

VA Office of Inspector General

OFFICE OF AUDITS AND EVALUATIONS



Department of Veterans Affairs

*Audit of
the Project Management
Accountability System
Implementation*

August 29, 2011
10-03162-262

ACRONYMS AND ABBREVIATIONS

| | |
|---------|--|
| CoreFLS | Core Financial and Logistics System |
| FLITE | Financial and Logistics Integrated Technology Enterprise |
| IPT | Integrated Project Team |
| IT | Information Technology |
| ITOC | Information Technology and Oversight Compliance |
| OIT | Office of Information and Technology |
| OMB | Office of Management and Budget |
| PM | Project Manager |
| PMAS | Project Management Accountability System |
| SAM | Strategic Asset Management |

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Report Highlights: Audit of VA's Project Management Accountability System Implementation

Why We Did This Audit

VA has a history of problems managing its information technology (IT) development projects. On June 19, 2009, VA launched the Project Management Accountability System (PMAS) to improve its IT development success rate. At the request of the Chief Information Officer, we conducted this audit to evaluate the effectiveness of PMAS planning and implementation.

What We Found

The Office of Information and Technology has made progress establishing PMAS. It has published a *PMAS Guide*, developed a prototype system for monitoring project status, and used the oversight approach to better meet incremental deliverable due dates for all active IT development projects.

However, a great deal of work remains before PMAS can be considered completely established and fully operational. The Office of Information and Technology created and instituted the PMAS concept without a roadmap, adequate leadership, and staff to effectively implement and manage the new methodology. If such foundational elements are not fully implemented, the discipline and accountability needed for effective management and oversight of IT development projects will not be instilled.

Specifically, key management controls to ensure PMAS data reliability, verify project compliance, and track project costs have not been well established. Detailed guidance on how such controls will be used within the

framework of PMAS to manage and oversee IT projects also has not been put in place. Until these deficiencies are addressed, VA will not fully achieve the goal of PMAS to reduce cost overruns, schedule slippages, and poor performance.

What We Recommended

We recommended the Assistant Secretary for Information and Technology develop an implementation plan and assign adequate leadership and staff needed to fully execute PMAS. We also recommended the Assistant Secretary establish controls for ensuring data reliability, verifying project compliance, and tracking costs to strengthen PMAS oversight. Finally, we recommended the Assistant Secretary provide detailed guidance on using PMAS to ensure IT project success.

Agency Comments

The Assistant Secretary for Information and Technology agreed with our findings and recommendations and will create a detailed implementation plan to address the recommendations. We will assess and monitor the implementation of corrective actions.

A handwritten signature in black ink that reads "Belinda J. Finn".

BELINDA J. FINN
Assistant Inspector General
for Audits and Evaluations

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INTRODUCTION

Objective

We conducted this audit to determine whether the Office of Information and Technology (OIT) has effectively planned and implemented the Project Management Accountability System (PMAS) with the management controls needed to ensure project managers deliver information technology (IT) projects within cost, schedule, and performance objectives. During meetings in preparation for this audit, the Assistant Secretary for Information and Technology expressed concerns about data reliability and the overall effectiveness of PMAS to control IT development projects. This audit report provides information to address his concerns. Appendix A provides background information on the PMAS initiative, while Appendix B provides a detailed description of our audit scope and methodology.

Overview

VA has a history of problems managing IT development projects. For example, after 6 years and despite spending more than \$249 million, VA halted the Core Financial and Logistics System (CoreFLS) project in 2004 due to significant project management weaknesses. VA began work on the Financial and Logistics Integrated Technology Enterprise (FLITE) program in September 2005 to meet an ongoing need to address a material weakness in its financial management operations.

In September 2009, we reported program managers had not fully integrated CoreFLS lessons learned into FLITE development (*Audit of FLITE Program Management's Implementation of Lessons Learned*, Report No. 09-01467-216, September 16, 2009). In July 2010, VA canceled FLITE, with the exception of the Strategic Asset Management project, partly because FLITE had suffered from the same project management issues that plagued CoreFLS. VA has also experienced other project failures, such as the Replacement Scheduling Application project, at an estimated cost of \$215 million.

The Assistant Secretary for Information and Technology (the Chief Information Officer) proposed using PMAS, a new IT project management methodology, to stop the succession of IT development failures. On June 19, 2009, the Secretary of Veterans Affairs announced the Department would begin implementing PMAS to improve its IT development projects.

Related Prior Inspector General Report

In September 2009, we concluded that OIT had not established the management controls needed to effectively control and monitor VA's IT development projects (*Audit of VA's System Development Life Cycle Process*, Report No. 09-01239-232, September 30, 2009). We reported OIT did not conduct timely or thorough IT development project reviews. We also reported OIT did not maintain cumulative project or program life cycle cost and schedule documentation. OIT created PMAS in part to address these same issues.

RESULTS AND RECOMMENDATIONS

Finding **Office of Information and Technology Can Improve PMAS Implementation**

OIT has made progress in establishing PMAS. It published the *PMAS Guide*, developed a prototype project status monitoring system, instituted an alert process to call attention to issues that could negatively impact IT projects, and now manages all IT development projects under PMAS. To date, OIT reports that PMAS has helped meet 75 percent of the incremental deliverable due dates for all active IT development projects. VA's Assistant Secretary for Information and Technology expects PMAS to serve as a model in the Federal community for managing IT investments.

