

DEPARTMENT OF HOMELAND SECURITY
Office of Inspector General

Letter Report:

**Review of DHS' Financial Systems
Consolidation Project**





Homeland
Security

May 9, 2008

MEMORANDUM FOR: David Norquist
Chief Financial Officer

FROM: 
Richard L. Skinner
Inspector General

SUBJECT: Review of DHS' Financial Systems Consolidation Project, OIG-08-47

We evaluated the Department of Homeland Security's (DHS) financial systems consolidation strategy. Specifically, our objective was to determine the progress DHS is making in developing and implementing its financial systems consolidation plan.

The Resource Management Transformation Office (RMTO) has developed a strategy to consolidate key component financial systems to either the Systems Applications and Products (SAP) or Oracle Financial platforms. In addition, the RMTO has developed project plans and other supporting documentation for this financial systems consolidation project. These items include a migration timeline, a draft concept of operations, a systems development lifecycle document, and an internal alternatives analysis.

Generally, the RMTO's evaluation provided adequate support for its decision to use two financial systems solutions. However, the RMTO has not conducted a complete analysis of possible service providers outside of DHS as required by Office of Management and Budget (OMB) guidance, and DHS does not have a documented waiver from OMB indicating that they do not have to comply with this guidance. Additionally, during the fiscal year 2007 financial statement audit, the external auditors outlined problems with the change control process in the Oracle platform. These change control problems could cause unsupported adjustments to not only the United States Coast Guard (Coast Guard) and Transportation Security Administration (TSA) financial data, but also to the data of other DHS components that will be migrated to the new financial system. Finally, the external auditors said that these change control issues could potentially lead to a scope limitation for the DHS financial statement audit.

Our report contains 3 recommendations aimed at improving the overall effectiveness of DHS' strategy to consolidate financial systems within the department. These recommendations advise that the RMTO conduct a full analysis of possible service providers in the federal government, including the OMB centers of excellence, to determine if any of these systems can meet DHS' financial management needs. In addition, the RMTO needs to improve its change control

Letter Report: Review of DHS' Financial Systems Consolidation Project

processes by identifying and correcting scripts being used by the Coast Guard and TSA. Your office concurred with all recommendations. Within 90 days of the date of this memorandum, please provide our office with additional information about the activities underway or planned by the RMTO to address our recommendations, including responsible parties, key milestones, and other supporting information.

Consistent with our responsibility under the *Inspector General Act*, we are providing copies of our report to appropriate congressional committees with oversight and appropriation responsibility over the DHS. In addition, we will post a copy of the report on our website for public dissemination.

Should you have any questions, please call me, or your staff may contact Frank Deffer, Assistant Inspector General for IT Audits, at (202) 254-4100.

Financial Systems Consolidation Strategy

The DHS Chief Financial Officer (CFO) has developed a strategy to consolidate the department's financial systems down to two platforms—SAP and Oracle Financials. This effort is being called the Transformation and Systems Consolidation (TASC) program. According to the RMTO, by deciding to consolidate to these two financial systems, the CFO chose the decision of least risk, which is to move to an alternative already in place and one with which some of the components are already familiar. SAP and Oracle Financials are also two of the most widely used financial systems in the private and public sectors. In addition, these two financial platforms have been approved by the DHS Chief Information Officer (CIO) and meet the requirements of the department's enterprise architecture. This is outlined in Homeland Security Management Directive number 0007.1, which states that each IT investment must align with the overall DHS enterprise architecture.¹ By selecting a system that meets the CIO's guidelines, approval by the CIO's enterprise architecture committee is not required.

By consolidating down to these two platforms, the use of other department-wide financial systems will be minimized by the year 2011—42% of components transitioned by 2009 and 96% of components transitioned by 2011. Figure 1 represents the consolidation of DHS budget authority from eight financial systems to four by 2011. The major financial systems included in Figure 1 are as follows: Integrated Financial Management Information System (IFMIS), Oracle Federal Financial system (OFF), SAP, Federal Financial Management System (FFMS), Momentum, and the Department of Justice (DOJ). Eventually, the department will move from the two solutions to one final platform after the year 2011.

