Data Quality Playbook

The Leveraging Data as a Strategic Asset Working Group developed and issued this Playbook in collaboration with federal agencies to assist with developing Data Quality Plans in support of the DATA Act implementation.

This playbook is a result of extensive collaboration between agencies, OMB, and the Department of the Treasury. The final document and subsequent versions will be posted to the CFOC website. The use of the playbook format is a practice to gather, define, and illustrate concepts in federal financial management. The DATA Quality playbook joins a library of management resources developed for agency use to include the ERM Playbook and the Program Integrity; Anti-fraud Playbook. As with these playbooks, nothing in this Playbook should be considered prescriptive. All examples provided should be modified to fit the circumstances, conditions, and structure of each agency (or other government organization).

The Leveraging Data as a Strategic Asset Working Group extends its gratitude to our colleagues within the financial management, procurement, and financial assistance communities for their contributions. This Playbook is intended for management; it is not audit guidance.

November 30, 2018
Executive Summary

Since 1981, the Office of Management and Budget (OMB) Circular No. A-123, *Management’s Responsibility for Internal Control*, has been at the center of federal requirements to improve federal programs and operations. Even before the *Federal Managers’ Financial Integrity Act* and the Government Accountability Office *Standards for Internal Control in the Federal Government*, one of A-123’s first requirements was to develop internal control plans across the Federal Government. In 2004, OMB and the Chief Financial Officer (CFO) Council worked together to develop internal control plans and implementation guidance to improve internal control over financial reporting (ICOFR). As a result, most CFO Act agencies have strengthened their internal controls over financial reporting. In the spirit of executing the President’s Management Agenda Cross Agency Priority goals to Leveraging Data as a Strategic Asset Working Group, this working group aims to support the integration of Digital Accountability and Transparency Act of 2014 (DATA Act) with existing Enterprise Risk Management processes and through improving reporting controls and data quality by providing agencies with this *Data Quality Playbook* (The Playbook).

The cover memo of *(M-18-16) of Appendix A of OMB Circular A-123, Management of Reporting and Data Integrity Risk* requires DATA Act reporting agencies to implement a data quality plan (DQP) effective fiscal year (FY) 2019 through FY 2021 at a minimum. This Playbook represents a compilation of insights gained by multiple federal agencies, each with unique perspectives and lessons learned as DATA Act reporting agencies. Agencies may find these scenarios useful to consider when developing a DQP.

This Playbook is a collection of examples and use-cases agencies have proposed based on agency-specific risk assessments at a given time. This Playbook and accompanying appendices are designed to provide practical information and helpful scenarios for agencies. It is not an all-inclusive catalog of the only acceptable options for developing a DQP and does not address all potential situations an agency may face with respect to DATA Act implementation. Rather, the Playbook provides a compendium of potential approaches, solutions, and explanations that provide context aligned with policy and business operations to focus the conversation on the utility of the data submitted in accordance with the DATA Act rather than a compliance-focused exercise. Each agency will need to develop a DQP that is tailored to their unique operating environments challenges and risks to achieving missions. Our goal is to support agencies in making their own determinations about how best to meet the DATA Act reporting requirements and improve the quality of spending data submitted to [USAspending.gov](http://USAspending.gov).

Nothing in this Playbook supersedes or replaces existing regulations, policies, guidance, or the submission requirements outlined in the DATA Act Information Model Schema. The Playbook may be updated periodically, if helpful to federal agencies, as together we strive to accomplish the underlying objectives of the DATA Act.
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Introduction

A. Applicability

The Data Quality Playbook, or “Playbook,” is intended to assist Senior Accountable Officials (SAOs) with developing Data Quality Plans (DQPs) to achieve reasonable assurance over internal controls and processes that support overall data quality for the input and validation of agency data submitted to USAspending.gov. The cover memo of Appendix A of Office of Management and Budget (OMB) Circular A-123, Management of Reporting and Data Integrity Risk (Appendix A), is the authoritative source on the Digital Accountability and Transparency Act of 2014 (DATA Act) DQP, and requires DATA Act reporting agencies to implement a DQP. Consideration of this plan must be included in agencies’ existing annual assurance statement over internal controls over reporting (ICOR) beginning in fiscal year (FY) 2019 and continuing through the statement covering FY 2021 at a minimum, or until agencies determine that they can provide reasonable assurances over the data quality controls that support achievement of the reporting objectives in accordance with the DATA Act.

This Playbook is intended to clarify concepts that can be overly complex and operationalize how to address such complexity while balancing burden and costs. The Playbook uses information gathered in previous DATA Act assessments. It should be understood that this Playbook document has no authoritative standing. It is not associated with the OMB Circular A-123 issuance and should not be considered authoritative guidance pertaining to Circular A-123. This Playbook was written by federal agencies to assist preparers by providing scenarios and illustrative examples to achieve the reporting objectives of the DATA Act. Therefore, the Playbook can and should be modified to fit the particular circumstances, conditions, strategic priorities, and structure of each agency.

B. Accountability for Quality Reporting

Federal agencies recognize the importance of confirming that data related to the spending and stewardship of taxpayer money is collected in an efficient and standardized manner by the agencies receiving the appropriations, assessed for overall quality, and published for maximum transparency and public ease of use. Spending data that is consolidated in an interoperable and consistent format not only provides visibility to taxpayers, but also enables federal leaders to make informed decisions for mission accomplishment and positive performance outcomes. Since the implementation of the Federal Funding Accountability and Transparency Act (FFATA) in 2006, there have been meaningful and significant improvements towards transparency in federal spending data.

The passage of the DATA Act in 2014 and the focus on open data transparency has steered governance bodies, agencies, and other stakeholders toward the common goal of producing quality, published spending data. In accordance with existing DATA Act guidance issued by OMB and the Department of the Treasury (Treasury), agencies are required to report spending data for publication on USAspending.gov on a recurring schedule based on the submission process outlined in the DATA Act Information Model Schema (DAIMS). The financial attributes must be generated
by the agencies’ financial systems of record, the award attributes required by FFATA from the authoritative sources, and the linkage of these using the award identification (ID) carried in the financial system.

C. Data Quality Actions

Appendix A to OMB Circular A-123 states agencies’ responsibility for the management of reporting and data integrity risk. The DATA Act is not the first or only transparency and reporting requirement for federal agencies’ spending data, as shown in the table below. Memorandum 18-16 also states:

“Quarterly certifications of data submitted by agency SAO should be based on the consideration of the data quality plan and the internal controls documented in their plan as well as other existing controls that may be in place, in the annual assurance statement process.”

Per OMB Memorandum M-17-04, the quarterly SAO assurances over the DATA Act submission are to (1) assure that the alignment among Files A-F is valid and reliable, and (2) the DATA Act files submitted for display on USASpending.gov are valid and reliable. M-17-04, Additional Guidance for DATA Act Implementation: Further Requirements for Reporting and Assuring Data Reliability further provides that existing data quality measures required by regulation and/or OMB guidance will be sufficient for SAO reliance on individual data files. The table below identifies many preexisting validations, to support quarterly DATA Act certifications on internal controls over their DATA Act submissions.

### Assurances for Each DATA Act File Submitted

<table>
<thead>
<tr>
<th>DATA Act File Authoritative Source</th>
<th>Existing Assurances or Internal Controls over Authoritative Source Data (Pre-DATA Act)</th>
<th>DATA Act Senior Accountable Official Assurance Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>File A: Appropriations Account</td>
<td>Pursuant to A-136, the reporting agency must reconcile 3rd Quarter and year-end SF-133 data to their Statement of Budgetary Resources (SBR). Year-end data are audited financial data, which are subject to management assurances of internal controls over reporting under A-123. Pursuant to the OMB Circular No. A-11 (A-11) Section 130.2, for Executive branch agencies, agencies must report all Treasury Appropriation Fund Symbols (TAFSs) in each GTAS reporting window.</td>
<td>The reporting objective is that the data reported in File A match the authoritative source (i.e., SF-133) and that all Treasury Account Symbols (TAS) are reported. To increase the likelihood that this objective will be met the agency SAO will provide assurance that data integrity processes and controls are in place and align with A-123. These assurances must be made on a quarterly basis and should leverage the existing processes and other assurances listed in the column “Existing Assurances or Internal Controls over Authoritative Source Data.”</td>
</tr>
<tr>
<td>DATA Act File</td>
<td>Existing Assurances or Internal Controls over Authoritative Source Data (Pre-DATA Act)</td>
<td>DATA Act Senior Accountable Official Assurance Required</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>File B: Object Class and Program Activity</strong></td>
<td>Pursuant to A-136, the reporting agency must reconcile 3rd Quarter and year-end SF-133 to their SBR. Year-end data are audited financial data, which are subject to management assurances of internal controls over reporting under A-123. The Program Activity names and codes are embedded in the President’s Budget. On a quarterly basis, agencies work with OMB to send updates to Program Activity through the Budget Data Request (BDR) process in alignment with the President’s Budget. OMB then passes the Program Activity validation list to Treasury as the validation list for the Broker. The DATA Act Broker will validate against the list of Object Class (OC) Codes in A-11.</td>
<td>The reporting objective is that the total amount reported in File B matches the authoritative source (i.e., SF-133) and that Program Activity and OC Codes are reported based on the President’s Budget as executed¹ and A-11 respectively. To increase the likelihood that this objective will be met the agency SAO will provide assurance that data integrity processes and controls are in place and align with A-123. These assurances must be made on a quarterly basis and should leverage the existing processes and other assurances listed in the column “Existing Assurances or Internal Controls over Authoritative Source Data.”</td>
</tr>
<tr>
<td><strong>The SF-133 derived from GTAS data</strong></td>
<td>Year-end data are audited financial data. All financial data, including the obligations reported in this file, are subject to management assurances under A-123.</td>
<td></td>
</tr>
<tr>
<td><strong>File C: Award Financial</strong></td>
<td>Year-end data are audited financial data. All financial data, including the obligations reported in this file, are subject to management assurances under A-123.</td>
<td>The reporting objective is that data reported in File C match the authoritative source (i.e., agency financial systems). To increase the likelihood that this objective will be met the agency SAO shall provide assurance that data integrity processes and controls are in place and align with A-123. These assurances must be made on a quarterly basis and should leverage the existing processes and other assurances listed in the column “Existing Assurances or Internal Controls over Authoritative Source Data.”</td>
</tr>
<tr>
<td><strong>Financial Systems</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>File D1: Procurement Award Attributes</strong></td>
<td>Pursuant to the Federal Acquisition Regulation (FAR) and OMB memoranda beginning in 2009², agencies are required to submit an annual FPDS-NG Data Verification and Validation (V&amp;V) Report to OMB and the General Services Administration (GSA). The report includes assurances over the timeliness and completeness of the data and sampling of the core DATA Act required data elements, comparing contract files to FPDS-NG.</td>
<td>The reporting objective is that for data reported pursuant to FFATA (P.L. 109-282) as amended by the DATA Act (P.L. 113-101, they are sourced from and match FPDS-NG at the time of quarterly reporting. To increase the likelihood that this objective will be met, the agency SAO will rely on internal controls (A-123) based on FAR required V&amp;V for the assurance over Federal procurement awards.</td>
</tr>
<tr>
<td><strong>Federal Procurement Data System – Next Generation (FPDS-NG)</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ A-11 Section 82.5 (a) contains information about how program activities should be created, and provides that agencies obtain OMB approval for any changes in activity structure. If for any reason, such as funding changes made during the appropriations process, an agency needs to change their program activities in the current fiscal year; such changes should be coordinated through their OMB Resource Management Office. In the future, corresponding validations for program activity in the DATA Act Broker may be implemented.

² Relevant OMB memoranda can be found at: https://www.whitehouse.gov/omb/management/office-federal-procurement-policy/
<table>
<thead>
<tr>
<th>DATA Act File Authoritative Source</th>
<th>Existing Assurances or Internal Controls over Authoritative Source Data (Pre-DATA Act)</th>
<th>DATA Act Senior Accountable Official Assurance Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>File D2: Financial Assistance Award Attributes</td>
<td>No current certification or assurance process is performed by agencies. OMB is reviewing opportunities to enhance assurances over this data.</td>
<td>The reporting objective is that data reported in File D2 match the authoritative source (i.e., agency award-management systems) for award-level data and the authoritative source (i.e., SAM) at the time of the award for prime awardee information. To increase the likelihood that this objective will be met the agency SAO will provide assurance that data integrity processes and controls are in place and align with A-123. These assurances must be made on a quarterly basis and should leverage the existing processes and other assurances listed in the column “Existing Assurances or Internal Controls over Authoritative Source Data.”</td>
</tr>
<tr>
<td>Agency Management Systems/Files (for award description, award title, etc.) Financial Assistance Awardee data in System for Award Management (SAM) at the time of award (for prime financial assistance awardee information)</td>
<td>Agencies may also leverage the data validations included in the Financial Assistance Broker Submission (FABS) as a control that their data follows the standard format. For entities required to register in SAM or otherwise registered, a validation of key data is performed to assure for the purposes of SAM data quality that the entity registration data are accurate. Agencies may leverage this existing validation as a control over the data submitted to SAM.</td>
<td></td>
</tr>
<tr>
<td>File E: Highly Compensated Officer Data</td>
<td>Contracts and financial assistance awards(^3) contain terms and conditions requiring reporting of executive compensation. (^3) At the time this Playbook was issued, 2 CFR 170 only required agencies to include this term and condition on grants and cooperative agreements. In the future, this requirement may be expanded to include loans and other forms of financial assistance.</td>
<td>Agencies will be able to leverage assurances based on the internal controls of the system owner, the GSA in accordance with A-123. In addition, for procurement-related awards, agencies will leverage the existing OMB guidance on subaward data quality.</td>
</tr>
<tr>
<td>SAM(^4)</td>
<td>For procurement OMB guidance of May 2011, requires agency Senior Procurement Executives (SPE) to certify that agency policies, procedures, and internal controls include reviews of contractor data to assess compliance and completeness. Contractual remedies exist to address any gaps.</td>
<td></td>
</tr>
<tr>
<td>File F: Subaward Attributes</td>
<td>Contracts and financial assistance awards(^4) contain terms and conditions requiring reporting of executive compensation. (^4) Not all award recipients are required to register in SAM. Controls and assurances associated with SAM data are not expected to be applied to recipients who are exempt from SAM registration or who are not required to register.</td>
<td>Agencies will be able to leverage assurances based on the internal controls of the system owner, GSA, in accordance with A-123. OMB is reviewing mechanisms to further enhance assurances over these data for financial assistance awards. In addition, for procurement-related awards, agencies may leverage the existing OMB guidance on subaward data quality.</td>
</tr>
<tr>
<td>FFATA Subaward Reporting System (FSRS)</td>
<td>For procurement, OMB guidance of May 2011 requires agency SPEs to certify that agency policies, procedures, and internal controls include reviews of contractor data to assess compliance and completeness. Contractual remedies exist to address any gaps.</td>
<td></td>
</tr>
</tbody>
</table>
Data Quality Playbook

Regarding File E and File F, 48 Code of Federal Regulations (CFR) states “an agency is not required to address data for which the agency would not normally have supporting information.” Appendix A of Circular A-123 enhances the M-17-04 statement that agencies must comply with current regulatory requirements, by adding:

“Consistent with terms and conditions of Federal awards, entities receiving federal awards are required by 2 C.F.R. Part 25 and the Federal Acquisition Regulation (FAR) to submit accurate data to the System for Award Management (SAM) and the FFATA Subaward Reporting System (FSRS) maintained by the General Services Administration (GSA). The quality of this data is the legal responsibility of the recipient. GSA provides an assurance statement that the systems are maintained appropriately and can therefore be used for public reporting. Agencies are responsible for assuring controls are in place to verify current registration in SAM at the time of the financial assistance award. Pursuant to 2 C.F.R. Part 200.513, agencies are responsible for resolving audit findings which may indicate if recipients are not complying with their requirements to register or report Subawards. Agencies are not responsible for certifying the quality of data reported by awardees to GSA and made available on USAspending.gov.”
Data Quality Plan Illustrative Scenarios

The following pages contain representative agency approaches to inform the development of DQPs by DATA Act reporting agencies using the Playbook. These are intended to assist federal agencies in meeting the requirements of Appendix A of OMB Circular A-123, as well as the agency SAO certification requirements under OMB M-17-04. Each approach was developed by contributors representing agencies of various sizes, missions, and operating environments. The scenarios are designed to increase the value of this data in making management decisions and support transparency objectives.

