CAT Reporting Customer & Account Technical Specifications for Industry Members

12/21/2023

Table of Contents

Pre	face		. iv			
Exe	cutive	e Summary	v			
1.	Intro	oduction	1			
	1.1.	CAT Overview	1			
2.	CAT	Customer & Account Reporting Fundamentals	3			
	2.1.	Key Data Elements				
		2.1.1. Firm Identifiers in File Submissions	3			
	2.2.	Reference Data	4			
		2.2.1. Firm Designated ID (FDID)	4			
		2.2.2. Large Trader ID (LTID) and Unidentified Large Trader ID (ULTID)	6			
		2.2.3. FDID Open Date	7			
		2.2.4. Customer	7			
		2.2.5. Input Identifiers	7			
		2.2.5.1. U.S. Tax Identifiers	8			
		2.2.5.2. Foreign Identifiers	8			
		2.2.6. Transformed Identifier (TID)	.10			
		2.2.7. Customer ID	.10			
		2.2.8. Customer Record ID	.10			
	2.3.	CAT CAIS Architecture	.11			
		2.3.1. CCID Subsystem	.11			
		2.3.2. CAIS Data Subsystem	.11			
	2.4.	Data Inconsistency	13			
	2.5.	Data Types	13			
		2.5.1. Data Validation Based on Data Types	14			
		2.5.2. Required, Conditional, and Optional Fields	16			
3.	Spe	cial Reporting Requirements	18			
	3.1.	Replacement of FDIDs	18			
	3.2.	Replacement of Transformed Identifier (TID)	18			
	3.3.	Mass Transfer of FDIDs across Industry Members	21			
	3.4.	Translation of Input Identifiers to TID Values				
	3.5.	Translation of TID to CCID Values	22			
	3.6.	Transition from LTID to Full Customer Reporting	22			
	3.7.	Full Data Replacement Submission	23			
	3.8.	Periodic Customer & Account Information Refresh	23			
	3.9.	Reporting Multiple Versions of a CAT Customer	24			
	3.10	. Tracking of Historical CAT Customer Names	25			

	3.11	. Specia	I Rules Regarding FDID Characters	25		
	3.12	. Specia	I Rules Regarding Natural Person Customer Names	26		
	3.13	. Specia	I Rules Regarding Natural Person Authorized Traders	27		
	3.14	. Specia	I Rules for Clearing Firms	28		
4.	CAIS Reporting					
	4.1.	CAIS D	Pata File	29		
	4.2.	Transf	ormed Identifiers File	49		
5.	Sub	mission	Process	55		
	5.1.	File Su	bmissions and Data Formats	55		
		5.1.1.	File Submission Names	55		
		5.1.2.	Submission Formats	57		
		5.1.3.	CAIS Data File Submission	57		
		5.1.3.1.	CAIS Data File Submission – FDID	58		
		5.1.3.2.	CAIS Data File Submission – Customer	62		
		5.1.4.	Transformed Identifiers File Submission	64		
		5.1.5.	Paired CAIS Data File and Transformed Identifiers File JSON Example	65		
		5.1.6.	Schema	70		
		5.1.6.1.	Schema Version	70		
		5.1.6.2	Schema Definition	7 1		
	5.2.	2. Connectivity				
	5.3. CAT Interface Methods					
		5.3.1.	CAT File Transfer	73		
		5.3.2.	CAT Reporter Portal – CAIS	74		
	5.4.	CAT C	AIS Reporting Hours	75		
		5.4.1.	Submission of CAT Account and Customer Data	75		
		5.4.2.	Deadline for Repair of Errors Identified by CAT CAIS	75		
		5.4.3.	Deadline for Resolving Inconsistencies Identified by CAT CAIS	76		
	5.5.	Securit	ty	77		
		5.5.1.	Encryption (In-transit)	77		
		5.5.2.	Encryption (At-rest)	77		
		5.5.3.	Authentication	77		
6.	Feed	dback a	nd Corrections	79		
	6.1.	File an	d Error Feedback	79		
		6.1.1.	Feedback Generation for CAIS Data and Transformed Identifiers Files	81		
		6.1.2.	Feedback Filenames and Format	82		
		6.1.3.	JSON Examples of Feedback File for File Acknowledgement	8		
	6.2.	File Int	egrity	89		

		6.2.1. JSON Examples for File Integrity Feedback	90			
	6.3.	Data Validation				
		6.3.1. JSON Examples for Data Validation Feedback	92			
	6.4.	Inconsistencies	96			
		6.4.1. Material Inconsistencies Identification	96			
		6.4.2. Outstanding Material Inconsistencies Feedback File	98			
		6.4.3. JSON Example for Outstanding Material Inconsistencies Feedback	100			
	6.5.	Outstanding Rejections	101			
		6.5.1. JSON Examples for Outstanding Rejections Metadata and Data Feedback	104			
	6.6.	Repairs, Corrections and Resolutions	106			
		6.6.1. File Integrity Errors	106			
		6.6.2. Data Validation Errors	107			
		6.6.2.1. Use of the correctionList	107			
		6.6.2.2. Repair of Other Data Validation Errors	108			
		6.6.3. Material Inconsistencies	109			
		6.6.4. Proactive Updates of Customer Record	109			
	6.7.	FDID Reconciliation Report	111			
7.	Test	ting	112			
8.	Add	itional Information	113			
	8.1.	Public Website	113			
App	endic	es	114			
App	endix	A: Change Release Management Process	115			
App	endix	B: Error Codes	116			
	B.1	File Integrity Errors	116			
	B.2	Data Validation Errors	118			
	B.3	Data Layer Validation Error Codes	126			
	B.4 Warning Error Codes					
	B.5 Inconsistency Codes					
App	endix	c C: Glossary	131			
App	endix	c D: Data Dictionary	133			
Apr	endix	E: Country and Region Codes	158			

Preface

Rule 613 of the Securities Exchange Act of 1934 requires national securities exchanges and national securities associations ("SROs") to submit a national market system plan to the Securities and Exchange Commission ("Commission" or "SEC") to create, implement, and maintain a consolidated audit trail (the "CAT") that would allow regulators to more efficiently and accurately track all activity in U.S. equity and listed options markets. Pursuant to Rule 613, the SROs filed with the Commission the National Market System Plan Governing the Consolidated Audit Trail ("CAT NMS Plan"), which was approved by the Commission on November 15, 2016.

Under Rule 613(g)(2), each member of a national securities exchange or national securities association is required to comply with all the provisions of the CAT NMS Plan. Relatedly, as mandated under Rule 613, the CAT NMS Plan requires each SRO to adopt rules requiring its members to comply with Rule 613 and the CAT NMS Plan, and to agree to enforce compliance by its members in that regard. Accordingly, each SRO has adopted rules requiring its members to comply with Rule 613 and the CAT NMS Plan. See, e.g., FINRA Rule 6800 Series.

The SROs jointly own Consolidated Audit Trail, LLC, which was formed by the SROs to arrange for and oversee the creation, implementation, and maintenance of the CAT as required under Rule 613. Thus, the CAT is a facility of each SRO.

This Customer and Account Technical Specification represents the second of the two-phase approach to Industry Member reporting of Customer and Account data, including the full Customer and Account information required under the CAT NMS Plan.

Table 1: Industry Customer & Account Specifications Phased Approach

LTID Phase Production – 12/2020 Compliance Dates: 4/26/2021 Equity Large Industry Members 12/13/2021 2d Options and Small Industry Members	Full Customer and Account Reporting Compliance Date: See CAT Alert 2022-01 and CAT Alert 2023-01
FDID, FDID Account Opening Date, LTID and LTID Effective Date	Remainder of Account information and all Customer information

Version 2.1 iv

Executive Summary

This document describes the requirements for the reporting of Customer and Account data to CAT by Industry Members, including detailed information about data elements and file submission. It also describes how Industry Members submit files to CAT, including access instructions, network and transport options, and testing requirements.

A separate companion document containing detailed reporting scenarios entitled <u>CAT Customer & Account Industry Member Reporting Scenarios</u> should be used as a guide for determining how the field values laid out in this document must be applied when reporting various scenarios for Customer and Account data.

Note: All names, addresses, and identifiers data used for examples in the Customer and Account information reports are purely fictional and for illustrative purposes only. Any resemblance to actual persons, organizations, or locations is purely coincidental. All Transformed Identifiers ("TIDs") included in the examples for Social Security Numbers, Individual Taxpayer Identification Numbers, or Employer Identification Numbers (collectively, 'SSN/ITIN' and 'EIN'), are generated from values that are outside of the acceptable range of assignment by the assigning body and would fail CAT data validations if actually reported to CAIS.

Table 2: Revision / Change Process

Version	Date	Author	Description
DRAFT 1.0	12/13/2019	Consolidated Audit Trail, LLC	Initial draft
1.0	1/31/2020	Consolidated Audit Trail, LLC	Publication of initial version
1.1	4/17/2020	Consolidated Audit Trail, LLC	Addition of Boolean data type Addition of fdidEndDateNULL, fdidEndReasonNULL, replacedByFDIDNULL, ItidEndDateNULL, and ItidEndReasonNULL attributes Removal of 'NULL' acceptable values from fdidEndDate, fdidEndReason, replacedByFDIDNULL, ItidEndDate, and ItidEndReason attributes Addition of failedCorrectionItems array in Feedback file Modified guidance on nullifying previously populated attributes Modified submission and feedback examples to include additions/removals of attributes Modified schema field descriptions Replacement of CAT CAIS Reporter Portal with CAT Reporter Portal – CAIS Addition and modification of Error Codes Separation of Data Validation Warnings from Data Validation
			Portal – CAIS

Version	Date	Author	Description
			Addition of Data Layer Validation Error Codes
			Addition of optional Group attribute for submission file names
			Replaced usage of Status with Feedback for feedback file
1.1.1	6/4/2020	Consolidated	Inclusion of 'Entity ID' as example in FDID Definition
		Audit Trail, LLC	Inclusion of 'ENTITY' as a valid FDID Type
			Correction of CAT CAIS Validation Warnings table Error Code
			numbering
			Clarification of 'Trading Day' as 'CAT Trading Day' and definition of 'CAT Trading Day'
			Explicit listing of 'false' as an acceptable value for Boolean attributes
			Inclusion of Error Code 22006 for duplicated largeTraderID within a single FDID Record submission
1.1.2	12/02/2020	Consolidated Audit Trail, LLC	Update to the Unsigned data type to be the same range as a 63-bit unsigned integer rather than a 64-bit unsigned integer
			Updated <i>firmDesignatedID</i> data type from Alphanumeric to Text to bring in line with Transaction reporting. Also results in changes to data type for <i>replacedByFDID</i> and <i>correctingFirmDesignatedID</i>
			Modification of the Feedback File to include submitterUserName and remove integrityErrorCode
			Renamed rejectionID within the failedCorrectionItems array to failedRejectionID, to clarify purpose
DRAFT 2.0	6/30/2020	Consolidated Audit Trail, LLC	Addition of Customer data, definitions, and reporting requirements
2.0			Addition of separate Transformed Identifiers file
			Modified Feedback file to include Customer Data and Inconsistencies
			Expanded guidance for Reference Data File Submission
			Addition and modification of Error Codes
			Addition and modification of Data Layer Validation Error Codes
			Addition of Data Inconsistency Codes
DRAFT	12/01/2020	Consolidated	Modifications to Schema
2.0 r1		Audit Trail, LLC	Modification of Tax Identifier to Input Identifier terminology
			Addition of 'FOREIGN' Input Identifier type
			Modification of Update Confirmation to Update Notification
			Modifications to File Submission rules
			Inclusion of Mass Transfer of FDIDs across CAT Reporter Firms
			Inclusion of Full Data Replace Submission
			Addition of Country and Region Code reference lists
DRAFT 2.0 r2	1/19/2021	Consolidated Audit Trail, LLC	Updates to the Account Type and Customer Type attribute codes and definitions
			Changed approach from Delta Files with Delta Records to Delta Files with Full Records
			Split <i>role</i> value of 'HOLDER' to two versions – 'TRDHOLDER' and 'NTHOLDER', to reflect holders with trading and holders without trading authorization
			Removed 'NULL' paired fields as a result of the change to Delta Files with Full Records

Version 2.1 vi

Version	Date	Author	Description
			Updated examples based on schema changes
			Updated to detail actions to take if a Foreign TID Type/Foreign TID Country Code/TID Value is incorrectly reported as a Natural Person or Legal Entity, and needs to be reported as the other
			Added customerRejectionEventID to feedback file to provide a single consistent ID for Customer rejections
			Revised guidance for clearing LTID rejections
			Removed correctingLargeTraderID attribute from the Correction Actions list
2.0	1/29/2021	Consolidated	Modification to ULTID format validation
		Audit Trail, LLC	Modifications to accountType
			Removed accountSubType
			Split <i>role</i> value of 'AUTHTRADER' to two versions – 'AUTHREP' and 'AUTH3RD' – to denote Authorized Traders who are, or are not, employees of the reporting firm
			Addition of hasDiscretion within fdidCustomerList
			Modifications of Appendices B and D
			Denoted certain conditionally approved sections in italics, and included note regarding conditional approval
2.0 r1	3/9/2021	Consolidated Audit Trail, LLC	Removed note regarding conditional approval, and converted all previously italicized conditionally approved sections to plain text, following approval
			Corrected <i>priorCATReporterFDID</i> data type to Text, following change of FDID from Alphanumeric to Text
			Corrected JSON Object level for the <i>addressList</i> on the Natural Person and Legal Entity Customer Record entries
			Minor textual edits
2.0 r2	5/7/2021	Consolidated Audit Trail, LLC	Added correspondentCRD attribute to the Main JSON Object level, to enable firms to delineate Customer and Account data of their correspondent introducing brokers
			Changed reporting requirements to allow firms to report multiple versions of a single Customer within a single submission file, and added a Special Reporting Requirements section regarding Reporting Multiple Versions of a CAT Customer
			Removed Material and Minor Inconsistency checks against First Name and Last Name of a Natural Person CAT Customer
			Changed data type of <i>primeBrokerID</i> , <i>bankDepositoryID</i> , and <i>clearingBrokerID</i> to be Arrays rather than Alphanumeric, to allow firms to report more than one value for a single FDID Record
			Modifications to remove LTID date validation comparisons against FDID dates – retirement of Error Codes 22025, 22026, 22027, 23002, and 23003 (included originally in LTID Technical Specification revision)
			Moved <i>customerType</i> attribute from the FDID Record to the Customer Record
			Removed <i>customerType</i> value of 'OTHER' and replaced with 'NOTAPPLICABLE'
			Added detailed information regarding FDID character rules that have been added following the transition from alphanumeric to text
			Clarified file creation and versioning approach for Feedback files.

Version 2.1 vii

Version	Date	Author	Description
			Modified Feedback file schemas
			Updated data and feedback examples
			Modifications to Appendix B Error Codes
2.0 r3	6/2/2021	Consolidated Audit Trail, LLC	Added detail for Section 3.7 – Periodic Customer & Account Information Refresh for requirements on refreshing CAIS submission data
			Updated Section 5.3 – CAT Interface Methods – to include the Refresh feedback
2.0 r4	8/24/2021	Consolidated Audit Trail, LLC	Added receiptTimestamp and completedTimestamp attributes to TIDs Feedback File schema
			Removed customerStartDate, customerEndDate, and customerEndReason attributes
			Updated branchOfficeCRD attribute to be Conditional
			Increased maximum character length for the accountName and legalName attributes. Clarified Input Identifier reporting requirements in Section 2.2.5 – Input Identifiers
			Clarified accountType and fdidType reporting requirements in Section 5.1.3 – Reference Data File Submission
			Updated definitions of <i>primeBrokerID</i> and <i>bankDepositoryID</i> to remove mention of custodian types
			Added catSubmitterID attribute to Nightly Inconsistencies Feedback File name structure
			Updated definitions of 'ACCREDITED', 'EMPLOYEE', 'OTHBKR' and 'ADVISER' customerType values
			Added terminal submission states INCOMPLETE_PROCESSING_FAILURE and COMPLETED_FILE_TIMEOUT
			Updated guidance and validations for appropriate foreignTIDType values for Natural Person or Legal Entity CAT Customers
			Added doingBusinessAs attribute
			Updated data and feedback examples
			Modified Appendix B Error Codes
			Modified Appendix E Region and Postal Code values to only be applicable for US and CA country values
2.0 r5	10/8/2021	Consolidated	Addition of Extended Text data type
		Audit Trail, LLC	Updated doingBusinessAs attribute to be Conditional
			Updated fdidCustomerList attribute to be Conditional
			Updated registeredRepCRD attribute to be Optional
			Corrected format of <i>regionCode</i> for US and Canada Addresses to AA-XX
			Updated definition of 'AVERAGE' accountType value
			Updated definition of doingBusinessAs attribute
			Updated definition of branchOfficeCRD attribute
			Clarified FDID definition in Section 2.2.1 – Firm Designated ID
			Added reporting guidance for Correspondent firms' Accounts in Section 2.1.1 – Firm Identifiers in File Submissions
			Clarified reporting guidance for 'FOREIGN' Input Identifiers in Section 2.2.5 – Material Inconsistencies Procedures
			Addition of Sections 2.2.13 – Material Inconsistency Obligations

Version 2.1 viii

Version	Date	Author	Description
			for Triggering Firms and 2.2.14 – Material Inconsistency Obligations for Impacted Firms
			Clarified reporting guidance for replacement and transfers of FDIDs in Section 3 – Special Reporting Requirements
			Modified reporting guidance for 'RELATIONSHIP' and 'ENTITYID' FDIDs in Section 5.1.3 – Reference Data File Submission
			Modified reporting guidance for 'EMPLOYEE', 'BD', and 'RIC' customerType values in Section 5.1.3 – Reference Data File Submission
			Added reporting guidance for <i>branchOfficeCRD</i> and registeredRepCRD for clearing firms and institutional customers in Section 5.1.3 – Reference Data File Submission
			Added reporting guidance for CAT Customers with trading discretion to Section 5.1.3 – Reference Data File Submission
			Addition of Account, Legal Entity, and Natural Person definitions in Appendix C
			Modified JSON example schemas
			Modified Appendix B error codes
			Corrected customerType value of 'ADVISER' for Legal Entity Customer Record
2.0 r6	12/17/2021	Consolidated	Modified Executive Summary
		Audit Trail, LLC	Added 'DRIVERLICENSE' foreignTIDType value
			Added 'AE', 'AA', and 'AP' as valid United States <i>regionCode</i> values for Military and Diplomatic addresses in Appendix E
			Added specific Go Live dates to Table 1
			Added guidance on 'FOR' primeBrokerID or bankDepositoryID value in Section 5.1.3.1 – Reference Data File Submission – FDID and attribute definitions
			Added guidance for reporting of 'BROKERAGE' accountType value in Section 5.1.3 – Reference Data File Submission
			Updated registeredRepCRD attribute definition
			Updated 2.2.13 and 2.2.14 regarding Material Inconsistency Obligations
			Updated 'EMPLOYEE' and 'ADVISER' customerType value definitions
			Updated 'BROKERAGE' accountType value definition
			Clarified Input Identifier guidance and formats, and updated validations for EINs used as Input Identifiers in Section 2.2.5 – Input Identifiers
			Updated guidance for EINs in Section 3.3 Translation of Input Identifiers to TID Values
			Added hash examples to Section 5.1 – File Submissions and Data Formats
			Added guidance for an Industry Member that stores single name value for a Customer Record in Section 5.1.3 – Reference Data File Submission
			Added reporting guidance for Military and Diplomatic addresses in Section 5.1.3 – Reference Data File Submission
			Clarified reporting of <i>registeredRepCRD</i> attribute in Section 5.1.3.1 – Reference Data File Submission – FDID
			Clarified submission inconsistency feedback files in Section 6.4

Version 2.1 ix

Version	Date	Author	Description
			- Submission Inconsistencies
			Clarified current Minor Inconsistencies in Section 2.2.11 – Data Inconsistency
			Clarified current Material Inconsistencies in Table 3
			Clarified 'ENDED' roleEndReason value definition
			Corrected firmDesignatedID and accountName attribute definitions
			Corrected Firm Designated ID definition in Appendix C – Glossary
			Corrected Extended Text field data types in Data Dictionary to match CAIS Data File section
			Modified JSON example schemas
			Removed error codes 21015 (Paired Identifiers File has Integrity Error) and 21515 (Paired Data File has Integrity Error)
			Added error codes 21020 (Automated transfer in progress), 22539 (CAT Customer Record has an unresolved inconsistency), and 22540 (Invalid middleName)
			Modified error codes 22535 (Legal Entity CAT Customer reported with improper foreignTIDType) and 24005 (Improper correction attempt)
			Replaced instances of "firm" with "Industry Member" throughout document
2.0 r7	3/9/2022	Consolidated	Added DVPCustodianID attribute
		Audit Trail, LLC	Removed primeBrokerID and bankDepositoryID attributes
			Added Section 6.6 – FDID Version Report
			Added 'INACTIVE' as an acceptable value for fdidEndReason, ItidEndReason, and roleEndReason attributes
			Removed 'CP' and 'OTHBKR' as acceptable values for customerType for Legal Entity CAT Customers
			Removed 'BROKERAGE' and 'ADVISED' as acceptable values for the <i>accountType</i> attribute
			Updated definition of 'OTHER' accountType value
			Updated definition of 'ADVISER' customerType value for Legal Entity CAT Customers
			Added Table 3 to illustrate inconsistency timeline
			Clarified LTID attribute in Full CAIS in Section 2.2.2 – Large Trader ID and Unidentified Large Trader ID
			Added reference to FAQ Q57 in Section 2.2.6 – Transformed Identifier (TID)
			Clarified acceptable use of 'NNVE' value in Section 5.1.3.2 – Reference Data File Submission – Customer
			Clarified inconsistency grace period in Sections 2.2.13 – Material Inconsistency Obligations for Triggering Firms and 2.2.14 – Material Inconsistency Obligations for Impacted Firms
			Clarified definition of <i>clearingBrokerID</i> , <i>statusHistory</i> , and <i>submissionStatus</i> attributes
			Replaced <i>rejectionID</i> attribute with <i>warningID</i> attribute for TIDs Feedback Files
			Updated data type of submissionID in TIDs Feedback File
			Corrected references of tidRecordID to customerRecordID
			Corrected references of correctionsList to correctionList

Version	Date	Author	Description
			Removal of error codes 22051 (Neither <i>primeBrokerID</i> nor <i>bankDepositoryID</i> populated), 22062 (Invalid <i>primeBrokerID</i>), and 22063 (Invalid <i>bankDepositoryID</i>)
			Clarified definitions of error codes 22529 (Customer Record rejected because another version of the customer was rejected), 22533 (Multiple instances of Customer with differing data) and 22526 (customerRecordID not present in paired Identifiers file); and clarified definition and description of error code 22042 (Multiple active roles for within fdidCustomerList). Addition of error code 22075 (Missing or Invalid DVPCustodianID)
2.0 r8	4/8/2022	Consolidated Audit Trail	Added foreignTIDType value of 'OTHGOVT' Clarified Sections 2.2.11 through 2.2.15 regarding Data
			Inconsistencies Moved the Customer Data Inconsistencies table to Section 2.2.1 and the Triggered Inconsistencies and Impacted Inconsistencies tables to Section 2.2.15
			Updated Customer Data Inconsistencies table to include additional information on when a Material Inconsistency for the <i>tidType</i> attribute would be triggered
			Updated Section 2.2.1 – Firm Designated ID (FDID) example for Entity ID
			Updated Section 2.2.5 – Input Identifiers to include 'OTHGOVT' on the hierarchy of Foreign Input Identifiers, added language regarding CAT NMS Plan requirements and clarified guidance when an Input Identifier for a Customer changes
			Updated Section 2.3 –Data Types to include detail that NUMBER JSON type fields having leading zero characters are not valid JSON and will result in a file integrity error
			Added Section 3.2 – Replacement of Transformed Identifier (TID) and addition of such information where applicable
			Clarified Section 3.6 – Transition from LTID to Full Customer Reporting regarding the differences between LTID Phase and Full CAIS Phase
			Revised Section 3.7 – Full Data Replacement
			Clarified Section 3.8 – Periodic Customer & Account Information Refresh
			Added Section 3.12 – Special Rules Regarding Natural Person Customer Names and addition of such information where applicable
			Added Section 3.13 – Special Rules Regarding Natural Person Authorized Traders
			Added authTraderNamesList multi-dimensional array to the FDID Record in Section 4.1 – CAIS Data File
			Updated Elements of an Identifiers Feedback File Table in Section 6.1.2 – Feedback File Names and Format to include submissionStatus of RECORD_SCAN_COMPLETED
			Updated Sections 6.6 – FDID Version Report with report formatting, example and sentinel file information
			Added Section 6.6.1 – JSON Examples for FDID Version Report
			Updated value descriptions:
			 'ENTITYID' (accountType, fdidType)
			'CP' (customerType)

Version 2.1 xi

Version	Date	Author	Description
			AUTH3RD and AUTHREP (role)
			 'NATIONALID' (foreignTIDType).
			Updated attribute descriptions:
			 DVPCustodianID (to align with the Transaction Technical Specification description)
			firstName
			clearingBrokerID
			 replacedByTID
			 replacingForeignTIDType
			foreignTIDType.
			Reordered the allowable values for <i>foreignTIDType</i> to align with the hierarchy outlined in Section 2.2.5 – Input Identifiers
			Updated Data Type for <i>lastSubmittedRecordID</i> in Nightly Inconsistencies Feedback File to Array [Unsigned] to support submission of multiple Customer versions
			Reverted warningID back to rejectionID in Identifiers Feedback File and updated rejectionID to be Conditional, and made conforming changes to schema where applicable in Section 6.2.1 – JSON Examples for File Integrity Feedback and Section 6.3.1 – JSON Examples for Data Ingestion Feedback
			Clarified Rules in Sections 5.1.3.1 – Reference Data File – FDID and 5.1.3.2 – Reference Data File Submission – Customer:
			 Rule 25 in Section 5.1.3.1 regarding scenarios where it is not permissible to implicitly end a Customer-to-FDID association
			 Rule 30 in Section 5.1.3.1 regarding populating the <i>DVPCustodianID</i> attribute when there is no clearing number or DTC number available
			 Rule 33 in Section 5.1.3.1 regarding how to report a change in <i>role</i>
			 Rule 36 in Section 5.1.3.1 and Rule 14 in Section 5.1.3.2 regarding Address Records for United States Military or Diplomatic addresses
			Added Rules in Sections 5.1.3.1 – Reference Data File – FDID and 5.1.3.2 – Reference Data File Submission – Customer:
			 Rule 28 in Section 5.1.3.1 and Rule 10 in Section 5.1.3.2 regarding address lines for FDID and Customer addresses
			 Rule 37 to Section 5.1.3.1 regarding fdidDate for an FDID that was closed and then reopened
			 Rule 15 to Section 5.1.3.2 regarding unparsed Natural Person Customer names
			Clarified Rule 1 in Section 7 – Nightly Data Inconsistencies Feedback to clarify sentinel file posting
			Updated Error Codes: 21011, 22042, 22057, 22527, 24904, 24908 and 24911
			Updated previously reserved Error Codes 22072, 22073 and 22074 based on addition of <i>authTraderNamesList</i> to the FDID Record
			Added Error Codes: 22541 and 22542
			Added corresponding Error Codes to CAT CAIS Identifiers File

Version 2.1 xii

Version	Date	Author	Description
			Validation Warnings Table
			Added terms to the Appendix C: Glossary:
			Authorized Trader
			CAT Customer
			Discretion
			Input Identifier
			CAT NMS Plan-Defined PII
			Sensitive Identifier
			Replaced formal field names with the JSON attribute (for example, Update Notification with updateNotification)
			Correction of minor typos throughout
			Included applicable reference data references to Appendix E
2.0 r9	5/4/2022	Consolidated Audit Trail	Added clarification to Section 3.13 – Special Rules Regarding Natural Person Authorized Traders
			Added the <i>hasDiscretion</i> field, where required, to the example in Section 5.1.5 –Paired CAIS Data and Transformed Identifiers File JSON Example
			Updated value descriptions:
			'MARKET' (accountType)
			'AUTH3RD' (role)
			'AUTHREP' (role)
2.0 r9.1	5/5/2022	Consolidated Audit Trail	Added clarification to Section 2.2.5 – Input Identifiers
2.0 r9.2	9/20/2022	Consolidated Audit Trail	Corrected maximum uncompressed size from 100GB to 7GB for files submitted through SFTP:
			 Section 5.1.3, Rule 10
			 Removal of Error Codes 21005 (File exceeds the supported size limit) and 21505 (File exceeds the supported size limit)
2.0 r10	08/02/2023	Consolidated Audit Trail	Added additional details and clarifications to Section 1– Introduction; Section 2 – CAT Customer & Account Reporting Fundamentals; Section 3 – Special Reporting Requirements; Section 4 –CAIS Reporting; Section 5 – Submission Process; Section 6 – Feedback and Corrections; and Section 7 – Impacted Inconsistencies Feedback
			Bifurcated Section 2.2.5 into new Sections: 2.2.5.1 – U.S. Tax Identifiers and 2.2.5.2 – Foreign Identifiers
			Added new Section 2.2.8 – Customer Record ID
			Moved Sections 2.2.8 – CCID Subsystem and 2.2.9 – CAIS Data Subsystem out of Section 2.2 – Reference Data and into new Section 2.3 – CAT CAIS Architecture
			Removed Section 2.2.10 – Reportable Identifier and marked data required to be reported in plaintext in the appropriate sections
			Moved Section 2.2.11 – Data Inconsistency out of Section 2.2 – Reference Data into new Section 2.4 – Data Inconsistency
			Deleted Table 3: Customer Data Inconsistencies and moved relevant information to the appropriate sections
			Renamed and renumbered Section 2.2.15 from "Notification of

Version 2.1 xiii

Version	Date	Author	Description
			Customer Record Updates" to Section 2.4.4 "Proactive Updates of Customer Record"
			Moved Table 4: Triggered Inconsistencies and Table 5: Impacted Inconsistencies to Section 5.4.3 – Deadline for Resolving Inconsistencies Identified by CAT CAIS
			Added a note to the Extended Text Data Type in Table 3: Data Types
			Renamed Section 3.3 from "Mass Transfer of FDIDs across CAT Reporter Firms" to "Mass Transfer of FDIDs across Industry Members"
			Removed references to the "Automated Transfer Procedure" from Section 3.3 – Mass Transfer of FDIDs across Industry Members
			Temporarily removed examples from Table 5: Periodic Refresh Examples
			Added new Section 3.14 – Special Rules for Clearing Firms
			Updated field Descriptions in Table 6, Table 7, Table 8, Table 20, Table 21, Table 22 and Table 23:
			 For Table 6, to note that at least one Customer address is required
			 For consistency with other guidance throughout the document
			 To detail, for Conditional fields, when the field is required and when it is not required
			To provide other additional clarifications
			Updated Appendix D to conform with changes in Tables 6 and 7
			Added that repair of Error Code 22526 requires use of the correctionList
			Added Rule 6 to Section 5.1.1 – File Submission Names
			Renamed Section 5.1.3 from "Reference Data File Submission" to "CAIS Data File Submission"
			Renamed Section 5.1.3.1 from "Reference Data File Submission – FDID" to "CAIS Data File Submission – FDID"
			Renamed Section 5.1.3.2 from "Reference Data File Submission – Customer" to "CAIS Data File Submission – Customer"
			Clarified Rule 1, Rule 24, Rule 30 and Rule 33 in Section 5.1.3.1 – CAIS Data File Submission – FDID
			Added Rule 38 to Section 5.1.3.1 – CAIS Data File Submission – FDID
			Added new Rule 15 and Rule 16 to Section 5.1.3.2 – CAIS Data File Submission – Customer
			Renamed Section 5.1.4 from "Identifiers File Submission" to "Transformed Identifiers File Submission"
			Added Rule 9 to Section 5.1.4 – Transformed Identifiers File Submission
			Renamed Section 5.1.5 from "Paired CAIS Data and Transformed Identifiers File JSON Example" to "Paired CAIS Data File and Transformed Identifiers File JSON Example"
			Revised the narrative and field values and added Customer addresses in the JSON examples in Section 5.1.5 – Paired CAIS Data File and Transformed Identifiers File JSON Example
			Renamed Section 5.4.2 from "Deadline of Repair for Errors