¹ Homeland Security Management Directives System 0007.1, *Information Technology Integration and Management*, March 15, 2007.

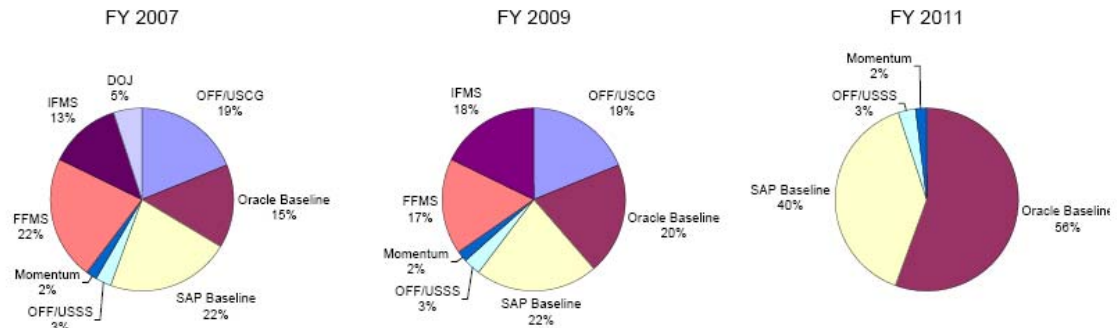


Figure 1: DHS Budget Authority

The migration plan created by the RMTO and approved by Congress as part of the fiscal years 2007-2008 expenditure plan is to incorporate the smaller components onto the Oracle platform and develop a best practices methodology to be used for the migration of larger components in the later years of the program. Once the Oracle baseline is in place, the solutions architect² will re-host the TSA and the Domestic Nuclear Detection Office to the DHS datacenter location in Stennis, Mississippi.³ Following this move, the solutions architect will migrate the Office of Health Affairs and the Science and Technology directorates to the new baseline. Shown in Table 1 are the components and their current financial management systems. By the end of FY 2011, most of these components, with the exception of the Federal Law Enforcement Training Center and the U.S. Secret Service, will be moving to one of the two platforms.

DHS Component	Current Financial System
Federal Law Enforcement Training Center	Momentum
U.S. Customs and Border Protection	Systems Applications and Products in Data Processing (SAP)
U.S. Coast Guard	Core Accounting System (Oracle-based)
Transportation Security Administration	Core Accounting System (Oracle-based)
Domestic Nuclear Detection Office	Core Accounting System (Oracle-based)
Federal Emergency Management Agency	Integrated Financial Management Information System
U.S. Secret Service	Core Accounting System (Oracle-based)
Immigration and Customs Enforcement	Federal Financial Management System
Citizenship and Immigration Service	Federal Financial Management System
DHS Headquarters <ul style="list-style-type: none"> • Office of Health Affairs • Science and Technology Directorate • Office of the Chief Information Officer • Office of the Chief Financial Officer • Office of the Chief Procurement Officer • National Protection and Programs • Intelligence and Analysis • Operations Coordination 	Federal Financial Management System

Table 1 – DHS Components and Financial Systems

² The solutions architect is the company that wins the contract award for the TASC project.

³ Currently the U.S. Coast Guard is the service provider for both the TSA and the Domestic Nuclear Detection Office.

Throughout this process, the focus of the RMTO's work has been on the Oracle baseline. For example, the request for proposals issued via the Enterprise Acquisition Gateway and Leading Edge solution states that there are two approved shared baselines for the financial systems consolidation; however, all of the tasks outlined in the RMTO documentation focus on the activities that pertain to the Oracle baseline. In addition, RMTO officials said that the only component that is considering moving to the SAP baseline is the Federal Emergency Management Agency (FEMA). However, additional evaluation needs to be completed by the RMTO and the solutions architect prior to the final decision. Moreover, the RMTO has created some of the documentation critical to DHS' success in implementing an integrated financial system—all for the Oracle platform. These documents include a concept of operations, a draft program management plan, a systems development lifecycle document, a risk management plan, and a migration timeline. The RMTO is also currently working on a governance plan and charter, a change control configuration document, and a helpdesk support document.