Readers of this Playbook may consider these scenarios as potential approaches for developing DQPs. DQPs will be unique to each agency, so the duplication in some scenarios shown here and unique solutions in others is representative of this variety. There may be components of each that are more useful depending on the reporting agency. The strategic priorities and mission of each agency is unique and these scenarios should not be taken as static options or requirements.

Readers may also note that some methodologies and themes repeat in more than one scenario, while some definitions and approaches vary across the scenarios. These variations illustrate the flexibility provided to agencies to develop plans best suited to meet their needs, while meeting the common SAO assurance requirements and direction on sufficient validations included in OMB M-17-04. A brief description of the agency operating environment is offered as an introduction for each of the scenarios displayed.

OMB’s requirement for implementing the DQP is effective for FY2019. Each agencies’ DQP will be representative of their existing DATA Act process maturity. Plans will differ vastly depending on the strength of controls in place over the reporting processes for the agency. Due to the flexibility of this maturity model, agencies should prioritize and reassess their plans as appropriate. In cases where agencies have significant data quality internal control weaknesses, the interim focus should be on adequately executing corrective actions in areas where controls are ineffective and then identifying significant reporting areas where assurance can be provided. Agencies have the flexibility to modify their DQP as changes in strategic priorities, new risks, or business needs are identified and deemed appropriate by the agency.
Illustrative Scenario 1: Agency XYZ

The following DQP outline was developed for a small, centralized agency with a robust control and governance structure. The integrated financial systems are modern and data quality standards had previously been in place to facilitate reconciliations of information reported in government-wide systems. Readers may be able to leverage some of the processes or methodologies described in this scenario depending on their DATA Act operating environment.

I. Introduction

The DATA Act requires federal agencies to report financial and award data in accordance with the established Government-wide financial data standards. In May 2015, the OMB and Treasury published 57 data definition standards, most from existing data standards, and required federal agencies to report financial data in accordance with these standards for DATA Act reporting to be displayed on USA Spend.gov for taxpayers and policy makers.

The DATA Act requires the Office of Inspector General (OIG) of each federal agency to review a statistically valid sample of the spending data submitted by its federal agency and to submit to Congress a publicly available report assessing the completeness, timeliness, quality, and accuracy of the data sampled and the implementation and use of the Government-wide data standards by the federal agency when reporting the data.

XYZ’s objective is to develop a process that assures data is submitted timely, contains all of the required 57 data elements, and ensures data accuracy for information published on USA Spend.gov. The objective will be met through training on the definition and standardization of data elements and underlying business processes and categories, systemic controls, and periodic reviews that provide feedback that can be leveraged for improving data quality. XYZ will follow the general concepts presented in OMB Circular A-123, Appendix A and an approach in accordance with the five components in the U.S. Government Accountability Office’s (GAO), Green book.

II. Control Environment

XYZ will use a control environment as a foundation to provide discipline and structure to the DATA Act submission process. This will include the oversight body made up of leadership positions that have the ability to influence objectives and activities being performed to ensure the quality of DATA Act submissions.

III. Agency-wide Roles and Responsibilities

A. Chief Financial Officer – DATA Act SAO

- Senior official responsible for certifying XYZ DATA Act submissions.
Required by M-17-04 to provide, on a quarterly basis, reasonable assurance that the agency's internal controls support the reliability and validity of the agency account-level and award-level data reported to USAspending.gov. Per OMB M-17-04, the SAO is to leverage existing data quality and management controls established in statute, regulation, and Federal-wide policy. Data certifications that are based in regulation and policy are sufficient for quarterly certifications and is not the Quarterly SAO assurance that includes three certification levels:

- The alignment among Files A-F is valid and reliable, including the interconnectivity/linkages across all the data in Files A, B, C, D1, D2, E, and F.
- The data in each DATA Act file submitted for display on USAspending.gov are valid and reliable and existing data quality measures required by regulation and/or OMB guidance will be sufficient for SAO reliance on individual data files.
- Data reported to USAspending.gov matches, or is directly provided by, its authoritative sources outlined in M-17-04 (reference to Management Procedures Memorandum (MPM) 2016-03).

B. Financial Assistance (grants, loans, surety bonds) Awarding Program Offices

- Responsible for data entry into source systems that feed the DATA Act submission.
- Design and implement control activities over the input of financial and award spending data into relevant source systems to ensure completeness, timeliness, and accuracy.
- Heads of Financial Assistance Awarding Program Offices certify the accuracy of financial assistance award data entered into source systems by the office monthly to the SAO.
  - Grants:
    - Executive Director of the Office of Executive Management, Installation & Support Services.
    - Associate Administrator for the Office of Entrepreneurial Development.
  - Loans and Surety Bonds:
    - Associate Administrator for the Office of Disaster Assistance.
    - Associate Administrator for the Office of Capital Access.
    - Associate Administrator for the Office of Investments and Innovation.

C. Senior Procurement Executive and Chief Acquisition Officer

- The SPE, in coordination with the head of the contracting activity, is responsible for developing and monitoring a process to ensure timely and accurate reporting of contractual actions to FPDS-NG.
- Within 120 days after the end of each FY, the SPE reports an annual certification of whether, and to what degree, agency contract data for the preceding FY is complete and accurate to the GSA.

- Certifies the accuracy of procurement award data entered into the contract writing system and FPDS-NG monthly to the SAO provided this is in alignment with the agency’s risk management strategy and until such time that this agency is comfortable with the quality of data per the DQP.

D. Acquisition Division

- Responsible for data entry into source systems that are used by the DATA Act submission.
- Contracting Officers that award a contract action are responsible for the completion and accuracy of the individual contract action report to FPDS-NG.
- Designs and implements control activities over the input of contract award spending data into relevant source systems to ensure completeness, timeliness, and accuracy.

E. Chief Data Officer

- Will maintain and oversee implementation of the agency-wide DQP.
- Responsible for oversight of data quality of the DATA Act submission.
- Supports any training necessary to promote compliance with the DATA Act.
- Oversees the review and resolution, if necessary, of Treasury validation warning and error messages.

F. Office of the Chief Financial Officer

- Compiles and submits DATA Act submission.
- Completes agency-wide data validations.
- Monitors and resolves any system-related discrepancies in awards data.
- Supports automation of system edit checks that support data quality.

IV. Risk Assessment

Members of XYZ’s control environment will continue to assess and monitor risks both internal and external to XYZ’s DATA Act submission process. XYZ will follow a risk-based approach in reviewing the processes used to compile the data and assess the existence of risks:

- Identify the risk.
- Determine the probability of occurrence.
- Analyze the impact (severity).
- Develop risk mitigation strategies.
- Communicate the risk information to all the related Offices.

Risk will be assessed using the following classifications:

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6 Federal Acquisition Regulation Section 4.604(b)(1)
• **Low Control Risk**: The control procedures and policies will prevent or detect aggregate errors.

• **Moderate Control Risk**: The control procedures and policies will, more likely than not, prevent or detect aggregate errors.

• **High Control Risk**: The control procedures and policies are unlikely to be effective in preventing or detecting aggregate errors. The XYZ will evaluate whether existing controls over the information areas with high impact risks are adequate.

The primary risks for DATA Act reporting relate to completeness, timeliness, accuracy, and quality of the data. The 2017 DATA Act Audit leveraged the following definitions when evaluating these risks:

• **Completeness** is measured in two ways: (1) all transactions that should have been recorded are recorded in the proper reporting period and (2) as the percentage of transactions containing all applicable data elements required by the DATA Act.

• **Timeliness** is measured as the percentage of transactions reported within 30 days of award.

• **Accuracy** is measured as the percentage of transactions that are complete and agree with the systems of record or other authoritative sources.

• **Quality** is defined as a combination of utility, objectivity, and integrity. Utility refers to the usefulness of the information to the intended users. Objectivity refers to whether the disseminated information is being presented in an accurate, clear, complete, and unbiased manner. Integrity refers to the protection of information from unauthorized access or revision.

In May 2018, XYZ performed an element-based risk assessment and identified 12 data elements as high risk. These elements will be the focus of data quality processes moving forward in alignment with any other statutory or regulatory requirements. Elements were assigned a final risk rating through a three-step process:

1. **Initial Risk Assessment**: Elements were assigned an initial risk score based on the element’s listing in the FFATA (FFATA – the underlying statute as amended by the DATA Act), 2017 DATA Act Audit findings related to the element, and the element’s importance relative to XYZ’s mission and/or the usability of the data by the public.

2. **Data Dependency Assessment**: Elements where the selected value affects other elements were assigned a higher recommended risk rating. Elements auto-populated based on other elements were assigned a lower recommended risk rating.

3. **Final Risk Rating Review**: The Chief Data Officer met with the SAO for DATA Act (the CFO), Deputy CFO, and the SPE on May 25, 2018 to review the recommended risk ratings for the DATA Act elements. Additional consideration was given to whether the element provides funding amount information, the likelihood of the element being incorrect (e.g., since nearly all awards are in the U.S., country-related elements are likely to be correct), and whether the data is entered/supplied by XYZ (e.g., is the element calculated by the DATA Act Broker). During this review, 12 data
elements were identified as high risk and selected to be included in the DQP. Table 1 presents the selected elements.

Table 1. High Risk Data Elements

<table>
<thead>
<tr>
<th>Data Element</th>
<th>Award Types</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Contracts</td>
</tr>
<tr>
<td>Action Type</td>
<td>X</td>
</tr>
<tr>
<td>Award ID Number</td>
<td>X</td>
</tr>
<tr>
<td>Award Type</td>
<td>X</td>
</tr>
<tr>
<td>Catalog of Federal Domestic Assistance (CFDA) Number</td>
<td>X</td>
</tr>
<tr>
<td>Period of Performance Current End Date</td>
<td>X</td>
</tr>
<tr>
<td>Period of Performance Start Date</td>
<td>X</td>
</tr>
<tr>
<td>Primary Place of Performance Address</td>
<td>X</td>
</tr>
<tr>
<td>Non-Federal Funding Amount</td>
<td>X</td>
</tr>
<tr>
<td>Awardee/Recipient Legal Entity Name</td>
<td>X</td>
</tr>
<tr>
<td>Awardee/Recipient Unique Identifier</td>
<td>X</td>
</tr>
<tr>
<td>Legal Entity Address</td>
<td>X</td>
</tr>
<tr>
<td>Action Date</td>
<td>X</td>
</tr>
</tbody>
</table>

As more guidance on government-wide materiality thresholds, acceptable risk tolerances, definitions of completeness, accuracy and timeliness, key data elements and other DATA Act submission risk considerations become available, this plan will be updated to remain in compliance with current guidance.

V. Control Activities

Through policy, procedures and training, XYZ leadership along with individual program offices will design control activities at various levels to meet objectives and respond to risks. The Control activities are designed around meeting the following criteria:

- Top-level reviews of actual performance.
- Reviews by management at the functional and activity level.
- Specific controls over information processing.
- Establishment and regular review of performance measures and indicators.
- Segregation of Duties.
- Proper Execution of transactions to include accuracy and timeliness.
- Appropriate documentation of transactions.

A. Data Input to Source Systems

The Acquisition Division and Financial Assistance Awarding offices will follow the policies and procedures established in statute and regulation with respect to the

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7 It is understood that ‘CFDA will change to ‘Assistance Listing” but we are keeping the CFDA text until the DATA ACT officially changes the title.
business process for making awards and any additional information outlined in their individual Data Quality Assurance plans. Each Data Quality Assurance plan will be unique to the offices’ processes and procedures, take into consideration existing data quality requirements in regulation, and issues found during the 2017 DATA Act audit. And, if appropriate, take steps to mitigate completeness, timeliness, accuracy, and quality risks through training, continuous monitoring, and monthly certification of their respective award data to the SAO until such time as the data improves in accordance with the published DQP.

B. Quarterly DATA Act Submission Process

The Office of the Chief Financial Officer (OCFO) compiles and submits the required data to the DATA Act and Financial Assistance Brokers. Figure 1 depicts the data flows from XYZ source systems, through the Broker’s to the public interface:

**Figure 1. DATA Act Submission Data Flow**

OCFO relies on both the DATA Act Broker and internal validation processes to ensure that the financial data reconciles to the agency general ledger, is submitted timely and completely and that valid linkages exist between the files. The following agency-wide validations provide these controls.

C. File A and File B
File A includes FY cumulative federal appropriations account summary data. File B includes FY cumulative federal OC and program summary-level data. Validation of Files A and B are the responsibility of the OCFO through the Quality Assurance team. The following tests are conducted.

**DATA Act Broker when data is submitted**:  
- Reconcile File A to SF133 excluding Loan Financing Accounts by agency identifier, main account code, sub account code, budget authority appropriated amount, budgetary authority amount, gross outlay TAS and unobligated balance.
- Reconcile File B to File A by Main account codes and sub account codes quarterly.
- Verify all OC codes from File B match Section 83 OMB Circular A-11.

**Office of Planning and Budget**:
- Verify program activity names and codes quarterly from File B match names and codes in the Program and Financing Schedule in the President’s Budget. Updates will be made via the MAX collect exercise quarterly, as needed.

**Financial Reporting Branch**:
- Verifies Intra-governmental transfer is an allocation transfer or buy/sell transaction.
- Verifies that File A and File B were reported within 30 days of quarter end.

**Quality Assurance Team**

- Reconciles OMB SF-133 to the SBRs on a quarterly basis.

**D. File B and File C**

File C reflects and links to reportable award-level transactions via an award ID number. File C is a subset of File B, so all items in File C (Awards) should be in File B, but not all of File B (all obligations) should be in File C. For example, salaries are obligations reported in File B but salaries are not awards reported in File C. Therefore, salaries would be a reconciling item between File B and File C. Comparison of File C to File B is the responsibility of the OCFO through the Quality Assurance team. The following tests are conducted.

**DATA Act Broker when data is submitted**:  
- Validates that File C includes applicable TAS by matching main account codes, sub account codes, OC codes found in File B.

**Quality Assurance Team**

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8 DATA Act validation rules are available here https://broker.usaspending.gov/#/validations?_k=gy8w41
• Compares B to C Files quarterly.
• Shares results from validation to the Director Office of Financial Systems (OFS), Director of Administrative Accounting, Director of Acquisitions, and Chief Data Officer to drive improvements in data quality.

E. File C and File D1

File D1 is extracted by the DATA Act Broker from FPDS-NG and reports the award and awardee details for contract awards reported in File C.

**DATA Act Broker when data is submitted:**

• Validates all reportable contract awards and amounts in File C match the contracts and amounts in File D1.
• Validates all reportable contract awards in File D1 with non-zero dollar obligations matching to the contracts and amounts in File C.

**Financial Reporting Branch:**

• Generates DataActJAAMSPRISMRecon file daily. Report mimics some DATA Act Broker validations by identifying any differences in transaction amounts or dates between XYZ’s financial system and contract writing system. File C is generated from XYZ’s financial system data and File D1 is generated from FPDS-NG, which is partially populated by data from XYZ’s contract writing system.
• Distributes report to the Office of Financial Systems, Administrative Accounting Branch, Financial Reporting Branch, and Acquisition Division.

**Office of Financial Systems, Administrative Accounting Branch, and Acquisition Division:**

• Reviews DataActJAAMSPRISMRecon report daily.
• Researches reconciliation items and resolves items that are deemed not allowable.
• Documents any unallowable and unresolvable reconciliation items in preparation for quarterly submission.

