



OFFICE OF INSPECTOR GENERAL

U.S. Department of Energy

SPECIAL REPORT

DOE-OIG-18-08

November 2017

**DEPARTMENT OF ENERGY'S
IMPLEMENTATION OF THE DIGITAL
ACCOUNTABILITY AND
TRANSPARENCY ACT OF 2014**



Department of Energy
Washington, DC 20585

November 8, 2017

MEMORANDUM FOR THE SECRETARY

April Stephenson

FROM: April Stephenson
Acting Inspector General

SUBJECT: INFORMATION: Special Report on the “Department of Energy’s Implementation of the Digital Accountability and Transparency Act of 2014”

BACKGROUND

The *Digital Accountability and Transparency Act of 2014* (DATA Act) requires Federal agencies to report on financial and non-financial data in accordance with standards established by the U.S. Department of the Treasury (Treasury) and the Office of Management and Budget (OMB). Agency reported data is made available to the public and other stakeholders on USASpending.gov, a Web site operated by Treasury in consultation with OMB. In May 2015, Treasury and OMB published 57 data definition elements and required agencies to report on the data elements, such as obligation amounts and legal entity address, beginning in January 2017. Once submitted by agencies to the Treasury, the data is displayed quarterly on USASpending.gov for taxpayers and policy makers.

The DATA Act requires each Office of Inspector General (OIG) to report on the completeness, timeliness, quality, and accuracy of data submitted by the cognizant agency. In preparation for the initial report to be issued in November 2017, we conducted a review to determine the Department of Energy’s readiness to implement the provisions of the DATA Act. Our report on *The Department of Energy’s Readiness to Implement the Digital Accountability and Transparency Act of 2014* (OIG-SR-17-03, November 2016) determined that the Department of Energy was well-positioned to execute and implement goals of the DATA Act. Consistent with guidelines established by the Council of the Inspectors General on Integrity and Efficiency, we completed this review to determine the completeness, accuracy, timeliness, and quality of fiscal year 2017 second quarter financial and non-financial data submitted for publication on USASpending.gov. This report documents the results of our test work related to the Department’s implementation of the DATA Act.

RESULTS OF AUDIT

We determined that the overall quality of available Department information related to the DATA Act was negatively impacted by weaknesses in completeness, accuracy, and timeliness of

information reported in the second quarter of fiscal year 2017. In particular, we identified weaknesses related to completeness, accuracy, and/or timeliness of information in the data files tested. For instance, we found that all 354 transactions sampled contained at least 1 error¹. While the majority of these errors were caused by other external agencies' data management processes and were outside the control of the Department and the scope of this audit, we found that 28 percent of the 354 transactions sampled contained errors caused by Department weaknesses. To the Department's credit, we noted that 91 percent of the 23,688 data elements tested from the sampled transactions were complete, accurate, and/or timely.

Testing Methodology

To meet the needs of the Inspector General community, the Council of the Inspectors General on Integrity and Efficiency, Federal Audit Executive Council, established the DATA Act Working Group. The Working Group developed a guide intended to provide a baseline framework for the reviews required by the DATA Act. In performing this audit, we adhered to the *Inspectors General Guide to Compliance Under the DATA Act*, issued in February 2017.

In conducting our audit, we evaluated and assessed the internal controls over the Department's and the Federal Energy Regulatory Commission's information systems used to report financial and non-financial data. Based on test work performed, we noted that the information technology controls tested for DATA Act purposes on the Department's financial and procurement systems appeared sufficient.

Just prior to issuance of our report, the OIG received allegations related to the Department's internal control environment over financial data. At the time our DATA Act test work was completed, the OIG was still evaluating the allegations and any potential impacts. If the results of our ongoing inquiry prove necessary, we will consider issuing supplemental correspondence in the future.

In addition, we reviewed both financial and non-financial data elements certified by the Department for the second quarter of fiscal year 2017. The chart below illustrates the seven DATA Act files included in our review, contents within the files, number of standard data elements established by Treasury and OMB, and the source of data for each of the files. A detailed chart of the files, descriptions, and information data flow can be found in Appendix 4.

¹ If one element reviewed was incomplete, inaccurate, or not timely, the complete sample item was in error. We define an error as any deviation in completeness, accuracy, or timeliness for an individual data element, regardless of the cause.

DATA Act Broker Files²	Contents of DATA Act Broker Files	Standard Data Elements Per Broker File³	Source Systems for Broker Files
File A	Appropriations Account	6	Standard Accounting and Reporting System
File B	Object Class and Program Activity	6	
File C	Award Financial	8	
File D1	Award and Awardee Attributes (Procurement)	39	Federal Procurement Data System Next Generation (FPDS-NG) Managed by the U.S. General Services Administration (GSA)
File D2	Award and Awardee Attributes (Financial Assistance)	35	Award Submission Portal Managed by Treasury
File E	Additional Awardee Attributes	5	System for Award Management Managed by GSA
File F	Sub-award Attributes	24	Federal Funding Accountability and Transparency Act Sub-award Reporting System Managed by GSA

We tested all transactions included in the Appropriations Account and Object Class and Program Activity files (Files A and B) reported by the Department. In addition, we performed the following steps to test the Department’s information related to the standard data definition elements established by Treasury and OMB:

- In accordance with direction included in the *Inspectors General Guide to Compliance Under the DATA Act*, we statistically sampled 354 transactions⁴ from the Award Financial file (File C). The Award Financial file included obligation information and was generated from the Department’s financial systems.
- Although our sample was selected from the Award Financial file (File C), the data elements used for testing the sampled transactions resided in the various Attribute files (Files D-F). Based on our sampling methodology, we ultimately reviewed 23,688 data elements for completeness, accuracy, and/or timeliness.

