U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF INSPECTOR GENERAL

Catalyst for Improving the Environment

Audit Report

EPA Needs to Improve Management Practices to Ensure a Successful Customer Technology Solutions Project

Report No. 10-P-0194

August 23, 2010

Report Contributors:

Rudolph M. Brevard
Cheryl Reid
Scott Sammons
Kyle Denning
Joseph Cook

Abbreviations

C&A	Certification and Accreditation
CGO	Continuing Governance Organization
CTS	Customer Technology Solutions
EPA	U.S. Environmental Protection Agency
FDCC	Federal Desktop Core Configuration
IV&V	Independent Verification and Validation
MEO	Most Efficient Organization
OEI	Office of Environmental Information
OIG	Office of Inspector General
PWS	Performance Work Statement
QAE	Quality Assurance Evaluators
QASP	Quality Assurance Surveillance Plan
QCP	Quality Control Plan
SOP	Standard Operating Procedure

Cover photo: Hardware ready for use during a Customer Technology Solutions deployment. (EPA OIG photo)

U.S. Environmental Protection Agency
Office of Inspector General

10-P-0194
August 23, 2010

At a Glance

Catalyst for Improving the Environment

Why We Did This Review

The Office of Inspector General conducted this audit as a result of receiving Hotline complaints about desktop deployments. We sought to determine whether the U.S. Environmental Protection Agency (EPA):

- Responded to resolve issues identified during Customer Technology Solutions (CTS) deployment.
- Implemented processes to eliminate recurring problems with deploying CTS.
- Implemented oversight practices for the CTS contract.

Background

CTS service includes acquiring, installing, maintaining, and supporting computers and network printers. The CTS deployment schedule projected 11,744 computers to be replaced in 18 locations across the United States. CTS is provisioned through EPA's Working Capital Fund and provides and coordinates all information technology end-user support and services for Headquarters and field offices.

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

To view the full report, click on the following link:
www.epa.gov/oig/reports/2010/20100823-10-P-0194.pdf

EPA Needs to Improve Management Practices to Ensure a Successful Customer Technology Solutions Project

What We Found

Although EPA indicated it could avoid spending more than $115.4 million over 8.5 years by consolidating the desktop computing environment, improved management practices are needed to ensure this cost avoidance is realized. CTS scheduled replacing 11,744 computers in 12 months, and also began providing maintenance and support for those computers and attached network printers, without sufficient planning to ensure ongoing success. This lack of planning has led to questions about (1) the quality of the helpdesk supporting the project; (2) a quality management program that is not finalized; (3) key business processes to support ongoing operations not being defined; and (4) vacant leadership positions needed to facilitate communication and coordination with customers about CTS equipment deployments. These conditions resulted in many end users voicing dissatisfaction with the CTS deployment and continued dissatisfaction with helpdesk support.

The CTS technical proposal indicates the consolidated desktop services solution will result in increased customer satisfaction and provide the technical tools and training needed to support EPA's critical programs. However, missteps in project planning led to sustained negative customer acceptance of CTS. Without CTS improving its service quality, end users may foster a degree of skepticism that will be hard for EPA to overcome.

What We Recommend

We made various recommendations to the Director of the Office of Technology Operations and Planning, Office of Environmental Information, to include:

- Implementing and maintaining a helpdesk that responds to and resolves issues in a manner that meets performance metrics;
- Improving the CTS Quality Management Program by developing and implementing an Independent Verification and Validation process and finalizing the Quality Assurance Surveillance Plan;
- Documenting milestones for the completion of overdue and future business process documents; and
- Filling vacant CTS leadership positions.

In general, the Agency agreed with the findings and recommendations.

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

THE INSPECTOR GENERAL

August 23, 2010

MEMORANDUM

SUBJECT: EPA Needs to Improve Management Practices to Ensure a Successful Customer Technology Solutions Project
Report No. 10-P-0194

FROM: Arthur A. Elkins, Jr.
Inspector General

TO: Vaughn Noga
Director, Office of Technology Operations and Planning
Office of Environmental Information

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 $177,268.

