

# CIGIE FAEC Inspectors General Guide to Compliance under the DATA Act

Created by the CIGIE FAEC DATA Act Common Methodology Group December 4, 2020

#### **FOREWORD**

We are facing extremely challenging times and want to thank each and every one of you for your dedication and efforts as we continue to provide Government oversight.

~Our shared sense of humanity can take us far~

# **SUMMARY OF CHANGES**

UPDATE	DESCRIPTION	SECTION
NEW COVID-19 ELEMENTS	Additional DATA Act Elements to track COVID-19 spending: National Interest Action Code P20C (File D1) and Disaster Emergency Fund Code (Files B, C).	110
SCOPE	Updated and added flexibility of scope selection based on specific criteria.	120
FEDERAL SHARED SERVICE PROVIDER AUDIT	Updated guidance for Federal Shared Service Provider and Customer Agency IGs.	400
SUBMISSION TESTING	Updated guidance to determine completeness and timeliness of the submission.	600
MONTHLY SUBMISSIONS	New requirement for COVID-19 funded Agencies.	630
DATA ELEMENT TESTING & SCORING	Updated data elements and scoring to determine completeness, accuracy, and timeliness.	700 & 800
OUTLAY TESTING REQUIREMENTS	New requirement for COVID-19 funded Agencies.	750
QUALITY	Updated guidance to determine quality based on both statistical and non-statistical testing results.	800
REPORTING LANGUAGE & GUIDANCE	Increased standard reporting language and updated guidance for contents of IG reports.	900

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#### **ABBREVIATIONS & SHORT REFERENCES**

AICPA American Institute of Certified Public Accountants

**Award ID** Award Identification

CARES Act Coronavirus Aid, Relief, and Economic Security Act of 2020
CIGIE Council of the Inspectors General on Integrity and Efficiency

**COVID-19** Coronavirus Disease 2019

**DAIMS** DATA Act Information Model Schema

**DATA Act** Digital Accountability and Transparency Act of 2014

**DEFC** Disaster Emergency Fund Code

**DQP** Data Quality Plan

**ERM** Enterprise Risk Management

**FABS** Financial Assistance Broker Submission

**FAEC** Federal Audit Executive Council

**FAIN** Federal Award Identification Number

**FAR** Federal Acquisition Regulation

**FFATA** Federal Funding Accountability and Transparency Act of 2006 **FFMIA** Federal Financial Management Improvement Act of 1996

**FMFIA** Federal Managers' Financial Integrity Act of 1982 **FPDS-NG** Federal Procurement Data System – Next Generation

**FSRS** FFATA Sub-award Reporting System **FSSP** Federal Shared Service Provider

**GAGAS** Generally Accepted Government Auditing Standards

**GAO** Government Accountability Office

GTAS Government-wide Treasury Account Symbol Adjusted Trial Balance System

**IDD** Interface Definition Document

**IG** Inspector General

IGT Intragovernmental Transaction
MPT Micro-Purchase Threshold
NIA National Interest Action

OMB Office of Management and Budget
PIID Procurement Instrument Identifier
PMO Program Management Office

RSS Reporting Submission Specification
SAM System for Award Management
SAO Senior Accountable Official
SOC Service Organization Control
TAS Treasury Account Symbol
Department of the Treasury
URI Unique Record Identifier

**Working Group** FAEC DATA Act Working Group

- Accountability and Transparency Act of 2014 (DATA Act)<sup>1</sup> for the third required report, due November 8, 2021. Audit teams should adhere to the overall methodology, objectives, and audit procedures outlined in this guide to the greatest extent possible.

  Note: This Guide may be updated after issuance based on feedback from the IG community, Government Accountability Office (GAO), and other stakeholders.
- .02 This Guide presents a common methodology and reporting approach for the IG community to use in performing its mandated DATA Act work. However, we realize that each Federal agency presents a unique set of implementation challenges and risks. If necessary, audit teams may modify this guide, but must use professional judgment when designing alternative audit procedures. Audit teams must document the reasons for all deviations from the Guide.
- .03 The guidance herein was created by the Council of the Inspectors General on Integrity and Efficiency (CIGIE) Federal Audit Executive Council (FAEC) DATA Act Working Group (Working Group), which consists of nearly 230 auditors representing 53 IGs. The Working Group's mission is to assist the IG community in understanding and meeting its DATA Act oversight requirements by (1) serving as a working-level liaison with the Department of the Treasury (Treasury), (2) consulting with GAO, (3) developing a common approach and methodology, and (4) coordinating key communications with other stakeholders.
- .04 In a July 2020 report, GAO found that agencies reported varying levels of data quality for the 2019 testing and reporting period. Out of 51 IG reports reviewed:
  - > 37 IGs reported that data was of higher quality
  - > 11 IGs reported that data was of moderate or lower quality
  - > 47 IGs reported that data was submitted on time
  - ➤ 37 IGs reported that agencies properly implemented and used the data standards established by the Office of Management and Budget (OMB) and Treasury
- In addition, during 2019, IGs identified a Government-wide ambiguity issue with the Treasury DATA Act Program Management Office (PMO) definition for period of performance start date in the DATA Act Information Model Schema (DAIMS).<sup>3</sup> In March 2020, Treasury's PMO, in coordination with OMB, updated the definition for period of performance start date in the DAIMS and Federal Procurement Data System Next Generation (FPDS-NG) Data Element Dictionary to reduce ambiguity.

<sup>&</sup>lt;sup>1</sup> Public Law 113-101 (May 9, 2014)

<sup>&</sup>lt;sup>2</sup> GAO-20-540, DATA ACT: OIGs Reported That Quality of Agency-Submitted Data Varied, and Most Recommended Improvements (July 9, 2020)

<sup>&</sup>lt;sup>3</sup> The DAIMS gives an overall view of the hundreds of distinct data elements used to tell the story of how Federal dollars are spent. DAIMS standardizes data elements to link multiple domains across the Federal enterprise so the data can be used to support better decision-making. It includes artifacts that provide technical guidance for Federal agencies about what data to report to Treasury's PMO, including data element definitions, the originating award document/contract files for the data elements, and the submission format.

.06 Updates to this guide include input from IGs, GAO, OMB, Treasury PMO, agencies, and Congress. By incorporating changes based on lessons learned, this guide aims to ensure IG audits are comparable, useful, and meet the requirements of the DATA Act.

# 110 Background

- .01 The DATA Act was enacted on May 9, 2014, to expand the reporting requirements pursuant to the Federal Funding Accountability and Transparency Act of 2006 (FFATA). The DATA Act, in part, requires Federal agencies to report financial and award data in accordance with the established Government-wide financial data standards. In May 2015, the OMB and Treasury published 57 data definition standards (commonly referred to as data elements).
- .02 As of January 2017, OMB requires Federal agencies to report financial and award data in accordance with DATA Act reporting standards. Additionally, in May 2017, Treasury began displaying Federal agencies' data (in accordance with the DATA Act) on USASpending.gov, a publicly available resource for taxpayers and policy makers.
- The DATA Act also requires the IG of each Federal agency to audit 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, accuracy, timeliness, and quality of the data sampled. These mandatory reports must also include an assessment of the agencies' implementation and use of the Government-wide financial data standards.
- .04 The first set of IG reports were originally due to Congress in November 2016. However, since Federal agencies were not required to display spending data in compliance with the DATA Act until May 2017, IGs were authorized to provide Congress with the first required reports in November 2017, one year later than the due date in the statute, with subsequent reports due on a 2-year cycle, in November 2019 and November 2021. The letter memorializing this strategy can be found in Appendix 1.
- In April 2020, OMB issued M-20-21, *Implementation Guidance for Supplemental Funding Provided in Response to the Coronavirus Disease 2019* (COVID-19), which made changes to DATA Act reporting.
  - Agencies that received COVID-19 supplemental relief funding must submit DATA Act Files A, B, and C on a monthly basis starting with the June 2020 reporting period.
  - ➤ These monthly submissions must also include a running total of outlays for each award in File C funded with COVID-19 supplemental relief funds.
- **06.** Two additional data elements are significant in promoting full and transparent reporting of spending and will be tested under the DATA Act. The National Interest

<sup>&</sup>lt;sup>4</sup> Public Law 109-282 (September 26, 2006)

Action (NIA) code P20C was added to FPDS-NG to help identify procurement actions related to the COVID-19 response. Additionally, OMB M-20-21 requires agencies to use a disaster emergency fund code (DEFC) to include covered funds in the Coronavirus Aid, Relief, and Economic Security Act (CARES Act)<sup>5</sup> that are not designated as emergency pursuant to the Balanced Budget and Emergency Deficit Control Act of 1985,<sup>6</sup> in order to provide similar transparency for CARES Act funding. As such, there are now 59 applicable data elements to be tested for all agencies.

# 120 Objectives & Scope

- The objectives of this audit are to assess the (1) completeness, accuracy, timeliness, and quality of the financial and award data submitted for publication on USASpending.gov and (2) Federal agency's implementation and use of the Government-wide financial data standards established by OMB and Treasury.
- The scope of this audit is a fiscal quarter of agency financial and award data submitted for publication on USASpending.gov and any applicable procedures, certifications, documentation, and controls. Each IG will select its respective agency's quarter, but it must fall within the range of fiscal year 2020 third quarter through fiscal year 2021 second quarter. In selecting their scope, IGs must select a formal fiscal year quarter and, at a minimum, consider a quarter that:
  - Is representative of agency spending;
  - > Includes pandemic-related spending transactions, if applicable; and
  - > Allows sufficient time to meet the mandatory audit deadline.

Auditors should also consider the impact of unimplemented recommendations from prior DATA Act audits and resources needed for other mandatory reporting (i.e. Financial Statement, Federal Information Security Management Act, Management Challenges).

# 130 Methodology

- .01 The Working Group, in consultation with GAO, agrees that the type of engagement to be performed to satisfy the reporting requirements under the DATA Act is a performance audit in accordance with the requirements of Generally Accepted Government Auditing Standards (GAGAS). This guide does not replace or include all requirements of GAGAS. Audit teams are responsible for ensuring compliance with GAGAS.
- .02 Audit teams must adequately plan and document work performed to address audit objectives in accordance with GAGAS. Auditors should also assess and document

<sup>&</sup>lt;sup>5</sup> Public Law 116-136 (March 27, 2020)

<sup>&</sup>lt;sup>6</sup> Public Law 99-177 (December 12, 1985)

audit risk and the potential for fraud and abuse within the context of the audit objectives. Based on that risk assessment, auditors should design and perform procedures to obtain reasonable assurance of detecting instances of noncompliance with provisions of laws, regulations, contracts, or grant agreements that are significant within the context of the audit objectives.

- **.03** To accomplish the objectives:
  - **a)** Obtain an understanding of any regulatory criteria related to the agency's responsibilities to report financial and award data under the DATA Act (Appendix 2 contains a list of suggested criteria);
  - **b)** Review the agency's Data Quality Plan (DQP);<sup>9</sup>
  - c) Assess the internal and information system controls in place as they relate to the extraction of data from source systems and the reporting of data to Treasury's DATA Act Broker, in order to assess audit risk and design audit procedures; 10
  - **d)** Review and reconcile summary-level data submitted by the agency for publication on USASpending.gov for the quarter selected;
  - **e)** Review a statistically valid sample of financial and award data submitted by the agency for publication on USASpending.gov for the guarter selected;
  - **f)** Assess the completeness, accuracy, timeliness, and quality of the financial and award data submitted and sampled; and
  - **g)** Assess the agency's implementation and use of the 59 data elements/standards established by OMB and Treasury.
- .04 While the procedures herein provide consistency amongst IGs, they should not restrict an auditor from pursuing additional issues or concerns. If additional areas of concern are identified, the auditor should proceed according to his or her professional judgment.

200 PLANNING

During the audit planning phase, audit teams should leverage the understanding gained during the performance of previous DATA Act required reviews, and any subsequent reviews performed by the IG to plan the current audit, while keeping in mind the agency's implementation efforts may have evolved over time. Audit

 $<sup>^{7}</sup>$  Government Auditing Standards, GAO-18-568G (Washington, D.C.) (GAGAS) Chapter 8, par. 8.05-.06 & par.8.71.

<sup>&</sup>lt;sup>8</sup> GAGAS Chapter 8, par. 8.68-.69.

<sup>&</sup>lt;sup>9</sup> OMB M-18-16, "Appendix A to OMB Circular No. A-123, Management of Reporting and Data Integrity Risk," requires DATA Act reporting agencies to implement a DQP effective fiscal year 2019 through fiscal year 2021 at a minimum.

<sup>&</sup>lt;sup>10</sup> OMB Circular No. A-123, Management's Responsibility for Enterprise Risk Management and Internal Control (July 15, 2016) and Appendix A to OMB Circular No. A-123, Management of Reporting and Data Integrity Risk (June 6, 2018)

teams should develop and perform procedures to follow up on prior year findings, recommendations, and corrective actions.

- **.02** Additionally, during planning audit teams should gain and document an understanding of:
  - a) The agency's DQP.
  - **b)** Systems, processes, and internal and information system controls that facilitate reporting financial and award data in accordance with DATA Act.
  - **c)** Applicable laws, legislation, directives, and any other regulatory criteria and guidance related to the agency's responsibilities to report financial and award data under the DATA Act (Appendix 2).
  - **d)** Treasury's DATA Act Implementation Playbook version 2.0<sup>11</sup>
  - **e)** DAIMS version 2.0 (or current version of the DAIMS applicable to the quarter being tested). The data files included in the DAIMS are:
    - i. File A: Appropriations Account,
    - ii. File B: Object Class and Program Activity,
    - iii. File C: Award Financial,
    - iv. File D1: Award (Procurement),
    - v. File D2: Award (Financial Assistance),
    - vi. File E: Additional Awardee Attributes, and
    - vii. File F: Sub-Award Attributes.
    - Files A and B are summary-level financial data, while File C is reportable record-level data. Files A, B, and C are submitted by Federal agencies from their internal financial system(s).
    - Files D1 through F contain detailed information for record-level transactions reported in File C. Files D1 through F are submitted by external award reporting systems to Treasury's DATA Act Broker.
    - ➤ The Senior Accountable Official (SAO), <sup>12</sup> or designee, for each Federal agency is required to certify these seven data files for its agency's financial and award data to be published on USASpending.gov. The DATA Act Element Information Flow Diagram is shown in Appendix 3. Appendix 4, Mapping of Data Elements, details the 59 data elements to be included in testing and in which file each data element can be found.
    - The data in Files E and F remains the responsibility of the awardee in accordance with terms and conditions of Federal agreements. **Note:** It is

<sup>&</sup>lt;sup>11</sup> Treasury's DATA Act Implementation Playbook version 2.0 was issued in June 2016.