² The Broker system is an information technology system developed by Treasury to standardize data formatting and assist agencies in validating data submissions before being uploaded to USASpending.gov.

³ The data elements are cross-functional, and some elements appear in multiple files.

⁴ The sample size is based on a 95-percent confidence level, an initial-year expected error rate of 50 percent, and a desired sampling precision of 5 percent.

Completeness of Data

We identified weaknesses related to the completeness of transactions reviewed. In particular, we found that 108 of 354 (31 percent) sampled transactions contained incomplete data attributed to either the Department or an external agency. We noted that 26 of the transactions containing errors were directly related to Department weaknesses. According to the *Inspectors General Guide to Compliance Under the DATA Act*, completeness is measured as: (1) all transactions that should have been recorded are recorded in the proper reporting period; and (2) the percentage of transactions containing all applicable data elements required by the DATA Act. During our testing of more than 23,600 data elements supporting the sampled transactions, we found:

- Five procurement awards that did not exist within the certified Award and Awardee Attributes (Procurement) file (File D1) taken from the Treasury's Broker system. While we confirmed that the data supporting these transactions was in the Broker system, the Department's certified file did not contain the transaction information. Without complete files, we were unable to verify the validity of data elements reported to the public on USASpending.gov. A Department official indicated that they communicated with Treasury to determine what caused this issue within the Broker system; however, the issue remained unresolved at the time of our review.
- Thirty-three instances where the Primary Place of Performance Zip Code data element was blank within the Award and Awardee Attributes (Financial Assistance) file (File D2). In all instances, we observed that Department submitted the required information to the Award Submission Portal. However, in 28 instances, the data in the Award and Awardee Attributes (Financial Assistance) file (File D2) did not match the information that was submitted to the Award Submission Portal by the Department. In the other five instances, the Department submitted the data in the format that was required by the Award Submission Portal but we observed that the format was insufficient for the DATA Act requirements. Because the Department submitted the required information in the Award Submission Portal, we excluded these instances from the Department's sampled transactions error rates.
- At least 72 instances in which the Legal Entity City Code and Primary Place of Performance County Name data elements were blank within the Award and Awardee Attributes (Financial Assistance) file (File D2). We noted that these elements were not being derived by Treasury in all instances. As a result, the Department's information available related to these data elements was incomplete. This issue was identified and acknowledged by Treasury but remained unresolved at the time of our test work.

We could not determine the completeness of the Sub-award Attributes file (File F). In particular, we found that several sub-awardees with obligations greater than \$25,000 were not reported within the Sub-award Attributes file (File F), as required. Furthermore, we determined that historical transaction data included in the file continued to change depending on when the report was generated. Department officials stated that no formal review process existed over sub-award information. However, the Office of Acquisition Management notified the Office of the Chief

Financial Officer that the Department was in the process of developing reviews to assess compliance and completeness of sub-awardee information. This particular completeness issue was identified and acknowledged by the Department and Treasury prior to our review.

Upon being made aware of the errors we identified related to completeness, Department officials took actions to identify and/or mitigate the risk of these errors continuing. Furthermore, to the Department's credit, although we noted the above completeness weaknesses, we determined that the Appropriations Account file (File A), Object Class and Program Activity file (File B), and Additional Awardee Attributes file (File E) were complete. In addition, even though the errors identified above existed, our analysis concluded that over 99 percent of the 23,688 data elements reviewed from the Award and Awardee Attributes (Procurement and Financial Assistance) files (Files D1 and D2) were complete. However, without ensuring that all DATA Act files are complete, stakeholders may not have all information necessary to evaluate the Department's spending and make informed decisions, as appropriate.

Accuracy of Data

We identified weaknesses related to the accuracy of transactions reviewed. Specifically, we determined that 268 of 354 (76 percent) sampled transactions contained accuracy errors attributable to either the Department or external agencies, 77 of which were directly related to Department errors. The *Inspectors General Guide to Compliance Under the DATA Act* indicated that accuracy is measured as the percentage of transactions that are complete and agree with the systems of record or other authoritative sources. Our test work of data elements revealed:

- Seventy-six instances where the Object Class and Program Activity (File B) file contained invalid information for two data elements – the Program Activity Name and Program Activity Code fields. According to a Department official, this problem occurred because the file utilized outdated Treasury Account Symbols that no longer appear on the Program and Financing Schedule. The Department disclosed this issue to Treasury and officials are working to resolve the problem. In addition, we identified 11 instances where the same elements contained inaccurate information. An official stated this issue occurred because the Treasury Account Symbols for these 11 instances did not have a program activity assigned by the Department.
- Accuracy weaknesses in the Current Total Value of Award and Potential Total Value of Award data elements being displayed on USASpending.gov. In particular, we identified 746 instances of data element information that was not accurately reflected on the Web site. Furthermore, we noted inconsistencies between the information reported by the Department and values displayed on the Web site. Upon making the Department aware of these weaknesses, we learned that Treasury knew of the issues but that the discrepancies will continue to exist until historical external system records transitioned to the new Treasury information system.
- Accuracy issues related to the Federal Action Obligation, Current Total Value of Award, and Potential Total Value of Award data elements within the Award and Awardee Attributes (Procurement) file (File D1). Specifically, we identified 92 instances in which

the Department reported non-appropriated funding, which should not have been reported as part of the DATA Act. Department officials acknowledged that non-appropriated amounts should be excluded from the Federal Action Obligation and took corrective action. However, officials noted there is no guidance that excludes non-appropriated amounts from the Current Total Value of Award and Potential Total Value of Award. Contrary to the Department's position, the Federal Acquisition Regulation (FAR) 4.6 states, "agencies awarding contract actions with a mix of appropriated and non-appropriated funding shall only report the full appropriated portion of the contract action in FPDS[-NG]." In light of the apparent discrepancy over reporting requirements, the Office of the Chief Financial Officer should seek further clarification from cognizant agencies regarding Current Total Value of Award and Potential Total Value of Award data elements. Until the Department obtains further clarification, we consider the information reported by the Department to be inaccurate.

