



*Review of the Enterprise  
E-Mail System Acquisition*

**September 30, 2016**

**Reference Number: 2016-20-080**

This report has cleared the Treasury Inspector General for Tax Administration disclosure review process and information determined to be restricted from public release has been redacted from this document.

**Redaction Legend:**

3 = Personal Privacy Information

---

Phone Number / 202-622-6500

E-mail Address / [TIGTACommunications@tigta.treas.gov](mailto:TIGTACommunications@tigta.treas.gov)

Website / <http://www.treasury.gov/tigta>



**To report fraud, waste, or abuse, call our toll-free hotline at:**

**1-800-366-4484**

**By Web:**

**[www.treasury.gov/tigta/](http://www.treasury.gov/tigta/)**

**Or Write:**

Treasury Inspector General for Tax Administration  
P.O. Box 589  
Ben Franklin Station  
Washington, D.C. 20044-0589

Information you provide is confidential and you may remain anonymous.



## HIGHLIGHTS

### REVIEW OF THE ENTERPRISE E-MAIL SYSTEM ACQUISITION

## Highlights

**Final Report issued on  
September 30, 2016**

Highlights of Reference Number: 2016-20-080 to the Internal Revenue Service Chief Information Officer and Chief Procurement Officer.

### IMPACT ON TAXPAYERS

The IRS currently maintains an on-premises e-mail environment that does not have archive capability. The existing system hardware is approaching manufacturer end-of-support and is experiencing numerous failures resulting in a significantly increased workload on enterprise e-mail support staff. If the IRS does not efficiently upgrade its e-mail environment, it could adversely affect the IRS's ability to effectively perform tax administration.

### WHY TIGTA DID THE AUDIT

The overall objective was to determine whether the IRS properly procured a new enterprise e-mail system. In order to comply with an Office of Management and Budget directive that requires Federal agencies to manage both permanent and temporary e-mail records in an accessible electronic format by December 2016, the IRS plans to procure a complete new enterprise e-mail system.

### WHAT TIGTA FOUND

The IRS purchased subscriptions for an enterprise e-mail system that, as it turned out, it could not use. The purchase was made without first determining project infrastructure needs, integration requirements, business requirements, security and portal bandwidth, and whether the subscriptions were technologically feasible on the IRS enterprise.

IRS Information Technology organization executives made a management decision to consider the enterprise e-mail project an upgrade to existing software and not a new

development project or program. Therefore, the Information Technology organization did not follow the Internal Revenue Manual Enterprise Life Cycle guidance. The IRS authorized the \$12 million purchase of subscriptions over a two-year period between June 2014 and June 2016. However, the software to be used via the purchased subscriptions was never deployed.

The IRS may have violated the *bona fide* needs rule when it purchased the subscriptions using Fiscal Years 2014 and 2015 appropriations and did not deploy the software subscriptions in those years. In addition, the IRS violated Federal Acquisition Regulation requirements by not using full and open competition to purchase these subscriptions.

### WHAT TIGTA RECOMMENDED

TIGTA recommended that the Chief Information Officer ensure that 1) appropriate Internal Revenue Manual sections are followed prior to the subscription requisition process and throughout the subscription project development life cycle for new subscriptions or managed services procurements and 2) a review is conducted by IRS Chief Counsel to determine if the subscriptions purchased violated the *bona fide* needs rule and take any actions required by law. TIGTA also recommended that the Chief Information Officer and Chief Procurement Officer ensure that, if the IRS intends to purchase a cloud solution in the future, it acquires the products through competitive procedures outlined in the Federal Acquisition Regulation.

In management's response to the report, the IRS agreed with two recommendations and plans to have a review conducted by Chief Counsel and to collaborate and follow the Federal Acquisition Regulation. The IRS partially agreed with one recommendation because it does not believe the Enterprise Life Cycle was applicable. The IRS also disagreed that it wasted taxpayer dollars. TIGTA maintains that the Enterprise Life Cycle was applicable and funds were wasted as explained in the report.



TREASURY INSPECTOR GENERAL  
FOR TAX ADMINISTRATION

DEPARTMENT OF THE TREASURY  
WASHINGTON, D.C. 20220

September 30, 2016

**MEMORANDUM FOR CHIEF INFORMATION OFFICER**

A handwritten signature in blue ink that reads "Michael E. McKenney".

**FROM:** Michael E. McKenney  
Deputy Inspector General for Audit

**SUBJECT:** Final Audit Report – Review of the Enterprise E-Mail System  
Acquisition (Audit # 201520028)

This report presents the results of our review of the enterprise e-mail system acquisition. The overall objective of this review was to determine whether the Internal Revenue Service properly procured a new enterprise e-mail system. This audit is included in our Fiscal Year 2016 Annual Audit Plan and addresses the major management challenge of Achieving Program Efficiencies and Cost Savings.

Management's complete response to the draft report is included as Appendix VI. In their response, management not only identified their corrective actions to our recommendations, but also summarized their disagreement with some of the assertions in the report. In Appendix VII, we provide our response to management's disagreement.

Copies of this report are also being sent to the Internal Revenue Service managers affected by the report recommendations. If you have any questions, please contact me or Danny R. Verneuille, Acting Assistant Inspector General for Audit (Security and Information Technology Services).