F. File C and File D2

File D2 reports the award and awardee details for financial assistance awards reported in File C.

**DATA Act Broker when data is submitted:**

• Validates all reportable awards and amounts in File C match the nonzero grants, loans, and surety bond and amounts in File D2.
Validates all reportable awards in File D2 with non-zero dollar obligations match the awards and amounts in File C.

**Financial Reporting Branch:**
- Generates DataActJAAMSPRISMRecon file daily.
- Distributes the DataActJAAMSPRISMRecon report to the Office of Financial Systems, Administrative Accounting Branch, Financial Reporting Branch, and Acquisition Division.

**Office of Financial Systems and Administrative Accounting Branch:**
- Reviews DataActJAAMSPRISMRecon report daily. Report mimics some DATA Act Broker validations by identifying any differences in transaction amounts or dates between XYZ’s financial system and other source systems. File C is generated from XYZ’s financial system data and File D2 is generated from XYZ’s financial and financial assistance award systems.
- Researches reconciliation items and resolves actionable variances.
- Documents any unallowable and unresolvable reconciliation items in preparation for quarterly submission.

G. File D2 and Agency Data

File D2 reports the awardee details for financial assistance awards reported in File C.

**Office of Financial Systems:**
- Generates a monthly Excel file that provides a reconciliation of Loan data, Grants Data and SBG data from the source systems to D2.
- Provides the file to a designated list of recipients including Chief Data Officer, Manager of Financial Reporting, and Manager of Quality Assurance to monitor. Any variances noted are addressed with OFS.

The SAO relies on these agency-wide validations as controls to ensure the data is complete, timely and that valid linkages exist between the files when certifying the submission.

**VI. Certification**

M-17-04 3 requires the DATA Act SAO to provide, on a quarterly basis, reasonable assurance that their agency's internal controls support the reliability and validity of the agency account-level and award-level data reported for display on USAspending.gov. M-17-04 specifies that this assurance should leverage data quality and management controls established in statute, regulation, and federal-wide policy, and be aligned with the internal control and risk management strategies in Circular A-123. M-17-04 further states...
that existing data quality measures required by regulation and/or OMB guidance will be sufficient for SAO reliance on individual data files.

Agency’s quarterly SAO assurance includes three certification levels:

- The alignment among the Files A-F is valid and reliable. Since a DATA Act submission contains a combination of many data sets, the SAO attests to the validity and reliability of the complete DATA Act submission and the interconnectivity/linkages (appropriate linkage) across all the data in Files A, B, C, D, E, and F. For Files E and F, M-17-04 clarifies that agencies will leverage assurances provided over the systems by the owner.
- The data in each DATA Act File reported in the quarterly submission to USAspending.gov are valid and reliable. To provide this assurance, the SAO confirms that internal controls over data quality mechanisms are in place for the data submitted in the DATA Act files submitted quarterly. Existing data quality measures required by regulation and/or OMB guidance will be sufficient for SAO reliance on individual data files.
- Data reported to USAspending.gov matches, or is directly provided by, its authoritative sources outlined in M-17-04 (reference to MPM 2016-03).

XYZ’s SAO relies on agency wide validations of the DATA Act submission files, monthly certification statements from the heads of the Acquisition Division (if applicable) and each of the Financial Assistance Awarding Offices – Office of Capital Access, Office of Disaster Assistance, Office of Entrepreneurial Development, Office of Executive Management, Installations & Support Services – which provide reasonable assurance over the completeness, accuracy, and timeliness of the data when certifying XYZ’s quarterly submission. Further, the SAO provides the following content by file during the certification process in the DATA Act Broker:

- **File A:** Pursuant to OMB Circular No. A-11, Section 130.2, for Executive branch agencies, XYZ reported all TAFS in each GTAS reporting window. The data in File A match the authoritative source (i.e., SF-133) and all required XYZ TAS are reported.

  Credit program financing account activity is not required to be reported under the DATA Act for files A and B. Face Values for loans often come from the financing accounts. Face values are reportable on file D2. Funding for these subsidy costs is reflected in the program account, per the Federal Credit Reform Act, as outlined in Section 185 of OMB Circular A-11.

- **File B:** The total amount reported in File B matches the authoritative source (SF-133), Program Activity, and Budget Object Class Codes are reported based on the President’s Budget as executed and A-11, respectively.

  The Program Activity names and codes are embedded in the President’s Budget. On a quarterly basis, agencies work with OMB to send updates to Program Activity
through the BDR process in alignment with the President’s Budget. OMB then passes
the Program Activity validation list to Treasury as the validation list for the Broker.

- **File C:** All financial data, including the obligations in this file, are subject to
  management assurances under A-123. The data reported in File C match the
  authoritative source (i.e., agency financial systems).

- **File D1:** Data reported pursuant to FFATA (P.L. 109-282), as amended by the DATA
  Act (P.L. 113-101), are sourced from FPDS-NG and the key data elements are
  aligned at the time of quarterly reporting. The data reported in File D1 are subject to
  internal controls based on FAR required V&V for the assurance over federal
  procurement awards.

Agency submissions for the DATA Act pull data from multiple sources. Each of these
sources has a different frequency for updating the relevant data to USAspending.gov.
These timing differences can result in data being displayed at different intervals
throughout the quarter, at times resulting in potential delays in awards matching
appropriations account-level data.

- **File D2:** The data in File D2 match the authoritative source (i.e., agency award
  management systems) for award-level data and the authoritative source (i.e., SAM) at
  the time of award. However, XYZ was unable to submit some records due to data
  and/or validation errors.

- **File E:** The data included in File E are subject to the internal controls of the system
  owner, the GSA in accordance with A-123. XYZ is relying on the assurance of GSA
  that data integrity processes are in place and align with A-123.

- **File F:** The data included in File F are subject to the internal controls of the system
  owner, the GSA in accordance with A-123. XYZ is relying on the assurance of GSA
  that data integrity processes are in place and align with A-123.

**VII. Information and Communication**

Members of XYZ’s control environment will effectively communicate and distribute
quality information from both internal and external sources that is relevant to meet the
agency’s objectives. A variety of factors will be considered when distributing information
including:

- **Audience**—making sure it gets to the intended recipients.
- **Nature of information**—purpose and type of information.
- **Availability**—making sure information is readily available when communicating.
- **Cost**—resources used for the effective communication.
- **Legal or regulatory requirements**—any laws and regulations that may impact the
  communication.
The Chief Data Officer recognizes that currently the Acquisitions Division, Office of Executive Management, Installation & Support Services – Office of Grants Management, Office of Entrepreneurial Development, Office of Disaster Assistance and Office of Capital Access are the primary offices that would be receiving the majority of DATA Act communications; but will also notify other offices if any issues relevant to their work needs to be addressed. This may also include establishing meetings and potential trainings depending on the level of the communications being transmitted.

Acquisition Division and Financial Assistance Awarding Office officials will also be responsible for updating the SAO and Chief Data Officer of issues with data accuracy, testing results, training activities and any other material changes that affect the DATA Act.

VIII. Monitoring

Members of XYZ’s control environment along with the Chief Data Officer will continuously monitor internal and external process and make necessary changes to make sure the agency continues to meet DATA Act data quality objectives. This includes monitoring the control activities to make sure processes are being followed and to making required adjustments in the case where they may not be. In addition, members of XYZ’s control environment will follow updates to laws and regulations to make appropriate adjustments to objectives, processes where needed, and properly communicate adjustments to all parties affected.

XYZ’s SAO will require certification statements from all office heads that award contracts, loans, grants, and surety bond guarantees and will leverage any existing regulatory certifications done by these functions. These statements certify to the SAO the accuracy of the data that has been entered for the month and will be based on the results of the quality assurance processes established in the office. Findings from the quality assurance process reviews will be used to add training, develop desktop guides, and create future review criteria. These certifications are required no later than the 5th day of the month during the month following the submission period.

As outlined above in the control activities section, XYZ OCFO has created a method to duplicate some DATA Act Broker validations between Files D1 and D2 and File C. Each transaction identified by the reconciliation report will be researched to identify the issue and determine which functional area is capable of resolving the issue and then communicate the issue and discuss possible remedies. Issues that can be corrected will be addressed timely to ensure the most complete submission. Any issues that cannot be corrected will be documented and reported to the SAO with the cause and reasoning behind the issue and lack of ability to correct.
Illustrative Scenario 2: Agency MBT

The following DQP outline was developed for a medium, centralized agency with a mature governance and control structure. While its programs are diverse and its operations geographically disbursed, the agency does maintain an integrated financial management system. Readers may be able to leverage some of the processes or methodologies described in this scenario depending on their DATA Act operating environment.

Overview

A. The Department of MBT incorporates Enterprise Risk Management (ERM) principles to focus on high-risk, high impact areas, balancing cost with benefit and leveraging existing controls, processing, and testing.

B. Participation of the appropriate technical experts, field personnel, and agency leadership is critical to defining objectives and clarifying roles and responsibilities.

C. Identifying and quantifying risks; accurately mapping these risks to existing controls or identifying deficiencies; and implementing or enhancing new controls is key.

Step 1 – Governance Structure

A. Ensure a governance structure to effectively develop, implement, and monitor the DATA Act Control Plan (DACP). A key consideration is the (1) right participants with subject matter expertise in systems, acquisitions, financial assistance, financial management, and policy and (2) representation from both the agency and field levels.

B. Clearly delineate who has responsibility for the quality of data that is generated by the business process and reported to authoritative sources for publication to USAspending.gov. OMB Memorandum M-17-04 and the revised appendix A of the OMB Circular No. A-123, Management’s Responsibility for Enterprise Risk Management and Internal Control. (Circular A-123) covers this point in its footnotes 3 – 6

C. Establish the appropriate governing bodies.

- **Executive Sponsors** with a broad range of subject matter expertise noted above. The Executive Sponsors (1) oversee the development and implementation of the DACP; (2) review risk assessments and testing summaries; and (3) approve and monitor corrective action plans.
- **DACP Workgroup** to develop and manage the overall DACP process. The workgroup consists of business process policy experts, internal control experts; DATA Act Reporting (querying of data from agency systems and reporting to the Data Broker) personnel; and subject matter experts in IT systems, acquisitions, financial assistance, financial management, etc.
- **Data Quality Team** with responsibility and oversight of financial and non-financial data at the detail level. Members include data owners/responsible parties who have first-hand knowledge of the data. DACP Workgroup members also participate in this group based on their areas of expertise.

**Step 2 – DATA Act Objectives**

A. Define the agency’s overall DATA Act objectives. The overarching objective should focus on the completeness, accuracy, and timeliness of data reported to the Data Broker and ultimately available on USAspending.gov. An important consideration is the different groups of data users: (1) agency leadership, managers, and other internal staff; (2) government-wide users, to include, the OMB, Congress, other agencies, etc.; (3) USAspending.gov data consumers with a consideration for taxpayers and other stakeholders.

B. Leverage the GAO Green Book, *Standards for Internal Control in the Federal Government*, particularly Section 2 OV2.16 - *Objectives of an Entity* as guidance for this area.

**Step 3 – Risk Assessment**

A. Based on the DATA Act Objectives outlined above, perform a risk assessment. The outcome of the risk assessment is an assurance tool to identify and quantify risks and map existing controls that mitigate those risks. For any identified gaps in the design of controls, management considers the cost/benefit of implementing additional controls. The operating effectiveness of controls will be tested later.

B. Determine quantitative and qualitative materiality. Materiality is a key input to risk appetite and tolerance. The Data Quality Team, in conjunction with Executive Sponsorship, should document how much risk the agency is willing to take, weighing the costs versus the benefits of accepting deficiencies within the process and balancing with the agency’s strategic mission priorities. Input from the field (data owners) is critical in this area.

C. Identify a systematic approach to identify areas with the potential of undesirable outcomes and bucket into these like categories.

- The first risk category is the DATA Act governance structure discussed above.
- The second category is the accuracy of the underlying data. Bucketing the data into similar subcategories is key. For example, consider bucketing financial assistance obligations and attributes separately from acquisition attributes if the data is processed on different systems or by different groups and as the data have different underlying statutes and regulations that must be followed in making and managing awards.
• The third category is the reporting of the data, starting with the extraction of data from agency databases and authoritative sources through to final submission to the Treasury Broker.

D. Analyze and evaluate identified risks guided by the established risk appetite. Quantify the impact (likelihood vs. consequence) of each risk. Qualitatively speaking, risk should be measured by considering the impacts if, and when, the data is incorrect.

E. Identify existing controls that mitigate each risk in order to isolate control gaps that may exist.

F. Leverage the methodology outlined in Circular No. A-123 and guidance provided in M-17-04. This includes documenting management’s risk appetite and tolerance, identifying risks, assessing inherent and residual risks, identifying existing controls, and documenting possible control gaps.

Step 4 – Testing

A. Design and conduct testing based on the risk assessment to determine whether data reported to the Broker meets the completeness, accuracy, and timeliness objectives as modified by the statutory and regulatory allowances or flexibilities for the business processes under which the awards were made.

B. Agencies should leverage existing testing techniques, templates, and sampling approaches as customized for DATA Act testing.

C. Typically, testers should choose from the 57 requisite elements (if they are not already validated through another process) and sample data from the Broker and trace back to the authoritative source (FPDS-NG for procurement) or other System of Record and to validate accuracy. The testing approach should be based on cost/benefit analysis and ERM principles.

Step 5 – Evaluating the Results and Providing Assurance

A. Determine if an internal control deficiency exists whereby the design or operation of the control does not allow management to prevent or timely detect incorrect data requiring follow-up and significant to data users.

B. Determine the level of severity for each deficiency.

C. Aggregate all results to analyze the deficiencies collectively.

D. Report any material weakness along with the corrective action plan in the agency’s assurance statement published in the Agency Financial Report.
Remediation, Monitoring, and Communication

- For any deficiency identified, implement new or enhance existing controls based upon ERM principles and cost/benefit analysis.
- Develop and monitor corrective action plans to remediate any deficiencies and improve the overall control environment.
- Use continuous monitoring to identify new issues and controls that do not continue to operate effectively.
- Communicate test results to all relevant parties, including the Data Quality Team, the DACP workgroup, and leadership at the agency and sub-agency levels.
Illustrative Scenario 3: Agency ABC

The following DQP outline was developed for a small, centralized agency with an effective and optimized internal control environment. Readers may be able to leverage some of the processes or methodologies described in this scenario depending on their DATA Act operating environment.

To: ABC Chief Financial Officer/DATA Act Senior Accountable Official

Through: Financial Assistance Systems Director
Procurement Director
Information Technology and System Security Director

From: Deputy Chief Financial Officer and Financial Management Director

Subject: ABC Data Quality Plan

Background

The purpose of this DQP is to document ABC’s FY 2019 approach to achieve reasonable assurance for internal control over quarterly DATA Act reporting. The DQP was prepared in accordance with OMB M-18-16, Appendix A to OMB Circular No. A-123, Management of Reporting and Data Integrity Risk as well as 48 CFR and includes a five-step process covering significant milestones and major decisions pertaining to:

- Organizational structure and key processes providing internal controls for spending reporting of the 57 requisite elements.
- Management’s responsibility to supply quality data to meet the reporting objectives for the DATA Act in accordance with OMB Circular No. A-123.
- Testing plan and identification of high-risk elements that are explicitly referenced by the DATA Act, confirmation that this data is linked through the inclusion of the award identifier in the agency’s financial system and properly reported.

