



U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF INSPECTOR GENERAL

Catalyst for Improving the Environment

Audit Report

EPA Personnel Access and Security System Would Benefit from Improved Project Management to Control Costs and the Timeliness of Deliverables

Report No. 08-P-0271

September 22, 2008

Report Contributors:

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Abbreviations

CMM	Contracts Management Manual
EPA	U.S. Environmental Protection Agency
EPASS	EPA Personnel Access and Security System
HSPD	Homeland Security Presidential Directive
IT	Information Technology
OARM	Office of Administration and Resources Management
OIG	Office of Inspector General
OMB	Office of Management and Budget
SDLC	System Development Life Cycle
SLCM	System Life Cycle Management
SMD	Security Management Division
SOW	Statement of Work
WQX	Water Quality Exchange



At a Glance

Catalyst for Improving the Environment

Why We Did This Review

We evaluated the cost justifications for major Information Technology (IT) investments in the U.S. Environmental Protection Agency (EPA) IT investment portfolio. We also evaluated contracted work for IT investments to determine whether the work met EPA's (1) time and budget estimates, and (2) intended needs.

Background

EPA received \$346 million in system development and/or maintenance funding for Fiscal Year 2007. This funding includes IT acquisition costs for contract services to develop and/or maintain IT systems.

For further information, contact our Office of Congressional and Public Liaison at (202) 566-2391.

To view the full report, click on the following link:
www.epa.gov/oig/reports/2008/20080922-08-P-0271.pdf

EPA Personnel Access and Security System Would Benefit from Improved Project Management to Control Costs and the Timeliness of Deliverables

What We Found

EPA has put into place processes to adequately justify costs of projects identified in its IT investments portfolio. However, the lack of key project management practices prevents it from achieving many of the projected milestone and budget estimates. In particular, EPA did not require the EPA Personnel Access and Security System (EPASS) contractor to follow Agency procedures for system development. EPASS did not have a Project Manager authorized to oversee the contractor's work. EPA also paid for invoices that contained contractor labor overcharges. These system development procedures are designed to help management better predict and control project costs. Had EPA implemented processes to mitigate many of the identified system development weaknesses, it would have been better able to anticipate and possibly avoid most of the additional \$983,216 in costs for EPASS. Further, had EPA implemented formal review procedures for contractor invoices, it would have prevented paying an estimated \$75,276 in over-billed contractor labor charges. We were unable to determine whether the EPASS work would meet EPA's intended needs because the project is under further development.

What We Recommend

Our recommendations to the Director, Security Management Division, Office of Administration, Office of Administration and Resources Management, are to:

- Develop and maintain an EPASS System Management Plan that includes the required Change Management and information security documents.
- Appoint a certified EPASS Project Manager with authority to oversee contractor work and ensure compliance with EPA's System Life Cycle Management guidance.
- Issue a memorandum to all EPASS Task Order Project Officers that outlines and reinforces expectations for complying with EPA invoice reviewing guidance.
- Follow up with the Contracting Officer to ensure EPA collects from the contractor the amount EPA overpaid for billing rate errors in the contractor's invoices.

The Agency indicated that it has taken actions to address many of our concerns. However, we believe the actions taken do not adequately address our recommendations. The Agency needs to take steps to put into place a structure to ensure that the EPASS project progresses through the System Development Life Cycle process as required by EPA guidance.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
INSPECTOR GENERAL

September 22, 2008

MEMORANDUM

SUBJECT: EPA Personnel Access and Security System Would Benefit from Improved Project Management to Control Costs and the Timeliness of Deliverables
Report No. 08-P-0271

FROM: Patricia H. Hill
Assistant Inspector General for Mission Systems

A handwritten signature in black ink that reads "Patricia H. Hill".

TO: Wesley J. Carpenter
Director, Security Management Division
Office of Administration and Resources Management

This is our report on the subject audit conducted by the Office of Inspector General (OIG) of the U.S. Environmental Protection Agency (EPA). This report contains findings that describe the problems the OIG has identified and corrective actions the OIG recommends. This report represents the opinion of the OIG and does not necessarily represent the final EPA position. Final determinations on matters in this report will be made by EPA managers in accordance with established audit resolution procedures.

The estimated cost of this report – calculated by multiplying the project's staff days by the applicable daily full cost billing rates in effect at the time – is \$391,452.

Action Required

In accordance with EPA Manual 2750, you are required to provide a written response to this report within 90 calendar days. You should include a corrective actions plan for agreed upon actions, including milestone dates. We have no objections to the further release of this report to the public. This report will be available at <http://www.epa.gov/oig>.

If you or your staff have any questions, please contact me at (202) 566-0894 or hill.patricia@epa.gov; or Rudolph M. Brevard, Director, Information Resources Management Assessments, at (202) 566-0893 or brevard.rudy@epa.gov.

