

U.S. International Trade Commission

Audit of the Controls on the DATA Act FY2019 First Quarter Submission



OIG-AR-20-03

November 7, 2019



Office of Inspector General

The U.S. International Trade Commission is an independent, nonpartisan, quasi-judicial federal agency that provides trade expertise to both the legislative and executive branches of government, determines the impact of imports on U.S. industries, and directs actions against certain unfair trade practices, such as patent, trademark, and copyright infringement. USITC analysts and economists investigate and publish reports on U.S. industries and the global trends that affect them. The agency also maintains and publishes the Harmonized Tariff Schedule of the United States.

Commissioners

*David S. Johanson, Chairman
Rhonda K. Schmidlein
Jason E. Kearns
Randolph J. Stayin
Amy Karpel*



UNITED STATES INTERNATIONAL TRADE COMMISSION

OFFICE OF INSPECTOR GENERAL

WASHINGTON, DC 20436

November 7, 2019

IG-RR-028

Chairman Johanson:

This memorandum transmits the Office of Inspector General's final report, *Audit of the Controls on the DATA Act FY2019 First Quarter Submission*, OIG-AR-20-03. In finalizing the report, we analyzed management's comments to our draft report and have included those comments in their entirety as Appendix A.

The audit focused on the effectiveness of the Commission's process for validating the reliability of its DATA Act submission.

We identified one problem area and issued eight recommendations. In the next 30 days, please provide me with your management decisions describing the specific actions that you will take to implement each recommendation.

Thank you for the courtesies extended to my staff during this review.

Philip M. Heneghan
Inspector General

U.S. International Trade Commission
Audit Report

Contents

Background	1
Results of Audit.....	3
Problem Area 1: Source Documents Were Not Used to Verify Accuracy of Data.....	4
Management Comments and Our Analysis.....	8
Objective, Scope, and Methodology	8
Appendix A: Management Comments.....	A

Tables

Table 1: DATA Act Files.....	1
Table 2: Errors by Data Element	5
Table 3: Errors by Transaction	6

U.S. International Trade Commission

Audit Report

Background

The Digital Accountability and Transparency Act of 2014 (DATA Act) signed into law in May 2014 was designed to increase the transparency of Federal spending data by making it more accessible, searchable, and reliable for taxpayers. The DATA Act expanded on the requirements of the Federal Funding Accountability and Transparency Act of 2006 by requiring Federal agencies to report financial and award data in accordance with government-wide data standards developed by the Office of Management and Budget and the Department of the Treasury. These standards were designed to ensure consistent and comparable Federal spending and award data across the Federal government. The Department of the Treasury makes Federal spending data available to the public on the USASpending.gov website.

The Department of the Treasury developed the DATA Act Implementation Modeling Schema that defines the attributes for seven files to be submitted by agencies. Only four of the seven files contain data that is applicable to the Commission. (The other three files contain data related to grants, loans, and third-party systems.) A description of the Commission's files and the data source for the submission are provided in table 1 below.

Table 1: DATA Act Files

File	Description	Source
A	Appropriations and Account Details – provides summary-level information on the status of budgetary resources for the quarter.	Oracle Federal Financial
B	Object Class and Program Activity: Provides the same information as File A, summarized by object class at the program activity level.	Oracle Federal Financial
C	Award and Financial Data: Provides award-level transactions with accounts, object class, program activity, and award identification.	Oracle Federal Financial
D1	Award and Awardee Attributes: Provide transaction-level procurement award and awardee data.	Federal Procurement Data System – Next Generation (FPDS-NG)

The quarterly submission process begins with the Commission generating File A, B, and C from the Commission's own financial system. These three files are then submitted to the DATA Act Broker, which is an external system developed by the Department of the Treasury. The DATA Act Broker extracts information about Commission procurements from a system run by the General Services Administration, the Federal Procurement Data System-Next Generation

U.S. International Trade Commission

Audit Report

(FPDS-NG).¹ This extract is used to create File D1. The Commission then reviews, certifies, and submits the files to the Department of the Treasury, which then uploads the DATA Act submission to the USASpending.gov website.