Action Required

We have closed this report in our audit tracking system based on your response to the draft report. We believe the proposed actions, when implemented, will adequately address the report's findings and recommendations. Please provide updated information in EPA's Management Audit Tracking System as you complete each planned corrective action or revise any corrective actions and/or milestone dates. If you are unable to meet your planned milestones, or believe other corrective actions are warranted, please send us a memorandum stating why you are revising the milestones or why you are proposing alternative corrective actions, as required by EPA Manual 2750.

We would like to thank your staff for their cooperation. 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 regarding this report, please contact Rudy Brevard at (202) 566-0893 or brevard.rudy@epa.gov.

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Chapter 1
Introduction

Purpose

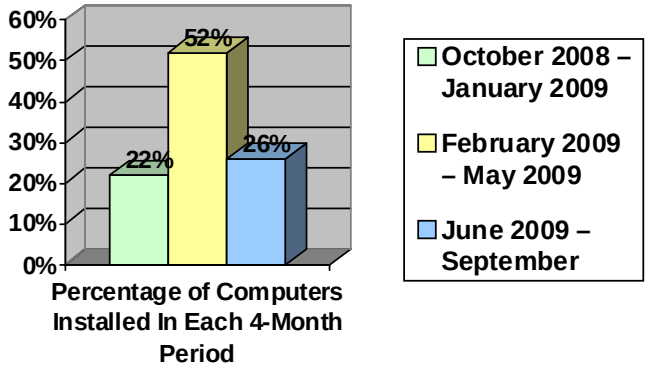
The Office of Inspector General (OIG) conducted this audit in response to hotline complaints about the Customer Technology Solutions (CTS) desktop deployments. We evaluated the U.S. Environmental Protection Agency's (EPA's) implementation of CTS. Specifically, we sought to determine whether EPA had:

- responded to resolve issues identified during CTS deployment,
- put in place processes to eliminate recurring problems with deploying CTS, and
- implemented oversight practices for the CTS contract.

Background

CTS is an Agency Working Capital Fund service that provides and coordinates all information technology end-user support and services for Headquarters and its field offices. The CTS service includes acquiring, installing, maintaining, and supporting computers and network printers. CTS scheduled 11,744 computers to be deployed in the 12 months from October 2008 through September 2009. As illustrated in Figure 1-1, CTS scheduled 52 percent of these computers for deployment in 4 months, from February 2009 through May 2009. This deployment placed CTS equipment in 18 locations across the United States.

Figure 1-1: Timeframe for Computers Installed



Source: OIG compilation and analysis.

CTS consolidated the efforts of 22 disparate organizations that provided desktop services to EPA into 1 new entity. The Continuing Governance Organization (CGO) within EPA's Office of Environmental Information (OEI) manages the new organization. EPA indicated that by implementing CTS it could avoid

spending more than $115.4 million over 8.5 years. CTS is composed of two entities working as an integrated Federal/industry team - the EPA Most Efficient Organization (MEO) and an industry contractor. The Federal portion of the team provides program management, customer relations, quality assurance, and contract oversight. The contractor is the operational portion of the team that delivers the services.

Noteworthy Achievements

The Agency deployed two other simultaneous initiatives: rolling out the Federal Desktop Core Configuration (FDCC) standards and upgrading its electronic mail software. The FDCC is a new federal policy, which standardizes resources and computer settings to increase security and protect government assets. The Agency indicated it upgraded its e-mail services to provide enhancements, including a more stable platform, faster performance, and the ability to change font size.

Scope and Methodology

We conducted audit work from April 2009 through May 2010 as a result of Hotline complaints of significant problems in deploying the CTS project. We performed field work at EPA Headquarters in Washington, DC, and EPA's Research Triangle Park Campus in Durham, North Carolina. We also visited Headquarters' field offices in Las Vegas, Nevada, and the following EPA laboratories:

- National Exposure Research Laboratory in Athens, Georgia.
- National Air and Radiation Laboratory in Montgomery, Alabama.
- National Vehicle and Fuel Emissions Laboratory in Ann Arbor, Michigan.

We performed this audit in accordance with generally accepted government auditing standards. These 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 our audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions.