Evaluation of Operational Solutions Not Complete

DHS did not perform a complete analysis of all potential systems and service providers as part of its process to select a financial systems solution. As a result, DHS may not have had sufficient information to support its decision to exclude obtaining financial system operational and hosting support from other sources.

OMB Circular A-130 directs that federal agencies must ensure that decisions to improve existing information systems or develop new information systems are initiated only when no alternative private sector or governmental source can efficiently meet the need.⁴ Further, in 2005, OMB issued additional guidance on the Federal Management Line of Business Initiative.⁵ The Financial Management Line of Business Initiative's overall vision is to improve the cost, quality, and performance of financial management systems by leveraging shared service solutions (i.e. Centers of Excellence), and implementing other government-wide reforms that foster efficiencies in federal financial operations. As required by this guidance, federal agencies must have competitive options available for financial systems, including consideration of shared service alternatives and existing federal financial systems, when deciding on a new agency financial system. As a part of this guidance, OMB discussed requirements for transparency and standardization among the Financial Management Line of Business Initiative and steps federal agencies should undertake in order to migrate to a center of excellence.

Contrary to OMB guidance, the RMTO did not consider potential shared service providers or any other external agency as part of the alternatives analysis for the TASC program. Instead, the RMTO excluded the centers of excellence from consideration, without conducting a full analysis of their respective capabilities. An RMTO official said the department had obtained a verbal waiver from OMB, allowing DHS to exclude the centers of excellence from consideration, and to proceed with RMTO's strategy for consolidating systems using the Oracle solution. OMB officials said that this waiver, while not documented, represents OMB's official position on the

⁴ Office of Management and Budget Circular A-130, *Management of Federal Information Resources*, November 28, 2000-Revision.

⁵ Office of Management and Budget, *Update on the Financial Management Line of Business and the Financial Systems Integration Office*, Memorandum, December 16, 2005.

matter. However, section 10.b of OMB Circular A-130 calls for written waiver requests, and requires that the agency publish the request in the Federal Register.

After obtaining the waiver from OMB, the RMTO began to look internally to leverage current DHS investments. In determining which internal system solution was right for DHS, the RMTO conducted multiple analyses of current DHS component financial systems. The first analysis outlined DHS' financial management vision, the current state of DHS' financial management systems, the consolidation approach, and recommendations on the way forward.

RMTO Analysis of Alternatives

As part of this analysis, the RMTO identified four alternatives within the department as possible solutions for the financial systems consolidation effort. These four alternatives discussed were to: (1) build a new Department-level financial management system to supersede the component-level systems, (2) consolidate one or more existing component systems, (3) conduct a comprehensive upgrade to existing systems to address corrective action plan weaknesses, and (4) maintain status quo. Each of these alternatives was compared with the requirements outlined by the RMTO, and the analysis disclosed that of these four alternatives, the consolidation of component systems met all of these requirements.

Once it was determined that the consolidation of component systems would best meet the department's needs, the RMTO performed a second analysis to identify which internal systems could best be matched with internal DHS components. In this analysis the RMTO evaluated five systems: (1) FFMS—in use by the Immigrations and Customs Enforcement agency, (2) OFF—in use by TSA, (3) SAP—in use by the Customs and Border Protection, (4) IFMIS—in use by FEMA and (5) Momentum—in use by the Federal Law Enforcement Training Center. DHS determined that using two service providers would be the best benefit for the department because this option allowed DHS to leverage current investments already in place.

Generally, the RMTO's internal analyses provide adequate support for its decision to use two service providers in the initial stages of its financial systems consolidation strategy. However, its decision to exclude potential external service providers, such as other federal departments, is not supported by any documented analysis, and thus is not justified and should be revisited. A complete evaluation of potential service providers can help ensure that DHS is implementing the best system to support the processing of financial transactions and ultimately help DHS receive an unqualified opinion on its financial statements.