- Four hundred sixty variances related to the accuracy of the Indefinite Delivery Vehicle Type data element within the Award and Awardee Attributes (Procurement) file (File D1). Specifically, we found that the Indefinite Delivery Vehicle Type data element was populated with inaccurate information. Upon being made aware of this issue, a Department official reported it to Treasury, which acknowledged the issue and is working to improve the data.
- Accuracy weaknesses related to the Legal Entity data elements from the Award and Awardee Attributes (Procurement) file (File D1). We identified a total of 521 weaknesses in which the Legal Entity data elements was not accurately reported within the external system managed by GSA. Specifically, we noted that the information being imported into FPDS-NG from the source system, System for Award Management, was not accurate. While the GSA Federal Service Desk stated that specific modifications were needed to reflect the current legal entity information, Department officials noted that it is not practical for agencies to do these actions before or after each modification to make sure that FPDS-NG reflects the most current information from the System for Award Management. Because we were unable to determine the cause of these weaknesses, we excluded them from the Department's sampled transactions error rates.

To the Department's credit, we identified that nearly all of the transactions reviewed in the Object Class and Program Activity file (File B) were accurate. In addition, approximately 92 percent of the 23,688 individual data elements reviewed from the Award and Awardee Attributes (Procurement and Financial Assistance) files (Files D1 and D2) were accurate. We also determined that the transactions tested in the Appropriations Account file (File A) were accurate. However, without assurance that all files supporting the DATA Act are accurate, the public, policymakers, and other stakeholders may make conclusions based on inaccurate information.

Timeliness of Data

During our review, nothing came to our attention to indicate a systemic issue related to the timely processing and posting of DATA Act related information. In particular, we only identified two (see bullets below) instances of timing errors. According to the *Inspectors*

General Guide to Compliance Under the DATA Act, timeliness is measured as the percentage of transactions reported within 30 days of the end of a quarter. Furthermore, FAR 4.6, *Contract Reporting*, required that the contract action report must be confirmed for accuracy by the contracting officer prior to release of a contract award and completed within the Federal Procurement Data System Next Generation within 3 business days after contract award. We identified:

- One procurement that was reported in the appropriate quarter; however, it did not meet the requirements of the FAR which required reporting within 3 business days.
- One instance in which we could not determine when a contract modification was approved. Therefore, we could not determine whether this award modification met all applicable requirements for timeliness.

Although we are required to report these discrepancies related to timeliness, we do not consider the issues to be systemic.

DATA Act Review Process

The weaknesses identified occurred, in part, because the Department did not always ensure that data exported from external systems maintained by Treasury and GSA was complete, accurate, and timely. Officials noted that the Department has an extensive process for testing, reviewing, and documenting the Appropriations Account (Files A), Object Class and Program Activity (File B), Award Financial (File C), and linkages of that data to the Award and Awardee Attributes (Files D1 and D2). However, as indicated in our report, the Department's process for testing and reviewing data was not always fully effective. Furthermore, the Department utilized Senior Procurement Executive assurances that leveraged existing processes and controls consistent with existing OMB policies. While the Department had procedures in place to submit, troubleshoot, and/or explain variances prior to certification of the data by the designated Senior Accountable Official, we noted that officials did not always ensure that information contained in the Award and Awardee Attributes files (Files D1 and D2) was complete and accurate before certifying the files. For instance, although we identified numerous weaknesses within the certified Treasury Broker files, the Office of the Chief Financial Officer and Office of Acquisition Management was not always aware that such issues existed.

Furthermore, certain weaknesses occurred because the Treasury's Broker system did not always extract the necessary data element, calculate correct information, and/or report precise information on the USASpending.gov Web site. For example, certain data elements were not appropriately derived and resulted in completeness discrepancies in the Award and Awardee Attributes (Financial Assistance) file (File D2). Also, the Treasury issues related to historical financial information contributed to accuracy weaknesses identified during our review. To its credit, the Department began coordinating with Treasury on potential corrective actions after it became aware of data processing issues.

Impact and Path Forward

Without complete, accurate, and timely data, policymakers and the public may draw conclusions and make decisions based on inadequate Department DATA Act information. Specifically, without an adequate review process, the Department may continue to provide information to stakeholders that is misleading or erroneous. For example, not ensuring that location related data elements are complete may prevent stakeholders from fully understanding where Department activities are performed and funds are spent. In addition, contrary to one of the objectives of the DATA Act, taxpayer may not be able to track the Department's spending more effectively without complete, accurate, and timely information. For example, a stakeholder may not be able to determine how much the Department paid a contractor due to inaccurate information, such as the discrepancies identified in our report. Due to the limited scope of our review, nothing came to our attention to indicate that the errors identified resulted in a misuse of funds. In light of the weaknesses identified during our review, we made recommendations that, if fully implemented, should help officials improve DATA Act reporting.

RECOMMENDATIONS

To improve the effectiveness of the Department's DATA Act reporting, we recommend that the Deputy Chief Financial Officer:

1. Establish and implement an effective review process that includes reviewing the Treasury Broker's Award and Awardee Attributes files (Files D1 and D2) and correcting any variances prior to certification; and
2. Coordinate with external agencies to resolve the issues identified in our report, as appropriate, including ensuring that the Department's data is being extracted, derived, and reported in accordance with DATA Act standards/requirements.

