Department of Veterans Affairs

*Review of Alleged
Improper Program Management
within the FLITE
Strategic Asset Management
Pilot Project*

**September 7, 2010
10-01374-237**

ACRONYMS AND ABBREVIATIONS

CoreFLS	Core Financial and Logistics System
COTR	Contracting Officer's Technical Representative
FLITE	Financial and Logistics Integrated Technology Enterprise
ICD	Interface Control Document
SAM	Strategic Asset Management
VistA	Veterans Health Information Systems and Technology Architecture

To Report Suspected Wrongdoing in VA Programs and Operations:

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Report Highlights: Review of Alleged Improper Program Management within the FLITE Strategic Asset Management Pilot Project

Why We Did This Review

We reviewed allegations of improper program management within the Strategic Asset Management (SAM) pilot project of the Financial and Logistics Integrated Technology Enterprises (FLITE) program. The complainant alleged:

- The FLITE program managers did not adequately manage the SAM contractor's performance.

- The SAM Project Manager pressured VA personnel to complete the contractor's deliverables.

- The FLITE program managers did not ensure that certain elements considered necessary for a successful software development effort were included in the FLITE program.

What We Found

We substantiated that FLITE program managers needed to improve their overall management of the SAM pilot project. FLITE program managers did not adequately monitor the contractor's performance and ensure that the Office of Information and Technology assigned legacy system programmers to the project in a timely manner. They also did not develop written procedures that clearly defined roles and responsibilities related to interface development for contractor and VA personnel. In addition, FLITE program managers were unable to successfully foster a collaborative working environment between the contractor and VA personnel. We did not substantiate that the SAM Project Manager pressured VA personnel to complete the contractor's deliverables. Finally, we substantiated in part that FLITE program managers did not ensure certain elements considered necessary for a successful software development effort, such as "to be" and architectural models were included in the FLITE program.

What We Recommended

We recommended the Assistant Secretary for Information and Technology strengthen management controls to improve the SAM pilot, beta, and national deployment projects.

Agency Comments

The Assistant Secretary for Information and Technology agreed with our findings and recommendations and plans to complete corrective actions by February 2011. We will monitor implementation of the planned actions.

(original signed by:)

BELINDA J FINN
Assistant Inspector General
for Audits and Evaluations

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INTRODUCTION

Objective

The OIG conducted a review to determine the validity of allegations regarding improper program management within the FLITE SAM pilot project. Our objective was to determine if the allegations had merit.

Hotline Complaint

On January 5, 2010, a complainant contacted the VA OIG Hotline regarding issues related to the development of the SAM pilot project. SAM will consolidate asset and inventory management, real property management, information technology asset management, work order, and project management functions currently performed by multiple legacy systems into a single system. The contract for the SAM pilot project requires the contractor to develop and deploy the SAM solution at the VA Medical Center, the VA Regional Office, and Wood National Cemetery, which are all co-located at VA Medical Center Milwaukee, WI. (Appendix A provides additional background information on the FLITE program and the SAM pilot project.) The complainant alleged:

- The FLITE program managers did not adequately manage contractor performance.

- The SAM Project Manager pressured VA personnel to complete deliverables for the contractor.

- The FLITE program managers did not ensure that certain elements necessary for a successful software development effort were included in the FLITE program.

Related OIG Reports

Concurrent with this hotline report, the OIG released a related report (*Audit of the FLITE Strategic Asset Management Pilot Project,* Report No. 09-03861-238, September 2010). In this audit, we evaluated whether program managers effectively managed the SAM pilot project to ensure: (1) the achievement of cost, schedule, and performance goals; (2) the accurate, complete, and timely completion of deliverables; (3) the proper management of risks; and (4) effective organizational change management.

In addition, we previously reported that FLITE program managers did not fully incorporate Core Financial and Logistics System (CoreFLS) lessons learned into the development of the FLITE program (*Audit of FLITE Program Management's Implementation of Lessons Learned*, Report No. 09-01467-216, September 2009). As a result, deficiencies similar to those found during CoreFLS have also occurred in the FLITE program.

RESULTS AND RECOMMENDATIONS

Allegation 1   FLITE Program Managers Did Not Adequately Manage Contractor Performance

We substantiated the allegation that FLITE program managers did not adequately manage General Dynamics Information Technology's (General Dynamics) performance, as exemplified by significant delays in obtaining contractor deliverables. For example, as of April 5, 2010, VA had accepted only 2 of 12 formal deliverables submitted by General Dynamics. According to General Dynamics's initial project schedule, FLITE program managers should have accepted 8 of the 12 formal deliverables by January 11, 2010. Among the contractor's deliverables, the SAM Project Management Plan was more than 6 months late. The Project Management Plan was originally due on May 22, 2009; however, the first version was not delivered until June 19, 2009, and FLITE program managers did not accept it as complete and accurate until December 9, 2009.   Similarly, General Dynamics's submission of the SAM Training Plan was due by January 11, 2010. It was first delivered on December 31, 2009, and it was not accepted as complete and accurate until March 22, 2010.

