



OFFICE OF INSPECTOR GENERAL  
U.S. Agency for International Development

# USAID Implemented Application Controls for DATA Act Reports, but Improvements Are Needed

**AUDIT REPORT A-000-18-005-C**  
**NOVEMBER 02, 2017**

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## MEMORANDUM

**DATE:** November 02, 2017

**TO:** Chief Financial Officer, Reginald W. Mitchell

**FROM:** Deputy Assistant Inspector General for Audit, Alvin A. Brown /s/

**SUBJECT:** USAID Implemented Application Controls for DATA Act Reports but Improvements Are Needed (A-000-18-005-C)

Enclosed is the final audit report on USAID's implementation of selected application controls used to report financial data under the Digital Accountability and Transparency Act of 2014 (DATA Act).<sup>1</sup> The Office of Inspector General (OIG) contracted with the independent certified public accounting firm CliftonLarsonAllen LLP (Clifton) to conduct the audit. The contract required Clifton to perform the audit in accordance with generally accepted government auditing standards.

In carrying out its oversight responsibilities, OIG reviewed Clifton's report and related audit documentation and inquired of its representatives. Our review, which was different from an audit performed in accordance with generally accepted government auditing standards, was not intended to enable us to express, and we do not express, an opinion on USAID's implementation of application controls for systems used to report under the DATA Act. Clifton is responsible for the enclosed report and the conclusions expressed in it. We found no instances in which Clifton did not comply, in all material respects, with applicable standards.

The audit objective was to determine whether USAID implemented selected application controls in its Global Acquisition and Assistance System (GLAAS) and its Phoenix Financial System (Phoenix). The Agency uses data from these two applications to report under the DATA Act. To answer the audit objective, Clifton evaluated USAID's implementation of selected application controls outlined in the Government Accountability Office's "Federal

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<sup>1</sup> Pub. L. No. 113-101 (May 9, 2014).

Information System Controls Audit Manual” (FISCAM).<sup>2</sup> The audit firm examined selected controls related to the Agency’s acquisition and procurement process. Clifton also performed procedures to determine whether (1) USAID obtained confirmation of the complete and accurate acceptance of files submitted to the Department of the Treasury’s DATA Act Broker website, and (2) USAID’s error correction and validation processes were adequate to ensure the timely resolution and submission of data files. Fieldwork was performed at USAID’s headquarters in Washington, DC, from June 8 through September 8, 2017.

The audit firm concluded that USAID implemented 23 of the 27 selected application controls designed to preserve the integrity of its DATA Act reporting. For example, USAID did the following:

- Maintained effective automated controls for the individual GLAAS and Phoenix applications. The GLAAS and Phoenix applications have certain edit checks in place to prevent users from entering incorrect values. For example, we observed error messages appear when the value entered did not match the approved value and the total spending amount entered exceeded the allotted funding amount.
- Maintained effective automated controls for the interface between GLAAS and Phoenix applications. For example, we observed that once an award is validated and approved in GLAAS, it is automatically sent to Phoenix for validation and approval. In addition, we observed that the award was accurately processed and obligated in Phoenix.

However, USAID did not do the following:

- Implement standard operating procedures for the DATA Act reporting process (three control weaknesses).
- Perform internal data validations before posting the Agency’s DATA Act reporting files to the Treasury’s DATA Act Broker website (one control weakness).

To address the weaknesses identified in the report, Clifton made and OIG agrees with the following recommendations to USAID’s management. We will track them until fully implemented. We recommend that the chief financial officer:

**Recommendation I.** Document and implement Agency-integrated standard operating procedures for extracting, reviewing, validating, and submitting Digital Accountability and Transparency Act (DATA Act) files to the Treasury’s DATA Act Broker website.

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<sup>2</sup> FISCAM represents best practices for application controls and presents a methodology for performing information system control audits of Federal and other governmental entities in accordance with professional standards.

**Recommendation 2.** Document and implement procedures to validate and reconcile financial data in Digital Accountability and Transparency Act (DATA Act) files before submitting them to the Treasury's DATA Act Broker website.

In finalizing the report, Clifton evaluated USAID's responses to the recommendations. Both Clifton and OIG consider recommendation 1 resolved but open pending completion of planned activities and recommendation 2 closed.