Change Control Issues Exist with One of the Proposed Solutions

The RMTO does not have a change control plan in place for the TASC program. As required by the DHS Sensitive Systems Policy Directive 4300A, DHS is required to prepare configuration management plans for all IT systems and establish, implement, and enforce configuration management controls as set forth by the configuration management plan.⁶ Additionally, DHS' draft System Lifecycle Guide requires that each IT project have a configuration plan, which

⁶ DHS Sensitive Systems Security Policy 4300.A, version 5.5, *Information Technology Security Program*, September 2007.

identifies the configuration management policy, procedures, structures, and roles/responsibilities to be used in executing configuration management. This plan should also assess the impact of change, define the Change Control Board, and identify the processes used by the Change Control Board in evaluating and approving changes to the system. Additionally, OMB Memorandum 97-16, *Information Technology Architectures*, requires configuration management and control processes as well as quality software engineering processes be implemented to maintain compliance with the architecture.⁷ Specifically, this memorandum requires configuration changes to be tested and validated prior to acceptance for operational use across the architecture. The RMTO is finalizing a governance document and change control plan that will outline the process for system changes for the financial system once the Oracle baseline is moved to the DHS data center in Stennis, Mississippi.

The National Institute of Standards and Technology, Special Publication 800-53, states that configuration change control involves the systematic proposal, justification, test/evaluation, review, and disposition of proposed changes.⁸ The external financial statement auditors reported a lack of approvals for the initiation, testing, and final approval of regular and emergency system changes. The external auditors also found that the Coast Guard's Finance Center in Chesapeake, Virginia, developed its own process to create and implement changes through the use of scripts. These scripts are used to increase the functionality of the system and fix data that are not properly processed in Coast Guard and TSA financial systems. Some of these scripts were developed to correct current software problems that have been awaiting development through the formal change control process.

The presence of these scripts indicates that controls are not properly designed and that the integrity of TSA and Coast Guard financial data can be compromised. These scripts may cause unsupported adjustments to Coast Guard and TSA financial data that ultimately affect multiple accounts and financial statement line items. In addition, because these scripts are unsupported, there is the potential that they may not be considered when future system modifications and interfaces are developed for these systems. This could lead to more transaction processing errors that could result in the misstatement of Coast Guard, TSA, and DHS financial statements. The external auditors have indicated that these scripts could lead to a potential scope limitation for the financial statement audit.

An RMTO official said that the RMTO would look into the scripting problem with the TSA Oracle Financial system. In addition, this official noted that while there will always be some scripts run with any system chosen, the RMTO nonetheless needs to research the scripts that are currently run to determine what procedures they perform and the effect of these procedures on TSA's financial data.

⁷ Office of Management and Budget Memorandum 97-16, *Information Technology Architectures*, June 18, 1997.

⁸ National Institute of Standards and Technology, Special Publications 800-53, revision 2 (Public Draft), *Recommended Security Controls for Federal Information Systems*, November 2007.

Impact of April 15, 2008, Court Decision

After we issued our draft report, the United States Court of Federal Claims issued a ruling in the bid protest case of *Savantage Financial Services, Inc. vs. United States*. In its decision, the court ruled that DHS' decision to use Oracle and SAP financial software systems via "Brand Name Justification" document is an improper sole source procurement in violation of the Competition in Contracting Act. The court rejected DHS' argument that its solicitation was not a procurement, but a task order under an existing contract. Further, the court determined that the DHS' sole source procurement decision was arbitrary and capricious: there did not appear to be a reasonable basis for DHS' decision, the contracting officer abused her discretion, and the decision violated applicable law. The court enjoined DHS from proceeding with the solicitation until DHS conducts a competitive procurement in accordance with the law to select financial management systems application software.

In response to this decision, RMTO is revisiting its financial systems consolidation strategy.

Recommendations

We recommend that the DHS Chief Financial Officer direct the RMTO to:

- **Recommendation #1:** Conduct a full evaluation of financial service providers available in the federal government, including OMB's shared service providers, to determine if any of these systems can meet DHS' financial management needs more efficiently.
- **Recommendation #2:** Identify all scripts being used at the Coast Guard and TSA and analyze them to determine their effect on financial transactions, as well as their effect on DHS' financial statements.
- **Recommendation #3:** Correct the scripts before migrating any DHS components to the new TSA based DHS financial system.