In addition to inadequately managing General Dynamics's performance, the FLITE program managers needed to improve their overall management of the SAM pilot project, which contributed significantly to the lack of progress made on the project.   For example, FLITE program managers did not accomplish the following:

- *Adequate monitoring of General Dynamics's performance.* Our report, *Audit of the FLITE Strategic Asset Management Pilot Project,* provides detailed information on this issue. In summary, we reported that the SAM pilot project contract included a detailed Quality Assurance Surveillance Plan, which identified the contracting officer's technical representative (COTR) and the contracting officer's surveillance responsibilities and duties. However, the COTR and contracting officer did not adhere to the procedures described in the plan for performing and formally documenting contractor surveillance. For example, the COTR and the contracting officer did not prepare written quarterly assessments of the contractor's performance to let General Dynamics know whether its performance for the quarter was exceptional, satisfactory, or unsatisfactory. The rating is based on an evaluation of the tasks the contractor needed to complete during the quarter, as specified in the project schedule, and whether the contractor met the performance standards contained in the Quality Assurance Surveillance Plan.

- *Timely assignment of programmers.* Our report, *Audit of the FLITE Strategic Asset Management Pilot Project*, provides detailed information on this issue. In summary, we reported that FLITE program managers needed to ensure legacy system programmers (VA personnel critical to the integration efforts and the SAM pilot project's success) were assigned in a timely manner. Veterans Health Information Systems and Technology Architecture (VistA) Applications Development Team (VistA developers) personnel were not dedicated to the SAM pilot project until 6 months after the contract was awarded because they were working on another project. Although, FLITE program managers brought this concern to the attention of the FLITE Oversight Board on April 15, 2009, the initial meeting to discuss FLITE legacy resource needs between the Deputy Secretary of VA, the Office of Information and Technology, and FLITE program managers did not occur until September 1, 2009. Further, VA's legacy system programmers did not become fully dedicated to the SAM pilot project until late October 2009.

- *Development of written guidance.* FLITE program managers did not develop written procedures that clearly defined the roles and responsibilities of General Dynamics and VA for developing interface control documents (ICDs). Instead, it was left up to General Dynamics and the VistA developers to work out the division of responsibility themselves.

- *Foster successful collaboration.* FLITE program managers did not foster a collaborative working environment between General Dynamics and VA personnel as needed to help ensure project success.

Missing Written Guidance

FLITE program managers did not develop written procedures that clearly defined General Dynamics and VA legacy system programmers' roles and responsibilities regarding the development of ICDs or provide timely guidance to the contractor. The statement of work required General Dynamics to collaborate with VA personnel to develop ICDs and interfaces between VA's legacy systems and Maximo (the SAM commercial off-the-shelf software solution). ICDs are essential design documents used in interface development to ensure that successful communications exist between legacy and new systems.

FLITE program managers also did not provide timely ICD guidance to General Dynamics. For example, FLITE program managers provided an ICD template to General Dynamics in May 2009, which the contractor used to develop the ICDs for the SAM pilot project. In September 2009, FLITE program managers gave instructions to General Dynamics requiring the use of a different ICD template. According to General Dynamics, the two

templates varied significantly, which caused the contractor to make extensive revisions to the ICDs being developed.

In September 2009, the VistA developers created a spreadsheet that explained their interpretation of General Dynamics and the VistA developers' roles and responsibilities in the ICD development process. The spreadsheet addressed roles and responsibilities based on the task order's statement of work requirements. However, VistA developers, instead of the FLITE program managers who have overarching responsibility for the program, presented it to General Dynamics. Further, the VistA developers presented the roles and responsibilities to General Dynamics approximately 5 months after VA awarded the task order.

The lack of written roles and responsibilities and clear and timely guidance created inefficiencies and magnified the issues associated with the development of the ICDs. Both General Dynamics and the VistA developers could have been more productive if FLITE program managers had provided written roles and responsibilities and ICD development guidance along with an approved ICD template at the beginning of the ICD development effort.

Improved Collaboration Needed

The success of the SAM pilot project depends heavily on collaboration between General Dynamics and VA personnel. The contractor needed to work closely with the VistA developers who have extensive knowledge of VA's legacy systems to develop interfaces between those systems and Maximo. However, FLITE program managers were unable to successfully foster an effective working environment between both parties. In addition, FLITE program managers needed to ensure that other VA support staff provided more timely and productive feedback to the contractor by actively participating earlier in the development process.

More Onsite Collaboration Needed

General Dynamics, FLITE program managers, and SAM project managers believed that more onsite collaboration between the contractor and the VistA developers would significantly benefit the SAM pilot project. According to General Dynamics, in an ideal situation, the VistA developers would maintain a presence at the pilot site by having team members onsite to work collaboratively to address technical issues or questions that needed to be answered quickly to help keep the project moving forward.