## *Table of Contents*

<a href="#"><u>Background</u></a> .....	Page 1
<a href="#"><u>Results of Review</u></a> .....	Page 3
<a href="#"><u>The Internal Revenue Service Wasted \$12 Million on Software Subscriptions Over a Two-Year Period Between June 2014 and June 2016</u></a> .....	Page 3
<a href="#"><u>Recommendation 1</u></a> .....	Page 5
<a href="#"><u>Recommendation 2</u></a> .....	Page 6
<a href="#"><u>The Internal Revenue Service Did Not Use Full and Open Competition in Its Acquisition of Software Subscriptions</u></a> .....	Page 6
<a href="#"><u>Recommendation 3</u></a> :.....	Page 8
 <b>Appendices</b>	
<a href="#"><u>Appendix I – Detailed Objective, Scope, and Methodology</u></a> .....	Page 9
<a href="#"><u>Appendix II – Major Contributors to This Report</u></a> .....	Page 11
<a href="#"><u>Appendix III – Report Distribution List</u></a> .....	Page 12
<a href="#"><u>Appendix IV – Outcome Measure</u></a> .....	Page 13
<a href="#"><u>Appendix V – Glossary of Terms</u></a> .....	Page 14
<a href="#"><u>Appendix VI – Management’s Response to the Draft Report</u></a> .....	Page 15
<a href="#"><u>Appendix VII – Office of Audit Comments on Management’s Response</u></a> .....	Page 19



---

*Review of the Enterprise E-Mail System Acquisition*

---

*Abbreviations*

BPA	Blanket Purchase Agreement
EaaS	E-Mail As a Service
ELC	Enterprise Life Cycle
GAO	Government Accountability Office
IRM	Internal Revenue Manual
IRS	Internal Revenue Service
IT	Information Technology
RFQ	Request for Quotation



## *Background*

On August 24, 2012, the Office of Management and Budget released a directive<sup>1</sup> that Federal agencies will manage both permanent and temporary e-mail records in an accessible electronic format by December 2016. The memorandum states that e-mail records must be retained in an appropriate electronic system that supports records management and litigation requirements (which may include preservation-in-place models), including the capability to identify, retrieve, and retain records for as long as they are needed. In August 2014, the Internal Revenue Service (IRS) prepared a draft Request for Quotation (RFQ). This document states:

*In compliance with the Federal Government Cloud First policy, the Internal Revenue Service (IRS) seeks an experienced industry partner to provide a secure cloud-based E-Mail as a Service (EaaS) solution to replace IRS-managed e-mail servers, software, and related infrastructure components. The EaaS service will provide the IRS with greatly expanded user e-mail mailbox sizes, e-mail archiving capabilities for all users, and high availability with auto fail-over to geographically dispersed redundant datacenters.*

The draft RFQ defined EaaS to be a hybrid Microsoft Office 365 Online Plan 2 e-mail solution, with the majority of IRS e-mail users migrating to the Microsoft Office 365 cloud and the remaining users residing in an on-premises IRS-managed Microsoft Exchange environment. The draft RFQ also stated that the IRS strategy is to replace the current enterprise e-mail system owned and managed by the IRS with a cloud-based service environment that is compatible with IRS and industry managed service Enterprise Life Cycle (ELC) principles. The draft RFQ stated that the IRS is challenged by an e-mail infrastructure that consists of hardware assets that may be less than optimally utilized. There is currently no archive capability associated with the enterprise e-mail environment. The existing system hardware is approaching manufacturer end-of-support and is experiencing numerous failures resulting in a significantly increased workload on enterprise e-mail support staff.

The General Services Administration offers Cloud EaaS blanket purchase agreements (BPA) that provide a broad range of EaaS solutions for the Federal Government. These solutions offer e-mail, calendar, contacts, and collaboration services (including instant messaging) on a per-mailbox basis and include mobile device integration with BlackBerry devices. They also provide archive and eDiscovery capabilities.

The Enterprise eRecords Management Team, which is under the Privacy, Governmental Liaison, and Disclosure Office, works to develop IRS policies, procedures, and information technology

---

<sup>1</sup> Office of Management and Budget, Memorandum M-12-18, *Managing Government Records Directive* (Aug. 24, 2012). See Appendix V for a glossary of terms.



## *Review of the Enterprise E-Mail System Acquisition*

---

solutions for electronic records management. The Enterprise eRecords Management Team developed a plan in Calendar Year 2015 to address electronic records management requirements, including identifying the technology to meet the statutory and regulatory requirements described in the Office of Management and Budget directive. The team's mission includes implementing the plan to manage all IRS temporary and permanent electronic records. The enterprise e-mail system is being managed by the Enterprise Exchange Upgrade Program Office, which is under the Microsoft Initiative Program Office established in February 2016.

The Information Technology (IT) organization's Office of Strategy and Planning, Strategic Supplier Management function, supports the IRS IT organization using an over-arching organizational concept of strategically managing information technology acquisitions and vendors to maximize the IRS's investments in key commodities while simultaneously minimizing business risk. The primary goal of the Strategic Supplier Management function is to identify significant opportunities to improve the IT organization's procurement capabilities.

This review was performed at the New Carrollton Federal Office Building in Lanham, Maryland, and an IRS office located in Denver, Colorado, during the period December 2015 through August 2016. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. Detailed information on our audit objective, scope, and methodology is presented in Appendix I. Major contributors to the report are listed in Appendix II.





## *Results of Review*

### **The Internal Revenue Service Wasted \$12 Million on Software Subscriptions Over a Two-Year Period Between June 2014 and June 2016**

According to Internal Revenue Manual (IRM) 2.21.1, *Requisition for IT Acquisition Products and Services, Introduction to Requisition Processing for Information Technology*, dated February 26, 2013, all organizations within the IRS are responsible for including business requirements as part of the requisition for information technology products and services. A business justification typically consists of: 1) technical requirements of the acquisition, 2) how it supports the organization's business requirements, 3) how the business requirements support the Strategic and Program Plan, 4) a basis of cost estimate, and 5) any other relevant information.