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Chapter 1

Introduction

Purpose

We sought to determine whether the U.S. Environmental Protection Agency (EPA) justified the Information Technology (IT) investments outlined in its Capital Investment Plan. We also sought to determine (1) what contract work was completed, (2) was it completed within time and budget requirements, and (3) did the work meet EPA's intended needs.

Background

During Fiscal Year 2007, EPA received \$346 million to support acquiring and maintaining its IT systems. This funding included costs to procure contract services to develop and maintain EPA systems.

EPA offices document the system acquisition strategies and costs in the business cases that support their systems. EPA's Chief Information Officer reviews this information for major IT investments through the Agency's Capital Planning and Investment Control process. This process is a Federal mandate designed to assure that investments in IT resources achieve high value outcomes at acceptable costs. Upon funding of the proposed business cases by the Office of Management and Budget (OMB), EPA offices commence system acquisition plans as detailed in the business cases.

For IT investments reviewed during this audit, EPA offices used contract services to acquire the systems. As such, the Contracts Management Manual (CMM) and Interim Agency System Life Cycle Management (SLCM) procedures outline EPA's contract management and system development requirements. In particular:

- The CMM requires the Contracting Officer to (1) verify usage of the correct contract billing rates and (2) ensure billing rate changes are correctly applied at the end of each contract period. The CMM also requires the Contracting Officer to verify other conditions that may result in re-calculation or adjustment of billing rates. Further, the CMM requires offices to perform Government surveillance of the contract. The Agency or appointee should review the receipt of services to ensure it is getting what it requested and needed. Contracted services should also be monitored for compliance with established timeframes.
- The SLCM procedures require offices to complete the system definition phase prior to starting the System Development or Acquisition Phase.

Most importantly, the procedures require offices to define the systems' functional, technical, and data requirements.

Scope and Methodology

We performed this audit from February through October 2007 at EPA Headquarters in Washington, DC, in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient and appropriate evidence to provide a reasonable basis for our findings and conclusions based on the audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions.

We evaluated EPA program offices' management control processes for compliance with Agency contracting and systems development requirements. We reviewed contract documents related to the systems reviewed under this audit. We interviewed EPA staff responsible for contractor work and management. We also reviewed contract invoices and schedules of deliverables.

We judgmentally selected two EPA systems that represented 20 percent of EPA's Fiscal Year 2007 IT investment portfolio. We did not include financial and infrastructure IT investments, as we review these systems yearly during the Agency's financial statement audit or these are included in the Office of Inspector General's (OIG's) annual audit plan. We reviewed the following systems:

- **Water Quality Exchange (WQX) System, within the Office of Water.** WQX provides a national picture of the surface and groundwater quality of the United States. WQX is the result of the redesigned STORage and RETrieval water quality system. Under the Clean Water Act, EPA is responsible for monitoring the ambient surface and ground waters of the Nation. The Office of Wetlands, Oceans and Watersheds within the Office of Water is responsible for developing WQX.
- **EPA Personnel Access and Security System (EPASS), within the Office of Administration and Resources Management (OARM).** EPASS is the Agency's implementation of Homeland Security Presidential Directive-12 (HSPD-12), Policy for a Common Identification Standard for Federal Employees and Contractors. This standard was signed by the President of the United States on August 27, 2004. Provisions 4 and 5 of the standard describe the timeline for federal departments and agencies to implement the standard. Implementation of the standard is to include both physical access to Agency facilities as well as electronic or logical access to Agency IT systems. The Security Management Division (SMD) within OARM is responsible for developing EPASS.

We did not find notable weaknesses in regards to WQX acquisition and subsequently informed the Office of Water of our findings. During preliminary research, we also did not find notable weaknesses with EPA processes that defined costs contained in Capital Planning and Investment Control business cases and did not pursue this area during field work. We were unable to determine whether the work would meet EPA's intended needs because the EPASS project is under further development.

We had no prior report recommendations to follow up on during this audit.

Noteworthy Achievements

EPA's management stated it completed many key milestones for the EPASS project. EPASS received the authority to operate on January 25, 2007, and implemented a physical access control system at EPA's One Potomac Yard in Alexandria, Virginia. EPA issued its first smart card in October 2006, and EPA has and continues to issue smart cards to employees and non-Federal workers throughout the Agency.

Chapter 2

EPASS Needs Improved Contract Management and System Development Practices

Our review disclosed that EPA did not require the EPASS development contractor to follow Agency system development procedures. This hindered management's ability to control project costs. Management officials stated they were unable to follow Agency procedures because of evolving requirements. However, we found EPA did not use a change management process to guide them in decisions for accepting risks resulting from the effects of these changing requirements. Although a qualified Project Manager was on the EPASS team, the Project Manager was not authorized to oversee the contractor's work or was not positioned within the organization to influence major decisions made related to the development of EPASS. We further disclosed that EPA paid additional charges for invoices that contained errors in contractor labor charges. Management's informal processes for reviewing invoices for accuracy did not identify discrepancies before approval and payment. Had EPA implemented processes to mitigate system development weaknesses, it would have been better able to anticipate the additional \$983,216 in costs for EPASS. Further, had EPA implemented formal review procedures for contractor invoices, it would have prevented paying an estimated \$75,276 in billed contractor labor charges.