However, VistA Applications Development Team managers viewed face-to-face meetings as an unreasonable and inefficient use of time that prevented the VistA developers from accomplishing work they were responsible for completing and resulted in schedule delays. In addition, they believed FLITE program managers could do a better job of planning in order to provide the VistA developers located across the country with more reasonable notice of the need to travel. The managers used a FLITE

Exposition meeting held in Milwaukee, WI on March 16-17, 2010, as an example of ineffective planning. In a March 5, 2010, correspondence sent to the FLITE Program Director, the managers stated:

> *The meeting next week in Milwaukee to discuss ITEM/Vendor/Contract functionality is an example of the type of circumstance that raises concern. Yes, the discussion topic for next week has become urgent, however the need to resolve this has been known in excess of three months. There is no reason that the meeting could not have been planned in a manner that would allow reasonable notice to staff that may need to travel.*

The VistA developers did not send a representative to the meeting even though the FLITE Program Director required their attendance.

VistA Applications Development Team managers were concerned with maintaining staff morale and commitment. In order to maintain that commitment, they believed it was necessary to recognize, respect, and support the fact that the VistA developers had lives outside of work. Consequently, the managers asked the FLITE Program Director to ensure they received a 10-day notice of future requirements to travel. Nonetheless, in some cases, even though FLITE program managers provided sufficient advance notice as requested, the VistA developers did not attend the scheduled meetings.

For example, the FLITE program held an All Hands Conference in Austin, TX on April 14, 2010. The meeting had been planned since January 2010 and the FLITE leadership notified all participants at that time of the need to attend. The FLITE Program Director had arranged for the Deputy Secretary of VA to recognize the Acting Director of the Development Team at the meeting for his contributions in bridging the ICD gap for the SAM pilot project and working diligently with the team to move the ICDs forward. On April 12, 2010, the FLITE Program Director learned that the Acting Director of the Development Team was not attending the conference due to a significant amount of travel scheduled for the last week of April and 3 weeks in May. The Acting Director did not notify the FLITE Program Director of his intention to miss the conference or arrange to send a delegate in his absence.

The lack of effective collaboration, in addition to unclear guidance as previously discussed, resulted in significant ICD completion delays. The ICD development process has both informal and formal review cycles. The VistA developers conduct informal technical reviews of the ICDs while General Dynamics is developing them. They input the results of their technical reviews into work product review worksheets and give them to

General Dynamics so that the contractor can resolve the issues as they are identified. The formal review process begins when General Dynamics submits an ICD to VA for acceptance. FLITE program managers designate reviewers, such as subject matter experts, the document owner, Systems Quality Assurance Service personnel, and program management support contractor personnel. FLITE personnel then log the formal review comments into a comment resolution matrix and submit it to General Dynamics for resolution.

General Dynamics estimated that ICD development should take no more than 2 months but it has taken significantly longer. We reviewed the development and review process for the Purchase Order and Financial Management System ICDs and found:

- The Purchase Order ICD was submitted three times for technical review between August 2009 and November 2009 and was formally submitted to VA for acceptance in January 2010. Interviews with the VistA developers disclosed, and we confirmed, that General Dynamics only devoted minimal time to meeting with the VistA developers up until the week prior to the contractor's formal submission of the ICD. In addition, because General Dynamics did not address comments included in a work product review worksheet for over a month, the VistA developers had to include the same comments in the next work product review worksheet. The Purchase Order ICD also went through two formal reviews. As a result, development and approval of the Purchase Order ICD took 7 months.

- General Dynamics submitted the Financial Management System ICD to FLITE program managers for formal review on four different occasions. The time limit for formal review is 10 days, yet it took FLITE program managers 17 days to respond to General Dynamics's first submission and 18 days to respond to its second submission. General Dynamics originally submitted the Financial Management System ICD in early January 2010, and FLITE program managers finally accepted it in late March 2010. As a result, development and approval of the Financial Management System ICD required 7 months.

Many of the issues surrounding the development of these ICDs could have been addressed more efficiently and effectively had General Dynamics and the VistA developers spent more time working side-by-side in a collaborative environment instead of in an environment that encouraged passing documents back and forth. All parties needed to coordinate conflicting schedules, plan adequately, and minimize employee disruptions while still achieving a workable level of needed onsite collaboration. This was especially important in the SAM pilot project where General Dynamics

was providing the SAM solution under a cost-reimbursable task order. Any delays in product delivery meant increased costs for VA.

Better VA Support Staff Participation Warranted

FLITE program managers did not ensure that other VA support staff responsible for formally reviewing ICD documents actively collaborated with General Dynamics during the early stages of ICD development. By comparing conference call minutes to the comment resolution matrix, we identified VA personnel who submitted comments during the formal review of the Financial Management System ICD, but did not attend Financial Management System ICD conference calls. These personnel included an accounting expert, a program management support contractor, and a Financial Management System service office representative who provided 31, 52, and 58 comments respectively. According to General Dynamics, the Financial Management System service office representative's comments in particular provided valuable information that facilitated the completion of the ICD. FLITE program managers could have reduced the time needed to develop, deliver, and modify ICDs by ensuring that VA comments were considered earlier in the development process through a more collaborative working relationship.