As part of the DATA Act process, a designated Senior Accountable Official is required to provide a quarterly assurance that the agency's internal controls support the reliability and validity of the agency account-level and award-level data prior to submitting the files for posting on the USASpending.gov website. The Office of Management and Budget memorandum M-17-04 states that in order to provide this assurance, the Senior Accountable Official will confirm that data integrity processes are in place for the data submitted in DATA Act files.

The DATA Act also requires the Inspector General of each agency to review a statistically valid sample of the spending data submitted by the agency to assess the completeness, timeliness, quality, and accuracy of the data sampled, and report to Congress on the implementation and use of the government-wide data standards.

In addition, the DATA Act requires the Government Accountability Office to assess and compare the Inspector General reports and issue a publicly available report to Congress on the completeness, timeliness, quality, and accuracy of the data submitted by Federal agencies.

The Council of Inspectors General for Integrity and Efficiency (CIGIE), in consultation with the Government Accountability Office, developed a common approach and methodology to provide a baseline framework for performing the audits and delivering results in a manner that can be compared and assessed equally across the government. We followed the procedures developed by the CIGIE Federal Audit Executive Committee's Common Methodology Working Group to meet the mandated review and allow for the aggregation of our data for government-wide reporting. We issued a separate report, *Audit of FY2019 First Quarter Data Submitted Under the DATA Act*, Report Number OIG-AR-20-02 dated November 7, 2019.

Because conducting this audit required extensive testing of the Commission's financial and procurement transactions, we gained significant insight into how procurement and financial actions were processed. We used the results of our testing to perform additional analysis of the data to meet the audit objective for this report.

¹ The Federal Procurement Data System-Next Generation is a web-based system owned by the General Services Administration. The system is used to make unclassified Federal award data publicly accessible, in accordance with the Federal Funding Accountability and Transparency Act of 2006. Executive agencies are required to report certain contract actions into the system within three business days after contract award.

U.S. International Trade Commission

Audit Report

Results of Audit

The objective of this audit was to answer the question:

Did the Commission implement an effective process for validating the reliability of its DATA Act Submission?

No. The Commission did not have an effective process for validating the reliability of its DATA Act Submission.

Data can be reliable only if it is complete, accurate, and timely.

The Commission's process for validating the reliability of data should include controls designed to minimize unintentional errors, prevent errors from occurring, and detect errors after they occur. Based on our analysis of the errors identified during this audit, we determined that the Commission's process did not have effective controls in place to prevent and detect accuracy errors in the DATA Act submission.

To perform our analysis, we used the results from our report, *Audit of FY2019 First Quarter Data Submitted Under the DATA Act*, and excluded errors attributed to third-party systems. We then analyzed the errors in File C and File D1. As part of our analysis we determined how each error occurred and separated the errors into three categories: 1) preventable, 2) detectable, and 3) hard to detect. Using these categories, we determined that:

- 71% of the errors were preventable.
- 20% of the errors were detectable.
- 9% of the errors were hard to detect.

These errors occurred because the Commission did not have quality control procedures in place to ensure that data entered into agency systems was correct and properly aligned with the information from source documentation. The Commission's process for validating the reliability of its DATA Act submission starts with reports generated by agency systems—reports that contained unreliable data.

The problem of relying on the Commission's systems as source data for the reconciliation and validation of the Commission's DATA Act submission is described in further detail in the report.

U.S. International Trade Commission

Audit Report

Problem Area 1:

Source Documents Were Not Used to Verify Accuracy of Data

OMB Circular A-123, Appendix A, Management of Reporting and Data Integrity Risk, focuses on the need for agencies to have high-quality data to support better data-driven decisions. In order to achieve this, the Commission must have quality control procedures in place to ensure that the data contained in our systems is complete, accurate, and timely.