MANAGEMENT RESPONSE

Management did not concur with our findings and recommendations. Management commented that the Department should not be held responsible for data discrepancies caused by other agencies and indicated there were no actions it could have taken to address certain issues identified in the report. In addition, management asserted that the OIG based its error rate calculation on 2010 OMB guidance which indicated that if one element was incorrect, the whole transaction should have been considered incorrect. Management stated that OMB acknowledged the guidance may need to be updated to be relevant to DATA Act files.

Management also commented that the OIG error rate calculations erroneously included Treasury Broker system warning messages. Furthermore, management stated that the inclusion of non-appropriated funding was allowable for certain data elements reported into FPDS-NG. Specifically, management asserted that OMB confirmed that the FAR allowed agencies to report non-appropriated funding in FPDS-NG, and the Department's software application was designed to allow the reporting of non-appropriated funding. In addition, management commented that the OIG's report appears to suggest that the Department should not have submitted any data until

Treasury fixed all Broker system issues. Management also stated that the Department certified, and will continue to certify, its quarterly DATA Act submissions in accordance with requirements.

AUDITOR COMMENTS

Throughout the report, we recognized the challenges encountered by the Department when errors occurred due to actions of external organizations. However, such challenges do not relieve: (1) the Department of its responsibilities under the DATA Act; (2) the Department from coordinating with external agencies to resolve the issues identified in this report; and (3) the OIG from the requirement to test the quality of the data and to report on the results. The DATA Act requires Federal agencies to submit data for publication on USASpending.gov. Users of the Web site have a right to assume that the Department's data is complete, accurate, and timely.

Management's non-concurrence with our recommendations implied that no review of the Award and Awardee Attributes files (Files D1 and D2) was necessary to correct errors prior to certification to ensure that all DATA Act information was complete, accurate, and timely. In addition, management's non-concurrence indicated that no further coordination with external agencies was needed to resolve the issues identified in our report. However, because many of the issues identified throughout our report were the result of weaknesses related to external agencies' extraction of data elements, we believe that additional coordination with those external agencies would be prudent. Management is correct that we used 2010 OMB guidance in determining error rates; however, management was unable to provide any support to indicate that OMB planned to change the guidance. The 2010 guidance was also included for use by other agencies in the *Inspectors General Guide to Compliance Under the DATA Act*.

Contrary to management's assertion, we do not believe that we erroneously included warning messages from Treasury's Broker system in our error rate calculations. Specifically, while we acknowledge that certain transactions tested contained warning messages from the Broker validations, our test work of the underlying data would have identified the errors whether or not a warning message existed. We are concerned that excluding transactions containing warning messages would have potentially skewed the results of our sample testing. In addition, while we agree that the FAR allowed non-appropriated funding to be reported in FPDS-NG, agencies must have approval in writing by GSA's FPDS Program Office to include non-appropriated funding. The Department did not provide any evidence of such approvals. Furthermore, although management commented that the application which provided the Department's information to FPDS-NG allowed it to report non-appropriated funds, this practice was not consistent with all aspects of the FAR.

We also disagree with management's assertion that the OIG was suggesting that the Department should not have submitted any data until Treasury fixed all Broker system issues. As noted in our report, we concluded that the Department should have performed an adequate review over its Award and Awardee Attributes files (Files D1 and D2) to ensure that all information available to the public and other stakeholders was complete, accurate, and timely. Our report included no suggestions that the Department delay submission of data related to DATA Act reporting.

Attachments

cc: Deputy Secretary
Chief of Staff
Acting Chief Financial Officer
Acting Under Secretary for Management and Performance

AWARD AND AWARDEE ATTRIBUTES (PROCUREMENT AND FINANCIAL ASSISTANCE)

The information below illustrates the results of our analysis of data elements reviewed in the Award and Awardee Attribute files (Files D1 and D2). As noted in our report, the individual data elements tested in each of these files are based on our statistical sample of 354 transactions from the Award Financial file (File C). We tested all data elements from the Award and Awardee Attribute file (Procurement) (File D1) and data elements from the Award and Awardee Attribute file (Financial Assistance) (File D2). Only those data elements with identified errors are included in the table below.

D1 File - Award and Awardee Attributes (Procurement)				<u>Audit Objective Impacted</u>							
				<u>Completeness</u>		<u>Accuracy</u>		<u>Timeliness</u>			
Data Elements With Identified Errors	federal action obligation			0	0.00%	8	0.44%	0	0.00%		
	current total value of award			0	0.00%	407	22.17%	0	0.00%		
	potential total value of award			0	0.00%	415	22.60%	0	0.00%		
	legal entity address line			0	0.00%	166	9.04%	0	0.00%		
	legal entity city name			0	0.00%	49	2.67%	0	0.00%		
	legal entity state description			0	0.00%	25	1.36%	0	0.00%		
	legal entity zip_4			0	0.00%	169	9.20%	0	0.00%		
	legal entity congressional district			0	0.00%	112	6.10%	0	0.00%		
	primary place of performance congressional district			0	0.00%	5	0.27%	0	0.00%		
	contract award type			0	0.00%	17	0.93%	0	0.00%		
	ultimate parent legal entity name			1	3.13%	1	0.05%	0	0.00%		
	funding office name			1	3.13%	2	0.11%	0	0.00%		
	funding agency code			15	46.88%	0	0.00%	0	0.00%		
	funding agency name			15	46.88%	0	0.00%	0	0.00%		
idv_type			0	0.00%	460	25.05%	0	0.00%			
action date			0	0.00%	0	0.00%	2	100%			
<u>Sampled Items</u>		<u>Errors Identified</u>		<u>Percentage</u>							
Totals 20,988		1,870		8.91%		32	0.15%	1,836	8.75%	2	0.01%