However, a great deal of work remains before PMAS can be considered completely established and fully operational. OIT rolled out the PMAS concept without a detailed plan and the leadership and staffing resources needed to implement the new oversight methodology. If OIT does not fully implement foundational elements, the discipline and accountability needed for effective management and oversight of VA's IT development projects will not be instilled. Specifically, OIT has not established key management controls over data reliability, project compliance, and project costs—controls needed to make PMAS a viable IT oversight mechanism. Detailed instructions on applying PMAS to manage and oversee IT projects also are not in place. Until OIT addresses these deficiencies and fully implements PMAS, VA's portfolio of IT development projects will remain susceptible to cost overruns, schedule slippages, and not meeting requirements.

OIT Has Made Progress Implementing PMAS

OIT has taken a number of positive steps in instituting PMAS to improve VA's management of IT development projects. Since its inception in June 2009, the program has progressed from a concept to deployment of a process and automated system for managing the Department's portfolio of IT development projects. With this accomplishment, PMAS is ensuring incremental deliverables and shows promise of serving as a model oversight methodology for wider Federal use.

PMAS Concept

PMAS represents a major shift from the way VA historically has planned and managed IT development projects. PMAS was designed as a performance-based management discipline that provides incremental delivery of IT system functionality—tested and accepted by customers—within established schedule and cost criteria. The PMAS concept requires projects delivering functional business capability in cycles of 6 months or less. PMAS is used to plan and manage all IT development projects that introduce new functionality or enhance existing capabilities within current VA systems that cost more than \$250,000 in one fiscal year. PMAS does not apply to projects associated with the sustainment of existing IT systems.

A project manager (PM) and an integrated project team (IPT) are responsible for managing each project subject to PMAS oversight. The PM is primarily responsible for delivering expected outcomes within cost, schedule, and scope. The IPT, co-chaired by the business sponsor and the PM, serves as the governing mechanism with responsibility for overall project decisions. IPTs comprise the business sponsor, significant project stakeholders, OIT representatives, and support staff from the Office of General Counsel and the Office of Acquisition and Logistics.

Each month, PMs enter updated data on the status of their projects into a PMAS database, which OIT uses for centralized oversight. Projects under PMAS are categorized into one of five states—new start, planning, active, paused, and closed. The level of monitoring done on a project is dependent on the state it holds in the project management life cycle. For example, a project in the paused state is much more heavily scrutinized than a project in the new start state.

During the planning state, PMs and IPTs ensure that required documents such as requirements specification documents, system design documents, and project management plans are developed to demonstrate that the projects are ready to enter the active state. To receive the Assistant Secretary for Information and Technology's approval to become active, a project must have:

- A business sponsor
- An established IPT
- A plan for delivering incremental functionality to the intended customer at least every 6 months
- Documented requirements for initial incremental deliverables
- Success criteria established and jointly accepted by the business sponsor, OIT, and the vendor

Active projects involve processes to build and deliver incremental functionality according to the established project schedule, or at least every 6 months. Customers certify incremental delivery of functionality on a customer acceptance form. The PM must also sign the customer acceptance form, validating that the incremental requirements have been met. Three failures to deliver functionality as scheduled should result in a project being paused. Once a project has been paused, no further development can occur until it has been evaluated, re-planned, and approved to restart by the Assistant Secretary for Information and Technology. The alternative is to terminate the project altogether.

*PMAS
Implementation
Progress*

Since instituting PMAS, OIT has made the following progress in its development and implementation.

- Published the *PMAS Guide*, which is the official OIT policy for managing IT development projects. In broad terms, it provides the procedures for planning, monitoring, and managing the projects. It presents an overview of PMAS processes, roles and responsibilities, and management controls. OIT published the initial guide on March 29, 2010, and the first revision on September 17, 2010.
- Developed a prototype PMAS Dashboard that displays the information contained in the PMAS database. OIT officials use the dashboard to monitor IT development project progress and identify issues with performance. The dashboard provides color-coded ratings of actual project performance against cost, schedule, and performance targets. A green rating indicates that a project is on track, a yellow that a project is behind, and a red that a project is failing. The prototype PMAS Dashboard became operational in May 2010. OIT expects to have the final PMAS Dashboard in place by September 2013.
- Created reports from the PMAS Dashboard to facilitate oversight of VA's IT development projects. The Assistant Secretary for Information and Technology and other OIT senior leadership use the Daily PMAS Report and related products to determine how well the Product Development organization is performing in meeting its incremental delivery schedules. Appendix C provides an excerpt of the PMAS Dashboard Active Projects Report.
- Established the red flag process, which allows anyone associated with a project to elevate issues impacting the project to senior level officials in a timely manner so they can take corrective actions quickly. Project managers have used this process successfully to obtain needed personnel resources for projects.
- Converted all ongoing and new product development projects to PMAS.

As of May 2011, OIT was managing 119 active IT development projects using PMAS. An additional 60 projects were in the planning state, while 41 projects were classified as new starts. At the time of our audit, OIT's efforts were primarily focused on ensuring that IT development projects were achieving their incremental deliveries. On May 11, 2011, in a statement before the House Committee on Veterans' Affairs, the Assistant Secretary for Information and Technology said that, through PMAS, OIT had achieved approximately 75 percent of the incremental delivery milestone dates for all active IT development projects.