Version 2.1 xiv

Version	Date	Author	Description
			Identified by CAT CAIS" to "Deadline for Repair of Errors Identified by CAT CAIS"
			Added Table 13: Error Repair Deadline Examples
			Renamed Section 5.4.3 from "Deadline of Repair of Data Inconsistencies or Confirmation of Data Accuracy Identified by CAT CAIS" to "Deadline for Resolving Inconsistencies Identified by CAT CAIS"
			Added Table 17: CAIS Data Feedback File Versions, Table 18: Transformed Identifiers Feedback File Versions; and Table 19: Triggered Inconsistencies Feedback File Version
			Retitled Table 20 from "Elements of a Data Feedback File" to "Elements of a CAIS Data Feedback File"
			Clarified the following in Table 20:
			customerRejectionEventID is a Data Type of Text (100)
			 customerRecordID is a Data Type of Array of Unsigned Values
			 addrType is a Data Type of Choice
			Retitled Table 21 from "Elements of an Identifiers Feedback file" to "Elements of a Transformed Identifiers Feedback File"
			Clarified the following in Table 21:
			 customerRecordID is a Data Type of Array of Unsigned Values
			Clarified that <i>rejectionID</i> is always set to 'null' in Table 21: Elements of a Transformed Identifiers Feedback File
			Renamed Section 6.1.2 from "Feedback File Names and Format" to "Feedback Filenames and Format"
			Clarified the following in Table 22:
			 customerRecordID is a Data Type of Array of Unsigned Values
			 updateNotifications is on the Main JSON Object
			Renamed Section 6.3 from "Data Ingestion" to "Data Validation"
			Renamed Section 6.3.1 from "JSON Examples for Data Ingestion Feedback" to "JSON Examples for Data Validation Feedback"
			Renamed Section 6.5 from "Corrections" to "Repairs and Corrections"
			Renamed Section 6.5.2.1 from "Missing or Invalid firmDesignatedID and Malformed TID Records" to "Repair or Deletion for Failing FDID or TID Format Validation or Failure to Pair customerRecordID"
			Renamed Section 6.5.2.2 from "Data Validation Errors" to "Repair of Other Data Validation Errors"
			Updated the JSON examples in Section 6 – Feedback and Corrections and Section 7 – Impacted Inconsistencies Feedback
			Added a new JSON example in Section 6 – Feedback and Corrections to illustrate a "v4" feedback file
			Removed the compression type from sentinel file examples
			Added Section 6.7 – FDID Reconciliation Report
			Bifurcated Rule 1 into Rule 1 and Rule 2 in Section 7 – Impacted Inconsistencies Feedback
			Added Rule 3 and Rule 7 to Section 7 – Impacted

Version 2.1 xv

Version	Date	Author	Description
			Inconsistencies Feedback
			Deleted Rule 8 from Section 7 – Impacted Inconsistencies Feedback
			Renamed Section 7.1.1 from "Data Inconsistencies Feedback File Names" to "Impacted Inconsistencies Feedback Filenames"
			Renamed Section 7.1.2 from "JSON Examples for Data Inconsistencies Feedback" to "JSON Example for Impacted Inconsistencies Feedback"
			Deleted Rule 3 and Table 20 from Section 7.1.1 – Data Inconsistencies Feedback File Names
			Renamed Table 23 from "Elements of an Inconsistency Feedback file" to "Elements of an Impacted Inconsistencies Feedback File"
			Clarified in Table 23: Elements of an Impacted Inconsistencies Feedback File that <i>inconsistencyList</i> , <i>inconsistencyDeadline</i> and <i>materialInconsistencies</i> are Required fields
			Renamed Table 24 from "Data File Integrity Errors" to "CAIS Data File Integrity Errors"
			Renamed Table 25 from "Identifiers File Integrity Errors" to "Transformed Identifiers File Integrity Errors"
			Renamed Table 28 from "CAT CAIS Data File Validation Warnings" to "CAIS Data File Validation Warnings"
			Renamed Table 29 from "CAT CAIS Transformed Identifiers File Validation Warnings" to "Transformed Identifiers File Validation Warnings"
			Clarified Error Code Descriptions and Explanations in Appendix B
			Removed Error Codes 21020, 22066 and 22070
			Added Error Codes 22076 and 22077
			Clarified the corresponding CAIS Data File Error Code for Warning Code 24904
			Added Warning Codes 24008 and 24917
			Renumbered duplicated Appendix B.4 to B.5
			Revised Full CAIS Compliance dates and Release dates throughout
			Removed references to expired or temporary guidance
			Conformed terminology such that
			 "CAT Reporter", "CAT Reporter Firm", etc. is now "Industry Member", where applicable
			"attribute" is now "field", where applicable
			 (1) rejections are "repaired"; (2) self-identified errors are "corrected"; and (3) inconsistencies are "resolved" (either by "confirming" or "updating")
			"Data file", "Reference Data file", etc. is now "CAIS Data File"
			"TIDs file", "Identifiers file", etc. is now "Transformed Identifiers File"
			 "Inconsistency Feedback- Submission" is now "Triggered Inconsistencies Feedback"
			"Inconsistency Feedback- Scans" is now "Impacted Inconsistencies Feedback"
			"CAIS Reporter Portal", "CAT Reporter Portal", etc. is

Version 2.1 xvi

Version	Date	Author	Description
			now "CAT Reporter Portal – CAIS"
			"Data ingestion" is now "Data Validation"
			Updated the field concepts to the field name (for example, from "FDID" to "firmDesignatedID")
			Added references to guidance in published FAQs, where applicable
			Renumbered Tables and Sections, where applicable
			Corrected minor typos throughout
2.1	12/21/2023	Consolidated Audit Trail	Removed Section 2.4.1 – Material Inconsistencies Procedure, Section 2.4.2 – Material Inconsistency Obligations for Triggering Firm, Section 2.4.3 – Material Inconsistency Obligations for Impacted Firm, and Section 2.4.4 – Proactive Updates of Customer Record, and moved relevant information to the appropriate sections
			Updated Rule 15 in Section 5.1.3 – CAIS Data File Submission – Customer
			Updated Section 5.3.1 – CAT File Transfer
			Updated Section 5.4.3 – Deadline for Resolving Inconsistencies Identified by CAT CAIS
			Renamed and updated Table 14 from "Triggered Inconsistencies" to "Inconsistencies"
			Removed Table 15: Impacted Inconsistencies
			Updated Section 6 – Feedback and Corrections
			Updated Section 6.1 – File and Error Feedback to remove references to "Triggered" and "Impacted" inconsistencies
			Updated Table 15: Feedback and Error Correction Availability
			Removed Table 19: Triggered Inconsistencies Feedback File Versions
			Renamed Section 6.1.1 from "Feedback Generation" to "Feedback Generation for CAIS Data and Transformed Identifiers Files"
			Removed Table 22: Elements of a Triggered Inconsistencies Feedback File
			Updated Section 6.3 – Data Validation to remove references to inconsistencies and moved Rule 8 to Section 6.4.2
			Updated customerRecordID in JSON feedback examples
			Repurposed Section 6.4 from "Triggered Inconsistencies" to "Inconsistencies"
			Added new Sections 6.4.1 – Material Inconsistencies Identification, Section 6.4.2 – Outstanding Material Inconsistencies Feedback File, Section 6.4.3 – JSON Example for Outstanding Material Inconsistencies Feedback
			Added new Table 20: Elements of an Outstanding Material Inconsistencies Metadata Feedback File and Table 21: Elements of an Outstanding Material Inconsistencies Data Feedback File
			Added new Section 6.5 – Outstanding Rejections and Section 6.5.1 JSON Examples for Outstanding Rejections Metadata and Data Feedback
			Added new Table 22: Elements of an Outstanding Rejections Metadata Feedback File and Table 23: Elements of an Outstanding Rejections Data Feedback File
			Updated and renamed Section 6.6 from "Repairs and

Version 2.1 xvii

Version	Date	Author	Description
			Corrections" to "Repairs, Corrections and Resolutions"
			Updated Section 6.6.2 – Data Validation Errors
			Updated and renamed Section 6.6.2.1 from "Repair or Deletion for Failing FDID or TID Format Validation or Failure to Pair customerRecordID" to "Use of the correctionList"
			Added that repair of Error Codes 22914 and 22501 requires use of the correctionList
			Added new Section 6.6.3 – Material Inconsistencies and Section 6.6.4 – Proactive Updates of Customer Record
			Removed Section 6.6 – FDID Version Report
			Removed Section 7 – Impacted Inconsistencies Feedback
			Updated Error Codes 22503, 22525, 22534, 22535, 22541 and 22542 in Appendix B.2
			Updated Appendix B.5
			Updated Appendix D to conform with changes in Table 6
			Renumbered sections, rules and tables as appropriate
			Added references to updated guidance throughout
			Removed references to expired or temporary guidance

Version 2.1 xviii

1. Introduction

1.1. CAT Overview

The Securities and Exchange Commission (SEC) approved Rule 613 under the Securities Exchange Act of 1934, which requires national securities exchanges and national securities associations (collectively, the Participants) to submit a national market system plan to create, implement, and maintain a consolidated audit trail (CAT NMS Plan) that would capture customer and order event information for orders in NMS Securities and OTC Equity Securities (Eligible Securities), across all markets, from the time of order inception through routing, cancellation, modification, execution, and allocation. The SEC approved the CAT NMS Plan on November 15, 2016.

In accordance with SEC Rule 613, the CAT NMS Plan requires a Central Repository that will comprehensively track orders throughout their lifecycle and identify the Participants and Industry Members handling them, as well as the account holders and Authorized Traders for any account that originates an order (Customers¹). Specific data elements will be submitted to the Central Repository by Participants, Industry Members, and CAT Reporting Agents. CAT Reporting Agents may be third-party firms reporting on behalf of other entities or may be outside parties that are not required to submit data to the CAT, but from which CAT may receive data per the CAT NMS Plan, such as the Securities Information Processors (SIPs).

The CAT NMS Plan also requires the selection of an entity as the Plan Processor to be responsible for performing the processing functions required by Rule 613 and the Plan. The Operating Committee of Consolidated Audit Trail, LLC, a governing body composed of representatives of the Participants, oversees the operation of the CAT. The duties of the Operating Committee are further described in Article IV of the CAT NMS Plan.

The CAT Customer & Account Information System (CAIS²) is the separate system for submission of Customer and Account data. Effective with the Full Customer and Account Reporting Phase (see Table 1), for every *firmDesignatedID* with reportable activity to the Transaction database since June 12, 2022, Industry Members are required to report the same *firmDesignatedID* to CAIS in an FDID Record along with the required Large Trader and Customer information. In addition, Industry Members are required to

Version 2.1

_

¹ Customers are defined in SEC Rule 613(j)(3) as: (i) the account holder(s) of the account at a registered broker-dealer originating the order; and (ii) any person from whom the broker-dealer is authorized to accept trading instructions for such account, if different from the account holder(s).

² References to CAIS throughout this document are asserted to include both the CAIS Data Subsystem and the separate CCID Subsystem, unless otherwise explicitly noted.

report changes and additions to FDID Records for "Active Accounts" previously accepted by CAIS. Section 1.1 of the CAT NMS Plan defines "Active Account" as "an account that has had activity in Eligible Securities within the last six months." Industry Members are not required to report updates or changes to FDID Records that do not meet the Plan definition of "Active Account" but may optionally do so. Industry Members will also be given the option to mark an account as "inactive" in CAIS. Further, only "Customers" of the reporting Industry Member, as defined in SEC Rule 613(j)(3), are required to be reported to CAIS. This includes FDID Records representing proprietary accounts of the Industry Member where the Industry Member itself is to be reported as the CAT Customer. See footnote 1 and the Glossary of this document for more information on the definition of "Customer".

Refer to SEC Rule 613, available at: https://www.sec.gov/rules/final/2012/34-67457.pdf for more details. Refer also to CAT NMS Plan, available at: https://catnmsplan.com/about-cat/cat-nms-plan.

2. CAT Customer & Account Reporting Fundamentals

2.1. Key Data Elements

The sections below describe the key data elements of CAT used in CAT CAIS submission files. A CAT CAIS submission is comprised of two files – a CAIS Data File and a Transformed Identifiers File – to facilitate separation of the Customer and Account data from the Transformed Identifier used to uniquely reference a single Customer.

2.1.1. Firm Identifiers in File Submissions

The CAT submissions process relies on certain firm identifiers to determine whose data is being reported, and to determine and verify the authorization of the submitter of the data.

CAT Reporter CRD

The CAT Reporter CRD is the Industry Member's Central Registration Depository (CRD) number, used to ensure all Account and Customer reporting activity of a single Industry Member can be consolidated at the CRD level in CAT CAIS. The CAT Reporter CRD must be populated in the CAIS Data filename and Transformed Identifiers filename as well as populated in the *catReporterCRD* field within the CAIS Data File.

CAT Submitter ID

The CAT Submitter ID is a CAT-assigned identifier for a firm that submits data to CAT. The CAT Submitter ID uniquely identifies the CAT Submitter and may be a different identifier than the CAT Reporter CRD.

The CAT Submitter ID must be populated in the CAIS Data filename and Transformed Identifiers filename as well as populated in the *catSubmitterID* field within the CAIS Data File.

Industry Members may submit data for themselves or may authorize a separate CAT Submitter to report on their behalf. Authorization between the Industry Member and CAT Submitter is granted through a reporting relationship that is entered by the Industry Member via the CAT Reporter Portal. When a file is received, CAT CAIS will verify that the Industry Member has authorized the CAT Submitter to submit on its behalf. See the <u>CAT CAIS Reporter Portal User Guide</u> for more information on reporting relationships.

Correspondent CRD

The Correspondent CRD is the CRD of the introducing broker or correspondent firm whose Customer and Account data is kept on record at the clearing firm. It is populated in the *correspondentCRD* field within the CAIS Data File.

The *correspondentCRD* field is only populated by clearing firms with introducing brokers or correspondents and only when reporting Accounts to CAIS that are custodied for their introducing brokers/correspondents, including DVP/RVP accounts. For Accounts which are not correspondent Accounts, the *correspondentCRD* field must not be populated.

The correspondentCRD value must be a different identifier than the catReporterCRD.

The *correspondentCRD* field is at the main level within the JSON structure of the CAIS Data File, and as such will apply to all records within the file. Thus, if the clearing firm custodies Accounts for multiple correspondent firms, Accounts for each individual correspondent must be grouped into a separate file. For firms reporting data of multiple correspondents, a separate file must be used for each *correspondentCRD*.

CAT CAIS will not validate that a business relationship exists between the clearing firm and the correspondent firm.

Note that clearing firms and introducing brokers/correspondents have their own separate and distinct CAIS reporting obligation.

2.2. Reference Data

2.2.1. Firm Designated ID (FDID)

Section 6.4 of the CAT NMS Plan requires that for the original receipt or origination of an order, Industry Members must report the Firm Designated ID (FDID). FDID is reported in the *firmDesignatedID* field and is defined in Section 1.1 of the CAT NMS Plan as:

"...(1) a unique and persistent identifier for each trading account designated by Industry Members for purposes of providing data to the Central Repository provided, however, such identifier may not be the account number for such trading account if the trading account is not a proprietary account; (2) a unique and persistent relationship identifier when an Industry Member does not have an account number available to its order handling and/or execution system at the time of order receipt, provided, however, such identifier must be masked; or (3) a unique and persistent entity identifier when an employee of an Industry Member is exercising discretion over multiple

client accounts and creates an aggregated order for which a trading account number of the Industry Member is not available at the time of order origination, where each such identifier is unique among all identifiers from any given Industry Member."

Before the reporting of Customer Account Information and Customer Identifying Information begins, regulatory users of the CAT will use FDIDs to identify whether the same Account is trading within a single broker-dealer. After the reporting of Customer Account Information and Customer Identifying Information begins, FDIDs will be used to link Accounts to specific Customers, including mapping Accounts with common ownership (for instance, where a Customer is associated with more than one FDID). Therefore, an FDID is required to be populated on all Transaction order and allocation events requiring an FDID for equities, options and multi-leg events.

Industry Members must assign a single FDID to each trading Account that is unique, persistent and consistent within the Industry Member and across all vendors and systems the Industry Member may use to report Transaction order and allocation events requiring an FDID to CAT and associated Customer and Account Information for the FDID to CAT CAIS, and unique across time. For example, if an Industry Member uses multiple vendors for reporting Transaction data to CAT, the Industry Member must ensure that all vendors use the same FDID for a particular trading Account in all CAT Transaction order and allocation events requiring an FDID, and that the same FDID associated with the trading Account is submitted to the Customer and Account Information System.

Examples of what an FDID would represent include:

- Individual Customer Account Number
- Institutional Customer Account Number
- Account Number of Average Price Account Designated for a Specific Customer (e.g., Master Account or agency Representative Order scenarios)
- Account Number of Firm Average Price Account Shared Across Customers (e.g., Master Account, Account Used For Agency Representative Order Flows)
- Proprietary Trading Account Number
- Industry Member-assigned identifier representing a trading relationship (Relationship ID) can be used when the trading account structure is unavailable at the time the order was placed
- Industry Member-assigned identifier (Entity ID) representing the Industry Member's discretionary
 relationship with the client when an employee of the Industry Member is exercising discretion
 over multiple client accounts and creates an aggregated order for which a trading account
 number of the Industry Member is unavailable at the time of order origination

An actual customer account number must not be used as the FDID for a Customer Account for CAT reporting and the same guidance would apply to an FDID representing a Relationship ID. See <u>FAQ M2</u> for more information on the prohibition on use of actual account numbers, and <u>FAQ M10</u> for more information on masking. Also, refer to the <u>CAT Industry Presentation</u> on FDID for additional information.

A change/replacement in the FDID value associated with a particular trading account, Relationship ID, and Entity ID would be an isolated event that is only permissible in certain limited circumstances, such as system migration, change of vendors, change in clearing firm, and change in masking methodology used for FDID values. See <u>FAQ M16</u> for more information on replacing/changing an FDID.

2.2.2. Large Trader ID (LTID) and Unidentified Large Trader ID (ULTID)

LTID is an identifier assigned by the SEC to a "large trader," defined as a person whose transactions in NMS securities equal or exceed:

- 2 Million shares or \$20 Million in any single calendar day; OR
- 20 Million shares or \$200 Million in any calendar month

A person qualifying as a large trader is required to submit Form 13H to the Commission and be assigned an LTID. In accordance with the CAT NMS Plan as amended for LTID, Industry Members are required to report all LTIDs associated to their FDIDs in plaintext as part of their Customer and Account reporting. Thus, Industry Members are required to obtain the LTID for each Account (to the extent that an LTID exists). LTIDs and related information are reported in the *largeTraderList*.

If a clearing firm determines a person (which includes both natural persons and legal entities under Section 13(h)(8)(e) of the Exchange Act) would qualify as a large trader, but the firm has not yet been provided with an LTID by the person, the clearing firm is required to assign an ULTID to the person until such time as the person provides its LTID. Any clearing firm with an obligation to assign an ULTID under the large trader rule is required to report any assigned ULTIDs associated to its reported customers in plaintext as part of its Customer and Account reporting. ULTIDs and related information are reported in the *largeTraderList*.

Industry Members that are not self-clearing and do not have an obligation to assign ULTIDs are not required to report ULTIDs to CAT as they will have no such number to report. The LTID is associated to the FDID Record, not the Customer Record.

Please refer to <u>Section 4 – CAIS Reporting</u> for information regarding the format requirements of the LTID and ULTID. For purposes of the CAT CAIS Reporting Technical Specification, references to LTID fields

and scenarios throughout the document are intended to cover both LTID and ULTID usage in accordance with the reporting obligations noted above.

2.2.3. FDID Open Date

The FDID open date is included in the CAIS data schema as *fdidDate*. The *fdidDate* field must be populated with either:

- Date in which the account was opened, or
- The Account Effective Date, as defined in Section 1.1 of the Plan, in the following circumstances:
 - The Industry Member has established a trading relationship, but not an account, with an institution or client
 - Proprietary trading accounts of the Industry Member
 - Accounts opened prior to the implementation date of the CAT NMS Plan applicable to the relevant Industry Member
 - The Industry Member has acquired another Industry Member and the Account Open Date was changed to a date value on or after the completion of the merger

Please see FAQ Q42 for additional details.

2.2.4. Customer

The CAT NMS Plan defines the term "Customer" as having the same meaning provided in SEC Rule 613(j)(3), which is as follows:

- (i) The account holder(s) of the account at a registered broker-dealer originating the order; and
- (ii) any person from whom the broker-dealer is authorized to accept trading instructions for such account, if different from the account holder(s).

2.2.5. Input Identifiers

Input Identifiers is a generic term for the types of identifiers used to identify unique Customer Records. Input Identifiers are always translated to Transformed Identifier values ("TID value" or "*tidValue*") prior to submission to CAT. The Plan Processor translates Transformed Identifier values into CAT Customer IDs. See <u>Section 2.2.6</u>, <u>Section 2.2.7</u> and <u>Section 3.4</u> for more information.

Input Identifiers include:

- Social Security Number (SSN)/Individual Taxpayer Identification Number (ITIN)
- Employer Identification Number (EIN, including QI-EIN, WP-EIN, and WT-EIN)
- Foreign Identifiers

In accordance with Plan requirements, Industry Members must reconcile each CAT Customer to a single Input Identifier and therefore a single *tidValue*, even if the Customer is associated to multiple FDIDs. It is not permissible for a single Customer to have multiple *tidValue*s. If an Industry Member obtains a new Input Identifier for a Customer that was previously reported to CAIS, the Customer's *tidValue* must be updated for all Customer-to-FDID associations at the Industry Member. Clearing firms with correspondents that have foreign customers, please refer to the additional guidance in Section 3.14 – Special Rules for Clearing Firms.

Refer to <u>FAQ Q57</u> for details regarding handling the selection of a specific Input Identifier for generating a *tidValue* when an Industry Member has multiple values for the same Input Identifier type for a CAT Customer.

2.2.5.1. U.S. Tax Identifiers

Social Security Number (SSN) and Individual Taxpayer Identification Number (ITIN) are considered Sensitive Identifiers and **must not** be submitted in the CAIS Data File. However, the Employer Identification Number (EIN) is not a Sensitive Identifier and must be submitted in plaintext in the CAIS Data File.

If the Customer has an SSN, ITIN, or EIN, it must always be used as the Input Identifier even if other Input Identifiers (i.e., Foreign Identifiers) exist.

Input Identifiers used to generate TID values must be input in valid format, including the hyphen(s) – that is, 999-99-9999 for SSN or ITIN, and 99-9999999 for EIN.

2.2.5.2. Foreign Identifiers

A Legal Entity Identifier (LEI) is not considered a Sensitive Identifier and must be submitted in plaintext in the CAIS Data File. All other foreign identifier values are considered Sensitive Identifiers and **must not** be submitted in the CAIS Data File.

Foreign Identifiers are **only** permissible to use for foreign Natural Person or foreign Legal Entity Customers that do not have a U.S. Tax Identifier. Further, foreign identifiers **must** be used for Natural Persons and Legal Entities that do not have a U.S. Tax Identifier. For example, a Natural Person residing in the U.S. that does not have a U.S. Tax Identifier and a U.S.-based intergovernmental organization that does not have a U.S. Tax Identifier must be reported to CAIS with a foreign identifier type.

Examples of foreign identifiers include:

Legal Entity Identifier (LEI)

- EU Member State National Client Identifier (NCI) in accordance with MIFID II
- Country of Domicile and Passport Number
- National Identity Card
- Permanent Resident Card Number
- Driver's License
- Other Government-Issued Identifier

Format validation will not occur for foreign Input Identifiers.

If an Industry Member has more than one foreign identifier collected for a CAT Customer (e.g., a National Registration and a Passport for a Natural Person) – and the Customer does not have an EIN, SSN, nor ITIN – the Industry Member must always use a single, consistent Input Identifier to generate the *tidValue* for the Customer across all Customer Records submitted by the Industry Member, irrespective if such Customer Records are associated with different FDID Records. Clearing firms with correspondents that have foreign customers, please refer to the additional guidance in <u>Section 3.14 – Special Rules for Clearing Firms</u>. The following hierarchy must be followed if more than one identifier type is available for a foreign CAT Customer:

- National Registration or Tax Identifier usable for Natural Person and Legal Entity CAT Customers
- 2. LEI usable only for Legal Entity CAT Customers
- 3. Country of Domicile and Passport Number usable only for Natural Person CAT Customers
- 4. Permanent Resident Identifier usable only for Natural Person CAT Customers
- 5. Driver's License usable only for Natural Person CAT Customers
- 6. Other Government-Issued Identifier usable for Natural Person and Legal Entity CAT Customers

If the Industry Member obtains a new foreign identifier for a Customer that was previously reported to CAIS and the new foreign identifier replaces the Customer's identifying information within the Industry Member's systems, the new foreign identifier must be used to generate a new *tidValue* for the Customer and must be reported to CAIS for all Customer-to-FDID associations at the Industry Member. If the newly obtained foreign identifier is lower on the hierarchy, it is acceptable for the Industry Member to generate the Customer's new *tidValue* from the new foreign identifier (for example, if a Customer's passport expired and the Customer provided the Industry Member with a driver's license). See <u>Section 3.2</u> Replacement of Transformed Identifier (TID) for information on replacing a Customer's *tidValue*.

When a foreign identifier is used to generate a TID and included in the Transformed Identifiers File, the *foreignTIDType* must be present and populated to indicate what type of identifier was used to generate the TID.

2.2.6. Transformed Identifier (TID)

The Transformed Identifier (TID) is a hashed version of the Input Identifier submitted to CAT by the Industry Member or its CAT Reporting Agent in place of the Input Identifier, in accordance with the exemptive relief granted by the SEC on March 17, 2020. The Industry Member has the responsibility to translate Input Identifiers to TID values (reported in the *tidValue* field) prior to submission, in accordance with the mathematical logic provided in Section 3.4 –Translation of Input Identifiers to TID Values. Input Identifiers used to generate TID values must be input in valid format, including the hyphen(s) – that is, 999-99-9999 for SSN or ITIN, and 99-9999999 for EIN. Format validation will not occur for foreign Input Identifiers.

2.2.7. Customer ID

The Customer ID, also known as CAT Customer ID or CCID, is a unique identifier generated by the Plan Processor, that is defined within SEC Rule 613(j)(5) as "with respect to a customer, a code that uniquely and consistently identifies such customer for purposes of providing data to the central repository." The CCID is a globally unique identifier generated for each unique TID value generated from a well-formatted and valid Input Identifier, in a way that is not reversible to the TID or textual Input Identifier value. The translation of TID to CCID is completed in the CCID Subsystem, in isolation from any of the Customer or Account reference data.

The CCID value is never provided to Industry Members or CAT Submitters and is only used within CAT to uniquely reference a single Customer.

2.2.8. Customer Record ID

A Customer Record ID, populated in the *customerRecordID* field, is a unique reference to a single Customer for a paired submission. This field is required when reporting a Customer in association to an FDID. Figure 1, below, shows that the *customerRecordID* provides CAIS with linkage between the Customer's information contained within the CAIS Data File and the Customer's information contained within the Transformed Identifiers File. For this reason, the *customerRecordID* in the Transformed Identifiers File must reference the *customerRecordID* in the CAIS Data File for the same Customer. For a paired submission of a CAIS Data File and Transformed Identifiers File, each Customer's *customerRecordID* is present three times:

- In the CAIS Data File, it is in the fdidCustomerList and;
- In either the naturalPersonCustomerList or the legalEntityCustomerList.
- In the Transformed Identifiers File, it is in the tidRecordList.

2.3. CAT CAIS Architecture

2.3.1. CCID Subsystem

The CCID Subsystem is an isolated subsystem of CAT CAIS that exists solely to translate input TID values into CCID values. The Transformed Identifiers File, sent only to the CCID Subsystem and containing the combination of the *customerRecordID* pointer and TID, translates the TID to CCID, and passes the combination of *customerRecordID* and CCID to the CAIS Data Subsystem, where the *customerRecordID* is used to associate the assigned CCID with the corresponding Customer Record.

2.3.2. CAIS Data Subsystem

The CAIS Data Subsystem is an isolated subsystem of CAT CAIS that exists for receipt and storage of Customer and Account data. The CAIS Data File, sent only to the CAIS Data Subsystem and containing the Customer and Account submission data, receives the combination of *customerRecordID* and CCID from the CCID Subsystem, and associates the assigned CCID with the corresponding Customer data.

The following diagram provides an overview of the flow of translating Input Identifiers to TID values by the reporting firm, the separation of the TID data from the Customer and Account reference data, and the translation of TID values to CCID values in the isolated CCID Subsystem so that TID is never known to the CAIS Data Subsystem.

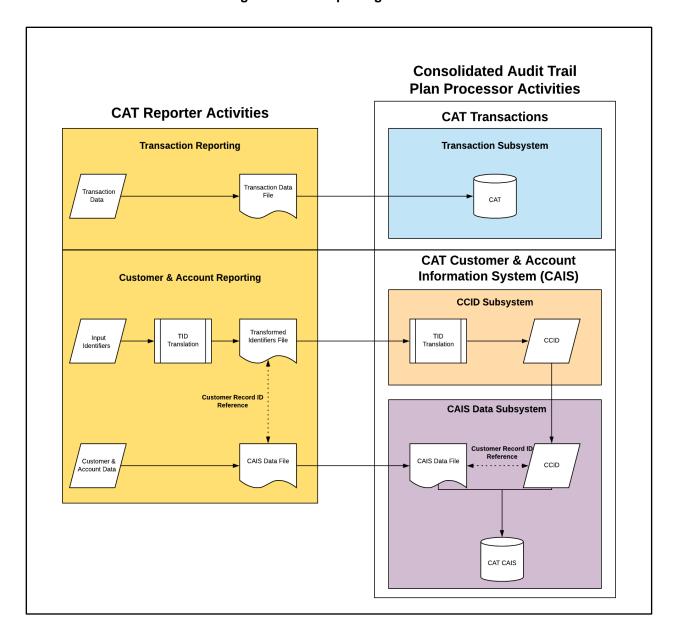


Figure 1: CAT Reporting Activities

2.4. Data Inconsistency

In accordance with the CAT NMS Plan Appendix D, Section 9.4, the CAT system must implement procedures and mechanisms to handle both minor and material inconsistencies in Customer information submitted to CAT.

Data Inconsistencies occur when comparing one version of a Customer Record to another version of the same Customer's record – either submitted by the same Industry Member or submitted by different Industry Members – and certain field values differ. As detailed in <u>Section 6.4.1</u>, data inconsistency checks are only applied against certain fields in the Customer Record. It is expected and acceptable that some Customer information (for example, an address) may differ across FDID Records. Data Inconsistencies can occur:

- Across multiple submission files of a single Industry Member (intra-firm inconsistency)
- Across multiple submission files of multiple Industry Members (inter-firm inconsistency).

Minor Inconsistencies are provided for informational purposes only, and do not require correction. There are no minor inconsistencies defined at this time, however the infrastructure is in place in accordance with the CAT NMS Plan requirements.

Material Inconsistencies are identified by CAT when Customer Records have passed data validation checks, but data inconsistency checks have found inconsistent Customer data. Feedback associated with Material Inconsistencies is provided and Industry Members that receive Material Inconsistency notifications must take action to resolve them within the Plan-established deadlines described in <u>Section</u> 5.4.3 – Deadline for Resolving Inconsistencies Identified by CAT CAIS.

More information on Material Inconsistencies can be found in <u>Section 6.4</u>, <u>Section 6.6.3</u> and Section 6.6.4.

2.5. Data Types

CAT Customer and Account data must be reported using JSON text files. Data types used throughout this document are described below. Data types used for CAT Customer and Account reporting are a subset of the data types used for CAT transaction reporting, with the following difference:

Timestamp – only STRING versions of timestamp are supported in Customer and Account reporting.

To support JSON submissions, the Industry Member Customer and Account Schema (JSON) file is available on the CAT public website that describes each data type with required representation formats.

2.5.1. Data Validation Based on Data Types

All Customer and Account data submitted to CAT will be validated based on the defined data type of each item, including proper formatting and range checking. Examples of accepted values are detailed in the table below. Valid values for Choice fields are defined in the Data Dictionary for each data element. Valid data values, ranges, and formats will be specified in the record schema files, which will be used to validate submitted data element values. Records and values that fail validation will be rejected and will be reported as feedback to the Industry Member (and CAT Submitter, if applicable) as detailed in Section 6 – Feedback and Corrections.

Table 3: Data Types

Data Type	JSON Type	Description
Unsigned	NUMBER	An unsigned value, greater than or equal to zero, with no decimal fraction component, in the inclusive range from 0 to 9,223,372,036,854,775,807 (the same range as a 63-bit unsigned integer). JSON parsing does not allow for leading zero (0) values in a Number JSON type field. Any leading zero characters in a Number JSON type field will result in a file integrity error for invalid JSON.
Boolean	BOOLEAN	A value with two choices: 'true' or 'false'. In JSON representation, if the field is not present, the value is considered 'false'.
Alphanumeric	STRING	A string, composed only of letters and digits [a-zA-Z0-9]. When an Alphanumeric type is described, it will include a number, indicating the maximum length of the field. For example, Alphanumeric (7) means that the field can contain up to 7 characters. Alphanumeric values are case sensitive.
Text	STRING	A string, composed of any printable ASCII character between 32 and 126. The string may not include the following characters which serve as delimiters: • comma (ASCII decimal 44, hex 2C), • pipe (ASCII decimal 124, hex 7C), • double quote (ASCII decimal 34, hex 22), and • @ (ASCII decimal 64, hex 40). When a Text data type is described, it will include a number, indicating the maximum length of the field. For example, Text (7) means that the field can contain up to 7 characters. Text values are case sensitive. When represented in JSON, the following rule applies: Backslash '\' is a reserved printable character in JSON and must be escaped in order to be used in strings by inserting a backslash prior to it within the string. For example: firmDesignatedID = 1234\ABCD must be reported to CAT as "firmDesignatedID": "1234\ABCD". If the backslash is not escaped, the submitted record will be rejected. Escape characters do not participate in the field value length.
Extended Text	STRING	A string, composed of any printable ASCII character between 32 and 255. Note that after UTF-8 encoding, the range of printable ASCII characters is between 32 and 126 and 160 and 255. ASCII characters 127 through 159 are not printable after UTF-8 encoding.

