



U.S. GOVERNMENT PRINTING OFFICE  
OFFICE OF INSPECTOR GENERAL

**FINAL REPORT**  
**14-16**

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**Information Technology Professional Services  
Integrated Library System**

**September 26, 2014**

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**Date**

September 26, 2014

**To**

Chief Information Officer  
Director, Acquisition Services

**From**

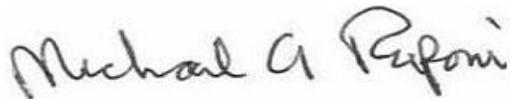
Inspector General

**Subject**

Final Report – Information Technology Professional Services—Integrated Library System  
Report Number 14-16

Enclosed please find the subject final report. Please refer to the “Results in Brief” for the overall audit results. Our evaluation of your response has been incorporated into the body of the report. We consider management’s comments responsive to the recommendations. The recommendations are resolved and will remain open for reporting purposes pending completion of the proposed actions.

We appreciate the courtesies extended to the staff during our review. If you have any questions or comments about this report, please do not hesitate to contact Mr. Jeffrey C. Womack, Assistant Inspector General for Audits and Inspections at (202) 512-2009 or me at (202) 512-0039.



MICHAEL A. RAPONI  
Inspector General

**Attachment**

cc:

Public Printer  
Deputy Public Printer  
General Counsel  
Chief of Staff  
Chief Administrative Officer  
Director, Library Services and Content Management

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# Office of Inspector General

Report Number 14-16

September 26, 2014

## Information Technology Professional Services— Integrated Library System

### Introduction

The Office of Inspector General (OIG) completed its review of GPO's oversight of the Integrated Library System (ILS) technical products as administered by its support contractor, Progressive Technology Federal Systems Inc. (PTFS). This report is one of a series of follow-on reports related to risks associated with the current maturity level of GPO's enterprise architecture. Enterprise architecture is a key element of GPO's transformation from a print-centric to a content-centric organization. In Fiscal Year (FY) 2012, OIG reported that GPO's architecture maturity level had not yet evolved to fully support transformation or optimization.

The objective of our review was to identify any major instances of potential duplication and overlap of support services and if any existed, identify which controls should be strengthened to mitigate the condition.

GPO's ILS, Aleph®, is used to manage operations in libraries, information dissemination, and provide a Web-based catalog of bibliographic data. GPO licenses Aleph® software from Ex Libris Group, a provider of library automation products. In June 2004, GPO issued a purchase order to PTFS for the procurement and maintenance of the ILS associated with a General Services Administration (GSA) contract under the Federal Supply Schedule Group 70—Information Technology Schedule. Today, GPO continues to issue purchase orders to PTFS for maintenance and hosting of hardware and software.

While administering information technology (IT) service contracts is interdependent with various GPO Business Units, acquisition authority is centralized. GPO policy requires that the Chief Acquisition Officer ensure that contracts are in accordance with applicable laws, regulations, and directives. GPO policy also states Information Technology and Systems (IT&S) is the steward of GPO's IT assets and resources.

To address our objective, we assessed relevant policies and procedures. We analyzed applicable documentation such as contract files, purchase orders, statements of work (SOWs), financial records, and status reports. We also interviewed key officials from Library Services and Content Management, the Office of Acquisitions, and IT&S responsible for ILS system. See Appendix A for the details of our objective, scope, methodology, and criteria.

## **Results in Brief**

GPO provides services to depositories and enables public access to Federal publications, in part, through its ILS. It also revealed that additional management attention is required to ensure that Agency needs are met. For example we noted that contractor responsibilities were not always clear. In addition, management did not perform a lease versus purchase analysis for hosting services and hardware to determine the appropriate acquisition method. Further, GPO did not have documentation validating that expenditures were based on the best value to the Government.

We believe the conditions existed because of the need to fully align the “as-is” and “to-be” views of ILS with GPO’s enterprise architecture. This should include strengthening oversight of the acquisition process as it relates to this service contract. Also, the relationship between those responsible for enterprise architecture, contracting and program management do not clearly address key areas of authority and responsibility for interrelated issues.

Without strengthening its oversight, management did not ensure that Agency needs were met and funds were spent in the most efficient and effective manner. In FY 2012, GPO spent approximately \$222,000 for maintenance services and \$144,000 for hosting services, while in FY 2013, it spent approximately \$221,000 and \$149,000 respectively. For FY 2014, the Agency will pay approximately \$229,000 for maintenance and \$154,000 for hosting services. Cumulatively, during the last 3 years, GPO paid approximately \$671,000 for software maintenance and approximately \$447,000 for hosting services.