Further, according to the Assistant Secretary for Information and Technology, OIT has made substantial strides forward and is well on its way toward achieving the goal of being the best IT organization in the Federal Government. He said that in a number of areas, including PMAS, VA has blazed a trail of innovation that the rest of Government is beginning to follow.

***Lack of a Plan
and Personnel
To Lead***

While these initial accomplishments are encouraging, the current framework for PMAS does not provide a sufficient foundation for continued progress. Because PMAS is a new management framework created at VA, OIT proceeded with PMAS' implementation without the benefit of a roadmap—that is, a detailed implementation plan—to guide it or the leadership and staffing resources needed to support it through full implementation.

***No
Implementation
Plan***

When the Secretary of Veterans Affairs announced PMAS on June 19, 2009, it was in the preliminary stages of development. It was primarily the Assistant Secretary for Information and Technology's vision rather than a fully developed methodology for managing IT development projects. The Assistant Secretary tasked OIT with putting his vision for PMAS into practice without providing a detailed plan to guide it through implementation. As such, OIT launched PMAS before it was well defined, and before it had in place the structure and support needed to effectively institute the new methodology.

An implementation plan would have identified the tasks necessary to accomplish PMAS, who would complete them, target due dates, and how the work would be tracked and monitored. OIT's FY 2010 Operating Plan included a general outline for implementing PMAS, but it lacked details. According to the Operating Plan, the Principal Deputy Assistant Secretary for Information and Technology was responsible for developing a plan of action with milestones by December 2009, but this was not done. OIT personnel responsible for implementing PMAS told us that they primarily relied on and reacted to directions provided by the Assistant Secretary for Information and Technology to implement PMAS.

Along with milestones and processes for managing PMAS, a detailed implementation plan would have also included performance measures to assess how well PMAS is meeting OIT's goals for IT development projects. Performance measures are indicators or metrics used to gauge program success—whether a program is achieving its objectives and whether progress is being made toward attaining organizational goals. Such goals are the target levels of performance expressed as measureable objectives against which actual achievement can be compared. To achieve optimal effectiveness with PMAS, OIT needs to develop a mix of both short- and long-term goals that address performance targets several years into the future.

**Inadequate
Leadership and
Staff**

OIT's efforts to make PMAS fully operational are further hindered because it proceeded with the implementation even though it did not have the leadership and staffing resources in place that were needed to establish the new process. Although OIT's FY 2010 Operating Plan included provisions for implementing a PMAS organizational structure, OIT did not adhere to the plan. According to the Operating Plan, the Principal Deputy Assistant Secretary for Information and Technology was responsible for establishing a PMAS office by May 2010. The Director of the PMAS Office would be responsible for:

- Developing and implementing the PMAS process
- Monitoring and controlling all IT development projects, including initiating reviews of the projects by September 2010
- Managing an office of analysts and communications personnel to monitor all IT development projects to ensure compliance with PMAS processes and milestones

However, OIT did not appoint a PMAS Director or establish a PMAS Office. At the time of our audit, OIT had less than two full-time personnel dedicated to the implementation of PMAS—a PM who was primarily responsible for developing the PMAS Dashboard and a consultant whose duties included supporting the program. At various points in time, OIT assigned additional personnel to work on PMAS tasks, but on a part-time or voluntary basis. For example, in the absence of a PMAS Office, the Director of the Office of Program Management, Policy, Assessment, and Reporting was tasked to create the *PMAS Guide*.

In October 2010, OIT completed a reorganization intended to transform it to meet the Secretary's vision for a 21st Century VA. In lieu of a central PMAS Office, pockets of PMAS responsibilities were created throughout the OIT organization; no single office or group of individuals was designated to orchestrate all of the actions needed to roll out the new IT oversight process. OIT also did not clearly define PMAS roles and responsibilities. As a result, even the PM and consultant (the two individuals most familiar with PMAS) told us that they had trouble identifying the personnel responsible for the PMAS tasks that needed to be accomplished.

**Management
Controls Not
Established**

OIT has not yet established key management controls needed to make PMAS a sound IT oversight mechanism. Lacking a detailed implementation plan and the leadership and program staff needed to guide efforts, OIT may face challenges making PMAS fully operational and providing the accountability and discipline required to effectively manage all IT developments.

Unreliable Data

The PMAS Dashboard was designed to provide the project status information needed for OIT leaders to make timely and informed decisions on IT development initiatives. However, we found that the information

maintained on the PMAS Dashboard does not always reflect the actual performance of an IT development project.

Office of Management and Budget (OMB) Circular A-11, Part 7, Section 300, *Planning, Budgeting, Acquisition, and Management of Capital Assets*, provides guidance and reporting requirements for major IT development projects. It requires Federal agencies to institute performance measures and management processes for monitoring and comparing planned results against actual performance. OMB expects agencies to achieve, on average, 90 percent of cost, schedule, and performance goals. An agency must review all projects not achieving 90 percent of its goals to determine whether it still needs the projects and what corrective actions, including possible termination, should be taken. In addition, OMB's *Information Technology Investment Baseline Management Policy* (M-10-27), issued June 28, 2010, requires agencies to measure performance against both the current approved baseline and the original baseline.

In line with these requirements, the *PMAS Guide* states that IT project progress should be primarily measured by comparing actual performance data against a project's baseline. When performance deviates significantly from the plan, management must take timely corrective actions.