D2 File - Award and Awardee Attributes (Financial Assistance) □				<u>Audit Objective Impacted</u>							
				<u>Completeness</u>		<u>Accuracy</u>		<u>Timeliness</u>			
Data Elements With Identified Errors	legal entity city code			75	39.89%	0	0.00%	0	0.00%		
	primary place of performance county			72	38.30%	0	0.00%	0	0.00%		
	primary place of performance state			3	1.60%	0	0.00%	0	0.00%		
	primary place of performance city name			5	2.66%	0	0.00%	0	0.00%		
	primary place of performance zipcode			33	17.55%	0	0.00%	0	0.00%		
<u>Sampled Items</u>		<u>Errors Identified</u>		<u>Percentage</u>							
Totals 2,700		188		6.96%		188	6.96%	0	0.00%	0	0.00%

Files D1 + D2				<u>Audit Objective Impacted</u>							
<u>Total Sampled Items</u>		<u>Total Errors Identified</u>		<u>Combined Error Rate</u>		<u>Completeness</u>		<u>Accuracy</u>		<u>Timeliness</u>	
23,688		2,058		8.69%		220	0.93%	1,836	7.75%	2	0.01%

OBJECTIVE, SCOPE, AND METHODOLOGY

OBJECTIVE

We conducted this audit to assess the (1) completeness, accuracy, timeliness, and quality of fiscal year 2017, second quarter financial and award data submitted for publication on USASpending.gov; and (2) Department of Energy's implementation and use of the Government-wide financial data standards established by the Office of Management and Budget and the U.S. Department of the Treasury.

SCOPE

The audit was performed from May 2017 to November 2017 at Department Headquarters in Germantown, Maryland and Washington, D.C. The *Digital Accountability and Transparency Act of 2014* (DATA Act) requires that the Office of Inspector General report on the completeness, accuracy, timeliness, and quality of data and the use of data standards by the agency. The review was conducted under Office of Inspector General project number A17TG033.

METHODOLOGY

To accomplish our objective, we:

- Reviewed the DATA Act and the *Federal Funding Accountability and Transparency Act of 2006*;
- Reviewed applicable guidance and standards issued by Office of Management and Budget, including Office of Management and Budget M-15-12, *Increasing Transparency of Federal Spending by Making Federal Spending Data Accessible, Searchable, and Reliable*, and M-17-04, *Additional Guidance for DATA Act Implementation: Further Requirements for Reporting and Assuring Data Reliability*;
- Reviewed prior reports and testimonies issued by the Office of Inspector General and Government Accountability Office related to the DATA Act;
- Held discussions with the Department's DATA Act internal working group to gain an understanding of the processes, systems, and controls that the Department implemented to report financial and non-financial data in accordance with the requirements of the DATA Act;
- Obtained the Department's fiscal year 2017 second quarter DATA Act submissions from the U.S. Department of the Treasury's DATA Act Broker system;
- Utilized the *Inspectors General Guide to Compliance Under the DATA Act* as the framework for our review; and

- Selected a statistically valid sample of certified spending data from the reportable award-level transactions in the Award Financial file (File C). Our sample size was based on a 95-percent confidence level, an expected error rate of 50 percent, and a sampling precision of 5 percent. Based on these sampling parameters, we determined that our sample size was 354 transactions.

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 the evidence obtained provides a reasonable basis for our findings and conclusions based on our objective. Accordingly, we assessed significant internal controls and compliance with laws and regulations to the extent necessary to satisfy the audit objective. In particular, we assessed the Department's implementation of the *GPRRA Modernization Act of 2010* and determined that it had established performance measures and/or goals related to DATA Act. Because our review was limited, it would not have necessarily disclosed all internal control deficiencies that may have existed at the time of our audit. We relied on computer-processed data to satisfy our objective and tested the validity of the data by reviewing prior internal controls test work. In addition, we traced a sample of the information back to source documents. While we found weaknesses existed regarding the completeness, accuracy, and timeliness of the DATA Act information, we determined overall that the data was reliable for the purposes of our audit objective.

Management waived an exit meeting on November 2, 2017.

RELATED REPORTS

Office of Inspector General

- Special Report on [*The Department of Energy's Readiness to Implement the Digital Accountability and Transparency Act of 2014*](#) (OIG-SR-17-03, November 2016). Our review of the Department of Energy's progress implementing the *Digital Accountability and Transparency Act of 2014* (DATA Act) did not identify any significant weaknesses and noted that the Department appeared to be on track to meet the requirements of the DATA Act. We also found that the Department had made significant progress addressing the elements included in the U.S. Department of the Treasury (Treasury) and Office of Management and Budget (OMB) eight-step implementation process. Specifically, we determined that the Department had taken action to address each of the planning steps included in the DATA Act readiness review guidance and was well-positioned to execute and implement goals within the required timeframes. In addition, while the potential existed that the requirements may change, the Department's actions to date positioned it to successfully execute the requirements of the DATA Act.