SMD Did Not Follow Agency Procedures for System Development

SMD's management of the EPASS project did not conform to key system development requirements required by EPA SLCM guidance. In particular, SMD proceeded to develop EPASS without (1) putting in place a structure to control undefined EPASS requirements as they are known, and (2) appointing a qualified Project Manager who has authority to oversee all EPASS development efforts.

EPASS Needs Clearly Defined Requirements and Implemented Change Management Practices to Control Spending

SMD did not complete the EPASS Definition Phase before entering into a contract to develop the system, nor did the contractor complete the Definition Phase once SMD modified the Statement of Work. The Definition Phase defines the system's functional, system, and data requirements and System Owners must complete this phase as required by EPA SLCM guidance. The Definition Phase is important because it assists management to ensure the intended system will support Agency requirements and control project costs. Management stated they could not complete the Definition Phase requirements because of the evolving, changing, and increasing program requirements imposed by lead Federal

agencies. Therefore, SMD issued a Statement of Work (SOW) that did not have detailed tasks that defined EPASS' system requirements. SMD then modified this SOW to include detailed tasks, which the contractor prepared. However, these detailed tasks did not require the contractor to perform a Definition Phase.

SMD had not put into place practices to validate newly defined HSPD-12 requirements and formally introduce the new requirements into the EPASS system development process. A change management process is a key management control used to record management decisions regarding evolving system changes. During our discussions with management about the change management processes, they seemed unaware of EPA requirements. After audit field work, management provided us the OARM/Office of Administration Software Development Software Configuration Management Plan in response to our request for their change management procedures. This plan outlines the contractor procedures for making system changes to EPASS, upon receipt of a software change request/software error notice via a trouble ticket system. However, management did not provide evidence of the processes it uses to evaluate and approve EPASS system changes from evolving HSPD-12 requirements. Further, the plan (1) is a proprietary document used internally by the contractor, (2) was not related to EPA-specific SLCM system development requirements, and (3) was not formally adopted by EPA management. Also, EPA management had not provided proof it implemented the practices outlined in the plan.

We found that SMD had not developed a System Management Plan, as required by SLCM guidance. This plan is the primary managerial document and serves as a portfolio of required documents used by System Managers to control, assess, and document the system throughout the SLC. EPA uses this plan as the principal tool for organizing and managing system project/program management information throughout the system life cycle.

Since SMD had not fully defined EPASS' requirements or implemented a process to control unexpected system requirements, further EPASS system development efforts are at risk. SMD needs to develop a full picture of EPASS' end state. Without this full picture, SMD cannot measure the contractor's system development work to ensure EPASS will meet EPA's desired needs. Had EPA implemented processes to mitigate system development weaknesses, it would have been better able to anticipate the additional \$983,216 in costs for EPASS. This upward trend of unanticipated costs has potential to continue because SMD projects that EPASS development and implementation will continue through 2015.

EPASS Needs a Certified Project Manager

EPASS needs a Project Manager with the skills, qualifications, and authority to oversee a High-Risk system development project. SMD assigned a Project

Officer to oversee the contractors developing EPASS. However, the Project Officer's main responsibility was to perform contract management functions and the Project Officer does not possess the qualifications or skills needed to manage system development activities for a high-risk project like EPASS. The EPASS Project Officer was not familiar with the Agency's SLCM requirements and, as such, was not familiar with system development techniques or processes to reduce the risk to the Agency for this high-risk project.

There was a qualified Project Manager on the EPASS development team who indicated some involvement with system development and system design; however, the Project Manager was not given responsibility for monitoring the contractor's progress, work, and costs. The Project Officer did not want the assigned Project Manager to have authority or responsibility for (1) reviewing the contractor's monthly status reports, (2) monitoring work, and (3) reviewing invoices, because the Project Officer stated they would not be comfortable with the Project Manager having all of these responsibilities. The Project Officer performs some of these duties, but does not have the required training and experience to be appointed as a Project Manager, and does not have the time to get the certification. Therefore, management listed the Project Manager on the IT business case submitted to OMB for funding even though the Project Manager was not fulfilling the role as required by OMB and EPA.

EPA's SLCM procedures require assigning a Project Manager who is responsible for managing the entire project through its life cycle. These responsibilities include managing the project's compliance with EPA SLCM policy and procedures, funding and resources, and system development processes. According to OMB, skilled project managers are critical in managing contractor activities to ensure they achieve intended outcomes. As such, it appears that management placed the certified Project Manager on the project team to receive funding for EPASS and not to oversee the system development processes as intended by OMB.