We appreciate the assistance extended to our staff and Clifton's employees during the engagement.



**CliftonLarsonAllen**

**U.S Agency for International Development Has Implemented  
Many Application Controls in Support of the DATA Act of 2014,  
But Improvements Are Needed**

**October 27, 2017**

**Final Report**



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October 27, 2017

Mr. Mark S. Norman  
Director, Information Technology Audits Division  
United States Agency for International Development  
Office of the Inspector General  
1300 Pennsylvania Avenue, NW  
Washington, DC 20005-2221

Dear Mr. Norman:

Enclosed is our final report on the U.S. Agency for International Development's (USAID) implementation of selected application controls in support of the Digital Accountability and Transparency Act of 2014, *The U.S Agency for International Development Has Implemented Many Application Controls in Support of the DATA Act of 2014, But Improvements Are Needed*. The USAID Office of Inspector General (OIG) contracted with the independent certified public accounting firm of CliftonLarsonAllen LLP to conduct an audit of selected application controls in support of the Data Act of 2014.

The objective of this performance audit was to determine whether USAID implemented selected application controls in its Phoenix Financial System (Phoenix) and its Global Acquisition and Assistance System (GLAAS). The audit included testing selected application controls from the controls outlined in the Government Accountability Office's (GAO) Federal Information System Controls Audit Manual (FISCAM) to determine whether they were properly designed, implemented and operating effectively.

Our audit was performed in accordance with Government Auditing Standards, issued by the Comptroller General of the United States. 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 objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The audit concluded that USAID generally implemented selected application controls for Phoenix and GLAAS. Although USAID generally had processes for its DATA Act reporting-related application controls, its implementation of those controls was not fully effective to preserve the integrity of the data submitted during the DATA Act reporting process.

Consequently, the audit identified areas with USAID's application controls that needed to be improved. To address those areas and to strengthen the Agency's Data Act reporting, we are making two recommendations.

This report is for the purpose of concluding on the audit objective described above. Accordingly, this report is not suitable for any other purpose.

We appreciate the assistance we received from USAID and appreciate the opportunity to serve you. We will be pleased to discuss any questions or concerns you may have regarding the contents of this report.

Very truly yours,

CLIFTONLARSONALLEN LLP

*CliftonLarsonAllen LLP*



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# SUMMARY OF RESULTS

The Digital Accountability and Transparency Act of 2014 (DATA Act)<sup>1</sup> was enacted to expand the reporting requirements pursuant to the Federal Funding Accountability and Transparency Act of 2006 (FFATA). The DATA Act, in part, requires:

- Federal agencies to report financial and award data in accordance with the established Government-wide financial data standards. In May 2015, the Office of Management and Budget (OMB) and Treasury published 57 (Appendix XI) data definition standards and required Federal agencies to report financial data in accordance with these standards for DATA Act reporting, beginning January 2017.

The U.S. Agency for International Development (USAID) Office of Inspector General (OIG) engaged us, CliftonLarsonAllen LLP, to conduct an audit of selected application controls in support of the Data Act of 2014. The objective of this performance audit was to determine whether USAID implemented selected application controls in its Global Acquisition and Assistance System (GLAAS) and its Phoenix Financial System.

Our audit was performed 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 objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

For this audit, we reviewed selected application controls related to the acquisition and procurement business process over two USAID information systems: GLAAS and the Phoenix Financial System. See Appendix II for a listing of selected controls for each system. GLAAS is utilized to help automate the Agency's end-to-end procurement process, as well as standardize and streamline its business processes. GLAAS is also utilized to support USAID's acquisition management activities, which include all aspects of the procurement life cycle. Phoenix Financial System is integrated with GLAAS for the processing of requests and awards, which are initiated in GLAAS. Momentum Financials, referred to as Phoenix Financial System, provides USAID the functionality to record financial planning and purchasing events as well as, accounts payable, disbursement, and budgeting execution.

Additionally, we performed procedures to support the OIG's DATA Act audit, to determine whether a) USAID obtained confirmation of complete and accurate acceptance of the files submitted to the Treasury's DATA Act Broker website, and b) error correction and validation processes were adequate to ensure timely resolution and submission of data files.

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<sup>1</sup> Digital Accountability and Transparency Act of 2014 (Public Law 113-101-May 9, 2014).