<sup>&</sup>lt;sup>12</sup> SAOs are high-level senior officials or their designees who are accountable for the quality and objectivity of Federal spending information. These senior leaders should ensure that the information conforms to OMB guidance on information quality and adequate systems and processes are in place within the agencies to promote such conformity. However, SAOs are not responsible for certifying the quality of data reported by awardees to the General Services Administration and made available on USASpending.gov.

optional for IGs to assess Files E and F as the quality of this data is the legal responsibility of the recipient and agencies are not responsible for certifying the quality of data reported by awardees. <sup>13</sup> However, agencies are responsible for assuring controls are in place to verify that awardees register in the System for Award Management (SAM) at the time of the financial assistance award. (See Section 300)

- **f)** The agency's financial and award information and environment, such as the:
  - i. Roles, responsibilities, and reporting relationships of the Federal agency, and its major components and/or bureaus;
  - Roles, responsibilities, and reporting relationships with all Federal Shared Service Providers (FSSP) used by the agency and its major reporting components and/or bureaus;
  - iii. Source systems for all financial and award data reported under the DATA Act;
  - iv. Impact of sensitive or classified information on these source systems;
  - v. Controls over these source systems, the nature and extent of control testing performed over the source systems, and the results of that testing; and
  - vi. Processes, systems, and controls the agency has in place to manage and report financial and award data under the DATA Act.
- Audit teams should inquire of management and consider the results of any attestation engagements, performance audits, or other studies that directly relate to the objectives of the audit, including whether related recommendations have been implemented. Audit teams should also evaluate whether to use the work of other auditors to address some of the audit objectives.
- .04 Performing this audit may require techniques or methods that require a specialist. Specialists include, but are not limited to, statisticians and information technology experts. If auditors intend to use the work of a specialist:
  - **a)** Assess the specialists' professional qualifications and independence in accordance with GAGAS 4.12 and 8.82; and
  - **b)** Follow internal IG guidance for using the work of internal specialists when evaluating qualifications and independence.

# 300 INTERNAL CONTROLS ASSESSMENT

- **.01** Management, not the audit team, is responsible for the design, implementation, and operating effectiveness of the agency's controls.
- .02 Auditors must obtain an understanding of internal controls and document controls that are significant to the audit objectives. When considering internal controls,

<sup>&</sup>lt;sup>13</sup> OMB Circular A-123, Appendix A, Management of Reporting and Data Integrity Risk

consult GAO's Standards for Internal Control in the Federal Government<sup>14</sup> and document which of the five components of internal control (control environment, risk assessment, control activities, information and communication, and monitoring) and the underlying 17 principles are significant to the audit objectives. All work performed in assessing internal controls should be documented in compliance with the requirements described in GAGAS 9.29 – 9.31.

- .03 Obtaining an understanding of internal controls can be accomplished through inquiries, observations/walkthroughs, inspection of documents and records, review of other auditors' work, or direct tests. The steps included in Sections 300, 400, and 620 of this Guide, have been designed to capture the relevant information needed to assess the controls significant to the objectives of this audit. However, reviewing and determining which internal control components and principles are significant to the audit objectives is a matter of auditor's judgment.
- Audit teams may also rely on relevant internal control and substantive testing performed by other auditors related to its agency (e.g., financial statement audits). If auditors rely on the work of others for internal control testing, audit teams should consult GAGAS 8.81 and 8.83-8.86 when devising their approach to rely on the work of others and document their determination of whether the other auditors' testing is sufficient in scope and the tests performed achieve the objectives of this DATA Act audit. The nature and extent of evidence needed will depend on the significance of the other auditors' work to the current objectives and the extent to which the audit team will use that work.
- **.05** In assessing an agency's controls:
  - **a)** Consider the agency's Enterprise Risk Management (ERM) risk profile, if one exists, and document whether the agency identified any risks associated with the controls over the DATA Act source systems and reporting.
  - **b)** Obtain and document an understanding of the design of internal and information system controls as they relate to the extraction of data from the source systems and the reporting of data to the DATA Act Broker.
  - c) Determine and document whether the SAO or designee has provided monthly or quarterly assurance (as applicable) that its agency's internal controls support the reliability and validity of the agency's summary-level and record-level data reported for publication on USASpending.gov.
  - **d)** Assess and document whether internal and information system controls as they relate to the extraction of data from the source systems and the reporting of data to the DATA Act Broker have been properly designed and implemented, and are operating effectively to allow the audit team to assess audit risk and design audit procedures.
  - e) For agencies that received COVID-19 relief funds, identify, assess, and document controls implemented to ensure specific DATA Act reporting requirements related to these funds are being met as prescribed by OMB M-20-21.

<sup>&</sup>lt;sup>14</sup> GAO-14-704G, Standards for Internal Control in the Federal Government (September 10, 2014)

- OMB guidance (i.e., M-17-04, M-20-21, Management Procedures Memorandum 2016-03) specifies that management's assurance and IG assessments 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 OMB Circular No. A-123.
- .07 The Federal Managers' Financial Integrity Act of 1982 (FMFIA)<sup>15</sup> requires that the head of each executive branch agency prepare a statement annually on whether the agency's systems of internal accounting and administrative controls comply with the requirements of FMFIA. If the operations and systems do not comply, the head of the agency will prepare a report to identify any material weaknesses in the agency's system of internal accounting and administrative control, and describe the plans and schedule for correcting such weaknesses.
  - The audit team should document its consideration of this report when determining its level of reliance on source systems, especially any agency that reported weaknesses in internal controls over operations and financial reporting and conformance with financial management systems requirements.<sup>16</sup>
- Additionally, the Federal Financial Management Improvement Act of 1996 (FFMIA)<sup>17</sup> advances Federal financial management by ensuring that Federal financial management systems of agencies covered by the Chief Financial Officers Act<sup>18</sup> provide accurate, reliable, and timely financial management information to the government's managers. Compliance with FFMIA provides the basis for the continuing use of reliable financial management information by program managers, the President, Congress, and the public. Audit teams should document their consideration of their agency's compliance with FFMIA.

# 310 Data Quality Plan

- .01 OMB M-18-16 requires agencies to develop a DQP, which should be included in the overall assessment of internal controls. Agency DQPs must consider incremental risks to data quality in Federal spending data and any controls that would manage such risks in accordance with OMB Circular No. A-123. If the agency's DQP was not finalized and/or not reviewed during the previous audit cycle, determine:
  - a) Whether the DQP documents the organizational structure and key processes to provide internal controls over financial and award data reporting.
  - **b)** Whether the DQP documents a testing plan and identification of high-risk reported data.
  - c) Whether the DQP documents the agency's process for identifying and assessing risks related to spending data such as the processes that govern the annual

<sup>&</sup>lt;sup>15</sup> Public Law 97-255 (September 8, 1982)

<sup>&</sup>lt;sup>16</sup> Public Law 97-255, FMFIA Sections 2 and 4 (September 8, 1982)

<sup>&</sup>lt;sup>17</sup> Public Law 104-208 (September 30, 1996)

<sup>&</sup>lt;sup>18</sup> Public Law 101-576 (November 15, 1990)

- verification and validation of procurement data in accordance with the Federal Acquisition Regulation (FAR) Subpart 4.6.
- **d)** Whether the DQP identifies risk of misreported data, the impact of the risk, and how and when those risks identified will be addressed.
- .02 Quarterly certifications of data submitted by SAOs (or designees) should be based on the consideration of the DQP. Determine if the DQP was considered during the fiscal year quarterly SAO certification process for the selected scope period.
  - **a)** If the DQP was considered, obtain and review documentation of discussions or considerations of the DQP during the certification process.
  - **b)** If DQP was not considered for the fiscal year quarterly SAO certification process for the scope period selected for review, then the audit team should document the reasons why and include it in its report.

# 400 FEDERAL SHARED SERVICE PROVIDERS

- .01 Federal shared services are an arrangement under which one agency (the provider) provides information technology, human resources, financial, or other services to other departments, agencies, and bureaus (the customers). This arrangement allows Customer Agencies to focus resources on their primary mission.
- .02 Due to the nature of the shared services provided and received, we recommend that auditors perform the steps described in this section in addition to the control steps in Section 300, and in conjunction with the procedures contained throughout this Guide. We recommend FSSP IGs and FSSP Customer Agency IGs perform applicable steps in this section and leverage work performed in previous DATA Act audits. FSSP IG audit steps are in Section 410, and Customer Agency IG audit steps are in Section 420. Ideally, this should be a collaborative approach between the FSSP IG and the Customer Agency IG. Some review procedures may not be applicable to your agency and/or may need to be adjusted based on additional procedures needed to achieve the audit objectives.

# 410 Internal Control Steps for FSSP IGs

- .01 FSSP IGs have jurisdictional oversight for assessing FSSP agencies' internal controls. We recommend that FSSP IGs perform the following steps:
  - a) Assess compliance with extracting data from source systems, generating, reporting, and/or submitting data to the DATA Act Broker on behalf of FSSP Customer Agencies. Significant deficiencies should be reported to the FSSP SAO and included in the FSSP IG's DATA Act Report.
  - **b)** Identify corrective actions implemented by the FSSP to address reported deficiencies. For example, what compensating controls, if any, has the FSSP

- implemented to address reported deficiencies and are they operating effectively to reduce the chance of misstatement?
- c) Determine whether the FSSP SAO and Customer Agency SAOs are coordinating and communicating to ensure that:
  - i. FSSPs have identified and resolved areas of concern brought to their attention by Customer Agencies and their IGs based on the prior DATA Act audits/submissions.
  - ii. FSSPs are continuing to engage Customer Agencies to collaborate and address potential changes/updates to reporting requirements and DAIMS.
  - iii. FSSPs are tracking FSSP statuses for the need to upgrade systems, and/or implement new processes to comply with updated DATA Act requirements and ensure these responsibilities are reflected in their service agreement.
  - iv. FSSPs have established reporting responsibilities for their agency and their customers. Ensure the DATA Act reporting roles and responsibilities for financial, procurement, grants, and loan information are being established and documented in service agreements.
  - v. FSSPs, in coordination with their Customer Agencies are continuing to determine applicable data elements and identify gaps and issues (if applicable).
- .02 If concerns are significant enough to recommend action, FSSP IGs can include these concerns in their oversight reports and make recommendations to the FSSP in an "Other Matters" section.
- .03 If new or existing findings are identified by FSSP IGs, auditors should follow up with the FSSP SAO. Additionally, FSSP IGs should identify a point of contact to allow for coordination and communication with FSSP Customer Agency IGs on any concerns. FSSP IGs should determine whether any reported concerns are significant enough to recommend action.

# 420 Internal Control Steps for Customer Agency IGs

- •• FSSP Customer Agency IGs have jurisdictional oversight for assessing its agency's internal controls. In addition to the internal control testing steps contained in Section 300, we recommend that Customer Agency audit teams perform the following steps:
  - a) Assess their agency's DATA Act reporting roles and responsibilities as documented in their service agreement with the FSSP.
    - i. Determine if the component(s) within the FSSP Customer Agencies have continued representation within the shared service provider's governance structure (e.g., the Customer Agency is a member of the shared service provider's DATA Act Working Group).

- ii. Determine if the FSSP component(s) and the FSSP Customer Agency documented an understanding and acknowledged the extent the shared service provider will submit on its behalf.<sup>19</sup>
- iii. Ensure the component(s) within their agency understands what financial and non-financial award data the FSSP will submit on its behalf (i.e., the level of service to be provided).
- iv. If the FSSP does not house all required payment and financial data (e.g., grant data) for the component(s) within your agency, will the component(s) within your agency be required to submit additional data to the shared service provider for DATA Act reporting or will the component(s) within your agency be responsible for submitting the data through its own agency (e.g., if the component(s) within your agency houses its own grants data, will the component(s) within your agency submit grant data to the FSSP for reporting)?
- v. If the component(s) within your agency is (are) responsible for submitting data to the FSSP, ensure that the component(s) within your agency developed a plan to provide the required data and communicated the plan to the FSSP.
- vi. If applicable, determine if the component(s) within your agency received notification from the FSSP of any further business process changes it needed to implement. For example, changes to business processes to ensure data elements are captured, appropriate awardee information is reported, and payment and financial transactions are reported accurately.
- vii. Determine whether the component(s) within your agency is (are) taking the necessary actions to implement further business changes.
- viii. Determine if the FSSP submits the DATA Act information on behalf of the Customer Agency. If they do, how does the Customer Agency SAO certify their agency's data submissions? Since the SAO certification is on the data submission web page, another certification mechanism should be in place for the FSSP to submit on behalf of the customer. If the FSSP did submit on behalf of the customer, clarify how they did so and how the Customer Agency SAO certified the data.
- **b)** Determine whether any findings could have a significant impact on the FSSP Customer Agency's DATA Act submission.
- c) Identify corrective actions implemented by the FSSP to address reported deficiencies. For example, what compensating controls, if any, has the Customer Agency or FSSP implemented to address reported deficiencies and are they operating effectively to reduce the chance of misstatement?
- **d)** Determine whether the FSSP SAO and the FSSP Customer Agency SAO are coordinating and communicating to ensure that:

<sup>&</sup>lt;sup>19</sup> FSSP IGs are not responsible for testing data submitted for/by FSSP Customer Agencies. All FSSP Customer Agencies are responsible for their individual DATA Act audits and the appropriate testing for data submitted should be performed by FSSP Customer Agency IGs or contract auditors.

- i. FSSPs have identified and resolved areas of concern brought to their attention by Customer Agencies and their IGs based on the prior DATA Act audits/submissions.
- ii. FSSPs are continuing to engage Customer Agencies to collaborate and address potential changes/updates to reporting requirements and DAIMS.
- iii. FSSPs and Customer Agencies are tracking FSSP statuses for the need to upgrade systems, and/or implement new processes to comply with updated DATA Act requirements and ensure these responsibilities are reflected in their service agreements.
- iv. FSSPs and Customer Agencies have established reporting responsibilities for FSSPs and their customers. Ensure the DATA Act reporting roles and responsibilities for financial, procurement, grants, and loan information are being established between the customers and their shared service providers and documented in their service agreement.
- v. FSSPs, in coordination with their Customer Agencies are continuing to determine applicable data elements and identify gaps and issues (if applicable).
- The FSSP Service Organization Controls (SOC) report does not assess internal controls outside of the FSSP source system. Since many agencies export the DATA Act information to excel spreadsheets prior to submission to Treasury's DATA Act Broker, Customer Agency IG audit teams should review the most recent FSSP SOC report for control deficiencies related to DATA Act submissions. Refer to GAO/CIGIE's Financial Audit Manual Section 640, Using the Work of Others-Entities Using a Service Organization and 640A, Service Organization Type 2 Report Assessment Tool.
- .03 If concerns are significant enough to recommend action, Customer Agency IGs may recommend that their agency work with the FSSP to address issues or concerns, and:
  - a) Note any significant deficiencies in their agency's DATA Act reporting attributable to the FSSP;
  - b) Report this information to their Agency SAO; and
  - c) Share concerns about their agency's data and/or error rates that are attributable to its FSSP to both the FSSP IG and GAO, as these two entities have jurisdiction to perform oversight work on the FSSP.

# 500 DATA STANDARDS – IMPLEMENTATION & USE

- .01 When assessing an agency's use of the data standards, review the agency's data inventory/mapping for Files A, B, C, D1, and D2 to ensure that:
  - a) Standardized data elements and OMB and Treasury definitions per the DAIMS are used across agency business processes, systems, and applications; identify the appropriate source systems where the data resides; and identify gaps.