After audit field work, we learned that SMD issued a new SOW, with potential funding of \$9.6 million over the life of the contract. This new SOW will be used to continue EPASS system development and deployment. SMD officials stated that system development costs are about 10 percent of the new SOW. If SMD uses a system development approach as specified in EPA guidance, we estimate EPA could better anticipate \$902,530 in unplanned project costs. See Appendix A for details.

SMD Did Not Require Contractor to Deliver Tasks by Due Dates

Tasks listed in the modified EPASS SOW were either late or lacked information on which to determine when the contractor was required to complete the assigned tasks. EPA's CMM requires offices to perform government surveillance of the contract. The CMM requires the respective office to review the receipt of

services to ensure it is getting what it requested and needed. The CMM also requires that contracted services should also be monitored for compliance with established timeframes.

SMD had the contractor prepare a detailed list of tasks with the dates the tasks were due. However, our review of the tasks and milestones revealed that 59 percent (75 of 127) of the tasks were delivered at least 1 month or more late. Also, 27 of the 127 tasks either did not have a due date or a date delivered. Management had not responded to our inquiries regarding these late or undated deliverables.

The Government Accountability Office recognizes that mature and effective management of IT investments can vastly improve government performance and accountability. Without good management, such investments can result in wasteful spending and lost opportunities for improving delivery of services. We feel this lack of oversight over deliverables, coupled with the absence of basic system development practices as previously discussed, contributed to the unpredicted overspending on the development of EPASS.

SMD Approved Contractor Invoices Containing Overcharges

From November 2005 through July 2007, SMD did not have formal processes for reviewing invoices and did not identify incorrect labor charges on at least 10 monthly invoices paid by EPA. EPA's CMM states the Contracting Officer should periodically verify usage of the correct rates. This includes reviewing rates that change at the end of each contract period and verifying rates that are recalculated or adjusted for any other reasons.

We learned that SMD subsequently reviewed all previous contractor invoices, identified billing discrepancies, and notified the Contracting Officer of the discrepancy. The Contracting Officer, in turn, issued a written request to the contractor regarding this matter. Based on our calculations, EPA paid an estimated \$75,276 in incorrect contractor labor overcharges. See Appendix A for details.

We further learned that after field work, the new EPASS Project Officer appointed five Task Order Project Officers and made them responsible for reviewing contractor invoices. Although SMD did not document this new internal review process, this informal practice resulted in SMD disapproving an invoice due to questions over billing.

Having documented procedures is the cornerstone of an effective internal control environment. Formal procedures help to ensure that personnel are aware of their responsibilities and understand the tasks that management intends to be accomplished. Because SMD uses a distributed structure for reviewing invoices,

it is imperative that SMD document these procedures to ensure processes are followed during day-to-day operations and personnel turnover.

Improved Project Management Oversight Needed

In discussions with OARM management regarding these findings, management indicated that:

- Although EPASS had not been able to comply with EPA's SLCM policy for the definition phase, it has complied for management of other key components, such as architecture planning, investment management, and security planning.
- EPASS did, and continues to have, a Project Officer authorized to oversee the contractor's work.
- OIG should focus on cost benefits of project accomplishments rather than total expenses, among these, issuing 7,000 smart cards to EPA employees and non-federal workers.

We recognize that developing an information system during a period where federal requirements continually evolve is a significant undertaking for SMD and its management. We further recognize that EPA is on the leading edge of federal agencies that have issued smart cards to its civilian employees and contractors. Although innovation involves taking risks, we feel that it is incumbent upon management to implement practices for innovation to mitigate risks to an acceptable level.

Developing EPASS is a high-risk undertaking. We feel that SMD chose to follow an ambitious implementation plan, which resulted in SMD spending the total project funding within 27 months. Our concern is that the Federal HSPD-12 requirements are now defined and SMD has yet to establish the formal processes needed to minimize the risk to EPA and guide them in the continued development of EPASS.

Recommendations

We recommend that the Director, Security Management Division, Office of Administration, Office of Administration and Resources Management:

- 2-1 Develop and maintain an EPASS System Management Plan. The plan should include all documentation that supports management's adherence to all controls gates and decision points related to ensuring EPASS compliance with prescribed EPA SLCM guidance. The plan should also include all required change management and required information security documents.

- 2-2 Appoint a certified EPASS Project Manager as required by EPA SLCM. The appointment memorandum should also include specific language to reinforce expectations for that person to manage the EPASS project through its life cycle and ensure compliance with EPA's SLCM guidance.
- 2-3 Issue a memorandum to all EPASS Task Order Project Officers that outlines and reinforces expectations for complying with EPA invoice-reviewing guidance.
- 2-4 Follow up with the Contracting Officer to ensure EPA collects from the contractor the amount EPA overpaid for billing rate errors in the contractor's invoices.

Agency Comments and OIG Evaluation

The Agency indicated that it has taken actions to address many of our concerns. However, we believe the actions taken do not adequately address our concerns. The Agency's complete response is at Appendix B.