According to IRM 2.16.1, *Enterprise Life Cycle (ELC) – Enterprise Life Cycle Guidance*, dated December 22, 2015, the ELC is a framework used by IRS projects to ensure consistency and compliance with Federal Government and industry best practices. IRM 2.16.1 states that the ELC Framework consists of multiple paths for new development and maintenance. A path is an approach to accomplishing the life cycle work, specifies how the work will be partitioned into phases, and supports a unique technical or system engineering approach in order to develop a solution. For new development projects, the ELC supports the Commercial Off-the-Shelf Path and the Managed Services Path. The ELC path selection typically occurs during the Project Initiation Phase and should be made based on the technical approach the project decides to use to develop the solution. If the best approach is to buy a solution and have the IRS maintain it, then the project will follow the Commercial Off-the-Shelf Path. The Managed Services Path is designed to capitalize on the benefits of services provided by an outside vendor. This could include software packages, integrated software packages, shared services and infrastructure components, web hosting, network-centric workstations, and support services and web hosting.

According to the Government Accountability Office's (GAO) *Principles of Federal Appropriations Law*,<sup>2</sup> a fiscal year appropriation may be obligated only to meet a legitimate, or *bona fide*, need arising in, or in some cases, arising prior to but continuing to exist in, the fiscal year for which the appropriation was made.<sup>3</sup> Annual appropriations are available only to meet the *bona fide* needs of the fiscal year for which they are appropriated.

IT organization executives told us that they made a management decision to consider the enterprise e-mail project an upgrade to existing software and not a new development project or

<sup>2</sup> GAO, GAO-04-261SP (3rd edition), *Principles of Federal Appropriations Law*, Chapter 5 (January 2004).

<sup>3</sup> 31 U.S.C § 1502 (a).



*Review of the Enterprise E-Mail System Acquisition*

program. Therefore, the IT organization chose not to use the draft RFQ and not to follow the ELC Commercial Off-the-Shelf Path or the Managed Services Path to acquire, develop, and deploy the enterprise e-mail system. \*\*\*\*\*3\*\*\*\*\*  
 \*\*\*\*\*3\*\*\*\*\*, authorized the \$12 million purchase of Microsoft Office 365 ProPlus monthly subscriptions from June 2014 to June 2016 and Exchange Online monthly subscriptions from June 2015 to June 2016. However, the software to be used via the purchased subscriptions was never deployed. Figure 1 provides a summary of the subscription costs.

**Figure 1: Software Paid for but Not Installed Over a Two-Year Period**

Product	Office 365 ProPlus	Exchange Online	Total
Monthly Cost Base Year	\$ 253,110	0	
Months Paid	12	0	
Total Paid for Base Year	\$ 3,037,320	0	\$ 3,037,320
Monthly Cost Option Year 1	\$ 486,750	\$ 267,750	
Total Months Paid	12	12	
Total Paid for Option Year 1	\$ 5,841,000	\$ 3,213,000	\$ 9,054,000
<b>Total Paid Over Contract</b>	<b>\$ 8,878,320</b>	<b>\$ 3,213,000</b>	<b>\$ 12,091,320</b>

Source: Softchoice BPA and associated task orders and modifications.

These subscriptions were purchased prior to the establishment of the Microsoft Initiative Program Office in February 2016 and without first determining project infrastructure needs, integration requirements between the Microsoft Government Community Cloud and an on-premises solution, business requirements, security and portal bandwidth, and whether the system was technologically feasible on the IRS enterprise. We believe that the IRS should have established the Microsoft Initiative Program Office and followed the Managed Services Path prior to purchasing the software subscriptions. We also believe that the results of the requirements determinations from that process should have been completed prior to the acquisition of the subscriptions.

The Strategic Supplier Management function and \*\*\*\*\*3\*\*\*\*\*  
 \*\*\*\*\*3\*\*\*\*\*, stated that the IRS made the purchase prior to being able to use the subscriptions in order to obtain what it felt was a more lucrative long-term deal for the IRS. This long-term agreement included locking in a commitment to the vendor in Fiscal Years 2014 and 2015 with multiple option years for subscriptions instead of perpetual software licenses. However, the IRS had no documentation or analysis to support that it would not have obtained the same or a better long-term deal by following the ELC and issuing an RFQ in an open and competitive acquisition process once all requirements had been determined. \*\*\*\*\*3\*\*\*\*\*  
 \*\*\*\*\*3\*\*\*\*\*, informed us that it did not follow the Commercial Off-the-Shelf Path or Managed Services Path as prescribed by IRM 2.21 or IRM 2.16.1 because it viewed this procurement as an upgrade. This decision was made even though the subscriptions



---

## *Review of the Enterprise E-Mail System Acquisition*

---

were separate products from the current environment and would require new infrastructure and new security requirements beyond what the current version of the software requires.

By not following IRM 2.21 or IRM 2.16.1 and performing the required and necessary cost analysis, security assessments, and requirements analysis to implement the software products prior to the purchase of the subscriptions, the IRS wasted \$12 million on subscriptions and renewal fees for software that was never deployed. The IRS may have violated the *bona fide* needs rule when it purchased the subscriptions in Fiscal Years 2014 and 2015 by using Fiscal Years 2014 and 2015 appropriations and not deploying the software subscriptions in those years. IRS executives and personnel were aware that the IRS did not have the infrastructure to utilize the software on premises, but the IRS had not yet determined all of the requirements or performed the necessary cost analysis and security assessments needed to use the Microsoft Government Community Cloud when the subscriptions were acquired.