- **b)** For any material gaps identified by the agency, viable corrective actions/solutions have been identified including potential impacts on the timeliness or effectiveness of the agency's implementation of the data standards.
- .02 Determine whether the agency has consistently used the OMB and Treasury established data elements per its inventory/mapping for the agency's submission of Files A, B, and C. Review and assess the agency's inventory/mapping document to:
  - a) Determine whether the agency has identified and defined all of the data elements in accordance with the DAIMS.
  - **b)** Determine if the agency identified, linked by common identifiers, all of the data elements in the agency's procurement, financial, grants, and loans systems (as applicable) as defined in the DAIMS.
- In addition, audit teams should utilize the results of its analysis of the agency's DATA Act Submission (Section 600) and its data element testing (Section 700) to assess its agency's use of the data standards. For example, if the audit team found that the agency consistently reported the "action date" data element as a date other than the base award date or the modification date (as defined in the DAIMS), the data element would be inaccurate, resulting in the improper implementation and use of that data standard.

# 600 DATA ACT SUBMISSION ANALYSIS

- **.01** This section addresses steps related to the agency's DATA Act submission. Audit teams should:
  - a) Review the agency's certification and submission process.
  - **b)** Determine the timeliness of the agency's submission (as applicable).
  - c) Determine completeness of summary-level data for Files A and B.
  - d) Determine whether File C is complete and suitable for sampling.

#### 610 Definitions – DATA Act Submission

#### .01 Completeness of Agency Submission

Transactions and events that should have been recorded are recorded in the proper period.

#### .02 Timeliness of Agency Submission

Reporting of the agency monthly or quarterly DATA Act submission to the DATA Act Broker is in accordance with the schedule established by the Treasury DATA Act PMO. The reporting submission dates can be found at <a href="https://www.fiscal.treasury.gov/data-transparency/resources.html">https://www.fiscal.treasury.gov/data-transparency/resources.html</a> under "Updates".

# Agency Certification & Submission Process

- .01 We recommend that audit teams obtain their Agency's DATA Act submission(s) directly from the Treasury's DATA Act Broker, rather than from USASpending.gov, as the DATA Act Broker provides access to additional details such as the submission history data files and warning files, which will be helpful to gain a full understanding of the agency's submission process. Audit teams should:
  - a) Obtain a read-only account to Treasury's DATA Act Broker.
  - **b)** For its agency, obtain the following from Treasury's DATA Act Broker:
    - i. Selected fiscal year quarter data submission for Files A through F,
    - ii. Final warning reports, and
    - iii. Final SAO or designee certification statement over the agency's submission for publication on USASpending.gov.
  - c) Review final warning or validation reports, reconciliation reports, and any other relevant supporting documentation from external award reporting systems used to report the data in Files D1 and D2 and determine the impact on the data submission.
  - **d)** Review and assess the final SAO assurance/certification statement for the selected fiscal year quarter data submission to determine whether the agency identified any data quality issues that should be considered in determining the nature and extent of audit work.
  - **e)** Obtain documentation from the agency to support the agency's reconciliations of linkages between the various files in the submission; DATA Act Broker warning reports; the SF-133, *Report on Budget Execution and Budgetary Resources*, <sup>20</sup> for the reporting period; and additional supporting documentation to support the completeness and timeliness of the agency submission.
- .02 Audit teams should assess the reasonableness of management's corrective actions and/or management's explanatory text included with the certification as it relates to the agency's quarterly submission and document this assessment for each of the following procedures:
  - **a)** Determine whether the agency has reported or identified concerns with the completeness, accuracy, timeliness, or quality of the data submitted.
  - **b)** Review the agency's reconciliation processes and supporting documentation for correcting errors or omissions in the data submission.
  - c) Understand the agency's process for addressing warnings during the agency's submission of files to Treasury's DATA Act Broker. The audit team should assess the agency's actions to determine if the warnings may be indicative of an inaccurate submission, represent a false-positive indication that an error exists in

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<sup>&</sup>lt;sup>20</sup> The SF-133 is a quarterly report that contains information on the sources of budget authority and the status of budgetary resources by individual fund or appropriation.

- the file, or known errors have not been properly identified by the broker. The audit team should request supporting documentation for the agency's review of the warning files and assess the reasonableness of management's actions to address the warnings.
- d) Understand the agency's process for determining that the linkages between Files A through F are valid and reliable. SAOs or designees are required to attest to the validity and reliability of the complete DATA Act quarterly submission including linkages across all data in Files A through F. SAOs or designees should document any discrepancies in linkages between the files. To provide assurance, agencies should have internal controls in place over all data submitted for publication on USASpending.gov.
- e) Understand the agency's process for determining that the data submitted in Files A through F are valid and reliable. The SAO or designee should confirm that internal controls over data quality mechanisms are designed, implemented, and operating effectively for the data submitted in Files A through F. Existing data controls established in statute, regulation, and Federal-wide guidance described above in Section 300 should be considered by the SAO or designee when certifying the DATA Act submission.

# 630 Timeliness of Agency Submission

- .01 The agency submission is considered timely when the submission by the agency to the DATA Act Broker is in accordance with the reporting schedule established by the Treasury DATA Act PMO (Section 610.02). Audit teams should determine the timeliness of the agency submission by verifying the date of the certification of the submission in the Treasury DATA Act Broker is within the established timeframe determined by the Treasury DATA Act PMO, traditionally within 45 days of quarter end.
- required to submit spending data monthly and attest that they meet the reporting requirements under the DATA Act and OMB M-20-21 and that the reported data was produced following the agency's normal practices and procedures. Although these agencies are reporting monthly, SAOs are required to certify the data quarterly, on the same 45-day schedule as non-COVID agencies. As applicable, audit teams should determine the timeliness of monthly submissions and quarterly certifications. The monthly and quarterly reporting submission dates can be found at <a href="https://www.fiscal.treasury.gov/data-transparency/resources.html">https://www.fiscal.treasury.gov/data-transparency/resources.html</a> under "Updates". Extensions granted to an agency by OMB or the Treasury DATA Act PMO should be supported by documentation from OMB or the Treasury DATA Act PMO to the agency.

# 640 Completeness of Summary-Level Data (Files A & B)

- .01 Completeness of the agency submission is defined as transactions and events that should have been recorded are recorded in the proper period. The audit team should determine the completeness of Files A and B in order to report on the completeness of the agency submission.
- .02 File A includes fiscal year cumulative Federal appropriations account summary-level data. To assess the completeness of File A, audit teams should:
  - **a)** Determine whether File A includes all Treasury Account Symbols (TAS) from which funds are obligated (as reflected in the Government-wide Treasury Account Symbol Adjusted Trial Balance System (GTAS) SF-133), except for Loan Financing Accounts.
  - **b)** Assess the completeness of File A by selecting all summary-level data from File A and matching the following elements to the agency's GTAS SF-133:
    - i. Agency identifier,
    - ii. Beginning period of availability,
    - iii. Ending period of availability,
    - iv. Main account code,
    - v. Sub account code,
    - vi. Budget authority appropriated amount,
    - vii. Gross outlay amount by TAS,
    - viii. Unobligated balance,
    - ix. Other budgetary resources amount, and
    - x. Obligations incurred by TAS.
- Any variances identified by the auditors between File A and the agency's GTAS SF-133 should be clearly explained and documented by the Federal agency. Audit teams should assess the reasonableness of the agency's explanation and resolution of all variances and report on any unusual or unexplained variances it identifies.
- **.04** File B includes fiscal year cumulative Federal object class and program activity summary-level data. To assess the completeness of File B, audit teams should:
  - **a)** Compare the data in File B to the TASs listed in File A (if File A is complete) and determine if all TASs in File A are accounted for in File B.<sup>21</sup>

<sup>&</sup>lt;sup>21</sup> If there are no obligations or outlays on a TAS, which is not unusual (especially with a brand-new TAS), agencies would submit the TAS in File B with zeroes for the financial-related information. For such TAS, 0000/unknown can be reported for program activity and object class; there are no programs or object classes to associate with these TASs since there are no obligations on them.

- **b)** Verify that the totals of File A and B are equal. Any variances identified by the auditors between Files A and B should be clearly explained and documented by the agency.
- **c)** Assess the reasonableness of the agency's explanation and resolution of all variances and report on any unusual or unexplained variances identified.
- **d)** Verify that all object class codes from File B match the codes defined in Section 83 of OMB Circular No. A-11.<sup>22</sup>
- e) Verify that all program activity names and codes from File B match the names and codes defined in the MAX Collect repository established by OMB Budget Data Request 17-09 as the authoritative source for program activity for purposes of DATA Act submissions.<sup>23</sup> Audit teams should be aware that OMB created a MAX Collect exercise for agencies to use on an ongoing basis to provide Treasury with a regularly updated list of program activities. Any variances identified between File B and the MAX Collect repository should be clearly explained and documented by the Federal agency.
- **f)** Assess the reasonableness of the agency's explanation and resolution of all variances and report on any unusual or unexplained variances identified.

# 650 Suitability of File C for Sample Selection

#### **.01** If the agency submitted File C:

- a) Determine whether File C included any agency data and, if so, assess the sufficiency of the agency's method of determining whether File C is complete and contains all transactions and linkages that should be included, as well as the agency's methodology for resolving DATA Act Broker warnings between Files C and D1/D2.
- **b)** Assess the reasonableness of the agency's process to resolve all variances and report on any unusual or unexplained variances. **Note:** It is important that auditors document the agency's process to ensure File C is complete and Broker warnings related to File C have been addressed.
- c) Remove rows with any outlays from File C. **Note:** Outlay records are those rows in File C without a transaction obligated amount (obligation). The characteristics of outlays are different than obligations, and outlays do not have a corresponding linkage to Files D1/D2. Outlays are also independent in terms of timing of when one or the other might occur. Due to these unique differences and there being no statistically viable method to test both obligations and outlays together, outlays

<sup>&</sup>lt;sup>22</sup> OMB Circular No. A-11, Preparation, Submission, and Execution of the Budget (July 1, 2016); section 83 of OMB Circular No. A-11 can be found at https://www.whitehouse.gov/wp-content/uploads/2018/06/s83.pdf.

<sup>&</sup>lt;sup>23</sup> In its validations, the DATA Act Broker employs Program Activity Names and Program Activity Codes from the MAX Collect repository. The most up-to-date table of these names and codes used by the DATA Act Broker is stored here: <a href="https://files.usaspending.gov/reference\_data/program\_activity.csv">https://files.usaspending.gov/reference\_data/program\_activity.csv</a>. This list is updated periodically as agencies work with OMB to update their codes and names during the budget data request process.

- should be tested separately. Thus, outlays will not be part of the suitability or statistical sample testing. However, COVID-19 outlays will be tested separately in Section 750.
- •• File C links to File B through the TAS, object class, and program activity data elements. Assess the linkage of File C to File B by tracing the TAS, object class, and program activity data elements from File C to File B to ensure they exist in File B.
- .03 File C links to Files D1/D2 by the Award Identification (Award ID) Number. Assess the linkage between File C and Files D1/D2 by tracing the Award ID Numbers that exist in File C to Files D1/D2 and vice versa.
- .04 Note that there are several situations where an award could validly be included in File C but not in Files D1/D2 or vice versa, including:
  - a) Procurement awards under the micro-purchase threshold (MPT) and deviations from award amounts due to discounts, penalties, and interest are not required to be reported in File C but may be submitted. The inclusion of procurement MPTs, discounts, penalties, or interest with an Award ID in File C will prompt warnings if the Award ID is not included in Files D1 since the DATA Act Broker cannot distinguish these transactions from standard Transaction Obligation Amount transactions. Reporting agencies may choose to forgo removing procurement MPTs, discounts, penalties, and interest transactions from the financial system download when generating File C. Therefore, while procurement MPTs and discounts may exist in File C, they would not exist in Files D1.
  - **b)** Awards that contain no cost modifications, such as extending the period of performance, would be reported in Files D1/D2 but not in File C. Because these awards do not have a financial transaction associated with the modification, there would be no record in the financial system and, therefore, no associated record in File C.
- during the selected quarter. In order to report on the completeness of the agency submission and to determine if File C is suitable for selecting a statistically valid sample, determine the completeness of File C.
- the completeness of File C, develop criteria for a non-statistical sample using this work. Select a non-statistical sample of awards from the financial system for each criterion and trace them to File C to test whether the potential problem previously identified affects the completeness of File C. Note all problems which are found and determine, where possible, the extent and dollar amount of agency financial systems potentially affected. Use this information to assess whether File C is suitable for sampling. If work performed under steps .01 through .05 did not raise any concerns, step .06 may be skipped.
- **.07** If File C is not suitable for sampling, a single sample should be derived from combining Files D1 and D2.

**.01** This section addresses steps related to sample selection and data element testing.

#### 710 Definitions – DATA Act Elements

#### .01 Completeness of Data Elements

For each of the required data elements that should have been reported, the data element was reported in the appropriate Files A through D2.

#### .02 Accuracy of Data Elements

Amounts and other data relating to reported transactions have been recorded in accordance with the DAIMS, Reporting Submission Specification (RSS), Interface Definition Document (IDD), and the online data dictionary, and agree with the original award documentation/contract file.

#### .03 Timeliness of Data Elements

For each of the required data elements that should have been reported, the data elements were reported in accordance with the reporting schedules defined by the financial, procurement, and financial assistance requirements (FFATA, FAR, FPDS-NG, Financial Assistance Broker Submission (FABS), and DAIMS).

# 720 Sample Selection

- .01 With the assistance of a qualified statistician, if possible, audit teams should:
  - a) Randomly select a statistically valid sample of certified spending data from the reported records included in the agency's certified data submission for File C, or Files D1/D2 if File C is determined not suitable for testing.
  - **b)** Use the following criteria when selecting the sample:
    - i. Population Size the number of detail records included in the agency's quarterly (or consolidated three months) certified data submission determined by adding the total number of detail records in File C (after removing outlays) or the total number of detail records in both Files D1 and D2, if File C was deemed not suitable for sampling.
    - ii. **Confidence Level** the probability that a confidence interval produced by sample data contains the true population error; set at 95 percent.
    - iii. **Expected Error Rate** the estimated percentage of error rate in the population to be sampled, which will be determined based on the results of the agency's November 2019 and subsequent testing of DATA Act information,

and additional information that the IG has accumulated related to the agency's internal controls and corrective actions from previous audits. If more than one error rate was determined in the November 2019 audit, use the error rate closest to 50 percent.<sup>24</sup> If this is a first year audit of the DATA Act submission and there is no previous testing with which to accurately estimate the expected error rate, then the expected error rate should be set at 50 percent.