Step One: Update the Charter of the DATA Act Working Group (October 2018)

Since June 2015, ABC established a robust DATA Act governance structure for strategic direction and guidance. This structure seeks to maximize existing management architectures, information technology (IT), and business processes to meet DATA Act requirements. The governance structure includes the following components:

- The SAO provides executive leadership level functional and technical oversight of the project as well as executive guidance on the management of the project. Interface with the DATA Act Steering Committee, OMB, Treasury, and other internal and external stakeholders as necessary.
• DATA Act Working Group (DAWG) provides technical and subject matter expertise to execute the implementation of the ABC DATA Act initiative. ABC OIG attends in ex officio capacity.
• Steering Committee provides advice as needed to the SAO and DAWG with regard to the strategic direction and decision-making of the DATA Act initiative’s scope, schedule, costs and risks. Approve or disapprove recommendations as necessary.
• Project Manager oversees the DAWG and manages the day-to-day operational aspects of the implementation initiative; ensure execution of project tasks to meet project objectives. Monitor project resources and risks. Liaise with SAO and Steering Committee to communicate project progress and receive guidance.

With the issuance of M-17-04 and Appendix A to OMB A-123, the DAWG’s charter will be updated to include oversight of the ABC DQP and responsibilities for:

• Ensuring that assessment objectives are clearly communicated throughout ABC.
• Ensuring that the assessment is carried out in a thorough, effective, and timely manner.
• Identifying and ensuring adequate resources are made available.
• Identifying staff to perform the assessment.
• Determining and understanding the scope of the assessment (See Step Two below).
• Determining the assessment design and methodology.

Step Two: Determine and Understand the Scope of Internal Control Over DATA Act Reporting (October 2018)

Definition of DATA Act Reporting: Reporting objectives pertain to the preparation of reports for use by organizations and stakeholders. External reporting objectives are driven by the DATA Act and data quality practices and procedures recommended by Treasury. For quarterly DATA Act Reporting purposes, ABC leverages the GAO Green Book definitions of Internal Control over External Financial and Nonfinancial Reporting (GAO-14-704G/OV2.21). In addition, ABC leverages related OMB implementation guidance provided in M-17-04, Appendix A to OMB Circular No. A-123, Management of Reporting and Data Integrity Risk and the FAR.

Objectives of Internal Control Over DATA Act Reporting: Internal control over quarterly DATA Act reporting is a process designed to provide reasonable assurance regarding the reliability of DATA Act reporting of the 57 requisite elements. Reliability of DATA Act reporting means that management can reasonably make the following reasonable assertions:

• All spending transactions that should be reported for the quarter have been included and no unauthorized transactions are included (completeness).
• Reportable spending transactions and key data elements agree to ABC systems of record (or official contract file) (accuracy).
• Reportable spending transactions are reported in a timely manner (timeliness).
• Spending data is reported in compliance with the objectives of the DATA Act (compliance) and regulations governing awards.
ABC’s approach for evaluating internal control over DATA Act Reporting will focus on the DAIMS Broker Submission process. The DAIMS Broker submission process includes the procedures used to submit files into the Treasury Broker and procedures used to initiate, authorize, record, and process adjustments. In assessing internal control over submission via the Broker reporting, the DAWG will plan to evaluate:

- The automated and manual inputs, procedures performed, and outputs of the processes ABC uses to produce its monthly and quarterly data submissions to Treasury.
- The extent of IT involvement in each reporting process element.
- Who participates from management.
- The types of adjusting entries.
- The nature and extent of the oversight of the process by ABC, OMB, Treasury, including the OIG.
- The controls over the consolidation process.
- The methods for establishing and monitoring the consistent application of DATA Act reporting.
- The use of manually compiled data in the DATA Act reporting process.
- Quantitative and qualitative materiality considerations.
- The regulations and policies governing the making and managing of awards reported via the DATA Act to explain variations.

**Materiality:** As provided by Appendix A to OMB Circular No. A-123, *Management of Reporting and Data Integrity Risk;* materiality for controls over reporting is defined as the risk of error or misstatement that could occur in a report that would impact management’s or users’ decisions, or conclusions based on the report. In order to determine the materiality of control deficiencies noted, ABC plans to leverage the materiality concepts described below. ABC will accumulate errors identified during management’s assessment process, other than those that are clearly trivial, and evaluate misstatements individually and in the aggregate in both quantitative and qualitative terms.

Illustrative examples of quantitative materiality calculations include:

- Calculating materiality base for spending classes of transactions.
- Planning materiality.
- Design materiality.

Illustrative examples of qualitative considerations include:

- Is considered sensitive to USAspending users, that is, the Congress, the public, influential special interest or stakeholder groups, and interested foreign governments.
- Affects compliance with the DATA Act.
- Affects compliance with financial assistance or other agreements.
- Heightens the sensitivity of the circumstances surrounding the misstatement (for example, the implications of misstatements involving fraud and possible instances of noncompliance with laws, regulations, or contracts conflicts of interest).
- Involves proprietary or sensitive information, such as federal taxpayer information.
These circumstances are only illustrative examples—not all are likely to be present in all situations nor is the list necessarily complete.

**Step Three: Leverage Enterprise Risk Management (December 2018)**

To meet the ERM requirements of Appendix A to OMB A-123, ABC will incorporate DATA Act reporting into ABC’s Risk Profile process and leverage Committee of Sponsoring Organizations (COSO)\(^9\) ERM concepts of risk appetite, tolerance, strategy, and objectives as a precondition of internal control. In addition, the DAWG will develop a portfolio view of DATA Act reporting within ABC’s risk profile. ABC’s risk profile\(^{10}\) will include a composite view of DATA Act reporting risk throughout management functions of ABC (e.g., procurement, financial management, financial assistance, and IT and security functions). The composite view will allow ABC to consider the type, severity, and interdependencies of risk and how they impact DATA Act performance as well as existing internal controls required by regulation (such as the FAR). ABC will leverage the risk profile as a whole when evaluating alternative strategies for decision making on assessing internal control over DATA Act Reporting.

ABC’s ERM approach will also include a risk assessment and prioritization of the data elements within DATA Act reporting including:

- Impact on DATA Act reporting.
- Complexity of the processes.
- Volumes of transactions.
- Centralization of processes.
- Inherent risk in processes
- Existing controls over elements.

ABC’s ERM approach will also consider extended enterprise (EE) considerations (e.g., risks between ABC, Treasury, General Service Administration, Universities, or other external stakeholders). These EE considerations may include risks, which cannot be directly controlled, and ABC will develop contingency plans for its risk management strategy.

In addition to leveraging a risk profile process, ABC’s approach to developing assurance will also include a maturity model to guide short and long-term effectiveness of internal control through FY 2021 or until ABC can determine that they can provide reasonable assurances over the data quality controls that support DATA Act reporting objectives.

**Step Four: Management’s Internal Control Over DATA Act Reporting Evaluation Approach (June 2019)**

ABC’s evaluation of Internal Control over DATA Act Reporting will comply with the GAO Standards for Internal Control in the Federal Government (GAO-14-704G) and OMB Circular

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\(^9\) COSO Enterprise Risk Management Integrating with Strategy and Performance, June 2017

\(^{10}\) The format of the risk profile will be in compliance with the format required by OMB Circular No. A-123, Management’s Responsibility for Enterprise Risk Management and Internal Control, July 2016
No A-123, Management’s Responsibility for Enterprise Risk Management and Internal Control, July 2016. The evaluation approach will include the following steps:

1. Conduct an assessment of internal control for each of the Green Book’s principles as they relate to DATA Act Reporting Objectives.
2. Prepare a summary of internal control deficiencies.
3. Conclude on internal control principle evaluation.
4. Conclude on internal control component evaluation.
5. Conclude on Overall Assessment of a system of internal control.

Note – ABC will leverage existing methodologies for testing, e.g.:
- Entity Level Review Assessments
- The FAR and OMB Memoranda related to procurement data quality such as, dated May 31, 2011, Improving Federal Procurement Data Quality – Guidance for Annual Verification and Validation.
- Assessments of ICOR via DAIMS and other business cycles.

Step Five: Provide Assurance and Implement Corrective Actions (November 2019 to January 2020)

ABC will leverage the reporting on internal control approach provided by section VI of OMB Circular No. A-123. The approach will determine control deficiencies, significant deficiencies, and material weakness for internal control over DATA Act compliance and reporting based on quantitative and qualitative materiality considerations. In addition, the ABC Director’s Assurance Statement will be supported by the DQP and quarterly SAO certification process. Finally, corrective action plans will be developed for control deficiencies identified in accordance with section V of OMB Circular No. A-123.
Illustrative Scenario 4: Department of JFK

The following DQP outline was developed for a medium, very diverse agency with an effective and optimized internal control environment. Readers may be able to leverage some of the processes or methodologies described in this scenario depending on their DATA Act operating environment.

I. Background

In June 2018, the OMB issued Memorandum M-18-16 Appendix A to OMB Circular No. A-123, Management Reporting of Data and Data Integrity Risk directing agencies to develop a DQP to achieve the objective of the DATA Act – producing quality, published spending data. In addition, the Department of JFK (the “Department”) OIG completed its first audit of the Department’s DATA Act submission in FY 2017 as required by the DATA Act.

The Department’s DQP is guided by the principles presented in OMB Circular No. A-123 and the GAO Standards for Internal Control in the Federal Government, and the results of prior year DATA Act audit.

II. JFK Organizational Chart

The Department comprises multiple bureaus and an independent authority within some of the bureaus, with the broad responsibility to achieve the agency’s overall mission of service to the American people.

The Department utilizes a shared service model for accounting and contracting/financial assistance services in which two larger bureaus provide services for smaller bureaus within separate instances of the Department’s core financial system. Two additional bureaus maintain their own accounting and contracting services on another instance of the Department’s core financial system while the other maintains an entirely separate financial system. While accounting and contracting/financial assistance functions at the four bureaus have the statutory responsibility for the creation of the data elements that are used by the DATA Act submission; the CFO and Assistant Secretary for Administration (ASA) designee, the Deputy Chief Financial Officer (DCFO), has responsibility for the alignment of the data in the quarterly DATA Act files and the assurance for the quarterly submission of the 57 DATA Act elements.

Two directorates within the Office of the CFO/ASA: Office of Financial Management (OFM) and Office of Acquisition Management (OAM) are primarily responsible for developing the Department’s DQP. OFM, which is led by the DCFO, includes the internal control and DATA Act processing functions and OAM includes procurement and financial assistance and ERM.
Furthermore, oversight responsibility for the programmatic (non-financial) and financial internal control programs is split between OAM and OFM, respectively, with the overall responsibility for the Federal Managers’ Financial Integrity Act (FMFIA) assurance belonging to OAM and the responsibility over acquisition management with the Chief Acquisition Officer per 41 USC. The Department’s approach to this DQP included all functional groups responsible for the key processing and underlying assurances.

III. Data Quality on Financial Data Elements (Note: Table of Data Elements in Appendix)

Enacted in September 1982, the FMFIA requires federal agencies to perform ongoing evaluations of the adequacy of their financial controls. In response to the FMFIA, OMB outlined federal management’s responsibility for internal controls in Circular A-123. In December 2004, OMB revised the Circular A-123 and introduced Appendix A, which prescribed a strengthened process to assess the effectiveness of the internal control over financial reporting (ICOFR). Since the introduction of Appendix A, the Department has put forth considerable efforts to mature their processes around ICOFR. Today, the internal control system over financial reporting in the Department includes automation, training, documented procedures, benchmarking and best practice reviews, continuous monitoring and improvement, management reviews, Departmental policies, risk assessments and annual testing. Furthermore, the Department has obtained 19 clean audit opinions with no significant prior year findings.

After reviewing the 57 key reportable data elements under the DATA Act, the Department has determined that the data quality of nine (9) of those elements are covered under our current financial control and regulatory processes associated with procurement. The Department will leverage the processes behind our strong control environment and clean audit opinions to report complete, timely, and accurate financial data elements.

IV. Data Quality on Procurement Related Data Elements

A. Prior year findings and Current independent V&V process conducted in accordance with 48 CFR and OMB policy
B. Leverage ERM to perform a risk assessment over the procurement related data elements;
C. Based on risk level, agency strategic mission priorities, and return on investment, define the phased approach (based on risks and data element)

V. Data Submission and Certification

A. Prior to the quarterly file submissions, the TAS reported in the DATA Act files are validated against the GTAS SF-133 files for that quarter;
B. File A to GTAS/ SF 133 Validation based on a list of data elements that are cross walked to SF133;
C. Reconcile File A and B based on a summation check;
D. File B and C data element and balance validation;
E. Working with bureaus on program activity, OC and percent allocation validation prior to generation of the quarterly files to Treasury;
F. Upload preliminary File A, B, and C to the Treasury DATA Act Broker and download Validation reports for initial analysis; and
G. Quarterly certification from bureau CFOs, head of Procurement certification (if appropriate) prior to DCFO final sign off and file submission to Treasury.

VI. Monitoring

JFK will leverage the existing 48 CFR and A-123 Appendix A testing processes and information in M-17-04 regarding existing certifications and Senior Assessment Team (SAT) to discuss the key testing steps for DATA Act. The SAT will also work with the Acquisition community and the DATA Act submission group to determine if any additional testing is necessary for procurement via the annual FAR required process. The group will develop testing steps to determine whether data reported to Treasury Broker meets the timeliness, completeness and accuracy requirements without conflicting with regulatory requirements or flexibilities. The testing steps should cover sample data from USAspending.gov and track back to the appropriate documents or authoritative sources (FPDS-NG for procurement) to validate the accuracy.

VII. Reporting and Tracking

Like other type of assurances covered under FMFIA, at the end of the testing and reporting phase, JFK SAT will work with the JFK components and other applicable offices to collectively report and determine the level of internal control deficiencies under the DATA Act:

- If a Material Weakness is determined, it will be reported through the Secretary’s FMFIA assurance statement along with identified corrective actions and published in the Agency Financial Report.

If the findings are lower than material weakness, it will be included in the overall A-123 Appendix A findings list and a corrective action plan will be developed and tracked to address each finding.
Illustrative Scenario 5: Department of WNB

The following DQP outline was developed for a large, decentralized agency where the largest known risk is related to the financial system configurations for accepting the award attributes. Another unique attribute for this agency is its use of aggregated data for financial assistance. Readers may be able to leverage some of the processes or methodologies described in this scenario depending on their DATA Act operating environment.

I. Introduction

This Administration is committed to delivering improved results to the public, while maintaining accountability to taxpayers for sound fiscal stewardship and mission results. This supports the President’s Management Agenda goal to shift from low-value to high-value work. The Department of WNB shares the Administration’s commitment to creating an unprecedented level of openness in government, ensuring the public trust, and establishing a system of transparency, public participation, and collaboration.

To submit high quality spending data to USAspending.gov, it is essential that the Department of WNB develop and implement a Data Quality Framework to empower key governance to oversee internal controls for data submitted for publication. Our governance for spending data quality is led by the SAO.

II. DATA Act Operating Environment

The DATA Act operating environment is comprised of three pillars that each contribute equally to upholding the reporting objectives of the DATA Act. The first pillar is the organizational structure, which defines the key stakeholders and accountable parties for collaboratively publishing quality data. The second pillar encompasses the lifecycle of the information and transactions behind the records reported for publication. The final pillar is data management, as agencies’ have the responsibility to ensure the reliability of systems that collect and report data and compliance with the statutory and regulatory frameworks for making and managing the awards reported under FFATA and the DATA Act.

A. Organizational Structure

The DATA Act is one of the first legislative requirements to bridge multiple federal agency functions. As a result, communication channels that may not have existed in the past were forged to reach reporting compliance. WNB strives to maintain the agency-wide accountability in meeting the objectives of providing the public with high quality data while maintaining the integrity of the Federal awarding process under which taxpayer dollars are spent.

Many of the key stakeholders in this process belong within existing governance structures, such as the Budget Officers Advisory Council, Chief Information Officers
Council (CIOC), CFOC, the Chief Acquisition Officers Council, and the Award Committee for E-Government.