However, OIT does not maintain in the PMAS Dashboard an audit trail of the initial baseline against which to measure project progress. Consequently, OIT has limited assurance that the information maintained in the system is accurate and complete. Currently, when a PM enters a revised project delivery date into the PMAS Dashboard, OIT loses visibility of the original delivery date. The current Dashboard update procedure simply entails replacing existing project delivery information with a revised due date. Compounding this issue is the fact that OIT has not yet begun performing the independent reviews needed to validate the accuracy of the data PMs enter into the PMAS Dashboard on their projects. As a result, OIT cannot rely on the PMAS Dashboard to support project oversight and provide accurate project status data OIT leaders need to make timely and informed management decisions.

We compared the June 28, 2010, Daily PMAS Report with the October 19, 2010, Daily PMAS Report to determine whether projects successfully completed 50 incremental deliveries scheduled to occur during September 2010. We found that 13 of the 50 incremental deliveries had not been completed as originally scheduled. Although OIT officials had approved each of the schedule slippages, they lost visibility of the baseline schedules when PMs entered revised due dates into the PMAS Dashboard. The BusinessWare Migration project provides a useful illustration of this deficiency. The project was scheduled to complete an initial operating capability test on September 28, 2010.

OIT officials extended this incremental delivery upon approving a revised completion date of November 30, 2010. As soon as the PM entered the revised date into the PMAS Dashboard, OIT lost visibility of the original baseline information. Consequently, although the project schedule had slipped by 2 months, the PMAS Dashboard indicated that the project was on track.

The project subsequently missed the revised completion date. It received a strike during a meeting with OIT officials held on January 18, 2011. During that meeting, OIT officials again agreed to extend the test completion date to March 30, 2011. The project received another strike when it did not meet the latest revised completion date. However, as of April 22, 2011, the PMAS Dashboard showed no indication that the project was at risk. Not only did the PMAS Dashboard incorrectly indicate that the project was on schedule, it also indicated that the project had not received any strikes. In May 2011, the PMAS Dashboard was updated to show that the project had three strikes against it and was still ongoing and meeting schedule even though the dates had changed several times.

The Strategic Asset Management (SAM) project provides another example of the limited usefulness of the information captured on the PMAS Dashboard. On April 21, 2009, VA awarded a task order for the SAM project valued at approximately \$8 million. The period of performance for the task order was 12 months. Modifications increased the value of the task order to over \$20 million, more than doubling the value of the task order and the period of performance. After the project received its third strike for failing to meet a delivery milestone, the Assistant Secretary for Information and Technology suspended the SAM project in February 2011, just weeks before it was scheduled to go live.

Despite SAM's troubled history, the PMAS Dashboard continued to show all facets of the project in a green status, signifying that the project was on track right up until the day it was suspended. In addition, the PMAS Dashboard indicated that the project had not received a single strike when in reality it had already received two strikes prior to suspension. The PMAS Dashboard also did not reflect that the project had incurred significant cost overruns and schedule slippages, demonstrating that the Dashboard needs improvements to become an effective and reliable tool for project monitoring.

OIT will not be able to realize the intended benefits of the PMAS Dashboard until it establishes the procedures and controls needed to ensure that the data presented by the dashboard are reliable and provide a complete picture of each project's status.

*Planning,
Compliance,
and Outcome
Reviews Not
Performed*

OIT has not conducted reviews required under PMAS to validate the performance of IT development projects. According to the *PMAS Guide*, these reviews are to examine project planning, compliance, and outcomes.

Specifically, as of September 17, 2010, the *PMAS Guide* required that OIT review projects in the planning state every 60 calendar days to evaluate whether they should be moved to the active state or closed. Such reviews are critical to ensure projects do not remain in planning for an excessive amount of time, thus expending unnecessary resources without making sufficient progress. To evaluate compliance with this requirement, we asked OIT officials to provide documentation of completed reviews for 59 IT development projects. The projects were identified on the PMAS Dashboard as being in the planning state as of February 3, 2011. OIT officials were unable to provide evidence to show that they had done any of the required planning reviews. OIT officials stated that their management oversight had suffered because of insufficient staff resources.

Further, OIT did not conduct compliance and outcome reviews. According to the *PMAS Guide*, compliance reviews are independent periodic reviews intended to ensure projects comply with PMAS requirements. In comparison, outcome reviews are to ensure that incremental deliverables meet customer expectations, and that projects provide expected functionality within designated time and budget parameters. These reviews are critical for ensuring data integrity since PMAS Dashboard data are self-reported by PMs. All of the PMs in our case studies of five IT development projects said that their projects had not undergone such reviews. Responsible OIT officials confirmed that OIT was not conducting the reviews because they had not yet developed detailed review processes and staffing resources were insufficient to implement an adequate independent review function.

The Assistant Secretary for Information and Technology has periodically required PMs to provide status briefings to support his review of selected IT development projects. In addition, the Assistant Secretary has held strike meetings to discuss why certain projects failed to meet scheduled incremental deliveries, as well as red flag meetings to resolve risks and issues negatively impacting projects. However, such briefings and meetings have typically been conducted on an ad hoc basis and do not constitute a consistent means of reviewing the performance of IT development projects.