- iv. Sample Precision The precision is a measure of the uncertainty associated with the projection; set at 5 percent.
- v. Sample Size The sample size is based on a 95 percent confidence level, the population size, the expected error rate, and a desired sampling precision of 5 percent. The sample size will vary by agency but should be no more than 385 records from File C or both Files D1 and D2 combined, if File C was deemed not suitable for sampling. Auditors should discuss with statisticians the need for replacement sample items.
- vi. **Sample Unit** The statistical sample should be selected and tested by record. A record is a row of data in File C or Files D1/D2, if File C was deemed not suitable for sampling. A record could be a portion of a transaction or award activity and not necessarily the whole transaction or award activity.
- .02 For agencies with a smaller population and high expected error rates, where the recommended sample size of 385 represents 5 percent or more of the population, the IG may reduce the sample size by applying the finite correction factor using the following formula to determine the recommended sample size: 385/[1+((385-1)/N)], where "N" represents the population size.
- .03 If a sample item is a procurement MPT or deviates from award amounts due to discounts, penalties, or interest, the sample item should not be tested and should be replaced with another sample item (Section 650.04). One method to plan for this is to randomly sort File C and select the sample as the first 385 records from the random sort. Thus, for example, if there is one out-of-scope record in a sample of 385, the audit team can then select the 386th record from the random sort of File C as a replacement sample unit. Note that the sample size of 385 was used only for purposes of the example; many IGs will have a statistical sample size which is less than 385.

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<sup>&</sup>lt;sup>24</sup> If all error rates are less than 20%, then a 20% expected error rate should be used. If all error rates are above 80%, then an 80% expected error rate should be used. Truncating the assumed error rate to 20% for 2019 estimated rates which are less than 20% and capping the assumed error rate to 80% for 2019 estimates that are greater than 80% ensures a sample size large enough to use the normal approximation when estimating the sampling error for attribute measures. See Table 3.3 on page 58 of Cochran, "Sampling Techniques", third edition https://archive.org/download/Cochran1977SamplingTechniques 201703/Cochran 1977 Sampling%20Techn iques.pdf.

# 730 Record-Level Linkage (Files C & D1/D2)

- .01 The sample awards reported in File C should be linked to applicable data elements reported in Files D1 and D2 or vice versa.<sup>25</sup>
  - a) Determine whether applicable procurement awards in the sample selected from File C are included in File D1 by matching both the Procurement Instrument Identifier (PIID) Numbers and the Parent Award ID.<sup>26, 27</sup> Note that the Transaction Obligated Amount in File C may not match the Federal Action Obligation amount in File D1 for the sample record. This is because File C may represent a single line item on a contract with multiple line items, and the amount in File D1 will represent the total contract transaction. Any variances identified by the auditors between Files C and D1 should be clearly explained and documented by the Federal agency. The audit team should assess the reasonableness of the agency's explanation and resolution of all variances and report on any unusual or unexplained variances it identifies.
  - **b)** Determine whether all financial assistance awards in the sample selected from File C match the Federal Award Identification Numbers (FAIN)<sup>28</sup> or Unique Record Identifiers (URI) contained in File D2.
  - c) Determine whether the Transaction Obligated Amounts in File C match the Federal Action Obligation amounts in File D2. Any variances identified by the auditors between Files C and D2 should be clearly explained and documented by the Federal agency.
  - **d)** The audit team should assess the reasonableness of the agency's explanation and resolution of all variances and report on any unusual or unexplained variances it identifies.
- .02 Depending on the type of intragovernmental transactions (IGT) being reported, the awarding agency will continue to report award-level information (Files D1 and D2) under FFATA and the FAR. Audit teams should:
  - a) Inquire if summary-level data includes IGTs.
  - **b)** Review OMB's M-17-04 for additional guidance on IGTs. Any variances with reporting IGTs should be clearly documented by the Federal agency. The audit team should assess the reasonableness of the agency's process to resolve all variances and report on any unusual or unexplained variances it identifies.

<sup>&</sup>lt;sup>25</sup> If the sample was extracted from File C, elements will be traced from File C to Files D1/D2. If the sample was extracted from Files D1/D2, elements will be traced from Files D1/D2 to File C.

<sup>&</sup>lt;sup>26</sup> The combination of the PIID and Parent Award ID (if applicable) is the Award ID for procurement awards.

<sup>&</sup>lt;sup>27</sup> If a File C sample item is a procurementMPT or deviates from award amounts due to discounts, penalties, or interest, the sample item should not be tested and should be replaced with another sample item. See Section 650.04.

<sup>&</sup>lt;sup>28</sup> FAIN (non-aggregate) or URI (aggregate) is the Award ID for financial assistance awards.

identifiable information in summary groups of similar awards at the county or state level known as "aggregate records." If single award-level reporting is not practicable, agencies may report at the county or state level. If an agency does not capture a FAIN or other individual details for an award to an individual, the agency should include that award in a county or state level aggregate record with other similar awards. Records reported in this way will be linked using the URI. The auditor should ensure that aggregates are reported consistent with OMB M-17-04. Auditor judgment should be used and documented when testing aggregate records when aggregate records are included in the statistically valid sample.

# 740 Data Element Testing – Statistical Sample

- .01 The detailed tests will be performed at the data element-level for each record in the sample. Statistical projections for completeness, accuracy, and timeliness will be determined and reported for the overall data elements tested. Please refer to definitions in Section 710 of this Guide.
  - **a)** Determine the completeness, accuracy, and timeliness for each of the data elements within the selected record as follows:
    - i. <u>To assess completeness</u>, determine if the data element is required for the record selected. If required, determine if the data element is included in the appropriate files. If a required data element was not reported, it is incomplete.
    - ii. <u>To assess accuracy</u>, data elements in File C should agree to the agency financial system and source documentation. Additionally, to assess accuracy of data elements in Files D1 and D2, use the crosswalk information contained in Attachments 1 and 2, respectively.
    - iii. To assess timeliness, determine whether:
      - a. Award financial data elements in File C are reported in the quarter of occurrence.
      - b. Procurement award data elements in File D1 are reported in FPDS-NG within 3 business days after the date that the contract award was signed (See FAR Section 4.604).<sup>29</sup> Contracts awarded in emergency situations (FAR Part 18) or urgent and compelling situations (FAR Part 6) have 30 calendar days. Reported means the FPDS-NG Approved Date must be within 3 business days or 30 calendar days, as applicable, after the FPDS-NG Date Signed (File D1 Action Date) for the contract award. **Note:** The Approved Date field is only available via the ad-hoc FPDS-NG report.

<sup>&</sup>lt;sup>29</sup> The submission to FPDS-NG should be compared to the date the award was made/amended in the accounting records of the originating agency financial system(s), to the extent the record can be relied upon. In addition, the audit team will need to match this information to the originating agency's underlying records.

- c. Financial assistance award data elements in File D2 are reported within 30 calendar days after award, in accordance with FFATA.<sup>30</sup> Reported means the FABS publication date (File D2 Last Modified Date) must be within 30 calendar days after the date of the award (File D2 Action Date).
- **.02** Completeness, accuracy, and timeliness of data elements will be tested independently of each other but may overlap. The following are answers to common questions:

# How do we handle data elements that are not applicable to a record?

Use a notation or tick-mark to indicate that the data element was not applicable. Do not include any non-applicable data elements in error rate calculations (in neither the numerator nor the denominator).

#### What if we don't have any transactions in File C?

Test only Files D1/D2 data elements in the statistical sample and consider the data elements that should have been in File C as errors. If a transaction exists in Files D1/D2, but File C does not include any corresponding data, then those data elements that should have been in File C are incomplete, inaccurate, and untimely and should be included in the error rate for those data elements. If there are no File C transactions, File C is not suitable for testing.

If a transaction is correctly recorded in File C, but data elements are not in Files D1/D2 then do we consider those data elements to be inaccurate? If a transaction is correctly recorded in File C, but Files D1/D2 do not include the required data elements, then those Files D1/D2 data elements are incomplete, inaccurate, and untimely.

# If no data elements are recorded in Files D1/D2 for a record, how do we determine which data elements were required/applicable?

Use File C supporting documentation to perform an analysis to determine what data elements should have been recorded in Files D1/D2. Mark all non-required data elements as not applicable.

# What if my agency reported an optional data element, but they did not report it accurately, is it an error?

Test reported optional data elements as you would test required data elements (for completeness, accuracy, and timeliness) and include in results calculations and statistical projections. However, if the agency did not report an optional standardized data element, mark it not applicable for completeness, accuracy, and timeliness; thereby excluding it from results calculations and projected error rates.

<sup>&</sup>lt;sup>30</sup> To ensure the timeliness of available data, FFATA set a baseline requirement that financial assistance spending data must be reported to and posted on USASpending.gov no later than 30 days after an award is issued. OMB M-20-21 strengthened this requirement for non-loans: now, agencies must report all issued-but-yet-to-be-reported non-loan assistance data twice a month (and space the reporting roughly two weeks apart).

#### If a data element is incomplete then is it inaccurate?

Yes, any data element that should have been reported but was not reported is incomplete. Because the data element is incomplete, it is also inaccurate. The data element may also be untimely, but this should be assessed on a case-by-case basis.

#### If a data element is not timely then is it inaccurate?

It depends. If the lack of timeliness led to a required data element being incomplete, the data element is also inaccurate. However, if the required data element was late, but still complete/reported, evaluate accuracy independently.

#### If a data element is not timely then is it incomplete?

It depends. If the lack of timeliness led to a required data element being incomplete, the data element is also incomplete (and inaccurate). However, if the data element was late, but still reported, evaluate completeness independently.

How should we assess the timeliness and completeness of the data included in the submission, but that was not yet required to be reported in the system (like FPDS-NG)?

The FPDS-NG and FABS schedules are shorter than the schedule for the submission as a whole, so theoretically all FPDS-NG and FABS items should be in the submission. Assess this on a case-by-case basis.

#### What if we find errors attributable to a third party and not to the agency?

Include all errors, in results calculation and statistical projections, regardless of responsibility (i.e., third-party errors). Include information about third-party errors not attributable to the agency separately in the final IG report. **Note:** IGs generally should not include recommendations in their report for errors that are not considered attributable to the agency. These third-party errors may be communicated, through the CIGIE FAEC DATA Act Working Group, to GAO before the final IG report is issued, consistent with IG policy. See Section 960.12 for an example on how to report this information.

Should audit teams test the DEFC element in File C and NIA element in File D1 for statistically sampled records regardless of whether they are COVID-19 awards or non-COVID-19 awards?

Yes, the DEFC and NIA code are two elements added to increase spending transparency related to the pandemic. As such, effective for the June 2020 reporting period, all agencies are required to add the DEFC attribute to Files B and C. In addition, agencies are directed to assign a NIA code to all procurement actions reported into FPDS-NG issued in response to the pandemic.

•• Error rates for completeness, timeliness, and accuracy of the entire sample population will be calculated and projected. Additionally, error rates for individual data elements will be calculated but not projected. Audit teams should utilize the Testing Spreadsheet (Attachment 3) to:

<sup>&</sup>lt;sup>31</sup> For agencies where the full population is tested, the actual error rate is reported.

- a) Calculate the average rate of error for each record based on the total data elements required to be reported (including optional data elements chosen to be reported by the agency) for that record (see Testing tabs).
- **b)** Calculate the overall error rates for completeness, timeliness, and accuracy based on the average rates of error by record which will be averaged over the total number of sample items tested (see Summary tab).

# 750 COVID-19 Outlay Testing – Non-Statistical Sample

- .01 The Federal Government's response to the COVID-19 pandemic included an economic relief package and new reporting requirements for agencies that received COVID-19 funds. Effective for the June 2020 reporting period, agencies with COVID-19 relief funding must submit DATA Act Files A, B, and C on a monthly basis that include:
  - **a)** DEFC domain value for Treasury accounts containing COVID-19 funding in Files B and C.
  - **b)** Outlays for COVID-19 awards in File C (reporting of outlays in File C is not required for agencies that did not receive COVID-19 relief funding, but reporting of outlays in Files A and B is required for all agencies) **Note:** Outlay records are those rows without a transaction obligated amount (obligation).
- .02 For COVID-19 outlays<sup>32</sup> removed from File C (Section 650):
  - a) Select a non-statistical sample from the outlay records from the 3rd month of the quarter selected and test COVID-19 outlay records separately. Auditors should select a non-statistical sample based on auditors' understanding of their agency's outlays. Auditors should develop criteria and select cases for review within these criteria. Random selection within criteria to control for selection bias may be used to select cases for review. The sample size can be determined based upon the structure and amount of the data and does not have to be large enough to support population projection. Rather, the number of cases should be sufficient to provide examples within each category of the criteria (e.g., dollar amount) used to design the sample.
  - **b)** Test the Parent Award ID, PIID/FAIN, object class, appropriations account, program activity, outlay, and DEFC elements for completeness, accuracy, and timeliness.
  - c) Test accuracy by obtaining the financial transaction history for the related PIID/FAIN from the financial system to ensure the correct cumulative amount was reported in File C. Auditors may coordinate with financial statement auditors to determine if they can leverage the test of COVID-19 payments work of financial statement auditors or if they need to adjust the nature and timing of the audit procedures performed.

<sup>&</sup>lt;sup>32</sup> Agencies can optionally report outlays other than COVID-19 in File C, but those outlays are not required to be tested for this audit cycle.

**d)** Include results of outlay testing in IG's report and factor into the non-statistical portion of Quality Scorecard (Section 820) when determining quality.

# 800 ANALYSIS OF RESULTS & QUALITY ASSESSMENT

.01 Upon completion of testing, audit teams should perform the analyses contained in this section. These analyses should be included in IG DATA Act reports. See Reporting Section 900.

# 810 Analysis of Results

#### .01 Data Element Analysis

Identify the number of errors and error rate associated with each data element. In evaluating the results by data element, determine if the identified risks in the agency's DQP were consistent with the results of testing for reported data. Audit teams may give consideration to the agency identified risk when reporting on the results of data tested.

#### .02 Analysis of the Accuracy of Dollar Value-related Data Elements

Determine the accuracy of dollar value-related data elements based on absolute values to capture the magnitude of any deviations as a result of those errors. It's important to emphasize in reporting these results that the amounts are not projectable because the statistical sample test was performed on attributes and not on monetary amounts.

#### .03 Analysis of Errors in Data Elements Not Attributable to the Agency

There are instances where errors are caused by an entity other than the agency. For example, if Treasury's DATA Act Broker extracts the wrong field from a source system, this is not an error attributable to the agency. The agency may have recorded the correct information in the source system, but due to an external third party extracting the incorrect field, the data was not reported accurately. In this instance, the error is included in the statistical results, but reporting the supplemental information will help the reader put into perspective the types of errors that were within the control of the agency.

# 820 Quality Assessment - Scorecard

- **.01 Quality of Data** is defined as data that is complete, accurate, and timely, and includes statistical and non-statistical testing results.
- .02 The assessment of overall quality of data is not a projected measurement but will be derived using a combination of statistical and non-statistical methods. Audit teams should combine the results of the statistical sample with the results on the non-

statistical testing in a quality scorecard. The scorecard is formatted to calculate quality based on weighted scores of both statistical sampling results and non-statistical testing results. For the quality scorecard, statistical testing results are valued at 60 points and non-statistical testing results are valued at 40 points, for a total of 100 points. The statistical sampling result is valued slightly higher because the DATA Act requires a statistical sample of data submitted and statistical results provide stakeholders with valuable insight on that data. The scorecard contains one tab for statistical testing, and each non-statistical testing category has an individual tab for the audit team's input. See Appendix 7 for instructions on completing the quality scorecard.