The governance structure supporting the data quality framework will leverage existing agency organizations and processes. WNB senior leadership is committed to increasing agency-wide accountability and transparency of our financial data and fostering a greater public understanding of the work we do and the costs associated with carrying out the agency mission. To achieve this, WNB has an organizational structure related specifically to DATA Act reporting. As shown in Table 1, reporting begins at the award and obligation level within sub-components and ends with the SAO.

Table 1: DATA Act Organizational Structure
The key stakeholders for ensuring successful implementation of the Data Quality Framework include the SAO, file owners, system owners, and data owners. The DATA Act Consortium serves as the agency-level oversight body for the DATA Act scope. Membership includes file and system owners. File owners are the primary party for ensuring that data is collected timely from the correct system, validated per the government-wide standards, and submitted timely for publication. File owners are also responsible for summarizing the results of each quarterly submission, quantifying and explaining variances, and adding context to the SAO certification recommendation where necessary. Accountability for variances in the submissions are assigned to the File owners, just as weaknesses in the system-operating environment are assigned to system owners. Overall gaps in the WNB operating environment are addressed at the Consortium and SAO level.

B. Information Process flow

The DATA Act reporting process is an amendment to existing information flow under the FFATA. As shown in Table 2 below, both the DATA Act and the FFATA reporting processes capture only the back end of the lifecycle of the transaction they represent.

Table 2: DAIMS Information Flow Diagram

The genesis of these records lie within the sub-component level functional offices such as contracting offices, budget offices, grant offices, and finance offices. Process owners have existing procedures and controls that align with statutory and regulatory requirements for such awards to ensure that transactions are subjected to the appropriate level of controls to ensure that approvals, data entries, validations, closeouts, reconciliations, and reporting processes are all completed in a repeatable,
efficient, and reliable manner. These business cycles are documented under the Federal Financial Manager’s Information Act of 1996 (FFMIA) requirements over internal controls, 48 CFR for Federal acquisition, and 2 CFR for Federal financial assistance.

C. Data Management

WNB data submitted for publication to USAspending.gov is drawn from the sources identified in Table 3. Department financial systems are required to carry the award ID to assure award linkage for all award transactions with associated financial details to awards made after January 1, 2017. Linkages are based on specifications of the award ID, such as mandated schematic, uniqueness, and length, as defined by the FAR for procurement awards and the DAIMS for financial assistance awards. For technical guidance on reporting of data, refer to the DAIMS. For guidance on generation of the data reported via the DAIMS, refer to the FAR for procurement and 2 CFR and OMB guidance for financial assistance.

Table 3: DATA Act File Overview

<table>
<thead>
<tr>
<th>File</th>
<th>Summary</th>
<th>System of Record (source)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Appropriations Accounts</td>
<td>Agency Financial System</td>
</tr>
<tr>
<td>B</td>
<td>Program Activity and Object Class Data</td>
<td>Agency Financial System</td>
</tr>
<tr>
<td>C</td>
<td>Award Financial Data</td>
<td>Agency Financial System</td>
</tr>
<tr>
<td>D1</td>
<td>Procurement Award and Awardee Attributes</td>
<td>Federal Procurement Data System – Next Generation (FPDS-NG)</td>
</tr>
<tr>
<td>D2</td>
<td>Financial Assistance Award and Awardee Attributes</td>
<td>Grant System(s) via the FABS</td>
</tr>
<tr>
<td>E</td>
<td>Prime Awardee Attributes</td>
<td>System for Award Management (SAM)</td>
</tr>
<tr>
<td>F</td>
<td>Sub-Award Attributes</td>
<td>FFATA Sub-Award Reporting System (FSRS)</td>
</tr>
</tbody>
</table>

One of the primary indicators of quality data is the ability to extract it from a reliable system. According to the Green Book’s Information and Communication principle for using quality information:

“Management obtains relevant data from reliable internal and external sources in a timely manner based on the identified information requirements. Relevant data have a logical connection with, or bearing upon, the identified information requirements. Reliable internal and external sources provide data that are reasonably free from error and bias and faithfully represent what they purport to represent. Management evaluates both internal and external sources of data for reliability. Sources of data can be operational, financial, or compliance related. Management obtains data on a timely basis so that they can be used for effective monitoring.”

The reliability of external sources lies with the system owner. Our responsibility is limited to ensuring that awardees are given adequate instructions at the time of award for completing data input to these systems.
Internal WNB systems align with the type of file for DATA Act systems. Files A and B are exclusively financial, while Files D1 and D2 are exclusively award information. The purpose of File C is to link the two primary data elements, financial data and award data, a link that is new across the Federal Government. Therefore, the scope of systems for WNB Files A – C data can be defined as the Oracle financial systems.

The feeder and mixed systems sourcing award data varied by sub-component and function. WNB operates specific platforms of varying types for the contracting writing systems. While individual sub-components have specific instances, the overall purpose is to interface output data to both the Oracle system and FPDS-NG (the authoritative source for DATA Act procurement elements) on a nightly batch basis.

WNB also leverages our business warehouse system collecting financial assistance data from sub-component grant offices. There are multiple grant award systems feeding the business warehouse. Other ancillary systems exist for additional financial assistance award types such as loans, stipends, and agreement; as well as a few manual flat-file uploads for aggregated data.

III. Data Quality Framework

The Department of WNB represents a collaboration of multiple critical stewardship activities across a diverse population of sub-components and programs. In an organization with such varied and distinctive missions, it is necessary to establish an understanding of the unique nature of our programmatic lines of business. It is equally critical in meeting the DATA Act reporting objectives to develop a common agreement on the criteria for ensuring data quality at its source and throughout its lifecycle of use and dissemination. WNB sees this criteria as a framework on which to gauge and improve reporting quality. The cornerstones of this framework are shown in Table 4.

Table 4: Data Quality Framework

<table>
<thead>
<tr>
<th>Define Data Quality</th>
<th>Determine Materiality and Risk Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establish a Quality Baseline</td>
<td>Develop a Quality Plan</td>
</tr>
</tbody>
</table>

A. Define Data Quality

Each agency subject to the DATA Act is required to appoint an SAO. It is the responsibility of the SAO to reasonably assure through quarterly certification, that
management has used quality information to manage the risk of not meeting DATA Act reporting and compliance objectives. WNB has defined that quality as follows:

- Data submitted meets the DATA Act reporting objectives.
- Data is generated from the appropriate source systems.
- Data is subjected to existing system and process controls.
- Key data elements were considered during the annual risk-based assessment of ICOR.
- Reportable records are submitted and linked across files, where appropriate, in accordance with the DAIMS.

The quarterly SAO certification communicates reasonable assurance that these components of quality have been met. Within this metric of quality, is the concept that data attributes carry varying levels of impact on the overall reporting process. WNB DATA Act submissions must comply with DAIMS display standards, as applicable. However, this agency aims to create reporting efficiencies by focusing on key components of individual records. Specifically, these elements are essential in determining who the funds were paid to, where the assistance was received, how much was obligated, and for what purpose.

An initial list of WNB-identified key data elements that demonstrate quality for presentation to the taxpayer is provided in Appendix I of this memorandum. A majority of these key elements are considered complete, timely, and accurate via their inclusion in existing agency and oversight control environments. These control environments include, but are not limited to policy and procedure documentation, reconciliations, testing, audits, and independent reviews.

At a minimum, the Department of WNB requires all data elements that meet the following criteria to be considered key elements.

- The data element is a GTAS-reportable financial attribute.
- The data element serves as a link between DATA Act Files.
- The data element is not a propagated, derived, or externally supplied field.
- The File D1 data element is currently reviewed as part of the annual procurement V&V process.
- The File D2 data element is the same as (or comparable to) one currently reviewed as part of the annual procurement V&V process.

Additional Elements may be included with those that fall under these criteria if identified as part of the baseline and risk assessment processes.

B. Determine Materiality and Risk Tolerance

Throughout the submission process, all critical errors must be remediated immediately. This includes all financial source file variances (File A to GTAS and cross-file errors).
Warnings are further assessed to determine the appropriate course of action, but are generally not an indicator of data quality, as they do not consider the statutory or regulatory variations allowed for awards. File owners will refer to the Materiality Threshold Chart (Table 5) to determine the prescribed action and attention paid to each variance. All variances require documentation, at a minimum, in the form of an explanation. In some cases, documentation takes the form of a Risk Acceptance Memo due to limitations such as resources, data availability, or inherent nature of the variance.

### Table 5: Materiality Threshold Chart

<table>
<thead>
<tr>
<th>Type</th>
<th>Variance</th>
<th>Threshold</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Source File Variance: A → C</strong></td>
<td>• File does not include all required TAS; or</td>
<td>Any variance</td>
<td>• Requires explanation</td>
</tr>
<tr>
<td></td>
<td>• File C does not include all reportable awards</td>
<td></td>
<td>• Return source file to process owner for remediation, if applicable</td>
</tr>
<tr>
<td><strong>Financial File Variance: File to File</strong></td>
<td>• File B to GTAS/SF-133; or</td>
<td>Any variance</td>
<td>• Requires review and explanation</td>
</tr>
<tr>
<td></td>
<td>• File A to File B</td>
<td></td>
<td>• Contact process/data owner for remediation or adjustment, if applicable/feasible</td>
</tr>
<tr>
<td><strong>Award File Variance: File to File</strong></td>
<td>• Award in File D1 or D2, missing from File C;</td>
<td>D1: ( \geq $XM^{11} ), (&lt; $XM) absolute value individual variance</td>
<td>• Requires review</td>
</tr>
<tr>
<td></td>
<td>• Obligation in File C missing from File D1 or D2; or</td>
<td>D2: ( \geq $XM, ,&lt; $XM) absolute value individual variance</td>
<td>• Send variances to File Owners</td>
</tr>
<tr>
<td></td>
<td>• Award and Obligation sum does not tie</td>
<td>D1: ( &gt; $XM) absolute individual variance, but (&lt; $XM)</td>
<td>• Determine if source file(s) needs adjustment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D2: ( \geq $XM) absolute individual variance, but (&lt; $XM)</td>
<td></td>
</tr>
<tr>
<td><strong>Any Unexplainable Variance</strong></td>
<td>• Any individual action or</td>
<td>Net or Absolute Value Variance Over $XM</td>
<td>• Communicate the issue to agency-level stakeholders at and above Director levels, up to and including the SAO</td>
</tr>
<tr>
<td></td>
<td>• A variance associated with a specific set of actions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Explanations should consider impact to the agency submission, pervasiveness, and critical or sensitive nature of the issue in addition to quantitative factors in the determination of materiality.

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11 Based on the individual analysis performed at this agency and is dependent on the total file value and SAO risk tolerance.
C. Establish a Quality Baseline

Success in achieving continuous quality starts with establishing a baseline of internal control measures against which future progress can be gauged. This self-assessment of the DATA Act operating environment needs to be comprehensive, objective, and must identify areas to strengthen. This is consistent with the activities described in the Green Book regarding the establishment of a baseline, as follows:

“Management establishes a baseline to monitor the internal control system. The baseline is the current state of the internal control system compared against management’s design of the internal control system. The baseline represents the difference between the criteria of the design of the internal control system and condition of the internal control system at a specific point in time. In other words, the baseline consists of issues and deficiencies identified in an entity’s internal control system.”

“Once established, management can use the baseline as criteria in evaluating the internal control system and make changes to reduce the difference between the criteria and condition. Management reduces this difference in one of two ways. Management either changes the design of the internal control system to better address the objectives and risks of the entity or improves the operating effectiveness of the internal control system. As part of monitoring, management determines when to revise the baseline to reflect changes in the internal control system.”

WNB will include the following results at a minimum in establishing the DATA Act quality baseline. The results of each will be reviewed for applicability to the DATA Act operating environment, remediation status, and risk to the DATA Act reporting objectives.

- Results of OIG Audits and Reviews.
- Results of GAO Audits and Reviews; for results specifically related to this agency; if any.
- Results of the Federal Procurement Data V&V.
- Results of the A-123 Internal Control Assessments; for any cycles and findings specifically related to the DATA Act operating environment.
- Results of the ERM agency risk profile process for cycles and business processes within the scope of the DATA Act operating environment.
- Any additional assessments related to the systems, data, processes, or stakeholders within the DATA Act operating environment.

The baseline will also include a snapshot of current internal control structures, both on the existing FFATA reporting side and the newer DATA Act reporting side. The result will be an assessment of the current quality level of data reported to USAspending.gov.
D. Develop a Quality Plan

The final cornerstone of the agency Data Quality Framework is to develop a plan for increasing the quality of the data submitted for publication on USAspending.gov. This involves three steps; conducting a risk analysis to identify gaps, developing procedures to address gaps identified, and establishing monitoring processes.

i. Assess Risk
To improve the quality of federal spending data, WNB will develop and utilize a risk-based approach for assessing the existing processes and systems used to compile spending data and assess the probability of occurrence and impact of inherent and potential risks. The risk assessment process facilitates the identification of risks related to federal spending information, rating of risks identified and rating the probability of occurrence and impact of these risks. The identification of the risks related to the quality of federal spending information will provide a basis for developing a comprehensive approach to reducing data quality risks and a mitigation strategy to improve the quality of federal spending data shared with the public.

For the purposes of developing the risk-based approach, the Department will limit the scope of the approach to the 57 federal spending elements submitted to USAspending.gov in response to the DATA Act by WNB. We will leverage the work and results of the analysis to develop a risk-based approach for assessing existing processes and systems. The risk-based approach will focus primarily on significant data quality and integrity problems, such as the timeline for integrating the award identifier and Aggregated Direct Payments. Additional activities will focus on data submission from the business warehouse to Treasury’s Broker.

Identified risks will be scored based on the probability of occurrence of the risk and the impact of the risk. Impact is based on the materiality, as determined by the agency and approved by the SAO. Materiality will be both qualitative and quantitative dependent on the nature of the data element or attribute. Because this is a subjective process, the agency will leverage some of the tools and techniques used to assess risk under the previously executed as part of the OMB Circular A-123, Management’s Responsibility for Internal Control, Appendix A12, Assessment, as well as tools and techniques used to perform the risk profile for ERM.

ii. Address Gaps
The Department of WNB will focus on high-risk areas by performing a Root Cause Analysis for each identified risk, develop a risk mitigation strategy, and establish a process for monitoring progress to reduce the risks, thereby improving the quality and integrity of the data shared with the public. This will include

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12 Risk assessments conducted under the revised 2018 Circular A-123, Appendix A are not explicitly defined by OMB; however, this agency will leverage existing practices.
sample testing for key attributes in the high-risk areas and it may be supplemented by the implementation of additional preventative controls, if applicable.

iii. Continuous Monitoring
WNB will monitor financial and award data quality for accuracy, timeliness, and completeness utilizing existing reviews, processes, testing, and risk mitigation activities to the greatest extent possible. WNB will monitor the plan throughout FYs 2019, 2020, and 2021 for updates based on new reports and the results of testing. Updates to existing procedures or development of new ones will be dependent on the periodic review of the DQP.

IV. Conclusion

In addition to sharing the Administration’s commitment to increasing accessibility to Government spending data, ensuring the public trust and establishing a system of transparency, public participation, and collaboration, WNB is committed to ensuring successful transformation across this agency to yield real and lasting improvement to the spending data quality of our organization. Our governance structures, plans for immediate action, and monitoring strategy – outlined in this Data Quality Framework – will improve the quality of spending data, address known deficiencies, and facilitate a greater public understanding of the programmatic results we achieve and the value of our business operations.

The results of the analysis conducted in accordance with this framework are included in Appendix II, however will be reviewed annually through FY 2021, at a minimum, for appropriateness and potential updates.
Appendix I

List of Key Data Elements

For the purposes of the WNB DQP, the chart below contains the data elements considered key to meeting the DATA Act reporting objectives for the respective record. Additional elements may be added dependent on the results of the risk analysis. These fields are considered accurate within the reported record when the value provided for DATA Act submissions matches to the authoritative source.