## Results

The audit concluded that USAID generally implemented 23 of the 27 selected application controls reviewed<sup>2</sup> for the GLAAS and Phoenix information systems in support of the DATA Act of 2014. Although we noted some controls that need improvement, USAID complied with following requirements:

- Maintained effective automated controls for the GLAAS and Phoenix applications. The GLAAS and Phoenix applications have certain edit checks in place to prevent users from entering incorrect values. For example, we observed error messages such as the value entered not matching predetermined approved values and the total spending amount exceeding the allotted funding amount.
- Maintained effective automated controls for the interface between GLAAS and Phoenix applications. For example, we observed that once an award is validated and approved in GLAAS it is automatically sent to Phoenix for validation and approval. In addition, we observed the the award was accurately processed and obligated in Phoenix.

Although USAID generally had processes for its DATA Act reporting, the implementation of those processes for 4 of the 27 selected application controls was not fully effective to preserve the integrity of its DATA Act reporting. Consequently, the audit identified two areas in USAID's DATA Act reporting controls that needed improvement. Specifically, USAID needs to:

- Create Agency-integrated Standard Operating Procedures (SOPs) for the DATA Act Reporting Process.
- Strengthen its Internal Data Validation Processes Related to Data Act File Submissions.

We made two recommendations to assist USAID in strengthening its DATA Act reporting processes. Detailed findings appear in the following section. Appendix I describes the audit scope and methodology.

Based on our evaluation of management comments, we acknowledge management decisions on both recommendations. We consider recommendation 1 resolved but open pending completion of planned activities and consider recommendation 2 closed.

Detailed findings appear in the following section. Appendix I describes the audit scope and methodology.

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<sup>2</sup> See Appendix II – Summary of Results of Each Control Reviewed.

# AUDIT FINDINGS

## 1. USAID Needs to Document Standard Operating Procedures for its DATA Act Reporting Process

Executive Office of the President, Officer of Management and Budget (OMB), M-15-12 Memorandum for the head of the Department and Agencies, dated May 8, 2015, *Increasing Transparency of Federal Spending by Making Federal Spending Data Accessible, Searchable, and Reliable*<sup>3</sup>, states:

Attachment – Federal Agency Guidance  
The DATA ACT requires

...

Implementation efforts shall include agency efforts to modify existing agency regulatory and non-regulatory policies (if required), business processes, and, as needed, systems to support agency-level financial reporting and new data quality requirements under this Memorandum. Agencies shall modify policies, internal business processes, and/or information technology, as needed, to ensure consistent publication of agency-level and award level reporting under the DATA Act and Federal Funding Accountability and Transparency Act (FFATA) on USA Spending.gov (or its successor site).

National Institute of Standards and Technology (NIST) Special Publication 800-53, Revision 4, *Security and Privacy Controls for Federal Information Systems and Organizations*, security control security control SI-1, states the following:

The organization:

- a. Develops, documents, and disseminates to [Assignment: organization-defined personnel or roles]:

\* \* \*

2. Procedures to facilitate the implementation of the system and information integrity policy and associated system and information integrity controls.

USAID had a process in place for extracting, populating, reviewing (errors/warnings), and submitting DATA Act Reporting Files A, B, and C to the Treasury's DATA Act Broker website. In addition, the Agency had three DATA Act subject matter experts who were familiar with the entire process from extraction to submission of the DATA Act Reporting Files to the Treasury's DATA Act Broker website. However, there were no documented standard operating procedures (SOP's) for extracting, reviewing, validating (errors and warnings), and submitting DATA Act Reporting Files A, B, and C<sup>4</sup> to the Treasury's DATA Act Broker<sup>5</sup> website.

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<sup>3</sup> Management and Budget (OMB), Memorandum, M-15-12, *Increasing Transparency of Federal Spending by Making Federal Spending Data Accessible, Searchable, and Reliable* (May 8th, 2015).

<sup>4</sup> File A – Appropriations Account Details; File B – Object Class Code and Program Activity Details; File C – Award Financial Details

<sup>5</sup> Treasury's DATA Act Broker - A system that collects and validates agency financial data.