Corrective Actions Taken

FLITE program managers have taken actions to improve collaboration between VA and General Dynamics. For example, in February 2010, FLITE program managers created a Red Team to provide a stronger program management presence and to build a more collaborative working relationship between VA and General Dynamics.[1] FLITE program managers also established the Red Team to enhance effectiveness in making program management decisions impacting VA and the contractor. General Dynamics, FLITE program and SAM project managers, and the VistA developers agreed that collaboration between General Dynamics and the VistA developers improved after implementation of the Red Team. However, they all also agreed that collaboration still needed to improve.

In addition, the SAM Project Manager and the FLITE Document Management Team have taken steps to strengthen SAM document review and acceptance procedures. The new procedures require that:

- General Dynamics, VA document owners, and reviewers meet before work begins to set expectations, make decisions on format, set review dates, and share information and items such as templates.

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[1]The Red Team was comprised of FLITE, Integrated Financial Accounting System, and SAM project staff who participated in ICD meetings to provide guidance and resolve issues that arose between the ICD participants.

- All reviewers are invited to working meetings and informal reviews as appropriate.

- Once an artifact or deliverable is submitted to VA, General Dynamics and the VA document owner conduct a meeting to collect formal comments on the document.

- A follow-up meeting is held approximately 10 business days after the first review meeting to walk through comments from the first meeting and review how comments are addressed. The goal is to be able to recommend document acceptance by resolving all comments by the end of this meeting.

Because FLITE program managers implemented these procedures after we completed our review, we did not confirm whether they improved the process.

Conclusion We substantiated the allegation that FLITE program managers did not adequately manage contractor performance. Moreover, we determined that FLITE program managers needed to improve their management of the entire SAM pilot project. A collaborative environment between General Dynamics and VA staff was critical to ensure not only the success of the SAM pilot project, but also the SAM project. Senior VA leaders were ultimately responsible for and needed to ensure that all parties participating in the SAM pilot project were actively engaged and working together during all stages of the system development process. Although FLITE program managers improved collaboration between General Dynamics and VA staff and took steps to improve document review and acceptance procedures, more work needed to be done.

Recommendations 1. We recommended the Assistant Secretary for Information and Technology establish mechanisms to ensure all VA staff designated to formally review artifacts or deliverables submit comments during predefined intervals in the development process and to ensure proper oversight of the contractor's actions to resolve comments timely.

2. We recommended the Assistant Secretary for Information and Technology develop and implement procedures to ensure needed collaboration occurs between VA personnel and future contractors.

3. We recommended the Assistant Secretary for Information and Technology direct key team members to attend meetings, conferences, and work sessions in person.

Management Comments and OIG Response

The Assistant Secretary for Information and Technology agreed with our finding and recommendations and provided acceptable implementation plans. The Assistant Secretary stated that VA would conduct a review session with all SAM pilot project personnel to ensure that they understand and follow the defined processes and procedures for deliverable review and acceptance by August 31, 2010. The Assistant Secretary developed a Statement of Expectations detailing VA and contractor responsibilities with regard to collaboration. The Statement of Expectations will be incorporated in all future contracts and reviewed during the kickoff meeting for each IT development project. The Assistant Secretary stated that VA personnel will attend meetings, conferences, and work sessions in person when warranted by project management. At other times, VA personnel will use electronic means such as teleconferences to achieve greater staff productivity and reduce travel costs. These actions meet the intent of our third recommendation. Appendix B contains the full text of the Assistant Secretary's comments.

Allegation 2   The SAM Project Manager Pressured VA Personnel to Complete Deliverables for the Contractor

We did not substantiate the allegation that the SAM Project Manager pressured VA personnel (the VistA developers) to complete the contractor's deliverables. According to the complainant, the SAM project manager said in a discussion held in December 2009 that VA senior management's philosophy for the FLITE program was to do whatever it took to make the project successful. The complainant alleged that he was also told that if General Dynamics did not submit deliverables on time, the VistA developers would be held responsible. However, we found no evidence of the SAM Project Manager or other FLITE program managers telling VA personnel they were responsible for completing the contractor's deliverables. The SAM Project Manager confirmed that he told the complainant he expected the VistA developers to collaborate with General Dynamics and to do what it took to get the job done. However, he said that he did not tell them to complete the contractor's deliverables. Both FLITE program and SAM project managers consistently stated that the VistA developers' role was to collaborate with General Dynamics and review the ICDs to ensure they were accurate and complete.

As discussed under Allegation 1, inadequate collaboration between FLITE program managers, the VistA developers, and General Dynamics regarding the ICD development could have led to miscommunication and confusion, ultimately impacting the quality and timeliness of the ICD development efforts. In our opinion, this allegation would not have occurred had FLITE program managers addressed these issues by developing written procedures that clearly defined General Dynamics and the VistA developers' roles and responsibilities related to ICD development.

Allegation 3 Elements Necessary for a Successful Software Development Effort Are Missing

We partially substantiated the allegation that FLITE program managers did not ensure certain elements, normally considered necessary for a successful software development effort, were included in the FLITE program.