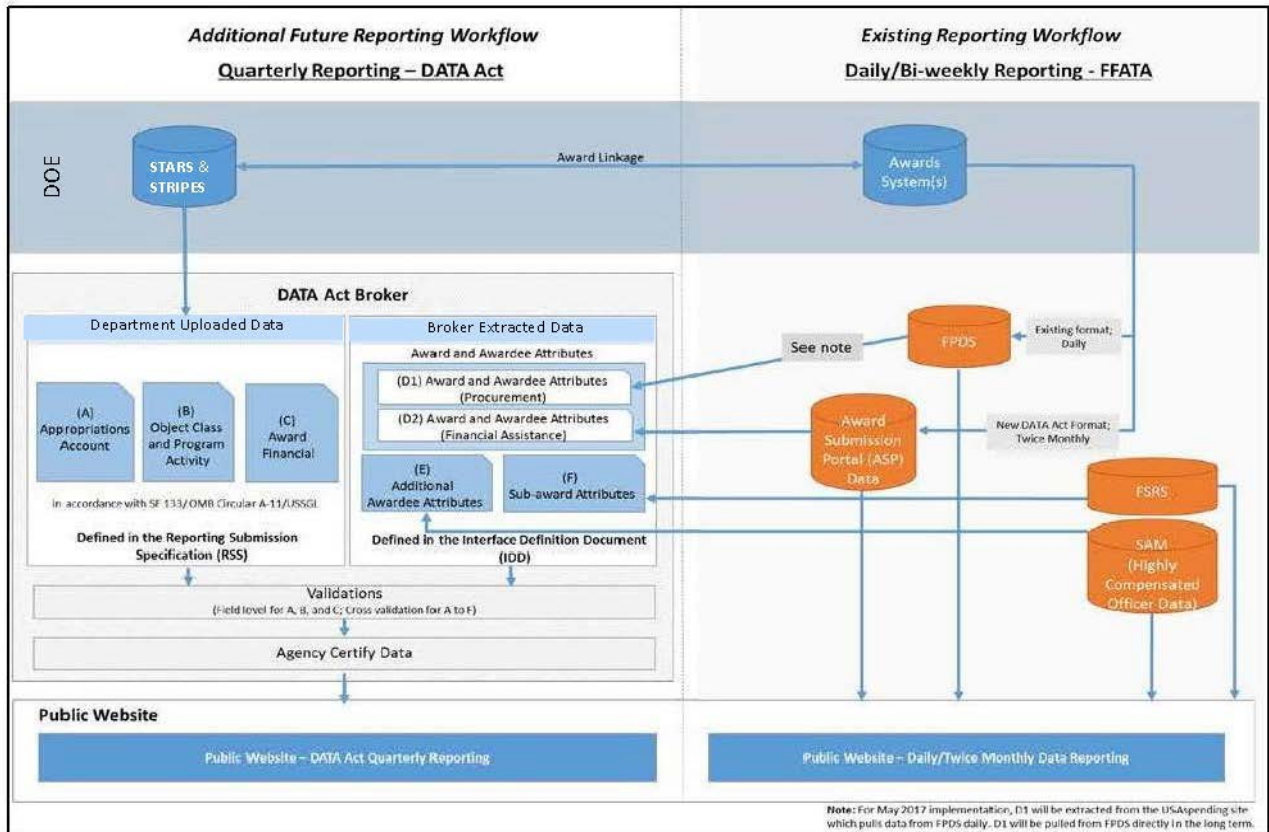
Government Accountability Office

- [*DATA Act: As Reporting Deadlines Nears, Challenges Remain That Will Affect Data Quality*](#) (GAO-17-496, April 2017). The Government Accountability Office (GAO) reviewed the implementation of the DATA Act and found challenges with guidance and that there were limitations with the data quality assurance process. In particular, challenges related to how agencies report certain intragovernmental transactions, reconcile recipient address information, and align required DATA Act files with missing data continue to present risks to the quality of data displayed on USASpending.gov. Furthermore, OMB guidance directs senior accountable officials at each agency to rely on existing assurance processes when they certify that their agencies' DATA Act submissions are valid and reliable. For example, OMB directed agencies to use a General Services Administration assurance statement attesting to the quality of data in two source systems, but the assurance statement focuses on data security rather than data quality, and it is unclear whether it applies to both procurement and financial assistance data.
- [*DATA ACT: Improvements Needed in Reviewing Agency Implementation Plans and Monitoring Progress*](#) (GAO-16-698, July 2016). The GAO noted that OMB and Treasury had not designed and implemented controls or fully documented processes related to the review and use of agency implementation plans for the DATA Act. OMB officials stated that their purpose for directing agencies to submit implementation plans was to use the implementation cost estimates to assist them in formulating the fiscal year 2017 budget, while Treasury officials stated that the purpose of their review of the plans was to facilitate discussions with the agencies. In addition, OMB and Treasury staff initially informed GAO that they were not going to request that agencies submit updated implementation plans that considered the new technical requirements and guidance

released in April 2016. However, in June 2016, OMB requested updated implementation plans by August 12, 2016, but only from agencies under *The Chief Financial Officers Act of 1990*.

- [*DATA ACT: Progress Made but Significant Challenges Must Be Addressed to Ensure Full and Effective Implementation*](#) (GAO-16-556T, April 2016). During testimony, it was noted that the lack of key guidance from OMB and Treasury has slowed the ability of agencies to operationalize the data standards. GAO also found that Treasury's technical guidance continues to evolve and lacks finality, which may impede agency implementation. Treasury has issued several iterative versions of the technical schema that describes the standard format for reporting elements. Each iteration resulted in revisions to the technical guidance, which may adversely affect the timely implementation of the DATA Act. A finalized technical schema would provide agencies with a stable base from which to develop data submission plans and processes.
- [*DATA ACT: Data Standards Established, but More Complete and Timely Guidance Is Needed to Ensure Effective Implementation*](#) (GAO-16-261, January 2016). GAO noted that agencies need the technical guidance and the intermediary service from OMB and Treasury to be finalized before they can develop detailed agency-level implementation plans. If this guidance is not aligned with agency implementation timelines, agencies may delay taking key steps or need to revise existing plans once final technical guidance is released, which would hinder their ability to meet the requirements of the DATA Act.

DIGITAL ACCOUNTABILITY AND TRANSPARENCY ACT OF 2014 INFORMATION FLOW DIAGRAM



This model shows the award linkages for the various files used to support reporting under the *Digital Accountability and Transparency Act of 2014*. A brief description of the content and source of each of these files is provided below:

- **File A** includes data on Unobligated, Budget Authority, Obligations, and Outlay balances taken from agency Standard Form 133 submitted through the Government-wide Treasury Account Symbol Adjusted Trial Balance System.
- **File B** includes obligation and outlay balances at the detailed standard general ledger level by Object Class and Program Activity. The source for this information is the agency financial systems.
- **File C** includes obligation transactions at the Object Class and Program Activity level by Award Identification number for those procurement obligations that were reported to the Federal Procurement Data System Next Generation and financial assistance obligations that were reported to the Award Submissions Portal. The source for this information is the agency financial systems.