File C is generated from data that resides in the agency's financial system. The Commission's process for validating the reliability of budget object codes in File C assumes that the object codes entered into the financial system are correct. The reconciliation process used for this data element is to compare the budget object code in File C to a list of acceptable object codes. If the code is on the list of acceptable codes, then the code is deemed valid, correct, and reliable.

We compared the budget object code from each of the 17 records in File C to the award documentation to determine if the object code accurately represented the goods or services being acquired. We found that 4 of the 17 object codes were not correct, which represents an error rate of 23.5%.

File B is generated from the agency's financial system and provides summary level data by object code. The audit procedures for File B were made on the assumption that the data contained in agency systems was correct. As a result, File B testing did not identify any exceptions. However, we cannot rely on the results of that test due to the object code errors identified in File C.

File D1 provides transaction-level procurement award data from the Federal Procurement Data System-Next Generation (FPDS-NG). The Commission's award data is initially entered into the contract writing system. The contract writing system has an electronic interface to FPDS-NG, which populates some of the required data elements. This data is supplemented by manual data entry by the contracting officer and external data from third-party systems.

The Commission's process for validating the reliability of the FPDS-NG data assumes that the information in the Commission's contract writing system is correct. The reconciliation procedure compares data elements from the contract writing system to the information in FPDS-NG. If the data matches, it is deemed valid, correct and reliable.

We compared the transaction-level award data for all 21 records in File D1 to the documentation in the contract file. We identified 66 instances where the information reported in File D1 did not accurately represent information contained in the contract file.

U.S. International Trade Commission

Audit Report

We identified 84 total errors in the agency's DATA Act submission for File C and File D1. These errors are illustrated in table 2 by data element and in table 3 by transaction. Both tables provide the overall errors, and then distinguish the errors according agency and external third-party errors.

Table 2: Errors by Data Element

Data Element	Data Element Description	Total Errors	USITC	External
DE 1	Awardee/Recipient Legal Entity Name	2	2	0
DE 2	Awardee/Recipient Unique Identifier	3	3	0
DE 3	Ultimate Parent Unique Identifier	1	0	1
DE 4	Ultimate Parent Legal Entity Name	7	0	7
DE 5	Legal Entity Address	12	7	5
DE 6	Legal Entity Congressional District	5	5	0
DE 7	Legal Entity Country Code	2	2	0
DE 8	Legal Entity Country Name	2	2	0
DE 14	Current Total Value of Award	2	2	0
DE 15	Potential Total Value of Award	6	6	0
DE 16	Award Type	2	2	0
DE 17	NAICS Code	5	4	1
DE 18	NAICS Description	4	4	0
DE 25	Action Date	1	1	0
DE 26	Period of Performance Start Date	3	3	0
DE 28	Period of Performance Potential End Date	2	2	0
DE 30	Primary Place of Performance Address	10	10	0
DE 31	Primary Place of Performance Congressional District	9	9	0
DE 36	Action Type	2	2	0
DE 50	Object Code (File C)	4	4	0
Totals		84	70	14

U.S. International Trade Commission

Audit Report

Table 3: Errors by Transaction

Record	Transaction Identification Number	Total Errors	USITC	External
1	34300019F0002	2	1	1
2	ITCPO170070 M002	2	2	0
3	ITCCN170001 M002	5	4	1
4	34300018P0007 P001	3	2	1
5	34300018F0008 P001	5	5	0
6	ITCPO160018 M005	4	4	0
7	34300019C0001 P001	9	8	1
8	34300019F0001	0	0	0
9	ITCTO170021 M003	7	7	0
10	ITCTO170026 M005	0	0	0
11	34300018F0010 P002	6	5	1
12	34300018P0008 P001	4	3	1
13	ITCDO160003 M004	0	0	0
14	34300019P0003	1	1	0
15	34300019P0002	5	5	0
16	ITCCN120002 M009	3	3	0
17	34300018P0001 P001	6	3	3
18	34300019P0001	3	2	1
19	34300019C0001	10	9	1
20	ITCTO160008 M006	3	1	2
21	34300018F0010 P001	6	5	1
Totals		84	70	14

We also performed a detailed analysis of each agency-caused error identified in File C and File D1 to determine where the error most likely occurred. A summary of results is provided below.