In general, EPA disagrees with the report's findings. EPA indicated:

- It was not able to follow prescribed EPA system development guidance because the requirements for the EPASS project were unknown at the initiation of the project.
- A qualified Project Officer and Project Manager were involved in the EPASS project from its inception. The Project Officer had overall project responsibility while the Project Manager was to manage the IT aspects, including the contractor's performance.
- There are no real cost overruns, savings to identify, or misspent monies.
- EPASS invoices are reviewed and paid following the guidelines set forth in Chapter 11 of the Contracts Management Manual, and Chapter 3 of the Recertification for Contracting Officer Representative Manual.

We found that although the EPASS requirements were not known at the initiation of the project, EPA had not taken steps to put in place processes to control the cost of the EPASS project. As such, EPA had not developed a System Management Plan to manage the EPASS project and document key decisions and control points completed as required by EPA guidance. Furthermore, OARM had not implemented a Change Management Process to ensure that as new project requirements occurred, there was a system in place to introduce these requirements in the system development process.

Our research and interviews concluded that although the EPASS project had a certified Project Manager listed on the project, the employee was not responsible for ensuring the project progressed through the System Development Life Cycle (SDLC) as required by EPA and OMB guidance. We found that the Project Manager lacked authority to guide the EPASS project and was not receiving cost information necessary to monitor the contractor's performance. We believe that had OARM assigned a Project Manager with authority to guide the EPASS project, OARM would have had a better handle over the unanticipated additional costs for EPASS. Additionally, OARM would have been able to put into place processes that would have minimized the risk to EPA when undertaking a high-risk project with evolving requirements. Furthermore, our research and interviews revealed that the assigned EPASS Project Officer lacks the knowledge and experience necessary to provide system development guidance on a project of this magnitude. Therefore, we believe that in order for EPASS to successfully progress through the required SDLC stages, OARM should assign a certified Project Manager with authority to guide the project.

With respect to OARM's invoice payment processes, although OARM assigned five Task Order Project Officers responsible for reviewing the contractor invoices, our subsequent interviews revealed that some personnel had not received the invoices to review until August 2008. Furthermore, even though OARM cites that it follows invoice review procedures outlined in EPA's Contract Management Manual, we found that OARM had not issued guidance to the five Task Order Project Officers outlining their specific responsibilities for documenting invoice reviews. The documentation of invoice reviews is required by EPA guidance, and because OARM has a distributed process for reviewing invoices, it is incumbent upon management to set the standards for this process to ensure consistency.

OARM also provided a status of its actions to address the report's recommendations. OARM indicated that it has taken sufficient action to address the report recommendations. However, for the reasons cited above, we believe OARM has not taken action to address the report's recommendations. OARM should take steps to put in place a structure to ensure that the EPASS project progresses through the SDLC process as required by EPA guidance.

Status of Recommendations and Potential Monetary Benefits

RECOMMENDATIONS						POTENTIAL MONETARY BENEFITS (in \$000s)	
Rec. No.	Page No.	Subject	Status ¹	Action Official	Planned Completion Date	Claimed Amount	Agreed To Amount
2-1	8	Develop and maintain an EPASS System Management Plan. The plan should include all documentation that supports management's adherence to all controls gates and decision points related to ensuring EPASS compliance with prescribed EPA SLCM guidance. The plan should also include all required change management and required information security documents.	U	Director, Security Management Division, Office of Administration, Office of Administration and Resources Management		\$902.5	
2-2	9	Appoint a certified EPASS Project Manager as required by EPA SLCM. The appointment memorandum should also include specific language to reinforce expectations for that person to manage the EPASS project through its life cycle and ensure compliance with EPA's SLCM guidance.	U	Director, Security Management Division, Office of Administration, Office of Administration and Resources Management			
2-3	9	Issue a memorandum to all EPASS Task Order Officers that outlines and reinforces expectations for complying with EPA invoice-reviewing guidance.	U	Director, Security Management Division, Office of Administration, Office of Administration and Resources Management			
2-4	9	Follow up with the Contracting Officer to ensure EPA collects from the contractor the amount EPA overpaid for billing rate errors in the contractor's invoices.	U	Director, Security Management Division, Office of Administration, Office of Administration and Resources Management		\$75.2	

¹ O = recommendation is open with agreed-to corrective actions pending
C = recommendation is closed with all agreed-to actions completed
U = recommendation is undecided with resolution efforts in progress

Appendix A

OIG Estimate of Efficiencies

I. Estimated Efficiencies for Recommendation 2-1

The condition found involves:

- Reduction in Outlays
 De-obligation of Funds
 Avoidance of Unnecessary Expenditures
 Increase in Revenue (e.g., Uncollected Fees)
 Other

Based on SMD's anticipated costs for the current SOW, the OIG estimates SMD spent approximately \$1,321,946 more than anticipated for the first 2 years. SMD has prepared a new SOW to continue system development and deployment. It estimates 10 percent of the new SOW will be for system development. If SMD follows OIG recommendations, the estimated efficiencies will total \$902,530 for the new SOW's base year and 4 option years as described below.