## **Recommendations**

We recommend that the Chief Information Officer work with the Director of Acquisition Services and strengthen controls over ILS contractor-provided services by (1) updating the SOW to define requirements in clear, concise language, identifying specific work to be accomplished and results achieved, (2) perform a lease versus purchase analysis for hosting services to identify the best value to GPO, and (3) perform an analysis to ensure current maintenance costs in support of ILS are reasonable.

## **Management’s Response**

Management concurred with the recommendations and has planned corrective actions. The complete text of management’s response is in Appendix C.

## Background

In 2012, OIG reported that without matured enterprise architecture, GPO assumed a risk that was duplicative, not well integrated, costly, not supportive of the Agency's strategic goals and mission, and not responsive to emerging technologies. In 2013, OIG conducted an audit to identify any major instances of potential duplication and overlap of Oracle modules and licenses. The audit identified instances where GPO paid for both an application user license and processor license for the same Oracle products. Excess user licenses and processor licenses resulted in potential loss. In 2014, OIG issued two reports relating to enterprise architecture—one on the procurement of Microsoft Licenses and the other on Oracle Professional Support Services. The review of Microsoft Licenses showed a need for standardized documented procedures for determining license requirements as well as a need for monitoring user and device demand. The review of Oracle Professional Support Services revealed that SOWs did not provide a clear description of work, could not always be associated to a Purchase Order, and missed key planning documentation and a significant amount of required reports.

This review is one of a series of follow-on reviews related to risks associated with the maturity level of GPO's enterprise architecture.

## Select IT Guidance and Regulations

Within the Federal Government, numerous rules and regulations govern development and execution of IT policy. Congress enacted the IT Management Reform Act of 1996, commonly referred to as the Clinger-Cohen Act.<sup>1</sup> The Act requires that the head of each Federal agency implement a process that will maximize the value of agency IT investments and assess and manage acquisition risks. A key goal of the Act is to ensure that agencies implement IT projects at acceptable costs and within reasonable timeframes. The Clinger-Cohen Act also requires that Government agencies improve their methodologies for defining customer requirements, improving business practices, and managing IT projects within budget and on schedule.

Office of Management and Budget (OMB) Circular No. A-130, *Management of Information Resources*, dated November 28, 2000, requires that agencies establish and maintain a capital planning and investment control process linking mission needs, information, and IT in an effective and efficient manner.

GPO Directive 705.28, *GPO Information Technology System Development Life Cycle Policy*, December 12, 2005, states that the Chief Information Officer is responsible for overall management of IT resources and for establishing specific procedures and

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<sup>1</sup> Public Law 104-106, Division E, February 10, 1996. The law, initially titled the Information Technology Management Reform Act of 1996, was subsequently renamed the Clinger-Cohen Act of 1996 in Public Law 104-208, September 30, 1996.

methodologies for conducting project/system development in the GPO environment.

GPO Directive 705.31A, *GPO Enterprise Architecture Policy*, December 16, 2013, states that the Chief Information Officer issues just one authoritative GPO enterprise architecture. The program helps maximize the business value of GPO's investment in IT and minimize the amount of unnecessary redundancy resulting from disparate planning, development, and IT acquisitions.

### **Service Contract Acquisitions**

Within GPO and under the Chief Administrative Officer, Acquisition Services is responsible for managing, overseeing, and supporting GPO acquisition operations, including service contracts, and for providing acquisition advice to program staff involved in the procurement process.

Acquisition Services also ensures that acquisitions of services comply with the laws, regulations, and policies governing procurement operations and procedures. The Materials Management Acquisition Regulation (MMAR) establishes uniform policies and procedures that cover all aspects of acquisitions GPO uses. In general, the MMAR system must deliver on a timely basis the best value product or service while maintaining the public's trust and fulfilling public policy objectives.

### **GPO's Management Control Guidelines**

GPO requires<sup>2</sup> that management controls provide reasonable assurance and safeguards to protect assets against waste, loss, unauthorized use, and misappropriation. It also requires that GPO maintain effective systems of accounting and management control. The guidance states that internal controls are the organization, policies, and procedures used to reasonably ensure that:

- programs achieve intended results
- resources are used consistent with agency mission
- programs and resources are protected from waste, fraud, and mismanagement
- laws and regulations are followed
- reliable and timely information is obtained, maintained, reported, and used for decision making

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<sup>2</sup> GPO Instruction 825.18A, *Internal Control Program*, dated May 28, 1997.

## Results and Recommendations

GPO should provide additional oversight in several areas pertaining to ILS IT services performed under contract. Areas requiring additional oversight include: (1) clearly identifying contractor responsibilities, (2) performing a lease versus purchase analysis for hosting services to identify best value to GPO, and (3) ensuring that maintenance costs in support of ILS are reasonable.

### Contractor Responsibilities

A complete and comprehensive SOW was not developed that contained specific deliverables and performance measures for ILS maintenance, making the contract difficult to administer and ensure compliance.