Data Type	JSON Type	Description
		When an Extended Text data type is described, it will include a number, indicating the maximum length of the field. For example, Extended Text (7) means that the field can contain up to 7 characters. Extended Text values are case sensitive.
		When represented in JSON, the following rule applies: Backslash '\' and double quote '" are reserved printable characters in JSON and must be escaped in order to be used in strings by inserting a backslash prior to the reserved character within the string. For example: <i>legalName</i> = 12"34\ABCD must be reported to CAT as "legalName": "12\"34\\ABCD". If the backslash or double quote is not escaped, the submitted record will be rejected. Escape characters do not participate in the field value length.
Date	NUMBER	An 8-digit integer representing the date in YYYYMMDD. JSON parsing does not allow for leading zero (0) values in a Number JSON type field. Any leading zero characters in a Number JSON type field will result in a file integrity error for invalid JSON.
Year	NUMBER	A 4-digit integer representing the year in YYYY. JSON parsing does not allow for leading zero (0) values in a Number JSON type field. Any leading zero characters in a Number JSON type field will result in a file integrity error for invalid JSON.
Timestamp	STRING	A timestamp represents a moment in time. All timestamps must be in Eastern Time (ET). Timestamps formatted as a STRING have a maximum length of 25 and are formatted as 'YYYYMMDD HHMMSS.CCCNNNNNN' with the Date and Time portions, separated by a space (ASCII decimal 32, hex 20) or the letter T (ASCII decimal 84, hex 54). • The Date portion must include four-digit year, two-digit month, and two-digit day. Valid values: YYYY = 0000 - 9999, MM = 01 - 12, DD = 01 - 31. • The Time portion must include a two-digit hour, two-digit minute, and two-digit seconds. Valid values: HH = 00 - 23, MM = 01 - 59, SS = 01 - 59, CCC = 000 - 999, NNNNNN = 000000 - 999999. Examples which comply with Timestamp in STRING format: • 20190617T000120.0000000000 • 20190617T000120.000
Name/Value Pairs	OBJECT	An object composed of a list of zero or more attributes where each attribute is either a name with no value, or a name with an accompanying value. Multiple attributes are separated by a delimiter.

Data Type	JSON Type	Description
		 When represented in JSON, the following rules apply: The OBJECT is contained within curly brackets { } Name/Value Pairs are comma separated A value accompanied by a name must be formatted as per the data type syntax required in JSON
Array	ARRAY	A list of 0, 1 or more values of the same data type. When represented in JSON, the following rules apply: ARRAY is within a set of brackets [] Elements within the array are comma separated.
Choice	STRING	A Text field with an explicit list of acceptable values. The Data Dictionary section of this document lists the acceptable values for each Choice field.
Multi- Dimensional Array	Multi- Dimensional ARRAY	A compound object that consists of an array of objects. The JSON syntax for this data type is consistent with other Multi-Dimensional Array JSON Types. Multi-Dimensional Array is specified as the data type within the Submissions file as well as the Feedback response file.
		When represented in JSON, the following rules apply:
		 ARRAY is within a set of brackets [] Each OBJECT contained in the ARRAY is within curly brackets {} Elements within each object are comma separated Conditional elements that do not have a value are not required to be included.
Hexadecimal	String	A string, composed only of valid hexadecimal characters [a-fA-F0-9]. When a Hexadecimal type is described, it will include a number, indicating the maximum length of the field. For example, Hexadecimal (7) means that the field can contain up to 7 characters. Hexadecimal values are case insensitive.

2.5.2. Required, Conditional, and Optional Fields

Throughout this document, record fields will be defined. Each field will be notated with the abbreviation R, C, or O to represent whether it is required, conditional, or optional. This codification will appear within each row of a table describing a field.

Table 4: Include Key

Value	Abbreviation	Description
Required	R	Required for the given record. This field must always be included.
Conditional	С	Conditionally required for the submission, either when paired with another field or fields, or when such data is applicable to the CAT Customer and/or FDID Record.
Optional	0	Optional for the given record. May be included at the discretion of the Industry

Value	Abbreviation	Description
		Member/Submitter.

3. Special Reporting Requirements

3.1. Replacement of FDIDs

The current functionality enables the replacement of a single *firmDesignatedID* at a time using the *replacedByFDID* field. If an Industry Member desires to replace one or more of its *firmDesignatedID*s due to one of the limited circumstances outlined in <u>FAQ M16</u>, it is able to do so by submitting each individual *firmDesignatedID* to be replaced and the *replacedByFDID* field indicating which *firmDesignatedID* has taken its place. There is no limit to how many *firmDesignatedID*s can be replaced within a submission file, other than the standing record limits for file transmission.

3.2. Replacement of Transformed Identifier (TID)

In order to satisfy Plan requirements for a unique CAT Customer ID, Industry Members must replace a Customer's *tidValue* in scenarios where a Customer's Input Identifier changes. If the Industry Member obtains a new Input Identifier for a Customer that was previously submitted to CAIS, it must update the Customer's *tidValue* for all Customer-to-FDID associations at the Industry Member. There are three ways to replace the Customer's Input Identifier in CAIS and the manner by which replacement must be reported to CAIS depends on **why** it is being updated:

- In one scenario, the Input Identifier was legally changed or the Industry Member obtained a different foreign Input Identifier that replaces the current foreign Input Identifier. This is the only scenario where the use of the *replacedByTID* functionality is permissible. It allows the previous *tidValue* to link to the new *tidValue* and indicates to regulators that the same Customer has always been associated to the FDID. Examples include but are not limited to: when a Customer's Input Identifier was changed from an ITIN to an SSN, a Foreign Legal Entity or Natural Person CAT Customer obtained a U.S.-assigned Input Identifier, a Customer's passport number changed upon reissuance, or a Legal Entity Customer's EIN changed due to a corporate merger or acquisition. In this scenario, Industry Members must report this to CAIS by:
- 1. Including in the Transformed Identifiers File:
 - A record for the Customer's previous TID noting the replacedByTID and replacedByTIDType³; and

Version 2.1 18

_

³ If the *replacedByTIDType* is 'FOREIGN', the Industry Member is also required to populate the *replacingForeignTIDType* and *replacingForeignTIDCountryCd* fields, as applicable.

- b. A record for the Customer's new TID; and
- 2. Including in the CAIS Data File:
 - a. A record for the Customer being replaced including a *roleEndReason* of 'REPLACED' and a *roleEndDate*. The Customer-to-FDID association must be explicitly ended in the submission file. It is not permissible to end the Customer-to-FDID association by omitting the *roleEndReason* and *roleEndDate* fields; and
 - b. A new record for the Customer with an active *role* and *roleStartDate*. The *roleStartDate* must represent the date on which the Customer entered into the specified *role*; not the date that the *tidValue* was replaced.

Note that if a Customer's *tidValue* is replaced with another *tidValue* using the *replacedByTID* functionality and multiple versions of the same Customer are present within the paired file submission, all of the Customer's original *tidValue*s must also be replaced. Customer Records that do not have the appropriate "replacedBy" fields will get Warning Code 24911 (Missing or invalid *replacedByTID*).

- If a Customer's Transformed Identifier (TID) was initially submitted to and accepted by CAIS based on an Input Identifier value that was later determined to be incorrect and was never intended to be associated with the Customer, it is not permissible to use the *replacedByTID* functionality. Reporting as described below will not link the previous *tidValue* to the new *tidValue* and indicates to the regulators that the Customer should not have been associated to the FDID. Examples include but are not limited to: when a *tidValue* was generated from an Input Identifier value that was incorrect and never associated with the Customer due to a manual entry error in the Industry Member's Customer database or the Customer initially provided the Industry Member with an incorrect Input Identifier. Upon receiving or determining the correct Input Identifier for the Customer, the Industry Member must update the record by:
- 1. Including in the Transformed Identifiers File:
 - a. A record for the Customer's previous, incorrect tidValue; and
 - b. A record for the Customer's new *tidValue* that was generated from the correct Input Identifier value for the Customer; and
- 2. Including in the CAIS Data File:

- a. A record for the Customer associated with the tidValue generated from the incorrect Input Identifier value, with a roleEndReason of 'CORRECTION' and a roleEndDate populated with the same date as the roleStartDate to indicate that the Customer Record should not have been associated to the FDID. The Customer-to-FDID association must be explicitly ended in the submission file and cannot be omitted; and
- b. A new record for the Customer associated with the tidValue generated from the correct Input Identifier value, with a roleStartDate reflecting the date the Customer originally entered into the specified role and not the date that the new tidValue was generated based on the correct Input Identifier.
- Per FAQ Q12, if the Industry Member has made a reasonable effort to obtain an accurate reason as to why the Customer is no longer associated to the FDID, and the Industry Member was unable to ascertain if the Customer's Input Identifier was replaced with another Input Identifier (roleEndReason of 'REPLACED') or the Customer was erroneously associated to the FDID (roleEndReason of 'CORRECTION'), the Industry Member may populate the Customer's roleEndReason with 'OTHER'. Reporting as described below will not link the previous tidValue to the new tidValue and indicates to the regulators that the Industry Member was unable to ascertain why the Input Identifier was replaced. In this scenario, Industry Members must report this to CAIS by:
- 1. Including in the Transformed Identifiers File:
 - A record for the Customer's tidValue that was generated from the original Input Identifier;
 and
 - b. A record for the Customer's *tidValue* that was generated from the new Input Identifier; and

2. Including in the CAIS Data File:

- a. A record for the Customer associated with the tidValue generated from the original Input Identifier, with a roleEndReason of 'OTHER' and a roleEndDate populated with the date the Input Identifier was changed by the Industry Member. The Customer-to-FDID association must be explicitly ended in the submission file and cannot be omitted; and
- b. A new record for the Customer associated with the *tidValue* generated from the subsequent Input Identifier value.

3.3. Mass Transfer of FDIDs across Industry Members

In the instance of Account transfers from one Industry Member to another resulting from a merger, acquisition, or divestiture, it is required by the CAT NMS Plan to have a means of linking the Accounts from the prior Industry Member to those of the new Industry Member. The transfer mechanisms described below are only to be used for instances of mass Account transfers. If assets or holdings of a single Account are transferred from one Industry Member to another, it is not required to report this as a Mass Transfer and such the below guidance would not apply.

In order to enact mass transfers of Account records from one Industry Member to another, the transferring Industry Member must report the end of the FDID Record by setting the *fdidEndReason* as 'TRANSFER'.

The receiving Industry Member acquiring the Accounts must report in its submission file the *firmDesignatedID* it has assigned to the Account, the CRD of the transferring Industry Member as the *priorCATReporterCRD* value, and must also provide the FDID value assigned to the acquired Account by the transferring Industry Member as the *priorCATReporterFDID*.

3.4. Translation of Input Identifiers to TID Values

For each SSN/ITIN or EIN Input Identifier that is to be used to uniquely identify a single Customer, the identifier must be input in the exact valid format, including the hyphen(s) – that is, 999-99-9999 for SSN or ITIN, and 99-9999999 for EIN – to a SHA-256 hashing algorithm.

For each foreign Input Identifier that is to be used to uniquely identify a single Customer, prior to applying the SHA-256 hashing algorithm, Industry Members must:

- Remove spaces (leading, trailing, and kerning), hyphens, and/or other punctuation (e.g., colons, semi-colons) so that only the numeric or alphanumeric values are used as the Input Identifier value.
- Avoid affixing additional values (e.g., the countryCode) that do not appear on the documentation, as the foreignTIDType and foreignTIDCountryCd are separately reported in the Transformed Identifiers file.

The 32 bytes output from the SHA-256 hashing algorithm must be then represented as a 64-byte hexadecimal value. This resulting output is the TID value that must be reported to CAT CAIS in the *tidValue* field and will be treated as case-insensitive. It is the responsibility of the Industry Member to translate the Input Identifier to a TID. The Plan Processor will conduct validations against the submitted TIDs to ensure the Input Identifier used to generate the TID was in the appropriate format and is from a valid range for the identifier type, as follows:

1. For SSN and ITIN

- a. No values having an Area Number (first three digits) of 000 nor 666.
- b. No values having a Group Number (middle two digits) of 00.
- c. No values having a Serial Number (last four digits) of 0000.
- d. No values of all the same digit such as 000-00-0000, 111-11-1111, 333-33-3333, 666-66-66666, 999-99-9999, nor 123-45-6789.

2. For EIN

a. No range validation will occur for TIDs generated from EINs.

3. For Foreign

a. No range validation will occur for TIDs generated from foreign identifiers.

3.5. Translation of TID to CCID Values

Each valid and unique input TID reported to CAIS in the *tidValue* field will result in the generation of a cryptographically randomized CCID by the Plan Processor. This resulting CCID will be unique for the specific input TID and will be the resulting CCID each time the same TID is input for translation. The resulting CCID will not be returned to the Industry Member or its CAT Reporting Agent, will not be able to be reversed to the input TID, and is only used within the CAT to uniquely identify a single Customer without storage of Input Identifiers.

3.6. Transition from LTID to Full Customer Reporting

The transition from LTID to Full Customer Reporting includes significant additions to the fields included on an FDID Record, as well as the addition of Customer-to-FDID associations and Customer Records.

For the LTID Phase, it was permissible to exclude optional or conditional fields previously submitted for an FDID or LTID, and no implicit update was made to these values stored in CAIS. If an Industry Member intended to clear a previously submitted value, they were required to use the paired NULL field. Since Industry Members are not permitted to view their record data as currently stored in CAIS, this raised concerns that the data could get out of alignment. To remove that concern in the Full Customer Reporting phase, when making any update to a previously accepted FDID Record (for any reason: repair, correct and update), the Industry Member is required to submit the entire FDID Record in its current state with all required LTID and Customer associations for each record within the file. Industry Members are only required to include records in their submission for new Active Accounts or when changes occur to previously accepted Active Accounts, however each record present in the file must contain the current state of fields and associations of the record.

The sole exception to this requirement to include all current fields and associations is Customer associations that were previously stored, where the FDID is not included in the current submission but at

least one of its associated Customers is included. In this event, the Customer-to-FDID associations for the FDIDs that are not included in the submission file will not be implicitly updated. For example:

- An initial submission file contains two FDIDs, FDID A and FDID B. FDID A has an association to Customer 1; FDID B has associations to Customer 1 and Customer 2.
- A subsequent submission file contains only FDID B and only contains an association to Customer
 2.
- In this event, the association from FDID B to Customer 1 is implicitly ended; however, the
 association from FDID A to Customer 1 is not implicitly ended because FDID A is not included in
 the submission file.

3.7. Full Data Replacement Submission

If an Industry Member determines it must end all FDID Records submitted to CAT CAIS and would like the Plan Processor to end them on its behalf, it must contact the FINRA CAT Helpdesk.

3.8. Periodic Customer & Account Information Refresh

In accordance with the CAT NMS Plan requirements, it is necessary for Industry Members to periodically refresh the Customer and Account information captured in CAIS by resubmitting previously accepted records. Any FDID Record that is active, that is, has no set *fdidEndDate* or has an *fdidEndDate* set to a date greater than the current calendar date, must be submitted to and accepted into CAIS no less often than every 12 calendar month period. Because the FDID Record must be submitted with the full current data and its associated CAT Customers, this will also result in refreshing the associated CAT Customer data on the same frequency. If an Industry Member submits an FDID Record prior to the refresh deadline, and it is accepted into CAIS, the 12 calendar month period will be reset from the date of the submission.

An FDID Refresh Report will contain a list of the Industry Member's active FDIDs that were last accepted at least 11 calendar months prior to the month of the report. To satisfy the periodic refresh requirement, Industry Members must submit to CAIS each FDID on the monthly FDID Refresh Report (with all associated LTIDs and Customers) without data validation errors. Any FDIDs that are subsequently accepted into CAIS will be removed from the subsequent report and the refresh deadline will be reset for those FDID Records. If the FDID is not submitted to CAIS, or is submitted to CAIS and is rejected, it will remain on the FDID Refresh Report until such time that it is either ended or is accepted into CAIS successfully. FDIDs that are not refreshed on or earlier than the last day of the 12 calendar month period will be included in the CAIS Report Cards as records overdue for refresh. Report Cards for a given month are generated at the end of the fifth processing day of the following month and published on the 15th calendar day of the following month. The first FDID Refresh report will be available via SFTP and the CAT Reporter Portal – CAIS on the third processing date in the 11th calendar month after Full CAIS

Compliance Go-Live. The FDID Refresh Report will then be made available via SFTP and the CAT Reporter Portal – CAIS on the third processing date of each following month.

If an FDID Record remains active in CAIS but has had no CAT-reportable activity within the prior sixmonth period, the Industry Member has the option, but is not obligated to, inactivate it in CAIS by reporting an *fdidEndReason* of 'INACTIVE'. An *fdidEndReason* of 'INACTIVE' indicates that the FDID is not in scope for the periodic refresh requirement and it will not appear on the FDID Refresh Report. In addition, FDIDs with an *fdidEndReason* of 'INACTIVE' are not required to be updated in CAIS when Account or Customer changes occur. However, if the inactivated FDID subsequently has any CAT-reportable events reported to the Transaction database, the Industry Member must reactivate the FDID in CAIS by the CAIS reporting deadline or else there may be linkage errors on the Transaction events. Reactivating the FDID is accomplished by resubmitting the entire FDID Record in its current state (with all required LTID and Customer associations) with null values for the *fdidEndDate* and *fdidEndReason* fields or by omitting the *fdidEndDate* and *fdidEndReason* fields from the reactivating submission.

In addition, when *fdidEndReason* is populated with 'INACTIVE', the *fdidEndDate* and *fdidEndReason* will be cascaded as the *roleEndDate* and *roleEndReason*; and cascaded as the *ltidEndDate* and *ltidEndReason* (if applicable). Thus, Customer Records associated to FDID Records that are optionally marked as 'INACTIVE' will not be included in the Material Inconsistency checks.

(T	0	В	е	Upo	dated	at	a	Fut	ure	D	a	te)	٦ (Га	ble	9 5	5:	Peri	iodic	R	efi	est	n I	Examp	oles	
---	---	---	---	---	-----	-------	----	---	-----	-----	---	---	-----	-----	----	-----	-----	----	------	-------	---	-----	-----	-----	-------	------	--

FDID Last Accepted	First Included in FDID Refresh Report	Due for FDID Refresh	First Included as Overdue in Report Card for Month Of

3.9. Reporting Multiple Versions of a CAT Customer

If an Industry Member has multiple versions of a CAT Customer (i.e., the natural person or legal entity has the same Input Identifier and therefore will be reported to CAIS with the same *tidValue* for each instance of the Customer), it is permitted to include the CAT Customer within the same submission file. Multiple versions of the Customer can be reported to CAIS within the same submission in two ways:

• In option 1, the Customer is associated to multiple FDID Records in the CAIS Data File with the same *customerRecordID* value and is only present once in the Transformed Identifiers File with a *customerRecordID* value matching the *customerRecordID* value in the CAIS Data File.

• In option 2, the Customer is associated to multiple FDID Records in the CAIS Data File with differing values for the *customerRecordID* and each instance of the *customerRecordID* is present in the Transformed Identifiers File. Note that if using this option, when a Customer's *tidValue* is replaced with another *tidValue* using the *replacedByTID* functionality and multiple versions of the same Customer are present within the paired file submission, all of the Customer's original *tidValues* must also be replaced. Customer Records that do not have the appropriate "replacedBy" fields will return Warning Code 24911 (Missing or invalid *replacedByTID*).

See the "Multiple Versions of a Customer Within a Submission File" section of the <u>CAT Customer & Account Industry Member Reporting Scenarios for more information.</u>

The versions of the CAT Customers, however, must not contain differing values for the following fields or else all instances of the CAT Customer within the file will be rejected:

- Reporting a 'FOREIGN' tidType record as both Natural Person and Legal Entity Customer Record types
- yearOfBirth (Natural Person Customers only)
- ein (Legal Entity Customers only)

The data stored in CAIS will consist of the merged set of entries across the submitted versions of the CAT Customer. For example, if the CAT Customer is reported in association to three FDID Records, and each time it is reported with different values in the *firstName* field, each of the name values will be stored in CAIS.

3.10. Tracking of Historical CAT Customer Names

To support regulatory understanding of historical CAT Customer Records, previously reported names of the CAT Customer will be retained in association to the currently submitted state of the record, even when the name value is not included in a subsequent submission of the CAT Customer Record.

3.11. Special Rules Regarding FDID Characters

The following are rules regarding specific handling of characters used to generate FDIDs:

A firmDesignatedID reported with the value 'PENDING', regardless of case, will be rejected. The
value of 'PENDING' is used in CAT Transaction reporting when a firmDesignatedID is required for
the event, but not available at the time of reporting; however, the value is not valid for reporting to
CAIS. Once a firmDesignatedID has been assigned by the Industry Member, it must be reported
to CAIS.

- Inclusion of any of the following character combinations in the firmDesignatedID field will result in rejection of the firmDesignatedID due to JSON data parsing rules unless the backslash is properly escaped:
 - o \b
 - 0 \
 - 0 \
 - o \n
 - o \t
 - o \"
- A backslash that is followed by any character other than the ones noted above, will result in the file having an Integrity Error for invalid JSON, unless the backslash is properly escaped.
- As an example of a properly escaped backslash, if an Industry Member has a firmDesignatedID of '1234\ABCD', it would be required to report this to CAIS as '1234\\ABCD'.
- Leading and trailing spaces in the firmDesignatedID field will be removed during processing, and
 the string between them will be stored in CAIS. Spaces bounded by other characters within the
 firmDesignatedID field string will be retained.
- A firmDesignatedID that consists of only spaces will be rejected.

3.12. Special Rules Regarding Natural Person Customer Names

To facilitate reporting of correct Customer names as required by the CAT NMS Plan, the Technical Specifications require Natural Person first and last names to be reported in two separate fields, *firstName* and *lastName*, respectively. Accordingly, if either the *firstName* or *lastName* fields for Natural Person Customers are not populated, the Customer Record will be rejected.

In the scenario where the Customer only has a single legal name (i.e., a first name but no last name, or a last name but no first name):

- If an Industry Member stores a single name value for its Customer who legally has one name, it
 must populate the *lastName* field with the name recorded in its books and records and populate
 the *firstName* field with a value of 'NNVE' (No Name Value Exists).
- If the Industry Member stores the legal name as both the first name and the last name (perhaps, due to system requirements), the Industry Member may report the Customer as described above or may populate the stored values in the respective *firstName* field and *lastName* fields.

Note that effective June 13, 2023, use of 'UNPARSED' is not allowed. An "Unparsed Names" report is available upon request to the FINRA CAT Helpdesk.

3.13. Special Rules Regarding Natural Person Authorized Traders

To facilitate assignment of the unique CCID as required by the CAT NMS Plan, the Technical Specification requires Natural Person CAT Customers to be reported with all required data, including a *tidValue* and *yearOfBirth*. Accordingly, if the *tidValue* and *yearOfBirth* for a Natural Person CAT Customer are not populated, the Customer Record will be rejected.

If an Industry Member has systematized all data required to report a Natural Person that has authority to trade on an Account ("Natural Person Authorized Trader"), it must report all information required for a complete Customer Record, including *tidValue* and *yearOfBirth*. However, if an Industry Member has not historically collected and systematized all data required to report a Natural Person Authorized Trader the Plan Participants will temporarily make available an Authorized Trader Names List on the FDID Record. The Authorized Trader Names List will enable the Industry Member to report only the name of the Natural Person Authorized Trader, where it does not have all data required to report a full Customer Record for the Authorized Trader. Use of the Authorized Trader Names List is not available for account holders; account holders must be reported to CAIS in a full Customer Record. Each FDID Record submitted must still have at least one active association to a CAT Customer reported with a *tidValue* and all required data, with trading capabilities. See <u>FAQ Q68</u> for the reporting requirements when the Authorized Trader is a government employee of a U.S. state, county or municipality and acting in the capacity of a guardian or conservator for a minor or incapacitated person, and the government employee Authorized Trader does not provide a year of birth or Input Identifier (such as a social security number).

If the Industry Member has stored the name of the Natural Person Authorized Trader as a single string, it must include the name string as stored in its system. If the Industry Member has stored the name of the Natural Person Authorized Trader as multiple fields, it must report the name as a concatenated string in First/Middle/Last/Suffix order. A single whitespace character must be included between each field value. For example, a name captured as:

First Name: John

Middle Name: William

Last Name: Doe

Must be reported as "John William Doe".

Use of the Authorized Trader Names List is only allowable on a temporary basis and, with sufficient time and notice, will be retired from the Full CAIS Technical Specifications at a future date. Thus, Industry Members will be required to resubmit the FDID Record to CAIS with all required data for a full Customer Record by or before that future date.

3.14. Special Rules for Clearing Firms

Clearing firms reporting FDID Records for Accounts held for their introducing brokers/correspondents must follow the Full CAIS reporting requirements outlined in <u>Section 2.2.5 – Input Identifiers</u>.

However, due to the nature of the clearing firm's relationship with the Customer:

- When reporting the Account held for an introducing broker/correspondent, clearing firms may report Customer Input Identifiers as received from the introducing broker/correspondent. Therefore, if the clearing firm has multiple versions of a foreign CAT Customer that it received from different introducing brokers/correspondents that may have each used different foreign Input Identifiers, the clearing firm is not required to reconcile the CAT Customer to a single Input Identifier when reporting the clearing firm's version of the Customer to support its allocation reporting obligations.
- Per <u>FAQ Q62</u>, when reporting its version of the Customer Record, the clearing firm may replicate
 the field value for certain required data elements as provided by its introducing
 broker/correspondent. Specifically, when the *correspondentCRD* field is populated:
 - The clearing firm may report a *role* of 'AUTHREP' for an Authorized Trader rather than "flipping" the *role* to 'AUTH3RD' on the clearing firm's version of the Customer Record.
 - The clearing firm may report a customerType of 'EMPLOYEE' rather than "flipping" the customerType to 'OTHBKR' on the clearing firm's version of the Customer Record.
- See <u>FAQ Q64</u> for information regarding how clearing firms must populate the *accountType* field when it is optionally reporting allocations to an account that is owned or controlled by an introducing broker/correspondent.

4. CAIS Reporting

This section describes the fields for inclusion within the CAIS submission files. All submissions to CAIS are required to be in UTF-8 encoding. <u>Table 6</u> and <u>Table 7</u> list each field in JSON naming convention, as well as corresponding Data Types, Include Key, acceptable Occurrences, Description, and Format or Accepted Values for a Choice-type field. A single submission to CAIS will require a paired set of a CAIS Data File and a Transformed Identifiers File, as defined in <u>Section 5.1 – File Submissions and Data Formats</u>.

4.1. CAIS Data File

The CAIS Data File contains the list of FDID Records and associated data, the core Customer data fields excluding TID data, and the relationships between the two. For security considerations, CAIS Data Files must not contain the TID data; this is to be provided in the Transformed Identifiers File. A single CAIS Data File is to be submitted in a pairing with a single Transformed Identifiers File.

Table 6: CAIS Data File

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
version	Text (10)	Main	R	Exactly One per submission file	The <i>version</i> of the CAIS Data File Schema under which the data is reported. The <i>version</i> utilized for full Customer and Account reporting is 2.0.0.	2.0.0
catReporterCRD	Unsigned	Main	R	Exactly One per submission file	The CRD number assigned to the Industry Member to which the data within the file belongs.	
catSubmitterID	Unsigned	Main	R	Exactly One per submission file	The ID of the firm submitting the file to CAT. Required even when the Industry Member is submitting data for itself.	
correspondentCRD	Unsigned	Main	С	Zero or One per submission file	The CRD number of the related introducing broker or correspondent firm whose Customer and Account data is kept on record at the Industry Member reporting to CAT. Required to be populated by clearing firms with introducing brokers or correspondents and only when reporting Accounts to CAIS that are custodied for their introducing	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					brokers/correspondents, including, DVP/RVP accounts. For Accounts which are not correspondent Accounts, the correspondentCRD field must not be populated. Must not be equal to catReporterCRD. All FDID and Customer data included in the file will be associated to the catReporterCRD and correspondentCRD pairing.	
fdidRecordCount	Unsigned	Main	R	Exactly One per submission file	The count of firmDesignatedID field occurrences within the file. Used to validate the count of FDID Records intended to be submitted within the file matches the count of records present in the file.	
naturalPersonCustomerR ecordCount	Unsigned	Main	R	Exactly One per submission file	The count of customerRecordID field occurrences within the file for Natural Person type Customers. Used to validate the count of Natural Person Customer Records intended to be submitted within the file matches the count of records present in the file.	
legalEntityCustomerReco rdCount	Unsigned	Main	R	Exactly One per submission file	The count of customerRecordID field occurrences within the file for Legal Entity type Customers. Used to validate the count of Legal Entity Customer Records intended to be submitted within the file matches the count of records present in the file.	
fdidRecordList	Multi- Dimensio nal Array	Main	С	Zero or One per submission file	Structure for the array of FDID Records that are included in the file. Required if the submission file contains one or more FDID Records; not required if no FDID Records are included in the file.	
fdidRecordID	Unsigned	FDID Record	R	Exactly One per FDID Record	A unique reference to a single FDID Record for a single submission file.	
firmDesignatedID	Text (40)	FDID Record	R	Exactly One per FDID	The Firm Designated ID of the 'ACCOUNT'	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
				Record	'RELATIONSHIP', or 'ENTITYID' being reported by the Industry Member.	
fdidType	Choice	FDID Record	R	Exactly One per FDID Record	Representation of the type of record of the reported FDID.	"ACCOUNT" "RELATIONSHIP
					Values: ACCOUNT – Account type record.	"ENTITYID"
					RELATIONSHIP – Relationship type record.	
					ENTITYID – Entity ID type record. Only allowable when the FDID represents the Entity ID of the firm when an employee of the firm is exercising discretion over multiple Customer Accounts.	
accountType	Array [Choice]	FDID Record	R	Exactly One per FDID Record	Representation of the type or types of Account the FDID represents. All applicable values for the FDID must be included in the array. All values included in the array. All values included in the array must be separated by commas. Values: AVERAGE – Industry Member-owned average price account. DVP/RVP – Delivery versus Payment account/Receipt versus Payment account. EDUCATION – Established for education savings including 529 Plan or Coverdale ESA. ENTITYID – Entity ID type record. Only allowable when the FDID represents the Entity ID of the firm when an employee of the firm is exercising discretion over multiple Customer Accounts. ERROR – Error account. FIRM – Is owned by the reporting firm, including proprietary trading accounts and inventory accounts. INSTITUTION – An institutional account as defined in FINRA Rule 4512(c). MARKET – Market Making	"AVERAGE" "DVP/RVP" "EDUCATION" "ENTITYID" "ERROR" "FIRM" "INSTITUTION" "MARKET" "MARGIN" "OPTION" "OTHER" "RELATIONSHIP" "RETIREMENT" "UGMA/UTMA"

Field Name	Data	JSON	Include	Occurrences	Description	Format/
	Туре	Object	Key			Accepted Values
					Account from which the Industry Member originates orders or to which it allocates shares/contracts in a security/securities for which the Industry Member is registered as a market maker, designated market maker, lead market maker or similar capacity on a national securities exchange or from which the Industry Member originates orders that clear in the OCC clearing range of 'M'. If the Industry Member reports New Order events with an accountHolderType of 'O', the accountType value of 'MARKET' must be included on the related FDID Record submitted to CAIS. See FAQ C5 for more information. MARGIN – Approved for trading on margin. OPTION – Approved for trading options. OTHER – Account which does not meet the criteria for any other listed value. RELATIONSHIP – Relationship type record. RETIREMENT – As defined by the IRS: Individual Retirement Arrangements (IRAs) Roth IRAs 401(k) Plans 403(b) Plans SIMPLE IRA Plans (Savings Incentive Match Plans for Employees) SEP Plans (Simplified Employee Pension) SARSEP Plans (Salary Reduction Simplified Employee Pension) Payroll Deduction IRAs Profit-Sharing Plans Defined Benefit Plans Money Purchase Plans Employee Stock Ownership Plans (ESOPs) Governmental Plans Honey Purchase Plans Employee Stock Ownership Plans (ESOPs) Governmental Plans Honey Purchase Plans Condata account under the Uniform Gift to	Values