Estimate involves efficiencies/savings related to:

- a one-time event
 the current and following year for operations of a continuing nature
 the next 5 years for reductions in a long-term program or program terminations

Calculation of Gross Savings

The OIG estimates that SMD could avoid project costs escalating over budget on the new EPASS contract by an amount similar to what was underestimated on the EPASS contract that ended in January 2008. Management indicated that approximately 10 percent of the new EPASS \$16,936,737 contract is related to system development efforts by the contractor. The OIG's calculation of Gross Savings is as follows:

Current SOW

The first calculation relates to the base period and option period 1. Each period is 12 months, beginning in November and ending in October.

Amount Budgeted for Base Period	\$ 765,863
Amount Budget for Option Period 1	+ 622,037
Total Budgeted for Base Period and Option Period 1	<u>\$ 1,387,900</u>
Paid Invoices through July 2007 (21 invoices)	\$ 2,371,116
Total of Budget Base Period and Option Period 1	- 1,387,900
Amount Underestimated through July 2007	<u>\$ 983,216</u>

The following calculation estimates the cost of invoices not yet approved (August-October 2007) for the current period. We did this to project an amount for a full 12 month period. We calculated a monthly estimate by averaging the total amount of all invoices received.

Paid Invoices through July 2007 (21 invoices)	\$ 2,371,116
Average amount per invoice (\$2,371,116 / 21 invoices = \$112,910)	
Estimate for 3 Months of Invoices (August-October 2007) (\$112,910 X 3 months)	+ 338,730
Total Estimated Project Costs	<u>\$ 2,709,846</u>

Total Amount Unanticipated (\$2,709,846 - \$1,387,900) **\$ 1,321,946**

Percentage of Unanticipated Costs on Current SOW
(\$1,321,946 / \$1,387,900) 95%

New SOW

Amount Budgeted for New SOW \$9,611,890

Percentage of SOW Identified as System Development 10%

Amount Attributed to System Development (\$9,611,890 X 10%) \$ 961,189

Percentage of Historical Unanticipated System Development Costs 95%

Estimated Unanticipated Costs if
Recommendation 2-1 is Not Implemented (\$961,189 X 95%) \$ 913,130

(a) Gross Estimates of Efficiencies **\$ 913,130**

Calculation of Cost to Implement Recommendation 2-1

The OIG estimates it will take SMD 10 days to comment on the OIG's estimate; 5 days to draft the technical direction memorandum; and 2 days for the Contracting Officer to review the technical direction memorandum and issue it to the contractor. The cost to implement is estimated as follows:

Estimated 7 days by GS-15 at \$700 per day	\$ 4,900
Estimated 7 days by GS-14 at \$600 per day	+ 4,200
Estimated 3 days by GS-13 at \$500 per day	+ 1,500
(b) Total estimated costs to implement	<u>\$10,600</u>

Estimate of Net Efficiencies/Savings

(a - b) or (\$913,130 - \$10,600) **\$ 902,530**

II. Estimated Efficiencies for Recommendation 2-5

The condition found involves:

- Reduction in Outlays
 De-obligation of Funds
 Avoidance of Unnecessary Expenditures
 Increase in Revenue (e.g., Uncollected Fees)
 Other

Management approved contractor invoices that contained overcharges. The contractor overcharged on at least 10 monthly invoices for incorrect labor rates or incorrect labor categories. As a result, EPA overpaid an estimated \$75,275.66 in contractor labor charges.

Estimate involves efficiencies/savings related to:

- a one-time event
 the current and following year for operations of a continuing nature
 the next 5 years for reductions in a long-term program or program terminations

Calculation of Gross Savings

SMD identified 10 invoices in which the contractor over-billed EPA for incorrect labor charges. The calculation of gross savings is as follows:

<u>Invoice Month</u>	<u>Amount Overcharged</u>
September 2006	\$ 9,959.08
October 2006	11,504.21
November 2006	4,232.42
January 2007	5,548.55
February 2007	3,369.80
March 2007	4,764.20
April 2007	3,718.40
May 2007	5,112.00
June 2007	10,663.05
July 2007	<u>16,403.95</u>
(a) Gross Estimate of Efficiencies	<u>\$75,275.66</u>

Calculation of Cost to Implement Recommendation 2-5

The OIG estimates it will take SMD 1 hour to follow up with the Contract Officer to ensure EPA has received payment from the contractor for overcharges.

