operational assessment. In July 2004, the Army Test and Evaluation Command completed a successful system assessment of Deployment Tools. The program director began fielding this minor enhancement while incorporating several improvements that the Army and we recommended.

TEST AND EVALUATION ASSESSMENT

OSD approved DTS entry into Production and Deployment in October 2003. The system achieved Initial Operational Capability in December 2003. By the end of FY04, the program director had corrected many of the problems found during IOT&E. By then, Enhanced Jefferson was fielded to nearly 3,000 sites. They comprised about 400,000 of 3.2 million expected users.

The program director is well along in developing Madison, the next major release. It corrects remaining Enhanced Jefferson deficiencies while also providing new capabilities.

The Deployment Tools functionality that the Army assessed during FY04 is a minor enhancement. It provides authorized Defense travel administrators with a tool to enter site data directly into DTS with no or little assistance required from technicians. It also allows travelers to create their own profile prior to creating travel documents, which reduces the travel administrators' workload. The Army found this enhancement to be operationally effective with some limitations and survivable at all sites. Army testers noted that the tools were suitable at Phase II sites and suitable with limitations at Phase III sites. (The Phase III sites are generally much smaller than the Phase II sites, and less capable of self-support.) The Army Test and Evaluation Command provided several recommendations to the program director. These included functionality enhancements, better training and support, and usability improvements. We concurred with the Army's assessment and recommendations. The program director moved quickly to incorporate the fixes or schedule them for near term upgrades.

The Army testers will conduct OT&E of the core capabilities of Madison in two phases, as each sub-release completes development. Using an in-lab approach, they will test the first available set of major capabilities during 1QFY05. They will test the second set during 3QFY05. They will then conduct an in-field operational assessment during 3QFY05 to ensure that Madison is operationally effective, suitable, and survivable in the field environment. This approach is consistent with the methodology that we approved for Enhanced Jefferson. It is necessary because OT&E of a web-based system like DTS presents special challenges. While operational testers can test DTS in the laboratory, the program director must field it in order for testing to occur in the actual users' web-based environment. It must completely replace the previous release because Defense Accounting and Disbursing Systems can only interface with one version of DTS at a time.