Enter Agency Name		Maximum Possible	Points	
FY 2021 DATA Act Quality Scorecard		Without Outlays (No COVID-19 Funding)	With Outlays (COVID-19 Funding)	
	Criteria	Score		
Non-Statistical	Timeliness of Agency Submission	5.0	5.0	5.0
	Completeness of Summary Level Data (Files A & B)	10.0	13.0	10.0
	Suitability of File C for Sample Selection	10.0	13.0	10.0
	Record Level Linkages (Files C & D)	7.0	9.0	7.0
	COVID-19 Outlay Testing Judgmental Sample	8.0	0.0	8.0
Statistical	Completeness	15.0	15.0	15.0
	Accuracy	30.0	30.0	30.0
	Timeliness	15.0	15.0	15.0
	Excellent	100.0	100.0	100.0

#### .03 Scorecard Non-Statistical Sample Calculations

Based on auditors' assessment, the scorecard allocates 40 points to non-statistical testing results, with points weighted to each of the following categories:

- ♦ Timeliness of Agency Submission (Section 630)
- ♦ Completeness of Summary-Level Data (Files A and B) (Section 640).
- ♦ Suitability of File C for Sample Selection (Section 650)
- ♦ Record-Level Linkages (Files C and D1/D2) (Section 730)
- ♦ COVID-19 Outlay Testing Non-Statistical Sample (Section 750) (if applicable)

#### .04 Scorecard Statistical Testing Calculations

The scorecard allocates 60 points to statistical testing results, weighted as follows:

- ♦ Completeness and Timeliness are each worth up to 15 points.
- ♦ Accuracy is worth up to 30 points.

Accuracy is valued higher because it significantly impacts the quality of the spending data and is likely most relevant to stakeholders. Audit teams input statistical sample results into the scorecard, which calculates the weighted scores as follows:

- ♦ Completeness and Timeliness mid-point error rates are converted to a positive value of up to 15 points (0% error rate = 15 points, 100% error rate = 0 points). The "correctness rate" is determined by subtracting the mid-point error rate from 1. Multiplying this percentage by 15 gives it a value on a 15-point scale.
- ♦ Accuracy mid-point error rate is converted to a positive value of up to 30 points (0% error rate = 30 points, 100% error rate = 0 points). The "correctness rate" is determined by subtracting the mid-point error rate from 1. Multiplying this percentage by 30 gives it a value on a 30-point scale.

#### .05 Quality Determination

Using the scorecard in Attachment 4, audit teams should:

a) Determine whether the quality of data is excellent (green), higher (blue), moderate (yellow), or lower (red) based on the overall quality score of the statistical and non-statistical results.

Quality Level				
Raı	nge	Level		
0	69.999	Lower		
70	94.999	Moderate		
85	94.999	Higher		
95	100	Excellent		

**b)** Include the results of the quality assessment level in the final IG report.

900	REPORTING	
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- .01 Audit teams should produce a report of the results of this DATA Act audit in conformance with GAGAS Chapter 9 and include, at a minimum, the results of testing for non-statistical, statistical, overall determination of quality, the implementation and use of data standards and other report content; as further described below.
- Audit teams are encouraged to use the standard reporting language provided in this section. Audit teams should modify the language to address any circumstances specific to the audit results for their agency, as appropriate.

#### 910 Non-Statistical Results

- **.01** DATA Act Reports should contain the following non-statistical results:
  - a) Timeliness of the Agency Submission (Section 630)
  - **b)** Completeness of Summary-Level Data (Files A and B) (Section 640)
  - c) Suitability of File C for Sample Selection (Section 650)
  - d) Record-Level Linkages (Files C and D1/D2) (Section 730)
  - e) COVID-19 Outlay Testing- Non-Statistical Sample (Section 750)
- .02 DATA Act Reports should also include any unusual or unexplained variances identified in their non-statistical test results and any impact to the overall quality determination.
- .03 DATA Act Reports should include explanations for incomplete data; and where practicable quantify the following:
  - a) Estimated dollar amounts by data element that were not included in the agency submission for PIID and/or FAIN transactions and any impact to the completeness and quality of the submission.
  - **b)** Percentage of agency spending that was not reported and any impact to quality of the submission.
  - **c)** Estimated number of transactions missing and any impact to the quality of the submission.
- **.04** DATA Act Reports should include whether the agency's certification statement for the quarter made proper disclosure of any data limitations.
- .05 If no test work was performed for any of the items identified in this section, the DATA Act Reports should identify the specific testing that was not performed and indicate the reasons testing was not completed.

#### 920 Statistical Results

DATA Act Reports should include:

- **.01** Whether the full population was tested or if a sample of the population was tested.
- .02 The confidence level and error rates for completeness, accuracy, and timeliness (Section 720).
- **.03** A description of the sampling methodology.
- Supplemental (non-projected) reporting of the results of the sample testing (Section 810). These results are not factored into the scorecard results for determining quality.

- > Data Element Analysis
- ➤ Analysis of the Accuracy of Dollar Value-related Data Elements
- Analysis of Errors Not Attributable to the Agency

# 930 Overall Determination of Quality

#### DATA Act Reports should:

- .01 Contain a summary that clearly states the results of quality per the DATA Act Quality Scorecard (non-statistical and statistical results) in Section 820.
- .02 Include information related to control deficiencies that had an adverse impact on the quality determination; and summary-level testing that had an adverse impact on the quality determination.

# 940 Implementation & Use of Data Standards

#### DATA Act Reports should:

- .01 Clearly state whether the agency has implemented and used the government-wide data standards to successfully submit the spending data to the Treasury's DATA Act Broker (Section 500).
- .02 Include information related to control deficiencies that had an adverse impact on the agency's overall implementation and use of the government-wide data standards.

# 950 Other Report Content

- **.01** DATA Act Reports should contain:
  - **a)** Findings, conclusions, and recommendations in relation to the audit objectives.
  - **b)** Scope of work on internal control and any deficiencies in internal control that are significant within the context of the audit objectives and based upon the audit work performed.
  - **c)** Objectives, scope, and methodology of the audit, to include date anomaly and testing limitation of Files E and F.
- .02 DATA Act Reports should communicate any applicable noncompliance with provisions of laws, regulations, contracts, and grant agreements that is significant within the context of the audit objectives.
- **.03** Where applicable, DATA Act Reports should:
  - **a)** Disclose any deviations from the guide, the reason for deviation, and the impact on the overall quality score.

- **b)** Include a summary of work performed related to FSSPs.
- .04 DATA Act Reports should also include comparative results for data elements tested in different years to assist stakeholders in identifying changes in data quality. Audit teams should use the table in Appendix 9 to include this information in their reports.

# 960 Standard Reporting Language

This section provides example verbiage for IGs to use in creating their reports. Audit teams are responsible for ensuring compliance with GAGAS reporting requirements.

### **Quality Determination**

#### .01 Overall Determination of Quality

Based on the results of our statistical and non-statistical testing for (Agency's) DATA Act audit for FY XX quarter X, (Agency) scored XX points, which is a quality rating of [Excellent/Higher/Moderate/Lower].

#### Statistical Results

#### .02 <u>Data Element Analysis</u>

The analysis of results by data elements can be reported using the example in Appendix 8. The audit team may want to sort the results by the Accuracy error rate in descending order to provide the stakeholders with easy to discern information regarding which data elements were determined to have the highest instances of error. Additionally, the report should discuss whether the results are consistent with the risks identified in the agency's DQP.

#### **♦** Positive Result

The table at Appendix 8. [Insert Table]

#### **♦** Negative Result

Auditors may choose to describe relevant facts related to agency-specific results.

#### .03 <u>Completeness – Actual Error Rate/Projected Error Rate</u>

#### **♦** Positive Result

The [actual error/projected error] rate for the completeness of the data elements is [X%]. A data element was considered complete if the required data element that should have been reported was reported.

If using projected error rate include the following: Based on a [X%] confidence level, the projected error rate for the completeness of the data elements is between [X% and X%].

#### **♦** Negative Result

Describe conditions found, root cause.

#### **.04** Timeliness – Actual Error Rate/Projected Error Rate

#### **♦** Positive Result

The [actual error/projected error] rate for the timeliness of the data elements is [X%]. The timeliness of data elements was based on the reporting schedules defined by the financial, procurement, and financial assistance requirements (FFATA, FAR, FPDS-NG, FABS, and DAIMS).

If using the projected error rate include the following: Based on a [X%] confidence level, the projected error rate for the timeliness of the data elements is between [X% and X%].

#### **♦ Negative Result**

Describe adverse conditions found, root cause.

#### .05 <u>Accuracy – Actual Error Rate/Projected Error Rate</u>

#### ♦ Positive Result

The [actual error/projected error] rate for the accuracy of the data elements is [X%]. A data element was considered accurate when amounts and other data relating to recorded transactions were recorded in accordance with the DAIMS RSS, IDD, and the online data dictionary, and agree with the originating award documentation/contract file.

If using projected error rate include the following: Based on a [X%] confidence level, the projected error rate for the accuracy of the data elements is between [X% and X%].

#### **♦** Negative Result

Describe adverse conditions found, root cause.

#### **Data Standards**

#### **.06** Implementation and Use of the Data Standards

#### **♦** Positive Result

We have evaluated [Agency]'s implementation of the government-wide financial data standards for award and spending information and determined the [Agency] is using the standards as defined by OMB and Treasury.

[Agency] linked by common identifiers (e.g., PIID, FAIN), all of the data elements in the agency's procurement, financial, and grants systems, as applicable. For the Treasury's DATA Act Broker files tested, we generally found that the required elements were present in the file and that the record values were presented in accordance with the standards.

#### ♦ Negative Result

We have evaluated [Agency]'s implementation and use of the government-wide financial data standards for spending information as developed by OMB and Treasury. [Agency] has [not fully implemented or used] the data standards as defined by OMB and Treasury.

Explain how the agency has not implemented and are not using the data standards. Specifically, identify the problem(s) and the cause of the problem(s).

#### **Non-Statistical Results**

#### .07 Completeness of the Agency DATA Act Submission

#### **♦** Positive Result

We evaluated [Agency]'s DATA Act submission to Treasury's DATA Act Broker and determined that the submission was complete. To be considered a complete submission, we evaluated Files A, B and C to determine that all transactions and events that should have been recorded were recorded in the proper period.

#### **♦ Negative Result**

We evaluated [Agency]'s DATA Act submission to Treasury's DATA Act Broker and determined that the submission was not complete. To be considered a complete submission, we evaluated Files A, B and C to determine that all transactions and events that should have been recorded were recorded in the proper period. The agency submission was not complete because [insert reason]. During our test work, we noted:

- The submission did not include XXX records in File X. [Explain how it was determined that XX records were not included in File X].
- Of the missing records an estimated [dollars or percentage] of [PIID and/or FAIN] records were missing from the agency's [X] quarter spending.

Based on the [# of records/dollar amounts] of incomplete data, we determined this [would/would not] have an adverse impact on the overall quality of the DATA Act submission. [Insert reason of impact decision]

## .08 <u>Timeliness of the Agency DATA Act Submission</u>

#### **♦** Positive Result

For non-COVID-19 Reporting Agencies: We evaluated [Agency]'s fiscal year 202X [XX quarter] DATA Act submission to Treasury's DATA Act Broker and determined that the submission was timely. To be considered timely, it had to be submitted and certified within 45 days of quarter end.

For COVID-19 Reporting Agencies: We evaluated [Agency]'s fiscal year 202X [XX, XX, XX monthly] DATA Act submissions to Treasury's DATA Act Broker and determined that the submissions were timely. We also noted that the SAO certified the data timely. To be considered timely, the DATA Act submission had to be submitted by the end of the following month and had to be certified by the SAO within 45 days of the end of the corresponding quarter.

#### **♦** Negative Result

For non-COVID-19 Reporting Agencies: We evaluated [Agency]'s fiscal year 202X [XX quarter] DATA Act submission to Treasury's DATA Act Broker to determine if it was submitted and certified within 45 days of quarter end. The agency [submission, certification or submission and certification] was dated [XXX], which was [XX] days after the required reporting deadline, and therefore was not timely. For COVID-19 Reporting Agencies: We evaluated [Agency]'s fiscal year 202X [XX, XX, XX] monthly DATA Act submissions to Treasury's DATA Act Broker and

determined that the submissions were not timely. [Agency] submitted [XX month(s)] timely but did not submit [XX month(s)] to Treasury's DATA Act Broker timely. The agency submission(s) was dated [XXX], which was [XX] days after the month of submission, and therefore was not timely. To be considered timely, the DATA Act submission(s) had to be submitted by the end of the following month and had to be certified by the SAO within 45 days of the end of the corresponding quarter.

The agency submission was late, because [insert reason]. Based on [the number of days/reason submission was late], we determined this [would/would not] have an adverse impact on the overall quality of the DATA Act submission. [Insert reason of impact decision].

#### .09 Completeness of Summary-Level Data for Files A and B

#### **♦** Positive Result

We performed summary-level data reconciliations and linkages for Files A and B and did not identify any variances. The test results verified: (1) summary-level data from File A matched the Agency's GTAS SF-133; (2) the totals and TAS identified in File A matched File B; and (3) all object class codes from File B match codes defined in Section 83 of OMB Circular No. A-11.

#### **♦** Negative Result

We performed summary-level data reconciliations and linkages for Files A and B and identified the following variances. [Insert description of variance and root cause]. Based on the variances identified, we determined this [would/would not] have an adverse impact on the overall quality of the DATA Act submission. [Insert reason of impact decision].

#### .10 Results of Linkages from File C to Files B/D1/D2

#### **♦** Positive Result

We tested the linkages between File C to File B by TAS, object class, and program activity, the linkages between File C to File D1 by both the PIID and Parent Award ID and the linkages between File C to File D2 by the FAIN or URI. All of the TAS, object class, and program activity data elements from File C existed in File B and all of the PIIDs/Parent Award IDs/FAINs/URIs from File C existed in File D1/D2; and all PIIDs/Parent Award IDs/FAINs/URIs in Files D1/D2 existed in File C.

#### **♦** Negative Result

We tested the linkages between File C to File B by matching TAS, object class, and program activity and the linkages between File C to File D1/D2 by matching the Award ID. During our test work we identified:

- [#] of records in File C that were not reported in File B
- [#] of records in File C that were not reported in File D1
- [#] of records in File C that were not reported in File D2
- [#] of records in File D1 that were not reported in File C
- [#] of records in File D2 that were not reported in File C

Based on our test results, the linkages from File C to File B and/or File C to Files D1/D2 did not work properly. The variances were caused by [insert explanation].

We determined the variance [would/would not] have an adverse impact on the overall quality of the DATA Act submission. [Insert reason of impact decision and whether the variance impacted the suitability of File C for testing].

#### .11 Analysis of the Accuracy of Dollar Value-related Data Elements

Below is an example<sup>33</sup> of how the results of the accuracy of the data elements related to dollar value can be displayed in the report. This provides the stakeholders with easy to discern information regarding those data elements that are associated with a dollar value. The absolute value of errors by data element will provide the stakeholders with additional information. However, it's important to note that these amounts are not projectable, and if this table is included in the audit report, the audit team should include an explanation as such.