Estimated .0125 day by GS-15 at \$700 per day	<u>87.50</u>
(b) Total estimated costs to implement	<u>\$ 87.50</u>

Estimate of Net Efficiencies/Savings

(a – b) or (\$75,275.66 - \$87.50)	<u>\$75,188.16</u>
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Appendix B

Agency Response

August 5, 2008

MEMORANDUM

SUBJECT: OARM Response to Draft Audit Report:
EPA Personnel Access and Security System Would Benefit
From Improved Project Management to Control Costs and the Timeliness
of Deliverables
Assignment No. 2007-000557

FROM: Wesley J. Carpenter, Director /s/
Security Management Division

TO: Rudolph M. Brevard, Director
Information Resources Management Assessments

OARM appreciates the opportunity to comment on the latest version (June 24, 2008) of the Draft OIG Audit Report of EPASS, Assignment Number 2007-000557. We believe that most of our comments pertaining to the earlier drafts are still valid; therefore, we have attached and are resubmitting them for inclusion in the final report.

We thank you again for your consideration and hope that we can reach a satisfactory resolution of these issues.

Attachment

cc: Renee Page
Dennis Bushta
Cheryl Reid

OARM'S COMMENTS

Our comments are organized by the four themes highlighted in the latest version (June 24, 2008) of the OIG discussion draft audit report on EPASS. Per the OIG's request, ancillary comments have been added to each theme to better depict and summarize previous comments submitted by OARM during its review of the three previous draft reports.

1. *OIG Theme No. 1: OARM did not follow EPA's interim System Life Cycle Management (SLCM) procedures, which require proposed IT systems be defined in terms of functional, technical, and data requirements prior to project initiation, development, or acquisition.*

OARM's Comments: In order to maximize the effectiveness of the SLMC in developing new IT applications, a clear knowledge of functional, technical and data requirements is essential prior to project initiation, development, or acquisition. Unfortunately, such complete knowledge was not available by the time the EPASS project had to be initiated. If EPA had delayed initiation until all up-front information had been available, the Agency would not have been able to meet federally mandated implementation deadlines.

- The IG report does not mention that the EPASS project was mandated by the White House and was the first of its kind ever undertaken by the Federal government, EPA, or the private sector. Because of HSPD-12's stringent implementation deadlines, Agency activities had to be initiated amid many uncertainties and unknowns, changing requirements, and equipment and technology use restrictions.
- At the time of contract award, final HSPD-12 PIV standards had not been issued nor had the relevant equipment or software been properly tested and approved by NIST and GSA for inclusion on the government's approved procurement list (APL).
- Over the life of the project, additional or supplemental OMB policy and NIST technical documents have been published adding either new requirements or amending those already in place. In fact, between March 2006 and August 2008, a total of 11 technical documents impacting HSPD-12 configuration and specifications were issued creating additional work for all agencies.

Ancillary Comments *OIG Theme No. 1:*

- In order to accurately portray EPASS, the report should provide a fair and equitable description of why the program was implemented, what the program is designed to accomplish, its mandates, timeframes, and the circumstances surrounding implementation. Insert a background statement on EPASS in the report's introduction to provide the necessary framework to completely understand the full complexity of the program.
- The report states that EPASS lacked a detailed statement of work (SOW). The reason the SOW did not contain detailed tasks had nothing to do with the allegation that SMD did not follow SLMC procedures. In the case of a project where little is known about specific requirements, it is not uncommon for the SOW to be void of detailed tasks and deliverables. The original EPASS contract recognized this and, upon award of the first option year, the contract was amended to include detailed tasks and deliverables.
- The OIG report states that 59 percent (75 of 127) of EPASS' tasks were either late or lacked information on due dates. It also states the SOW didn't contain specific tasks. These are statements are conflicting; they need to be reconciled prior to the next iteration of the report.
- OARM strongly recommends that the OIG interview the EPASS CO to better understand the contracting process and how the EPASS contract was advertised and awarded. This request has continually been ignored.

2. *OIG Theme No. 2: OARM did not assign an EPASS Project Manager who has the certification and authority to oversee contractor performance and compliance with EPA's interim SLCM.*

OARM's Comments: A qualified Project Officer and Project Manager (IT) were involved in this project from inception. The Project Officer had overall project responsibility while the Project Manager was to manage the IT aspects, including the contractor's performance.

- Since inception of this project in late 2005, all monthly reports and invoices were shared with the PM.
- The PM played a key role in monitoring the ongoing performance of the contractor as well as providing oversight and direction for the technical aspects of the contract.

Ancillary Comments *OIG Theme No. 2:*

- This conclusion is not supported by the facts. No such restriction was ever placed on the PM (IT).
- OARM has strongly recommended that the OIG interview the EPASS PM to better understand the details of EPASS contract administration and management. This request has continually been ignored and neither the original PM, nor the CO, have ever been interviewed.

3. *OIG Theme No. 3: Costs were more than expected and unanticipated; unnecessary expenditures could have been avoided.*

OARM's Comments: Due to the many uncertainties and unknowns that existed at the inception of this project, total costs and time frames were underestimated. However, this does not support the OIG's implication that funds were wasted or misused. The report's references to potential monetary benefits, estimates of efficiencies, gross savings, and avoidance of unnecessary expenditures are unsubstantiated and should be deleted.