We reviewed the CTS technical proposal, CTS Performance Work Statement (PWS), and quality assurance and quality control documents. We analyzed information from 113 OIG Hotline complaints related to the CTS deployment. We also analyzed answers from 120 CTS users we interviewed about their experiences with CTS. We selected the interviewees using 3 different methods: (1) 68 from a CTS user inventory database, (2) 46 according to users' availability on the day we visited their location, and (3) 6 from the Hotline complainants. Table 1-1 is a breakdown of the number of users that provided feedback by source.

Table 1-1: Source of CTS Feedback

Users Interviewed	**120**
Hotline Complaints	**113**

Source: OIG compilation and analysis.

Appendix B contains the results of our analysis of the hotline complaints. It includes a complaint category table with the number of times each issue occurred and category descriptions. Also, we interviewed designated program office points of contact; CTS sub-contractors, EPA Zone Representatives, and CTS Service Desk personnel.

Prior Reporting

In September 2009, we sent a memorandum to the Acting Assistant Administrator for Environmental Information. The memorandum conveyed our concerns that EPA should deal quickly with our observations from site visits to three EPA facilities. We expressed this was necessary to decrease the turmoil evident during CTS deployments in an effort to garner users' acceptance of the new equipment. We also issued Quick Reaction Report No. 10-P-0028, *Improved Security Planning Needed for the Customer Technology Solutions Project*, November 16, 2009. The report conveyed our concerns regarding needing to develop and implement a vulnerability testing and remediation process for CTS equipment.

Chapter 2
CTS Helpdesk Lacks Quality

CTS users voiced dissatisfaction with the quality of CTS helpdesk services. The two main helpdesk issues were related to responsiveness and technicians' skill level. Interviews with some CTS helpdesk staff revealed inconsistencies with communicating and sharing knowledge, and training. These issues occurred because CTS does not have standard helpdesk processes and procedures for use at all CTS locations. The CTS Quality Control Plan (QCP) states "To build quality into our services, we will establish standardized processes and procedures (SOPs) as well as checks and balances (performance monitoring) early in the Phase-in of CTS, and train personnel in these measures." However, CTS did neither of these quality-building processes. Unsuccessful helpdesk responses may cause lost productivity and down-time for users. Also, it can tarnish a user's impression of an entire organization, such as CTS.

Helpdesk Responsiveness Is Lengthy

Monthly CTS performance reports include multiple metrics to measure the timeliness of helpdesk response and resolution time. These metrics help to encourage quick and efficient operations. However, 57 of 120 users interviewed and 51 of 113 Hotline complainants reported a major concern with the responsiveness of the helpdesk. Two users reported helpdesk responsiveness concerns in both their interview and Hotline complaint. The "responsiveness issues" were categorized by users' complaints of lengthy (1) on-hold wait times when calling the helpdesk, (2) response time for a technician to arrive at a user's desk to address an issue, and (3) total resolution time of complaint. One user indicated that his email request to the helpdesk did not receive a response for 2 weeks; another user indicated that the initial helpdesk response was prompt, but it took 2 weeks for his problem to be resolved. Helpdesk responsiveness was still a concern near the end of the year-long deployment period. Users interviewed 11 months into the deployment disclosed helpdesk responsiveness remained an issue.

Technicians' Skill Levels Are Inconsistent

The skill level of CTS technicians was a concern, with 23 of 120 users interviewed and 16 of 113 Hotline complainants commenting negatively. While CTS users overwhelmingly indicated they were happy with their new equipment and that the CTS technicians were polite and courteous, many users expressed dissatisfaction with the inconsistent results received when technicians responded to a trouble ticket. Users' comments pertained to CTS technicians that were either (1) temporary employees tasked with deploying CTS equipment to users, (2) temporary employees being considered to fill permanent positions on the

helpdesk, or (3) permanent helpdesk technicians. The inconsistency of technicians' skill levels in resolving a reported issue also caused delays in the users return to work. At one of the CTS sites we visited, a wide disparity of experience existed between two temporary technicians being considered for a permanent assignment. One technician had more than 10 years of specialized information technology experience. The other technician only had one year of basic information technology experience.