#### **Accuracy of Dollar-Value Related Data Elements**

PIID/FAIN	#	Data Element	Accurate	Not Accurate	Not Applicable	Total Tested	Error Rate	Absolute Value of Errors
PIID	DE 11	Federal Action Obligation	365	0	6	371	0%	\$ -
PIID	DE 14	Current Total Value Of Award	361	1	9	371	0%	\$ 120,000
PIID	DE 15	Potential Total Value Of Award	367	1	3	371	0%	\$ 120,000
PIID	DE 53	Obligation	300	50	21	371	14%	\$ 500,000
FAIN	DE 11	Federal Action Obligation	14	0	0	14	0%	\$ -
FAIN	DE 12	Non-Federal Funding Amount	0	0	14	14	0%	\$ -
FAIN	DE 13	Amount of Award	14	0	0	14	0%	\$ -
FAIN	DE 14	Current Total Value Of Award	14	2	0	14	14%	\$ 800
FAIN	DE 53	Obligation	5	1	0	6	17%	\$ 400
		Total	1,440	55	53	1,546	-	

## .12 Analysis of Errors in Data Elements Not Attributable to the Agency

Below is an example of how to display the results for the errors in data elements that are not attributable to the agency. This provides the stakeholders with easy to discern information regarding those data elements that were caused by a third-party system, such as Treasury's DATA Act Broker. The audit team should include an explanation in the report that describes the reason for the third-party system errors (if known).

#### **Errors in Data Elements Not Attributable to the Agency**

PIID/FAIN	#	Data Element	Attributed to
PIID	DE 14	Current Total Value Of Award	Treasury's DATA Act Broker Extracting from FPDS-NG
PIID	DE 5	Legal Entity Address Legal Entity Address State Description	FPDS-NG Extracting from SAM
PIID	DE 16	Award Type IDV_Type	Treasury's DATA Act Broker Extracting from FPDS-NG
FAIN	DE 5	Legal Entity Address Legal Entity Address State Description	Treasury's DATA Act Broker Extracting from FABS
FAIN	DE 30	Primary Place of Performance Address Primary Place of Performance County Name	Treasury's DATA Act Broker Extracting from FABS

<sup>&</sup>lt;sup>33</sup> Example of results table from 2019 DATA Act audit.

#### .13 <u>File C COVID-19 Outlay Testing and Results</u>

We selected a non-statistical sample (explain judgement used) of X records out of X File C outlay records from the third month of the FY 202X, X quarter DATA Act submission. Our testing included assessing the Parent Award ID number, PIID/FAIN, object class, appropriations account, obligation, program activity, outlay, and DEFC File C outlays data elements for completeness, accuracy, and timeliness. Based on our testing, we found that the File C outlays for our sample of X records, were X% complete, X% accurate, and X% timely. This non-statistical sample design did not allow projection of the test results to the universe from which the samples were selected.

#### **Other Report Content**

#### .14 Assessment of Internal Control and Compliance with Laws and Regulations

When internal control is significant within the context of the audit objectives, auditors should include in the audit report (1) the scope of their work on internal control and (2) any deficiencies in internal control that are significant within the context of the audit objectives and based upon the audit work performed.

#### **♦** Suggested Language

We assessed internal controls and compliance with laws and regulations necessary to satisfy the audit objective. In particular, we assessed [insert related internal control components and underlying principles significant to the audit objective, or as necessary, if too voluminous for this paragraph, consider referring to an appendix that will contain all relevant components/principles]. However, because our review was limited to these internal control components and underlying principles, it may not have disclosed all internal control deficiencies that may have existed at the time of this audit.

#### .15 Deviations from the Guide

#### **♦** Suggested Language

We did not follow the CIGIE FAEC Inspector's General Guide to Compliance under the DATA Act for the following sections...the reason why...Our deviation [will or will not] impact the overall quality score...this is how...

#### .16 DATA Act Date Anomaly

#### **♦** Suggested Language

The Council of the Inspectors General on Integrity and Efficiency (CIGIE) identified a timing anomaly with the oversight requirements contained in the Digital Accountability and Transparency Act of 2014 (DATA Act). That is, the first Inspector General (IG) reports were due to Congress in November 2016; however, Federal agencies were not required to report spending data until May 2017. To address this reporting date anomaly, the IGs provided Congress with their first required reports by November 8, 2017, 1 year after the statutory due date, with two subsequent reports to be submitted following on a 2-year cycle. This is the third and final report required

under the DATA Act. On December 22, 2015, CIGIE's chair issued a letter detailing the strategy for dealing with the IG reporting date anomaly and communicated the strategy to the Senate Committee on Homeland Security and Governmental Affairs and the House Committee on Oversight and Government Reform.

#### .17 <u>Testing Limitations for Files E and F</u>

#### **♦** Suggested Language

File E of the DATA Act Information Model Schema contains additional awardee attribute information the Treasury DATA Act Broker software extracts from the System for Award Management (SAM). File F contains sub-award attribute information the broker software extracts from the Federal Funding Accountability and Transparency Act (FFATA) Subaward Reporting System (FSRS). Files E and F data remain the responsibility of the awardee in accordance with terms and conditions of Federal agreements, and the quality of these data remains the legal responsibility of the recipient. Therefore, agency senior accountable officials are not responsible for certifying the quality of File E and F data reported by awardees, but they are responsible for assuring controls are in place to verify that financial assistance awardees register in SAM at the time of the award. As such, we did not assess the completeness, timeliness, quality, and accuracy of the data extracted from SAM and FSRS via the Treasury broker software system.

#### 970 Deadline & Transmittal Information

- .01 The due date for this report is November 8, 2021.
- .02 This report should be addressed to the head of the agency; made publicly available, and distributed as follows:

#### United States Senate Committee on Homeland Security and Governmental Affairs

Chairman and Ranking Member 340 Dirksen Senate Building Washington, DC 20510

#### **United States House Committee on Oversight and Reform**

Chairman and Ranking Member 2157 Rayburn House Office Building Washington, DC 20515

#### **United States Senate Committee on the Budget**

Chairman and Ranking Member 624 Dirksen Senate Office Building Washington, DC 20510

## **United States House Committee on the Budget**

Chairman and Ranking Member 204-E Cannon House Office Building Washington, DC 20515

**.03** Copies of this report and the completed quality scorecard (Attachment 4) should also be sent to:

**GAO** at **DATAActImplementation@gao.gov** 

Treasury IG at DATAAct@oig.treas.gov

## **Appendix 1 – CIGIE'S DATA ACT Anomaly Letter**



December 22, 2015

The Honorable Ron Johnson Chairman The Honorable Thomas Carper Ranking Member Committee on Homeland Security and Governmental Affairs United States Senate Washington, D.C. The Honorable Jason Chaffetz
Chairman
The Honorable Elijah Cummings
Ranking Member
Committee on Oversight and Government Reform
U.S. House of Representatives
Washington, D.C.

Dear Mr. Chairmen and Ranking Members:

The Council of the Inspectors General on Integrity and Efficiency (CIGIE) recognizes and appreciates your leadership on issues of Government transparency and accountability. In particular, we believe the enactment last year of the Digital Accountability and Transparency Act of 2014 (DATA Act) will significantly improve the quality of Federal spending data available to Congress, the public, and the accountability community if properly implemented. To make sure this happens, the DATA Act provides for strong oversight by way of the Federal Inspectors General and the Government Accountability Office (GAO). In particular, the DATA Act requires a series of reports from each to include, among other things, an assessment of the completeness, timeliness, quality, and accuracy of data submitted by agencies under the DATA Act.

I am writing this letter on behalf of CIGIE to inform you of an important timing anomaly with the oversight requirement for Inspectors General in the DATA Act. Your staffs have been briefed on this timing anomaly, which affects the first Inspector General reports required by the DATA Act. Specifically, the first Inspector General reports are due to Congress in November 2016. However, the agencies we oversee are not required to submit spending data in compliance with the DATA Act until May 2017. As a result, Inspectors General would be unable to report on the spending data submitted under the Act, as this data will not exist until the following year. This anomaly would cause the body of reports submitted by the Inspectors General in November 2016 to be of minimal use to the public, the Congress, the Executive Branch, and others.

To address this reporting date anomaly, the Inspectors General plan to provide Congress with their first required reports in November 2017, a one-year delay from the due date in statute, with subsequent reports following on a two-year cycle, in November 2019 and November 2021. We believe that moving the due dates back one year will enable the Inspectors General to meet the

#### Page 2

intent of the oversight provisions in the DATA Act and provide useful reports for the public, the Congress, the Executive Branch, and others.

Although we think the best course of action is to delay the Inspector General reports, CIGIE is encouraging the Federal Inspector General Community to undertake DATA Act "readiness reviews" at their respective agencies well in advance of the first November 2017 report. Through a working group, CIGIE has developed guidance for these reviews. I am pleased to report that several Inspectors General have already begun reviews at their respective agencies, and many Inspectors General are planning to begin reviews in the near future. We believe that these reviews, which are in addition to the specific oversight requirements of the Act, will assist all parties in helping to ensure the success of the DATA Act implementation.

We have kept GAO officials informed about our plan to delay the first Inspector General reports for one year, which they are comfortable with, and our ongoing efforts to help ensure early engagement through Inspector General readiness reviews.

Should you or your staffs have any questions about our approach or other aspects of our collective DATA Act oversight activities, please do not hesitate to contact me at (202) 514-3435.

Sincerely,

Michael E. Horowitz

Chair, Council of the Inspectors General on Integrity and Efficiency

Inspector General, U.S. Department of Justice

cc: The Honorable David Mader, Controller, OMB

The Honorable Gene Dodaro, Comptroller General, GAO

# Appendix 2 – Suggested Criteria<sup>34</sup>

1. Digital Accountability and Transparency Act of 2014 https://www.gpo.gov/fdsys/pkg/PLAW-113publ101/pdf/PLAW-113publ101.pdf

2. Federal Funding Accountability and Transparency Act of 2006 https://www.congress.gov/109/plaws/publ282/PLAW-109publ282.pdf

3. The Federal Financial Management Improvement Act of 1996 https://www.gpo.gov/fdsys/pkg/PLAW-104publ208/pdf/PLAW-104publ208.pdf

4. The Federal Managers' Financial Integrity Act of 1982 https://www.gpo.gov/fdsys/pkg/STATUTE-96/pdf/STATUTE-96-Pg814.pdf

5. OMB Circular No. A-123 https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2016/m-16-17.pdf

6. OMB Circular No. A-123, Appendix A https://www.whitehouse.gov/wp-content/uploads/2018/06/M-18-16.pdf

7. OMB Management Procedures Memorandum No. 2016-03 https://obamawhitehouse.archives.gov/sites/default/files/omb/financial/memos/management-proceduresmemorandum-no-2016-03-additional-guidance-for-data-act-implementation.pdf

8. OMB M-17-04 Additional Guidance for DATA Act Implementation: Further Requirements for Reporting and **Assuring DATA Reliability** https://obamawhitehouse.archives.gov/sites/default/files/omb/memoranda/2017/m-17-04.pdf

9. OMB M-10-06 Open Government Directive https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2010/m10-06.pdf

10. OMB Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information **Disseminated by Federal Agencies** https://www.gpo.gov/fdsys/pkg/FR-2002-02-22/pdf/R2-59.pdf

11. OMB Open Government Directive – Framework for the Quality of Federal Spending Information https://obamawhitehouse.archives.qov/sites/default/files/omb/assets/financial\_pdf/Open\_Government\_Directive\_02 082010.pdf

12. OMB M-20-11 Administrative Relief for Recipients and Applicants of Federal Financial Assistance Directly Impacted by the Novel Coronavirus (COVID-19) https://www.whitehouse.gov/wp-content/uploads/2020/03/M-20-11.pdf

13. OMB M-20-21 Implementation Guidance for Supplemental Funding Provided in Response to the Coronavirus Disease 2019

https://www.whitehouse.gov/wp-content/uploads/2020/04/Implementation-Guidance-for-Supplemental-Funding-Provided-in-Response.pdf

14. OMB M-20-18 Managing Federal Contract Performance Issues Associated with Novel Coronavirus https://www.whitehouse.gov/wp-content/uploads/2020/03/M-20-18.pdf

15. OMB M-20-20 Repurposing Existing Federal Financial Assistance Programs and Awards to Support the Emergency Response to the Novel Coronavirus (COVID-19) https://www.whitehouse.gov/wp-content/uploads/2020/04/M-20-20.pdf

16. OMB Memorandum Risk-Based Financial Audits and Reporting Activities in Response to COVID-19 https://www.whitehouse.gov/wp-content/uploads/2020/06/6209 Memo.pdf

<sup>&</sup>lt;sup>34</sup> Auditors are responsible for ensuring that they have the most recent and relevant criteria as it pertains to their audit objectives.

17. DAIMS v 2.0 (includes RSS & IDD)

https://fiscal.treasury.gov/data-transparency/DAIMS-current.html

18. DAIMS v 2.0 Practices and Procedures

https://community.max.gov/download/attachments/754091528/Practices-and-Procedures-v2.0.pdf?api=v2

19. DATA Act Online Data Dictionary

https://www.usaspending.gov/#/download center/data dictionary

20. Data Quality Playbook

https://www.cfo.gov/wp-content/uploads/2018/12/Data-Quality-Playbook-2018.pdf

21. Federal Spending Transparency Data Standards & Whitepapers

https://max.gov/maxportal/assets/public/offm/DataStandardsFinal.htm

https://fedspendingtransparency.github.io/data-elements/https://fedspendingtransparency.github.io/data-elements/

22. DATA Act Broker Validation Rules

https://fiscal.treasury.gov/files/data-transparency/DAIMS-Validation-Rules-v2.0.1.xlsx

23. U.S. Digital Services Playbook

https://playbook.cio.gov/#plays index anchor

24. GAO Financial Audit Manual, Volume 1,2,3

http://www.gao.gov/financial audit manual/overview

25. Government Auditing Standards (The Yellow Book)

http://www.gao.gov/yellowbook/overview

- 26. ELECTRONIC GOVERNMENT: Implementation of the Federal Funding Accountability and Transparency Act of 2006 <a href="http://www.gao.gov/assets/310/301849.pdf">http://www.gao.gov/assets/310/301849.pdf</a>
- 27. DATA Transparency: Oversight Needed to Address Underreporting and Inconsistencies on Federal Award Website <a href="http://www.gao.gov/assets/670/664536.pdf">http://www.gao.gov/assets/670/664536.pdf</a>
- 28. Standards for Internal Control in the Federal Government

http://www.gao.gov/products/GAO-14-704G

29. Federal Acquisition Regulation

https://www.acquisition.gov/?q=browsefar

30. FPDS-NG Data Dictionary

https://www.fpds.gov/downloads/Version\_1.5\_specs/FPDSNG\_DataDictionary\_V1.5.pdf