Due to the infancy of the DATA Act reporting process, management indicated there were no documented SOPs that describe the entire process. However, by not documenting SOP's for the DATA Act Reporting process, which describe the step-by-step instructions from extracting data for submission of DATA Act files to the Treasury's DATA Act Broker website, there is an increased risk USAID will not be able to submit the files to the Treasury's DATA Act Broker website in compliance with DATA Act of 2014 requirements. Since the knowledge of the reporting process is maintained by a few individuals, there is an inherent risk of a) knowledge transfer to individuals outside of this group, and b) potential inconsistency in the application of reporting procedures.

***Recommendation 1:*** We recommend that the USAID Chief Financial Officer document step-by-step Agency-integrated standard operating procedures for extracting, reviewing, validating, and submitting DATA Act files to the Treasury's DATA Act Broker website.

## **2. USAID Needs to Improve Its Internal Data Validation Processes Related to Data Act File Submissions**

Public Law 113-101-May 9, 2014, *Digital Accountability and Transparency Act of 2014 (DATA Act)*, Sec. 2. Purpose states:

...  
(4) improve the quality of data submitted to USASpending.gov by holding Federal agencies accountable for the completeness and accuracy of the data submitted;

NIST Special Publication 800-53, Revision 4, security control SI-10, states the following:

The organization:

...  
Control Enhancements:

...  
(2) INFORMATION INPUT VALIDATION | REVIEW / RESOLUTION OF ERRORS  
The organization ensures that input validation errors are reviewed and resolved within [Assignment: organization-defined time period].

We determined that limited internal data validations or reconciliations were being performed by USAID staff prior to posting the Agency's DATA Act reporting files to the Treasury's DATA Act Broker website. Management indicated that the Treasury's DATA Act Broker website was utilized to validate DATA Act reporting files A, B, and C for any warning and errors (indicated within the Warning report, generated from the Treasury's DATA Act Broker website). Although files were not accepted with critical errors, files with only warnings (e.g., incorrect formatting, incorrect object class codes, incorrect header information, etc.) were accepted by the Treasury's DATA Act Broker website.

By not performing internal data validation and reconciliation procedures, there is an increased risk that erroneous data may be submitted within USAID DATA Act files to the Treasury's DATA Act Broker website.

**Recommendation 2:** *We recommend that the USAID Chief Financial Officer document and implement procedures to perform data validation and reconciliations of data within its DATA Act files prior to submitting them to the Treasury’s DATA Act Broker website.*

# EVALUATION OF MANAGEMENT COMMENTS

We provided our draft report to USAID on October 18, 2017, and on October 25, 2017, received its response, which is included as Appendix II.

The report included two recommendations. We acknowledge management decisions on both recommendations. The Agency accepted recommendation 1 and stated it will develop step-by-step Agency-integrated standard operating procedures for extracting, reviewing, validating, and submitting DATA Act files to Treasury's DATA Act Broker website. Therefore, we consider recommendation 1 resolved but open pending completion of planned activities. In regard to recommendation 2, USAID's response noted that the Treasury's DATA Broker is designed to allow agencies to validate data prior to submission to ensure that the agency data comports to Treasury data schema requirements. Therefore, the Agency concluded that to implement an internal data validation solution would be a duplication of effort that would not add any substantive value for USAID's DATA Act submission process. We acknowledge the Agency's logic and its determination that the resources needed to implement the recommendation could outweigh the benefits. Therefore, we consider recommendation 2 closed.

# SCOPE AND METHODOLOGY

## Scope

We conducted this audit in accordance with generally accepted government auditing standards, as specified in the Government Accountability Office's *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. The audit was designed to determine whether USAID implemented selected application controls over the procurement life cycle in support of the Office of Inspector General's Digital Accountability and Transparency Act of 2014 (DATA Act) audit.

The objective of this performance audit was to determine whether USAID implemented selected application controls in its Phoenix Financial System and GLAAS, specific to the acquisition and procurement business process.

The scope of this audit included testing selected application controls from the controls outlined in Government Accountability Office's (GAO) Federal Information System Controls Audit Manual (FISCAM)<sup>6</sup> to determine whether the controls were properly designed, implemented and operating effectively. The selected application controls are summarized below and more specifically within Appendix II:

- Business Process Controls
- Interface Controls
- Data Management System Controls

For this audit, we reviewed the controls over two USAID information systems: the Phoenix Financial System and GLAAS. See Appendix II for a listing of selected controls for each system.