On March 28, 2011, the Office of Information and Technology Oversight and Compliance (ITOC) began the first round of PMAS compliance reviews. ITOC staff developed standard operating procedures that identified roles and responsibilities, processes, and reporting guidelines to aid this review effort. ITOC officials acknowledged that their personnel needed training to develop the skills needed to perform these reviews. They explained that this was a new mission for their organization. They also stated that due to time constraints, initial training would be limited in depth; as such, initial

compliance reviews would also be limited in depth. ITOC officials anticipate increasing the extent of the reviews over time as ITOC personnel receive more training and validate the new review procedures.

*Lack of Project
Budget and
Cost Tracking*

OIT has not established budget traceability down to project and increment levels within the OIT Operating Plan. According to the *PMAS Guide*, a clearly established and understandable line of sight should exist from OMB Exhibit 300s, to programs, to projects, and finally to PMAS incremental deliveries. Exhibit 300s are the documents OMB uses to collect IT project investment information from each agency. Full traceability from this budget document to expenditures is necessary to ensure decision makers have sufficient information to understand the potential impact of decisions made on IT development projects.

However, responsible OIT officials stated that current VA financial systems only allow them to track obligations for each project, but not actual costs incurred. OIT has not developed a standard methodology PMs can use to overcome this problem and ensure compliance with the traceability requirements in the *PMAS Guide*. Without accurate expenditure data, OIT cannot effectively compare planned against actual performance to determine whether VA is meeting OMB's mandate to achieve 90 percent of its cost goals for IT development projects.

*Lack of Detailed
Guidance*

In June 2009, OIT and project personnel were required to implement PMAS before detailed guidance was provided on the processes, deliverables, and management controls it would entail. Initially, on July 9, 2009, OIT published *PMAS Instructions for Project Managers*, which targeted the initial projects managed by PMAS—45 projects paused by the Assistant Secretary for Information and Technology as a result of an OIT analysis of VA's IT projects. The intent of this document was to inform PMs of the steps they needed to take to start managing paused projects, along with the actions needed to gain approval to restart the projects under PMAS.

However, the document fell short in several areas. For example, it did not provide a description of PMAS and included no discussion of PMAS processes because they had not yet been developed by OIT. It also did not explain how to manage a project under PMAS, how OIT would monitor projects, and the roles and responsibilities for personnel responsible for managing and monitoring projects.

As previously stated, the *PMAS Guide* was ultimately published in March 2010, approximately 9 months after PMAS was announced. The *PMAS Guide* provided an overview of PMAS, described the PMAS processes, and defined critical terms such as incremental deliverables. It identified management controls for monitoring performance and ensuring that PMAS procedures were followed. It also explained management and oversight roles and responsibilities. OIT used the *PMAS Guide* to introduce

new PMAS concepts and inject more accountability and discipline into the new methodology. For example, the *PMAS Guide* established that three failures (strikes) to meet scheduled delivery of functionality would result in a project being paused. Nonetheless, this guide, and the revision in September 2010, still did not provide all of the step-by-step instructions needed on how to comply with PMAS requirements.

The lack of detailed guidance resulted in confusion on issues such as what constituted an acceptable deliverable to meet the 6-month delivery requirement. For example, the PM for the Veterans Health Information and Technology Architecture Imaging Storage project originally planned only one incremental delivery—national implementation of a patch to provide functionality needed to maintain system integrity. The PM scheduled the incremental delivery merely to meet the PMAS 6-month delivery requirement. He also scheduled it without a complete understanding of what constituted an acceptable PMAS deliverable and a project plan to facilitate meeting the delivery schedule. The PM was unaware that testing of the patch, which should have occurred before patch implementation, constituted an acceptable PMAS incremental delivery. After recognizing his error, the PM revised the project delivery schedule so that the testing of the patch would comprise the first deliverable, and national deployment of the patch would comprise the second.

The project has been in active state since October 2009; however, the first incremental delivery—testing of the software patch—was not delivered until November 8, 2010. Delivery 2, national implementation of the patch, was originally scheduled to be completed on March 31, 2010. OIT officials once more extended the second incremental delivery 14 months by approving a revised software patch implementation date of June 3, 2011, which the project met. Because of the lack of initial PMAS oversight, OIT allowed the project to remain in an active state without penalty even though it was not producing incremental deliveries of functionality every 6 months as required.

To further complicate matters, OIT has not developed written processes and procedures that describe how management controls, such as independent reviews, budget traceability, and planning reviews, will be implemented; what they are to accomplish; and who is responsible for carrying out the tasks associated with the management controls. Although the *PMAS Guide* provides general guidance in these areas, it does not provide sufficient detailed instructions to effectively implement these needed management controls.

For example, the *PMAS Guide* states that OIT will monitor a project's progress by comparing actual performance data against the project's cost and schedule baseline. Although OIT officials acknowledged that VA's financial systems do not facilitate the tracking of costs for each project, they have not developed standard written procedures that tell PMs how to accumulate and

track project costs and how to develop an audit trail of the costs for independent verification. Similarly, the *PMAS Guide* does not elaborate on essential details such as the frequency and scope of compliance, outcome, and planning reviews; the methodology for the reviews; consequences of unfavorable reviews; and reporting requirements. Senior OIT officials agreed that they needed to develop detailed policies and procedures to guide OIT and project personnel through these PMAS processes.