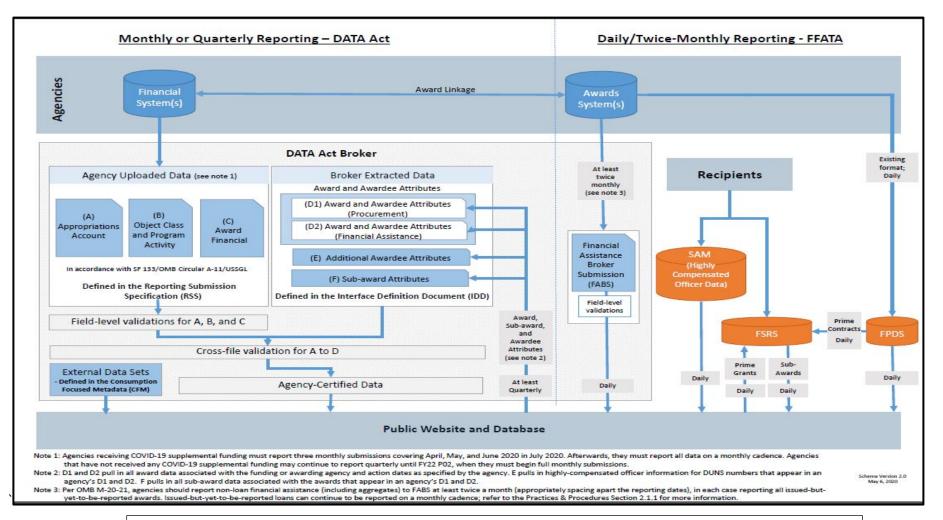
31. FPDS-NG User Guide

https://www.fpds.gov/downloads/Manuals/FPDS-NG User Manual V15.pdf

32. Coronavirus (COVID-19) Acquisition Related Information & Resources

https://community.max.gov/x/dUCafg

## **Appendix 3 – DATA Act Information Flow Diagram**



Source: Department of the Treasury. https://www.fiscal.treasury.gov/data-transparency/resources.html

# **Appendix 4 – Mapping of Data Elements**

# 59 Data Elements Mapped to Files A to D2

DAIMS Element #	Data Element Name		Links a	Notes			
		File A	File B	File C	File D1	File D2	
1	Awardee/Recipient Legal Entity Name				•	•	
2	Awardee/Recipient Unique Identifier				•	•	
3	Ultimate Parent Unique Identifier				•	•	
4	Ultimate Parent Legal Entity Name				•	•	
5	Legal Entity Address				•	•	
6	Legal Entity Congressional District				•	•	
7	Legal Entity Country Code				•	•	
8	Legal Entity Country Name				•	•	
9	Highly Compensated Officer Name						Reported in Files E and F
10	Highly Compensated Officer Total Compensation						Reported in Files E and F
11	Amount of Award					•	
12	Non-Federal Funding Amount					•	
13	Federal Action Obligation				•	•	
14	Current Total Value of Award				•		
15	Potential Total Value of Award				•		
16	Award Type				•	•	
17	NAICS Code				•		
18	NAICS Description				•		
19	Catalog of Federal Domestic Assistance Number					•	
20	Catalog of Federal Domestic Assistance Title					•	
21	Treasury Account Symbol						Included with Data Element #51
22	Award Description				•	•	
23	Award Modification / Amendment Number				•	•	
24	Parent Award ID Number			•	•		
25	Action Date				•	•	
26	Period of Performance Start Date				•	•	
27	Period of Performance Current End Date				•	•	
28	Period of Performance Potential End Date				•		
29	Ordering Period End Date				•		

File A File B File C D1 D2  30 Primary Place of Performance Address • • • • • • • • • • • • • • • • • •	
31   Primary Place of Performance Congressional District	
32 Primary Place of Performance Country Code  33 Primary Place of Performance Country Name  34 Award ID Number (PIID/FAIN)  35 Record Type  36 Action Type  37 Business Types	
33         Primary Place of Performance Country Name         •         •           34         Award ID Number (PIID/FAIN)         •         •           35         Record Type         •         •           36         Action Type         •         •           37         Business Types         •         •	
34         Award ID Number (PIID/FAIN)         •         •           35         Record Type         •         •           36         Action Type         •         •           37         Business Types         •         •	
35         Record Type         ●           36         Action Type         ●           37         Business Types         ●	
36 Action Type   37 Business Types  • • •	
37 Business Types •	
30 Funding Assess Many	
38 Funding Agency Name • •	
39 Funding Agency Code • •	
40 Funding Sub Tier Agency Name • •	
41 Funding Sub Tier Agency Code • •	
42 Funding Office Name • •	
43 Funding Office Code • •	
44 Awarding Agency Name • •	
45 Awarding Agency Code • •	
46 Awarding Sub Tier Agency Name • •	
47 Awarding Sub Tier Agency Code • •	
48 Awarding Office Name • •	
49 Awarding Office Code • •	
50 Object Class • •	
51 Appropriations Account • • •	
52 Budget Authority Appropriated •	
53 Obligation • • •	
54 Unobligated Balance • • •	
55 Other Budgetary Resources •	
56 Program Activity • •	
57 <b>O</b> utlay <sup>35</sup> • • •	
163 National Interest Action (No.58)	
430 Disaster Emergency Fund Code (No.59)	

<sup>35</sup> Agencies previously had the option to report File C outlays on a quarterly basis. Under OMB M-20-21, agencies with COVID-19 funding are now required to report outlays on a monthly basis for COVID-19 funded awards.

## **Appendix 5 – Statistical Sampling Technique**

#### I. Introduction

The American Institute for Certified Public Accountants (AICPA) defines statistical sampling as "An approach to sampling that has the following characteristics:

- a. Random selection of the sample items
- b. The use of an appropriate statistical technique to evaluate sample results, including measurement of sampling risk.

A sampling approach that does not have characteristics a and b is considered non-statistical sampling." <sup>36</sup>

The DATA Act specifies the use of a statistically valid sample of spending data submitted under the Act and requires IGs to report the completeness, timeliness, quality, and accuracy of the data sampled. Unless the IG is doing a census review of 100% of the agency data submissions, a probability selection method must be used, and the results must be projected to the population with the sampling error disclosed. In AICPA terminology, the method that is used for this type of audit is referred to as "attributes sampling." <sup>37</sup>

A census, where the IG tests each and every row in the population frame, is consistent with the definition of a statistical sample. Each sample unit has a probability of selection equal to 1, the sampling fraction is 1, and there is no sampling error. Reporting the results as a percentage is methodologically equivalent to projecting to the population. If a census is not feasible because of resources and/or the agency's File C is too large to test all of them, then a statistical sample should be drawn.

#### II. Sample Design

If the prior audit steps have determined that File C is suitable as the population frame, then it should be used for sampling. If the determination is made that File C is not suitable then Files D1 and D2 should be used as the population sample frame. The sampling unit is one row in the data file (a record). The data elements in sample selections are to be evaluated for completeness, timeliness, and accuracy. While the data rows in the population file come from federal spending data, including awards (e.g., procurements/contracts, grants, and loans), this is not a financial audit. The purpose of the sample is to assess the completeness, timeliness, and accuracy of the data submitted, which includes the 59 data elements. Statistical sampling should be done with equal probability of selection, either as

<sup>&</sup>lt;sup>36</sup> Source: AICPA Audit Guide - Audit Sampling, May 2017, page 161

<sup>&</sup>lt;sup>37</sup> Source: AICPA Audit Guide - Audit Sampling, May 2017, page 25, section 2.35. "Attributes sampling is used to reach a conclusion about a population in terms of a rate of occurrence. Its most common use in auditing is to test the rate of deviation from a prescribed control to support the auditor's assessed level of control risk. In attributes sampling, each occurrence of, or deviation from a prescribed control, is given equal weight in the sample evaluation, regardless of the dollar amount of the transactions. For testing the operating effectiveness of controls that are expected to operate with the same level of consistency, regardless of the size of transactions, attributes sampling is typically the most effective method for applying audit sampling to these tests."

a simple random selection or within each sampling stratum if the IG chooses to stratify. Sampling via probability proportionate to size is not recommended for the estimation of attribute measures, the controls on data quality we are assessing are supposed to apply equally to all data rows in the population.

There are up to 59 data elements that the statistical sample is supposed to assess.<sup>38</sup> The sample unit is a row of data (a record); each selected data row (record) will have a subset of the full 59 data elements present. Within File C an individual data row could derive from an award (e.g., procurement, grant, or loan) record. Because some sample selections could be from contracts while others could be from grants or loans, the subset of the 59 data elements which are actually present and applicable to a sampled data row will vary. We will return to how to handle this in section IV with the discussion about stratification versus simple random selection.

For completeness in an individual data element, in a sampled data record, the outcome measure is defined as:

 $X_{(c,i)} = 1$  (a data value is present)

 $X_{(c,i)} = 0$  (no data value is present or the data value present is not formatted correctly)

 $X_{(c,i)} = N/A$  (not applicable, this data element is not required in the record type)

Where i = 1 to 59, one completeness measure for each data element.

For accuracy in an individual data element, in a sampled data record, the outcome measure is defined as:

 $X_{(a,i)} = 1$  (data element is accurate)

X (a,i) = 0 (data element is not accurate)

 $X_{(a,i)} = N/A$  (not applicable, this data element is not required in the record type)

Where i = 1 to 59, one accuracy measure for each data element.

For timeliness in an individual data element, in a sampled data record, the outcome measure is defined as:

X(t,i) = 1 (data element was reported timely)

X(t,i) = 0 (data element was not reported timely)

 $X_{(t,i)} = N/A$  (not applicable, this data element is not required in the record type)

Where i = 1 to 59, one timeliness measure for each data element.

#### III. Data record level measures for completeness, accuracy, and timeliness

In terms of assessing completeness, accuracy, and timeliness at the data record level, there are several different ways to aggregate the results of the attribute measures across the data elements present in the record. We can think of our sample as a matrix, where each selected data row (record) from File C (or D1/D2) is a row in the matrix and the columns are the measures for the completeness, accuracy, and timeliness of the 59 data elements. The outcome measures defined previously cover the measurement and estimation for the columns in our matrix. The next step is to define the outcomes so that we measure completeness, accuracy, and timeliness at the record (sample unit) level. This will involve

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<sup>38</sup> https://fedspendingtransparency.github.io/data-elements/

aggregating across the various columns within each of the three main dimensions (completeness, accuracy, and timeliness). Below is an example for accuracy. You would have a similar matrix for completeness and one for timeliness.

An Example for Accuracy

Sample	Data Element 1	Data Element 2	Data Element 3	 Data Element 59
data record 1	1	1	1	1
data record 2	0	1	1	1
data record 3	1	0	0	1
data record				
385	1	1	1	N/A

A variety of ways exist for how to aggregate the findings from the individual data element tests to record summary level measures of completeness, accuracy, and timeliness. For consistency, IGs should create a data record level percentage measure as described below.

For a given dimension (e.g., completeness, accuracy, and timeliness), sum the indicator measures for the subset of the 59 data elements which are applicable for the data record. For example, if 40 data elements apply to the data record <sup>39</sup>, then the sum of the accuracy attribute measures for this data record will be a number between 0 and 40. Once we have our sum, divide by the number of applicable data elements and multiply by 100. This rescales the measure from a number that ranges from 0 to 40 to a percentage which ranges in value from 0 to 100. This is the percentage of data elements which are accurate in the data record. Rescaling and converting the record level measure to a percentage that ranges in value from 0 to 100 allows results to be combined across sample selections from different record types. After rescaling, everything is on a common scale of measurement.

Example: We have a data record in our sample where accuracy was assessed for 48 data elements.

Step 1: Determine the sum – this is the number of accurate data elements among the 48.

$$A = \sum_{i=1}^{48} X_{a,i}$$

Step 2: Rescale A to a measure of percentage accurate.

$$\overline{A} = \frac{A}{48} \times 100$$

<sup>&</sup>lt;sup>39</sup> This number will vary depending upon whether the data record comes from a procurement, including the type of procurement, a grant or a loan.

This type of outcome measure is intuitive in that it represents the percent of the applicable data fields which met the accuracy data reliability test. Estimates for this type of measure should be determined by calculating the average percentage for accuracy for the sample, then project them to the population. You would repeat all these steps for completeness and timeliness.

#### IV. Design Choices – to Stratify or Use Simple Random Selection

The File C data which IGs end up with to evaluate will vary in record composition across the government from one agency to another. Some agency population frames will be composed of grants and loans while others may be composed entirely of procurements. Most will be a mix of grants, loans, and procurements. For this reason, it is not necessary for each and every IG in the government to use the exact same sample design.

The estimates will be statistically comparable across the IG community as long as a) the random selection is done via equal probability of selection; and b) CIGIE/FAEC has agreed upon common outcome measures to use.

There are a few steps to consider which should help audit teams decide what type of sample design is most appropriate for their size of agency.

- If you are an IG for a small agency and your agency has a small enough number of data rows in the File C submission that a census is feasible, then use a census and evaluate the file in its entirety. Use the outcome measures which CIGIE/FAEC agrees upon for measuring completeness, accuracy, timeliness, and quality.
- If you are an IG from a small or medium sized agency, you have an agency data file which is too large for a census to be feasible, but there is no in-house specialist staff group in your IG to help with the statistics, then a simple random sample is a valid choice for the sample design. Use the outcome measures which CIGIE FAEC agrees upon for measuring completeness, accuracy, timeliness, and quality.
- If you are from an IG for a large agency and you have an in-house specialist support group then stratification by record type is worth considering. Sample size allocation for each stratum should be done so that estimation for an attribute measure can be made with some larger margin of error sample while the overall margin of error is set using the agreed upon sample size determination methodology. <sup>40</sup> The added value that stratification provides is the ability to ensure all data record types (e.g., procurements, grants, and loans) are represented in the sample and thus target findings and related recommendations accordingly. For example, testing of the sample selections may reveal that your agency has problems in accuracy with procurements, but not grants or loans. Or it may reveal that the problems are agency wide and not confined to one type of record. Use the outcome measures

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<sup>&</sup>lt;sup>40</sup> For example, in the 2017 GAO report on the DATA Act (GAO-18-138) the stratification was designed to produce stratum-level estimates with a margin of error no larger than plus or minus 10 percentage points at the 95% level of confidence and an overall margin of error no larger than plus or minus 7 percentage points at the 95% level of confidence.

which CIGIE/FAEC agrees upon for measuring completeness, accuracy, timeliness, and quality.

o For agencies with a skewed distribution, such as one where the majority are of one record type while a small percentage are other record types, it is okay to target most of the sample size allocation to the record type with the disproportionate representation in the population and apply a small sample allocation to the other stratum (or strata) for purposes of audit coverage. It would also be okay with a File C that is predominantly of one record type to select a simple random sample and live with the consequence that the results for a subset of data elements would not be projectable. It would not be projectable.

<sup>41</sup> If the allocation of sample units to the "small" stratum (or strata) is not large enough to support statistically reliable estimates, report out counts for the data elements which are unique to the record type which comprises a small share of the total agency C file. As long as statistical projections are made for the other data elements, including the ones common to both record types, this is methodologically sound. For attribute variables in classic variable sampling, we consider a margin of error less than or equal to plus or minus 15 percentage points at the 95% level of confidence to be of sufficient reliability to report out on.

<sup>&</sup>lt;sup>42</sup> In this situation, report out counts for the data elements which are specific to the record type which comprises a small share of the total agency C file if they do not turn up in the sample in a number sufficient to support statistically reliable population estimates. As long as statistical projections are made for the other data elements, including the ones common to both record types, this is methodologically sound. For attribute variables in classic variable sampling, we consider a margin of error less than or equal to plus or minus 15 percentage points at the 95% level of confidence to be of sufficient reliability to report out on.