- File D1 includes all procurement obligations reported to the Federal Procurement Data System – Next Generation for the month/quarter. This information is pulled directly into the Broker system by the U.S. Department of the Treasury.
- File D2 includes all financial assistance obligations reported to the USASpending.gov Web site through the Award Submission Portal for the month/quarter. This information is pulled directly into the Broker by the U.S. Department of the Treasury.
- File E pulls Executive Compensation data from the General Services Administration System for Award Management for the awards on the D1 and D2 files for the month/quarter. This information is pulled directly into the Broker system by the U.S. Department of the Treasury.
- File F pulls sub-award information that was reported by the Department of Energy's prime contractors to the General Service Administration's Federal Funding Accountability and Transparency Act Subaward Reporting System on obligations over \$25,000 in the previous month. This information is pulled directly into the Broker system by the U.S. Department of the Treasury.

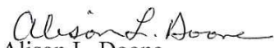
MANAGEMENT COMMENTS



Department of Energy
Washington, DC 20585

November 3, 2017

MEMORANDUM FOR: Sarah B. Nelson
Assistant Inspector General for Audits and Administration
Office of Inspector General

FROM: 
Alison L. Doone
Acting Chief Financial Officer
Office of the Chief Financial Officer

SUBJECT: DOE Response to Office of Inspector General Draft Special Report, "Department of Energy's Implementation of the Digital Accountability and Transparency Act of 2014."

This is in response to the Office of Inspector General (IG) draft special report, "Department of Energy's Implementation of the Digital Accountability and Transparency Act of 2014." The report states the IG found "numerous weaknesses with the certified Broker files" which "occurred, in part, because the Department did not always ensure that data exported from external systems maintained by Treasury and GSA was complete, accurate, and timely." As described in detail below, most of the "weaknesses" identified by the IG are attributable to known issues with the Department of Treasury (Treasury) system used to compile all federal agency DATA Act submissions which have been acknowledged by, and are being resolved, by Treasury. Further, the Office of Management and Budget (OMB) issued guidance to agencies stating that agencies should leverage existing processes, controls, and assurances over the authoritative source data. While the Department of Energy (DOE) will continue to ensure that data from DOE systems are accurate and complete, will support Treasury efforts to address the broker issues, and will participate in testing as requested to support implementation of corrected data elements, DOE cannot be held responsible for either the Treasury broker or the General Service Administration (GSA) authoritative source systems from which the Treasury broker pulls data.

To implement DATA Act requirements, Treasury developed a Broker to consolidate agency data and authoritative source data to display on USASpending.gov. Federal agencies, including DOE, provide financial data (Files A through C) to the Treasury broker. Treasury populates procurement-related data into the D1, D2, E, and F Files from GSA-managed systems that serve as the authoritative sources of government-wide procurement-related data.

Treasury acknowledges the following five data elements/fields are not displaying the correct result because of issues in deriving, extracting, and displaying fields: Current Total Value Of Award, Potential Total Value Of Award, and indefinite delivery vehicle (IDV) Type on the D1 file and Legal Entity City Code and Primary Place Of Performance County Name on the D2 File. Treasury is working to resolve the issues with the display of these five data elements. Therefore,

these known data element issues are outside the control of DOE, and there are no actions that DOE could have taken to address these issues. Given these elements appear on all transactions and cut across both the D1 and D2 files, it is likely that all agencies will have missing or incorrect data in these fields across all transactions.

The IG report acknowledges that the DOE-submitted financial data (Files A and C) were complete, accurate, and timely and that program activity and object class obligation and outlay data (File B) were complete, timely, and “nearly all” accurate. In addition, the report acknowledges that the linkage between the C File and the D1 and D2 files was researched and documented and related A-123 processes were tested by DOE as required.

Given the completeness, accuracy, and timeliness of DOE-submitted data to the Treasury broker, and despite knowing that the elements in the D1, D2, E, and F files are extracted or derived by Treasury and that Treasury-acknowledged broker issues are beyond the control of DOE, most of the IG report focuses on the D1 and D2 files and error rates virtually entirely driven by the Treasury-acknowledged broker issues affecting all agency data.

Further, the IG based its error rate calculation on the methodology defined in the OMB April 6, 2010 memorandum, Open Government Directive – Federal Spending Transparency, Footnote 5 on page 8. The definition states that completeness and accuracy error rates are measured as the percentage of transactions containing all data elements that are complete and are consistent with source records or authoritative sources. Application of the April 2010 methodology results in treating all elements with equal weight, and if just one element is incorrect, the whole transaction is considered incorrect. OMB acknowledges that the April 2010 rule was implemented to enhance the accuracy of the first generation of USASpending and may need to be updated so it is relevant to DATA Act files, and the error rate for accuracy, completeness, and timeliness is calculated on an element basis rather than transaction basis.

In addition, the IG error calculations erroneously include Treasury broker warning messages. According to Treasury, warning messages in DATA Act submissions are intended as flags for agency review and are not critical errors. Data submissions that generate a warning message before submission will be accepted for publication while data that generate a critical error message will not be accepted. The Council of the Inspectors General on Integrity and Efficiency (CIGIE) agreed that warning messages should not be included as errors and provided this information to the IG community, and therefore, it is unclear why warning messages are included in the error counts.