Management Comments and OIG Analysis

We obtained written comments on a draft of this report from the DHS CFO. We have included a copy of the comments in their entirety at Appendix A.

In the comments, the CFO concurred with all of the findings and recommendations of our report. In addition to providing formal responses to the three recommendations, the CFO and the RMTO provided us with technical clarification on some statements in the report.

In response, the CFO concurred with Recommendation #1; however, the response does not adequately address our recommendation. The CFO's response states that the RMTO will look at external providers who can help DHS implement the current TSA baseline approach. This is not the intent of our recommendation. The TSA baseline was selected by DHS without an analysis of financial systems external to DHS. The intent of our recommendation is for the CFO to review external agency financial systems to see if these systems are more efficient and cost effective to DHS before moving forward with the TSA baseline approach.

Recommendation # 1 is considered unresolved and open.

In response to recommendation # 2, the CFO stated that the RMTO has identified the scripts that affect financial transactions currently in use at the Coast Guard and the TSA. The CFO and RMTO have identified a total of 60 scripts, and in 20 cases the underlying issues have been corrected and the scripts have been eliminated. Ten additional scripts have been corrected and are undergoing government acceptance testing, and 30 remaining scripts still need to be fixed. Once the RMTO has successfully contracted a Solutions Architect, the RMTO, along with the contractor will identify the impact area of each script, its materiality, and assign it a priority.

In response to recommendation #3, the CFO outlined various efforts to correct scripts before migrating any DHS components to the new TSA based financial system. The CFO and RMTO will ensure that scripts are eliminated before any components go to the new system. Project plans will be available to oversee and monitor corrective action activities.

Recommendations #2 and #3 are considered to be resolved but open pending verification of planned action.

This review is based on analysis of applicable documentation and interviews with personnel and officials of relevant agencies and institutions. We conducted our audit from August 2007 to January 2008 under the authority of the *Inspector General Act of 1978*, as amended, and according to generally accepted government audit standards.

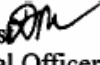
U.S. Department of Homeland Security
Washington, DC 20528



**Homeland
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March 14, 2008

MEMORANDUM FOR: Richard Skinner
Inspector General

FROM: David Norquist 
Chief Financial Officer

SUBJECT: Response to DHS Office of Inspector General Draft Report:
Review of DHS' Financial Systems Consolidation Project

Thank you for your review of DHS' financial systems consolidation program in your February 2008 Draft Report. The attached document provides responses to your three recommendations, as well as additional technical clarification.

We appreciate our close working relationship with your office and look forward to future analysis and input as we continue down the path to modernize and consolidate financial management systems department-wide.

Please direct specific questions concerning our response to Avie Snow, Director, Resource Management Transformation Office (RMTO) at 202-447-0040, or Avie.Snow@dhs.gov.

Attachment: DHS Response to Draft Report

DHS Response to Inspector General Draft Report: Review of DHS' Financial Systems Consolidation Project

DHS CFO/RMTO concurs with the three report recommendations detailed below.

Recommendation #1: *Conduct a full evaluation of financial service providers available in the federal government, including OMB's centers of excellence, to determine if any of these providers can meet DHS' financial management needs more efficiently.*

Response: CFO/RMTO concurs. The OCFO will conduct a full evaluation of potential service providers within the federal government to ensure that the department leverages the most efficient and cost effective financial management support for the TASC Baselines. The evaluation will include an analysis of who will own, operate and maintain the consolidated system once it is in a steady-state. This service provider evaluation will be a simultaneous effort as the migrations progress.

Recommendation #2: *Identify all scripts being used at the Coast Guard and Transportation Security Administration (TSA) and analyze them to determine the effect of the scripts on financial transactions and ultimately the effect on DHS' financial statements.*

Response: CFO/RMTO concurs. As of December 2007, CFO/RMTO identified a total of sixty scripts that affect financial transactions currently in use at the Coast Guard and Transportation Security Administration (TSA). In twenty cases the underlying issues have been corrected and the scripts have been eliminated, ten issues are corrected and are undergoing government acceptance testing, and thirty remain to be fixed. A breakdown of script fixes includes reference, transaction and setup data types. Once we have successfully contracted with a Solutions Architect, we will identify the impact area of each script, its materiality, and assign a priority. In accordance with DHS, the National Institute for Standards and Technology (NIST) and OMB policies, RMTO will follow configuration management processes, which includes identifying each script as a configuration item within a configuration management data base. Each correction will be treated as a delivered software fix subject to the software development life cycle (SDLC), testing and acceptance before implementation into the production environment. Each data fix will also be subject to internal controls compliance oversight and testing.