- The IG Report continues to imply that OARM overran costs on the contract, which is misleading as is the potential cost savings based on this notion.
- Any increase in costs was due to evolving, changing, and increasing program requirements imposed by lead Federal agencies resulting in an expanded level of effort.
- The follow-on contract was awarded March 19, 2008, and includes a base year and four one-year option periods with a total contract ceiling amount of \$9.6 million.
- The best way to measure EPASS cost benefits is to evaluate project accomplishments against total expenditures (i.e., OMB and internal EPA approvals of the HSPD 12 implementation plan; meeting executive mandate to issue smartcards by October 26, 2006; implementing a federally compliant physical access control system at Potomac Yard; and issuing almost 14,000 smartcards to EPA employees and non-Federal workers).

Ancillary Comments *OIG Theme No. 3:*

- There are no real cost overruns, savings to identify, or misspent monies; therefore, remove any references to these unsubstantiated issues.
- If the OIG really feels that there is legitimate cost savings to capture, then the way to do it is by means of a bona fide cost benefit analysis.

4. *OIG Theme No. 4: OARM has no formal procedures for reviewing and approving contract invoices or addressing overpayments.*

OARM's Comments: EPASS invoices are reviewed and paid following the guidelines set forth in Chapter 11 of the Contracts Management Manual and Chapter 3 of the Recertification for Contracting Officer Representative Manual. It was this review that led to SMD identifying the contractor's overbilling after receipt of the invoice from the contractor.

- Each month every invoice is reviewed by all TOPOs (IT, ID Proofing/ Registration, and PACS) before final PM approval.
- Currently, the \$75,276 overpayment has been suspended by the CO and COTR. The contractor's request for the funds has been denied by the CO.

Ancillary Comments OIG Theme No. 4:

- This theme implies SMD has no process for reviewing invoices. This is not true; review of contractor invoices follow the guidelines set forth in Chapter 11 of the Contracts Management Manual and Chapter 3 of the Recertification for Contracting Officer Representative Manual. Each month every invoice is reviewed by all TOPOs (IT, ID Proofing/ Registration, and PACS) before final PM approval.
- The OIG report states that the EPASS project paid \$75,276 in erroneously billed contractor labor overcharges. What it fails to mention is this issue was raised by the EPASS PM prior to approving the first invoice containing overcharges.
- Subsequent invoices containing overcharges were also paid. At issue was the contractor's ability to increase its rates whenever a contract option period was exercised early.
- The EPASS PM was compelled to pay subsequent invoices pending the outcome of discussions between the CO and contractor.
- Once a formal CO decision was rendered, all overcharges were recovered.

Status of Recommendations and Potential Monetary Benefits

2-1 Develop a Technical Direction memorandum that specifies how the contracting firm must implement system development processes compliant with EPA's SLCM. Technical Direction memorandum should specify that no system development should begin until the company defines, and EPA approves, the requirements for the system under development. The Technical Direction memorandum should be approved by the EPASS Contracting Officer and issued to the company awarded the new EPASS contract.

Status: Section C.2, Compliance with EPA Policies for Information Resources Management (EPAAR 1552.211-79, Oct. 2000), part (b) (1) of the newly awarded EPASS contract requires the contractor to comply with the 2100 Series (2100-2199) of the Agency's Directive System which contains the requirements for SLCM compliance.

Planned Completion Date: Complete on contract award date, March 16, 2008.

2-2 Develop and implement a formal Change Management process that meets the requirements of EPA's SLCM guidance.

Status: Section C.2, Compliance with EPA Policies for Information Resources Management (EPAAR 1552.211-79, Oct. 2000), part (b) (1) of the newly awarded EPASS contract requires the contractor to comply with the 2100 Series (2100-2199) of the Agency's Directive System which contains the requirements for SLCM compliance.

Planned Completion Date: Complete on contract award date, March 16, 2008.

2-3 Assign a Project Manager who has the certification and the authority to oversee the EPASS project as required by EPA's SLCM guidance.

Status: We already have a certified PM with authority to oversee the contractor's performance.

Planned Completion Date: Since inception of the original contract.

2-4 Develop and document formal procedures for reviewing contractor invoices.

Status: EPASS invoices are reviewed and paid following the guidelines set forth in Chapter 11 of the Contracts Management Manual and Chapter 3 of the Recertification for Contracting Officer Representative Manual.

Planned Completion Date: Since inception of the original contract.

2-5 Follow up with the Contracting Officer to ensure EPA collects from the contractor the amount EPA overpaid for billing rate errors in the contractor's invoices.

Status: The cost associated with the overpayment of \$75,276 was previously suspended by the CO, so the Agency has already recovered the money. The EPASS CO has officially disapproved the contractor's request for a refund of these funds.

Planned Completion Date: Complete on January 16, 2008.

Appendix C

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