✓ – Identifies elements included in existing quality procedures (e.g., Governmentwide Treasury Account Symbol Adjusted Trial Balance System [GTAS], FAR validations, or annual V&V assessment) and indicates that duplicative and/or additional testing for the sole purpose of DATA Act reporting is not necessary based on OMB M-17-04.

X – Identifies elements not currently included in a government-wide or agency-specific data quality requirement and as a result, the element may be at higher risk for not addressing data quality standards.

∞ – Identifies elements serving as a primary link between Files that shall be assessed based on effectiveness in linking the files.

<table>
<thead>
<tr>
<th>Data Element Labels</th>
<th>File</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D1</th>
<th>D2</th>
<th>E</th>
<th>F</th>
<th>Link</th>
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<tr>
<td>Allocation Transfer Agency Identifier</td>
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<td>Contract Authority Amount Total CPE</td>
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<tr>
<td>Spending Authority From Offsetting Collections Amount Total CPE</td>
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<td>Other Budgetary Resources Amount CPE</td>
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</tr>
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</tr>
<tr>
<td>Gross Outlays Delivered Orders Paid Total FYB</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>US$GL 490800 Authority Outlayed Not Yet Disbursed CPE</td>
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<tr>
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<td>Federal Award Identification Number (FAIN)</td>
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<td>Unique Record Indicator (URI)</td>
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Scenario 5
Appendix II

**FY 2019 Department of WNB Data Quality Baseline**

Based on the results of the FY 2019 Department of WNB Data Quality Baseline Assessment, our agency has determined that the Financial Assistance and IT cycles carry the largest risk to meeting our DATA Act reporting objectives.

However, an assessment of their respective corrective action plan’s lead-time, resource requirements, and ancillary impacts has led the SAO to conclude that WNB will focus the FY19 efforts on remediating or lowering the DATA Act IT risks. In the meantime, WNB will develop a V&V assessment tool for implementation in the financial assistance community. The results of the assessment will provide the agency with targeted weaknesses for correction in out years.

### FY 2019 Agency Data Quality Baseline

<table>
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<tr>
<th>Assessable Units (AU)</th>
<th>Weight</th>
<th>Blended Cycle Risk Rating</th>
<th>Materiality</th>
<th>Compliance</th>
<th>Human Capital</th>
<th>Centralized/Decentralized</th>
<th>Recent Process Changes</th>
<th>Complexity</th>
<th>Information Technology</th>
<th>Known Deficiencies</th>
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<td>DATA Act Operating Environment</td>
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<td>1 3 2 1 5 3 1 2</td>
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<td>Financial Reporting</td>
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</table>

Average Risk: 2.98

Total AU: 7

% of Total: 100%

**Key**

- **Low Risk**: Risk ratings from 1 up to 2.24
- **Moderate Risk**: Risk ratings from 2.25 up to 3.74
- **High Risk**: Risk rating from 3.75 up to 5

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Illustrative Scenario 6: Department of NCR

The following DQP outline was developed for a midsize agency with a significant grant and loan portfolio and a maturing ERM capability. Readers may be able to leverage some of the approaches or methodologies described in this scenario depending on their DATA Act operating environment.

I. Overview

The DATA Act established requirements for agencies to link financial and award data to promote open data transparency. OMB issued additional requirements in M-17-04 and under Circular A-123 Appendix A, Management of Reporting and Data Integrity Risk, issued in June 2018, to help ensure all reported data are of sufficient quality to provide visibility to taxpayers as well as enable government leaders to make informed decisions for achieving mission outcomes.

One of the OMB requirements is for agencies to develop a DQP in support of achieving the objectives of the DATA Act. The purpose of the plan is to help guide the implementation of effective risk management, including internal controls, to achieve quality reporting of financial data.

This document serves as Department of NCR’s framework for ensuring data quality efforts, including the DQP for externally reported financial data, are aligned with the Department’s mission objectives, and informed by risk. NCR has enterprise-wide strategic objectives focused on strengthening the quality, accessibility, and use of data. These objectives include but are not limited to externally reported financial data, which is the focus of the DATA Act.

Department of NCR will use this framework to guide the development and implementation of the DQP in support of externally reported financial data, as well as to guide all other Department risk management strategies and internal control activities related to data quality.

II. Enterprise View of Data Quality

As NCR matures its ERM capability, risk information and enterprise-wide risk management strategies will increasingly guide decision-making across throughout the organization. This includes balancing consideration of risks, strategic mission priorities, and the focus of internal controls, across all strategic, operational, compliance and reporting objectives.

The newly issued OMB Circular A-123, Appendix A reinforces this approach. It provides greater flexibility than before in requirements related to internal controls over data and reporting so agencies can most effectively prioritize resource allocations to ensure successful mission delivery. The newly issued guidance builds on prior OMB guidance.
(M-17-04) that supports agencies’ use of existing statutory and regulatory approaches for data quality in meeting the DATA Act quality efforts.

Department NCR’s enterprise risk appetite and tolerances, as well as integrated risk portfolio will be used to ensure the appropriate balance of risk management activities related to data quality. This includes balancing cost, performance, and risk considerations related to financial data management activities and non-financial (largely performance) data management activities. Given limited Department resources, data management activities must be aligned across the enterprise to maximize the value of NCR’s efforts to strengthen the quality, accessibility, and use of its data.

III. Data Quality Internal Controls

To provide open data transparency as well as enable leaders and stakeholders to make informed decisions, Department of NCR data are managed and reported internally and externally. These activities can be grouped into four broad categories:

<table>
<thead>
<tr>
<th>External Financial Data</th>
<th>External Non-Financial Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Includes DATA Act requirements, DQP, agency financial reports and budget</td>
<td>• Includes Government Performance and Results Act requirements, strategic and annual plans/reports</td>
</tr>
<tr>
<td>• Supported by Internal Controls Over Financial Reporting (ICOFR)</td>
<td>• Supported by internal controls over data sources /management including grant/loan recipient performance data /procurement V&amp;V data</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Internal Financial Data</th>
<th>Internal Non-Financial Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Includes spending plans, operational data on expenditures</td>
<td>• Includes operational plans, program and management performance and risk data</td>
</tr>
<tr>
<td>• Supports internal controls over operations including grant/contract/loan monitoring</td>
<td>• Supports internal controls over strategic, program, and risk management initiatives including grant/contract/loan performance monitoring</td>
</tr>
</tbody>
</table>

IV. Framework for Data Quality Management

Step 1 – Governance

- Create linkages between existing bodies and offices within NCR to improve communication and coordination across all data quality efforts. Leverage existing Data Strategy Team to help promote consistent approaches and discussions of data management—completeness, timeliness, accuracy, and quality—across external and internal, financial and non-financial data categories.
• Integrate data quality into ERM and internal control governance discussions to promote strategic, coordinated decisions on data management activities including risk treatments, internal controls, and control monitoring.

Step 2 – Identify Objectives

• Define Department of NCR’s overall reporting objectives with respect to the DATA Act. Leverage the GAO Green Book, Standards for Internal Control in the Federal Government and OMB Circular No A-123, Management’s Responsibility for Enterprise Risk Management and Internal Control.
• Ensure DATA Act and other data quality objectives are aligned to NCR’s Strategic Plan goals and objectives including those focused on strengthening the quality, accessibility, and use of data at the enterprise level. Objectives for individual offices should cascade down the organization from the Department-level objectives, and capture the unique functions, statutory, regulatory, and business processes of those offices in support of the broader mission.

Step 3 – Risk Identification and Assessment

• Each office should identify and conduct an assessment of the most significant risks to achieving its unique data quality objectives. Materiality as well as other quantitative and qualitative factors will be used to evaluate the likelihood and potential impact of risks.
• Develop an integrated portfolio view of the significant risks that may affect external and internal, financial and non-financial data. This assessment should include consideration of existing risk treatments.

Step 4 – Risk Management

• Incorporate data quality into ERM discussions and decisions on risk appetite and tolerances.
• Department of NCR enterprise risk appetite and tolerances will guide risk management decisions across and at lower levels of the organization. Each office should align data management activities to risk appetite and tolerances. This includes developing target risk levels and implementing risk treatments (including internal controls to ensure data quality) to achieve those targeted levels of risk.

Step 5 – Monitoring Controls and Providing Assurance

• Each office should monitor and test the key internal controls in their risk treatment strategies. The number of data quality controls tested and samples taken will be informed by the office’s risk management strategy and the enterprise-wide portfolio view of data quality risk. To maximize value, NCR seeks to achieve a strategic balance in its implementation of internal controls and testing over the various external and internal, financial and non-financial data.
• Department of NCR will leverage existing internal control processes including testing techniques, templates, and sampling approaches to support monitoring of all data quality controls including DATA Act implementation.
• Department of NCR will document the specific controls and monitoring procedures for the DATA Act in its DQP.
• Deficiencies related to external and internal, financial and non-financial controls will be reported, aggregated, and analyzed across the enterprise to inform NCR’s overall management assurance statement regarding the efficiency and effectiveness of reporting.

Step 6 – Remediating Deficiencies and Continuous Improvement

• Offices will implement corrective actions to remediate data quality internal control deficiencies.
Exceptions Representing Valid Business Processes and Statutory Allowances

I. Introduction

The DATA Act provided a unique opportunity to present the lifecycle of a Federal dollar through Federal awards. As the statutes, regulations, and policies governing the integrity of such processes differ across business lines, presenting such data in a comprehensive and cohesive view required making adjustments in the collection of such data. This section of the Playbook is designed to provide oversight and compliance managers with examples of such variations as described in each condition.

The examples here are drawn from existing oversight and compliance reviews or agency-specific internal control processes over Files A, B, and C in preparation of submission to Treasury’s Broker and linkage to award files. The limitations present in the timing and reporting structure of the initial DATA Act implementation has created opportunities for further improvements. In the interim, this Playbook provides context around data differences, context that cannot be easily understood from a comparison of data elements but for which there is longstanding and recognized policy or process rationale.

As used in this Playbook, the terms ‘explainable warnings’, ‘valid variances’, and ‘justifiable exceptions’ are all used to communicate that there is a policy basis for dismissing a system-generated warning (edit check) that is limited to quarterly comparisons of data across all files. As such, the Broker warnings may not indicate inaccuracies in the data, as the warning logic cannot assess all possible policy parameters. This is not a quality assessment but rather an indication of an anomaly. Agencies can rely on existing guidance and regulation citations to direct review teams for reference and avoid developing additional documentation requirements, unless required.

This list IS NOT ALL-INCLUSIVE but rather provides examples of when technology warnings may not actually be based on any vulnerabilities or risk. Future updates to the Broker may change, add to, or mitigate this list.

Explainable warnings include:

- **File Warnings:** An attribute(s) within an individual record that does not meet the criteria of a validation rule in the agency’s quarterly assurance process or in the Broker, but are either accurate per the authoritative source or are an allowable option based in policy or regulation.

- **Cross-File Warnings:** The corresponding record in one file does not match either the primary key or all comparable data fields (e.g., TAS, Award ID, obligation amount) in the cross-file validation; however, despite the mismatch, the submitted record itself is valid.

- **Data Fixes:** This final category represents examples of options agencies may take to correct critical errors that must be taken to correct data that would otherwise generate
a critical error. This is in contrast to the file and cross-file warnings, which are groups of variances that require explanation, but do not require that the input be changed, as they do not represent critical errors.

The following displays possible explainable differences for each DATA Act file, by the warning type.

II. File A

A. File Warnings

There are no significant examples of warnings specific to File A that are related to business processes, policy, or regulation.

B. Cross-File Warnings

File A to B Variances Due to prior year adjustment (PYA) Variances (Broker Validations A18, A19, and A35)

- Variances between File A and File B will be noted by Treasury’s Broker when USSGL accounts 48XX-49XX are submitted with a PYA attribute of ‘B’ or ‘P’. In the GTAS Adjusted Trial Balance System, these amounts are cross-walked to Line #1020 (Adjustment to unobligated balance brought forward, Oct 1) on the standard form (SF)-133 instead of the normal Obligations Incurred, Recoveries, or Gross Outlays lines. Since the PYA attribute is not part of the File B submission, the calculated change in GL balances will not reconcile to the SF-133 lines. When comparing File A to File B, the Broker will generate warnings for these explainable differences in these cases based on the type of balance submitted: Outlays (A18), Obligations incurred (A19), and Deobligations, Recoveries, and Refunds (A35).

C. Data Fix

There are no significant examples of critical errors specific to File A that would require agencies to update the input data and are related to business processes, policy, or regulation.

III. File B

A. File Warnings

Program Activity Validation (Broker Validation B9)

- While OMB and Treasury have a process to obtain updates to the list of program activity codes and names, there are instances where valid program activities were not included on the most recent update. Therefore, explainable differences are observed in cases where a B9 warning is received even though the program activity is valid as confirmed with the agency budget office and OMB.
- Final funding allocations for centrally funded activities are not known until the Current Plan is finalized.
File B to GTAS Variances (Broker Validations B14 and B15)
- When the PYA attribute scenario exists in File A generating an A19 warning (see above), the agency will incur an explainable difference for the corresponding B14 (direct) and/or B15 (reimbursable) warning due to the Broker validation comparing the obligations for those TAS in File B to GTAS.

B. Cross-File Warnings
File A to B Variances Due to PYA Variances (Broker Validations A18, A19, and A35)
- See Section II.B for details.

File A to B Variances Due to Program Activity Rounding (Broker Validations A18, A19, and A35)
- For agencies with Program Activity allocations, small rounding differences (e.g., one or two cents) explainable differences may be noted when the Broker flags warnings in comparing the Outlays (A18), Obligations incurred (A19), and Deobligations, Recoveries, and Refunds (A35) reported by the agency in File B to File A.
  o Example: Funds for centrally funded initiatives come from a number of contributing program activities on a pro-rata basis; the obligations for those activities must be re-allocated back to the contributing program activities on the same pro-rata basis. This causes slight explainable rounding differences when the Broker compares File A to File B.

C. Data Fix
Program Activity Validation
- When obligation activity has not yet occurred for a TAS reported in File A; there will be no corresponding File B record. To pass the critical error Broker validation, comparing all TAS in File A to File B (A30), agencies must insert a row into File B (manually or through system configurations) with a zero dollar balance and use the “Other/Unknown” program activity code and name. These rows are reported with “0000” in the program code and “000” for the OC. For these explainable differences, the Broker does not display a warning if the other/unknown values are submitted and the row contains all zero balances but review of the File will show the other/unknown values.
- It is possible to have a reportable record in File C associated with a TAS and OC combination that does not exist in File B. This explainable difference can be the result of an initial obligation being recorded in one quarter and either corrected or deobligated in a subsequent quarter. However the Broker’s Cross-File, comparison will trigger this as a critical error (B20) when there is no corresponding File B TAS and OC combination. Agencies can mitigate this error by adding (manually or through system configurations) a corresponding zero balance record to File B with the other/unknown program activity name and codes.
  o Example, FY 2018 TAS obligation recorded for $100 to OC 252 in Q2 and this is the only transaction for this TAS and OC combination. Correction of
the OC from 252 to 257 was posted in Q3. As a result, there is reportable activity in File C for that TAS and OC combination. Yet, the beginning and ending balances are both zero for the TAS and 252 OC, preventing the need for a File B record.

IV. File C

A. File Warnings
There are no significant examples of warnings specific to File C that are related to business processes, policy, or regulation.

B. Cross-File Warnings
Reporting Threshold (Broker Validations C11, C8, and/or C23)

- 48 CFR (the FAR) does not require agencies to report contract actions below the micro-purchase threshold (MPT). The broker compares File C with File D1 and as a result, identifying these explainable differences and will generate warnings (C11 and C23) when a PIID is found in File C under the MPT and no corresponding PIID is found in File D1 (C11 and C23).
- Firm fixed price contract actions that meet the simplified acquisition threshold and are not complex can have funds deobligated after the final invoice payment without requiring a contract modification. In these cases, the explainable difference is between the File C entry for a deobligation without a corresponding File D1 record in the period of the deobligation, triggering a Broker warning (C11 and C23).
- Financial assistance awards under the reporting threshold are not required to be reported in File D2; however, may be determined to be reportable for File C. This explainable difference will result in Broker warnings for the cross-file comparison (C8 and C23).