- 71% of the errors were due to incorrect data at the point of entry into agency source systems. These errors could have been prevented if a process was in place to verify that the data elements were correctly aligned with what was being acquired, who we were acquiring the goods or services from, and what type of contract was being awarded—prior to entering the information into the system.
- 20% of the errors were attributed to human data entry errors, particularly in the fields related to dates and dollar amounts. These errors could have been detected if a process was in place to validate the information after it was entered into the system.

U.S. International Trade Commission

Audit Report

- 9% of the errors were attributed to not performing necessary steps required by the system(s) to process the data correctly. These errors were generally related to address changes, which would have been harder to detect, but also impact the accuracy of the congressional district.

Based on this analysis, 91% of the errors we identified could have been prevented or detected if the Commission had quality control procedures over the integrity of data entered into its source systems.

Another reason for the errors is that the Commission's business process activities are not effectively designed to collect, record, or report accurately on detailed transaction-level financial data related to contract awards. This hurts the Commission's ability to effectively and efficiently perform quality control over the integrity of data in our systems. This in turn impacts the accuracy, traceability, and usability of the data.

Recommendation 1: The Commission redesign their business process activities related to procurement contract awards and the financial recording of those transactions to ensure that the proper information is collected, recorded, and reported in the procurement and financial systems.

Recommendation 2: The Commission develop a quality control process to ensure that all data is correct before it is entered into the financial system.

Recommendation 3: The Commission develop a reconciliation process to validate information entered into the financial system to detect and correct data entry errors.

Recommendation 4: The Commission develop a quality control process over procurement award data to ensure the data is correct before it is entered into the procurement system.

Recommendation 5: The Commission develop a reconciliation process to validate the information entered into the procurement system to detect and correct data entry errors.

Recommendation 6: The Commission identify all transaction-level award data that resides in both the financial system and procurement system.

Recommendation 7: The Commission develop a process to reconcile all transaction-level award data between systems.

Recommendation 8: The Office of Internal Control perform a review of these processes to determine if the controls are operating effectively.

U.S. International Trade Commission

Audit Report

Management Comments and Our Analysis

On November 5, 2019, Chairman Johanson provided management comments on the draft report. He agreed with the findings and will develop management decisions that address the recommendations from the report.

Objective, Scope, and Methodology

Objective: Did the Commission implement an effective process for validating the reliability of its DATA Act Submission?

Scope: The scope of this audit was fiscal year 2019, first quarter financial and award data the Commission submitted for publication on the USASpending.gov website, and any procedures, certifications, documentation, and controls used in this process.

DATA Act submission files within the scope of this audit are:

- 1) File A, Appropriations Account Detail
- 2) File B, Object Class and Program Activity Detail
- 3) File C, Award and Financial Detail
- 4) File D1, Award and Awardee Attributes

Methodology: The criteria for testing followed the *CIGIE FAEC Inspectors General Guide to Compliance under the DATA Act*. The guide included a standard reporting template used to consolidate the results to provide a government-wide view of DATA Act implementation. We issued two reports based on the results of the testing. The DATA Act report is intended to provide a way to compare reports of agency implementation of DATA Act performed by different Inspectors General.

This report uses the data from the DATA Act audit testing and refines it to meet the objectives of this audit. In conducting this audit, we:

- 1) Obtained an understanding of any regulatory criteria related to its responsibilities to report financial and award data under the DATA Act.
- 2) Reviewed the Commission's data quality plan.
- 3) Assessed the internal and information system controls in place as they relate to the Commission's DATA Act submission.
- 4) Reviewed and reconciled fiscal year 2019, first quarter summary-level data submitted by the agency for publication on the USASpending.gov website.
- 5) Reviewed 100% of the records from the fiscal year 2019, first quarter financial and award data submitted by the agency for publication on the USASpending.gov website.