Key Helpdesk Processes Are Inconsistent and Lacking

According to interviews with CTS representatives and technicians, an inconsistent approach exists with populating issues and resolutions into a common knowledge base. EPA's April 2009 Service Improvement Plan states that the Agency plans to deploy the Knowledge Base component in the helpdesk trouble ticket system. This component was supposed to provide a common source for helpdesk technicians to retrieve solutions to identified problems. However, implementing the component has yet to occur. Some technicians responded they were not aware of a common solutions library, while others responded that they used a folder on a shared network drive to find resolutions to problems that occurred during installments. In addition, a lack of consistency existed in the way technicians at different CTS sites shared newly discovered deployment problems with other locations. One technician described daily meetings in which issues were shared; others said they used emails for sharing, and yet others did not know what the proper procedure would be for sharing issues.

These variations were caused by an inconsistent method for training deployment and helpdesk technicians. CTS lacked a uniform training approach across CTS deployment sites. For example, at one site deployment staff were given classroom training along with on-the-job training by shadowing a more experienced technician. At another site, technicians did not receive classroom training and were only trained by shadowing more experienced technicians during a computer deployment. Furthermore, interviews with helpdesk technicians revealed they received limited or no ongoing training.

In response to the draft report, management indicated they implemented a training program followed by all CTS technicians to ensure skills and knowledge remain consistent with the needs of the CTS customer base. Also, EPA instituted an audit in early 2010 through Office of Administration and Resources Management regarding the technical skills and qualifications of the contractor technical staff; the audit results defined the skills and qualifications needed for CTS helpdesk staff. While management indicated they took steps, more management emphasis is needed to ensure that CTS define their business practices and train personnel.

Recommendations

We recommend that the Director, Office of Technology Operations and Planning, Office of Environmental Information:

2-1 Develop and implement a process to help meet all performance metrics related to CTS helpdesk responsiveness.

2-2 Document a catalog of all helpdesk processes and train all CTS technicians on these respective CTS processes, procedures, and technologies.

2-3 Implement the use of the Knowledge Base component in the trouble ticket system.

Agency Response and OIG Comments

In general, the Agency agreed with the findings and recommendations. However, the Agency indicated it had an on-board training program for training CTS technicians. In the draft report, we recommended that the Agency coordinate with the CTS Contracting Officer to better define the qualifications and skill level needed for CTS helpdesk staff. In response, CTS management provided us the results of an Agency audit of the CTS helpdesk staff's technical skills and qualifications that took place during our audit. After reviewing these results, we removed our recommendation. Where appropriate, we modified the report.

Chapter 3
CTS Lacks an Effective Quality Management Program

EPA lacks an effective Quality Management Program that monitors all aspects of the contractor's performance. The draft CTS Quality Assurance Surveillance Plan (QASP) defines key roles and processes to ensure quality work by the contractor. Although this key document was due at the onset of the CTS project, EPA has not finalized it, due to delays in establishing agreed-upon details with the contractor. As a result, EPA does not have a process to validate performance metrics data that are self-reported by the contractor. Without accurate performance feedback, EPA management may find it difficult to identify areas needing improvement and implement effective solutions.

CTS Quality Assurance Plan Is Not Finalized

The CTS QASP dated March 2007 is still in draft as of April 2010. The plan describes procedures EPA will use to monitor the Service Providers contract/Letter of Obligation performance. The QASP focuses on examining the end products and services provided by the contractor. It also describes the methodology used to make both quantitative and qualitative evaluations of the contractor's performance. A CTS representative stated that the draft QASP was hastily developed to meet Office of Management and Budget Circular A-76 guidelines for a competitive sourcing proposal. The representative stated that the plan still needs to be tailored to fit the CTS model. For example, the CTS representative explained that in the CTS model, the roles and responsibilities outlined in the plan for Quality Assurance Evaluators (QAEs) are to be filled by the Zone Representatives. However, the QASP still lists the positions as QAEs. The Agency reported that the QASP will be finalized in early February 2010. However, the plan was not complete as of April 2010.