According to the *PMAS Guide*, PMAS processes were designed to enable leadership and project management to clearly see cost, schedule, and quality status. However, OIT efforts to date have focused primarily on whether projects are meeting scheduled incremental deliveries of functionality. Until OIT fully defines and documents the processes and procedures for carrying out the management controls mentioned above, they will not achieve the intended accountability and discipline needed to make PMAS more successful.

Conclusion

OIT has an opportunity to set the Federal standard for IT project management. However, the current PMAS framework does not provide a sound basis for future success. A great deal of work remains before PMAS can be considered completely established and fully operational. Currently, the PMAS Dashboard's usefulness as a project management and performance monitoring tool is limited. The information maintained on the dashboard is not consistently reliable and does not provide the project performance history needed to help senior VA leaders make informed project decisions. Further, designating less than two full-time personnel to implement and manage PMAS to monitor VA's entire portfolio of IT development projects has proven a questionable approach, as evidenced by the finding in this report.

The initial steps accomplished to implement PMAS have been critical to improve VA's IT project management and oversight. However, it remains too early to assess PMAS' impact—most steps have recently become operational or are not fully implemented. Additionally, only recently have IT projects been required to comply and incrementally deliver under PMAS—most have gone through only one or two incremental delivery milestones since PMAS' inception in June 2009. Thus, the overall effectiveness of PMAS in improving VA's IT development project success cannot be clearly established.

OIT's ability to complete PMAS implementation in an effective and timely manner would be significantly aided by a well thought out implementation plan, with details on the controls needed for viable PMAS oversight and IT project accountability, as well as additional program leadership and staff resources. Putting these foundational elements in place to provide stronger visibility and oversight of VA's portfolio of IT development projects will

help reduce the risk of cost overruns, schedule slippages, and poor performance.

- Recommendations**
1. We recommended the Assistant Secretary for Information and Technology develop a detailed plan of the steps needed to complete implementation of the Project Management Accountability System program, including milestones for deliverables, performance measures, and a methodology for tracking progress.
 2. We recommended the Assistant Secretary for Information and Technology assess Project Management Accountability System resources to ensure the Office of Information and Technology has adequate leadership and staff assigned to complete both implementation and execution of the Project Management Accountability System.
 3. We recommended the Assistant Secretary for Information and Technology clearly define the roles and responsibilities for executing the Project Management Accountability System and establish a central office or group of individuals responsible for fully implementing and executing the Project Management Accountability System.
 4. We recommended the Assistant Secretary for Information and Technology modify the Project Management Accountability System Dashboard to maintain original baseline data and issue guidance to ensure project performance is measured against both the original and current baselines.
 5. We recommended the Assistant Secretary for Information and Technology designate personnel and provide them with detailed written procedures to perform periodic independent reviews of the Project Management Accountability System Dashboard to ensure data reliability and completeness.
 6. We recommended the Assistant Secretary for Information and Technology designate personnel and provide them with detailed written instructions to perform Project Management Accountability System planning, outcome, and compliance reviews and track project budgets and costs.

**Management
Comments and
OIG Response**

The Assistant Secretary agreed with our findings and recommendations. OIT will create an implementation plan within 60 days of the report issuance date addressing in detail how it will implement each recommendation in the audit report. We will assess these actions when we receive the details and follow up on the implementation of corrective actions. Appendix D contains the full text of the comments received from the Assistant Secretary for Information and Technology.

Appendix A Background

Overview of PMAS

The Secretary of Veterans Affairs recently identified IT as a critical resource for achieving the President's vision of a 21st Century Department of Veterans Affairs. In particular, the Secretary recognized the need for VA to leverage the power of IT to accelerate and modernize the delivery of benefits and services to our nation's veterans.

However, VA historically has struggled to manage IT development projects that successfully deliver desired results within cost, schedule, and performance objectives. To improve, OIT established PMAS in 2009, signifying a substantial change in the way VA plans and manages IT development projects. PMAS was designed to reduce risks; to institute monitoring, controlling, and reporting discipline; and to establish accountability. It became mandatory that VA personnel use PMAS to plan and manage all IT development projects that introduce new functionality or enhance existing capabilities within current VA systems.

Concurrent with PMAS's implementation, OIT's Transformation 21 IT Work Group conducted an initial analysis of 282 of VA's IT development projects to support the President's vision for creating a 21st Century VA. As a result of the Work Group's analysis, the Assistant Secretary for Information and Technology paused 45 of the projects because they were either 1 year behind schedule or 50 percent over their baseline budgets. These 45 projects were the first projects to be re-planned and managed under PMAS and were required to meet the new incremental delivery requirements. OIT ultimately canceled 12 of the 45 projects, while it managed the 33 remaining projects using PMAS.

PMAS Principles

When fully implemented, PMAS will be a performance-based management discipline that provides frequent delivery of deployable IT system functionality—tested and accepted by customers—within established schedule and cost criteria. Throughout project execution, customers will certify delivery of IT functionality at intervals of 6 months or less. Three failures to meet a delivery of functionality will result in a project being paused or suspended. Once a project has been paused, no further development activity can occur until it has been evaluated for cause, re-planned, and approved to restart. Alternatively, a paused project might be terminated. The Assistant Secretary for Information and Technology or his designee is responsible for approving project restarts.

