



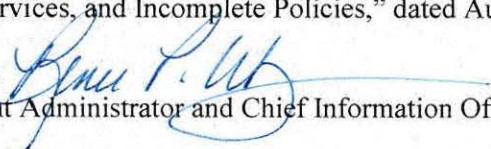
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
ENVIRONMENTAL INFORMATION

OCT 27 2014

**MEMORANDUM**

**SUBJECT:** Response to Office of Inspector General Final Report No. 14-P-0332, "Cloud Oversight Results in Unsubstantiated and Missed Opportunities for Savings, Unused and Undelivered Services, and Incomplete Policies," dated August 15, 2014

**FROM:** Renee P. Wynn   
Acting Assistant Administrator and Chief Information Officer

**TO:** Arthur A. Elkins, Jr.  
Inspector General

Thank you for the opportunity to respond to the issues and recommendations in the subject final audit report. Following is a summary of the Office of Environmental Information's (OEI) overall position, along with its corrective action plan. For those report recommendations with which the OEI agrees, we have provided high-level intended corrective actions and estimated completion dates. There are some recommendations I believe are out of the scope of this audit, and I submitted a Dispute Resolution Request to the audit's Assistant Inspector General to address the issues.

In response to the draft report, OEI argued that chapters 4 and 5 (containing recommendations #9-12, now renumbered as #8-11) were out of scope of the stated purpose of the audit which was to determine whether the EPA had: 1) implemented its cloud initiatives in accordance with the Federal Cloud Computing Strategy, and 2) developed formal processes to monitor cloud vendors. OIG responded that the Federal Cloud Computing Strategy shows the potential for cloud computing to address inefficiencies. "We conclude this to mean that the management of IT investments to eliminate those inefficiencies is a part of the Federal Cloud Computing Strategy."

We continue to hold that chapters 4 and 5, with their recommendations concerning the evaluation of all applications on the Domino infrastructure and in other domains, are out of scope of this particular audit. The stated purpose was not to determine whether the Agency's IT portfolio as a whole was in compliance with the Federal Cloud Computing Strategy. It was to determine whether the Agency's "cloud initiatives" were implemented in accordance with the Strategy. As such, the scope can include only initiatives that are cited under Scope and Methodology: The My Workplace Migration and the Infrastructure as a Cloud (IaaS) contract. As such we consider recommendations 8 through 11 out of scope and have not addressed them in this response.

Please find attached the OEI corrective action plan for this audit. If you have any questions or concerns about this response, please contact Harrell Watkins, Acting Director, Office of Technology Operations and Planning, at 202-566-0672.

Attachment

cc: Harrell Watkins  
Anne Mangiafico  
Judi Maguire

**OFFICE OF ENVIRONMENTAL INFORMATION (OEI)  
RESPONSE TO FINAL OIG REPORT RECOMMENDATIONS  
CORRECTIVE ACTION PLAN**

OIG Final Report No. 14-P-0332, "Cloud Oversight Results in Unsubstantiated and Missed Opportunities for Savings, Unused and Undelivered Services, and Incomplete Policies," dated August 15, 2014.

Note: The Office of Administration and Resources Management leads and has completed recommendations 2 and 7.

**OIG Recommendation 1:**

Develop and implement an internal independent oversight process to ensure that documented cost-benefit analyses are performed in compliance with proper OMB circular prior to OEI outsourcing IT initiatives.

OEI Corrective Action Recommendation 1 (Lead Office OEI/OTOP/MISD):

OEI agrees that proper cost analyses are important to any decision on the appropriate hosting environment. However, factors such as discoverability of data hosted in the cloud and cyber security are arguably more important, and must be considered along with cost savings estimates. Currently, OEI can require detailed analyses when outsourcing its own applications. However, other EPA programs are not currently constrained to submit their application hosting actions to OEI for review. OEI believes it would be beneficial to adopt new policies that establish OEI as a broker in all proposed application hosting decisions so that we can assess discoverability and security as well as cost savings. This will involve a change in current practices, and as such must be developed in concert with the programs and obtain the approval of the Quality and Information Council (QIC).