Contractor Performance Measurements Are Not Validated by EPA

The validity of performance metric numbers being met each month is uncertain because EPA does not have a process in place to validate the measurements that are self-reported by the contractor. These measurements include customer satisfaction ratings and the timeliness of helpdesk responses and resolutions, hardware installs, and incident reporting. Performance measurement reports dated December 2008 through September 2009 produced by the contractor show a monthly average of 20 out of 44 metrics have not been met. According to a CTS representative, some contractor reports were rejected because data appeared incorrect. The CTS representative stated the Agency is working with the contractor to examine the methodology used for each of the performance measures. Also, the Agency plans to develop Independent Verification and

Validation (IV&V) standards and processes for each of the 44 metrics. However, as of October 2009, EPA was in preliminary project discussions and lacked a process to gather independent performance data or validate the performance data being reported by the contractor. Measuring and tracking contractor performance is critical to ensuring that the Agency is obtaining contractually required services and an indicator that certain types of benefits are, or are not, being achieved (e.g., improved user satisfaction). In addition, these data are ultimately used in calculating an award fee for the CTS contractor. Without a process in place to verify contractor performance, the contractor could receive a monetary award without having actually met award criteria.

Recommendations

We recommend that the Director, Office of Technology Operations and Planning, Office of Environmental Information:

3-1 Finalize the QASP and verify the plan is tailored to reflect the CTS business model.

3-2 Develop and implement an IV&V process for each of the 44 performance metrics.

Agency Response and OIG Comments

The Agency agreed with the findings and recommendations.

Chapter 4
CTS Business Processes Are Not Defined

The contractor has not completed key planning and operational documents that outline critical business processes. The CTS PWS cites that the CTS Service Provider is responsible for documenting all efforts associated with the PWS, including supporting documents for installing, testing, and operating the systems. A CTS representative stated insufficient time was allocated to project planning, which led to incomplete and untimely deliverables from the contractor. This delay occurred because the same contractor staff integral to the CTS deployment were also responsible for developing these key documents. Success in implementing desktop services management rests in large part on thorough preparation and planning before deployment. Without this, significant problems could occur during deployment. Further, without complete documentation of key business processes, the Agency has no standard in which to measure the completeness, quality, and accuracy of the contractor's products and performance.

Key Planning and Operational Documents Are Not Complete

As of January 2010, the contractor has yet to complete key planning and operational documents, due in June-July 2008, to EPA standards. The documents are:

- Configuration Management Plan,
- Phase-In Plan,
- Program Management Plan,
- Quality Control Plan, and
- Standard Operating Procedures.

While the contractor provided these deliverables, EPA rejected the documents because required standards had not been met. A contractor performance evaluation cited

> …the content of the documentation was not fit for its intended purpose, which was to describe the processes and procedures that would accomplish the overall requirements of the PWS. The documents lacked clarity and appropriate details, did not reference industry standards cited in the contract, and did not include the required schedule for completion of specific tasks in the plan.

Also, the contractor has not provided all required recurring reports such as status reports, issue tracking reports, and inventory reports. Even though the contractor had not completed these documents to the Agency's satisfaction, the EPA contracting office made payment to the contractor for these deliverables. Without these key planning and operational documents, management can not verify that PWS requirements are being carried out as planned.

In response to the draft report, management indicated they are using the award fee process as a way of imposing consequences on the contractor for nonperformance. Although, the purpose of the award fee should to motivate the contractor to meet performance metrics it does not include contractor's performance pertaining to developing key planning and operational documents. As such, it is critical that management establish milestones for delivering these key documents and internal control processes to ensure deliverables are approved before payment.

Security Planning Was Not Complete

One of the more critical documents that the contractor did not complete was the CTS Security Plan. As with the other overdue CTS documents from the contractor, the security plan submitted did not meet EPA requirements and was rejected. To move forward with the certification and accreditation (C&A) of CTS, EPA had to rewrite the Security Plan (a required C&A document). This critical document was not approved until November 2009. Further, the contingency planning portion of required CTS security documents was also not completed until January 2010. Without security planning documents in place, management could not be reasonably assured of the security and availability of the system and that Agency operations would continue in the event of a disaster.

Recommendations

We recommend that the Director, Office of Technology Operations and Planning, Office of Environmental Information:

4-1 Document milestones for completing overdue and future contractor deliverables.

4-2 Document the process used to verify deliverables are complete and accepted prior to paying contractor. This should include withholding future payments to contractor until required deliverables are delivered and approved.