### ***Recommendations***

The Chief Information Officer should:

**Recommendation 1:** Ensure that IRM 2.21 and IRM 2.16.1 requirements regarding the Commercial Off-the-Shelf Path or the Managed Services Path are followed prior to the subscription requisition process and throughout the subscription project development life cycle for new subscriptions or managed services procurements.

**Management's Response:** The IRS partially agreed with this recommendation. The IRS's ELC as outlined in IRM 2.16.1 is principally a project management methodology to be used for large-scale software development projects and the introduction of new technology. The IRS disagrees that this methodology must be used for software acquisitions. However, the IRS agrees that large-scale, new enterprise-wide software acquisitions need to have a set of well-documented minimum requirements to ensure that effective management is adhered to for acquisitions of the type and size.

**Office of Audit Comment:** The ELC Framework consists of multiple paths for new development and maintenance. Two of the paths available are the Commercial Off-the-Shelf Path and the Managed Services Path, which are used to acquire and implement software products of this nature. The adoption of online services (EaaS) creates a substantial change in administration, vendor management, asset management, and operations.

After completing our audit work, we obtained a document titled *Enterprise Exchange Upgrade, ELC Managed Services Path, Project Tailoring Plan* dated June 30, 2015. The document was digitally signed by the project manager on July 16, 2015. This document contradicts the points made in IRS management comments and supports our recommendation. In addition, the IRS is developing its plans to implement Microsoft Exchange 2016 on premises. We obtained an initial draft document titled *Exchange*



---

## *Review of the Enterprise E-Mail System Acquisition*

---

*Server 2016 Upgrade, ELC Commercial Off-the-Shelf Path, Project Tailoring Plan,* dated April 6, 2016, further supporting our position that the ELC should be followed.

**Recommendation 2:** Seek a review by IRS Chief Counsel to determine if the purchase of Microsoft Office 365 ProPlus and Exchange Online violated the *bona fide* needs rule and take any actions required by law.

**Management's Response:** The IRS agreed to this recommendation. The Chief Information Officer has requested Chief Counsel to determine if the purchase of Microsoft Office 365 ProPlus and Exchange Online violated the *bona fide* needs rule. Upon completion of the Chief Counsel's response, the IRS will take any action required.

### **The Internal Revenue Service Did Not Use Full and Open Competition in Its Acquisition of Software Subscriptions**

The General Services Administration administers the Federal Supply Schedule program, also known as the General Services Administration Schedules Program or Multiple Award Schedule Program, which is a simplified process for Federal agencies to obtain supplies or services at prices associated with volume buying.<sup>4</sup> Ordering agencies are authorized to place orders, or establish BPA, against vendor's Federal Supply Schedule contracts. The Competition in Contracting Act of 1984<sup>5</sup> is a public law enacted for the purpose of encouraging competition for the award of all types of Federal Government contracts. It states that contracting offices should provide for full and open competition through the use of competitive procedures. Federal Supply Schedule orders that are outside the scope of the underlying BPA are subject to the requirement for competition.

The contracting officer is the key operational person in the Federal acquisition process. The contracting officer may enter into, administer, or terminate contracts and make related determinations and findings. Because the contracting officer performs many functions, a staff of contracting personnel and business unit subject matter experts usually support the contracting officer. The contracting officer relies on these personnel in order to make final determinations regarding the contract.

The draft RFQ described the EaaS solution as a hybrid Microsoft Office 365 Exchange Online Plan 2 solution. The draft RFQ prepared by the IRS in August 2014 stated:

*In compliance with the Federal Government Cloud First policy, the IRS seeks an experienced industry partner to provide a secure cloud-based EaaS solution to replace IRS-managed e-mail servers, software, and related infrastructure components. The EaaS service will provide the IRS with greatly expanded user e-mail mailbox sizes, e-mail archiving capabilities for all users, and high availability with auto fail-over to*

---

<sup>4</sup> Federal Acquisition Regulation, 48 C.F.R pt. 8.4.

<sup>5</sup> 41 U.S.C § 3301.



---

## *Review of the Enterprise E-Mail System Acquisition*

---

*geographically dispersed redundant datacenters. Through the implementation of a cloud-based EaaS solution, the IRS seeks to improve efficiency, quality, reliability, and cost of providing a high-quality enterprise e-mail service.*

The IRS violated the Federal Acquisition Regulation requirements by not using full and open competition in its acquisition of Microsoft Office 365 ProPlus and Exchange Online monthly subscriptions. Even though the IRS completed preparing a draft RFQ in August 2014 to purchase EaaS, it instead obtained subscriptions in June 2014 and June 2015 by executing task orders against an existing BPA to purchase Microsoft Office 365 ProPlus and Exchange Online, which, when combined, would give the IRS the ability to run a cloud EaaS. However, the subscriptions purchased were not specifically included on the BPA.

The IRS stated that it viewed these products as upgrades to the current products that it was licensed to use, and it was not purchasing new licenses or services. In order to execute this task order against the existing BPA, the contracting officer relied on this information from the Strategic Supplier Management function, which served as the technical experts in this area.