Procurement: Post Date and Award Date Differences (Broker Validations C11, C12, and/or C23)

- The quarterly nature of the DATA Act reporting introduces timing differences in reporting across files, and these differences may not require further explanation or documentation. If documentation is required, it should be done in accordance with policy or internal controls. Financial obligations are recorded in the financial system upon receipt. The FAR requires reporting of contract obligations within certain timeframes (3-30 days depending on FAR flexibilities). A contract could be awarded in Q2 and reported to FPDS-NG to meet FAR requirements yet the nature of the financial reporting is such that the financial obligations are recorded in Q3. Likewise, a contract for an urgent and compelling need could be awarded and recorded in the financial system before it is required to be recorded in FPDS-NG, crossing DATA Act reporting quarters. As the broker matching occurs within a single quarter, the explainable difference will generate a warning (C11, C12, and C23) in the current reporting period.
- When a TAS is canceling, the outstanding unpaid obligations are closed out in the financial system in the current reporting period (in accordance with A-11),
triggering a reportable File C record. If the deobligation is for canceling funds on a contract, there will be no corresponding contract action in File D1 until the FAR administrative closeout procedures (in another reporting period), including any audits or litigation, have been completed. As the broker matching occurs within a single quarter, the explainable difference will generate a warning (C11, C12, and C23) in the current reporting period.

Financial Assistance: Post Date and Award Date Differences (Broker Validations C8, C9, and/or C23)

- Some entitlement programs are authorized via statute to make funds available to the recipient on the first day of the quarter. The agencies with these programs certify the funds in the period prior to their availability to the recipient with a ‘release date’ corresponding to the date it is available for the recipient. As a result of this explainable difference, the File C obligation reported in the current period will have no corresponding File D2 award, which will trigger Broker warnings (C8 and C23). The reverse will occur in the following reporting period when the File D2 record is present without a corresponding File C record for that award (C9 and C23).

- Some agencies release the Notice of Award to recipients prior to the award start date (e.g., up to 15 days). If this activity crosses quarters and explainable difference is noted where the obligation post date will be associated with a File C record for one period (C8 and C23 warnings in the first period) and the corresponding File D2 record will appear unmatched in the subsequent period (C9 and C23 warnings in the subsequent period).

- When a TAS is canceling, the outstanding unpaid obligations are closed out in the financial system in the current reporting period (in accordance with A-11), triggering a reportable File C record. There is no corresponding award record in File D2 for that single quarterly reporting period, as financial assistance will keep the award open administratively until it has satisfied the agreement’s closeout procedures. As the broker matching occurs within a single quarter, the explainable difference will generate a warning (C8, C9, and C23) in the current reporting period
  - Example: Closeouts for awards can be delayed due to award audits or pending litigation that would prevent final closeout ahead of the fund cancellation.

C. Data Fix
   Program Activity Validation

- See section III.C for details on the B20 validation data fix.

V. File D1

A. File Warnings

There are no warnings for File D1 in the DATA Act Broker as these are based on the authoritative source for procurement (FPDS-NG). Records that pass FPDS-NG
validations in accordance with the FAR are passed to USAspending.gov on a daily basis as authoritative.

B. Cross-File Warnings
   Reporting Threshold (Broker Validations C11 and/or C23)
   • See section IV.B for details

   Post Date and Award Date Differences (Broker Validations C11, C12, and/or C23)
   • See section IV.B for details

   Award ID Referential Integrity (Broker Validations C11, C12, and/or C23)
   • To reduce administrative burden and expedite mission delivery, the FAR provides agencies with the flexibility to do “express reporting” (FAR 4.606). Such reporting will result in one contract action record in FPDS-NG but multiple financial obligations in the financial system (for example, purchase of prosthetics). This explainable difference will generate warnings (C11, C12, and/or C23) as a result of this flexibility.

C. Data Fix
   Any future changes to capture data or reporting would need to occur when the data are generated as no edits to D1 procurement data can be made without appropriate review at the source.

VI. File D2

   A. File Warnings
   There are no examples of warnings specific to File D2 in the DATA Act Broker after file generation, as these validations are performed in accordance with the FABS validation rules. Records that pass these validations are interfaced to USAspending.gov to populate File D2 in accordance with the appropriate reporting period action date.

   B. Cross-File Warnings
   Reporting Threshold (Broker Validations C8 and/or C23)
   • See section IV.B for details.

   Post Date and Award Date Differences (Broker Validations C8, C9, and/or C23)
   • See section IV.B for details.

   Administrative Modifications
   • Non-monetary award modifications or corrections will populate in File D2 for the quarter associated with the action date and may represent explainable differences, as they are not expected to have a corresponding record in File C.
     o Example: Non-financial closeouts where funds have already canceled and been removed from the finance system. The current period File D2 entry represents a valid administrative modification.
Example: Modifications processed to extend the period of performance are considered (among many other examples) as administrative only, with no expected corresponding File C record. The current period File D2 entry represents a valid administrative modification.

Award ID Referential Integrity (Broker Validations C8, C9, and/or C23)
- Some agencies have specific statutory authority to report financial assistance awards in a consolidated manner to reduce reporting burden. The result is one record in the period’s File D2 and many transactional records in File C, or vice versa, depending on the agency’s situation. The one-to-many relationship is an explainable difference that may trigger Broker warnings on the referential integrity and will generate warnings (C8, C9, and/or C23).

C. Data Fix
Data submitted to FABS for validation in accordance with existing FFATA guidance is not available for edit at the point of quarterly DATA Act reporting. Any necessary changes identified through reconciliations or Broker cross-file validations should be referred to the financial assistance stakeholders for review and corrective action determination if a file needs to be resubmitted to FABS and a new File D2 generated.

VII. File E

A. File Warnings
There are no examples of warnings specific to File E in the DATA Act Broker. Per the FAR, agencies “are not required to address data for which the agency would not normally have supporting information, such as the compensation information required of contractors and first-tier subcontractors.” In addition, OMB Circular A-123 Appendix A provides:

“Consistent with terms and conditions of Federal awards, entities receiving federal awards are required by 2 C.F.R. Part 25 and the FAR to submit accurate data to the SAM and the FSRS maintained by the GSA. The quality of this data is the legal responsibility of the recipient. GSA provides an assurance statement that the systems are maintained appropriately and can therefore be used for public reporting. Agencies are responsible for assuring controls are in place to verify current registration in SAM at the time of the financial assistance award. Pursuant to 2 C.F.R. Part 200.513, agencies are responsible for resolving audit findings which may indicate if recipients are not complying with their requirements to register or report Subawards. Agencies are not responsible for certifying the quality of data reported by awardees to GSA and made available on USAspending.gov.”

B. Cross-File Warnings
There are no cross-file validations between File E and any other file.

C. Data Fix
The agency has no DATA Act action or responsibility on this file.

VIII. File F
A. File Warnings
There are no examples of warnings specific to File F in the DATA Act Broker. Per the FAR, agencies “are not required to address data for which the agency would not normally have supporting information, such as the compensation information required of contractors and first-tier subcontractors.” In addition, OMB Circular A-123 Appendix A provides:

“Consistent with terms and conditions of Federal awards, entities receiving federal awards are required by 2 C.F.R. Part 25 and the FAR to submit accurate data to the SAM and the FRSR maintained by the GSA. The quality of this data is the legal responsibility of the recipient. GSA provides an assurance statement that the systems are maintained appropriately and can therefore be used for public reporting. Agencies are responsible for assuring controls are in place to verify current registration in SAM at the time of the financial assistance award. Pursuant to 2 C.F.R. Part 200.513, agencies are responsible for resolving audit findings which may indicate if recipients are not complying with their requirements to register or report Subawards. Agencies are not responsible for certifying the quality of data reported by awardees to GSA and made available on USAspending.gov.”

B. Cross-File Warnings
There are no cross-file validations between File F and any other file.

C. Data Fix
The agency has no DATA Act action or responsibility on this file

IX. Contract Policy Clarifications

The following are several examples where oversight reports included observations that have mischaracterized explainable differences as inaccuracies. The following policy context is provided for these observations in an attempt to provide information on the policy, process, and technology solutions that support reliance on the data quality in a dynamic operating environment.

A. Vendor Information
- Contractor information collected in FPDS-NG is based on the contract file at time of award, which uses the contractor’s unique entity identifier and associated information at the time of the contract award. Such information, along with other statutorily required registration data, may change over time. Such changes will be reflected in the contract record if appropriate modifications are warranted. As FPDS-NG is the authoritative data source for US Federal procurement, including display on USAspending.gov and DATA Act reporting, the contractor information in FPDS-NG is the authoritative data for that contract. Contractor information on USAspending.gov is sourced directly from FPDS-NG and as a result, comparison of contractor information from USAspending.gov to the SAM or to the contract file or contract writing system may return explainable differences and discrepancies as FPDS-NG is the authoritative source for contract awards.
As FPDS-NG records data at the time of award until appropriate contract (or task order) adjustments are made, there may be differences in information on a task/delivery order, blanket purchase agreement (BPA), or a BPA call reported to FPDS-NG (File D1) and the contractor information in SAM. The task/delivery order contractor information will be aligned to the information on the base (referenced indefinite delivery vehicle) award, not the vendor’s current registration in SAM. As FPDS-NG is the authoritative source for procurement data there is no additional review of SAM to USAspending.gov required and it risks returning information or observations that are not aligned with regulatory requirements.

Similar to the previous two examples, comparing addresses for a contractor across multiple data sources may return explainable differences. The SAM must collect multiple addresses for companies seeking contracts from the Federal government. These include the physical address of the company’s location, the mailing address where official documents are to be sent, and even a payment address for payments that are not electronic. The contract documentation may include yet another address, that of the place of performance of the predominance of the contract. Each is based in certain regulatory or statutory needs. The FFATA and DATA Act require only two addresses to display to whom the money was awarded (physical address) and where the work is done (place of performance). As all these data are keyed together by the unique entity identifier and are used in different situations, comparing the addresses across multiple sources may return different information.

B. Deviations from Regulations

The FAR (48 CFR) provides agency officials with flexibilities designed to accommodate emergent needs, mission requirements, and statutory changes. Such flexibilities include the ability to deviate from the FAR (1.4). Deviations from the FAR may be granted unless they are precluded by law, executive order, or regulation. Some deviations may be authorized by the agency head (1.403) while others require consultation with the Civilian Agency Acquisition Council prior to authorization. In both cases, procedures and requirements for issuing and documenting such deviations can be found in the FAR (1.4) and questions regarding deviations should be directed to the agency Chief Acquisition Officer or SPE.

There are situations where the contract information reported to FPDS-NG will contain a generic name and address for privacy and security reasons. Explainable differences between File D1 and contract files\contract writing systems may be permissible as defined in FAR 4.605(c).

C. Administrative Modifications
- Non-monetary contract awards and modifications will populate in File D1 for the quarter associated with the action date and may not have a corresponding record in File C for the same period.
  - Example: Non-financial closeouts where funds have already expired and been removed from the finance system in a prior reporting period. The current period File D1 entry represents a valid administrative modification.
  - Example: Modifications processed to change the contracting officer are considered (among many other examples) as administrative only, with no expected corresponding File C record. The current period File D1 entry represents a valid administrative modification.

D. Appropriated funds – the FAR requires reporting of procurement actions using appropriated funds.

E. Emergency acquisitions – the FAR provides flexibilities to support contingency operations when the President issues an emergency declaration (among other items). When such flexibilities are authorized, numerous FAR requirements can be delayed and/or waived to include dollar thresholds, documentation, and reporting requirements, vendor registration requirements, etc. If such flexibilities are exercised, this may result in explainable differences between Files C and D1.
Award-Specific Considerations

Agency DATA Act submissions to USAspending.gov must comply with the requirements set forth in the following OMB Memorandums to provide reasonable assurances to their agency SAO in support of certification that the agency’s internal controls support the reliability and validity of the agency’s financial assistance award-level data reported:


For Financial Assistance certification process, the Treasury Broker generates File D2 based on the data previously provided to USAspending.gov via the ongoing submissions to the FABS for that quarter. File D2 is generated using the action date field by specifying the date range for the quarter in the Broker. File D2 is comprised of transactional financial assistance award data as well as aggregated financial assistance award data (depending on the agency). In accordance with OMB submission guidance, the agency should be submitting financial assistance data to the FABS at least twice each month. Any financial assistance data that cannot be reported at the transactional level should be aggregated according to DATA Act reporting requirements.

**Award ID Linkage:** The Broker executes cross-file validation rules to compare the financial data contained in File C with the financial assistance award data contained in File D2. There are several Broker cross-file validations for Files C to File D2 that validate the presence of an Award ID linkage between the files. The requirement to report the Award IDs (i.e., FAIN, and Unique Record Indicator [URI] for financial assistance) in File C necessitates that this Award ID linkage exist in agency financial and management systems.

**Agency Data Quality Processes:** Each agency is encouraged to develop and continuously refine its processes to collect, validate, and submit data to USAspending.gov via the FABS, and should consider developing a validation results report that identifies any withheld records that did not pass agency internal system validations or FABS validations. These reports can then be used to communicate issues to the data owners (e.g., at the Sub-Tier Agency level) and track each record to a resolution and explanation of why a resolution cannot be achieved within this quarterly submission.

**Scenarios Affecting Agency Ability to Establish File C to D2 Award ID Linkages:** Agency reviews of Award ID linkages between Files D2 and C may take into consideration that that there
are limited exceptions to any 100% match between files D2 and C. Possible explainable differences between the two files as are outlined below:

- **Timing Differences:**
  - One of the predominant cross-file alignment differences are timing differences due to the current business processes used by the finance and financial assistance communities for data reporting. After conducting analysis of prior periods, agencies may recognize that some timing differences will always exist between File C and File D2, but may expect that a great deal of these cross-file variances can be explained by examining additional reporting periods. Over time, agencies should re-examine these existing processes to ascertain whether they should be adjusted for DATA Act reporting or will remain explainable differences, based on the needs of the various communities.
  - For example: a financial assistance award is made on March 31 but does not get posted to the financial system until April 1, resulting in a Q2 record in File D2 and its corresponding File C record appearing in Q3. While these explainable differences may net between File C and File D2 within the FY, they will not align within the single certification periods.

**Additional Recommendations:** Each agency should ensure its financial assistance office(s) responsible for reporting to the FABS and USAspending.gov are engaged and attentive to upcoming updates and opportunities to review drafts of future releases of Treasury’s DAIMS and the technical reporting specifications for USAspending.gov. Agencies can request to be added to the distribution list for DAIMS releases by sending an email to the Treasury DATA Act Program Management Office (PMO) at DATAPMO@fiscal.treasury.gov. Additionally, given the reliance on the Federal Hierarchy (managed by GSA’s Integrated Award Environment) for DATA Act reporting, agencies should ensure their Change Control Board (CCB) representatives or their designees are current, engaged, and actively participating in CCB meetings. The Federal Hierarchy is comprised of Funding Agency Codes/Names, Funding Sub-Tier Agency Codes/Names, Funding Office Codes/Names, Awarding Agency Codes/Names, Awarding Sub-Tier Agency Codes/Names, and Awarding Office Codes/Names. Agency CCB reps (or their designees) should review their respective agency’s Federal Hierarchy data for accuracy as it is used for both financial assistance data reporting as well as procurement data reporting, and may be used in the near future to facilitate reduced agency reporting requirements. Agency CCB reps may email newsamtesting@gsa.gov to request help with reviewing their respective Federal Hierarchy data as well as to designate an alternate agency rep to manage the Federal Hierarchy data.
Certification Illustrative Examples

Certification of the quarterly DATA Act submission occurs in Treasury’s Broker, in accordance with the schedule released by Treasury, but no later than 45 days after the end of each quarter. The SAO must have a certifier role activated in the Broker to access this feature. Once all files pass critical errors and the cross-file validations have been performed, SAOs may select the certification option. Treasury provides SAOs comment boxes for each File (A – F) for the SAO to include additional language, if they so choose. Below are some examples that SAO may choose to provide in these comment boxes based on their discretion, knowledge of the status of the quality of their data, and reliance on controls in place over the reported data. The examples below are illustrative only, but demonstrate the flexibility provided by OMB to agencies in providing reasonable assurance over their data.