The audit was conducted at USAID's headquarters in Washington, D.C., from June 8, 2017, to September 8, 2017.

## Methodology

Following the audit methodology prescribed in GAO's FISCAM, we reviewed selected application controls<sup>7</sup> over USAID's Phoenix Financial System and GLAAS systems, specific to the acquisition and procurement business process and data elements, such as obligations, awards, commitments, awardees, etc.

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<sup>6</sup> FISCAM represents best practices and presents a methodology for performing information system control audits of federal and other governmental entities in accordance with professional standards.

<sup>7</sup> Ibid. footnote 2.



To accomplish our audit objective, we preformed the following procedures:

- Interviewed key personnel, and reviewed information on system control policies, procedures, and objectives;
- Interviewed key personnel and observed the process (and key controls) to create requisitions, create contracts and modify existing contracts within GLAAS to the associated obligation of funds in Phoenix Financial System.
- Reviewed documentation related to USAID's acquisition and procurement business process, such as acquisition policies and procedures, system user guides, system error guides and listings, interface procedure guides, and memorandums of understandings for system interconnections.
- Tested Business Process, Interface, and Data Management System controls related to acquisition and procurement business process and data elements, such as obligations, awards, commitments, and awardees application. The selected application controls are summarized within Appendix II.
- Leveraged the fiscal year 2017 USAID Federal Information Security Modernization Act of 2014 (FISMA) audit results for change management and access controls as they related to or affected the selected application controls tested.
- On August 18<sup>th</sup>, 2017, discussed with the OIG's DATA Act and financial audit team whether any concerns or observations were noted in their acquisition/procurement testing performed.
- Reviewed designed documentation related to DATA Act Files reporting process.
- Conducted walkthrough of DATA Act files related to how Data Act files are compiled, generated, reviewed for errors/warnings, and posted to the Department of Treasury DATA Act Brokers website.

In testing for the adequacy and effectiveness of the security controls, we exercised professional judgment in determining the number of FISCAM controls selected for testing and the method used to select them. We considered relative risk, and the significance or criticality of the specific controls in achieving the related control objectives. In addition, we considered the severity of a deficiency related to the control activity and not the percentage of deficient controls found.

# MANAGEMENT COMMENTS



*Chief Financial Officer*

October 25, 2017

## MEMORANDUM

**TO:** Tom Yatsco, Assistant Inspector General for Audit

**FROM:** Reginald W. Mitchell /s/

**SUBJECT:** Management Response to Draft Report on USAID Implemented Application Controls for DATA Act Reports but Improvements Are Needed (A-000-18-00X-C)

Thank you for the opportunity to respond to the draft audit report. The Office of the Chief Financial Officer has reached a management decision for the following two recommendations:

**Recommendation 1:** We recommend that the USAID Chief Financial Officer document step-by-step Agency-integrated standard operating procedures for extracting, reviewing, validating, and submitting DATA Act files to the Treasury's DATA Act Broker website.

**Management Decision:** The Office of the Chief Financial Officer accepts this recommendation and will develop step-by-step Agency-integrated standard operating procedures for extracting, reviewing, validating, and submitting DATA Act files to Treasury's DATA Act Broker website.

**Target Completion Date:** July 31, 2018

**Recommendation 2:** We recommend that the USAID Chief Financial Officer document and implement procedures to perform data validation of data within its DATA Act files prior to submitting them to the Treasury's DATA Act Broker website.

**Management Decision:** The Office of the Chief Financial Officer believes that implementing this recommendation would not add any substantive value for USAID's DATA Act submission process. Furthermore, the Treasury's DATA Broker is designed to allow agencies to validate data prior to submission to ensure that the agency data comports to Treasury data schema requirements. To implement an internal data validation solution would be a duplication of effort and would provide little, if any, value in determining data validity prior to submission to the DATA Broker, which is designed to perform this very function. Management requests that this recommendation be closed upon issuance of the final report.