While the items procured against the BPA had very similar names as items on the Federal Supply Schedule, they were different products. The product listed on the existing BPA (Office Professional Plus) is a Microsoft Office licensed product with a traditional installation on individual computers without the option to use cloud-based storage. However, the product purchased by the IRS, Microsoft Office 365 ProPlus,<sup>6</sup> is a user-based service available as a subscription. According to Microsoft, Office 365 ProPlus is a lot like other versions of Microsoft Office. However, there are differences. The software updates and fixes are applied differently, installation is faster, it can be used with Exchange Online and SharePoint Online, and it provides cloud-based storage.

Additionally, Exchange Standard Client Access Licenses (the product on the BPA) is described by Microsoft as a software license that enables users to access their own network exchange server. However, Exchange Online,<sup>7</sup> the item purchased by the IRS, is described by Microsoft as a product designed to host e-mail on Microsoft's cloud servers.

On March 10, 2016, the IRS informed us that the GAO received a bid protest on March 7, 2016, related to the procurement of these subscriptions. On June 14, 2016, the GAO ruled that the "protest alleging that agency issued an improper, out-of-scope, sole-source delivery order against a previously-awarded Federal Supply Schedule BPA is sustained where the record shows that the delivery order contemplates providing products that were not included in the underlying BPA." Further, the GAO provided the following summary:

---

<sup>6</sup> The task order lists the product as "Office ProPlus subscription." However, Microsoft only offers Office 365 ProPlus as a subscription-based product.

<sup>7</sup> The task order lists the product as "Exchange Plan 2." However, the Federal Supply Schedule lists the item as "Exchange Online Plan 2G." This product is Microsoft's Exchange Online subscription and is referred to as Exchange Online throughout the report.



---

## *Review of the Enterprise E-Mail System Acquisition*

---

*In sum, the record shows that the agency used the delivery order to acquire a “hybrid” cloud-based solution for its e-mail requirements. However, the acquisition of the products or services to implement a cloud-based solution is outside the scope of the underlying BPA which, by its terms, is limited to acquiring updated or replacement versions of the agency’s preexisting software portfolio that is installed in the agency’s own computing environment.*

The former \*\*\*\*\*3\*\*\*\*\* made the decision in April 2016 to change the enterprise e-mail system design to an on-premises deployment without the use of the Microsoft Government Community Cloud in response to the GAO protest of the purchase of these subscriptions. As such, the IRS allowed the contracts for these subscriptions to expire on June 19, 2016.

### **Recommendation**

**Recommendation 3:** The Chief Information Officer and Chief Procurement Officer should ensure that, if the IRS intends to purchase a cloud EaaS solution in the future, the IRS acquires the products through competitive procedures outlined in the Federal Acquisition Regulation.

**Management’s Response:** The Chief Information Officer and Chief Procurement Officer have agreed to collaborate and continue to follow all applicable procedures outlined in the Federal Acquisition Regulation.

**Office of Audit Comment:** The IRS’s response implies that it followed the Federal Acquisition Regulation. As outlined in the finding, the IRS did not follow the Federal Acquisition Regulation.





## **Appendix I**

### *Detailed Objective, Scope, and Methodology*

Our overall objective was to determine whether the IRS properly procured a new enterprise e-mail system. To accomplish our objective, we:

- I. Determined whether the IRS properly followed Federal Acquisition Regulation requirements and IRS procedures during the procurement of the enterprise e-mail system.
  - A. Obtained and reviewed acquisition regulations, including the Federal Acquisition Regulation and the IRM, for guidance relevant to the procurement of the enterprise e-mail system.
  - B. Determined whether the IRS followed acquisition regulations and procedures during the planning, contract formation, and contract administration phases of the enterprise e-mail system procurement.
  - C. Interviewed the appropriate contract officer, contracting officer's representative, and personnel involved with the enterprise e-mail system to obtain explanations for any discrepancies identified in the acquisition processes.
- II. Determined whether the IRS followed applicable financial management laws when procuring the enterprise e-mail system and whether the IRS violated the *bona fide* needs rule.
  - A. Researched and reviewed the specific requirements of the *bona fide* needs rule to gain a better understanding.
  - B. Obtained and reviewed the financial management documentation for the current contract and any contract amendments.
  - C. Determined the cause if the *bona fide* needs rule was violated.
- III. Determined whether the Microsoft Exchange Online Government Community Cloud licenses or services were acquired prematurely.
  - A. Determined when the Microsoft licensing for Exchange Online is needed.
  - B. Verified when Microsoft licensing for Exchange Online was added to the contract to determine whether it was prematurely purchased.
  - C. Determined whether licenses were prematurely purchased and whether the acquisition resulted in wasted taxpayer funds.



## *Review of the Enterprise E-Mail System Acquisition*

---

### **Internal controls methodology**

Internal controls relate to management's plans, methods, and procedures used to meet their mission, goals, and objectives. Internal controls include the processes and procedures for planning, organizing, directing, and controlling program operations. They include the systems for measuring, reporting, and monitoring program performance. We determined that the following internal controls were relevant to our audit objective: the IT organization's policies, procedures, and processes of procurement. We evaluated these controls by interviewing IT organization management, identifying Federal requirements, and reviewing contracts and relevant documentation.