Agency Response and OIG Comments

In general, the Agency agreed with the findings. Management indicated milestones have been developed and are in place for the required contractual deliverables, and management will document these in the project plan by

September 15, 2010. The Agency also indicated it has a process in place to ensure deliverables are completed and accepted prior to payment. However, management indicated they have not documented the process. Management indicated they have an award fee process in place, but an award fee has not been paid to the contractor up to this point. Management needs to document the processes used for evaluating performance. Where appropriate, we modified the report.

Chapter 5
Key CTS Positions Are Not Permanently Staffed

EPA did not have a permanent, full-time CTS Program Manager during the 12-month deployment. The CTS Continuing Governance Organization (CGO) positions remain vacant as of November 2009. The CGO provides management oversight of the CTS deployment and continued operations for over 11,700 end users. The technical proposal states that the above positions were to be in place by October 1, 2007. Problems encountered during the Program Manager hiring process resulted in a vacancy of the CGO positions. As a result, deploying over 11,700 computers was burdened with problems and created a frustrating transition for end users. This may result in a sustained negative impression of CTS that the Agency will need to overcome for users to accept and support continuing the CTS environment.

Permanent Program Manager Position Vacant During Deployment

The CTS deployment period lacked a permanent full-time Program Manager, a key management position for this project. This MEO team position is responsible for activities such as developing policies, performing long- and short-term planning, managing customer focused activities, and meeting service performance measures. The CTS technical proposal required this position to be in place before starting deployment. However, the Program Manager position was filled in an acting capacity on a part-time basis until hiring someone full-time at the end of September 2009, the last month of the deployment period. The staff member filling the role on a part-time basis was also responsible for heading an OEI branch during this time. This management official stated that performing both roles left an insufficient amount of time available to perform the CTS Program Manager duties.

Two key areas of CTS affected by this lack of time were communications and developing processes and procedures for deployment--both key planning areas that, if neglected, can negatively impact a project. Agency managers and end users stated that better communication was needed and that the CTS deployment lacked key procedures and processes. Staff members responsible for coordinating with CTS for the computer installations at their location stated that the communication plan was not sufficient to make them feel prepared for the deployment. They also stated that if they had not taken the lead on preparing their office for the deployment, the situation would have been more problematic. Staff members also stated that without their proactive and follow-up actions before and during the deployment, it would have been more problematic.

Most Efficient Organization Oversight Team Not in Place

The CGO is a leadership team intended to govern activities of the CTS team. The CGO positions were originally planned to be in place by October 1, 2007, *before the deployment*. However, as of November 2009, the four CGO positions were still vacant. These positions are Program Manager, Project Officer, Technical Architect, and Service Manager. A CTS representative stated that these vacancies hindered the deployment. An example given by the CTS representative was problems encountered by eBusiness (an Agency system used by CTS for ordering computers and related hardware and the billing of this equipment). The representative stated that the CGO Service Manager position could have used the assistance of eBusiness to avoid many of the problems encountered during the deployment. When questioned about the delay in hiring the CGO positions, a representative stated that the MEO positions took priority over these positions. The lack of guidance that this oversight board could have provided may have caused many of the issues and delays in CTS deployment activities. Hiring these positions as soon as possible will provide the management oversight and guidance needed to assist in reducing and remediating problems during the operations and maintenance phase of the CTS project.

Recommendation

We recommend that the Director, Office of Technology Operations and Planning, Office of Environmental Information:

5-1 Give priority to filling all four CGO vacancies, and establish a milestone date.

Agency Response and OIG Comments

The Agency agreed with the findings and recommendation.

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	6	Develop and implement a process to help meet all performance metrics related to CTS helpdesk responsiveness.	O	Director, Office of Technology Operations and Planning, Office of Environmental Information	01/15/11		
2-2	6	Document a catalog of all helpdesk processes and train all CTS technicians on these respective CTS processes, procedures, and technologies.	O	Director, Office of Technology Operations and Planning, Office of Environmental Information	12/15/10		
2-3	6	Implement the use of the Knowledge Base component in the trouble ticket system.	O	Director, Office of Technology Operations and Planning, Office of Environmental Information	01/30/11		
3-1	8	Finalize the QASP and verify the plan is tailored to reflect the CTS business model.	O	Director, Office of Technology Operations and Planning, Office of Environmental Information	04/01/11		
3-2	8	Develop and implement an IV&V process for each of the 44 performance metrics.	O	Director, Office of Technology Operations and Planning, Office of Environmental Information	02/15/11		
4-1	10	Document milestones for completing overdue and future contractor deliverables.	O	Director, Office of Technology Operations and Planning, Office of Environmental Information	09/15/10		
4-2	10	Document the process used to verify deliverables are complete and accepted prior to paying contractor. This should include withholding future payments to contractor until required deliverables are delivered and approved.	O	Director, Office of Technology Operations and Planning, Office of Environmental Information	09/15/10		
5-1	13	Give priority to filling all four CGO vacancies, and establish a milestone date.	O	Director, Office of Technology Operations and Planning, Office of Environmental Information	09/15/10		