Roles and Responsibilities

The Assistant Secretary for Information and Technology is responsible for monitoring all IT development projects operating under PMAS. PMs are primarily responsible for managing IT development projects to deliver expected outcomes on time and within budget. Accordingly, under PMAS,

they are responsible for ensuring that their projects deliver IT functionality in increments of 6 months or less and that their projects comply with cost and schedule milestones. PMs also work as part of IPTs that serve as core multidisciplinary management groups responsible for the success of their projects. The PM and the business sponsor co-chair the IPT. IPTs typically include team members from the Offices of Acquisition and Logistics and General Counsel, in addition to various IT personnel.

Appendix B Scope and Methodology

Scope

We conducted our audit work from July 2010 through June 2011. We focused on evaluating the actions OIT has taken to plan and implement PMAS and the progress it has made in this undertaking. We also evaluated whether OIT has established management controls to ensure that project managers deliver IT development projects that meet cost, schedule, and performance objectives. As of May 2011, OIT was managing 119 active IT development projects using PMAS. An additional 60 projects were in the planning state, while 41 projects were classified as new starts.

Methodology

We reviewed OMB and VA guidance related to effective management and oversight of IT development projects. We also reviewed PMAS guidance developed by OIT to provide criteria for our audit. To evaluate whether OIT had effectively planned the implementation of PMAS, we interviewed the Assistant Secretary for Information and Technology and other senior OIT officials, as well as PMAS and project management officials. In addition, we interviewed senior-level acquisition officials and the contracting officers for several IT development projects. We also examined the steps OIT had taken to implement PMAS.

To evaluate whether OIT has established the management controls needed to ensure project managers deliver projects that meet cost, schedule, and performance objectives, we interviewed senior OIT leaders and analyzed PMAS guidance and processes. We interviewed PMs and customers and reviewed project documentation to analyze whether internal controls are effective and whether PMAS is operating as intended. We also selected and analyzed IT development case studies to evaluate whether PMs and OIT personnel are complying with PMAS requirements.

Reliability of Computer- Processed Data

In our effort to determine whether OIT effectively planned and implemented PMAS, we reviewed the extent and quality of management controls over the data contained in the PMAS Dashboard. We interviewed OIT and project management officials and collected and reviewed documentation to gain an understanding of the existing management controls. We evaluated whether the controls in place were adequate to provide reasonable assurance that the data in the dashboard were valid and reliable for our intended use. We also reviewed the data in the dashboard for selected projects to determine whether the data provided a valid and reliable representation of project status.

We concluded that the data were not sufficiently reliable to determine the actual performance of IT development projects. As a result, we developed recommendations for improving management controls to ensure the reliability of data included in the PMAS Dashboard.

**Compliance
With
Government
Audit
Standards**

Our assessment of internal controls focused on those controls relating to our audit objectives. We conducted this performance audit in accordance with generally accepted government auditing standards. These 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 objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

Appendix C Excerpt of OIT's PMAS Dashboard Active Projects Report

Department of Veterans Affairs OIT PMAS Dashboard Active Projects Report

Note: All indicator fields on this report are based on subjective manual input and not based on calculations derived from the project plans entered into Project Server

| Major Initiative | Project Name | Sponsor | Strikes | Overall | Rqmts | Sched Curr | Sched Prev | Cost Curr | Cost Prev | Cost Total | Acq Plan | Prime Contractor |
|------------------|--|---------|---------|---------|-------|------------|------------|-----------|-----------|------------|----------|----------------------------|
| 6 - VRM | Veteran On Line Application (VOA) Information Technology | VHA | | G | Y | G | NA | G | NA | G | G | Systems Made Simple |
| 6 - VRM | Veterans Financial Applications (VFA) | VBA | | R | G | R | NA | G | NA | G | G | Systems Made Simple |
| 6 - VRM | Veterans Online Application (VONAPP) II | VBA | | G | Y | G | NA | G | NA | G | G | SPAWAR |
| 6 - VRM | VIERS | VBA | | G | O | G | NA | G | NA | G | G | -Contractor TBD- |
| 7 - NHCM | Document and Ancillary Imaging | VHA | | G | G | G | G | G | G | G | G | Patriot Tech - Harris Corp |
| 7 - NHCM | Home TeleHealth (HT) Capabilities Enhancements | VHA | | G | G | G | G | G | G | G | G | HP |
| 7 - NHCM | MHV - Online Viewing PHR | VHA | | G | R | G | NA | G | NA | G | G | Sparta |

LEGENDS

| OVERALL PROJECT RATING | |
|------------------------|------------------|
| O | Not reported |
| G | Project on track |
| Y | Project slipping |
| R | Project failing |

| SCHEDULE-CURRENT INCREMENT | |
|----------------------------|------------------------|
| O | Not reported |
| G | Less than 30 days |
| Y | Between 30 and 44 days |
| R | Greater than 44 days |

| COST-CURRENT INCREMENT | |
|------------------------|---------------------|
| O | Not reported |
| G | Less than 10% |
| Y | Between 10% and 24% |
| R | Greater than 24% |

| COST - PROJECT | |
|----------------|---------------------|
| O | Not reported |
| G | Less than 10% |
| Y | Between 10% and 24% |
| R | Greater than 24% |

| SCHEDULE-PREVIOUS INCREMENT | |
|-----------------------------|------------------------|
| O | Not reported |
| G | Less than 30 days |
| Y | Between 30 and 44 days |
| R | Greater than 44 days |

| COST-PREVIOUS INCREMENT | |
|-------------------------|---------------------|
| O | Not reported |
| G | Less than 10% |
| Y | Between 10% and 24% |
| R | Greater than 24% |

| REQUIREMENTS/BUS PROCESS | |
|--------------------------|-----------------------|
| O | Not reported |
| G | Both documents signed |
| Y | One document signed |
| R | Neither document |

| ACQUISITION PLAN | |
|------------------|---------------------------|
| O | Not reported |
| G | Awards on track |
| Y | Potential schedule delays |
| R | Schedule delays |