*Review of the Enterprise E-Mail System Acquisition*

---

**Appendix II**

*Major Contributors to This Report*

Danny R. Verneuille, Acting Assistant Inspector General for Audit (Security and Information Technology Services)  
Myron Gulley, Acting Director  
John Ledford, Audit Manager  
Ashley Weaver, Lead Auditor  
Ryan Perry, Senior Auditor



*Review of the Enterprise E-Mail System Acquisition*

---

**Appendix III**

*Report Distribution List*

Commissioner  
Office of the Commissioner – Attn: Chief of Staff  
Deputy Commissioner for Operations Support  
Chief Procurement Officer  
Associate Chief Information Officer, Application Development  
Associate Chief Information Officer, Cybersecurity  
Associate Chief Information Officer, Enterprise Operations  
Associate Chief Information Officer, Enterprise Services  
Associate Chief Information Officer, Strategy and Planning  
Associate Chief Information Officer, User and Network Services  
Director, Information Technology Acquisition  
Director, Strategic Supplier Management  
Chief Counsel  
Director, Office of Audit Coordination



## **Appendix IV**

### *Outcome Measure*

This appendix presents detailed information on the measurable impact that our recommended corrective actions will have on tax administration. This benefit will be incorporated into our Semiannual Report to Congress.

#### **Type and Value of Outcome Measure:**

- Inefficient Use of Resources – Potential; \$12,091,320 (see page 3).

#### **Methodology Used to Measure the Reported Benefit:**

The IRS purchased Microsoft subscriptions between June 2014 and June 2016 for \$12,091,320 to obtain an EaaS solution to meet its e-mail needs.<sup>1</sup> However, the IRS made the purchases without first establishing project infrastructure needs, integration between the Microsoft Government Community Cloud and an on-premises solution, business requirements, security and portal bandwidth, and whether the system was technologically feasible on the IRS enterprise. As such, it was unable to deploy the software.

---

<sup>1</sup> See Appendix V for a glossary of terms.



**Appendix V**

*Glossary of Terms*

<b>Term</b>	<b>Definition</b>
Blanket Purchase Agreement	A BPA is a simplified method of filling anticipated repetitive needs for supplies or services by establishing “charge accounts” with qualified sources of supply.
eDiscovery	The process used by organizations to find, preserve, analyze, and package electronic content for a legal request or investigation.
E-Mail As a Service	A cloud-based e-mail service with enhanced efficiency, agility, innovation, and potential cost savings.
Enterprise Life Cycle	The approach used by the IRS to manage and implement business change through information system initiatives.
Fiscal Year	Any yearly accounting period, regardless of its relationship to a calendar year. The Federal Government’s fiscal year begins on October 1 and ends on September 30
Government Accountability Office	An independent, nonpartisan agency that works for Congress. The GAO reports to Congress on how well Government programs and policies are meeting their objectives. It advises Congress and the heads of executive agencies about ways to make the Government more efficient, effective, ethical, equitable, and responsive.
Office of Management and Budget	The largest component of the Executive Office of the President. The management side oversees and coordinates Federal procurement policy, performance and personnel management, information technology, and financial management. In this capacity, it oversees agency management of programs and resources to achieve legislative goals and administration policy.
Request for Quotation	As required by Federal Acquisition Regulation requirements, ordering activities must provide an RFQ, including the evaluation criteria or the basis upon which the selection will be made, to schedule contractors that offer supplies of services that will meet the agency’s needs.
Requirement	A formalization of a need and the statement of a capability or condition that a system, subsystem, or system component must have or meet to satisfy a contract, standard, or specification.



## *Review of the Enterprise E-Mail System Acquisition*

### **Appendix VI**

## *Management's Response to the Draft Report*



DEPARTMENT OF THE TREASURY  
INTERNAL REVENUE SERVICE  
WASHINGTON, D.C. 20224

SEP 15 2016

#### MEMORANDUM FOR DEPUTY INSPECTOR GENERAL FOR AUDIT

FROM:

S. Gina Garza   
Chief Information Officer

SUBJECT:

Draft Audit Report – Review of the IRS Enterprise E-mail System Acquisition (Audit # 201520028)

Thank you for the opportunity to review the draft audit report and discuss observations with the audit team. The IRS takes seriously our obligation to manage taxpayer dollars in the most efficient and effective manner possible. While we value the insight that TIGTA audits provide, we strongly disagree with the assertions made in the report regarding IRS not following appropriate management practices, deviating from the Federal Acquisition Regulations (FAR) and using resources inefficiently.

The assertions in the report stem from differing perspectives on the approach the IRS took in acquiring Microsoft (MS) Office365 Pro Plus and MS Exchange Online Plan 2. At the time of the acquisition, the IRS deemed the subscription purchases strictly as an upgrade from our current version of MS products, following the same approach and practices that had been used for prior upgrades. As such, the IRS followed appropriate management processes and developed the acquisition plan in line with FAR regulations for acquiring upgrades to software.

Furthermore, we strongly disagree that the IRS wasted taxpayer dollars. In 2010, the IRS developed an enterprise strategy to reduce the yearly expenditure on MS software and services which resulted in saving taxpayers over \$127 million. As our strategy continued to evolve, the IRS determined in 2014 it could save taxpayers an additional \$21 million by purchasing subscriptions instead of perpetual licenses for MS Office 365 ProPlus and MS Exchange Online Plan 2. The transition from a perpetual license model to a subscription model provided more flexibility and efficient management of licenses by ensuring the IRS maintains rights to the most current version of capabilities as software upgrades are released. Maintaining currency in our IT ecosystem is a guiding principle that mitigates many security and integration challenges we would otherwise face in our complex environments. In addition, the capabilities that were included in the upgrade to MS Exchange Online Plan 2 would have allowed the IRS to timely meet the National Archives and Records Administration (NARA) Capstone requirements and the Office of Management and Budget's (OMB) Directive on retention of e-mail records, as well as eliminating the need for a stand-alone solution. Within two months of award, we began necessary efforts to prepare our large and complex Information Technology (IT) ecosystem for the enterprise upgrades of our user base to



## *Review of the Enterprise E-Mail System Acquisition*

---

2

ensure there would be minimal disruption to existing services. We also took advantage of some of the subscription service offerings to design and build the infrastructure required for full deployment to production. We initiated extensive testing of MS Office 365 ProPlus in our development and testing environments. Had the protest not occurred, the IRS would have been well on its way to completing implementation in Calendar Year (CY) 2016.