**Target Completion Date:** N/A

# SUMMARY OF RESULTS FOR EACH CONTROL REVIEWED

## Summary of Selected Controls

Control No.	Application Controls	Is Control Effective?
Business Process (BP)		
BP-1.2	Source documentation and input file data collection and input preparation and entry is effectively controlled.	Yes, testing was limited to the acquisition/ procurement cycle
BP-1.3	Access to data input is adequately controlled.	Yes, testing was limited to the acquisition/ procurement cycle
BP-1.4	Input data are approved.	Yes, testing was limited to the acquisition/ procurement cycle
BP-1.5	Input data are validated and edited to provide reasonable assurance that erroneous data are detected before processing.	Yes, testing was limited to the acquisition/ procurement cycle
BP-1.6	Input values to data fields that do not fall within the tolerances or parameters determined by the management result in an automated input warning or error.	Yes, testing was limited to the acquisition/ procurement cycle
BP-1.7	Error handling procedures during data origination and entry reasonably assure that errors and irregularities are detected, reported, and corrected.	No. Refer to finding 1.
BP-1.8	Errors are investigated and resubmitted for processing promptly and accurately.	Yes, testing was limited to the acquisition/ procurement cycle
BP-2.1	Application functionality is designed to process input data, with minimal manual intervention.	Yes, testing was limited to the acquisition/ procurement cycle
BP-2.2	Processing errors are identified, logged and resolved.	Yes, testing was limited to the acquisition/ procurement cycle

<b>Control No.</b>	<b>Application Controls</b>	<b>Is Control Effective?</b>
BP-2.3	Transactions are executed in accordance with the pre-determined parameters and tolerances, specific to entity's risk management.	Yes, testing was limited to the acquisition/ procurement cycle
BP-2.4	Transactions are valid and are unique (not duplicated).	Yes, testing was limited to the acquisition/ procurement cycle
BP-2.5	The transactions appropriately authorized.	Yes, testing was limited to the acquisition/ procurement cycle
BP-3.3	System generated outputs/reports are reviewed to reasonably assure the integrity of production data and transaction processing.	Yes, testing was limited to the acquisition/ procurement cycle
BP-4.1	Master data are appropriately designed.	Yes, testing was limited to the acquisition/ procurement cycle
BP-4.2	Changes to master data configuration are appropriately controlled.	Yes, testing was limited to the acquisition/ procurement cycle
BP-4.3	Only valid master records exist.	Yes, testing was limited to the acquisition/ procurement cycle
BP-4.4	Master data are complete and valid.	Yes, testing was limited to the acquisition/ procurement cycle
BP-4.6	Master data additions, deletions, and changes are properly managed and monitored by data owners.	Yes, testing was limited to the acquisition/ procurement cycle
<b>Interface Controls (IN)</b>		
IN-1.2	An interface design is developed for each interface used in the application that includes appropriate detailed specifications.	Yes, testing was limited to the acquisition/ procurement cycle and related interfaces between Phoenix Financial System and GLAAS
IN-2.1	Procedures are in place to reasonably assure that the interfaces are processed accurately, completely and timely.	No. See Finding 1

<b>Control No.</b>	<b>Application Controls</b>	<b>Is Control Effective?</b>
IN-2.2	Ownership for interface processing is appropriately assigned.	No. See Finding 1
IN-2.3	The interfaced data is reconciled between the source and target application to ensure that the data transfer is complete and accurate.	No. See Finding 2
IN-2.4	Errors during interface processing are identified by balancing processes and promptly investigated, corrected and resubmitted for processing.	Yes, testing was limited to the acquisition/ procurement cycle and related interfaces between Phoenix Financial System and GLAAS
IN-2.5	Rejected interface data is isolated, analyzed and corrected in a timely manner.	Yes, testing was limited to the acquisition/ procurement cycle and related interfaces between Phoenix Financial System and GLAAS
IN-2.6	Data files are not processed more than once.	Yes, testing was limited to the acquisition/ procurement cycle and related interfaces between Phoenix Financial System and GLAAS
<b>Data Management System Controls (DA)</b>		
DA-1.1	Implement an effective data management system strategy and design, consistent with the control requirements of the application and data. The strategy addresses key concepts including: <ul style="list-style-type: none"> <li>• database management,</li> <li>• middleware,</li> <li>• cryptography,</li> <li>• data warehouse, and</li> <li>• data reporting/data extraction.</li> </ul>	Yes, testing was limited to the acquisition/ procurement cycle
DA-1.2	Detective controls are implemented in a manner that effectively supports requirements to identify and react to specific system or user activity within the data management system and its related components.	Yes, testing was limited to the acquisition/ procurement cycle