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					Minors Act or Uniform Transfer to Minors Act.	
accountName	Extended Text (200)	FDID Record	R	Exactly One per FDID Record	The name applied to the 'ACCOUNT', 'RELATIONSHIP', or 'ENTITYID' at the Industry Member.	
DVPCustodianID	Array [Alphanu meric (5)]	FDID Record	С	Zero or One per FDID Record	Required when accountType includes 'DVP/RVP'. All values included in the array must be separated by commas. Each value must be five characters or fewer, including leading zeros. If the custodian is a U.S. broker-dealer, this field must be populated with the clearing number of the custodian. If the custodian is a bank and is not a registered broker-dealer, this field must be populated with the DTC number of the bank. See FAQ Q66 for acceptable uses of the value 'DTCRM'. If there is no clearing number or DTC number because the custodian is foreign, this field must be populated with a value of 'FOR'.	
clearingBrokerID branchOfficeCRD	Array [Alphanu meric (4)]	FDID Record	С	Zero or One per FDID Record Zero or One per FDID Record	The NSCC Clearing ID of the Industry Member that clears the Accounts. Must be populated if known to the Industry Member. All values included in the array must be separated by commas. Each value must be exactly four characters, including leading zeros. If the Industry Member is a self-clearing firm, it must report its own NSCC Clearing ID. The CRD for the branch office to which the FDID Record is assigned, if applicable. Required if a Customer Account is	
registeredRepCRD	Array	FDID	0	Zero or One	assigned to a branch office other than the main office. The CRD number assigned	
3,555,555,556	[Unsigned		Ū	per FDID	to the Registered	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
]	Record		Record	Representative(s) responsible for the FDID Record (as identified as such per SEC Rule 17a-3) that can provide trading advice for the Account. When optionally reported, all CRDs included in the array must be only numeric values, must not contain any leading zeroes, and must be separated by commas.	
fdidDate	Date (Number) (8)	FDID Record	R	Exactly One per FDID Record	Date on which the FDID opened, as defined in Section 2.2.3 of this specification, in YYYYMMDD format.	YYYYMMDD
fdidEndDate	Date (Number) (8)	FDID Record	С	Zero or One per FDID Record	Date on which the FDID was closed or ended, in YYYYMMDD format. Must be provided if the fdidEndReason field is populated.	YYYYMMDD
fdidEndReason	Choice	FDID Record	С	Zero or One per FDID Record	Reason why the FDID was closed or ended. Must be provided if the fdidEndDate field is populated. Values: CORRECTION – FDID was not required to be reported to CAIS. ENDED – FDID was ended (e.g., account was closed). INACTIVE – Indicates the FDID has had no CAT-reportable transaction activity associated with the FDID in the prior six months. REPLACED – FDID replaced by another FDID within the Industry Member. See FAQ M16 regarding FDID replacements. OTHER – Other unlisted reason for ending the FDID. TRANSFER - FDID was transferred to another Industry Member as part of a mass transfer as described in Section 3.3.	"CORRECTION" "ENDED" "INACTIVE" "REPLACED" "OTHER" "TRANSFER"
replacedByFDID	Text (40)	FDID Record	С	Zero or One per FDID Record	The new firmDesignatedID replacing the currently reported firmDesignatedID. Used to provide historical	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					linkage across replaced records over time. Must be provided if the fdidEndReason is 'REPLACED'. Must not be provided if the fdidEndReason is any value other than 'REPLACED'.	
priorCATReporterCRD	Unsigned	FDID Record	С	Zero or One per FDID Record	CRD of the Industry Member from which the Account was acquired as part of a mass transfer as described in <u>Section 3.3</u> . Must be provided if the Account was acquired by the Industry Member. Must be provided if priorCATReporterFDID is populated.	
priorCATReporterFDID	Text (40)	FDID Record	С	Zero or One per FDID Record	The original firmDesignatedID for the record acquired as part of a mass transfer as described in Section 3.3. Must be provided by the acquiring Industry Member if the Account was acquired as part of a mass transfer.	
addressList	Multi- Dimensio nal Array	FDID Record	R	Exactly One per FDID Record	Structure for the array of Address Records that are associated to the FDID Record within the file. At a minimum, an 'ADDRESS1' record populated with the mailing address associated to the FDID must be included for each FDID Record within the file. Additional addresses may be included for the FDID if available within the Industry Member's system.	
addrType	Choice	Addres s Record	R	Exactly One per Address Record	The type of the Address Record. Values: ADDRESS1 – The mailing Address Record of the FDID. ADDRESS2 – The second Address Record of the FDID. ADDRESS3 – The third Address Record of the FDID. ADDRESS4 – The fourth Address Record of the FDID.	"ADDRESS1" "ADDRESS3" "ADDRESS4"

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
addrLine1	Extended Text (40)	Addres s Record	R	Exactly One per Address Record	The first Address Line for the Address Record.	
addrLine2	Extended Text (40)	Addres s Record	0	Zero or One per Address Record	Additional space for Address Line. Must not be provided if addrLine1 is not provided.	
addrLine3	Extended Text (40)	Addres s Record	0	Zero or One per Address Record	Additional space for Address Line. Must not be provided if <i>addrLine2</i> is not provided.	
addrLine4	Extended Text (40)	Addres s Record	0	Zero or One per Address Record	Additional space for Address Line. Must not be provided if addrLine2 and addrLine3 are not provided.	
city	Extended Text (100)	Addres s Record	R	Exactly One per Address Record	City of the address.	
regionCode	Extended Text (40)	Addres s Record	С	Zero or One per Address Record	Code of the local region of the address. Required if the countryCode is 'US' or 'CA' and must be provided in ISO 3166-2 format. Please view Appendix E for acceptable values. For all other countryCodes, the regionCode must be provided in text format if known to the Industry Member.	AA-XX* *Format when countryCode is 'US' or 'CA'
countryCode	Choice	Addres s Record	R	Exactly One per Address Record	Code of the country of the address, in ISO 3166-1 alpha-2 format. Please view Appendix E for acceptable values.	AA
postalCode	Text (15)	Addres s Record	С	Zero or One per Address Record	Postal code of the address. Must be provided if postal codes exist for the country of the address. Please view Appendix E for acceptable formatting per country.	
largeTraderList	Multi- Dimensio nal Array	FDID Record	С	Zero or One per FDID Record	Structure for the array of LTID and ULTID Records that are associated to the FDID Record within the file. Required if the submission file contains one or more LTID/ULTID Records associated to the FDID Record; not required if no LTID/ULTID Records are included in the file in association to the reported FDID Record.	
largeTraderRecordID	Unsigned	Large	R	Exactly One	A unique reference to a	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
		Trader Record		per Large Trader Record	single LTID or ULTID in reference to a single FDID Record for a single submission file.	
largeTraderID	Text (13)	Large Trader Record	R	Exactly One per Large Trader Record	The LTID or ULTID associated to the FDID in the Industry Member's system. For LTID Records, the identifier must be eight numeric characters, followed by a dash, followed by four numeric characters. For ULTID Records, the identifier must start with 'ULT', followed by alphanumeric [0-9A-Z] characters for the fifth through eighth positions, followed by four alphanumeric [0-9A-Z] characters.	For LTID – 99999999-9999 For ULTID – ULTXXXXX- XXXX
ItidEffectiveDate	Date (Number) (8)	Large Trader Record	R	Exactly One per Large Trader Record	Date on which the LTID or ULTID became associated to the FDID within the Industry Member's system, in YYYYMMDD format.	YYYYMMDD
ltidEndDate	Date (Number) (8)	Large Trader Record	С	Zero or One per Large Trader Record	Date on which the LTID or ULTID was no longer associated to the FDID within the Industry Member's system, in YYYYMMDD format. Must be provided if the ItidEndReason field is populated.	YYYYMMDD
ltidEndReason	Choice	Large Trader Record	С	Zero or One per Large Trader Record	Reason why the LTID or ULTID was no longer associated to the FDID. Must be populated in order to end date an LTID-to-FDID association in the system. Must be provided if the <i>ItidEndDate</i> field is populated.	"CORRECTION" "ENDED" "INACTIVE" "REPLACED" "OTHER" "TRANSFER"
					Values: CORRECTION – LTID was erroneously reported as associated to the FDID or FDID was not required to be reported to CAIS.	
					ENDED – LTID-to-FDID association was ended. INACTIVE – Indicates the associated FDID has had no CAT-reportable transaction activity in the	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					prior six months. REPLACED – LTID was replaced by a different LTID or the FDID was replaced by a different FDID. OTHER –Other unlisted reason for ending the LTID-to-FDID association or per FAQ Q12, the reason why an LTID-to-FDID association was ended could not be reasonably ascertained. TRANSFER – LTID association was ended because the FDID was transferred to another Industry Member as part of	
fdidCustomerList	Multi- Dimensio nal Array	FDID Record	С	Exactly One per FDID Record	a mass transfer as described in Section 3.3. Structure for the array of Customer Records that are associated to the FDID Record within the file. Required when the FDID Record is being reported to CAIS for the first time. Also required when there is no fdidEndReason. Not required when ending an FDID Record that was previously accepted with one or more Customers.	
customerRecordID	Unsigned	FDID Custom er Record	R	Exactly One per FDID Customer Record	A unique reference to a single Customer for a single submission file. The value in this field must also be a value present in the naturalPersonCustomerList or the legalEntityCustomerList; and present in the Transformed Identifiers File.	
role	Choice	FDID Custom er Record	R	Exactly One per FDID Customer Record	Representation of the type of role the Customer has on the FDID. Values: AUTH3RD – An Authorized Trader who is not a holder of the Account, nor an employee of the reporting Industry Member, who has authority to place orders for the Account without prior approval of the account holder(s). AUTHREP – An Authorized	"AUTH3RD" "AUTHREP" "NTHOLDER" "TRDHOLDER"

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					Trader who is not a holder of the Account but does have authority to place orders for the Account without prior approval of the account holder(s) and is either the reporting Industry Member or an employee of the reporting Industry Member, if the account holder specifically designates the natural person employee as authorized to trade for the Account independent of the authority granted to the entity Authorized Trader. See FAQ Q56 for more information. This role must also be used for affiliated group companies (for Legal Entity Customers) and employees of affiliated group companies (for Natural Person Customers) (see FAQ Q56 for more information), if the Industry Member maintains in its books and records that the Legal Entity Customer or Natural Person Customer is an affiliate. For example, if the Industry Member maintains in its books and records that the Legal Entity Registered Investment Advisor Authorized Trader is affiliated with the reporting Industry Member, the role must be 'AUTHREP'. If the Industry Member does not maintain in its books and records that the Legal Entity Registered Investment Advisor Authorized Trader is affiliated with the reporting Industry Member, the role may be 'AUTHREP'. If the Industry Member does not maintain in its books and records that the Legal Entity Registered Investment Advisor Authorized Trader is affiliated with the reporting Industry Member, the role may be 'AUTHREP'. If the Industry Member, the role may be 'AUTHOLDER – Holder of the Account that does not have authorization to trade on the Account. TRDHOLDER – Holder of the Account that also has authorization to trade on the Account.	
hasDiscretion	Boolean	FDID Custom	С	Zero or One per FDID	Indicates if the Authorized Trader has the ability to	true

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
		er Record		Customer Record	place orders on the Account without prior approval of the Holder(s). Must be present and populated if <i>role</i> is 'AUTH3RD' or 'AUTHREP'. Must be omitted or 'false' if <i>role</i> is 'NTHOLDER' or 'TRDHOLDER'.	false
roleStartDate	Date (Number) (8)	FDID Custom er Record	R	Exactly One per FDID Customer Record	Date on which the Customer entered into the specified <i>role</i> on the Account, in YYYYMMDD format.	YYYYMMDD
roleEndDate	Date (Number) (8)	FDID Custom er Record	С	Zero or One per FDID Customer Record	Date on which the Customer ceased having the specified <i>role</i> on the FDID, in YYYYMMDD format. Must be provided if the <i>roleEndReason</i> field is populated.	YYYYMMDD
roleEndReason	Choice	FDID Custom er Record	С	Zero or One per FDID Customer Record	Reason why the Customer ceased having the specified role on the FDID. Must be provided if the roleEndDate field is populated. Values: CORRECTION – Customer was erroneously reported as associated to the FDID or FDID was not required to be reported to CAIS. ENDED – Customer was reported to CAIS with an incorrect role (e.g., erroneously reported as 'AUTH3RD' rather than correctly reported as 'AUTHREP'), role on FDID was ended (e.g., account was closed upon death of account holder). INACTIVE – Indicates the associated FDID has had no CAT-reportable transaction activity in the prior six months. REPLACED – Customer role on FDID was replaced with another FDID, or because the FDID was replaced with another Input Identifier. OTHER – Other unlisted reason for ending the	"CORRECTION" "ENDED" "INACTIVE" "REPLACED" "OTHER" "TRANSFER"

Field Name	Data	JSON	Include	Occurrences	Description	Format/
	Туре	Object	Key			Accepted Values
					Customer role on FDID or per FAQ Q12, the reason why a Customer-to-FDID association was ended could not be reasonably ascertained. TRANSFER – Role ended because the FDID was transferred to another Industry Member as part of a mass transfer as described in Section 3.3.	
authTraderNamesList	Multi- Dimensio nal Array	FDID Record	С	Zero or One per FDID Customer Record	Structure for the array of Authorized Trader Names that are associated to the FDID Record within the file. Must only be used for Natural Person Authorized Traders where the Industry Member does not have all data required to report a full Natural Person Customer Record. Required when the FDID has one or more Authorized Traders for which the Industry Member does not have all data required to report a full Natural Person Customer Record. Not to be used if the Industry Member has all data required to report a full Customer Record for the Natural Person Authorized Trader.	
authTraderNameID	Unsigned	Authori zed Trader Name List	R	Exactly One per Authorized Trader Name Record	A unique reference to a single Authorized Trader Name for a single FDID, for a single submission file.	
authTraderName	Extended Text (200)	Authori zed Trader Name List	R	Exactly One per Authorized Trader Name Record	The name of the Natural Person who has authority to place order for the account.	
naturalPersonCustomerLi st	Multi- Dimensio nal Array	Main	С	Zero or One per submission file	Structure for the array of Natural Person type Customer Records that are included in the file. Required if the submission file contains one or more Natural Person Customer Records. Not required if no Natural Person Customer Records are included in the file.	
customerRecordID	Unsigned	Natural Person	R	Exactly One per Natural	A unique reference to a single Customer for a single	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
		Custom er Record		Person Customer Record	submission file. The value in this field must also be a value present in the fdidCustomerList and present in the Transformed Identifiers File.	
firstName	Extended Text (40)	Natural Person Custom er Record	R	Exactly One per Natural Person Customer Record	The First Name known for the Customer. If the Customer legally has one name, this field must be populated with 'NNVE' (No Name Value Exists).	
middleName	Extended Text (20)	Natural Person Custom er Record	0	Zero or One per Natural Person Customer Record	The Middle Name or initial known for the Customer.	
lastName	Extended Text (200)	Natural Person Custom er Record	R	Exactly One per Natural Person Customer Record	The Last Name known for the Customer.	
nameSuffix	Choice	Natural Person Custom er Record	0	Zero or One per Natural Person Customer Record	The Name Suffix known for the Customer. Values: FIFTH FOURTH JUNIOR SENIOR THIRD	"FIFTH" "FOURTH" "JUNIOR" "SENIOR" "THIRD"
doingBusinessAs	Extended Text (200)	Natural Person Custom er Record	С	Zero or One per Natural Person Customer Record	The Doing Business As name for a sole proprietorship or other legal entity Customer reported to CAIS using SSN/ITIN as the Input Identifier, or for foreign Customers, one of the Input Identifiers allowable for a foreign natural person. Must be populated when reporting a CAT Customer as a Natural Person record that is a sole proprietorship, trust, or otherwise conducts business under a name other than the Natural Person's legal name.	
yearOfBirth	Year (Number) (4)	Natural Person Custom er Record	R	Exactly One per Natural Person Customer Record	The Year of Birth known for the Customer in YYYY format.	YYYY
addressList	Multi- Dimensio	Natural Person	R	Zero or One per Natural	Structure for the array of Address Records that are	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
	nal Array	Custom er Record		Person Customer Record	associated to the Customer Record within the file. An 'ADDRESS1' record must be included for the Customer Record. Additional addresses may be included for the Customer if available within the Industry Member's system.	
addrType	Choice	Addres s Record	R	Exactly One per Address Record	The type of the Address Record. Values: ADDRESS1 – The first Address Record of the Customer. ADDRESS2 – The second Address Record of the Customer. ADDRESS3 – The third Address Record of the Customer. ADDRESS4 – The fourth Address Record of the Customer.	"ADDRESS1" "ADDRESS2" "ADDRESS3" "ADDRESS4"
addrLine1	Extended Text (40)	Addres s Record	R	Exactly One per Address Record	The first Address Line for the address.	
addrLine2	Extended Text (40)	Addres s Record	0	Zero or One per Address Record	Additional space for Address Line. Must not be provided if addrLine1 is not provided.	
addrLine3	Extended Text (40)	Addres s Record	0	Zero or One per Address Record	Additional space for Address Line. Must not be provided if addrLine2 is not provided.	
addrLine4	Extended Text (40)	Addres s Record	0	Zero or One per Address Record	Additional space for Address Line. Must not be provided if addrLine2 and addrLine3 are not provided.	
city	Extended Text (100)	Addres s Record	R	Exactly One per Address Record	City of the address.	
regionCode	Extended Text (40)	Addres s Record	С	Zero or One per Address Record	Code of the local region of the address. Required if the countryCode on the Customer Address Record is 'US' or 'CA' and must be provided in ISO 3166-2 format. For all other countryCodes, the regionCode must be provided in text format if known to the Industry Member.	AA-XX* *Format when countryCode is 'US' or 'CA'

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
countryCode	Choice	Addres s Record	R	Exactly One per Address Record	Code of the country of the address, in ISO 3166-1 alpha-2 format. Please view Appendix E for acceptable values.	AA
postalCode	Text (15)	Addres s Record	С	Zero or One per Address Record	Postal code of the address. Must be provided if postal codes exist for the country of the address. Please view Appendix E for acceptable formatting per country.	
customerType	Array [Choice]	Natural Person Custom er Record	R	Exactly One per Natural Person Customer Record	Representation of the characteristics of the CAT Customer. All applicable values for the CAT Customer must be included in the array. All values included in the array must be separated by commas. Values: ACCREDITED – Customer was identified as an accredited investor by the Industry Member as set forth in Rule 501(a) of the Securities Act of 1933, if maintained in the Industry Member's general customer and account records. ADVISER – Customer was identified as being associated to a U.S. registered Investment Adviser, if maintained in the Industry Member's general customer and account records. CP – Customer identified itself as an officer, director, or 10% or more share owner of a public company at the time of account opening. EMPLOYEE –Customer is an employee or associated person of the Industry Member, as defined in Section 3(a)(18) of the Securities Exchange Act of 1934. If employee attribute is maintained by the Industry Member at the group level, this value may also include Customers employed by affiliated group companies. FOREIGN – Customer is a	"ACCREDITED" "ADVISER" "CP" "EMPLOYEE" "FOREIGN" "NOTAPPLICAB LE" "OTHBKR" "TRUST"

Field Name	Data	JSON	Include	Occurrences	Description	Format/
	Туре	Object	Key			Accepted Values
					Natural Person that does not have a U.S. Tax Identifier. NOTAPPLICABLE – None of the defined terms are applicable to the Customer. OTHBKR – Customer is associated with a U.S. registered broker-dealer other than the Industry Member. TRUST – Customer is a trust.	
updateNotification	Boolean	Natural Person Custom er Record	С	Zero or One per Natural Person Customer Record	Required as 'true' when the Customer Record is being reported to resolve a Material Inconsistency or is being reported with known updates to material fields.	true false
legalEntityCustomerList	Multi- Dimensio nal Array	Main	С	Zero or One per submission file	Structure for the array of Legal Entity type Customer Records that are included in the file. Required if the submission file contains one or more Legal Entity Customer Records; not required if no Legal Entity Customer Records are included in the file.	
customerRecordID	Unsigned	Legal Entity Custom er Record	R	Exactly One per Legal Entity Customer Record	A unique reference to a single Customer for a single submission file. The value in this field must also be a value present in the fdidCustomerList and present in the Transformed Identifiers File.	
legalName	Extended Text (200)	Legal Entity Custom er Record	R	Exactly One per Legal Entity Customer Record	The Legal Name known for the Customer.	
addressList	Multi- Dimensio nal Array	Legal Entity Custom er Record	R	Zero or One per Legal Entity Customer Record	Structure for the array of Address Records that are associated to the Customer Record within the file. An 'ADDRESS1' record must be included for the Customer Record. Additional addresses may be included for the Customer if available within the Industry Member's system.	
addrType	Choice	Addres	R	Exactly One	The type of the Address	"ADDRESS1"

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
		s Record		per Address Record	Record. Values: ADDRESS1 – The first Address Record of the Customer. ADDRESS2 – The second Address Record of the Customer. ADDRESS3 – The third Address Record of the Customer. ADDRESS4 – The fourth Address Record of the Customer.	"ADDRESS2" "ADDRESS3" "ADDRESS4"
addrLine1	Extended Text (40)	Addres s Record	R	Exactly One per Address Record	The first Address Line for the address.	
addrLine2	Extended Text (40)	Addres s Record	0	Zero or One per Address Record	Additional space for Address Line. Must not be provided if addrLine1 is not provided.	
addrLine3	Extended Text (40)	Addres s Record	0	Zero or One per Address Record	Additional space for Address Line. Must not be provided if addrLine2 is not provided.	
addrLine4	Extended Text (40)	Addres s Record	0	Zero or One per Address Record	Additional space for Address Line. Must not be provided if addrLine2 and addrLine3 are not provided.	
city	Extended Text (100)	Addres s Record	R	Exactly One per Address Record	City of the address.	
regionCode	Extended Text (40)	Addres s Record	С	Zero or One per Address Record	Code of the local region of the address. Required if the countryCode on the Customer Address Record is 'US' or 'CA' and must be provided in ISO 3166-2 format. For all other countryCodes, the regionCode must be provided in text format if known to the Industry Member.	AA-XX* *Format when countryCode is 'US' or 'CA'
countryCode	Choice	Addres s Record	R	Exactly One per Address Record	Code of the country of the address, in ISO 3166-1 alpha-2 format. Please view Appendix E for acceptable values.	AA
postalCode	Text (15)	Addres s Record	С	Zero or One per Address Record	Postal code of the address. Must be provided if postal codes exist for the country of the address. Please view Appendix E for acceptable formatting per country.	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
ein	Text (10)	Legal Entity Custom er Record	С	Zero or One per Legal Entity Customer Record	The Employer Identification Number (EIN) of the Customer, in 99-9999999 format. Must be included if the Input Identifier used to generate the Transformed Identifier of the Customer was an EIN.	99-9999999
customerType	Array [Choice]	Legal Entity Custom er	R	Exactly One per Legal Entity Customer Record	Representation of the characteristics of the CAT Customer. All applicable values for the CAT Customer must be included in the array. All values included in the array must be separated by commas. Values: ACCREDITED – Customer was identified as an accredited investor by the Industry Member as set forth in Rule 501(a) of the Securities Act of 1933, if maintained in the Industry Member's general customer and account records. ADVISER – Customer was identified as a U.S. registered Investment Adviser, if maintained in the Industry Member's general customer and account records. BD – Customer is a U.S. registered broker-dealer, if maintained in the Industry Member's general customer and account records. BD – Customer is a U.S. registered broker-dealer, if maintained in the Industry Member's general customer and account records. Effective July 11, 2023, 'BD' must be populated for all U.S. registered broker-dealer Customer types, including for broker-dealer Customers that were not identified as 'BD' prior to July 11, 2023. FOREIGN – Customer is a Legal Entity that does not have a U.S. Tax Identifier. NOTAPPLICABLE – None of the defined terms are applicable to the Customer. RIC – Customer is a Registered Investment Company Act of 1940 (15 U.S.C. § 80a—	"ACCREDITED" "ADVISER" "BD" "FOREIGN" "NOTAPPLICAB LE" "RIC" "TRUST"

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					3(a)(1)), if maintained in the Industry Member's general customer and account records. TRUST – Customer is a trust.	
lei	Alphanum eric (20)	Legal Entity Custom er Record	С	Zero or One per Legal Entity Customer Record	The Legal Entity Identifier (LEI) of the Customer. Must be provided if known to the Industry Member. Must be included if the Input Identifier used to generate the Transformed Identifier of the Customer was an LEI.	
updateNotification	Boolean	Legal Entity Custom er Record	С	Zero or One per Legal Entity Customer Record	Required as 'true' when the Customer Record is being reported to resolve a Material Inconsistency or is being reported with known updates to material attributes.	true false
correctionList	Multi- Dimensio nal Array	Main	С	Zero or One per Submission File	Structure for the array of Correction Action Records within the file. Required if the submission file contains one or more Correction Action Records.	
rejectionID	Unsigned	Correct ion Action Record	R	Exactly One per Correction Record	The CAT-assigned rejectionID from a prior submission that was created for the particular data validation error being corrected.	
correctionAction	Choice	Correct ion Action Record	R	Exactly One per Correction Record	The action being taken to repair for the prior rejection. Values: CORRECTION – A new entry is included to correct for the prior rejected record using a new firmDesignatedID or new Customer Record. DELETE – The prior rejection needs to be cleared without a new record being submitted.	"CORRECTION" "DELETE"
correctingFirmDesignated ID	Text (40)	Correct ion Action	С	Zero or One per Correction	The firmDesignatedID that is repairing a previously rejected firmDesignatedID.	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
		Record		Record	The correctingFirmDesignatedID value must reference a corresponding firmDesignatedID value that is either included in the current submission file or was accepted by CAT CAIS in a prior submission. Required if the correctionAction is 'CORRECTION' and the prior error being corrected was against a firmDesignatedID.	
correctingCustomerRecor dID	Unsigned	Correct ion Action Record	С	Zero or One per Correction Record	A reference to the customerRecordID value in the submission file that is repairing a previously rejected Customer Record. The correctingCustomerRecordID value must reference a customerRecordID that is included in the current submission file. Required if the correctionAction is 'CORRECTION' and the prior error being corrected was against a Customer Record.	

4.2. Transformed Identifiers File

The Transformed Identifiers File contains the list of *tidValues* and the pointer to the *customerRecordID* from the CAIS Data File. A single Transformed Identifiers File is to be submitted in a pairing with a single CAIS Data File.

Table 7: Transformed Identifiers File

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
version	Text (10)	Main	R	Exactly One per submission file	The version of the Transformed Identifiers File Schema under which the data is reported. The version utilized for full Customer and Account reporting is 2.0.0.	2.0.0

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
tidRecordCount	Unsigned	Main	R	Exactly One per submission file	The count of TID Record occurrences within the file. Used to validate that the count of TID Records intended to be submitted within the file matches the count of records present in the file.	
tidRecordList	Multi-Dimensional Array	Main	С	Zero or One per submission file	Structure for the array of TID Records that are included in the file. Required if the submission file contains one or more TID Records; not required if no TID Records are included in the file.	
customerRecordID	Unsigned	TID Record	R	Exactly One per TID Record	A unique reference to a single Customer Record in the CAIS Data File. The value in this field must also be a value present in the customerRecordIDs in the CAIS Data File.	
tidType	Choice	TID Record	R	Exactly One per TID Record	The specific type of Input Identifier used to generate the tidValue. Values: EIN -The tidValue was generated using an Employer Identification Number (EIN). FOREIGN -An identifier other than an EIN, SSN, or ITIN was used to generate the tidValue. SSN/ITIN -The tidValue was generated using a Social Security Number (SSN) or Individual Taxpayer Identification Number (ITIN).	"EIN" "FOREIGN" "SSN/ITIN"
foreignTIDType	Choice	TID Record	С	Zero or One per TID Record	The specific type of foreign Input Identifier used to generate a	"DRIVERLICENS E" "LEI"

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
		Object	Key		'FOREIGN' tidType. Required to be populated if the tidType is 'FOREIGN'. The following hierarchy must be followed if more than one identifier type is available for a foreign CAT Customer: Values: 1. NATIONALID — National registration or tax identifier, if the Industry Member knows the identifier was issued by a national-level government body or agency, or when the Industry Member cannot distinguish if the issuer is a national-level government body or agency. 2. LEI — Legal Entity Identifier. 3. PASSPORT — Country of issuance and passport number. 4. PERMANENT — Permanent resident identifier. 5. DRIVERLICENSE — Driver's license identifier. 6. OTHGOVT — Other government- issued identifier, if the Industry Member knows the identifier was issued by a non-national level government body or agency, such as a regional agency. Must not be used if one of the other allowable values	"NATIONALID" "OTHGOVT" "PASSPORT" "PERMANENT"
foreignTIDCountryCd	Choice	TID Record	С	Zero or One per TID Record	apply. Code of the country that issued the Input Identifier used to generate the	AA

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					in ISO 3166-1 alpha- 2 format. Please view Appendix E for acceptable values. Required if the tidType is 'FOREIGN' and the foreignTIDType is not 'LEI'.	
tidValue	Hexadecimal (64)	TID Record	R	Exactly One per TID Record	The obfuscated Input Identifier of the Customer whose data is being reported.	
replacedByTIDType	Choice	TID Record	С	Zero or One per TID Record	The specific type of Input Identifier used to generate the replacedByTID when a Customer's Input Identifier has changed. Required when replacedByTID is populated. Values: EIN -The replacedByTID was generated using an Employer Identification Number (EIN). FOREIGN -An identifier other than an EIN, SSN, or ITIN was used to generate the replacedByTID. SSN/ITIN -The replacedByTID was generated using a Social Security Number (SSN) or Individual Taxpayer Identification Number (ITIN).	"EIN" "FOREIGN" "SSN/ITIN"
replacingForeignTIDT ype	Choice	TID Record	С	Zero or One per TID Record	The specific type of foreign Input Identifier used to generate a 'FOREIGN' replacedByTIDType when a foreign Customer's Input Identifier has changed. Required to be populated if the replacedByTIDType is 'FOREIGN'. The following hierarchy	"DRIVERLICENS E" "LEI" "NATIONALID" "OTHGOVT" "PASSPORT" "PERMANENT"

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
		Object	Key		must be followed if more than one identifier type is available for a foreign CAT Customer: Values: 1. NATIONALID – National registration or tax identifier, if the Industry Member knows the identifier was issued by a national-level government body or agency, or when the Industry Member cannot distinguish if the issuer is a national-level government body or agency. 2. LEI – Legal Entity Identifier. 3. PASSPORT – Country of issuance and passport number. 4. PERMANENT – Permanent resident identifier. 5. DRIVERLICENSE – Driver's license identifier. 6. OTHGOVT – Other governmentissued identifier, if the Industry Member knows the identifier was issued by a non-national level government body or agency such as a regional agency. Must not be used if one of the other	Accepted Values
					one of the other allowable values apply.	
replacingForeignTIDC ountryCd	Choice	TID Record	С	Zero or One per TID Record	Code of the country that issued the Input Identifier used to generate the 'FOREIGN' replacedByTIDType when a foreign Customer's Input Identifier has changed; in ISO 3166-1 alpha-2	AA

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					format. Please view Appendix E for acceptable values. Required if the replacedByTIDType is 'FOREIGN' and the replacingForeignTID Type is not 'LEI'.	
replacedByTID	Hexadecimal (64)	TID Record	С	Zero or One per TID Record	The obfuscated Input Identifier of the Customer when the Customer's Input Identifier has changed. Must be provided if the roleEndReason is 'REPLACED'. Must not be provided when roleEndReason is a value other than 'REPLACED'.	

5. Submission Process

This section contains information pertaining to CAT CAIS file submission and data formats, CAT CAIS submissions (including a general data flow overview), network and transport options, CAT CAIS access, and reporting hours.

5.1. File Submissions and Data Formats

All submissions to CAIS are required to be in UTF-8 encoding. The following are examples of input UTF-8 values and their corresponding expected SHA-256 hashes:

Input Value	Hashed Value
999-99-9999	1438887c12c566c8f87325380e06517bfb2e46e4de7e07fc6f004ea5bb21945d
111-11-1111	4628ea314743d5ac373997763be3d39b86fc40c5d2015d2db345b0231e215b6c
000-00-0000	5fb0d784eb4b5277d787d9fef634cde3f1915fe4ae306d4a4c41db866565e7bd

A single submission to CAT CAIS must be comprised of a paired CAIS Data File and Transformed Identifiers File, even if record counts are zero for both files. The base filenames for the CAIS Data File and Transformed Identifiers File must use identical name values, comprised of the CAT Submitter ID, CAT Reporter CRD, File Generation Date, optional Group, and File Number, to be identified as a pair. CAIS files have a prescribed naming convention and are supported in JSON format. It is acceptable to submit a file set containing zero records, for example if an Industry Member has no updates to report but chooses to continuously generate and submit a daily file.

Submissions must include a CAIS Data File with populated header record information, including *version*, *catReporterCRD*, *catSubmitterID*, *fdidRecordCount*, and Customer Record Count (populated in the *naturalPersonCustomerRecordCount* and *legalEntityCustomerRecordCount* fields). It is valid and acceptable for an Industry Member to submit a file with only this header information and record counts of zero, indicating an intentional submission of no Account or Customer Record data.

Transformed Identifiers File submissions must include populated header record information, including *version* and *tidRecordCount*. It is valid and acceptable for an Industry Member to submit a file with only this header information and a record count of zero, indicating an intentional submission of no TID data.

5.1.1. File Submission Names

1. CAIS Data Files must be named using the following format:

```
<CAT Submitter ID>_<CAT Reporter CRD>_<File Generation

Date>_[<Group>_]<File Kind>_<File Number>.<Format

Extension>.<Compression Extension>
```

For example: 123_999_20200101_CAIS_000123.json.bz2

2. Transformed Identifier Files must be named using the following format:

```
<CAT Submitter ID>_<CAT Reporter CRD>_<File Generation
Date>_[<Group>_]<File Kind>_<File Number>.<Format
Extension>.<Compression Extension>
```

For example: 123_999_20200101_TIDS_000123.json.bz2

3. The values assigned within the format of a filename include:

Table 8: Elements of a File Submission Name

Field Name	Data Type	Description	Include Key
CAT Submitter ID	Unsigned	The ID of the firm submitting the file to CAT.	R
CAT Reporter CRD	Unsigned	The CRD number assigned to the Industry Member to which the data within the file belongs.	R
File Generation Date	Date	The date the file was generated or reported. Used to guarantee uniqueness of a file across dates.	R
		Date must be less than or equal to System Date. Future dates are not acceptable.	
Group	Alphanumeric (20)	Industry Member-defined string optionally included to guarantee uniqueness of a file across dates.	0
		Filenames associated with manually created submissions entered into the CAT Reporter Portal – CAIS will be assigned the Group value of 'caisweb'. Submission files uploaded via the CAT Reporter Portal – CAIS or submitted via SFTP must not use a value of 'caisweb' for the Group field or else the file will be rejected with Error Code 21010. Using a value of 'CAIS', uppercase or lowercase, is not recommended because the feedback filename will not be in the format described in Section 6.	
File Kind	Alphanumeric (20)	Set to 'CAIS' for CAIS Data Files. Set to 'TIDS' for Transformed Identifiers Files.	R
File Number	Unsigned	Sequence number of the file, 6-digits long, left-padded with zeros.	R
Format Extension	Alphanumeric (4)	Represents the format of the data submission. JSON formatted submissions must be 'json'.	R
Compression Extension	Alphanumeric (3)	Applicable to CAIS Data and Transformed Identifiers Files. Set to 'bz2'.	R

- 4. Filenames are required to be globally unique among all other files using the base name (the portion of the filename without the format and compression extensions) of the file.
- 5. A single CAT CAIS submission must consist of a paired CAIS Data File and Transformed Identifiers File, noted by the same filename for the CAIS Data File and Transformed Identifiers File for the combination of CAT Submitter ID, CAT Reporter CRD, File Generation Date, optional Group (if present on either), and File Number attributes.
- 6. If either of the paired CAIS Data or Transformed Identifiers Files must be resubmitted, both files must be renamed to avoid a duplicate file warning.