OEI will work with the Information Investment Review Board to charter a work group to develop a plan: (a) detailing the elements of an OEI review of application hosting proposals (to include cost, discoverability, security, and other elements if necessary); (b) identifying specific policy and procedure documents to be updated or developed to support this new process; and (c) presenting a resource estimate implementing and executing the new process. The work of this group will include meeting with program offices and other stakeholders to hear their ideas and concerns, and to foster support for the policy change. The group will present its plan to the QIC for review and decision no later than June 2015.

Planned Completion Date: June 30, 2015

**OIG Recommendation 3:**

Perform a formal documented analysis to determine whether it is in the EPA's best interest to continue the IaaS contract.

OEI Corrective Action Recommendation 3 (Lead Office: OEI/OTOP/NCC):

OEI concurred with the OIG's recommendation and performed an analysis. The analysis was completed on September 30, 2014 (see attached document "Analysis of EPA Cloud IaaS Contract). The analysis concluded that continuing the IaaS contract was in the best interest of the Agency. There were three findings which led to this conclusion. First, the IaaS acquisition was conservative, cost conscious and compliant with the "Cloud First" directives. Second, the contract is being used by EPA and no cost is incurred beyond what is expended on services ordered and received. Third, OEI exercised the final option year in June 2014 which extends the period of performance through June 2015. Terminating the

contract for the convenience of the government at this point would be costly both in terms of funding and customer disruptions.

Completion Date: September 30, 2014

**OIG Recommendation 4:**

Prior to entering into any future IaaS contracts, perform a formal documented analysis to determine whether such contracts are in the EPA's best interest that includes the investments the EPA would have to make to address integration requirements, obstacles and gaps identified as a result of the current IaaS contract.

OEI Corrective Action Recommendation 4 (Lead Office: OEI/OTOP/NCC):

OEI agrees with the OIG's recommendation and is preparing an action plan accordingly. The plan will address three key aspects of our preparation for future IaaS contracts. First, we will refine and communicate EPA's Cloud Computing Strategy. Second, we will design a Concept of Operations (COO) for NCC to become the Agency's Cloud Service Broker (CSB) and undertake the necessary transformative activities. Third, OEI/OTOP will define an Agency approach for acquiring new cloud IaaS contracts in the context of a CSB offering from NCC.

Planned Completion Date: October 16, 2015

**OIG Recommendation 5:**

Modify the Information Security-Interim Access Control Procedures to adhere to the TIC Reference Architecture Document, which specifies that all external connections are secured through a TIC access point.

OEI Corrective Action Recommendation 5 (Lead Office: OEI/SAISO):

The SAISO is in the process of updating the interim control procedures to reflect NIST SP800-53 rev 4, and will ensure the access control procedure includes appropriate reference guidance from the Department of Homeland Security's Trusted Internet Connections (TIC) Reference Architecture Document Version 2.0 (October 1, 2013).

Planned Completion Date: December 31, 2014

**OIG Recommendation 6:**

Perform a formal documented analysis to determine whether it is in the EPA's best interest to continue using the internal hosting services as-is or to upgrade them to establish an internal private cloud that meets all characteristics of the NIST definition of a cloud.

OEI Corrective Action Recommendation 6 (Lead Office: OEI/OTOP/NCC):

OEI agrees with the OIG's recommendation and plans to undertake the necessary analysis. OEI believes that organizations must understand their IT requirements and implement clouds/hosting operations in a manner which provided the best solution for those requirements. As such, the NCC meets some of the NIST characteristics and not others. Our intent is to analyze and determine the best approaches in terms of cost and functionality in meeting EPA's hosting needs, be they cloud or other. OEI feels the most cost effective approach to analyzing its hosting operations as a cloud is to include it in the NCC COO CSB analysis being performed in support of OIG Recommendation four (4).

Planned Completion Date: October 16, 2015