## **Appendix 6 - Testing Spreadsheet Instructions**

## **Purpose**

The Testing Spreadsheet includes the specific data elements that should be tested based on CIGIE Guidance. It is designed to auto-calculate projectable error rates for completeness, accuracy, and timeliness of the entire statistical sample. Additionally, it can be used to calculate error rates per individual elements.

The Testing Spreadsheet also includes a tab that calculates error rates for a non-statistical sample of COVID-19 outlays as applicable. We strongly encourage auditors to use the Testing Spreadsheet to record and calculate their statistical sample testing results.

## **Overall Layout**

In addition to these instructions and a summary, the Testing Spreadsheet contains three testing worksheets:

- PIID Testing
- ♦ FAIN Testing
- ♦ COVID-19 Outlay Testing



## **Agency Template Set up**

Auditors should set up their templates for the PIID, FAIN and COVID-19 testing sheets as follows:

- ♦ Go to the Review Tab and select "Unprotect Sheet" (NO Password)
- ♦ Add/delete rows only based on Agency sample size
- ♦ Go back to the Review Tab and select "Protect Sheet" (NO Password) to protect locked horizontal formula cells.
- ♦ Note: Do NOT change cells with formulas, as they reflect how errors must be calculated per the Guide.
- ♦ **Note: Do NOT add** additional **columns** to this spreadsheet, as adjusting the columns can alter the performance of the embedded formulas.
- ♦ **Note:** Agencies are responsible for any additional, vertical summation calculations.

## PIID & FAIN Testing Worksheets – Statistical Sample

Each worksheet is divided into statistical and non-statistical sections:

Statistical Testing

Scores are recorded and included in statistical results calculations.

Sta	Statistical Testing (1=Exception 0= No Exception n/a=Not Applicable)																					
ting	g File C Testing File C Testing File D1 Testing File D1 Testing File D1 Testing File D1 Testing								File	D1 Te	sting											
		DE 53			DE 56			DE 430	)		DE 1			DE 2			DE 3		DE 4		Ι	
ions	0	bligatio	on	Prog	ram Ac	tivity	and the same of the	Disaste rgency Code	Fund	0.0000000000000000000000000000000000000	iee/Re Entity		Martin Co. Tool	dee/Re jue Idei	CONTRACTOR OF	100000000000000000000000000000000000000	nate Pa ue Ider	C/10/2006	100000000000000000000000000000000000000	nate Pa		
ement ransferA fier	53(B)/T	t 03/Elem ransaction edAmoun	nObligat		02.E.2/Ek rogramAr me		Sort 430/Dis	02.H/Ele asterEme _ndCode	rgencyFu	1/Award	5.B.02/El deeOrRei (EntityNa	cipientLe	2/Awar	Sort 05.B.01/Element Sort 05.C.01/Element Sort 05.C. /AwardeeOrRecipientUn 3/UltimateParentUniqueId 4/UltimateFigueIdentifier entifier its		3/UltimateParentUniqueId			LegalEnt			
T	С	A	Т	С	A	Т	С	A	Т	С	A	Т	С	A	т	С	А	Т	С	A	Т	

The statistical testing sections of the PIID and FAIN testing worksheets contain:

- ♦ Missing or Invalid Alert Column Alerts auditors to any blanks or improperly formatted scores, by yellow highlighting with number of issues in red font.
- ♦ Total Data Elements Reported / Required column Auto-calculates the number of data elements applicable for this sampled record. The figures can be different for sample records due to optional data elements and whether a data element is applicable to that sample record or not.
- ♦ Error Count columns Auto-calculate exceptions (i.e., errors) noted for this sampled record
- ◆ **Testing Columns** Contain score cells for each data element tested for Completeness (C), Accuracy (A), and Timeliness (T). Scores are entered as follows: 1= Exception 0= No Exception n/a= Not Applicable.
- ♦ Optional or Potentially Non-Applicable Data Elements Have a red border with comments. Optional DEs, should be tested if reported, or marked as "n/a" if not reported. Potentially non-applicable DEs, require auditors to determine whether the DE applies to the sample record or not.

#### Non-Statistical Testing

Used to test file linkages and capture dollar amounts of exceptions for the sampled record.

	Non-Statistical Testing							
Linkage To	ests Between	Files C and D1						
Does the PIID in File C and D1 match?	Does the Parent Award ID in File C and D1 match?	Does the TOA in File C (DE 53) equal the <u>inverse</u> of the FAO amount in File D1 (DE 13)?	Exception Amount File C / DE 53 Transaction Obligation Amount	File D1 / DE 13 Federal Action	Exception Amount File D1 / DE 14 Current Total Value of Award	Exception Amount File D1 / DE 15 Potential Total Value of Award		

◆ **Linkage columns** - PIIDs and FAINS are to link from File C1 and Files D1 or D2. These columns will capture the results of the tests of these linkages. This information is not included in the statistical projections, but if significant issues exist, it should be included in the auditor's report.

♦ Exception Amount columns - These columns will capture the exception amounts for sampled records that do not agree with their source documentation. This additional information is not included in the statistical projection but should be included in the auditor's report.

## **Summary Sheet**

Auditors should add PIID and FAIN Testing results here to calculate the overall error rates for the entire statistical sample.

## **COVID-19 Outlay Testing Worksheet – Non-statistical Sample**

The COVID-19 Outlay Testing Worksheet is set up to include only the required testing data elements for COVID-19 outlays. Auditors should include these results in the quality scorecard as applicable; however, they will not be incorporated into statistical projections, as they are selected in a separate, non-statistical sample.

#### **Directions**

Enter results of record-level testing on PIID, FAIN, and COVID-19 Testing Worksheets according to CIGIE Guidance. To properly auto-calculate results, scores **MUST** be entered as follows:

- ♦ 1=Exception (Error)
- ♦ 0= No Exception
- ♦ n/a=Not Applicable.

**Note:** Refer to row 5 for reference(s) and sub-elements.

## **Troubleshooting & Questions:**

DATAAct@oig.treas.gov

## **Appendix 7 - Quality Scorecard Instructions**

#### **Purpose**

The Quality Scorecard is designed to provide government-wide consistency in the measurement of quality. This is accomplished by including and assigning quantifiable values to non-statistical testing and weighing those results with statistical testing results.

#### Layout

The Quality Scorecard input tabs are designed to mirror sections of the *CIGIE FAEC Inspectors General Guide to Compliance under the DATA Act* (the Guide). These include 630 Timeliness, 640 Summary-Level Data, 650 Suitability of File C, 730 Record-Level Linkages, 740 Data Element Testing, and 750 COVID-19 Outlay Testing.

Formulas feed the point values from the input section tabs into the Quality Scorecard tab. Most input cells are highlighted in yellow. Cells that do not require auditor input are locked to protect the integrity of formulas. Auditors will enter dates, data, or select responses from drop-down menus in the section tabs. Point values are calculated based on this input.

#### **Weighted Scoring**

Points are allocated based on whether the agency received COVID-19 funding.

Criteria	Without Outlays (No COVID Funding)	With Outlays (COVID funding)
630 Timeliness	5.0	5.0
640 Summary-Level Data	13.0	10.0
650 Suitability of File C	13.0	10.0
730 Record-Level Linkages	9.0	7.0
740 Data Element Testing		
Completeness	15.0	15.0
Accuracy	30.0	30.0
Timeliness	15.0	15.0
750 COVID-19 Outlay Testing		
Completeness	-	2.0
Accuracy	-	4.0
Timeliness	-	2.0
Total	100.0	100.0

#### **Quality Scorecard Tab**

Auditors will enter the agency name at the top of the scorecard. Scores are automatically populated as auditors complete the input tabs described below.

#### 630 - Timeliness of Agency Submission

Submission requirements vary based on whether agencies received COVID-19 funding. Select an answer from the drop-down menu in cell C6. If the agency did not receive COVID-19 funding, auditors are directed to complete Section A. If the agency received COVID-19 funding, auditors are directed to complete Section B. Enter the due date(s) and submission date(s) as directed. Number of business days late and the corresponding score are calculated, and the score is fed into the Quality Scorecard tab.

**Note:** Because scores are based on whether an agency received COVID-19 funding, some scores cannot be calculated without a response in cell C6 of this tab. Auditors may receive the response "Error" in lieu of a score while this cell is incomplete. For this reason, it is recommended auditors answer this question first.

#### 640 - Completeness of Summary-Level Data (Files A & B)

Auditors will answer the questions by selecting from the drop-down lists in column D. Points are calculated, and the score is fed into the Quality Scorecard tab.

#### 650 - Suitability of File C for Sample Selection

Auditors will answer the questions by selecting from the drop-down list in cell D5 and entering numerical answers to the remaining yellow-highlighted cells in column D. Rates are calculated with locked formulas in the Scoring & Results section, points are calculated, and the score is fed into the Quality Scorecard tab.

#### 730 - Record-Level Linkages (Files C & D1/D2)

Auditors will answer the questions by selecting answers from drop-down lists and entering numerical answers in the yellow-highlighted cells in column D. Rates are calculated with locked formulas in the Scoring & Results section, points are calculated, and the score is fed into the Quality Scorecard tab.

## 740 - Data Element Testing – Statistical Sample

Auditors will enter results from the Summary Stat Sample Results tab of the Testing Spreadsheet in the yellow-highlighted cells in column B. Correctness rates are calculated with locked formulas, points are calculated, and the score is fed into the Quality Scorecard tab.

## 750 - COVID-19 Outlay Testing – Non-statistical Sample

For agencies that received COVID-19 funding, auditors will enter results from the COVID-19 Outlay Testing tab of the Testing Spreadsheet in the yellow-highlighted cells in column B. Correctness rates are calculated with locked formulas, points are calculated, and the score is fed into the Quality Scorecard tab.

## **Troubleshooting & Questions:**

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# **Appendix 8 – Standardized Data Element Reporting**

# <Agency>'s Results for Data Elements

in Descending Order by Accuracy Error Rate

Sample Error Rate<sup>43</sup>

DAIMS Element #	Data Element Name	A Accuracy	C Completeness	T Timeliness
1	Awardee/Recipient Legal Entity Name			
2	Awardee/Recipient Unique Identifier			
3	Ultimate Parent Unique Identifier			
4	Ultimate Parent Legal Entity Name			
5	Legal Entity Address			
6	Legal Entity Congressional District			
7	Legal Entity Country Code			
8	Legal Entity Country Name			
11	Amount of Award			
12	Non-Federal Funding Amount			
13	Federal Action Obligation			
14	Current Total Value of Award			
15	Potential Total Value of Award			
16	Award Type			
17	NAICS Code			
18	NAICS Description			
19	Catalog of Federal Domestic Assistance (CFDA) Number			
20	Catalog of Federal Domestic Assistance (CFDA) Title			
22	Award Description			
23	Award Modification / Amendment Number			
24	Parent Award ID Number			
25	Action Date			
26	Period of Performance Start Date			
27	Period of Performance Current End Date			
28	Period of Performance Potential End Date			
29	Ordering Period End Date			
30	Primary Place of Performance Address			
31	Primary Place of Performance Congressional District			

<sup>&</sup>lt;sup>43</sup> These error rates do not reflect projected error rates to the population, but error rates from the sample alone.

DAIMS Element #	Data Element Name	A Accuracy	C Completeness	T Timeliness
32	Primary Place of Performance Country Code			
33	Primary Place of Performance Country Name			
34	Award ID Number (PIID/FAIN)			
35	Record Type			
36	Action Type			
37	Business Types			
38	Funding Agency Name			
39	Funding Agency Code			
40	Funding Sub Tier Agency Name			
41	Funding Sub Tier Agency Code			
42	Funding Office Name			
43	Funding Office Code			
44	Awarding Agency Name			
45	Awarding Agency Code			
46	Awarding Sub Tier Agency Name			
47	Awarding Sub Tier Agency Code			
48	Awarding Office Name			
49	Awarding Office Code			
50	Object Class			
51	Appropriations Account			
53	Obligation			
54	Unobligated Balance			
56	Program Activity			
57	Outlay (Gross Outlay Amount By Award CPE <sup>44</sup> ) <sup>45</sup>			
163	National Interest Action			
430	Disaster Emergency Fund Code			

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<sup>&</sup>lt;sup>44</sup> In File C, agencies previously had the option to report on a quarterly basis the Gross Outlay Amount By Award CPE. Under OMB M-20-21, agencies with COVID-19 funding are now be required provide each Gross Outlay Amount By Award CPE on a monthly basis for each Federal award with outlay activity and to break down each Gross Outlay Amount By Award CPE by Treasury Account Symbol, Program Activity, Object Class, and DEFC.

<sup>&</sup>lt;sup>45</sup> Outlays were tested using a non-statistical sample.

## **Appendix 9 – Comparative Results Table**

The table below identifies the error rate by data element from the FY2019 and FY2021 audit results. The information is being provided for illustrative purposes only and may not necessarily be indicative of actual percent change based on differences in testing procedures such as population size, sample methodology, quarter tested, file tested, and changes to data definition standards.

# <a href="#"><Agency>'s Comparative Results for Data Elements Based on Accuracy Error Rate in Descending Order</a> Error Rate

DAIMS Element #	Data Element Name	2021	2019	% Change
1	Awardee/Recipient Legal Entity Name			
2	Awardee/Recipient Unique Identifier			
3	Ultimate Parent Unique Identifier			
4	Ultimate Parent Legal Entity Name			
5	Legal Entity Address			
6	Legal Entity Congressional District			
7	Legal Entity Country Code			
8	Legal Entity Country Name			
11	Amount of Award			
12	Non-Federal Funding Amount			
13	Federal Action Obligation			
14	Current Total Value of Award			
15	Potential Total Value of Award			
16	Award Type			
17	NAICS Code			
18	NAICS Description			
19	Catalog of Federal Domestic Assistance (CFDA) Number			
20	Catalog of Federal Domestic Assistance (CFDA) Title			
22	Award Description			
23	Award Modification / Amendment Number			
24	Parent Award ID Number			
25	Action Date			
26	Period of Performance Start Date			
27	Period of Performance Current End Date			
28	Period of Performance Potential End Date			

DAIMS Element #	Data Element Name	2021	2019	% Change
29	Ordering Period End Date			
30	Primary Place of Performance Address			
31	Primary Place of Performance Congressional District			
32	Primary Place of Performance Country Code			
33	Primary Place of Performance Country Name			
34	Award ID Number (PIID/FAIN)			
35	Record Type			
36	Action Type			
37	Business Types			
38	Funding Agency Name			
39	Funding Agency Code			
40	Funding Sub Tier Agency Name			
41	Funding Sub Tier Agency Code			
42	Funding Office Name			
43	Funding Office Code			
44	Awarding Agency Name			
45	Awarding Agency Code			
46	Awarding Sub Tier Agency Name			
47	Awarding Sub Tier Agency Code			
48	Awarding Office Name			
49	Awarding Office Code			
50	Object Class			
51	Appropriations Account			
53	Obligation			
54	Unobligated Balance			
56	Program Activity			
57	Outlay (File C - Gross Outlay Amount By Award CPE)	n/a		n/a
163	National Interest Action	n/a		n/a
430	Disaster Emergency Fund Code	n/a		n/a

## **Appendix 10 - Major Contributors**

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