The MMAR<sup>3</sup> states that requirements for services must be clearly defined and appropriate performance standards developed so that Agency requirements can be understood by potential offerors and that performance is in accordance with contract terms, and conditions meet the Agency requirements. The MMAR<sup>4</sup> also describes the requirements for SOWs. The guidance states that the document should “define requirements in clear, concise language identifying specific work to be accomplished.”

With the exception of the Project Plans document, the SOW does not clearly identify specific work to be performed. Although our review of the Project Plans document disclosed some detailed activity, the majority of items were related to scheduling bi-weekly meetings and due dates for monthly reports. Additionally, the Project Plans document, with the exception of dates, does not significantly differ over the past 2 years. Further, additional variance from year-to-year states that the Government, and not PTFS, was responsible.

The following is an excerpt from the SOW of FY 2010, and provides examples illustrating the generality of the deliverables.

<b>SOW for ILS Maintenance Dated: FY 2010</b>
<p><i>Service Deliverables:</i></p> <ul style="list-style-type: none"><li>• ILS Maintenance Plan and Schedule. Upon the signing of this contract, a kick-off meeting will be held between GPO and the Vendor to begin ILS Maintained. The Vendor, using information obtained during this meeting, will within 2 weeks create and present GPO with a plan and proposed schedule for ILS Maintenance. These documents are critical components for meeting the goals, objectives and timeframes for successful completion of ILS Maintenance.</li></ul>

<sup>3</sup> GPO Publication 805.33, Section 37.503, Agency-head Responsibilities, dated May 15, 2003.

<sup>4</sup> GPO Publication 805.33, Section 37.602-1 Statements of Work, dated May 15, 2003.

The SOW also includes a requirement for a Project Plan, Kick Off Meeting, Kick Off Meeting Notes, Bi-Weekly Meeting, Bi-Weekly Meeting Notes, Monthly Reports, and Sync between Production, and Test Servers monthly. Requirements to be performed on an “as needed” basis include Services Packs for Aleph®, MetaLib, System Documentation Updates, and General Maintenance.

The effective date for the most recent SOW was dated FY 2010. No evidence exists that the appropriate GPO official approved the SOW.

#### Lease versus Purchase Analyses for Hosting Services

A lease versus purchase analysis for hosting services was not performed to determine the appropriate acquisition method. Although the MMAR<sup>5</sup> provides guidance that contracting officials should consider when determining whether to lease or purchase, also known as a lease versus purchase analysis, management did not conduct those analyses for the contract we reviewed.

Currently, GPO leases hardware from PTFS in support of ILS programs. GPO pays the contractor—PTFS—for hosting services for the leased hardware and Government-owned hardware. The hardware resides at a data center in Sterling, Virginia. For the three year period of FY 2012 through FY 2014, GPO paid more than \$436,000 for the services.

According to GPO management, GPO could purchase the equipment for approximately \$100,000 and house it at GPO more efficiently and cost effectively. As it stands, if issues occur with the equipment, PTFS and GPO employees must drive to Sterling, Virginia to resolve them. This delays problem resolution and incurs the cost of the time and travel to the Virginia site.

#### Pricing for Software Maintenance

GPO could not demonstrate through documentation that expenditures were based on the best value to the Government. The most recent price reasonableness analysis was conducted more than 10 years ago. GPO pays a fixed price per month for related software maintenance services.

According to PTFS monthly reports, the number of maintenance hours varies from month to month. The table below depicts the actual maintenance hours.

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<sup>5</sup> MMAR, GPO Publication 805.33, Section 7.402, acquisition methods, dated May 15, 2003.

Table 1: Maintenance Hours

Date	Software Maintenance Hours Reported
January 2013	74
February 2013	52.25
March 2013	38.75
April 2013	34.5
May 2013	47.75
June 2013	84
July 2013	95.75
August 2013	46
September 2013	37.75
October 2013	39
November 2014	45.5
December 2013	46.5
January 2014	55
February 2014	38
March 2014	37
April 2014	73.75
May 2014	62
June 2014	42.5

The MMAR<sup>6</sup> describes types of contracts that may be used in acquisitions. It also states that each contract file must include documentation showing why the particular contract type was selected. The Contracting Officer stated that they chose a fixed price contract because the costs were based on the contractor’s GSA schedule contract. However, our review determined that the maintenance costs were not based on the schedule contract but on open market prices that were not reviewed or analyzed.

**Recommendations**

We recommend that the Chief Information Officer work with the Director of Acquisition Services and strengthen controls over ILS contractor-provided services by:

1. Updating the SOW to define requirements in clear, concise language, identifying specific work to be accomplished and results achieved.