Stakeholder Requirements Not Documented

We substantiated the allegation that FLITE program managers did not ensure FLITE officials developed documented stakeholder-accepted requirements for interfaces beyond what was contained in the request for proposal. According to the SAM Project Manager, FLITE personnel included the original requirements for the development of interfaces and business flows in the request for proposal for the SAM pilot project and in the Requirements Traceability Matrix. Both General Dynamics and the VistA developers stated that these requirements lacked the details needed to complete interface designs. The VistA developers explained the requirements should have discussed how functionality currently performed by legacy systems would be apportioned between the SAM and the legacy systems. They should have also addressed how the two systems would work together. Because FLITE program managers did not provide this level of detail at the beginning of the SAM pilot project, General Dynamics and the VistA developers were developing the missing requirements as they proceeded with ICD development. Both General Dynamics and the VistA developers stated that progress would have been faster had the requirements been known at the beginning of the ICD development effort. Knowing the requirements at the beginning of the development effort was paramount because the contractor was being paid on a cost-reimbursable basis.

No "To Be" Model

We partially substantiated the allegation that the SAM project did not have a "to be" model that described how functionality would be apportioned across legacy and target systems. According to FLITE program managers, FLITE program management support staff developed a model that described how systems would integrate across legacy and SAM components. They also developed a model that described how SAM and the Integrated Financial Accounting System would integrate across legacy and FLITE systems. After the initial development effort, FLITE program managers planned for the Integrated Financial Accounting System contractor to further develop and refine FLITE integration. However, given the delays in the Integrated Financial Accounting System contract award, the FLITE Program Director's Office assigned the program management support contractor to further develop, define, and refine systems integration work.

Architectural Model Missing

We partially substantiated the allegation that the FLITE program does not have an architectural model and program level architectural support or

oversight. FLITE program managers stated the program management support contractor was providing system engineering support with a focus on SAM and FLITE-level architectural models. The FLITE Program Director's Office had proposed a Government-led Integration Team to create and manage the FLITE-level architecture. The FLITE Program Director's Office also planned to dedicate a full-time integration architect to the Integration Team. At the time of our review, the program management support contractor was working to identify VA and contractor personnel that the FLITE Program Director's Office could assign to the integration and architectural efforts.

Uniform Functionality Not Maintained

We did not substantiate the allegation that FLITE program managers were not attempting to maintain uniform functionality between the pilot and beta sites. Both FLITE program and SAM project managers focused their efforts on maintaining uniform functionality between the pilot and beta sites. FLITE program managers provided logical reasons for instances where they were not maintaining uniform functionality. For example, FLITE program managers removed Omnicell and Pyxis MedStation interfaces from the SAM pilot project requirements because the medical center at the pilot site did not use those products in its facilities.[2] General Dynamics will nonetheless test these interfaces at three VA medical centers during the beta phase. The complainant elaborated that in some cases, it may not be possible to maintain uniform functionality, but ultimately, it should be the goal when developing an IT system.

No System Migration Plan

We partially substantiated the allegation that the SAM pilot project did not have a system migration plan. According to FLITE program managers, SAM system migration plans were under development. Data migration plans covering some legacy systems were in place but FLITE program officials were still developing others because the SAM pilot project was in a pre-production environment. FLITE program officials finalized the SAM Data Migration Plan on March 31, 2009. The Systems Quality Assurance Service, the activity performing Independent Verification and Validation, completed its review of the SAM Data Migration Plan on March 26, 2009.

System Migration Contingency Utilities Missing

We substantiated the allegation that system migration contingency utilities did not exist. According to the complainant, these utilities were discretionary items considered a best practice that FLITE officials should have adopted to test SAM reliability. However, FLITE program managers considered the procurement of such tools premature because the SAM pilot project was not operational at the time of our review. In addition, FLITE program managers stated that without a full end-to-end production

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[2]Omnicell and Pyxis MedStation are automated medication dispensing systems.

environment, they could not yet determine what tools, procedures, or provisions, if any, would prove useful in the event of an actual failure. Thus, FLITE program managers considered the procurement of system migration contingency utilities an inappropriate use of Government funds during this phase of the program.

Infrastructure Stakeholder Support Lacking

We did not substantiate the allegation that the FLITE program lacked support from infrastructure and organizational process stakeholders, such as the VistA Integration Administrator and VistA Interface Engine stakeholders. Work steps were included in the Work Breakdown Structure for the SAM pilot project that required action on the part of the VistA and Health Level 7 administrators. General Dynamics's weekly status reports included dates for the VistA developers, the VistA Administrator, and the Health Level 7 administrator to review the ICDs. In addition, VistA Interface Engine stakeholders participated in the ICD development process and in the formal review of the VistA Interface Engine ICD.

Conclusion

We partially substantiated the allegation that FLITE program managers did not ensure that certain elements normally considered necessary for a successful software development effort were included in the FLITE program. FLITE program managers were developing and refining requirements missing for interface development, "to be" models, the FLITE architectural model, and system migration plans. However, we did not substantiate the allegations related to maintaining uniform functionality across the pilot and beta sites or a lack of support from infrastructure and organizational process stakeholders.