5.1.2. Submission Formats

CAT CAIS supports the submission of data in JSON format only, due to the relational nature of the Account and Customer data.

5.1.3. CAIS Data File Submission

The following rules apply to CAIS Data Files:

- The Plan Processor will support standard JSON syntax for each record or as specified in this document.
- 2. CAIS Data Files serve as top-level containers for each object.
- 3. All CAIS Data Files sent from the Industry Member (or the third-party CAT Reporting Agent for the Industry Member) must be compressed using BZip2. The associated compression extension is "bz2".
- CAIS Data Files must be individually compressed and submitted. Compressed files may not be bundled into a single container file.
- The data contained within the CAIS Data File must represent data for the CAT Reporter CRD number identified within the filename.
- A CAIS Data File without an associated Transformed Identifiers File posted within 60 minutes of the CAIS Data File submission will result in an error.
- 7. A Transformed Identifiers File without an associated CAIS Data File posted within 60 minutes of the Transformed Identifiers File submission will result in an error.
- 8. The CAT Submitter ID, CAT Reporter CRD, File Generation Date, optional Group, and File Number must be the same for the CAIS Data File and paired Transformed Identifiers File.
- The CAIS Data File submission must be the same schema *version* as the Transformed Identifiers File.
- 10. Files submitted through SFTP are limited to a maximum uncompressed size of 7GB.
- 11. Files sizes <= 1GB are recommended as feedback will be returned faster.
- 12. CAIS Data Files submitted through the CAT Reporter Portal CAIS are limited to a maximum uncompressed size of 1GB, with a record limit of 100,000 FDID Records per file and 100,000

- Customer Records. Files with more than 100,000 FDID Records and/or more than 100,000 Customer Records will be rejected.
- 13. Schema files will be maintained by the Plan Processor and will be versioned as the Technical Specifications change.
- 14. Updates or changes will only be enacted on records as contained within the submission file. Records previously received and not included in a later submission file will not be changed in CAT CAIS until included in a subsequent submission file.
- 15. Records included in a submission file must reflect the complete and current state of that record. This includes all pertinent associations and fields. The new record state will replace the state of the record in CAIS if it had been previously submitted. Any associations that were previously accepted into CAIS but are omitted in the subsequent submission of the record, will be implicitly ended; likewise, any fields that were previously accepted but are omitted will be implicitly cleared.
- 16. CAIS Data Files may contain original submissions, updates to records contained in prior submissions, Industry Member-initiated corrections of records contained in prior submissions, and record error repairs.
- 17. Conditional and optional fields reported without a value will be assumed to be NULL. Conditional and optional fields may also be present in a submission with a 'null' value in order to be interpreted as NULL.
- 18. All Customer and Account data included in the submission file must be appropriate for the CAT Reporter CRD and Correspondent CRD pairing present in the file. If the data being reported is for the Customers and Accounts of the correspondent firm itself, the *correspondentCRD* must either be excluded from the file or left as NULL.

5.1.3.1. CAIS Data File Submission - FDID

The following rules apply to FDID Records present within CAIS Data Files:

- 1. An FDID being submitted to CAIS must have at least one associated Customer within the submission file. The maximum number of Customers that can be associated to the FDID is 2,000.
- 2. Each FDID Record included in a submission file must contain all fields and associations that reflect its current state.
- If any Customer associated to an FDID within a submission file is rejected due to data validation errors, the FDID and all of its other Customer associations will be rejected as well.
- 4. If an Industry Member needs to clear a previously submitted conditional or optional field value, it must omit the field in a resubmission, which will implicitly clear the value, or include it in a resubmission with an explicit value of 'null'. The full state of the FDID Record must be included as well. For example, if an Industry Member previously ended an FDID Record for a reason other than

- 'REPLACED', and the Industry Member wants to resume submission of the FDID Record, it can simply omit the *fdidEndDate* and *fdidEndReason* from the resubmission.
- 5. Each FDID Record in a submission file must include any and all applicable *accountType* values that are applicable for the FDID. The *accountType* value of 'ENTITYID' can only be used if the *fdidType* for the FDID is 'ENTITYID', and the *accountType* value of 'RELATIONSHIP' can only be used if the *fdidType* for the FDID is 'RELATIONSHIP' as such, the *accountType* values 'RELATIONSHIP' and 'ENTITYID' cannot be used when *fdidType* is 'ACCOUNT'.
- 6. If the *fdidType* for an FDID Record is 'RELATIONSHIP' or 'ENTITYID', the *role* of the associated Customer(s) must be 'TRDHOLDER'.
- 7. If an Industry Member ends an FDID Record by populating the fdidEndDate and fdidEndReason fields, but does not include some or all of the currently active LTIDs associations stored in CAIS, the omitted active LTIDs associated to the ended FDID will be systematically ended. The fdidEndDate and fdidEndReason will be cascaded as the ItidEndDate and ItidEndReason, respectively.
- 8. If an Industry Member ends an FDID Record and an LTID or Customer association to that FDID exists with an *ItidEffectiveDate* and/or *roleStartDate* later than the submitted *fdidEndDate*, the *ItidEffectiveDate* and/or *roleStartDate* will be systematically updated to match the *fdidEndDate* in order to prevent rejection.
- 9. If an Industry Member is ending an FDID Record that has currently active LTIDs associated to the ending FDID, and it does not want the date and reasons cascaded, it must explicitly end the LTID-to-FDID association by including the association in the submission file and populating the *ItidEndDate* and *ItidEndReason* fields.
- Clearing previously set fdidEndDate and fdidEndReason fields will not result in implicit reactivation of LTID nor Customer associations of the FDID.
- 11. If an LTID is associated to multiple FDID Records within a single Industry Member, the LTID-to-FDID association must be submitted for each FDID. The associations may be submitted within a single submission file or across multiple submission files as associations are established.
- 12. If an LTID becomes associated to an FDID that was previously submitted to and accepted by CAT CAIS, the Industry Member must establish the LTID-to-FDID association by including the FDID in a submission file with all appropriate fields and associations and include the new LTID within the largeTraderList array of the FDID Record.
- 13. If an Industry Member is ending an FDID Record that has one or more stored LTID associations where the *ItidEndDate* is set to a date later than the *fdidEndDate* and the association is omitted from the submission, the *ItidEndDate* values stored in CAIS will be systematically updated to the earlier *fdidEndDate* value. The *ItidEndReason* currently set on the association will not be updated if it differs from the submitted *fdidEndReason* value.
- 14. If an LTID-to-FDID association that was previously stored in CAIS is omitted from a subsequent submission of the FDID Record, the association will be implicitly ended. The date the subsequent

- submission was acknowledged by CAIS will be used as the *ltidEndDate* and the *ltidEndReason* will be set to 'ENDED'. The *ltidEffectiveDate* will be unchanged in this case.
- 15. The *replacedByFDID* value included in a submission file must reference an FDID that is either included in the current submission file or was accepted by CAT CAIS in a prior submission file.
- 16. If the replacedByFDID record in a submission file was not accepted by CAT CAIS in a prior submission file and is not included in the current submission file or is included in the current submission file but the replacing FDID Record does not pass data validation checks, the submission record referencing the replacing FDID will fail data validation and will not be accepted by CAT CAIS.
- 17. The *correctingFirmDesignatedID* value included in a submission file must reference a corresponding *firmDesignatedID* value that is either included in the current submission file or was accepted by CAT CAIS in a prior submission file.
- 18. If the firmDesignatedID value listed in the correctingFirmDesignatedID field in a submission file was not accepted by CAT CAIS in a prior submission file and is not included in the current submission file or is included in the current submission file but the FDID Record does not pass data validation checks, the repairing submission record referencing the FDID Record will fail data validation and will not be accepted by CAT CAIS.
- 19. If a Customer is associated to multiple FDID Records within a single Industry Member, the Customer-to-FDID association must be submitted for each FDID. The associations may be submitted within a single submission file or across multiple submission files as associations are established.
- 20. If a Customer becomes associated to an FDID that was previously submitted to and accepted by CAT CAIS, the Industry Member must establish the Customer-to-FDID association by including the FDID in a submission file with all fields that apply and including the Customer's *role* within the *fdidCustomerList* array of the FDID Record. The current state of the corresponding Customer Record must be included in the submission as well.
- 21. If an Industry Member ends an FDID Record by populating the fdidEndDate and fdidEndReason fields, but does not include some or all of the currently active Customer-to-FDID associations stored in CAIS, the omitted active Customers associated to the ended FDID will be systematically ended. The fdidEndDate and fdidEndReason will be cascaded as the roleEndDate and roleEndReason, respectively.
- 22. If an FDID has previously been submitted to CAIS without an *fdidEndDate* or *fdidEndReason* set, and the FDID is no longer "Active" as defined by the CAT NMS Plan (i.e., has not had any CAT-reportable transaction activity for the previous six months), an Industry Member can designate the FDID as 'INACTIVE' in CAIS. An *fdidEndReason* of 'INACTIVE' indicates the FDID is not in scope for the periodic refresh requirements.
- 23. If an Industry Member is ending an FDID Record that has currently active Customers associated to the ending FDID, and they do not want the date and reasons cascaded, they must explicitly end the

- Customer-to-FDID association by including the association in the submission file and populating the roleEndDate and roleEndReason fields.
- 24. If an FDID Record has one or more stored Customer-to-FDID associations where the *roleEndDate* is set and the Industry Member subsequently ends the FDID Record with an *fdidEndDate* populated with a date prior to the previously set *roleEndDate*, and the Customer association is omitted from the resubmission, the *roleEndDate* values stored in CAIS will be systematically updated to the earlier *fdidEndDate* value. The *roleEndReason* currently set on the association will not be updated if it differs from the submitted *fdidEndReason* value.
- 25. If a Customer-to-FDID association that was previously stored in CAIS is omitted from an FDID submission, the association will be implicitly ended. The date the submission was acknowledged by CAIS will be used as the *roleEndDate* and the *roleEndReason* will be set to 'ENDED'. The *roleStartDate* will be unchanged in this case. There are some scenarios where it is not permissible to implicitly end a Customer-to-FDID association. See <u>Section 3.2 Replacement of Transformed Identifier (TID)</u> for more information.
- 26. Each FDID Record within a submission file must contain at least one Address Record and may contain up to four total Address Records. When multiple Address Records are included in the file, they must use the address type values corresponding to the counts of addresses in the file. For example, if two Address Records are included, they must be 'ADDRESS1' and 'ADDRESS2'.
- 27. The FDID Record submission must contain all current Address Records for the FDID Record. If a previously stored Address Record is not included in a subsequent submission of the FDID Record, the Address Record(s) that is not received will no longer be stored as an address of the FDID.
- 28. CAIS allows for four address lines of up to 40 characters per line, or 160 total characters for each FDID address. Address lines exceeding 40 characters may be continued to the next address line. Industry Members must report each FDID address as it appears in its books and records and are not expected to use specific abbreviations or standardization (e.g., "ST" or "ST." for "Street"), or white space trimming when submitting the address information to CAIS.
- 29. When the *accountType* of the FDID Record is 'DVP/RVP', each FDID Record within a submission file must contain a populated value for the *DVPCustodianID* field.
- 30. If an FDID Record has an accountType of 'DVP/RVP' and there is no DVPCustodianID assigned to the FDID Record because the custodian is a non-DTC custodian (e.g., a foreign custodian), then the value of 'FOR' must be used in the DVPCustodianID field. If an Industry Member optionally reports a DVP/RVP account that is temporarily not assigned a clearing number or DTC number because the account is new, or the current clearing number or DTC number has been removed from DTCC's ALERT service and no new clearing number or DTC number is available, the Industry Member must populate the DVPCustodianID field with 'DTCRM'. Further, the DVPCustodianID must be immediately updated upon receipt of the new clearing number or DTC number.

- 31. Industry Members reporting data for their correspondents, such as a clearing firm reporting Accounts of an introducing broker, are not required to populate the *branchOfficeCRD* field for the FDIDs being reported for correspondents. While the *registeredRepCRD* is an optionally reported field, it is likewise not expected for Industry Members reporting data for their correspondents to populate this field.
- 32. When optionally populated, the FDID submission must include any and all *registeredRepCRD* values for current Registered Representatives of the FDID. If a specific CRD that was previously stored for an FDID is not included in a subsequent submission of the FDID, the CRD that is no longer received will no longer be stored in association with the FDID. For Industry Members optionally reporting the *registeredRepCRD*, it is not anticipated that *registeredRepCRD* is populated for institutional accounts, as defined by FINRA Rule 4512(a)(1)(c).
- 33. Each Customer of an FDID must only ever have one active *role* in association to the FDID at a time. If a Customer changes its *role* for example, a Holder of the Account that does not have authorization to trade on the Account is granted authorization to trade the original *role* must be ended either by resubmitting the FDID Record with the Customer's *roleEndDate* and *roleEndReason* or by resubmitting the FDID Record with the Customer's new *role* and *roleStartDate* and omitting the Customer's previous *role* and previous *roleStartDate*. Ending the association and adding the new association may occur within a single submission, however there cannot be overlap of more than one calendar day between the effective date ranges for each association for a given Customer.
- 34. Each FDID must have at least one active association to a CAT Customer with trading capabilities. Each FDID must have at least one active association to a CAT Customer with a *role* of 'TRDHOLDER', or at least one active association to a CAT Customer with a *role* of 'AUTH3RD' or 'AUTHREP' where *hasDiscretion* is 'true'.
- 35. No validation will occur for LTID Dates (*ItidEffectiveDate* and *ItidEndDate*) compared to the associated FDID Dates (*fdidDate* and *fdidEndDate*). However, the *ItidEffectiveDate* included in a submission must still be set to a value earlier than the *ItidEndDate* when *ItidEndDate* is populated.
- 36. If an Address Record for an FDID is a United States military or diplomatic address, the *countryCode* field is to be populated with 'US' and the *regionCode* is to be populated with 'US-AA', 'US-AE', or 'US-AP', as applicable. The *city* field is to be populated with 'APO', 'DPO', or 'FPO', as applicable.
- 37. If an Industry Member has closed an account and ended the associated FDID in CAIS, and later reopens the same account and resubmits the FDID to CAIS, then the *fdidDate* in the reopening submission must be updated to reflect the reopening date.
- 38. If an Industry Member is ending an FDID in CAIS with an *fdidEndReason* of 'CORRECTION', the *fdidEndDate* must be the same as the *fdidDate* to indicate that the FDID Record should never have been submitted to CAIS.

5.1.3.2. CAIS Data File Submission - Customer

The following rules apply to Customer Records present within CAIS Data Files:

- Each Customer Record present in the CAIS Data File must have a corresponding entry in the Transformed Identifiers File. If a corresponding Transformed Identifiers File entry is not present, the Customer Record will be rejected.
- 2. A Customer being submitted to CAIS must have at least one associated FDID within the submission file or else the Customer Record will be rejected.
- Each Customer included in a submission file must contain all fields and associations that reflect its current state.
- 4. If any FDID associated to a Customer within a submission file is rejected due to data validation errors, the Customer will be rejected as well.
- 5. If an Industry Member needs to clear a previously submitted conditional or optional field value, it must omit the field in a resubmission, which will implicitly clear the value, or include it in a resubmission with an explicit value of 'null'. The full state of the Customer Record must be included as well.
- 6. If the Customer listed in the *correctingCustomerRecordID* is not included in the current submission file or is included in the current submission file but the Customer Record does not pass data validation checks, the repairing submission record referencing the Customer Record will fail data validation and not be accepted by CAT CAIS.
- 7. If a Customer becomes associated to an FDID that was previously submitted to and accepted by CAT CAIS, the Industry Member must establish the Customer-to-FDID association by including the FDID in a submission file with all relevant fields that apply and including the Customer's *role* within the *fdidCustomerList* array of the FDID Record. The current state of the corresponding FDID Record must be included in the submission as well.
- 8. Each Customer Record within a submission file may contain up to four Address Records. Effective July 12, 2023, each Customer must be reported to CAIS with at least one address (up to four addresses). When multiple Address Records are included in the file, they must use the address type values corresponding to the counts of addresses in the file. For example, if two Address Records are included, they must be 'ADDRESS1' and 'ADDRESS2'.
- 9. The Customer submission must contain all current Address Records for the Customer Record. If a previously stored Address Record is not included in a subsequent submission of the Customer, the Address Record(s) that is not received will no longer be stored as an Address of the Customer.
- 10. CAIS allows for four address lines of up to 40 characters per line, or 160 total characters for each Customer address. Address lines exceeding 40 characters may be continued to the next address line. Industry Members must report each Customer address as it appears in its books and records and are not expected to use specific abbreviations or standardization (e.g., "ST" or "ST." for "Street"), or white space trimming when submitting the address information to CAIS.
- 11. If a single Customer is associated to multiple FDIDs and included in a single submission file, the Industry Member must ensure the following attributes are consistent across all versions Customer Record type for a 'FOREIGN' *tidType* record (i.e., reporting only as a Natural Person or a Legal

- Entity), *yearOfBirth*, and *ein*. Failure to maintain consistent data on these fields will result in the rejection of all instances of the Customer Record.
- 12. Each Customer in a submission file must include any and all applicable *customerType* values that are applicable for the Customer. If none of the defined terms are applicable for the Customer, the value of 'NOTAPPLICABLE' is to be used.
- 13. If an Industry Member stores a single name value for its Customer who legally has one name (i.e., a first name but no last name, or a last name but no first name), it must populate the *lastName* field with the name recorded in its books and records and populate the *firstName* field with a value of 'NNVE' (No Name Value Exists). If the Industry Member stores the legal name as both the first name and the last name (perhaps, due to system requirements), the Industry Member may report the Customer as described above or may populate the stored values in the respective *firstName* field and *lastName* field.
- 14. If an Address Record for a Customer is a United States military or diplomatic address, the *countryCode* field is to be populated with 'US' and the *regionCode* is to be populated with 'US-AA', 'US-AE', or 'US-AP', as applicable. The *city* field is to be populated with 'APO', 'DPO', or 'FPO', as applicable.
- 15. If a Customer Record is rejected and the Industry Member subsequently determines that (1) it does not have an obligation to submit the Customer information to CAIS; and (2) it does not have the information required to repair the rejection, the rejection may be deleted by submitting a CAIS Data File referencing the *rejectionID* in the *correctionList* with a *correctionAction* of 'DELETE'.
- 16. When *tidType* is 'FOREIGN', *foreignTIDCountryCd* must not be 'US'. In addition, when *tidType* is 'FOREIGN', *replacingForeignTIDCountryCd* must not be 'US'.

5.1.4. Transformed Identifiers File Submission

The following rules apply to the Transformed Identifiers Files and the records present within the file:

- 1. Schema files will be maintained by the Plan Processor and will be versioned as the Technical Specifications change.
- 2. A single *tidValue* may be present within the Transformed Identifiers File in association with differing *customerRecordID* values.
- 3. Each TID Record present in the Transformed Identifiers File must reference a record present in the CAIS Data File. If a corresponding record is not present in the CAIS Data File either in the naturalPersonCustomerList or the legalEntityCustomerList, the individual TID entry in the Transformed Identifiers File will be rejected and not processed for additional validations.
- 4. A TID Record must be created from an appropriately formatted Input Identifier for SSN/ITIN and EIN inputs, including the hyphen(s) that is, SSN/ITIN values formatted as '999-999999' or EIN values formatted as '99-9999999'.

- 5. Format validation will not occur for foreign Input Identifiers.
- 6. A TID Record must be created from a valid Input Identifier, as noted
 - a. For 'SSN/ITIN'
 - i. No values having an Area Number (first three digits) of 000 nor 666.
 - ii. No values having a Group Number (middle two digits) of 00.
 - iii. No values having a Serial Number (last four digits) of 0000.
 - iv. No values of 111-11-1111, 333-33-3333, 666-66-6666, nor 123-45-6789.
 - b. For 'EIN'
 - i. No range validation will occur for TIDs generated from EINs.
- 7. Associating an 'SSN/ITIN' with a Customer in the *legalEntityCustomerList* or an 'EIN' with a Customer in the *naturalPersonCustomerList* will result in a rejection of the Customer Record.
- 8. A *tidValue* generated from an invalid Input Identifier, or submitted with an incorrect *tidType* value, will cause the Customer Record to be rejected.
- Transformed Identifiers Files submitted through the CAT Reporter Portal CAIS are limited to a
 maximum uncompressed size of 1GB, with a record limit of 100,000 TID Records per file. Files with
 more than 100,000 TID Records will be rejected.

5.1.5. Paired CAIS Data File and Transformed Identifiers File JSON Example

The following JSON example demonstrates how a clearing firm (*catReporterCRD* 123456) must structure a CAIS Data File submission for an account that it holds for a correspondent (*correspondentCRD* 3210) when it is using a CAT Reporting Agent (*catSubmitterID* 99999) to submit to CAT CAIS.

```
"version": "2.0.0",
"catReporterCRD": 123456,
"catSubmitterID": 99999,
"correspondentCRD": 3210,
"fdidRecordCount": 3,
"naturalPersonCustomerRecordCount": 3,
"legalEntityCustomerRecordCount": 1,
"fdidRecordList": [
    "fdidRecordID": 1,
    "firmDesignatedID": "EZAccount123",
    "fdidType": "ACCOUNT",
    "accountType": ["OPTION"],
    "accountName": "JointMgdAcct",
    "fdidDate": 20190102,
    "addressList": [
        "addrType": "ADDRESS1",
        "addrLine1": "123 MAIN ST",
        "city": "NEW YORK",
        "regionCode": "US-NY",
```

```
"countryCode": "US",
      "postalCode": "10011"
    },
      "addrType": "ADDRESS2",
      "addrLine1": "1 WATERS ST",
      "addrLine2": "TRADING DESK 15",
      "city": "JERSEY CITY",
      "regionCode": "US-NJ",
      "countryCode": "US",
      "postalCode": "07097"
 ],
  "largeTraderList": [
   {
      "largeTraderRecordID": 1,
      "largeTraderID": "12345678-0001",
      "ltidEffectiveDate": 20190501
    },
      "largeTraderRecordID": 2,
      "largeTraderID": "98765432-1234",
      "ltidEffectiveDate": 20190501
   }
 ],
  "fdidCustomerList": [
      "customerRecordID": 1,
      "role": "TRDHOLDER",
      "roleStartDate": 20190102
    },
      "customerRecordID": 4,
      "role": "TRDHOLDER",
      "roleStartDate": 20190102
    },
      "customerRecordID": 15,
     "role": "AUTHREP",
      "hasDiscretion": true,
      "roleStartDate": 20190501
 ]
},
 "fdidRecordID": 2,
 "firmDesignatedID": "MyTestEntity",
 "fdidType": "ENTITYID",
  "accountType": ["ENTITYID"],
  "accountName": "AllAcctTest",
  "fdidEndDate": 20191201,
  "fdidDate": 20170308,
  "fdidEndReason": "ENDED",
  "addressList": [
      "addrType": "ADDRESS1",
```

```
"addrLine1": "1604 RIVERSIDE DRIVE",
      "city": "HILL VALLEY",
      "regionCode": "US-CA",
      "countryCode": "US",
      "postalCode": "91361"
 1
},
 "fdidRecordID": 3,
 "firmDesignatedID": "InternalRel",
 "fdidType": "RELATIONSHIP",
 "accountType": ["RELATIONSHIP"],
  "accountName": "Relationship Acct",
  "fdidDate": 20150121,
  "addressList": [
      "addrType": "ADDRESS1",
      "addrLine1": "84 BEACON ST",
      "city": "BOSTON",
      "regionCode": "US-MA",
      "countryCode": "US",
      "postalCode": "02101"
    },
      "addrType": "ADDRESS2",
      "addrLine1": "400 PRIVATE DRIVE",
      "city": "LITTLE WHINGING",
      "regionCode": "SURREY",
      "countryCode": "GB",
      "postalCode": "A9A 9A9"
    } ,
      "addrType": "ADDRESS3",
      "addrLine1": "84 BEACON ST",
      "city": "BOSTON",
      "regionCode": "US-MA",
      "countryCode": "US",
      "postalCode": "02101"
 ],
  "largeTraderList": [
      "largeTraderRecordID": 1,
      "largeTraderID": "98765432-1234",
      "ltidEffectiveDate": 20180501
    },
      "largeTraderRecordID": 2,
      "largeTraderID": "11223344-0001",
      "ltidEffectiveDate": 20180901
    },
      "largeTraderRecordID": 3,
      "largeTraderID": "99887766-6543",
      "ltidEffectiveDate": 20200105
```

```
}
    ],
    "fdidCustomerList": [
        "customerRecordID": 2,
        "role": "TRDHOLDER",
        "roleStartDate": 20150121
    ]
  }
],
"naturalPersonCustomerList": [
    "customerRecordID": 1,
    "firstName": "JOHN",
    "lastName": "DOE",
    "nameSuffix": "SENIOR",
    "doingBusinessAs": "JOHN'S PLUMBING",
    "yearOfBirth": 1980,
    "addressList": [
      {
        "addrType": "ADDRESS1",
        "addrLine1": "123 MAIN ST",
        "city": "NEW YORK",
        "regionCode": "US-NY",
        "countryCode": "US",
        "postalCode": "10011"
      }
    "customerType": ["ACCREDITED"]
  },
    "customerRecordID": 4,
    "firstName": "JANE",
    "lastName": "DOE",
    "yearOfBirth": 1982,
    "addressList": [
        "addrType": "ADDRESS1",
        "addrLine1": "123 MAIN ST",
        "city": "NEW YORK",
        "regionCode": "US-NY",
        "countryCode": "US",
        "postalCode": "10011"
      }
    "customerType": ["ACCREDITED"],
    "updateNotification": true
  },
    "customerRecordID": 15,
    "firstName": "ALEXANDER", "middleName": "W",
    "lastName": "SMYTHE",
    "yearOfBirth": 1975,
    "customerType": ["EMPLOYEE"]
```

```
"addressList": [
         "addrType": "ADDRESS1",
"addrLine1": "1 WATERS ST",
         "addrLine2": "TRADING DESK 15",
         "city": "JERSEY CITY",
         "regionCode": "US-NJ",
         "countryCode": "US",
         "postalCode": "07097"
  "legalEntityCustomerList": [
      "customerRecordID": 2,
      "legalName": "PRIMARY TRADING",
      "addressList": [
          "addrType": "ADDRESS1",
          "addrLine1": "84 BEACON ST",
          "city": "BOSTON",
          "regionCode": "US-MA",
          "countryCode": "US",
          "postalCode": "02101"
      ],
      "customerType": ["FOREIGN"]
   }
"correctionList": [
    {
      "rejectionID": 1127,
      "correctionAction": "CORRECTION",
      "correctingFirmDesignatedID": "EZAccount123"
    },
      "rejectionID": 821,
      "correctionAction": "DELETE"
  ]
}
```

The following JSON example demonstrates how the Industry Member would structure the companion Transformed Identifier File submission.

```
"customerRecordID": 2,
      "tidType": "FOREIGN",
      "foreignTIDType": "NATIONALID",
      "foreignTIDCountryCd": "GB",
      "tidValue":
"26f917bb38d0309e438e57e06a241473ed7a59bae503712dee9c5cff3ecb50e7"
    },
      "customerRecordID": 4,
      "tidType": "SSN/ITIN",
      "tidValue":
"4628ea314743d5ac373997763be3d39b86fc40c5d2015d2db345b0231e215b6c"
      "customerRecordID": 15,
      "tidType": " SSN/ITIN",
      "tidValue":
"568ca6d8af479889d124c329061ea0762a9c87abc3c80fddb659804477531e1a"
 1
}
```

5.1.6. Schema

An Industry Member schema file that details the structure and expected contents of every CAIS file submission is available on the CAT public website. The schema file will be maintained by the Plan Processor and will be versioned as the Account and Customer file formats change. The CAT CAIS schema file will use the JSON schema format as defined at https://json-schema.org/.

5.1.6.1. Schema Version

Schema changes will be updated when changes to the CAT Reporting Technical Specifications for Industry Members occur that impact the schema. The following rules apply:

- 1. The Schema Version is formatted as <Major>.<Minor>.<Patch>. All digits must be represented.
 - Major updated when a change occurs that impacts all or a significant portion of Industry Members. In such cases, the schema is not backward compatible and will be specified accordingly.
 - Minor updated when a change occurs that does not require coding changes for all Industry Members. In such cases, the schema is not backward compatible.
 - Patch updated when a change occurs that does not require coding changes for any Industry Members.
- 2. Records contained in a CAIS Data File must be formatted as per the schema version noted in the submission file.

3. Feedback provided by CAT CAIS will set the *version* equal to the applicable schema version for the submission file.

5.1.6.2. Schema Definition

The schema file is a JSON format file that represents the following:

- 1. **Data Types** CAT-defined data types containing the following elements:
 - dataType: Data Type (e.g., Text) as defined in Table 3: Data Types.
 - **JSONDataType**: JSON standard data type to be used to submit data of this type.
 - maxLength: Maximum length of the string submission. Applicable to text and alphanumeric types only.
- 2. **Choices** For choice data types, the list of possible values.
- 3. Name/Value Pairs Field specifications for Name/Value Pair fields.
 - name: Field Name.
 - dataType: Data Type or an array of Data Types.
 - JSONDataType: The JSON standard data type or an array or JSON standard data types.
 - required: Indicates whether the field is "Required," "Conditional," or "Optional."

5.2. Connectivity

Connectivity to CAT will be through at least one of the following methods:

- Private Line provided by a Managed Network Service Provider (MNSP)
- AWS PrivateLink⁴
- CAT Secure Reporting Gateway (SRG) Reporter Portal

Both the Private Line and AWS PrivateLink connectivity methods will support the CAT File Transfer service, which provides access for automated, machine-to-machine file submissions, acknowledgements, rejections, and corrections using the Secure File Transfer Protocol (SFTP) service as well as to the CAT Reporter Portal for interactive reporting through web-based forms or manual file uploads.

The CAT Secure Reporting Gateway (SRG) connectivity method will only support the CAT Reporter Portal. The SRG requires multi-factor authentication (MFA) to establish a secure, encrypted session

⁴ Industry Members and CAT Reporting Agents interested in AWS PrivateLink should contact the FINRA Helpdesk at 888-696-3348 or at help@finracat.com.

before accessing the CAT Reporter Portal. The SRG requires the use of modern browsers supporting HTML5 and TLS (Transport Layer Security). No client software installation is required.

The combinations of Connectivity and Interface Methods are summarized below.

Table 9: Connectivity Methods and Supported CAT Interfaces Methods

Connectivity Methods	Interface Methods		
	CAT File Transfer	CAT Reporter Portal - CAIS	
Private Line provided by MNSP	Y	Y	
AWS PrivateLink	Y	Y	
CAT Secure Reporting Gateway (SRG)	N	Y	

For a detailed description of the CAT Connectivity Methods, including instructions for establishing access and connectivity to the CAT system, refer to the <u>FINRA CAT Connectivity Supplement for Industry Members</u>.

5.3. CAT Interface Methods

The interface methods available to Industry Members and CAT Reporting Agents to submit data and retrieve reporting feedback include CAT File Transfer and the CAT Reporter Portal – CAIS. For a detailed description of the CAT Interface Methods, including instructions for establishing access and connectivity to the CAT system, refer to the <u>FINRA CAT Connectivity Supplement for Industry Members</u> and the <u>CAT CAIS Reporter Portal User Guide</u>.

The following identifies the types of CAT information with the respective interface methods available for each:

Table 10: CAT Data and Feedback Interface Methods

CAT Data Submission and Feedback	Category	CAIS SFTP	CAT Reporter Portal – CAIS	CAT Reporter Portal
Submission of CAT CAIS files	Submission	✓	✓	
Resubmission of Rejected Files/Records, Corrections and Update Notifications	Submission	✓	✓	
Interactive CAT Reportable Account Entry	Submission		✓	
Interactive CAT Reportable Customer Entry	Submission		√	
File Status Retrieval	Feedback	✓	√	

CAT Data Submission and Feedback	Category	CAIS SFTP	CAT Reporter Portal – CAIS	CAT Reporter Portal
Reporting Statistics	Feedback		✓	
Error Feedback	Feedback	✓	✓	
Data Inconsistencies Feedback	Feedback	✓	✓	
FDID Reconciliation Report	Feedback		✓	
FDID Refresh Report	Feedback	✓	✓	
Account Maintenance	Administration			✓
Establishment of Reporting Relationships	Administration			✓

5.3.1. CAT File Transfer

The CAT File Transfer method is an automated, machine-to-machine interface utilizing the Secure File Transfer Protocol ("SFTP") for file submissions, acknowledgements, rejections and corrections. SFTP enables Industry Members and CAT Reporting Agents to create machine-to-machine connections to securely transmit data and retrieve data from FINRA CAT. In order to ensure Customer and Account reference data is never commingled with the TID value, the two file types must be posted to separate SFTP sites.