**Management’s Response**

Concur. IT &S and Acquisitions will work with Library Services to update the SOW by September 30, 2015.

2. Performing a lease versus purchase analysis for hosting services to identify the best value to GPO.

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<sup>6</sup> GPO Publication 805.33, Part 16, Types of Contracts, dated May 15, 2003.

### **Management's Response**

Concur. IT&S will take the lead in performing the lease-versus-purchase analysis by March 31, 2015.

3. Performing an analysis to ensure current maintenance costs in support of ILS are reasonable.

### **Management's Response**

Concur. Acquisitions will take the lead in performing the analysis by March 31, 2015.

### **Evaluation of Management's Response**

Management's planned actions are responsive to the recommendations. The recommendations are resolved but will remain open for reporting purposes pending the completion of the proposed actions.

## **Appendix A - Objectives, Scope, and Methodology**

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We performed the review from April 2014 through September 2014 at the GPO Central Office in Washington, D.C. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on audit objectives.

### **Objectives**

The objective of our review was to identify any major instances of potential duplication and overlap of support services and if any existed, identify which controls could be strengthened to mitigate the condition.

### **Scope and Methodology**

To meet our objectives, we performed the following:

- We assessed relevant policies and procedures.
- We analyzed applicable documentation such as contract files, purchase orders, SOWs, financial records, and status reports.
- We interviewed key officials from Library Services and Content Management, the Office of Acquisitions, and IT&S responsible for ILS system.

### **Management Controls Reviewed**

We determined that the following internal controls were relevant to our audit objective:

Program Operations – Policies and procedures management implemented to reasonably assure that software license management program met GPO’s objectives.

Compliance with Laws and Regulations – Policies and procedures management implemented to reasonably assure that resource use was consistent with laws and regulations.

The details of our examination of management controls, the results of our examination, and noted management control deficiencies are in the report narrative. Implementing the recommendations in this report should improve those management control deficiencies.

## **Appendix B - Acronyms Used**

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GPO	Government Printing Office
GSA	General Services Administration
ILS	Integrated Library System
IT	Information Technology
IT&S	Information Technology and Systems
OIG	Office of Inspector General
OMB	Office of Management and Budget
PTFS	Progressive Technology Federal Systems Inc.
MMAR	Materials Management Acquisition Regulation
SOW	Statement of Work

## Appendix C – Management’s Response

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UNITED STATES GOVERNMENT PRINTING OFFICE

# memorandum

DATE: September 25, 2014  
REPLY TO  
ATTN OF: Chief of Staff  
SUBJECT: Management Response to IG Draft Report Number 14-16 (September 8, 2014):  
Draft Report on Information Technology Professional Services – Integrated  
Library System  
TO: Inspector General

This provides management’s response to the draft Inspector General (IG) report number 14-16 (September 8, 2014), concerning the need to strengthen controls over Integrated Library System (ILS) contractor-provided services related to information technology (IT).

**Recommendation 1:** We recommend that the Chief Information Officer work with the Director of Acquisition Services and strengthen controls over ILS contractor-provided services by updating the SOW to define requirements in clear, concise language.

**Response:** Concur. Information Technology and Systems (IT&S) and Acquisitions will work with Library Services to update the SOW by September 30, 2015.

**Recommendation 2:** We recommend that the Chief Information Officer work with the Director of Acquisition Services and strengthen controls over ILS contractor-provided services by performing a lease-versus-purchase analysis for hosting services to identify the best value to GPO.

**Response:** Concur. IT&S will take the lead in performing this lease-versus-purchase analysis by March 31, 2015.

**Recommendation 3:** We recommend that the Chief Information Officer work with the Director of Acquisition Services and strengthen controls over ILS contractor-provided services by performing an analysis to ensure current maintenance costs in support of ILS are reasonable.

## Appendix C – Management’s Response

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**Response:** Concur. Acquisitions will take the lead in performing this analysis by March 31, 2015.

Thank you for the opportunity to comment on the draft report. If you have any questions or comments about this response, please do not hesitate to contact me on (202) 512-1100.



ANDREW M. SHERMAN

cc: Public Printer  
Deputy Public Printer  
Chief Administrative Officer  
Chief Information Officer  
Director, Acquisitions Services

## **Appendix D - Status of Recommendations**

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<b>Recommendation</b>	<b>Resolved</b>	<b>Unresolved</b>	<b>Open/ECD*</b>	<b>Closed</b>
1	x		September 30, 2014	
2	x		March 15, 2015	
3	x		March 15, 2015	

\*Estimated Completion Date.

## **Appendix E – Report Distribution**

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Public Printer

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Chief of Staff

Chief Administrative Officer

Director, Library Services and Content Management

## **Major Contributor to the Report**

Patricia M. Bach, Senior Auditor