Recommendations

4. We recommended the Assistant Secretary for Information and Technology establish an oversight mechanism to ensure officials complete documented stakeholder requirements related to interfaces for future efforts prior to the development of the interface control documents.

5. We recommended the Assistant Secretary for Information and Technology assign adequate resources to support completion of all SAM "to be" and architectural models.

6. We recommended the Assistant Secretary for Information and Technology validate that SAM project officials complete system migration plans for the SAM project.

7. We recommended the Assistant Secretary for Information and Technology ensure SAM project officials develop a plan for testing the reliability of SAM once the SAM pilot is

operational and a full end-to-end production environment is in place.

The Assistant Secretary for Information and Technology agreed with our finding and recommendations and provided acceptable implementation plans. The Assistant Secretary stated that OI&T will ensure that fully defined stakeholder requirements are included in all SAM acquisition packages. VA development personnel will be included in all future integrated product teams to ensure requirements are robust enough to develop interface control documents at the point of acquisition release. The Assistant Secretary stated that the Program Management Office support contractor is creating the "to be" model for the SAM pilot. In addition, the acquisition packages for the SAM beta and national deployment phases will require the winning contractors to complete the architectural models as part of the contractors' deliverables. The Assistant Secretary stated that an analysis of several system migration options is underway and that the SAM System Migration Plan will be completed by February 28, 2011. VA is finalizing the operations and maintenance plan for the SAM pilot. The Assistant Secretary expects testing for reliability, which is part of the operations and maintenance plan, to be completed by December 31, 2010.

We will monitor OI&T's implementation of planned actions. Appendix B contains the full text of the Assistant Secretary's comments.

Appendix A   Background, Scope, and Methodology

Overview of VA's FLITE Initiative

In September 2005, VA began working on the FLITE program (a successor to an earlier failed initiative known as the CoreFLS) in order to address some of the material weaknesses in VA's financial management system functionality. FLITE consisted of three components: (1) the Integrated Financial Accounting System, (2) SAM, and (3) the FLITE Data Warehouse.[3]

VA is using a multiphased approach for the SAM project, which a contractor will implement using a commercial off-the-shelf product. SAM implementation will occur with sequenced acquisitions using phased deployment and integration. VA plans to initially implement SAM at a pilot site and subsequently refine and validate it at beta sites before national deployment. The purpose of the pilot phase is to validate the system and associated business processes in a production environment, gain experience in deploying the system, and obtain acceptance from the user community. During the beta phase, VA will perfect rollout capabilities by deploying the system to a limited number of sites that are representative of the full range of VA organizational environments, incorporate lessons learned from the pilot phase, and produce a set of repeatable processes to use during VA-wide deployment.

On April 21, 2009, VA awarded a cost plus fixed fee task order valued at about $8 million against an indefinite delivery/indefinite quantity contract with the National Institutes of Health to General Dynamics for the implementation of the SAM pilot project. General Dynamics will use IBM's Maximo Asset Management solution to consolidate VA's asset, inventory, and work order management processes into a single enterprise system that will be used Department-wide. Maximo allows VA to standardize procurement, inventory, equipment, and work management processes. VA has not awarded additional contracts for the SAM beta sites and national deployment.

On August 17, 2009, during a Program Management Accountability System review, VA's Chief Information Officer gave General Dynamics its first strike for missing the delivery of the SAM pilot project schedule. During this meeting, the Chief Information Officer also cautioned that General Dynamics and FLITE needed to make substantial gains prior to the next Program Management Accountability System milestone review in order to avoid a second strike. Should the project incur three strikes, it could be

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[3]On July 12, 2010, VA made a decision to terminate the FLITE program with the exception of the SAM pilot, beta, and national deployment projects.

paused and re-planned. Additional contracts have been placed on hold until VA demonstrates that it has the SAM pilot project back on track.

Roles and Responsibilities

The SAM Project Manager is responsible for the day-to-day management of the SAM project. Accordingly, the SAM project manager is responsible for managing the project's scope, schedule, and costs. The VistA Applications Development Team provides integration management support for the SAM pilot project and is responsible for working closely with the contractor on the development of interface control documents. The team is aligned under the SAM Project Manager.

Scope and Methodology

To address the allegations made by the complainant, we interviewed the complainant, FLITE program and SAM project management officials, VistA Applications Development Team managers and team members, General Dynamics managers and team members, and SAM pilot project contracting officials. We visited and interviewed officials in Reno, NV; Washington, DC; and at the SAM pilot project site in Milwaukee, WI.

We also analyzed SAM documents related to the allegations, such as the SAM pilot project contract and supporting documentation, the SAM Concept of Operations, the SAM Data Migration Plan, meeting minutes, and documents used to track informal and formal document reviews related to the Purchase Order and the Financial Management System ICDs.

Reliability of Computer-Processed Data

To address the complainant's allegations, we did not rely on computer-processed data. Accordingly, we did not assess the reliability of computer-processed data.