U.S. International Trade Commission

Audit Report

- 6) Assessed the completeness, accuracy, timeliness, and quality of the financial and award data sampled.

Methodology for Categorizing Errors:

- 1) Preventable: An error that could have been prevented if a quality control procedure had been in place to verify the accuracy of data prior to entry into a source system.
- 2) Detectable: A human data entry error that could have been detected if a quality control procedure was in place to verify that the data was entered correctly into a source system.
- 3) Hard to Detect: These are system processing errors that could be caused by incorrectly performing steps required by a system to process the data correctly.

Assessment of Internal Control over Data Act Submission:

We performed procedures to determine if the Commission's process for evaluating the reliability its DATA Act submission was effective. We reviewed the Commission's internal control procedures for generating reports, addressing validation warnings, and the process to reconcile data between the financial system and the procurement system.

Our assessment over internal control also considered any risks identified in the Commission's enterprise risk management system, the data quality plan, and reports issued by other oversight entities.

The internal control processes are dependent upon the accuracy of the data in the Commission's source systems.

Assessment of Internal Control over Information Systems:

Contract Award: The Commission uses a commercial off-the-shelf software product, Procurement Information System for Management (PRISM) to aid in the procurement process. PRISM is a contract writing system that covers the full procurement lifecycle from solicitation through contract closeout. PRISM is accessed through a secure browser from a desktop, and access is limited to the Office of Procurement staff. PRISM is integrated with the Federal Procurement Data System-Next Generation (FPDS-NG). The data in FPDS-NG is supplemented by manual data entry by procurement staff and external data from third-party systems.

In performing our assessment, we obtained an understanding of the systems and processes used to create contract awards. We obtained and reviewed the annual certification of the agency contract action report to the General Services Administration and supporting documentation. We also reviewed related process and procedures related to validating the reliability of data in the source system and supporting documentation.

U.S. International Trade Commission

Audit Report

Our review found that the Commission did not have adequate internal control procedures over the quality and integrity of the data that was entered into the contract writing system. This data was subsequently used to reconcile FPDS-NG data and the Commission's DATA Act submission.

Financial Systems: The Commission's financial data is hosted in the Oracle Federal Financial system which is operated by a Federal Shared Service Provider. As a customer agency, the Commission is responsible for the data in the financial system. The Commission is responsible for internal control procedures over the integrity of data, which includes making sure the information is complete, timely, and accurate; having a process for the reconciliation of accounts; and implementing systems for detecting and correcting errors.

Our review found that the Commission did not have adequate internal control procedures over the quality and integrity of the data that was entered into the financial system. The data in the system is being used as the authoritative source for Files A, B, and C.

Federal Shared Service Provider:

The Commission is a customer agency of the Department of the Interior's Interior Business Center (DOI/IBC). DOI/IBC provides vendor maintenance services to the Commission, which includes systems management, help desk administration, network security, and compliance and control. The Commission is the data owner and is responsible for entering financial transactions into the financial system, and ensuring they are complete, accurate, and timely.

DOI/IBC created a DATA Act file generator for its customer agencies that produces File A, B, and C. The Commission is responsible for generating the reports, identifying and resolving discrepancies, and final submission and certification to the Treasury Data Broker. We obtained access to the DATA Act file generator and were able to replicate the Commission's FY2019 first quarter submission of Files A, B, and C from the financial system.

We reviewed the Commission's survey response and the subsequent report issued by the Government Accountability Office, *DATA Act Customer Agencies' Experiences Working with Shared Service Providers for Data Submissions*, issued in July 2019.

We also reviewed the *SSAE 18 SOC1 – Type 2 Report* issued on July 16, 2018, by KPMG. We reviewed the results of testing to specific control objectives and determined that any further testing of DOI/IBC would be unnecessary based on the results of KPMG testing, the role the FSSP provider, and the Commission's responsibility for ensuring the integrity and quality of data in the financial system.