We want to reiterate here again that we strongly disagree with the assertions that we wasted taxpayer dollars, that we did not follow appropriate management practices and that we deviated from the FAR.

Finally, IRS fully understands a fiscal year appropriation may be obligated only to meet a legitimate or bona fide need arising in, or in some cases arising prior to but continuing to exist in, the fiscal year for which the appropriation was made. The Bona Fide Needs Rule is an important and a complex consideration for IRS as it executes its budget and acquisitions. The citations to this principle are numerous. While IRS believes we had a need to make the purchases in the years they were made, we agree with your audit recommendation and have asked Counsel to review the details of the acquisition.

In closing, the IRS strongly disagrees with the TIGTA's potential outcome measure. As stated, the MS acquisition was done in good faith and in accordance with our guiding principle to maintain currency for our extensive user base and to take advantage of overall cost savings. The IRS remains committed to continuously improve our IT systems and processes and to follow all applicable competitive procedures outlined in the FAR. If you have any questions, please contact me or a member of your staff may contact Andrew Paquette at (202) 317-4168.

Attachment





---

## Review of the Enterprise E-Mail System Acquisition

---

Attachment

Draft Audit Report – Review of the Enterprise E-mail System Acquisition (Audit #201520028) e-trak # 2016-85009

**Recommendation 1:** Ensure that IRM 2.21 and IRM 2.16.1 requirements regarding the Commercial Off-the-Shelf Path or the Managed Services Path are followed prior to the subscription requisition process and throughout the subscription project development life cycle for new subscriptions or managed services procurements.

**Corrective Action:** The IRS partially agrees with this recommendation. IRS' Enterprise Life Cycle (ELC) as outlined in IRM 2.16.1 is principally a project management methodology to be used for large-scale software development projects and the introduction of new technology. The IRS disagrees that this methodology must be used for software acquisitions. However, the IRS agrees that large-scale, new enterprise-wide software acquisitions need to have a set of well documented, minimum requirements to ensure that effective management is adhered to for acquisitions of this type and size.

**IMPLEMENTATION DATE:** July 15, 2017

**RESPONSIBLE OFFICIAL(S):** Associate Chief Information Officer, Strategy & Planning

**CORRECTIVE ACTION MONITORING PLAN:** We enter accepted Corrective Actions into the Joint Audit Management Enterprise System (JAMES) and monitor them on a monthly basis until completion.

**RECOMMENDATION 2:** The Chief Information Officer should seek a review by IRS Legal Counsel to determine if the purchase of Office ProPlus 365 and Exchange Online violated the *Bona Fide* Needs Rule and take any actions required by law.

**CORRECTIVE ACTION:** The IRS agrees to this recommendation. The Chief Information Officer has requested Chief Counsel to determine if the purchase of Office ProPlus 365 and Exchange Online Plan 2 violated the Bona Fide Needs Rule. Upon completion of Chief Counsel's response, the IRS will take any actions required.

**IMPLEMENTATION DATE:** Completed August 29, 2016

**RESPONSIBLE OFFICIAL(S):** Associate Chief Information Officer, Strategy & Planning



---

## *Review of the Enterprise E-Mail System Acquisition*

---

Attachment

Draft Audit Report – Review of the Enterprise E-mail System Acquisition (Audit #201520028) e-trak # 2016-85009

**CORRECTIVE ACTION MONITORING PLAN:** We enter accepted Corrective Actions into the Joint Audit Management Enterprise System (JAMES) and monitor them on a monthly basis until completion.

**RECOMMENDATION 3:** The Chief Information Officer and Chief Procurement Officer should ensure that, if the IRS intends to purchase a cloud E-mail as a Service (EaaS) solution in the future, the IRS acquires the products through competitive procedures outlined in the Federal Acquisition Regulation.

**CORRECTIVE ACTION:** The Chief Information Officer and Chief Procurement Officer have agreed to collaborate and continue to follow all applicable procedures outlined in the Federal Acquisition Regulation.

**IMPLEMENTATION DATE:** Completed August 25, 2016

**RESPONSIBLE OFFICIAL(S):** Associate Chief Information Officer, Strategy & Planning and Chief Procurement Officer

**CORRECTIVE ACTION MONITORING PLAN:** We enter accepted Corrective Actions into the Joint Audit Management Enterprise System (JAMES) and monitor them on a monthly basis until completion.





## **Appendix VII**

### *Office of Audit Comments on Management's Response*

In response to our draft report, the Chief Information Officer included some general comments and assertions we believe warrant additional comment. We have included portions of management's response and our related comments below.

**Management's Response:** *The assertions in the report stem from differing perspectives on the approach the IRS took in acquiring Microsoft (MS) Office365 Pro Plus and MS Exchange Online Plan 2. At the time of the acquisition, the IRS deemed the subscription purchases strictly as an upgrade from our current version of MS products, following the same approach and practices that had been used for prior upgrades. As such, the IRS followed appropriate management processes and developed the acquisition plan in line with FAR regulations for acquiring upgrades to software.*

**Office of Audit Comment:** The adoption of online services (EaaS) creates a substantial change in administration, vendor management, asset management, and operations. As such, it was incorrect to deem the subscription purchases strictly as an upgrade. The ELC Framework consists of multiple paths for new development and maintenance. Two of the paths available are the Commercial Off-the-Shelf Path and the Managed Services Path, which are used to acquire and implement software products of this nature.