Compliance with Government Audit Standards

We conducted our review from January 2010 through June 2010. Our assessment of internal controls focused on those controls relating to our review objective. We conducted this review in accordance with the Quality Standards for Inspections (dated January 2005) issued by the President's Council on Integrity and Efficiency.

Appendix B   Agency Comments

Department of Veterans Affairs

Memorandum

Date: August 18, 2010

From: Assistant Secretary for Information and Technology (005)

Subj: Draft Report—Review of Alleged Improper Program Management within the FLITE Strategic Asset Management Pilot Project (Project No. 2010-01374-R6-0246)

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

Thank you for the opportunity to review the Office of Inspector General (OIG)

draft report titled, "Review of Alleged Improper Program Management within the

FLITE Strategic Asset Management Pilot Project (Project No. 2010-01374-R6-

0246)". The Office of Information and Technology agrees with OIG's findings

and submits the attached written comments.   If you have any questions, please

contact Carol Macha, FLITE IT Program Manager, at (708) 786-7788.

(original signed by:)

Roger W. Baker

Attachment

Attachment

***Review of Alleged Improper Program Management within the FLITE
Strategic Asset Management Pilot Project***

(Project No. 2010-01374-R6-0246)

1. **We recommend the Assistant Secretary for Information and Technology establish mechanisms to ensure all VA staff designated to formally review artifacts or deliverables submit comments during predefined intervals in the development process and to ensure proper oversight of the contractor's actions to resolve comments timely.**

Concur   **Target Completion Date: August 31, 2010**

Comments: OI&T concurs. The SAM Project (as a follow-on to the FLITE Program) has highly defined processes and procedures for document review and acceptance of deliverables. VA personnel assigned to the SAM Project will ensure all staff, to include contractors, are familiar with and adhere to the prescribed processes and procedures. VA will conduct a review session for all personnel by 31 August 2010.

2. **We recommend the Assistant Secretary for Information and Technology develop and implement procedures to ensure needed collaboration occurs between VA personnel and future contractors.**

Concur   **Target Completion Date: Completed**

Comments: OI&T concurs. The attached Statement of Expectations outlines the roles and responsibilities of VA contractors and staff during the SAM pilot, beta, and national deployment projects. The document summarizes requirements already specified in contracts with SAM contractors; therefore, no additional contracting actions are required. This document will be included in all future contracts and reviewed during the kick off meeting.

3. **We recommend the Assistant Secretary for Information and Technology direct key team members to attend in person.**

Partially Concur   **Target Completion Date: Completed**

Comments: OI&T partially concurs. VA has a strong infrastructure developed to support remotely assigned employees that support the SAM project. When determined appropriate by the SAM project director or designated representatives, key team members will attend meetings, conferences, and work sessions in person. Other meetings, conferences and work sessions may be accomplished via teleconferences,

LiveMeetings ,or other electronic means to achieve greater productivity of staff time and reduce travel costs.

4. We recommend the Assistant Secretary for Information and Technology establish an oversight mechanism to ensure officials complete documented stakeholder requirements related to interfaces for future efforts prior to the development of the interface control documents.

Concur   Target Completion Date: September 30, 2010

Comments: OI&T concurs. We will ensure fully defined stakeholder requirements are included in all SAM acquisition packages. VA development personnel will be included in all future Integrated Product Teams (IPTs), thereby ensuring requirements are robust enough from which to develop Interface Control Documents (ICDs) at the point of acquisition release.

5. We recommend the Assistant Secretary for Information and Technology assign adequate resources to support completion of all SAM "to be" and architectural models.

Concur   Target Completion Date: Completed

Comments: OI&T concurs. For SAM pilot, the "to-be" architecture models are being drafted by the Program Management Office Support (PMOS) contractor for Government approval. For the SAM Beta and National Deployment acquisition, VA will ensure this requirement is included as part of the deliverables. The architectural model for the SAM Pilot is completed. For beta and national deployment, the architectural models will be completed upon official release of the acquisition packages**.**

6. We recommend the Assistant Secretary for Information and Technology validate that SAM project officials complete system migration plans for the SAM project.

Concur   Target Completion Date: February 28, 2011

Comments: OI&T concurs. The SAM Data Migration Plan was completed on March 31, 2009. As a result of the cancellation of the IFAS project, the SAM System Migration strategy is currently being reevaluated. An analysis of several system migration options is currently underway and is anticipated to take approximately six months to complete. The SAM System Migration Plan will be completed by February 28, 2011.

7. We recommend the Assistant Secretary for Information and Technology ensure SAM project officials develop a plan for testing the reliability of SAM once the SAM pilot is operational and a full end-to-end production environment is in place.

Concur   **Target Completion Date: December 31, 2010**

<u>Comments:</u> OI&T concurs. VA is finalizing its operations and maintenance (O&M) plans for the SAM pilot. Testing for reliability will be included in the O&M plan which is projected to be completed by December 31, 2010.