There are two separate host sites that are utilized for CAIS data reporting to ensure the separation of the Customer and Account data submissions from the Transformed Identifiers File. This additional physical separation for file posting further increases the security of the data within the Transformed Identifiers File, and the separate directory structure reduces risks of files being cross-posted to the incorrect directory.

The following is the SFTP directory structure that will be made available in the submitter's home directory for posting CAIS Data Files and received feedback and reports. Files associated with CAIS Data File submissions, associated feedback, and reports will be uploaded in SFTP directories as per the following table.

Table 11: SFTP Directories - CAIS Data, Feedback, and Reports

SFTP Directory	Usage
/submitterID/cat/cais/upload	SFTP submissions of CAIS Data Files uploaded by CAT Submitters. CAT will move files from this directory for further processing.
/submitterID/cat/cais/feedback	CAIS Data Feedback Files, Outstanding Rejections Feedback Files and Sentinel Files and Outstanding Material Inconsistencies Feedback Files and Sentinel Files.
/submitterID/cat/cais/reports	Directory for the FDID Refresh Report.

The following is the SFTP directory structure that will be made available on the separate host site for posting the Transformed Identifiers File and received feedback files.

Table 12: SFTP Directory – Transformed Identifiers File

Identifiers Data SFTP Directory	Usage
/submitterID/cat/tid/upload	SFTP submissions of Transformed Identifiers Files uploaded by CAT Submitters. CAT will move files from this directory for further processing.
/submitterID/cat/tid/feedback	Transformed Identifiers Feedback File.

The following rules apply:

- 1. Processing is initiated when a file appears in the /submitterID/cat/cais/upload directory paired with a corresponding file in the /submitterID/cat/tid/upload directory only.
- 2. Files posted to /submitterID/cat/cais/upload without a corresponding file submission posted to /submitterID/cat/tid/upload will be rejected one hour after posting.
- 3. Files posted to /submitterID/cat/tid/upload without a corresponding file submission posted to /submitterID/cat/cais/upload will be rejected one hour after posting.
- 4. CAT will remove files from the upload directory as soon as each file upload is complete.
- 5. The CAT Submitter must not delete files from the /submitterID/cat/cais/upload directory.
- 6. Due to the CAT NMS Plan-Defined PII considerations of the Account and Customer data, a copy of uploaded files will not be made available to the Industry Member or CAT Submitter after submission.
- 7. Industry Members using SFTP will be able to obtain feedback files for files submitted through the SFTP, as well as any files submitted through the CAT Reporter Portal CAIS through either file upload or manual submission.

5.3.2. CAT Reporter Portal – CAIS

The CAT Reporter Portal – CAIS is a web interface utilizing secure encryption protocols (HTTPS/TLS) and multifactor authentication (MFA). The CAT Reporter Portal – CAIS will facilitate data submissions using the following methods:

- Manual data file uploads for files up to 1GB in size and limited to 100,000 FDID and 100,000
 Customer Records meeting all requirements of CAIS Data Files as specified in <u>Section 5.1.3</u>.
- Manual data entry for original submissions, repairs for CAT-identified errors, and Industry
 Member-initiated corrections. These entries will be converted to submission files generated by the
 portal. Because these files will contain CAT NMS Plan-Defined PII data, they will not be available
 to download after submission.

- The CAT Reporter Portal CAIS will include a summary view screen for records created through manual data entry that contains the record data which will be submitted, allowing users to confirm, and capture for their records, the details of their submission.
- For data security, Industry Members using the CAT Reporter Portal CAIS will not be able to
 view the full details of the originally submitted record for repair of CAT-identified errors. The CAT
 Reporter Portal CAIS will only display the following fields regarding the error record, and will
 require entry of all other data fields to be included in the repairing submission:
 - catReporterCRD
 - catSubmitterID
 - firmDesignatedID
 - fdidRecordID
 - customerRecordID (if error is against a Customer Record or an FDID-to-Customer association)
 - largeTraderRecordID (if error is against a Large Trader record)
 - rejectionID
 - errorCode
- Industry Members using the CAT Reporter Portal CAIS will only be able to view Feedback Files
 for files submitted through the CAT Reporter Portal CAIS. They will not be able to view
 Feedback Files for files posted via SFTP.

5.4. CAT CAIS Reporting Hours

5.4.1. Submission of CAT Account and Customer Data

The CAT NMS Plan requires Industry Members to report Received Industry Member Data, which includes Customer and Account data, by 8:00 a.m. Eastern Time on the CAT Trading Day following the day the Industry Member receives such Received Industry Member Data. Customer and Account data may be bulk uploaded at the end of the CAT Trading Day or may be submitted in batches with associated uploads throughout the day. All creation of, or modifications to, CAT reportable Customers and Accounts are required to be submitted to CAT CAIS by 8:00 a.m. Eastern Time on the CAT Trading Day following the day such information was received by the Industry Member.

Weekends or any day that all equities or options national securities exchanges are closed are not considered a CAT Trading Day.

5.4.2. Deadline for Repair of Errors Identified by CAT CAIS

For data submitted by 8:00 a.m. ET, errors will be identified by CAT CAIS and provided to Industry Members by no later than 5:00 p.m. ET on the CAT Trading Day such information was submitted to CAT.

Once available, repairs can be made immediately. All repairs must be submitted by 5:00 p.m. Eastern Time on the third Trading Day after the Customer or Account information became available to the Industry Member. Repairs received after the repair deadline will be accepted but considered late.

If an Industry Member determines that previously accepted Customer or Account data is incorrect, the Industry Member must correct the Customer or Account data even if it did not produce an error during processing. Industry Member-initiated corrections will be handled in the same method as any other update to the existing Customer or Account record.

Table 13: Error Repair Deadline Examples

IM Receives Data	Holiday	Initial Report Due (T+1)	Repair Due (T+3)
Monday 2:20 p.m. ET	N/A	Tuesday 8:00 AM ET	Thursday 5:00 p.m. ET
Monday 11:40 p.m. ET	N/A	Wednesday 8:00 a.m. ET	Friday 5:00 p.m. ET
Friday 11:00 a.m. ET	N/A	Monday 8:00 a.m. ET	Wednesday 5:00 p.m. ET
Friday 4:02 p.m. ET	N/A	Monday 8:00 a.m. ET	Wednesday 5:00 p.m. ET
Friday 4:02 p.m. ET	Next Monday	Tuesday 8:00 a.m. ET	Thursday 5:00 p.m. ET
Wednesday 3:00 p.m. ET	Thursday, Friday is half day	Friday 8:00 a.m. ET	Tuesday 5:00 p.m. ET
Saturday 11:15 a.m. ET	N/A	Tuesday 8:00 a.m. ET	Thursday 5:00 p.m. ET
Saturday 11:15 a.m. ET	Next Monday	Wednesday 8:00 a.m. ET	Friday 5:00 p.m. ET
Monday 10:00 a.m. ET (holiday)	On event date	Wednesday 8:00 a.m. ET	Friday 5:00 p.m. ET

5.4.3. Deadline for Resolving Inconsistencies Identified by CAT CAIS

For data submitted by 8:00 a.m. ET, data inconsistencies feedback will be available by no later than 5:00 p.m. ET. Once available, data updates or confirmations can be made immediately. All updates or confirmations must be submitted by 5:00 p.m. Eastern Time on the third CAT Trading Day of the submission causing the Material Inconsistency. Updates or confirmations received after the resolution deadline will be accepted but considered late.

Table 14: Inconsistencies

Event Occurs/IM Receives Data	Holiday	Initial Report Due (T+1)	Inconsistency Resolution Due (T+3)
Monday 2:20 p.m. ET	N/A	Tuesday 8:00 a.m. ET	Thursday 5:00 p.m. ET
Monday 11:40 p.m. ET	N/A	Wednesday 8:00 a.m. ET	Friday 5:00 p.m. ET
Friday 11:00 a.m. ET	N/A	Monday 8:00 a.m. ET	Wednesday 5:00 p.m. ET

Event Occurs/IM Receives Data	Holiday	Initial Report Due (T+1)	Inconsistency Resolution Due (T+3)
Friday 4:02 p.m. ET	N/A	Monday 8:00 a.m. ET	Wednesday 5:00 p.m. ET
Friday 4:02 p.m. ET	Next Monday	Tuesday 8:00 a.m. ET	Thursday 5:00 p.m. ET
Wednesday 3:00 p.m. ET	Thursday, Friday is half day	Friday 8:00 a.m. ET	Tuesday 5:00 p.m. ET
Saturday 11:15 a.m. ET	N/A	Tuesday 8:00 a.m. ET	Thursday 5:00 p.m. ET
Saturday 11:15 a.m. ET	Next Monday	Wednesday 8:00 a.m. ET	Friday 5:00 p.m. ET
Monday 10:00 a.m. ET (holiday)	On event date	Wednesday 8:00 a.m. ET	Friday 5:00 p.m. ET

5.5. Security

5.5.1. Encryption (In-transit)

TLS-based encryption, version 1.2 minimum, is required for connection to the Reporter Portal– CAIS (whether accessed via private line or the SRG) and to the Secure Reporting Gateway itself.

For SFTP, in addition to the fact that the SFTP service is only accessible via private line, traffic will be encrypted by virtue of the intrinsic encryption capabilities of SFTP. AES256 will be supported for SFTP; support for other encryption protocols is under evaluation.

5.5.2. Encryption (At-rest)

The CAT CAIS system will use native AWS encryption features to encrypt data upon receipt. No action is required by the Industry Member.

5.5.3. Authentication

Two-factor authentication will be required for access to the CAT Reporter Portal – CAIS. The first factor will be username and password which will require periodic rotation.

The second factor will to be via push notification to an off-the-shelf application installed on a mobile device provided by the user. The user will be required to install the application to their mobile device through their mobile operating system's application store and then complete a registration process on the CAT Reporter Portal or SRG. There is no cost to the CAT Reporter or the user for this mobile application.

The SFTP service similarly requires that two conditions be met to access the interface. The first factor is authentication via username and password. The second is the use of a defined IP source address that is

established during initial onboarding. The SFTP system implements an IP whitelist that prevents access from any system not on the whitelist.

More detailed information related to security is described in the <u>FINRA CAT Connectivity Supplement for Industry Members</u> available at https://www.catnmsplan.com/registration/.

6. Feedback and Corrections

CAT provides feedback associated with CAT CAIS submissions for Industry Members and CAT Submitters as follows:

- **File Status:** available via SFTP and the CAT Reporter Portal CAIS, indicates the acceptance or associated errors with a submission file.
- Reporting Statistics: available via the CAT Reporter Portal CAIS, daily summary statistics
 representing reporting activity and errors for prior submissions. Error rate is also included.
- Error Feedback: available via SFTP and the CAT Reporter Portal CAIS, errors found during
 processing will be made available, including error code, affected FDID, and associated record
 ID(s) from the submission file.
- **Corrections Feedback:** available via the CAT Reporter Portal CAIS, information is provided for the status of all repairs. When an error has been repaired, the updated status will be reflected.
- Outstanding Rejections Feedback: available via SFTP and the CAT Reporter Portal CAIS, errors found during processing on that day or on prior days that have not be repaired, and therefore remain outstanding, including error code and details about the submission file that last contained the associated record ID(s).
- Outstanding Material Inconsistencies Feedback: available via SFTP and the CAT Reporter
 Portal CAIS, Material Inconsistencies found during processing on that day or on prior days that
 have not been resolved, and therefore remain outstanding, including inconsistency code, details
 about the submission file that last contained the Customer Record, and associated record ID(s)
 from the submission file.

This section describes the procedures for obtaining feedback and making repairs associated with feedback of errors. Additionally, this section describes the requirement for making corrections for accepted data for which there was no feedback.

6.1. File and Error Feedback

A feedback file will be made available for each submission file that is acknowledged as uploaded. This file will contain information about current status, as well as previously completed stages of processing. Feedback related to the following stages of processing is expected to be made available within the following timelines:

Table 15: Feedback and Error Correction Availability

Seq	Processing Stage	Feedback	Anticipated Delivery	Delivery No Later Than
1	File Acknowledgement	File Acknowledgement Status	Within 10 minutes of File Submission	1 hour of File Submission
2	File Integrity	File Integrity Error Status or File Integrity Passed Status	Within 30 minutes of File Submission	2 hours of File Submission
3	Data Validation	Data Errors including syntax and semantic errors	Within 1 hour of File Integrity Feedback	4 hours of File Integrity Feedback
4	Outstanding Material Inconsistencies	Outstanding Material Inconsistencies	5:00 p.m. Eastern Time	5:00 p.m. Eastern Time
	and Outstanding Rejections Feedback	Data Errors that have not been repaired	5:00 p.m. Eastern Time	5:00 p.m. Eastern Time

Feedback files are versioned as they proceed through each stage of processing. The following tables, Table 17, Table 18 and Table 19, show for each stage of processing which feedback file version will be posted and the possible submission status for each version.

Table 16: CAIS Data Feedback File Versions

Seq	Processing Stage	Version	Possible Submission Status
1	File Acknowledgement	v1	FILE_ACKNOWLEDGED INCOMPLETE_PROCESSING_FAILURE CANCELLED_BY_SUPPORT
2	File Integrity	v2	FILE_INTEGRITY_PASSED COMPLETED_INTEGRITY_ERROR INCOMPLETE_PROCESSING_FAILURE CANCELLED_BY_SUPPORT
3	Data Validation	v3	RECORD_SCAN_COMPLETED INCOMPLETE_PROCESSING_FAILURE CANCELLED_BY_SUPPORT
3	Data Validation	v4	COMPLETED_WITHOUT_REJECTIONS COMPLETED_WITH_REJECTIONS COMPLETED_FILE_TIMEOUT INCOMPLETE_PROCESSING_FAILURE CANCELLED_BY_SUPPORT

Table 17: Transformed Identifiers Feedback File Versions

Seq	Processing Stage	Version	Possible Submission Status
1	File Acknowledgement	v1	FILE_ACKNOWLEDGED INCOMPLETE_PROCESSING_FAILURE CANCELLED_BY_SUPPORT
2	File Integrity	v2	FILE_INTEGRITY_PASSED COMPLETED_INTEGRITY_ERROR INCOMPLETE_PROCESSING_FAILURE CANCELLED_BY_SUPPORT
3	Data Validation	v3	RECORD_SCAN_COMPLETED INCOMPLETE_PROCESSING_FAILURE CANCELLED_BY_SUPPORT
3	Data Validation	v4	COMPLETED COMPLETED_FILE_TIMEOUT INCOMPLETE_PROCESSING_FAILURE CANCELLED_BY_SUPPORT

6.1.1. Feedback Generation for CAIS Data and Transformed Identifiers Files

Feedback associated with all processing stages will be made available via SFTP and/or the CAT Reporter Portal – CAIS as described in <u>Table 10: CAT Data and Feedback Interface Methods</u>. A series of feedback files will be generated for each file submission as the file progresses through each stage of processing. The filenames will have the same base portion, but with differing *version* values.

For feedback files made available via SFTP, the following rules apply:

- 1. The format of feedback files will be JSON.
- 2. Feedback files for CAIS Data File submissions will be accessible under the cat/cais/feedback directory in the CAT Submitter's home directory on the Feedback SFTP server.
- 3. Feedback files for Transformed Identifier File submissions will be accessible under the cat/tid/feedback directory in the CAT Submitter's home directory on the Feedback SFTP server.
- 4. In addition to the feedback posted to the CAT Submitter's home directories, the feedback for data submitted by a CAT Submitter on behalf of an Industry Member will be accessible under the Industry Member's home directory on the Feedback SFTP server after the file has passed file integrity checks if the Industry Member has an SFTP account.
- 5. If a file is rejected for a file integrity error, it will not proceed to the next processing stage.
- 6. The minimum retention time for feedback files on the SFTP server is 10 calendar days. After that time, they may be removed from the server. Feedback will be available via the CAT Reporter Portal –

CAIS for 10 calendar days. Metadata regarding the submission will be available via the CAT Reporter Portal – CAIS for at least 90 days.

6.1.2. Feedback Filenames and Format

1. Feedback Files created by CAT CAIS will be named using the following format:

```
<original file base name>.<version>.feedback.<Format
Extension>.<Compression Type>
```

Example: SUBID_MYID_20200101_CAIS_000123.v1.feedback.json.bz2

Example: SUBID_MYID_20200101_TIDS_000123.v1.feedback.json.bz2

- 2. If a single Industry Member submits multiple files having the same original file base name, a file version will be appended to the original file base name separate from the *version* attribute of the feedback filename so that the feedback file for each version submitted can be retained.
- 3. Separate feedback files will be provided for the CAIS Data and Transformed Identifiers Files.

Table 18: Elements of a CAIS Data Feedback File

Field Name	Data Type	JSON Object	Includ e Key	Description
version	Text (10)	Main	R	The schema version of the feedback file used for providing the response.
submissionID	Unsigned	Main	R	The unique Submission ID assigned to the CAIS Data File by the CAT CAIS system. Used to identify the single submission activity. If the same filename is submitted across multiple submissions, each submission instance will have a separate and unique Submission ID value.
submitterUsername	Text (200)	Main	R	The name associated to the CAT User ID of the account used to submit the file to CAT CAIS.
catSubmitterID	Unsigned	Main	R	The ID of the firm that submitted the file to CAT.
catReporterCRD	Unsigned	Main	R	The CRD number assigned to the Industry Member to which the data within the submitted file belongs.
correspondentCRD	Unsigned	Main	С	The CRD number of the related introducing broker or correspondent firm whose Customer and Account data is kept on record at the Industry Member reporting to CAT. Only populated when correspondentCRD is populated in the submission file.
submissionStatus	Choice	Main	R	The current status of the submission file in the processing flow. VALUES:
				• FILE_ACKNOWLEDGED – indica

Field Name	Data Type	JSON Object	Includ e Key	Description
				the file was acknowledged as having been submitted and has been picked up for file integrity checks. FILE_INTEGRITY_PASSED – indicates the file passed file integrity checks and will now be processed through record data validations. RECORD_SCAN_COMPLETED – indicates the file has completed record validations. If one or more records passed record validation, they will now be loaded to CAIS. Details about any rejected records are now available within the feedback file in the rejectionItems section. COMPLETED_WITHOUT_REJECTION S – indicates the file has completed loading into CAIS, and no data validation errors were encountered. No further updates will be made to the feedback file. COMPLETED_WITH_REJECTIONS – indicates the file has completed data validation checks, and one or more data validation errors were encountered. No further updates will be made to the feedback file. COMPLETED_INTEGRITY_ERROR – indicates the file falled file integrity checks and cannot be processed. No further updates will be made to the feedback file upon reaching this status. COMPLETED_FILE_TIMEOUT – indicates the paired Transformed Identifiers File was not received within the prescribed time frame or was rejected. No further updates will be made to the feedback file. INCOMPLETE_PROCESSING_FAILUR E – indicates the file had an unexpected error and could not be processed. No further updates will be made to the feedback file. INCOMPLETE_PROCESSING_FAILUR E – indicates the submission was cancelled by CAIS support staff at the request of the Industry Member. No further updates
receiptTimestamp	Timestamp (String)	Main	R	will be made to the feedback file. The time at which the file was acknowledged to have been submitted for processing.
completedTimestamp	Timestamp (String)	Main	С	The time at which the file completed processing, reaching a completed status. Only populated after the file has reached a final status of COMPLETED_INTEGRITY_ERROR, COMPLETED_FILE_TIMEOUT,

Field Name	Data Type	JSON Object	Includ e Key	Description
				COMPLETED_WITHOUT_REJECTIONS, COMPLETED_WITH_REJECTIONS, INCOMPLETE_PROCESSING_FAILURE or CANCELLED_BY_SUPPORT.
receivedFDIDRecordCount	Unsigned	Main	С	Total count of FDID Records present within the file. Only populated when the file has reached the interim status of RECORD_SCAN_COMPLETED or a final status of COMPLETED_WITHOUT_REJECTIONS or COMPLETED_WITH_REJECTIONS.
successfulFDIDRecordCount	Unsigned	Main	С	Total count of FDID Records processed without data validation errors. Only populated when the file has reached the interim status of RECORD_SCAN_COMPLETED or a final status of COMPLETED_WITHOUT_REJECTIONS or COMPLETED_WITH_REJECTIONS.
receivedNaturalRecordCount	Unsigned	Main	С	Total count of Natural Person Customer Records present within the file. Only populated when the file has reached the interim status of RECORD_SCAN_COMPLETED or a final status of COMPLETED_WITHOUT_REJECTIONS or COMPLETED_WITH_REJECTIONS.
successfulNaturalRecordCou nt	Unsigned	Main	С	Total count of Natural Person Customer Records processed without data validation errors. Only populated when the file has reached the interim status of RECORD_SCAN_COMPLETED or a final status of COMPLETED_WITHOUT_REJECTIONS or COMPLETED_WITH_REJECTIONS.
receivedLegalEntityRecordCo unt	Unsigned	Main	С	Total count of Legal Entity Customer Records present within the file. Only populated when the file has reached the interim status of RECORD_SCAN_COMPLETED or a final status of COMPLETED_WITHOUT_REJECTIONS or COMPLETED_WITH_REJECTIONS.
successfulLegalEntityRecord Count	Unsigned	Main	С	Total count of Legal Entity Customer Records processed without data validation errors. Only populated when the file has reached the interim status of RECORD_SCAN_COMPLETED or a final status of COMPLETED_WITHOUT_REJECTIONS or COMPLETED_WITH_REJECTIONS.
receivedCorrectionActionCount	Unsigned	Main	С	Total count of Correction Action records present within the file. Only populated when the file has reached the interim status of RECORD_SCAN_COMPLETED or a final status of COMPLETED_WITHOUT_REJECTIONS or COMPLETED_WITH_REJECTIONS.
successfulCorrectionActionC ount	Unsigned	Main	С	Total count of Correction Action Records processed without data validation warnings. Only populated when the file has reached the interim status of RECORD_SCAN_COMPLETED or a final status of COMPLETED_WITHOUT_REJECTIONS or

Field Name	Data Type	JSON Object	Includ e Key	Description
				COMPLETED_WITH_REJECTIONS.
statusHistory	Name/Value Pair	Main	R	Includes the list of events and corresponding timestamps from file processing. Includes one or more of the following statuses: • FILE_ACKNOWLEDGED • FILE_INTEGRITY_PASSED • RECORD_SCAN_COMPLETED • COMPLETED_WITH_REJECTIONS • COMPLETED_WITHOUT_REJECTION S • COMPLETED_FILE_TIMEOUT • INCOMPLETED_FILE_TIMEOUT • INCOMPLETED_INTEGRITY_ERROR • CANCELLED_BY_SUPPORT
rejectionItems	Multi- Dimensional Array	Main	С	Includes the list of file integrity error codes or records having data validation errors. Only populated if the file had an integrity error or at least one record had a data validation error, and only when the file has reached the interim status of RECORD_SCAN_COMPLETED or the final statuses of COMPLETED_WITH_REJECTIONS or COMPLETED_INTEGRITY_ERROR.
rejectionID	Unsigned	Rejectio n Record	R	Identifier assigned by CAT to uniquely identify a rejected record or file.
firmDesignatedID	Text (40)	Rejectio n Record	С	The <i>firmDesignatedID</i> , as submitted to CAIS, of the record having the data validation error. Only populated on FDID rejections.
fdidRecordID	Unsigned	Rejectio n Record	С	The <i>fdidRecordID</i> , as submitted to CAIS, of the record having the data validation error. Only populated on FDID rejections.
largeTraderRecordID	Unsigned	Rejectio n Record	С	The largeTraderRecordID, as submitted to CAIS, of the record having the data validation error. Only populated on Large Trader rejections.
customerRejectionEventID	Text (100)	Rejectio n Record	С	Only available in the CAT Reporter Portal – CAIS. A unique identifier assigned by CAT for the specific Customer – by tidValue – having one or more rejections. If the same Customer (tidValue) is subsequently rejected, it will be assigned the same unique identifier. This ID is used because the CAT NMS Plan-Defined PII – including tidValue— of the Customer cannot be returned to the Industry Member after it is submitted to CAT.
customerRecordID	Array of Unsigned Values	Rejectio n Record	С	The customerRecordID, as submitted to CAIS, of the record having the data validation error. Only populated on Customer rejections or when an FDID Record rejects because an associated Customer Record rejected.
addrType	Choice	Rejectio	С	The addrType, as submitted to CAIS, of the

Field Name	Data Type	JSON Object	Includ e Key	Description
		n Record		record having the data validation error. Only populated when an address error resulted in the rejection. When populated, either firmDesignatedID or customerRecordID will be populated.
authTraderNameID	Unsigned	Rejectio n Record	С	The authTraderNameID, as submitted to CAIS, of the record having the data validation error. Only populated when an Authorized Trader Name error resulted in the rejection.
errorCode	Unsigned	Rejectio n Record	R	The error code of the file integrity error or data validation error.
rejectionTimestamp	Timestamp	Rejectio n Record	R	Indicates the time at which the file integrity or data validation error was identified.
failedCorrectionItems	Multi- Dimensional Array	Main	С	Includes the list of Correction Action Records having data validation warnings. Only populated if at least one record had a data validation warning, and only when the file has reached the interim status of RECORD_SCAN_COMPLETED or a final status of COMPLETED_WITHOUT_REJECTIONS or COMPLETED_WITH_REJECTIONS.
failedRejectionID	Unsigned	Failed Correcti on Record	R	The unique ID reference reported in the submission file for the Correction Action Record that was not able to be processed.
warningCode	Unsigned	Failed Correcti on Record	R	The warning code of the data validation, noting which attribute caused the Correction Action Record to not be able to be processed.

Table 19: Elements of a Transformed Identifiers Feedback File

Field Name	Data Type	JSON Object	Includ e Key	Description
version	Text (10)	Main	R	The schema version of the feedback file used for providing the response.
submissionID	Text (36)	Main	R	The unique Submission ID assigned to the Transformed Identifier File by the CAT CAIS system. Used to identify the single submission activity. If the same filename is submitted across multiple submissions, each submission instance will have a separate and unique Submission ID value.
submissionStatus	Choice	Main	R	The current status of the submission file in the processing flow. VALUES: • FILE ACKNOWLEDGED – indicates

Field Name	Data Type	JSON Object	Includ e Key	Description
				the file was acknowledged as having been submitted, and has been picked up for file integrity checks. FILE_INTEGRITY_PASSED – indicates the file passed file integrity checks and will now be processed through record data validations. RECORD_SCAN_COMPLETED – indicates the file has completed record validations. If one or more records passed record validation, they will now be loaded to CAIS. Details about any rejected records are now available within the feedback file in the rejectionItems section. COMPLETED_INTEGRITY_ERROR – indicates the file failed file integrity checks and cannot be processed. No further updates will be made to the feedback file upon reaching this status. COMPLETED – indicates the paired CAIS Data and Transformed Identifiers Files have been successfully loaded into CAIS. Please refer to the feedback file for details regarding outcomes of record validations. COMPLETED_FILE_TIMEOUT – indicates the paired CAIS Data File was not received within the prescribed time frame or was rejected. No further updates will be made to the feedback file. INCOMPLETE_PROCESSING_FAILUR E – indicates the file had an unexpected error and could not be processed. No further updates will be made to the feedback file. CANCELLED_BY_SUPPORT – indicates the submission was cancelled by CAIS support staff at the request of the Industry Member. No further updates will be made to the feedback file.
receiptTimestamp	Timestamp (String)	Main	R	The time at which the file was acknowledged to have been submitted for processing.
completedTimestamp	Timestamp (String)	Main	С	The time at which the file completed processing, reaching a completed status. Only populated after the file has reached a final status of: COMPLETED, COMPLETED_INTEGRITY_ERROR, COMPLETED_FILE_TIMEOUT, INCOMPLETE_PROCESSING_FAILURE or CANCELLED_BY_SUPPORT
receivedTIDsCount	Unsigned	Main	С	Total count of TID Records present within the file. Only populated when the file has reached the

Field Name	Data Type	JSON Object	Includ e Key	Description
				final status of COMPLETED.
successfulTIDsCount	Unsigned	Main	С	Total count of TID Records processed without record validation warnings. Only populated when the file has reached the final status of COMPLETED.
statusHistory	Name/Value Pair	Main	R	Includes the list of events and corresponding timestamps from file processing. Includes one or more of the following statuses: • FILE_ACKNOWLEDGED • FILE_INTEGRITY_PASSED • RECORD_SCAN_COMPLETED • COMPLETED_INTEGRITY_ERROR • COMPLETED • COMPLETED • COMPLETED • COMPLETED_FILE_TIMEOUT • INCOMPLETE_PROCESSING_FAILUR E • CANCELLED_BY_SUPPORT
rejectionItems	Multi- Dimensional Array	Main	С	Includes the list of file integrity error codes or records having data validation errors. Only populated if the file had an integrity error or at least one record had a data validation error, and only when the file has reached the interim status of RECORD_SCAN_COMPLETED or the final status of COMPLETED.
rejectionID	Unsigned	Rejectio n Record	С	Populated if a file integrity error occurs. If populated, set to 'null' in the Transformed Identifiers Feedback File.
customerRecordID	Array of Unsigned Values	Rejectio n Record	С	The <i>customerRecordID</i> , as submitted to CAIS, of the record having the data validation error. Always populated unless the rejection resulted from a malformed or missing <i>customerRecordID</i> .
errorCode	Unsigned	Rejectio n Record	С	The error code of the file integrity error or data validation error.
rejectionTimestamp	Timestamp	Rejectio n Record	R	Indicates the time at which the file integrity or data validation error was identified.

6.1.3. JSON Examples of Feedback File for File Acknowledgement

The following is an example of a CAIS Data Feedback File after the submission has been acknowledged and accepted for file integrity checks:

Original CAIS Data File Submission Filename	123_456_20200204_CAIS_000123.json.bz2
CAIS Data Feedback Filename	123_456_20200204_CAIS_000123.v1.feedback.json.bz2
Feedback File Contents	{

The following is an example of a Transformed Identifiers Feedback File after the submission has been acknowledged and accepted for file integrity checks:

Original Transformed Identifiers File Submission Filename	123_456_20200204_TIDS_000123.json.bz2
Transformed Identifiers Feedback Filename	123_456_20200204_TIDS_000123.v1.feedback.json.bz2
riiename	
Feedback File Contents	<pre>{ "version": "2.0.0", "submissionID": 15, "submissionStatus": "FILE_ACKNOWLEDGED", "receiptTimestamp": "20200204T152233.000045000", "statusHistory": { "FILE_ACKNOWLEDGED": "20200204T152233.000045000" } }</pre>

6.2. File Integrity

During the File Integrity processing stage, the submission file contents are also validated to ensure they are readable and formatted as expected.

The following rules apply:

- Filenames which duplicate prior submissions accepted during File Integrity will reject, unless the original file had a file integrity error.
- 2. Files which are not readable will reject.
- 3. CAIS Data Files which do not have a paired Transformed Identifiers File posted within 60 minutes will reject.
- 4. CAIS Data Files which include inaccurate counts of records will reject.
- 5. Transformed Identifiers Files which include inaccurate counts of TIDs will reject.
- Transformed Identifiers Files which do not have a paired CAIS Data File posted within 60 minutes will reject.
- 7. The CAT Submitter ID within the filename must be equal to the Submitter ID of the submitter that sent the files (as determined from SFTP or CAT Reporter Portal CAIS username).

- 8. The CAT Reporter CRD within the filename must match the *catReporterCRD* populated in the CAIS Data File.
- The paired CAIS Data and Transformed Identifiers Files must be submitted by the same Industry Member or CAT Reporting Agent.
- 10. If a CAT Submitter is reporting on behalf of the Industry Member, a Reporting Relationship must be effective.
- 11. CAIS Data Files that have a file integrity error will result in the paired Transformed Identifiers File also having a file integrity error; likewise, Transformed Identifiers Files that have a file integrity error will result in the paired CAIS Data File also having a file integrity error.