After completing our audit work, we obtained a document titled *Enterprise Exchange Upgrade, ELC Managed Services Path, Project Tailoring Plan* dated June 30, 2015. The document was digitally signed by the project manager on July 16, 2015. This document contradicts the points made in IRS management comments and supports our position that the ELC Managed Services Path should have been followed.

In addition, the IRS did not follow the Federal Acquisition Regulation when it incorrectly purchased the subscriptions against an existing Blanket Purchase Agreement that did not include the subscriptions. The subscriptions should have been purchased using full and open competition.

**Management's Response:** *Furthermore, we strongly disagree that the IRS wasted taxpayer dollars. In 2010 the IRS developed an enterprise strategy to reduce the yearly expenditure on MS software and services which resulted in saving taxpayers over \$127 million. As our strategy continued to evolve, the IRS determined in 2014 it could save taxpayers an additional \$21 million by purchasing subscriptions instead of perpetual licenses for MS Office 365 ProPlus and MS Exchange Online Plan 2. The transition from a perpetual license model to a subscription*



---

## *Review of the Enterprise E-Mail System Acquisition*

---

*model provided more flexibility and efficient management of licenses by ensuring the IRS maintains rights to the most current version of capabilities as software upgrades are released. Maintaining currency in our IT ecosystem is a guiding principal that mitigates many security and integration challenges we would otherwise face in our complex environments.*

**Office of Audit Comment:** The IRS purchased \$12 million in subscriptions for software that it never used (deployed) over a two-year period. We consider this a waste of taxpayer funds. The IRS has not provided us with documentation to support a new enterprise strategy to reduce the yearly expenditure on Microsoft software and services. Further, the IRS has not provided any documentation to support that this strategy has saved taxpayers over \$127 million.

The IRS did provide support to show that it could have saved taxpayer money by purchasing subscriptions instead of perpetual licenses. However, because the IRS did not follow the ELC outlined in IRM 2.16.1, it prematurely purchased the software subscriptions. As such, the IRS continued to use the perpetual licenses it already purchased instead of the \$12 million in subscriptions it acquired in Fiscal Years 2014 and 2015.

**Management's Response:** *In addition, the capabilities that were included in the upgrade to MS Exchange Online Plan 2 would have allowed the IRS to timely meet the National Archives and Records Administration (NARA) Capstone requirements and the Office of Management and Budget's (OMB) Directive on retention of e-mail records, as well as eliminating the need for stand-alone solution. Within two months of award, we began necessary efforts to prepare our large and complex Information Technology (IT) ecosystem for the enterprise upgrades of our user base to ensure there would be minimal disruption to existing services. We also took advantage of some of the subscription service offerings to design and build the infrastructure required for full deployment to production. We initiated extensive testing of MS Office 365 ProPlus in our development and testing environments. Had the protest not occurred, the IRS would have been well on its way to completing implementation in Calendar Year (CY) 2016.*

**Office of Audit Comment:** The IRS has not provided documentation to support that it obtained capabilities to timely meet the National Archives and Records Administration's Capstone requirements and Office of Management and Budget directives on retention of e-mail records when it purchased Exchange Online. The IRS provided us with an e-mail that appeared to be an *ad hoc* test plan for Microsoft Office 365 ProPlus. The e-mail showed that testing would begin on April 28, 2016, 22 months after the purchase of the subscriptions and two months prior to the expiration of the contract. In that e-mail, the IRS stated that it did not plan to test Exchange Online. Additionally, there was an e-mail sent which stated 17 people were currently field testing their applications. That email stated there were only two virtual workstations that could be used. These virtual workstations were loaded with Microsoft Office 2016, not Microsoft Office 365 ProPlus because it had not been approved to be on the IRS network.



---

## *Review of the Enterprise E-Mail System Acquisition*

---

**Management's Response:** *Finally, IRS fully understands a fiscal year appropriation may be obligated only to meet a legitimate or bona fide need arising in, or in some cases arising prior to but continuing to exist in, the fiscal year for which the appropriation was made. The Bona Fide Needs Rule is an important and a complex consideration for IRS as it executes its budget and acquisitions. The citations to this principal are numerous. While IRS believes we had a need to make the purchases in the years they were made, we agree with your audit recommendation and have asked Counsel to review the details of the acquisition.*

**Office of Audit Comment:** Documentation received from the IRS show that the software subscriptions were not needed in Fiscal Years 2014 and 2015 when purchased because the infrastructure needed to run the software purchased via the subscriptions did not exist and IRS security requirements were not met. For this reason, we recommended that the IRS seek a review by IRS Legal Counsel to determine if the IRS violated the *bona fide* needs rule.

**Management's Response:** *In closing, the IRS strongly disagrees with the TIGTA's potential outcome measure. As stated, the MS acquisition was done in good faith and in accordance with our guiding principal to maintain currency for our extensive user base and to take advantage of overall cost savings. The IRS remains committed to continuously improve our IT systems and processes and to follow all applicable competitive procedures outlined in the FAR.*

**Office of Audit Comment:** We did not provide an opinion as to the intent of the IRS. While the IRS may have acquired the software subscriptions in good faith, it did not follow the IRS IRMs, violated the Federal Acquisition Regulation, may have violated the *bona fide* needs rule, never realized a \$21 million savings by purchasing these subscriptions, and wasted \$12 million.