Department of Veterans Affairs (VA) and Contractor Collaboration

Statement of Expectations

Purpose

This purpose of this document is to articulate expectations relative to collaboration activities involving the Department of Veterans Affairs (VA) and contractors during the software development lifecycle (SDL) for the SAM Project. The scope of these expectations encompasses any tangible deliverables throughout the SDL that are collaboratively produced. This includes deliverables that are co-developed and deliverables developed by the contractor that may require input from VA.

This document is intended as general guidance for interaction between contractor(s) and groups within the VA. The guidance set forth in this document will be applied unless contract provisions specify otherwise.

Roles and Responsibilities

VA: It is the responsibility of VA to set the expectations for VA and contractor(s) collaboration on mutually developed deliverables. It is also the responsibility of the VA to abide by the expectations set forth in this document.

Contractor(s): It is the responsibility of the contractor to abide by the expectations set forth in this document.

Work Products

Examples of mutually produced deliverables include, but are not limited to:

- Requirements documents
- Design documents
- Coding
- Testing documentation
- Training materials
- Security Plan

Expectations

a. *Setting Expectations:* Expectations shall be set by VA as outlined in this document. This document should be an attachment to the Statement of Work (SOW) for a contract. These expectations shall be discussed with the contractor(s) at the initial project kick-off meeting. The kick-off meeting agenda for collaborative work will include the following:

- Both VA and contractor(s) will review expectations based on contractual terms.

- Both VA and contractor(s) will identify project points of contact (POCs) to establish methods of communication and facilitate collaboration.
- Both VA and contractor(s) will clearly identify points of authority to provide decisions as well as persons accountable/responsible for ensuring collaborative agreements and schedules are met.
- Clearly define VA's process for issue management, document management, risk management and change management that must be adhered to by contractor(s).
- Regular meetings to review work status will be established.
- Establish VA and contractor(s) expectations about timeframes and schedules. There will be a base-lined integrated schedule that, at a minimum, describes integration points between VA and the contractor(s), all relevant deliverables and dependencies.
- VA will provide and review related templates and formats expected for deliverables (e.g. requirements documents, Interface Control Documents, etc.) and discuss the expected degree of completion of the content in each template.
- To the extent possible, all VA groups that will participate directly with the contractor(s) will be identified and participate in the kick-off meeting. In addition, all relevant VA POCs will be identified for each work stream.
- It should be recognized that different VA groups with which the contractor(s) may interact will have differing levels of interaction, priorities and responsibilities relative to project activities and deliverables, but will be prescribed during the kick off meeting.
- Escalation of issues will follow VA's defined escalation path which includes guidelines and timeframes for escalating issues according to severity and criticality.
- VA and contractor(s) staff are encouraged to use alternative remote communication vehicles including: direct phone conversations, e-mails, Live Meetings, and teleconferences to minimize costs of travel and increase efficiencies where possible.

   b. *VA Standards and Policies:* All contractors must comply with VA standards and policies as applicable to project activities, deliverables and conduct.

- The contractor(s) has the flexibility to implement innovative or preferred software development approaches and methodology, however to the extent that the characteristics of any deliverable are affected by tools, process, and formats the elements contributing to the creation of those deliverables shall conform to the tools, processes, and formats established and approved by the VA at the kick off meeting.
- The contractor(s) does not have to use the same technologies, tools, etc. that are in use by the VA (e.g. software IDE) when the final product is not affected by the use of that tool. Tools or technologies used by the contractor(s) must be specified during the kick off meeting.
- Specifically, the contractor must comply with VA standards and policies for the products produced as well as non-functional criteria established by the VA including security, privacy and confidentiality, Section 508 accessibility, capacity and performance.

c. *Rules of Behavior:* It is expected that VA and contractor(s) shall adhere to the following rules of behavior to maintain a professional environment.

- Respond promptly to inquiries and questions from other parties.
- Proactively provide relevant information/links which may assist VA staff.
- Identify and communicate risks relative to the other party which may assist them in achieving success
- Provide a detailed agenda for contractor(s) or VA regularly scheduled meetings least 24 hours advance of a scheduled meeting and specify desired outcome of the meeting (e.g., decision, information, etc.).
- Ensure that meeting materials are distributed within a reasonable timeframe relative to the complexity of material to facilitate adequate review by contractor or VA staff, as applicable. For example, a 100 page document for review should be distributed far enough in advance to allow the other party to review adequately, whereas a one page document will require less time for review.
- Coordinate meetings and communications geographically to fall within the core hours to accommodate participants from all areas of the United States.
- To the extent possible, honor designated meeting times. Start on time and end on time.
- Honor rules of basic respect, professionalism, dignity, courtesy, and respect for diversity, including origin of employment.
- Interact with each other in a manner that optimizes success for both parties. For example, communication of issues/obstacles relative to both groups that may fall outside the scope of deliverables at hand may be beneficial to the success of the other party.
- Do what is possible to increase the efficiencies of all groups involved.

d. *Quality:* The quality of materials exchanged between groups shall be of high professional quality and as outlined as acceptable deliverables in the contract.

Appendix C   OIG Contact and Staff Acknowledgments

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Appendix D   Report Distribution

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