U.S. International Trade Commission

Audit Report

GAGAS Statement: We conducted this performance audit in accordance with Generally Accepted Government Auditing Standards (GAGAS) during the period of February 2019 through November 2019. 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.

U.S. International Trade Commission

Audit Report

Appendix A: Management Comments



UNITED STATES INTERNATIONAL TRADE COMMISSION

WASHINGTON, DC 20436

CO83-RR-012

November 5, 2019

MEMORANDUM

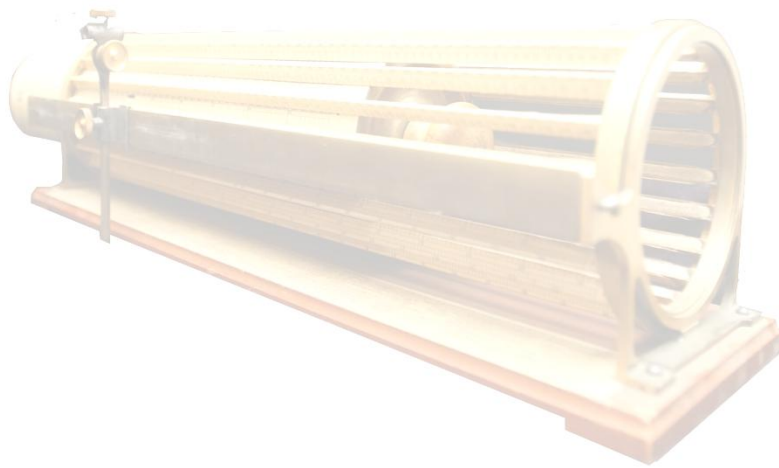
TO: Philip M. Heneghan, Inspector General

FROM: David S. Johanson, Chairman *DST (5 Nov. 2019)*

SUBJECT: Response to Draft Report – Audit of the Controls on the DATA Act FY 2019 First Quarter Submission

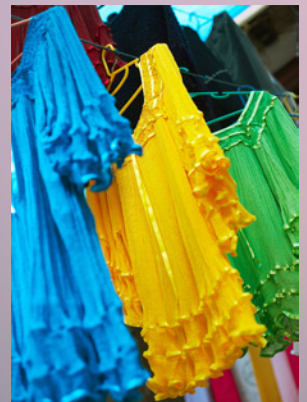
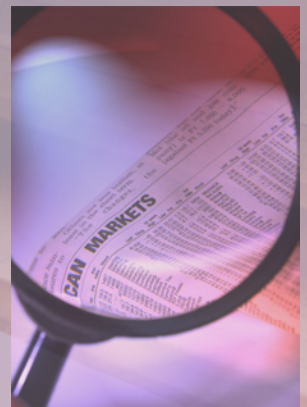
Thank you for the opportunity to review and provide comments to the draft report -- Audit of the Controls on the DATA Act FY 2019 First Quarter Submission

We agree with your findings in this audit that improvements are needed in the Commission's quality control procedures over the integrity of data entered into its source systems and that the Commission's business process activities are not effectively designed to collect, record, or report accurately on detailed transaction level financial data related to contract awards. The Commission will develop management decisions to address the eight recommendations in the report.



“Thacher’s Calculating Instrument” developed by Edwin Thacher in the late 1870s. It is a cylindrical, rotating slide rule able to quickly perform complex mathematical calculations involving roots and powers quickly. The instrument was used by architects, engineers, and actuaries as a measuring device.

To Promote and Preserve the Efficiency, Effectiveness, and Integrity of the U.S. International Trade Commission



U.S. International Trade Commission
Office of Inspector General
500 E Street, SW
Washington, DC 20436

Office: 202-205-6542
Fax: 202-205-1859
Hotline: 202-205-6542
OIGHotline@USITC.GOV