Scenario 1 - Agency XYZ

File A

As the SAO for XYZ’s DATA Act submission, I assure that File A, B, C, D1, and D2 of XYZ’s DATA Act submission for the X quarter of FY20XX are appropriately aligned and the underlying data are being managed in accordance with internal control practices outlined in OMB memoranda, Federal regulation, and OMB A-123. I assure that the DATA Act data are valid and reliable for display on USAspending. Pursuant to OMB Circular No. A-11 Section 130.2, for Executive branch agencies, XYZ reported all TAFS in each GTAS reporting window. The data in File A match the authoritative source (i.e., SF-133) and all required TAS are reported. Credit program financing account activity is not required to be reported under the DATA Act. Funding for these costs is reflected in the program account, per the Federal Credit Reform Act, as outlined in Section 185 of OMB Circular A-11.

File B

The total amount reported in File B matches the authoritative source (SF-133), Program Activity, and Budget Object Class Codes are reported based on the President’s Budget as executed and A-11 respectively.

The Program Activity names and codes are embedded in the President’s Budget. On a quarterly basis, agencies work with OMB to send updates to Program Activity through the BDR process in alignment with the President’s Budget. OMB then passes the Program Activity validation list to Treasury as the validation list for the Broker.

File C

All financial data, including the obligations in this file, are subject to management assurances under OMB Circular A-123. The data reported in File C match the authoritative source (i.e., agency financial systems). Agency submissions for the DATA Act pull data from multiple sources. The sources for Files C, D1, and D2 have different frequencies for updating the relevant data to USAspending.gov. These timing differences can result in data being
displayed at different intervals throughout the quarter, at times resulting in potential delays in awards matching across sources. There are a few records in Files C, D1, and D2 that are not linked directly. However, the steps management is taking to resolve these explainable differences are reasonable and sufficient.

**File D1**

The data reported pursuant to FFATA (P.L. 109-282) as amended by the DATA Act (P.L. 113-101) are sourced from FPDS-NG and the key data elements are aligned at the time of quarterly reporting. The data reported in File D1 are subject to internal controls based on FAR required V&V for the assurance over Federal procurement awards.

**File D2**

The data in File D2 match the authoritative source (i.e., agency award management systems) for award-level data and the authoritative source (i.e., SAM) at the time of award for prime awardee information.

**File E**

The data included in File E are subject to the internal controls of the system owner, the GSA in accordance with A-123. XYZ is relying on the assurance of GSA that data integrity processes are in place and align with A-123.

**File F**

The data included in File F are subject to the internal controls of the system owner, the GSA in accordance with A-123. XYZ is relying on the assurance of GSA that data integrity processes are in place and align with A-123.

**Scenario 2 - Agency MBT**

**File A**

Pursuant to OMB Circular No. A-11 Section 130.2, for Executive branch agencies, MBT reports all TAFSs in each GTAS reporting window, MBT assures DATA Act File A reconciles to the GTAS SF-133 per A-136 guidelines, and data is audited and subject to management assurances of internal controls over reporting under A-123.

**File B**

Pursuant to OMB Circular No. A-11 Section 130.2, for Executive branch agencies, MBT reports all TAFSs in each GTAS reporting window. MBT assures this data is audited and subject to management assurances of internal controls over reporting under A-123. MBT assured the Program Activity codes utilized in DATA Act File B are validated against the President's budget, and the OC codes cited are validated against A-11.

**File C**

MBT assures that data is audited and subject to management assurances of internal controls over reporting under A-123. Agency submissions for the DATA Act pull data from multiple
sources. Each of these sources has a different frequency for updating the relevant data to USAspending.gov. These timing differences can result in explainable differences for data being displayed at different intervals throughout the quarter, at times resulting in potential delays in awards matching appropriations account-level data. MBT is aware of a variance between our financial/procurement system and FPDS-NG with regard to the Parent Award ID.

File D1

Pursuant to the FAR and OMB memoranda beginning in 2009, MBT is required to submit annual FPDS-NG Data V&V Report to OMB and GSA. The report includes assurances over the timeliness and completeness of the data and sampling of the core DATA Act required data elements, comparing contract files to FPDS-NG. Agencies are not required by statute or policy to report awards below the MPT (as defined by FAR 2.101) or any classified, sensitive, or personally identifiable information. MBT is aware of a variance between our financial/procurement system and FPDS-NG with regard to the Parent Award ID.

File D2

MBT assures that data is audited and subject to management assurances of internal controls over reporting under A-123. MBT is reliant upon the validations within the FABS to ensure data follows the standard format.

File E

In FY 2016, the Procurement Management Review (PMR) Division of the Procurement Management Division (reporting directly to the GSA SPE in the Office of Acquisition Policy), Office of Government-wide Policy and the OCFO A-123 Internal Control Review team conducted parallel financial and acquisition reviews across the agency. PMR reviews assessed the effectiveness of internal controls over procurement management. By analyzing activities from both an acquisition and financial perspective, GSA addressed control issues that involved financial and acquisition functions. The SAM and FSRS successfully passed the security controls assessment at the Federal Information Processing Standards (FIPS) 199 Moderate impact level, in accordance with the Federal Information Security Management Act (FISMA) and National Institute of Standards and Technology (NIST) policy guidelines and GSA Security Assessment and Authorization (A&A) process. GSA has determined that the risk to Federal Agency operations, data, and/or assets resulting from the operation of the common controls of SAM and FSRS information systems are acceptable and meet all the security controls required for DATA Act reporting. Accordingly, agencies can rely on data from SAM and FSRS for DATA Act reporting.

File F

In FY 2016, the PMR Division of the Procurement Management Division (reporting directly to the GSA SPE in the Office of Acquisition Policy), Office of Government-wide Policy and the OCFO A-123 Internal Control Review team conducted parallel financial and acquisition reviews across the agency. PMR reviews assessed the effectiveness of internal controls over procurement management. By analyzing activities from both an acquisition and financial perspective, GSA addressed control issues that involved financial and acquisition functions. The SAM and FSRS successfully passed the security controls assessment at the FIPS 199...
Moderate impact level, in accordance with FISMA and NIST policy guidelines and GSA Security A&A process. GSA has determined that the risk to Federal Agency operations, data, and/or assets resulting from the operation of the common controls of SAM and FSRS information systems are acceptable and meet all the security controls required for DATA Act reporting. Accordingly, agencies can rely on data from SAM and FSRS for DATA Act reporting.

Scenario 3 - Agency ABC

The following comments apply to all Files in this submission for Agency ABC.

- **Timing Issues**: ABC submissions for the DATA Act pull data from multiple sources. Each of these sources has a different frequency for updating the relevant data to USAspending.gov. These timing differences can result in data being displayed at different intervals throughout the quarter, at times resulting in potential delays in awards matching appropriations account-level data.

- **Award ID Linkage**: As required in OMB Memorandum M-16-03 and M-17-04 on DATA Act reporting to USAspending.gov, agencies must link their financial account data to their the award data by carrying the Federal award ID in the agency financial system and using this to link with award data for reporting as of January 1, 2017. For data submitted prior to that date, award data may not be linked to financial account data.

- **Missing Awards**: ABC is not required by statute or policy to report awards below the MPT (as defined by FAR 2.101) or any classified, sensitive, or personally identifiable information.

Scenario 4 - Department of JFK

**File A**

Pursuant to OMB Circular No. A-11, Section 130.2, for Executive branch agencies, JFK reports all TAFSs in each GTAS reporting window. JFK assures DATA Act File A reconciles to the GTAS SF-133 per A-136 guidelines, and data is audited and subject to management assurances of internal controls over reporting under A-123. Optional Data: Some agencies have chosen to provide optional data elements not required when it is beneficial to their own recordkeeping or reporting purposes, or to pilot possible areas of expanded reporting capability. Financing Accounts & Program Accounts for Credit: Credit program financing account activity is not required to be reported under the DATA Act, and as a result, award information for certain contract costs paid out of those accounts will not appear to be directly linked to account data. Funding for these costs is reflected in the program account, per the Federal Credit Reform Act, as outlined in Section 185 of OMB Circular A-11.

**File B**

Pursuant to OMB Circular No. A-11, Section 130.2, for Executive branch agencies, JFK reports all TAFSs in each GTAS reporting window, JFK assures DATA Act File A reconciles to the GTAS SF-133 per A-136 guidelines, and data is audited and subject to
management assurances of internal controls over reporting under A-123. JFK assures the Program Activity codes utilized in DATA Act File B are validated against the President’s budget, and the OC codes cited are validated against A-11.

Financing Accounts & Program Accounts for Credit: Credit program financing account activity is not required to be reported under the DATA Act, and as a result, award information for certain contract costs paid out of those accounts will not appear to be directly linked to account data. Funding for these costs is reflected in the program account, per the Federal Credit Reform Act, as outlined in Section 185 of OMB Circular A-11.

Default Object Classes: Beginning balances brought forward from the prior FY do not have the associated OC due to known system limitations of JFK’s financial system.

On-Top Adjustments: The JFK is aware that some of the balances do not include OC details due to on top adjustments made during the GTAS reporting process outside of the financial system during the FY.

File C
Data Completeness:

• Award ID Linkage: As required in OMB Memorandum M-16-13 and M-17-04 on DATA Act reporting to USAspending.gov, financial account data must be linked to their award data carrying the Federal award ID in the agency financial systems and using this ID to link to awards as of January 1, 2017. For data submitted prior to that date, award data may not be linked to financial account data. The JFK is aware that the agency JFK was not appropriately reporting the PIID in FPDS-NG. As of May 1, 2018, JFK has implemented the new PIID logic in accordance with the FAR requirements.

• Parent Award ID: The JFK has implemented changes to begin capturing the federal award ID of the parent award owned by another agency in JFK’s financial system as of June 22, 2018. Award data prior to this date may not have other agency parent award information.

• Missing URI: As of Month X, 20XX, a URI field has been made available in the JFK’s financial system. The JFK is in the process of implementing changes to start populating this field.

• Timing Issues: The JFK pulls data from multiple sources for the DATA Act submission. Each of these sources has a different frequency for updating the relevant data to USAspending.gov. These timing differences can result in data being displayed at different intervals throughout the quarter, at times resulting in potential delays in awards matching appropriations account-level data

File D1
See Award ID Linkage and Timing Issues in File C Section.

Data Completeness:

• Micro-Threshold: As defined by FAR 2.101, JFK is not required by statute or policy to report awards below the MPT.
• PII: Agencies are not required to report classified, sensitive, or personally identifiable information.

• Inconsistent PIID Logic: The JFK is aware that JFK was not appropriately reporting the PIID in FPDS-NG. As of Month X, 20XX, JFK has implemented the new PIID logic in accordance with the FAR requirements.

File D2
See Award ID Linkage and Timing Issues in File C Section.

Data Completeness:

• Missing De-obligations: At this time, the JFK is aware that de-obligations are not always reported to the FABS. Corrective actions are in process to begin consistently reporting de-obligations in FY19.

• Incorrect Dollar Value: At times, obligation amounts have been reported to FABS as a rounded dollar value. As of Month X, 20XX, exact obligation amounts with dollars and cents will be reported.

• Missing URI: Beginning on Month X, 20XX, financial assistance data will begin to report relevant URI information to FABS.

File E

OMB has stated that the Department may certify based on GSA assurance per guidance in M-17-04.

File F

OMB has stated that the Department may certify based on GSA assurance per guidance in M-17-04.

Scenario 5 - Department of WNB

As the SAO for Agency WNB’s DATA Act submission, I assure that Files A, B, C, D1 and D2 of WNB’s DATA Act submission for the X quarter of FY 20XX are appropriately aligned and valid and reliable for display on USA spending.gov per OMB Circular A-123, Management’s Responsibility for ERM and Internal Control. Per OMB M-17-04, WNB relies on the internal controls of the system owners for Files E and F to ensure data quality.

Scenario 6 - Department of NCR

The Department of NCR considers the act of selecting the certification feature in Treasury’s Broker sufficient to indicate that the SAO has certified the data and therefore does not interpret the comment boxes provided to be necessary enhancements to the certification, unless otherwise noted by NCR to indicate an anomaly or exception.

File A
Agencies are not required by statute or policy to report awards below the MPT (as defined by FAR 2.101) or any classified, sensitive, or personally identifiable information. Agency submissions for the DATA Act pull data from multiple sources. Each of these sources has a different frequency for updating the relevant data to USAspending.gov. These timing differences can result in data being displayed at different intervals throughout the quarter, at times resulting in potential delays in awards matching appropriations account-level data.

Credit program financing account activity is not required to be reported under the DATA Act, and as a result, award information for certain contract costs paid out of those accounts will not appear to be directly linked to account data. Funding for those costs is reflected in the program account, per the Federal Credit Reform Act, as outlined in Section 185 of OMB Circular A-11.

As required in OMB Memorandum M-15-12 on Data Act reporting to USAspending.gov, agencies must link their financial account data to their award data using a Federal award ID as of January 1, 2017. For data submitted prior to that date, award data may not be linked to financial account data. Incomplete or missing Zip+4 and/or address data received from SAM.GOV was corrected where possible by using the United States Postal Service database. This correction also included incidental changes to place of performance and Congressional Districts. Data that could not be corrected, in some cases, was rejected by the USA Spending error checks and could not be included in the monthly submissions.
Glossary of Acronyms

A&A  Assessment and Authorization
AU  Assessable Units
ASA  Assistant Secretary for Administration
BPA  Blanket Purchase Agreement
BDR  Budget Data Request
CAR  Contract Action Report
CFDA  Catalog of Federal Domestic Assistance
CCB  Change Control Board
CFO  Chief Financial Officer
CFOC  Chief Financial Officer Council
CFR  Code of Federal Regulations
CIOC  Chief Information Officers Council
DATA Act  Digital Accountability and Transparency Act of 2014
DACP  DATA Act Control Plan
DAIMS  DATA Act Information Model Schema
DAWG  DATA Act Working Group
DCFO  Deputy Chief Financial Officer
DQP  Data Quality Plan
EE  Extended Enterprise
ERM  Enterprise Risk Management
FAIN  Federal Award Identification Number
FABS  Financial Assistance Broker Submission
FAR  Federal Acquisition Regulation
FFATA  Federal Funding Accountability and Transparency Act
FFMIA  Federal Financial Manager’s Information Act
FIPS  Federal Information Processing Standards
FISMA  Federal Information Security Management Act
FMFIA  Federal Managers’ Financial Integrity Act
FPDS-NG  Federal Procurement Data System- Next Generation
FSRS  FFATA Subaward Reporting System
FY  Fiscal Year
GAO  Government Accountability Office
Green book  Standards for Internal Control in the Federal Government
GSA  General Services Administration
GTAS  Government-wide Treasury Account Symbol
ICOFR  Internal Control Over Financial Reporting
ICOR  Internal Control Over Reporting
ID  Identification
IG  Inspector General
IGT  Intra-Governmental Transfer
IT  Information Technology
MPT  Micro-purchase Threshold
NAICS  North American Industry Classification System
NIST  National Institute of Standards and Technology
<table>
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<td>Object Class</td>
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<td>Procurement Instrument Identifier</td>
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<td>Program Management Office</td>
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Acknowledgments and Considerations

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