Recommendation #3: *Correct the scripts before migrating any DHS components to the new TSA based DHS financial system.*

Response: CFO/RMTO concurs. CFO/RMTO will ensure that these scripts are eliminated before any components go live on the baseline. Project plans will be available to oversee and monitor corrective action activities. Specific remediation steps include:

1. Developing a project plan and schedule with the Solutions Architect to eliminate scripts;
2. Adhering to the SDLC and configuration management plan to ensure a compliant production environment;

3. Providing test plans and scenarios that fully analyze and test the proposed solutions; and
4. Documenting lessons learned during the script elimination process to ensure that back-end scripting is the exception rather than the rule.

General Comment: In addition to the report recommendations, other technical clarifications to report language are as follows:

- As stated in the draft report, “An RMTO official said the department had obtained a verbal waiver from OMB, allowing DHS to proceed with RMTO’s strategy for consolidating systems.”

OMB endorsed the TASC program effort to consolidate the department onto two baselines, Oracle Federal Financials and SAP in several ways. RMTO received a verbal waiver from OMB allowing DHS to proceed with the TASC program. This position was reaffirmed in writing in the FY09 passback which represents OMB’s official position on the matter. The language states, “a total of \$14 million (8 FTP/4 FTE) is recommended for the RMTO in 2009 for continuing to implement the TASC project.”

- The report also cites concern for change control issues which could potentially lead to a scope limitation for the DHS financial statement audit. The report states: “Additionally, during the fiscal year 2007 financial statement audit, the external auditors outlined problems with the change control process in the Oracle platform. These change control problems could cause unsupported adjustments to not only the United States Coast Guard and Transportation Security Administration (TSA) Financial data, but also to the data of other DHS components that will be migrated to the new financial system. Finally, the external auditors said that these change control issues could potentially lead to a scope limitation for the DHS financial statement audit.”

TASC will not follow the change control process used by the USCG. Instead, TASC will leverage its own governance structure comprised of an executive steering committee co-chaired by the DHS Under Secretary for Management and Chief Financial Officer and change control board facilitated by the RMTO director. TASC governance will streamline decision making to resolve problems and control configuration changes within the TASC Baseline. A task risk management plan has been finalized to mitigate risks associated with change control process problems. A risk team will assess the probability and impact of identified risks and develop appropriate risk response strategies.

- There are also necessary clarifications regarding FEMA and SAP. As mentioned in the report: “In addition, RMTO officials said that the only component that is considering moving to the SAP baseline is the Federal Emergency Management Agency. However, additional evaluation needs to be completed by the RMTO and solutions architect prior to the final decision.”

In 2007 FEMA commissioned an independent analysis to identify the recommended set of options that best satisfies the requirements to replace the Integrated Financial

Management Information System (IFMIS). Using a variety of qualitative and quantitative analysis, the study narrowed down the options to two financial management systems – Oracle Federal Financials and SAP – with SAP scoring only marginally better in the final result. Further analysis needs to be conducted to determine the best way forward.

- Finally, the draft report concludes: “Moreover, the RMTO has created some of the documentation critical to DHS’ success in implementing an integrated financial system—all for the Oracle platform. These documents include a concept of operations, a draft program management plan, a systems development lifecycle document, a risk management plan, and a migration timeline.”

Existing documentation (Concept of Operations, Program Management Plan, SDLC, Risk Management Plan, and Migration Timeline) focuses on the Oracle baseline, as the SAP baseline will remain at Customs and Border Protection (CBP). However, it is important to note that all program and technical documentation are living documents, subject to real-time updates throughout the program lifecycle. Should a component opt to migrate to SAP, RMTO will coordinate with CBP to update documentation as appropriate

Appendix B: Major Contributors

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