Appendix D Assistant Secretary for Information and Technology Comments

**Department of
Veterans Affairs**

Memorandum

Date: August 1, 2011

From: Assistant Secretary for Information and Technology (005)

Subj: Draft Report-Audit of VA's Implementation of the Project Management Accountability System; Project No. 2010-03162-R6-0328

To: Assistant Inspector General for Audits and Evaluations (52)

Thank you for the opportunity to review the subject Office of Inspector General (OIG) draft report. I appreciate the work that your staff has done, and the contribution that their work and this report make to the continued success of the PMAS program. The Office of Information and Technology concurs with the OIG's findings and submits the attached written comments for each of the recommendations.

As you are aware, PMAS has been a key component in our ability to dramatically improve the results of VA's IT investments over the last two years. At the same time, PMAS has been a constantly evolving program itself, as we sought to establish policies and disciplines that were both effective and pragmatic. In June of 2009, PMAS was solely a vision and a set of principles. Since that time, through the contributions of hundreds of VA staff, PMAS has both become a real program itself. I has been the primary driver in the renovation of an IT organization of over 2, 500 people, and has become the accepted "way we work" in our Product Development organization. Most importantly, the implementation of PMAS has dramatically reduced the number of failing IT projects at VA, and saved substantial taxpayer dollars. We appreciate your assistance in helping define how PMAS can be improved.

If you have any questions, contact me at (202) 461-6910, or have a member of your staff contact Lorraine Landfried at (202) 632-4347.


Roger W. Baker
Attachments

OIG DRAFT REPORT

Audit of the Project Management Accountability System Implementation

(Project No. 2010-03162-R6-0328)

OIG Recommendations

1. We recommend the Assistant Secretary for Information and Technology develop a detailed plan of the steps needed to complete implementation of the Project Management Accountability System program, including milestones for deliverables, performance measures, and a methodology for tracking progress.

CONCUR. The Office of Information and Technology is preparing an implementation plan to address the audit recommendations. The implementation plan will address in detail how OIT will implement each OIG recommendation in the audit report.

TARGET COMPLETION DATE: The plan will be completed 60 days after the final report issuance date.

2. We recommend the Assistant Secretary for Information and Technology assess Project Management Accountability System resources to ensure the Office of Information and Technology has adequate leadership and staff assigned to complete both implementation and execution of the Project Management Accountability System.

CONCUR. The Office of Information and Technology is preparing an implementation plan to address the audit recommendations. The implementation plan will address in detail how OIT will implement each OIG recommendation in the audit report.

TARGET COMPLETION DATE: The plan will be completed 60 days after the final report issuance date.

3. We recommend the Assistant Secretary for Information and Technology clearly define the roles and responsibilities for executing the Project Management Accountability System and establish a central office or group of individuals responsible for fully implementing and executing the Project Management Accountability System.

CONCUR. The Office of Information and Technology is preparing an implementation plan to address the audit recommendations. The implementation plan will address in detail how OIT will implement each OIG recommendation in the audit report.

TARGET COMPLETION DATE: The plan will be completed 60 days after the final report issuance date.

4. We recommend the Assistant Secretary for Information and Technology modify the Project Management Accountability System Dashboard to maintain original baseline data

and issue guidance to ensure project performance is measured against both the original and current baselines.

CONCUR. The Office of Information and Technology is preparing an implementation plan to address the audit recommendations. The implementation plan will address in detail how OIT will implement each OIG recommendation in the audit report.

TARGET COMPLETION DATE: The plan will be completed 60 days after the final report issuance date.

5. We recommend the Assistant Secretary for Information and Technology designate personnel and provide them with detailed written procedures to perform periodic independent reviews of the Project Management Accountability System Dashboard to ensure data reliability and completeness.

CONCUR. The Office of Information and Technology is preparing an implementation plan to address the audit recommendations. The implementation plan will address in detail how OIT will implement each OIG recommendation in the audit report.

TARGET COMPLETION DATE: The plan will be completed 60 days after the final report issuance date.

6. We recommend the Assistant Secretary for Information and Technology designate personnel and provide them with detailed written instructions to perform Project Management Accountability System planning, outcome, and compliance reviews and track project budgets and costs.

CONCUR. The Office of Information and Technology is preparing an implementation plan to address the audit recommendations. The implementation plan will address in detail how OIT will implement each OIG recommendation in the audit report.

TARGET COMPLETION DATE: The plan will be completed 60 days after the final report issuance date.

Appendix E Office of Inspector General Contact and Staff Acknowledgements

| | |
|-------------|---|
| OIG Contact | For more information about this report, please contact the Office of Inspector General at (202) 461-4720. |
|-------------|---|

| | |
|-----------------|---|
| Acknowledgments | Mario M. Carbone, Director Clenes Duhon Michael Jacobs Jehri Lawson Theresa Lospinoso Kristin Nichols Charanpreet Singh |
|-----------------|---|

Appendix F Report Distribution

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