[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

Agency Response to Draft Report

July 12, 2010

MEMORANDUM

SUBJECT: OEI Comments on the Draft Report: EPA Needs to Improve Management Practices to Ensure a Successful Customer Technology Solutions Project, Audit No: OMS-FY09-0004

FROM: Vaughn Noga, Director
Office of Technology Operations and Planning
And Chief Technology Officer

TO: Rudy Brevard, Director
Information Resources Management Assessments
Office of Inspector General

We appreciate the opportunity to review the draft Report, "*EPA Needs to Improve Management Practices to Ensure a Successful Customer Technology Solutions Project*."

In general, we found the report was an accurate reflection of the Customer Technology Solutions (CTS) service at the time of the audit and activities that will improve the service. We concur with some of the findings and recommendations; however, given the duration of time between the audit, conducted in April 2009, and the final report, provided in June 2010, many of the findings and subsequent recommendations have been accomplished. Please refer to the associated Corrective Action Plan for further details.

If you have any questions regarding this report, please contact me at 202-564-6665, or your staff may contact Michael Fays at 202-566-0438.

cc: Johnny Davis
Liza Hearns
Michael Fays

Office of Environmental Information
Corrective Action Plan

Auditing Group: OIG **Audit No.: OMS-FY09-0004** **Report Date: June 10, 2010** **OEI Lead Office: OTOP/EDSD**	**Audit Title: EPA Needs to Improve Management Practices to Ensure a Successful Customer Technology Solutions Project (draft)** **OEI Lead and Phone: Michael Fays 202-566-0438**

Recommendation	Corrective Action	Planned Completion Date	Status / Actions Taken
2-1 Develop and implement a process to help meet all performance metrics (PM) related to CTS helpdesk responsiveness.	2-1-1 Develop a process to help meet PM on responsiveness 2-1-2 Implement process	2010/11/15 2011/01/15	2-1-1 PM attainment levels have trended in a positive manner as follows: -- April 2009: 47% -- April 2010: 73% This has been accomplished through focus on specific metrics and issues, along with rigorous analysis of metrics calculations. Efforts in this respect will continue and a formal process will be documented.
2-2 Document a catalog of all helpdesk processes. Develop and implement a process to train all CTS technicians on the respective CTS processes, procedures, and technology.	2-2-1 Develop a helpdesk process catalog 2-2-2 Develop process to train CTS technicians 2-2-3 Implement process to train technicians	2010/12/15 2010/10/01 2010/11/15	2-2-1 Knowledge articles continue to be developed based on operational requirements; the appropriate documentation will be compiled into a process catalog by the indicated date. 2-2-2/2-2-3 Non-concur. An onboarding training program is currently followed for all CTS technicians to ensure skills and knowledge remain consistent with the needs of the CTS customer base.
2-3 Coordinate with the CTS Contracting Officer to better define the qualifications and skill level needed for CTS	Describe work CO and audit has done to define qualifications and skill level of CTS staff.	2010/10/15	Non-concur. EPA instituted an audit in early 2010 through OARM regarding the technical skills and qualifications of the contractor technical staff; the results of this audit are pending.