6.2.1. JSON Examples for File Integrity Feedback

File Submission Integrity Success:

Original CAIS Data File Submission Filename	123_456_20200204_CAIS_000123.json.bz2
CAIS Data Feedback Filename	123 456 20200204 CAIS 000123.v2.feedback.json.bz2
Feedback File Contents	<pre>{ "version": "2.0.0", "submissionID": 7, "submitterUsername": "caisimusr", "catSubmitterID": 123, "catReporterCRD": 456, "submissionStatus": "FILE_INTEGRITY_PASSED", "receiptTimestamp": "20200204T152233.000045000", "statusHistory": { "FILE_ACKNOWLEDGED": "20200204T152233.000045000", "FILE_INTEGRITY_PASSED": "20200204T152234.123245000" } }</pre>

Original Transformed Identifiers File Submission Filename	123_456_20200204_TIDS_000123.json.bz2
Transformed Identifiers Feedback	123_456_20200204_TIDS_000123.v2.feedback.json.bz2
Filename	
Feedback File Contents	<pre>{ "version": "2.0.0", "submissionID": 15, "submissionStatus": "FILE_INTEGRITY_PASSED", "receiptTimestamp": "20200204T152233.000045000", "statusHistory": { "FILE_ACKNOWLEDGED": "20200204T152233.000045000", "FILE_INTEGRITY_PASSED": "20200204T152234.123245000" } }</pre>

File Submission Integrity Error:

Original CAIS Data File Submission	123_456_20200204_CAIS_000123.json.bz2
Filename	

```
CAIS Data Feedback Filename
                                        123_456_20200204_CAIS_000123.v2.feedback.json.bz2
Feedback File Contents
                                        {
    "version": "2.0.0",
                                         "submissionID": 7,
                                         "submitterUsername": "caisimusr",
                                         "catSubmitterID": 123,
                                         "catReporterCRD": 456,
                                         "submissionStatus": "COMPLETED_INTEGRITY_ERROR",
                                         "receiptTimestamp": "20200204T152233.000045000",
                                         "completedTimestamp": "20200204T152721.023423000",
                                         "statusHistory": {
                                          "FILE_ACKNOWLEDGED": "20200204T152233.000045000",
                                          "COMPLETED_INTEGRITY_ERROR": "20200204T152721.023423000"
                                         "rejectionItems": [
                                            "rejectionID": 1127,
                                            "errorCode": 21007,
                                            "rejectionTimestamp": "20200204T152721.023423000"
                                         ]
```

Original Transformed Identifiers File	123_456_20200204_TIDS_000123.json.bz2
Submission Filename	
Transformed Identifiers Feedback	123_456_20200204_TIDS_000123.v2.feedback.json.bz2
Filename	
Feedback File Contents	<pre>{ "version": "2.0.0", "submissionID": 15, "submissionStatus": "COMPLETED_INTEGRITY_ERROR", "receiptTimestamp": "20200204T152233.000045000", "completedTimestamp": "20200204T152721.023423000", "statusHistory": { "FILE_ACKNOWLEDGED": "20191123T152233.000045000", "COMPLETED_INTEGRITY_ERROR": "20200204T152721.023423000" }, "rejectionItems": [{ "rejectionID": null, "customerRecordID": null, "errorCode": 21507, "rejectionTimestamp": "20200204T152721.023423000" } }</pre>

6.3. Data Validation

During Data Validation, records within the CAIS Data File and Transformed Identifiers Files are validated. Validations to ensure correct syntax and semantics associated with record length, field length, data type, non-null and reference data checks are performed. Validations are initiated by the record type of every record contained in the file. Data Validation feedback will be provided with reference to any and all records that have data validation errors.

During the Data Validation stage, each record will be checked for proper formatting (JSON field names and values) and data contents.

The following rules apply:

- 1. Data Validation feedback will be generated for every submission file passing file integrity checks.
- 2. Any record within a CAIS Data File determined to be malformed or otherwise invalid will be rejected, but will not cause a rejection of the full file. However, if an FDID Record rejects, all associated LTID and Customer Records will also reject. If a Customer Record rejects, the FDID Record will reject and therefore, all other associated LTID and Customer Records will also reject. In addition, if a Customer Record rejects for an error on the Customer Record, all other Customer Records within the submission file with the same tidValue will also reject.
- Any record within a Transformed Identifiers File determined to be malformed or otherwise invalid will be rejected, but will not cause a rejection of the full file.
- 4. When a record is readable and can be parsed, data validations, data layer validations, and inconsistency checking will occur for every field within the record.
- 5. One or more errors may be found within a record.
- 6. Each error identified against a single FDID or Customer Record will be listed separately within the feedback file.
- 7. The original record reported to CAT CAIS will not be included in the feedback file. The feedback file will instead include the associated record IDs (fdidRecordID, largeTraderRecordID, customerRecordID, correctingCustomerRecordID) of the record having the error. If the error is on an FDID Record, the firmDesignatedID will also be included in the feedback file.
- 8. Records that are not rejected during Data Validation will be imported into the CAT CAIS, even if one or more inconsistencies are identified in the accepted record.
- If an FDID Record passes validation, but contains one or more errors on associated LTIDs, the FDID Record will be rejected and no updates from the record will be stored in CAIS.
- 10. If an FDID Record passes validation, but contains one or more errors on associated Customer Records, the FDID Record will be rejected and no updates from the record will be stored in CAIS.

6.3.1. JSON Examples for Data Validation Feedback

CAIS Data File Submission Data Validation Success (Interim status noting that the record scan was completed):

Original CAIS Data File Submission	123_456_20200204_CAIS_000123.json.bz2		
Filename			
CAIS Data Feedback Filename	123 456 20200204 CAIS 000123.v3.feedback.json.bz2		

```
Feedback File Contents
                                              "version": "2.0.0",
                                              "submissionID": 7,
                                              "submitterUsername": "caisimusr",
                                              "catSubmitterID": 123,
                                              "catReporterCRD": 456,
                                              "submissionStatus": "RECORD_SCAN_COMPLETED",
                                              "receiptTimestamp": "20200204T152233.000045000",
                                              "receivedFDIDRecordCount": 100,
                                              "successfulFDIDRecordCount": 100,
                                              "receivedNaturalRecordCount": 50,
                                              "successfulNaturalRecordCount": 50,
                                              "receivedLegalEntityRecordCount": 60,
                                              "successfulLegalEntityRecordCount": 60,
                                              "receivedCorrectionActionCount": 0,
                                              "successfulCorrectionActionCount": 0,
                                              "statusHistory": {
                                               "FILE_ACKNOWLEDGED": "20200204T152233.000045000",
                                               "FILE_INTEGRITY_PASSED": "20200204T152234.123245000", "RECORD_SCAN_COMPLETED": "20200204T152255.324392000",
                                              "rejectionItems":[],
                                              "failedCorrectionItems":[]
```

Original Transformed Identifiers File Submission Filename	123_456_20200204_TIDS_000123.json.bz2
Transformed Identifiers Feedback	123_456_20200204_TIDS_000123.v3.feedback.json.bz2
Filename	
Feedback File Contents	{ "version": "2.0.0", "submissionID": 15, "submissionStatus": "RECORD_SCAN_COMPLETED", "receiptTimestamp": "20200204T152233.000045000", "receivedTIDsCount": "7", "successfulTIDsCount": "7", "statusHistory": { "FILE_ACKNOWLEDGED": "20200204T152233.000045000", "FILE_INTEGRITY_PASSED": "20200204T152234.123245000", "RECORD_SCAN_COMPLETED": "20200204T152255.324392000" } }

CAIS Data File Submission Data Validation Success (Final status noting that the file completed Data Validation without rejections):

Original CAIS Data File Submission	123_456_20200204_CAIS_000123.json.bz2
Filename	
CAIS Data Feedback Filename	123_456_20200204_CAIS_000123.v4.feedback.json.bz2
Feedback File Contents	<pre>{ "version": "2.0.0", "submissionID": 7, "submitterUsername": "caisimusr", "catSubmitterID": 123, "catReporterCRD": 456, "submissionStatus": "COMPLETED_WITHOUT_REJECTIONS", "receiptTimestamp": "20200204T152233.000045000", "completedTimestamp": "20200204T152721.023423000",</pre>

```
"receivedFDIDRecordCount": 100,
 "successfulFDIDRecordCount": 100,
 "receivedNaturalRecordCount": 50,
 "successfulNaturalRecordCount": 50,
 "receivedLegalEntityRecordCount": 60,
 "successfulLegalEntityRecordCount": 60,
"receivedCorrectionActionCount": 0,
 "successfulCorrectionActionCount": 0,
 "statusHistory": {
  "FILE_ACKNOWLEDGED": "20200204T152233.000045000",
  "FILE_INTEGRITY_PASSED": "20200204T152234.123245000",
  "RECORD_SCAN_COMPLETED": "20200204T152255.324392000",
  "COMPLETED_WITHOUT_REJECTIONS":
"20200204T152721.023423000"
 "rejectionItems":[],
 "failedCorrectionItems":[]
```

Original Transformed Identifiers File	123_456_20200204_TIDS_000123.json.bz2			
Submission Filename				
Transformed Identifiers Feedback	123_456_20200204_TIDS_000123.v4.feedback.json.bz2			
Filename				
Feedback File Contents	{ "version": "2.0.0", "submissionID": 15, "submissionStatus": "COMPLETED", "receiptTimestamp": "20200204T152233.000045000", "completedTimestamp": "20200204T152721.023423000", "receivedTIDsCount": "7", "successfulTIDsCount": "7", "statusHistory": { "FILE_ACKNOWLEDGED": "20200204T152233.000045000", "FILE_INTEGRITY_PASSED": "20200204T152234.123245000", "COMPLETED": "20200204T152255.324392000" } }			

CAIS Data File Submission Data Validation Error and Failed Correction Action:

Original CAIS Data File Submission	123_456_20200204_CAIS_000123.json.bz2
Filename	
CAIS Data Feedback Filename	123_456_20200204_CAIS_000123.v4.feedback.json.bz2
Feedback File Contents	{ "version": "2.0.0", "submissionID": 7, "submitterUsername": "caisimusr", "catSubmitterID": 123, "catReporterCRD": 456, "submissionStatus": "COMPLETED_WITH_REJECTIONS", "receiptTimestamp": "20200204T152233.000045000", "completedTimestamp": "20200204T152721.023423000", "receivedFDIDRecordCount": 100, "successfulFDIDRecordCount": 99, "receivedNaturalRecordCount": 50, "successfulNaturalRecordCount": 49, "receivedLegalEntityRecordCount": 60,

```
"successfulLegalEntityRecordCount": 60,
"receivedCorrectionActionCount": 1,
"successfulCorrectionActionCount": 0,
"statusHistory": {
    "FILE_ACKNOWLEDGED": "2019200204T152233.000045000",
 "FILE_INTEGRITY_PASSED": "20200204T152234.123245000",
 "RECORD_SCAN_COMPLETED": "20200204T152255.324392000",
 "COMPLETED_WITH_REJECTIONS": "20200204T152721.023423000"
"rejectionItems": [
  "rejectionID": 1127,
  "firmDesignatedID": "ABC123",
  "fdidRecordID": 4,
  "largeTraderRecordID": 2,
  "errorCode": 22012,
  "rejectionTimestamp": "20200204T152221.023423000"
  "rejectionID": 9985,
  "customerRecordID":[73],
  "errorCode": 22900,
  "rejectionTimestamp": "20200204T152221.023423000"
"failedCorrectionItems": [
  "failedRejectionID": 5000,
  "warningCode": 24002
]
```

Original Transformed Identifiers File Submission Filename	123_456_20200204_TIDS_000123.json.bz2
Transformed Identifiers Feedback Filename	123_456_20200204_TIDS_000123.v4.feedback.json.bz2
Feedback File Contents	{ "version": "2.0.0", "submissionID": 15, "submissionStatus": "COMPLETED", "receiptTimestamp": "20200204T152233.000045000", "completedTimestamp": "20200204T152721.023423000", "receivedTIDsCount": "7", "successfulTIDsCount": "6", "statusHistory": { "FILE_ACKNOWLEDGED": "20200204T152233.000045000", "FILE_INTEGRITY_PASSED": "20200204T152234.123245000", "COMPLETED": "20200204T152721.023423000" }, "rejectionItems": [{ "rejectionID": null, "customerRecordID": [73], "errorCode": 24902, "rejectionTimestamp": "20200204T152221.023423000" }] }

6.4. Inconsistencies

The Material Inconsistencies Procedure is currently disabled. See the <u>Full CAIS Industry Member</u> <u>Release Rollout</u> for information regarding re-enabling the validation and delivering the feedback.

Once per day, Customer Records within the CAIS system are scanned for inconsistent Customer data. Inconsistencies that are identified during the scan for Customers with an association to an active FDID are returned in feedback. Industry Members that receive Material Inconsistency notifications must take action to resolve them, as described in <u>Section 6.6.3</u>.

6.4.1. Material Inconsistencies Identification

The process by which Material Inconsistencies are identified and reported back to Industry Members is known as the Material Inconsistencies Procedure. During the once-daily scan, Material Inconsistency checks will compare accepted Customer Records within and across Industry Members and generate Material Inconsistency notifications when the Customer's *tidValue* reported in the Transformed Identifiers File is the same but:

- A different yearOfBirth was reported (for Customers submitted in the naturalPersonCustomerList);
 or
- A different ein was reported (for Customers submitted in the legalEntityCustomerList); or
- For foreign Customers, the same combination of foreignTIDType (specifically, the 'OTHGOVT' or 'NATIONALID' values), foreignTIDCountryCd, and tidValue was submitted in both the naturalPersonCustomerList and legalEntityCustomerList in different file submissions.

The following additional rules apply:

- 1. Customer Records receiving a Material Inconsistency have an active association to an active FDID Record where:
 - a. The Customer Record is associated to any FDID Record that has no set fdidEndDate or has an fdidEndDate set to a date greater than the current calendar date; or
 - b. The Customer Record has no *roleEndDate* or has a *roleEndDate* greater than the current calendar date.
- 2. Material Inconsistency checks within the same Industry Member ("intra-firm") will evaluate submissions from the same CAT Reporter CRD since the most recently accepted submission where *updateNotification* is populated with 'true'.
- 3. Material Inconsistency checks across Industry Members ("inter-firm") will evaluate the most recently accepted submission of the Customer regardless of how *updateNotification* is populated.
- 4. All Material Inconsistencies (intra-firm and inter-firm) will be reported to all affected Industry Members on the date that the Material Inconsistency was identified.

- 5. Customer Records accepted by CAIS from an Industry Member that submitted the one-time attestation will not receive an inter-firm Material Inconsistency. See <u>Section 6.6.3</u> for more information on the one-time attestation.
- 6. All Customer Records submitted by 8:00 a.m. Eastern Time and accepted into CAIS will participate in the once-daily Material Inconsistencies scan, along with Customer Records that were previously accepted into CAIS. Feedback containing any Material Inconsistencies will be delivered in a metadata file and data file set by 5:00 p.m. Eastern Time. Customer Records submitted after the cut-off time and accepted into CAIS will participate in the following day's Material Inconsistencies scan.
- 7. The window for resolution begins with the CAT Trading Day of the identification of the Material Inconsistency.
- 8. If a Material Inconsistency exists and has not been resolved ("Outstanding Inconsistency"), additional Material Inconsistencies will not be created.
- Customer Records that have a data validation error and are rejected will not be checked for inconsistencies.
- 10. If a Material Inconsistency is identified against a Customer Record due to conflicting data from another Industry Member (inter-firm inconsistency) and is resolved by resubmitting the Customer Record with *updateNotification* populated with 'true', it will not result in a new Material Inconsistency against the same Customer Record unless the Industry Member submits the same Customer with data that introduces a new intra-firm Material Inconsistency.

Intra-firm Material Inconsistency Example:

Within the Transformed Identifiers File, an Industry Member submits a specific combination of *tidValue* and *tidType* (and *foreignTIDType*, if applicable) for a Customer to CAIS and in the paired CAIS Data File, indicates the customer's *yearOfBirth* is '1980' and the Customer Record is accepted. Later, the same Industry Member submits the same combination of *tidValue* and *tidType* (and *foreignTIDType*, if applicable) to CAIS and it is accepted, this time the *yearOfBirth* is '1908'. The Industry Member has a Material Inconsistency (an intra-firm inconsistency) and the second submission will get a Material Inconsistency notification with Inconsistency Code 30002 (Inconsistent data for *yearOfBirth* within the Industry Member).

Inter-firm Material Inconsistency Example:

If Industry Member A submits a specific combination of *tidValue* and *tidType* (and *foreignTIDType*, if applicable) for a Customer to CAIS and indicates the customer's *yearOfBirth* is '1980' and the Customer Record is accepted, and subsequently Industry Member B submits the same combination of *tidValue* and *tidType* (and *foreignTIDType*, if applicable) to CAIS indicating that the Customer's *yearOfBirth* is '1970' and the Customer Record is accepted, a Material Inconsistency (inter-firm inconsistency) for the

Customer Record will be created. Industry Member A and Industry Member B will both get a Material Inconsistency notification with Inconsistency Code 40002 (Inconsistent data for *yearOfBirth* across Industry Members).

6.4.2. Outstanding Material Inconsistencies Feedback File

Material Inconsistencies found during the once-daily scan as well as Material Inconsistencies that remain unresolved at the time of the daily scan will be delivered in feedback consisting of a metadata file and data file set.

The following rules apply to Outstanding Material Inconsistencies Feedback Files:

- Feedback files for Outstanding Material Inconsistencies will be accessible via the CAT Reporter Portal – CAIS and under the /submitterID/cat/cais/feedback directory in the CAT Submitter's home directory on the Feedback SFTP server.
- 2. A sentinel file will be posted to the SFTP directory to indicate that the inconsistencies scan ran successfully and is complete. The sentinel file will be empty.
- 3. If there are no outstanding Material Inconsistencies, only a sentinel file will be posted to the SFTP folder to indicate the operation ran successfully but did not produce any results.
- 4. The Outstanding Material Inconsistencies Feedback File will include all intra-firm and inter-firm Material Inconsistencies identified during the once-daily scan and any intra-firm and inter-firm Material Inconsistencies that were previously identified and have not been resolved.
- Outstanding Material Inconsistencies Feedback Files will be delivered to the CAT Submitter and the CAT Reporter.
- Outstanding Inconsistencies Feedback will include a metadata and data file set. The data file will
 include details about the inconsistencies and the metadata file will include the count of
 inconsistencies contained within the data file.
- A set(s) of metadata file and data file will be delivered for each combination of CAT Submitter, CAT Reporter CRD and Correspondent CRD.
- The Outstanding Material Inconsistencies Data Feedback File will be limited to 400,000
 inconsistencyEventIDs. If the catReporterCRD and correspondentCRD combination exceeds 400,000
 inconsistencyEventIDs, an additional set(s) of metadata and data files will be delivered.
- Each inconsistency identified against a single Customer Record will be listed in the feedback file
 against a single inconsistencyEventID assigned to the Customer.

Outstanding Material Inconsistences Metadata Feedback Files will be named using the following format:

<CAT Submitter ID>_<CAT Reporter CRD>_<Correspondent CRD>_<File Generation Date>_<File Kind>_<Group>_<File Type>.<Format Extension>

Example: 123_456_2_20240401_OUTSTANDINGINCONSISTENCIES_000001_meta.json

Outstanding Material Inconsistencies Data Feedback Files will be named using the following format:

<CAT Submitter ID>_<CAT Reporter CRD>_<Correspondent CRD>_<File Generation

Date>_<File Kind>_<Group>_<File Type>.<Format Extension>.<Compression

Extension>

Example: 123_456_2_20240401_OUTSTANDINGINCONSISTENCIES_000001_data.json.bz2

Sentinel Outstanding Material Inconsistencies Feedback Files will be named using the following format:

<File Generation Date>_OUTSTANDINGINCONSISTENCIES_processed

Example: 20240401_OUTSTANDINGINCONSISTENCIES_processed

Table 20: Elements of an Outstanding Material Inconsistencies Metadata Feedback File

Field Name	Data Type	JSON Object	Include Key	Description
catSubmitterID	Unsigned	Main	R	The ID of the firm that submitted the data to CAT.
catReporterCRD	Unsigned	Main	R	The CRD of the Industry Member for which the Outstanding Material Inconsistencies Feedback File was generated.
correspondentCRD	Unsigned	Main	С	The CRD number of the related introducing broker or correspondent firm whose Customer and Account data is kept on record at the Industry Member reporting to CAT. Only populated when correspondentCRD is populated in the submission file.
materialInconsistencyCount	Unsigned	Main	R	Total Count of Outstanding Material Inconsistencies.
errorFeedbackFilename	Text (100)	Main	R	Name of the corresponding Material Inconsistencies Data Feedback File.

Table 21: Elements of an Outstanding Material Inconsistencies Data Feedback File

Field Name	Data Type	JSON Object	Include Key	Description
type	Choice	Main	R	Set to 'materialInconsistency'.
fileName	Text (100)	Main	R	Name of the file in which the Customer was last submitted.
submissionID	Unsigned	Main	R	The unique Submission ID assigned to the CAIS Data File by the CAT CAIS System. Used to identify the single submission activity. If the same filename is submitted across multiple submissions, each submission instance will have a separate and unique Submission ID value.
inconsistencyEventID	Text (100)	Main	R	Unique identifier assigned by CAT for the specific Customer – by tidValue – having one or more inconsistencies. This ID is used because the CAT NMS Plan-Defined PII – including tidValue – of the Customer cannot be returned to the Industry Member after it is submitted to CAT.
customerRecordID	Array of Unsigned Values	Main	R	The <i>customerRecordID</i> , as submitted to CAIS, of the record having the inconsistency.
inconsistencyCode	Unsigned	Main	R	The Inconsistency Code of the identified inconsistency on the Customer Record.
identificationDate	Timestamp	Main	R	Date the Material Inconsistency was identified.
InconsistencyDeadline	Timestamp	Main	R	Deadline for resolving the Material Inconsistency.

6.4.3. JSON Example for Outstanding Material Inconsistencies Feedback

The following JSON example demonstrates the structure of an Outstanding Material Inconsistencies Metadata Feedback file.

CAIS Material Inconsistencies Metadata Feedback Filename	123_456_2_20240401_OUTSTANDINGINCONSISTENCIES_000001_meta.json
Feedback File Contents	{ "catSubmitterID": 123, "catReporterCRD": 456, "correspondentCRD": 2, "materialInconsistencyCount": 3, "errorFeedbackFilename": "123_456_2_20240401_OUTSTANDINGINCONSISTENCIES_000001_data.json.bz2" }

The following JSON example demonstrates the structure of an Outstanding Material Inconsistencies Data Feedback file.

CAIS Material	123_456_2_20240401_OUTSTANDINGINCONSISTENCIES_000001_data.json.bz2
Inconsistencies Data	
Feedback Filename	
Feedback File	{"type": "materialInconsistency", "fileName":
Contents	"123_456_20231201_Group11_CAIS_000129", "submissionID": 456389,
	"inconsistencyEventID": "368453\$24948#555#NULL#2023-02-
	28T01:01:26.340000+00:00", "customerRecordID": [367,357], "inconsistencyCode":
	30002, "identificationDate": "20240401T140000.0000000", "inconsistencyDeadline":
	"20240403T170000.00000000"},
	{"type": "materialInconsistency", "fileName":
	"123_456_20240104_Group43_CAIS_000861", "submissionID": 835479,
	"inconsistencyEventID": "320648651\$24948#555#NULL#2023-02-
	28T01:01:26.340000+00:00", "customerRecordID": [12], "inconsistencyCode": 30003,
	"identificationDate": "20240401T140000.00000000", "inconsistencyDeadline":
	"20240403T170000.00000000"},
	{"type": "materialInconsistency", "fileName":
	"123_456_20240104_Group32_CAIS_963482", "submissionID": 596634,
	"inconsistencyEventID": "34698132\$24948#555#NULL#2023-02-
	28T01:01:26.340000+00:00", "customerRecordID": [68], "inconsistencyCode": 30004,
	"identificationDate": "20240401T140000.00000000", "inconsistencyDeadline":
	"20240403T170000.00000000"}

6.5. Outstanding Rejections

See the <u>Full CAIS Industry Member Release Rollout</u> for information regarding the effective dates of these feedback files.

Rejections identified during Data Validation that remain unrepaired at the time of the Outstanding Rejections scan will be returned in the Outstanding Rejections Feedback File. The Outstanding Rejections scan will run each day at 12:00 p.m. Eastern Time and identify all unrepaired Customer and Account rejections.

The following rules apply to Outstanding Rejections Feedback Files:

- Feedback files for Outstanding Rejections will be accessible via the CAIS Reporter Portal CAIS and under the /submitterID/cat/cais/feedback directory in the CAT Submitters home directory on the Feedback SFTP server.
- 2. A sentinel file will be posted to the SFTP directory to indicate that the Outstanding Rejections scan ran successfully and is complete. The sentinel file will be empty.
- 3. If there are no outstanding rejections, only a sentinel file will be posted to the SFTP folder to indicate the operation ran successfully but did not produce any results.

- 4. The Outstanding Rejections Feedback will include a metadata and data file set. The data file will include details about the rejections and the metadata file will include the count of Customer and Account rejections contained within the data file.
- A set(s) of metadata file and data file will be delivered for each combination of CAT Submitter, CAT Reporter CRD and Correspondent CRD.
- 6. The Outstanding Rejections Data Feedback File will be limited to 400,000 *rejectionIDs*. If the *catReporterCRD* and *correspondentCRD* combination exceeds 400,000 *rejectionIDs*, an additional set(s) of metadata and data files will be delivered.

Outstanding Rejections Metadata Feedback Files will be named using the following format:

```
<CAT Submitter ID>_<CAT Reporter CRD>_<Correspondent CRD>_<File Generate Date> <File Kind> <Group> <File Type>.<Format Extension>
```

Example: 99999999_555_2_20240401_OUTSTANDINGREJECTIONS_000001_meta.json

Outstanding Rejections Data Feedback Files will be named using the following format:

```
<CAT Submitter ID>_<CAT Reporter CRD>_<Correspondent CRD>_<File Generation Date>_<File Kind>_<Group>_<File Type>.<Format Extension>.<Compression
```

Example: 99999999_555_2_20240401_OUTSTANDINGREJECTIONS_000001_data.json.bz2

The Outstanding Rejections Sentinel Feedback File will be named using the following format:

```
<File Generation Date> OUTSTANDINGREJECTIONS processed
```

Example: 20240402 OUTSTANDINGREJECTIONS processed

Table 22: Elements of an Outstanding Rejections Metadata Feedback File

Field Name	Data Type	JSON Object	Include Key	Description
catSubmitterID	Unsigned	Main	R	The ID of the firm that submitted the data to CAT.
catReporterCRD	Unsigned	Main	R	The CRD number assigned to the Industry Member to which the data within the submission file belongs.
correspondentCRD	Unsigned	Main	С	The CRD number of the related introducing broker or correspondent firm whose Customer and Account data is kept on record at the Industry Member reporting to CAT. Only populated when

				correspondentCRD was populated in the submission file.
outstandingFDIDCount	Unsigned	Main	R	Total count of outstanding rejected FDID Records that have not been repaired.
outstandingCustomerCount	Unsigned	Main	R	Total count of outstanding rejected Customer Records that have not been repaired.
errorFeedbackFilename	Text (100)	Main	R	Name of the corresponding Outstanding Feedback File

Table 23: Elements of an Outstanding Rejections Data Feedback File

Field Name	Data Type	JSON Object	Include Key	Description
type	Choice	Main	R	Indicates if the rejected record was an FDID or Customer rejection. Values: • fdidRejection – Indicates the FDID Record was rejected • customerRejection – Indicates the Customer Record was rejected.
rejectedFDID	Text (40)	Main	С	The firmDesignatedID, as submitted to CAIS, of the record having the data validation error. Only populated on the FDID rejections.
submissionFilename	Text (100)	Main	R	Name of the file in which the rejected FDID or Customer was last submitted.
submissionID	Unsigned	Main	R	The unique Submission ID assigned to the CAIS Data File by the CAT CAIS system. Used to identify the single submission activity. If the same filename is submitted across multiple submissions, each submission instance will have a separate and unique Submission ID value.
rejectionID	Unsigned	Main	R	Identifier assigned by CAT to uniquely identify a rejected record.
fdidRecordID	Unsigned	Main	С	The <i>fdidRecordID</i> , as submitted to CAIS, of the record having the data validation error. Only populated on FDID rejections.
errorCode	Unsigned	Main	R	The error code of the data validation error.
customerRecordID	Array of Unsigned Values	Main	С	The customerRecordID, as submitted to CAIS, of the record having the data validation error. Only populated on Customer rejections or when an FDID Record rejects because an associated Customer Record rejected.
rejectionTimestamp	Timestamp	Main	R	Indicates the time at which the data validation error was originally identified.

addrType	Choice	Main	С	The addrType, as submitted to CAIS, of the record having the data validation error. Only populated when an address error resulted in the rejection. When populated, either firmDesignatedID or customerRecordID will be populated. VALUES: ADDRESS1 – The first Address Record of the Customer ADDRESS2 – The second Address Record of the Customer ADDRESS3 – The third Address Record of the Customer ADDRESS4 – The fourth Address Record of the Customer	
largeTraderRecordID	Unsigned	Main	С	The <i>largeTraderRecordID</i> , as submitted to CAIS, of the record having the data validation error. Only populated on Large Trader rejections.	
authTraderNameID	Unsigned	Main	С	The authTraderNameID, as submitted to CAIS, of the record having the data validation error. Only populated when an Authorized Trader Name error resulted in the rejection.	
customerRejectionEventID	Text (100)	Main	С	A unique identifier assigned by CAT for the specific Customer – by tidValue – having one or more rejections. If the same Customer (tidValue) is subsequently rejected, it will be assigned the same unique identifier. This ID is used because the CAT NMS Plan-Defined PII – including tidValue— of the Customer cannot be returned to the Industry Member after it is submitted to CAT.	

6.5.1. JSON Examples for Outstanding Rejections Metadata and Data Feedback

The following JSON example demonstrates the structure of an Outstanding Rejections Metadata Feedback File.

Outstanding Rejections	99999999_555_2_20240401_OUTSTANDINGREJECTIONS_000001_meta.json				
Metadata Feedback					
Filename					
Feedback File Contents	{				
	"catSubmitterID": 99999999,				
	"catReporterCRD": 555,				
	"correspondentCRD": 2,				
	"outstandingFDIDCount": 2,				
	"outstandingCustomerCount": 1,				
	"errorFeedbackFilename":				
	"99999999_555_2_20240401_OUTSTANDINGREJECTIONS_000001_data.json.bz2"				
	}				

The following JSON example demonstrates the structure of an Outstanding Rejections Data Feedback File.

Outstanding Rejections Data Feedback Filename	99999999_555_2_20240401_OUTSTANDINGREJECTIONS_000001_data.json.bz2
Feedback File Contents	{"type": "fdidRejection", "rejectedFDID": "ExAccount4", "submissionFilename": "99999999_555_20240312_Group03_CAIS_000001", "submissionID": 61045, "rejectionID": 61045000000002, "fdidRecordID": 1, "errorCode": 22042, "customerRecordID": [34], "rejectionTimestamp": "20240312T125431.606107000"},
	{"type": "fdidRejection", "rejectedFDID": "ExAccount7", "submissionFilename": "99999999_555_20230901_Group126_CAIS_000123", "submissionID": 611091, "rejectionID": 61045000000003, "fdidRecordID": 902, "errorCode": 22055, "rejectionTimestamp": "20230901T125431.606107000", "addrType": "ADDRESS1"},
	{"type": "fdidRejection", "rejectedFDID": "FDID-123", "submissionFilename": "99999999_555_20230901_Sept1_CAIS_636988", "submissionID": 559036, "rejectionID": 55903600002583, "fdidRecordID": 36710, "errorCode": 22017, "rejectionTimestamp": "20230901T125431.606107000", "largeTraderRecordID": 347},
	{"type": "fdidRejection", "rejectedFDID": "Account.qwerty", "submissionFilename": "99999999_555_20230901_Sept1_CAIS_636988", "submissionID": 559036, "rejectionID": 55903600002539, "fdidRecordID": 3606, "errorCode": 22074, "rejectionTimestamp": "20230901T125431.606107000", "authTraderNameID": 836},
	{"type": "fdidRejection", "rejectedFDID": "Account.qwerty",
	{"type": "fdidRejection", "rejectedFDID": "AcctXYZ", "submissionFilename": "99999999_555_01122024_Group43_CAIS_000861","submissionID": 563921,"rejectionID": 6104500000003, "fdidRecordID": 1, "errorCode": 22048, "rejectionTimestamp": "20240112T125431.606107000"},
	{"type": "customerRejection", "submissionFilename": "99999999_555_20240112_Group43_CAIS_000861", "submissionID": 563921, "customerRejectionEventID": "1078\$24948#250#NULL#2023-02- 28T01:01:26.340000+00:00", "rejectionID": 563921000000023, "customerRecordID": [1, 4, 46, 311], "errorCode": 22518, "addrType": "ADDRESS1", "rejectionTimestamp": "20240112T125431.354705000"},
	{"type": "customerRejection", "submissionFilename": "99999999_555_20240112_Group03_CAIS_000001", "submissionID": 61045, "customerRejectionEventID": "1078\$24948#555#NULL#2023-02- 28T01:01:26.340000+00:00", "rejectionID": 61045000003251, "customerRecordID": [22], "errorCode": 22523, "rejectionTimestamp": "20240112T125431.354705000"},
	{"type":" customerRejection", "submissionFilename": "99999999_555_202401121_Group43_CAIS_000861", "submissionID": 835479, "customerRejectionEventID": "1078\$24948#250#NULL#2023-02-

6.6. Repairs, Corrections and Resolutions

Errors found during the data validation process must be repaired. Errors not found during processing but self-identified by the Industry Member or its CAT Reporting Agent subsequent to transmission must be corrected. Data inconsistencies identified during inconsistency scans must be resolved.

Repairs and self-identified corrections are made by submitting the current state of the FDID Record with all its current LTID and Customer associations. The reporting of repairs and corrections is facilitated in CAT CAIS through submissions via SFTP and the CAT Reporter Portal – CAIS. Industry Member-initiated corrections of data that had been accepted in prior CAT CAIS submissions are acceptable at any time and will be processed the same as any other update to the original record. The new data provided on the corrected record will update the currently stored record in CAT CAIS. Historical versions of the record will be made available for regulatory use.