The IG also disputes inclusion of non-appropriated funds in the Current Total Value of Award and Potential Total Value of Award fields on the D1 file and interprets the Federal Acquisition Regulation (FAR) 4.406(a) as meaning agencies should only include appropriated funds in those data elements. OMB confirmed that FAR section 4.606(b) allows agencies to provide funds other than those in FAR section 4.406(a), including non-appropriated funds or “NAF portion of a contract action using a mix of appropriated and non-appropriated funding”. According to OMB, the FAR provides agencies with such discretion as there may be circumstances where an agency has identified a need that such reporting is necessary or beneficial such as to provide additional data for better management. DOE historically has provided the total of appropriated and non-appropriated funds in these two fields. Compusearch released the first GSA-certified

PRISM/FPDS-NG interface in 2004. When DOE implemented its CompuSearch PRISM procurement system in 2008, the Commercial Off The Shelf (COTS) software calculated these two data elements as the sum of appropriated and non-appropriated funds, continuing the legacy practice. GSA recertified the use of CompuSearch PRISM with the GSA FPDS-NG application in September 2017 with the inclusion of the calculation of both non-appropriated and appropriated funding in the Current and Potential Total Value of Award fields. Therefore, the multiple agencies that use the CompuSearch PRISM COTS software are calculating and transmitting both appropriated and non-appropriated amounts in these fields in the same manner to GSA FPDS-NG. CompuSearch confirmed that other supported federal agencies do not have customizations that would alter the calculation of these amounts. Thus, DOE affirms that it will continue to report both appropriated and non-appropriated dollars in the Current Total Value of Award and Potential Total Value of Award fields as it has done for the past 10 years without objection from GSA.

The following table identifies the source of the IG-defined errors on the D1 and D2 files on both a transaction and data element basis and demonstrates the low error rates attributable to DOE actions. As indicated in the table, only 35 (9.9%) of the 354 D1 and D2 file transactions and 20 (.08%) of the 23,688 D1 and D2 data elements are attributable to DOE error. Most, 21 (60%), of the 35 transaction errors are instances in which the funding office name either did not match the GSA system or was blank. None of these 21 instances affect display of the amount, purpose or recipient of the DOE funds on the beta.usaspending website.

D1 and D2 Testing - Transactions											
		# of Errors and %									
	Sample Size - Transactions	Treasury Broker or FPDS-NG		Current & Potential Total Value of Award - Non-Appropriated		Warning Messages vs. Errors		DOE		Total	
		#	%	#	%	#	%	#	%	#	%
Completeness	354	82	23.2%	-	0.0%	13	3.7%	13	3.7%	108	30.5%
Accuracy	354	191	54.0%	51	14.4%	-	0.0%	26	7.3%	268	75.7%
Timeliness	354	-	0.0%	-	0.0%	-	0.0%	2	0.6%	2	0.6%
Total	354	255	72.0%	51	14.4%	13	3.7%	35	9.9%	354	100.0%

Note: Total may be less than sum of the 3 items because a transaction could include both incomplete and inaccurate data elements

D1 and D2 Testing - Elements											
		# of Errors and %									
	Sample Size - Elements	Treasury Broker or FPDS-NG		Current & Potential Total Value of Award - Non-Appropriated		Warning Messages vs. Errors		DOE		Total	
		#	%	#	%	#	%	#	%	#	%
Completeness	23,688	218	0.9%	-	0.0%	-	0.0%	2	0.01%	220	0.9%
Accuracy	23,688	1,722	7.3%	98	0.4%	-	0.0%	16	0.07%	1,836	7.8%
Timeliness	23,688	-	0.0%	-	0.0%	-	0.0%	2	0.01%	2	0.0%
Total	23,688	1,940	8.2%	98	0.4%	-	0.0%	20	0.08%	2,058	8.7%

Finally, the IG report states that DOE “officials did not always ensure that information contained in the Award and Awardee Attributes files (Files D1 and D2) was complete and accurate before certifying the files.” By its all or nothing approach to its review and its statement that DOE “certified as accurate and complete” its April 26 DATA Act submission, the IG appears to suggest that DOE should not have submitted any data until Treasury fixed all the broker issues. Given that 99.9% of the data elements within DOE control were accurate, complete, and timely, this position would have prevented the public from access to DOE financial and procurement data until actions outside DOE control were completed. The IG report belabors the point that 5 data elements on 2 files (2% of total data elements on the D1 and D2 files) were incompletely or inaccurately populated by the Treasury broker and appears to suggest that DOE is responsible for ensuring Treasury resolves known Treasury broker issues that were, and are, being addressed by Treasury.

DOE certified, and will continue to certify, its quarterly DATA Act submissions in accordance with the certification requirements provided in OMB M17-04: (1) attest to the validity and reliability of the DATA Act submission, including interconnectivity/ linkages across data in all files based on established internal controls in accordance with OMB Circular A-123; (2) confirm internal controls are in place for DATA Act file data which may be based on existing data quality measures required by regulation and/or OMB guidance; and (3) leverage existing processes and other assurances listed in the column Existing Assurances or Internal Controls over Authoritative Source Data.” Further, as outlined in OMB’s Management Procedures Memorandum 2016-03, the authoritative sources for the data reported in Files E and F are SAM and FSRS, respectively, with no additional action required of Federal agencies. Any errors in these files are not the responsibility of the Federal agency reporting the prime award and should not have been included in this report.

For all of the above reasons, DOE non-concurs with the IG findings and recommendations. While DOE will continue to ensure that data from DOE systems are accurate and complete, will support Treasury efforts to address the broker issues, and will participate in testing as requested to support implementation of corrected data elements, DOE cannot be held responsible for either the Treasury broker or the GSA authoritative source systems from which the Treasury broker pulls and derives the data.

FEEDBACK

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Office of Inspector General (IG-12)
Department of Energy
Washington, DC 20585

If you want to discuss this report or your comments with a member of the Office of Inspector General staff, please contact our office at (202) 253-2162.