helpdesk staff.			
2-4 Implement the use of the Knowledge Base component in the trouble ticket system.	Implement the use of Knowledge Base component in the Remedy system.	2011/01/30	
3-1 Finalize the QASP and verify the plan is tailored to reflect the CTS business model.	3-1-1 Finalize the QASP 3-1-2 Verify the QASP is tailored to reflect the CTS business model	2011/04/01 2010/12/15	The team plans to first ensure the QASP is relevant to the CTS operation, and then will work to finalize by the indicated date.
3-2 Develop and implement an IV&V process for each of the 44 performance metrics.	3-2-1 Develop IV&V process for the PMs 3-2-2 Implement the IV&V process	2011/01/15 2011/02/15	
4-1 Establish a milestone for completing overdue CSC deliverables and verify deliverables meet EPA standards.	Establish milestones in project plan for overdue deliverables. Per schedule in project plan, verify the deliverables meet EPA standards	2010/09/15	Non-concur. Milestones have been developed and are in place for the required contractual deliverables, and will be documented by the indicated date.
4-2 Determine whether compensating measures are needed until key documents are delivered, and if so, establish those measures.	4-2-1 Determine compensating measures needed for key documents 4-2-2 Establish project plan for establishing those measures.	2010/08/15 2010/09/15	
4-3 Verify all deliverables are complete and accepted prior to paying contractor.	Verify process to ensure deliverables are complete and accepted prior to payment.	2010/09/15	Non-concur. CTS Program Manager/EPA Team and the Contracting Officer are aligned regarding the criteria that constitute quality and complete deliverables that warrant payment; the process governing this approach is in place, and will be documented by the indicated date.
4-4 Coordinate with the CTS Contracting Officer to impose consequences when contractor fails to deliver products and services according to contracted	Coordinate with CTS CO to impose consequences for failed delivery.	2010/09/15	Non-concur. This is in place today. The Award Fee process inherent to the contract is utilized and, up to this point, the contractor has not received an Award Fee. Additionally, the EPA team continues to diligently document and reject contractor's proposed PM attainment levels on metrics for where there is not

timelines. This should include withholding future payments to CSC until all required deliverables are delivered.			consensus regarding the validity of the calculation. The actual process will be documented by the indicated date.
5-1 Give priority to filling out all four CGO vacancies, and establish a milestone date.	Outline priorities for filling CGO vacancies and establish milestone dates for filling vacancies	2010/09/15	CTS Program Manager position was filled in September 2010. Technical Manager position was filled March 2010. A plan for filling the remaining positions is underway and will be documented, along with target dates, by the indicated date.

Appendix B

OIG Hotline Complaint Category Descriptions

The table below shows the 113 OIG hotline complaints by category and the number of times that each of the six issues was cited. (Note: Some of the 113 complaints had more than 1 issue.)

Table A-1: OIG Hotline Complaint Categories with Number of Occurrences

Technician Skill Level	Helpdesk Responsiveness	Printers	"Deployment Day" Issues	Hardware	Non-CTS
16	51	21	10	37	42

Source: OIG compilation and analysis.

- The "Technician Skill Level" category incorporates users' comments about CTS technicians not possessing the appropriate skill level to complete an assigned task or duty.
- The "Helpdesk Responsiveness" category captures complaints related to long on-hold times when calling the helpdesk, technicians taking a long time to respond to a help request, or a lengthy issue resolution time.
- The "Printers" category incorporates complaints related to new CTS printers (mostly issues related to duplex printing) and connectivity issues with existing non-CTS printers.
- The "Deployment Day Issues" category captures complaints of problems only experienced on the day of deployment.
- The "Hardware" category captures complaints that the new CTS hardware is "inferior" to what existed and slow start-up times on the new equipment. In most cases, slow start-up times of new hardware were due to heavy network traffic during deployment and improved after the specific site deployment was complete.
- The "Non-CTS" category incorporates problems related to FDCC standards, email system upgrade, encryption, and general setting problems.

Appendix C

Distribution

Office of the Administrator
Assistant Administrator for Environmental Information and Chief Information Officer
Assistant Administrator for Administration and Resources Management
Agency Follow-up Official (the CFO)
Agency Follow-up Coordinator
Director, Office of Technology Operations and Planning, Office of Environmental Information
Director, Enterprise Desktop Solutions Division, Office of Environmental Information
Director, Office of Acquisition Management, Office of Administration and Resources Management
General Counsel
Associate Administrator for Congressional and Intergovernmental Affairs
Associate Administrator for External Affairs and Environmental Education
Audit Follow-up Coordinator, Office of Environmental Information
Inspector General