The following rejection repair and inconsistency resolution scenarios are detailed below:

- Correction of CAT CAIS submission files having a File Integrity Error
- · Repair of Data Validation Errors
- Resolution of Material Inconsistencies

6.6.1. File Integrity Errors

A file integrity error resulting in the inability to process a particular submission file can be corrected by submission of a new file having the same submission filename, with corrected data that passes file integrity checks.

If a file is received having the same submission filename as a prior submission that did not have a file integrity error, the new submission file will be rejected as a file integrity warning, alerting the Industry Member that it has reused the same submission filename as a file that was previously accepted by CAT CAIS. The Industry Member does not have to take further action to correct for this submission file, however the data included in the submission file will not be processed through Data Validation nor accepted into CAT CAIS.

6.6.2. Data Validation Errors

Data Validation Errors found during processing result in a rejection that must be repaired. CAIS tracks historical repairs and the lineage of replacements. When a properly formed FDID or Customer was submitted to CAIS, a rejection must be repaired by resubmitting the FDID Record in its current state (with all LTID and Customer associations), with corrected data. When a malformed FDID or Customer was submitted to CAIS, a rejection must be repaired via the *correctionList*. Rejections for FDIDs or Customers that were not required to be submitted to CAIS may optionally be deleted via the *correctionList*.

6.6.2.1. Use of the correctionList

The *correctionList* is a feature of the CAIS Data File available to support repair of Data Validation Errors through the submission of one or more Correction Action Records. All Data Validation Errors⁵ (Error Codes 22001 through 23999) may be repaired by submitting a *correctionAction* of 'DELETE'. A *correctionAction* of 'DELETE' does not delete the FDID or Customer Record from the CAIS system; it deletes the rejection. Any FDID Records or Customer Records that are required to be reported to CAIS but were submitted with a *correctionAction* of 'DELETE' must be accepted in its full current state by CAIS in a prior or subsequent submission.

As noted below, when a malformed FDID or Customer was submitted to CAIS, it must be repaired by submitting a *correctionAction* of 'CORRECTION' or 'DELETE'. Records failing Data Validation for the following reasons require use of the *correctionList* within the CAIS Data File:

- 1. Missing or Invalid firmDesignatedID (Error Code 22001)
- 2. Malformed TID Record (Error Code 22900)
- 3. customerRecordID not present in paired Transformed Identifiers File (Error Code 22526)
- 4. Missing or Invalid customerRecordID in paired Data File (Error Code 22501)
- 5. Paired TID record failed validation (Error Code 22914)
- To delete the rejection, the Industry Member is required to populate the following within the correctionList: the rejectionID and correctionAction of 'DELETE'.
- To repair the rejection, the Industry Member is required to populate the following within the correctionList: the rejectionID and correctionAction of 'CORRECTION'.

Version 2.1 107

_

⁵ As of the date of publication, only Error Codes 22001, 22900, 22526, 22501 and 22914 can be repaired via the *correctionList*. See the <u>Full CAIS Industry Member Release Rollout</u> for the effective dates of the expanded use of the *correctionList*.

Further, in the 'CORRECTION' scenario:

- For repairing a Missing or Invalid firmDesignatedID (Error Code 22001) the repairing FDID
 Record must be included within the current submission and pass all data validation checks,
 or the repairing FDID Record must have been accepted by CAT CAIS in a prior submission.
- For repairing a Malformed TID Record (Error Code 22900) or a TID record that failed to pair (Error Code 22914) – the repairing Customer Record must be included in the current submission and pass all data validation checks.
- For a customerRecordID in the Transformed Identifiers File (Error Code 22526) or the Data
 File (Error Code 22501) the repairing Customer Record must be included in the current
 submission and pass all data validation checks.

If the repairing record fails Data Validation again for the same reason (Error Code 22001, 22900, 22526, 22501, or 22914), a separate rejection will be created against the repairing record, and the original rejection will remain open for repair. Thus, the Industry Member will have two rejections to repair. If the repairing record does not fail Data Validation again for the same reason (Error Code 22001, 22900, 22526, 22501, or 22914), the original rejection will be closed as repaired. However, if the repairing record fails a separate data validation check, a new rejection will be recorded and tracked against the timeline for repair of the original error. Malformed *largeTraderID*s do not require use of the *correctionList* and can be repaired by resubmitting the full FDID Record, including all associations, with a valid *largeTraderID* value.

6.6.2.2. Repair of Other Data Validation Errors

If a submission record fails data validation checks for any reasons other than the format of the FDID or TID value or failure to pair the customerRecordID, rejections must be repaired by resubmitting the FDID Record in its current state (with all LTID and Customer associations), with corrected data. If the resubmission fails for the same data validation, the prior rejection for the record will be considered repaired, and a new rejection will be created, however the new rejection will be tracked against the timeline for repair of the original error. If the repairing submission fails validation against a separate field, the original rejection will be closed as repaired, and a new rejection will be created for the separate field validation failure, however the new rejection will be tracked against the timeline for repair of the original error.

Note that implicitly ending a rejected record, for example by implicitly ending a Customer Record, will not repair any unrepaired rejections. Rejections can only be repaired by resubmitting the FDID Record (with all LTID and Customer associations) with corrected data.

6.6.3. Material Inconsistencies

When a Material Inconsistency is identified, the Industry Member must always take action by either:

- Confirming the accuracy of the Customer Record it submitted to CAIS by resubmitting the entire FDID Record in its current state with all required LTID and Customer associations and including the updateNotification field populated with 'true'.
- Or submit an update to the Customer Record by resubmitting the entire FDID Record with all required LTID and Customer associations and the updated Customer information and including the updateNotification field populated with 'true'.

The following additional rules apply:

- Acceptance of a Customer Record with updateNotification populated with 'true' will initiate a process
 to determine if a Material Inconsistency exists for the same Customer and CAT Reporter CRD
 combination. If found, the Material Inconsistency will be resolved.
- Acceptance of a Customer Record with updateNotification populated with 'true' in response to an
 inter-firm Material Inconsistency will be considered as a one-time attestation of the Customer data
 received by the CAT Reporter CRD. The one-time attestation will prevent the CAT Reporter CRD
 from receiving subsequent inter-firm Material Inconsistencies for that Customer.
- 3. Resolving a Material Inconsistency does not require the Industry Member to contact its Customer to confirm the information. See FAQ Q55 for more information.
- 4. If an Industry Member attempts to resolve a Material Inconsistency, but the submission record is rejected, the Material Inconsistency will remain unresolved and the original inconsistency resolution deadline will remain the same.
- If an Industry Member resolves an intra-firm inconsistency and then subsequently creates another intra-firm inconsistency before the next Material Inconsistency process, the original inconsistency will be resolved and new inconsistency will be opened.

6.6.4. Proactive Updates of Customer Record

If an Industry Member knows that it is submitting Customer data that would result in a Material Inconsistency notification, in some circumstances, it is possible to proactively use *updateNotification* to avoid an intra-firm Material Inconsistency. When the Industry Member includes this proactive notification, CAIS will not create an intra-firm Material Inconsistency for the reported Customer.

Proactive Updates Not Allowed

Because of the requirement to hash the EIN (the hashed value is reported in the *tidValue* field), proactive use of *updateNotification* is not possible for Legal Entity Customers where the EIN is the Input Identifier and reported in plaintext in the *ein* field. For example, if Industry Member A reported a specific *tidValue* and *ein* combination in Submission 1 and later realized that the *ein* value was incorrect (but the *tidValue* was correct), it must report the correct *ein* value in a second submission <u>without</u> populating *updateNotification* with 'true'. This will result in Inconsistency Code 30003 (Inconsistent data for *ein* within the Industry Member) which Industry Member A must resolve as described in Section 6.6.3.

It should be noted that Industry Members cannot proactively populate *updateNotification* with 'true' in the second submission. Doing so would result in a Material Inconsistency notification that must be resolved.

Proactive Updates Allowed:

There are two scenarios where use of proactive notification is allowable. First, updating a Customer's *yearOfBirth* and second, changing certain foreign Customers from Natural Persons to Legal Entities (or vice versa). This can be done proactively by populating *updateNotification* with 'true'.

Example Showing Proactive Use to Update a Year of Birth:

If Industry Member A reported a specific *tidValue* and *yearOfBirth* combination in Submission 1 and later realized that the *yearOfBirth* value was incorrect (but the *tidValue* was correct), it must report the correct *yearOfBirth* value in a subsequent submission. If Industry Member A proactively populates *updateNotification* with 'true' in the subsequent submission, it would not receive a Material Inconsistency notification. If Industry Member A does not appropriately use the *updateNotification* function, it will be notified that the Customer data it submitted to CAT resulted in a Material Inconsistency. The Industry Member must then follow the procedure described in <u>Section 6.6.3</u>.

Example Showing Proactive Use to Change Customer Type:

If Industry Member A reported a specific combination of *tidValue*, *foreignTIDType* (specifically the 'OTHGOVT' or 'NATIONALID' values), and *foreignTIDCountryCd* in the Transformed Identifiers File, and reported the Customer in the *naturalPersonCustomerList* in paired Submission 1 and later realized that the Customer should have been reported in the *legalEntityCustomerList* (but the *tidValue* was correct), it must report the Customer in the *legalEntityCustomerList* in a subsequent submission. If Industry Member A proactively populates *updateNotification* with 'true' in the subsequent submission, it would not receive a Material Inconsistency notification. If Industry Member A does not appropriately use the *updateNotification* function, it will be notified that the Customer data it submitted to CAT resulted in a Material Inconsistency. The Industry Member must then follow the procedure

described in <u>Section 6.6.3</u>. The same would be true if the foreign Customer was originally reported in the *legalEntityCustomerList* (with a correct *tidValue*) but should have been reported in the *naturalPersonCustomerList*.

6.7. FDID Reconciliation Report

The FDID Reconciliation Report in the CAT Reporter Portal – CAIS allows an entitled user to upload a text file containing up to 1,000 FDIDs and retrieve a report in .csv format which indicates, for each specified FDID for the selected CAT Reporter CRD, the *firmDesignatedID* value, *correspondentCRD* value (if applicable), FDID Status, Associated Customer Count, Last Accepted File Name, Last Accepted File Version, masked associated LTIDs (in the format *xxxxx999-9999*), and an LTID Status for each associated LTID.

Industry Members will be able to view all specified FDIDs submitted (either self-submitted or submitted by the CAT Reporting Agent) that were accepted into CAIS. The CAT Submitter will be able to view the FDIDs submitted to, and accepted by, CAIS for each CAT Reporter CRD for which it has an active reporting relationship. For more information on the FDID Reconciliation Report, please see the CAT CAIS Reporter Portal User Guide.

FDID Reconciliation Reports created by CAT CAIS will be named using the following format:

```
FDID_reconciliation_report_<Date of Generation>_<Timestamp of
Generation>.<Format Extension>
```

Example:

FDID reconciliation report 20220101 150948 EDT.csv

7. Testing

CAT will provide an environment for testing that mirrors the current functionality of the CAT CAIS Production Environment, as well as functionality for the next release version of the CAT CAIS environment when available. The CAT CAIS Test Environment will automatically determine which specification version Industry Members and CAT Reporting Agents are using for submissions. If error reporting formats change, Industry Members and CAT Reporting Agents will receive feedback in the current and new specification via SFTP, as well as have access to current/new CAT Reporter Portal – CAIS URLs for specification changes that impact the CAT Reporter Portal – CAIS. Current/new connectivity changes will also be supported concurrently.

Industry Members and CAT Reporting Agents must test their submissions using the Test Environment before they begin submitting to the Production Environment.

The Test Environment is available 24 hours a day, 6 days a week. Refer to the CAT website for contact information and hours of operation for support.

Industry Members and CAT Reporting Agents connect to the Test Environment in the same manner they would connect to the Production Environment. However, for the connection to the Test Environment, one or more alternate IP addresses or URLs may be used.

Testing does not relieve an Industry Member of its responsibilities to submit production data to the CAT System.

8. Additional Information

8.1. Public Website

The CAT public website, www.catnmsplan.com, is available via the public internet, and is hosted outside the CAT secure network. The CAT public website provides information about CAT, including links to SEC Rule 613, Participant and Industry Member Technical Specifications, FAQs, training materials, and CAT Helpdesk contact information.

Web announcements will be made available on the public website. You can also <u>subscribe</u> to receive email notifications regarding changes to the website and system status notifications. These announcements are used to post information related to the operation of CAT.

Contact help@finracat.com for any questions and/or feedback regarding this document.

Appendices

Appendix A: Change Release Management Process

Following publication of version 1.0, changes to this CAT Reporting Customer & Account Technical Specification for Industry Members ("Technical Specifications") will be released as follows:

- All proposed amendments to the Technical Specifications will be made in accordance with the CAT NMS Plan, including being approved or deemed approved (as applicable) by the Consolidated Audit Trail, LLC Operating Committee.
- Prior to the go-live date for any system changes set forth in the Technical Specifications:
 - A new Technical Specifications will be posted to the CAT public website, www.catnmsplan.com.
 - A notice will be posted on the CAT NMS Plan public website with a summary of changes, the go-live date for the changes and links to relevant information.
 - One or more email alerts will be sent to the email address(es) on file for the CAT Reporters
 with a summary of changes set forth in the revised Technical Specifications, the go-live date
 for the changes and links to relevant information.
 - Industry Members will be permitted to perform testing of the revised Technical Specifications in advance of the go-live date for the changes. Information on such testing will be set forth in the notices and alerts described above.
 - As the go-live date approaches, Industry Members will be able to conduct testing and will
 receive support from the Plan Processor to prepare for production reporting using the revised
 Technical Specifications format. The revised Technical Specifications will include a summary
 list of changes as well as a table listing the specific areas of the document where the
 changes have been made.

Appendix B: Error Codes

This section defines the error and warning codes generated by CAT CAIS. Each code is defined to include the reason for the error or warning, and the associated fields. Errors found during CAT CAIS processing must be repaired. Warnings are not subject to further processing and Industry Members are not required to take any action on them. Codes are assigned in ranges to represent similar types of errors within the same range, related by validation type and/or by record type. Codes are organized by the CAT Processing stages including:

- File Integrity
- Data Validation
- Data Inconsistency Checking

B.1 File Integrity Errors

The table below contains error messages that are associated with file integrity. Errors are associated with files, filenames, and metadata within submission files (such as record counts).

Table 24: CAIS Data File Integrity Errors

Error Code	Error Code Description	Explanation	Warning/ Error
21001	Duplicate File	A file with the same base name was previously accepted by CAT CAIS.	Error
21002	Missing or Invalid CAT Submitter ID	CAT Submitter ID is missing or invalid.	Error
21003	Missing or Invalid CAT Reporter CRD	CAT Reporter CRD is missing or is not a valid Market Participant for the Generation Date.	Error
21004	Missing or Invalid File Generation Date	File Generation Date is missing or is not a valid date.	Error
21005	Reserved	Reserved for future use	
21006	Unauthorized CAT Submitter ID	CAT Submitter ID has not been authorized to submit for the CAT Reporter CRD. Verify that the CAT Submitter ID and CAT Reporter CRD in the filename have a transmitting relationship.	Error
21007	Missing or Invalid fdidRecordCount	The <i>fdidRecordCount</i> in the CAIS Data File is missing, is a negative number or does not match the count of FDID Records within the CAIS Data File.	Error
21008	Missing or Invalid version	Schema <i>version</i> in the CAIS Data File is missing or invalid.	Error
21009	File exceeds maximum records allowed for Web upload	A single CAIS Data File uploaded via the CAT Reporter Portal – CAIS must not contain more than 100,000 FDID Records.	Error

Error Code	Error Code Description	Explanation	Warning/ Error
21010	Invalid CAIS Filename	CAIS submission filenames must follow the defined format. Submission files uploaded via the CAT Reporter Portal – CAIS or SFTP may not use a Group value of 'caisweb'.	Error
21011	CAIS Data File not Readable	CAIS Data File format is not readable as it is not in a valid JSON format, contains an incorrect delimiter, or does not follow the prescribed schema.	Error
21012	Unknown Attribute Name	The file contains a file level attribute that is not known under the reported schema <i>version</i> .	Error
21013	CAIS Data File cannot be Uncompressed	The CAIS Data File was not properly compressed and cannot be processed.	Error
21014	Paired Transformed Identifiers File not received	The paired Transformed Identifiers File for the CAIS Data File was not received in time or had a file integrity error.	Error
21016	Missing or Invalid naturalPersonCustomerRecordC ount	The naturalPersonCustomerRecordCount in the CAIS Data File is missing, is a negative number, or does not match the count of Natural Person Customer Records within the file.	Error
21017	Missing or Invalid legalEntityCustomerRecordCount	The legalEntityCustomerRecordCount in the CAIS Data File is missing, is a negative number, or does not match the count of Legal Entity Customer Records within the file.	Error
21018	Invalid correspondentCRD	When populated, correspondentCRD must be properly formatted and must be a different identifier than the catReporterCRD.	Error
21019	Duplicate occurrences of a field exist	A field can only appear at most one time per JSON object.	Error
21020	Reserved	Reserved for future use	
21021	Reset in progress	When an Industry Member has requested its data be reset and the reset operation is in progress, the Industry Member nor any of its CAT Submitters can submit files to CAIS.	Error

Table 25: Transformed Identifiers File Integrity Errors

Error Code	Error Code Description	Explanation	Warning/ Error
21501	Duplicate File	A file with the same base name was previously accepted by CAT CAIS.	Error
21504	Missing or Invalid File Generation Date	File Generation Date is missing or is not a valid date.	Error
21505	Reserved	Reserved for future use	
21507	Missing or Invalid tidRecordCount	The <i>tidRecordCount</i> in the Transformed Identifiers File is missing, is a negative number, or does not match the count of TID Records within the file.	Error

Error Code	Error Code Description	Explanation	Warning/ Error
21508	Missing or Invalid version	Schema <i>version</i> in Transformed Identifiers File is missing or invalid.	Error
21509	File exceeds maximum records allowed for web upload	A single Transformed Identifiers File uploaded via the CAT Reporter Portal – CAIS must not contain more than 100,000 TID Records.	Error
21510	Invalid Transformed Identifiers Filename	Transformed Identifiers Filenames must follow the defined format.	Error
21511	Transformed Identifiers File not Readable	Transformed Identifiers File format is not readable as it is not in a valid JSON format, contains an incorrect delimiter, or does not follow the prescribed schema.	Error
21512	Unknown Attribute Name	The file contains a file level attribute that is not known under the reported schema <i>version</i> .	Error
21513	Transformed Identifiers File cannot be Uncompressed	The Transformed Identifiers File was not properly compressed and cannot be processed.	Error
21514	Paired CAIS Data File not received	The paired CAIS Data File for the Transformed Identifiers File was not received in time or had a file integrity error.	Error
21516	Duplicate occurrences of a field exist	A field can only appear at most one time per JSON object.	Error
21517	Reserved	Reserved for future use	
21518	Reserved	Reserved for future use	
21519	Reserved	Reserved for future use	

B.2 Data Validation Errors

The table below contains error messages that are associated with Data Validation. Error codes are associated with specific fields within a submission record.

Table 26: Data Validation Errors

Error Code	Error Code Description	Explanation	Warning/ Error
22001	Missing or Invalid firmDesignatedID	firmDesignatedID must be populated in the correct format for each FDID Record within the file. Affected records will not be processed for further validation checks. Refer to Section 3.11 – Special Rules Regarding FDID Characters for additional details.	Error
22002	Duplicated firmDesignatedID	Each <i>firmDesignatedID</i> must be present in the submission file only once. Affected records will not be processed for further validation checks.	Error
22003	Missing or Invalid fdidRecordID	fdidRecordID must be present and populated for each FDID Record within the file. Affected record will not be processed for further validation checks.	Error

Error Code	Error Code Description	Explanation	Warning/ Error
22004	Duplicated fdidRecordID	Each <i>fdidRecordID</i> must be present in the submission file only once. Affected records will not be processed for further validation checks.	Error
22005	Missing or Invalid fdidType	fdidType must be present and populated with one of the allowable values.	Error
22006	Duplicated largeTraderID	Each largeTraderID must be present only once for a single FDID Record.	Error
22007	Missing or Invalid format of fdidDate	fdidDate must be populated in the correct format. Affected record will not be processed for further validation checks.	Error
22008	Missing or Invalid fdidEndDate	When populated, <i>fdidEndDate</i> must be in the correct format. Must be populated if <i>fdidEndReason</i> is populated.	Error
22009	fdidEndDate set prior to fdidDate	When populated, <i>fdidEndDate</i> must be equal to or later than <i>fdidDate</i> .	Error
22010	Missing or Invalid fdidEndReason	When populated, <i>fdidEndReason</i> must be populated with one of the allowable values. Must be populated if <i>fdidEndDate</i> is populated.	Error
22011	Missing or Invalid replacedByFDID	When populated, replacedByFDID must be in the correct format for firmDesignatedID. Must be populated if fdidEndReason is 'REPLACED'.	Error
22012	Missing or Invalid format of largeTraderID	When populated, largeTraderID must be in the correct format for either a Large Trader ID or an Unidentified Large Trader ID. Must be populated for each Large Trader Record. Affected record will not be processed for further validation checks.	Error
22013	Missing or Invalid largeTraderRecordID	largeTraderRecordID must be present and populated for each Large Trader Record within the file. Affected record will not be processed for further validation checks.	Error
22014	Duplicated largeTraderRecordID	Each largeTraderRecordID reported for a single FDID Record within the file must be present only once.	Error
22015	Missing or Invalid ItidEffectiveDate	ItidEffectiveDate must be populated in the correct format.	Error
22016	Missing or Invalid ItidEndDate	When populated, <i>ItidEndDate</i> must be in the correct format. Must be populated if <i>ItidEndReason</i> is populated.	Error
22017	Missing or Invalid ItidEndReason	When populated, <i>ItidEndReason</i> must be populated with one of the allowable values. Must be populated if <i>ItidEndDate</i> is populated.	Error
22018	Unknown Field Name	The record contains a field that is not known under the reported schema <i>version</i> .	Error
22024	replacedByFDID must not be equal to firmDesignatedID	When populated, replacedByFDID must be a different value than the firmDesignatedID.	Error
22028	ItidEndDate set prior to ItidEffectiveDate	ItidEndDate must not be set to a value prior to the ItidEffectiveDate.	Error
22034	Data type violation –	FDID Record contains one or more field values that	Error

Error Code	Error Code Description	Explanation	Warning/ Error
	FDID Record	violate the data type for the field.	
22035	Improper Use of Address Lines for the FDID Record	For an FDID Record: addrLine2 must not be present and populated unless addrLine1 is also present and populated.	Error
		addrLine3 must not be present and populated unless addrLine2 and addrLine1 are also present and populated. addrLine4 must not be present and populated unless addrLine3, addrLine2 and addrLine1 are present and populated.	
22036	Missing or Invalid <i>city</i> for the FDID Record	city must be present and populated with a valid value for each Address Record present for each FDID Record within the file.	Error
22037	Missing or Invalid regionCode for the FDID Record	regionCode must be present and populated for each Address Record present for each FDID Record within the file if the countryCode included has a corresponding list of regions in Appendix E.	Error
22038	Missing or Invalid countryCode for the FDID Record	countryCode must be present and populated for each Address Record present for each FDID Record within the file.	Error
22039	Missing or Invalid format of postalCode for the FDID Record	postalCode must be present and populated in the valid format for each Address Record present for each FDID Record within the file if the countryCode included has a corresponding Postal Code in Appendix E.	Error
22040	Missing fdidCustomerList	fdidCustomerList must be present for each FDID Record within the file, unless the FDID is being ended in the submission.	Error
22041	Missing or Invalid customerRecordID within fdidCustomerList	customerRecordID must be present and populated for each record within the fdidCustomerList object and reference a customerRecordID also present in either the naturalPersonCustomerList or legalEntityCustomerList. Affected record will not be processed for further validation checks.	Error
22042	Multiple active roles for Customer within fdidCustomerList	Each Customer, as reconciled to a single tidValue, present in the fdidCustomerList of a single FDID must have exactly one role without a set roleEndDate. It is not permissible for the same Customer, as reconciled to a single tidValue, to have different active role values or the same active role value present in the fdidCustomerList. The dates on which a Customer's role on an FDID are active cannot overlap by more than one calendar day with other roles for the same Customer.	Error
22043	Missing or Invalid role	role must be present and populated with one of the allowable values for each record within the fdidCustomerList object.	Error
22044	Missing or Invalid roleStartDate	roleStartDate must be present and populated for each record within the fdidCustomerList object.	Error
22045	Missing or Invalid roleEndDate	When populated, roleEndDate must be in the correct format. Must be populated if roleEndReason is	Error

Error Code	Error Code Description	Explanation	Warning/ Error
		populated.	
22046	roleEndDate set prior to roleStartDate	When populated, roleEndDate must be equal to or later than roleStartDate.	Error
22047	Missing or Invalid roleEndReason	When populated, <i>roleEndReason</i> must be populated with one of the allowable values. Must be populated if <i>roleEndDate</i> is populated.	Error
22048	Associated Customer Record rejected	The FDID Record is rejected because an associated Customer Record was rejected.	Error
22049	Missing or Invalid accountType	accountType must be present and populated with one (or more, if applicable) of the allowable values for each FDID Record within the file.	Error
22050	Missing or Invalid accountName	accountName must be present and populated for each FDID Record within the file.	Error
22052	Invalid branchOfficeCRD	When populated, branchOfficeCRD must be a valid value.	Error
22053	Reserved	Reserved for future use	
22054	Missing or Invalid priorCATReporterCRD	priorCATReporterCRD must be present and populated when priorCATReporterFDID is populated. When populated, priorCATReporterCRD must be a valid CAT Reporter CRD value.	Error
22055	Missing 'ADDRESS1' type Address Record on the FDID Record	An Address Record of type 'ADDRESS1' must be present for each FDID Record within the file.	Error
22056	Missing addrLine1 on the FDID Record	Each Address Record for each FDID Record within the file must have a populated addrLine1.	Error
22057	Missing or invalid addrType on the FDID Record	addrType must be present and populated with one (or more, if applicable) of the allowable values for each Address Record present for each FDID Record within the file.	Error
22058	Missing or Invalid priorCATReporterFDID	priorCATReporterFDID must be present and populated when priorCATReporterCRD is populated. When populated, priorCATReporterFDID must be a valid firmDesignatedID value.	Error
22059	Improper Use of Address Type on the FDID Record	For an FDID Record: addrType value must not be duplicated on the FDID Record. 'ADDRESS2' must not be present and populated unless ADDRESS1 is also present and populated. 'ADDRESS3' must not be present and populated unless 'ADDRESS1' and 'ADDRESS2' are both present and populated.	Error
		'ADDRESS4' must not be present and populated unless 'ADDRESS1', 'ADDRESS2', and 'ADDRESS3' are present and populated.	
22060	Invalid format of Address Line on the FDID Record	When populated, an Address Line must be a valid value. This includes attributes addrLine1, addrLine2, addrLine3 and/or addrLine4.	Error
22061	Missing or invalid	Must be present and populated if role is set to	Error

Error Code	Error Code Description	Explanation	Warning/ Error
	hasDiscretion	'AUTHREP' or 'AUTH3RD'.	
		Must be omitted or 'false' if <i>role</i> is 'NTHOLDER' or 'TRDHOLDER'.	
22064	Invalid clearingBrokerID	When populated, <i>clearingBrokerID</i> must be properly formatted.	Error
22065	Invalid registeredRepCRD	When populated, registeredRepCRD must be properly formatted.	Error
22066	Reserved	Reserved for future use	
22067	roleEndDate set later than fdidEndDate	The roleEndDate for all Customers associated to a given FDID must not be set later than the fdidEndDate for that FDID.	Error
22068	No active Customer associations	Each FDID must have at least one Customer association with no <i>roleEndDate</i> set earlier than the <i>fdidEndDate</i> .	Error
22069	Improper combination of accountType and fdidType values	The accountType values of 'ENTITYID' and 'RELATIONSHIP' are only to be used when the fdidType is of the same value.	Error
22070	Reserved	Reserved for future use	
22071	No Customer association with trading capabilities	Each FDID must have at least one CAT Customer association with a <i>role</i> of 'TRDHOLDER', or a <i>role</i> of 'AUTHREP' or 'AUTH3RD' where <i>hasDiscretion</i> is 'true'.	Error
22072	Missing or invalid authTraderNameID	authTraderNameID must be present and populated for each record within the authTraderNamesList object of each FDID Record within the file.	Error
22073	Duplicated authTraderNameID	Each authTraderNameID must be present within the authTraderNamesList only once. Affected records will not be processed for further validation checks.	Error
22074	Missing or invalid authTraderName	authTraderName must be present and populated with a valid value for each record within the authTraderNamesList object of each FDID Record within the file.	Error
22075	Missing or Invalid DVPCustodianID	DVPCustodianID must be populated for every FDID Record where accountType includes the value 'DVP/RVP'.	Error
22076	Invalid use of ItidEndReason	When ItidEndReason is populated with a value of 'INACTIVE', the fdidEndReason of the associated FDID Record must also be populated with a value of 'INACTIVE'.	Error
22077	Invalid use of roleEndReason	When roleEndReason is populated with a value of 'INACTIVE', the fdidEndReason of the associated FDID Record must also be populated with a value of 'INACTIVE'.	Error
22501	Missing or Invalid customerRecordID	customerRecordID must be present and populated for each Customer Record within the naturalPersonCustomerList and legalEntityCustomerList. Affected record will not be processed for further validation checks.	Error

Error Code	Error Code Description	Explanation	Warning/ Error
22502	Duplicated customerRecordID	Each customerRecordID must be present in the CAIS Data File only once. Affected records will not be processed for further validation checks.	Error
22503	Invalid use of updateNotification	updateNotification must only be used for a Customer Record that has previously been accepted by CAIS.	Error
		Effective February 26, 2024, this Error Code will be retired from the Production Environment.	
22504	Missing or Invalid format of ein	ein must be present and populated for each Legal Entity Customer Record within the file if the tidType is 'EIN'. Must be present in the appropriate format.	Error
22507	Missing or Invalid firstName	firstName must be present and populated with a valid value for each Natural Person Customer Record within the file.	Error
22508	Missing or Invalid lastName	lastName must be present and populated with a valid value for each Natural Person Customer Record within the file.	Error
22509	Invalid nameSuffix	nameSuffix must be populated with one of the allowable values.	Error
22510	Missing or Invalid format of yearOfBirth	yearOfBirth must be populated in the correct format for each Natural Person Customer Record within the file.	Error
22514	Missing 'ADDRESS1' type Address Record on the Customer Record	An Address Record type of 'ADDRESS1' must be present for each Customer Record within the file.	Error
22515	Missing addrLine1 on the Customer Record	Each Address Record for each Customer Record within the file must have a populated addrLine1.	Error
22516	Missing or invalid addrType on the Customer Record	addrType must be present and populated with a valid value for each Address Record present for each Customer Record within the file.	Error
22517	Improper Use of Address Lines on the Customer	For a Customer Record:	Error
	Record	addrLine2 must not be present and populated unless addrLine1 is also present and populated.	
		addrLine3 must not be present and populated unless addrLine2 and addrLine1 are also present and populated.	
		addrLine4 must not be present and populated unless addrLine3, addrLine2 and addrLine1 are present and populated.	
22518	Missing or Invalid <i>city</i> on the Customer Record	city must be present and populated with a valid value for each Address Record present for each Customer Record within the file.	Error
22519	Missing or Invalid regionCode on the Customer Record	regionCode must be present and populated for each Address Record present for each Customer Record within the file if the countryCode included has a corresponding list of regions in Appendix E.	Error
22520	Missing or Invalid countryCode on the Customer Record	countryCode must be present and populated for each Address Record present for each Customer Record within the file.	Error

Error Code	Error Code Description	Explanation	Warning/ Error
22521	Missing or Invalid format of <i>postalCode</i> on the Customer Record	postalCode must be present and populated in the valid format for each Address Record present for each Customer Record within the file if the countryCode included has a corresponding Postal Code in Appendix E.	Error
22522	Data type violation - Customer	Customer Record contains one or more field values that violate the data type for the field.	Error
22523	Customer Record rejected because an associated FDID Record was rejected	The Customer Record is rejected because an FDID Record in the file with association to the Customer Record has been rejected, or because the Customer Record was not associated to an FDID Record in the submission file.	Error
22524	Missing or Invalid customerType	customerType must be present and populated with one (or more, if applicable) of the allowable values for each Customer Record within the file.	Error
22525	Customer Record has an open Material Inconsistency and updateNotification was not set as 'true'	The Customer Record has an open Material Inconsistency requiring resolution however the <i>updateNotification</i> field was either not included in the submission or was not set as 'true'. Effective February 26, 2024, this Error Code will be retired from the Production Environment.	Error
22526	customerRecordID not present in paired Transformed Identifiers File	Each customerRecordID present in the CAIS Data File must have a corresponding entry in the paired Transformed Identifiers File. The customerRecordID in both the Transformed Identifiers File and the CAIS Data File must be valid and properly formatted.	Error
22527	Improper Use of Address Type on the Customer Record	For a Customer Record: addrType value must not be duplicated on the Customer Record. 'ADDRESS2' must not be present and populated unless 'ADDRESS1' is also present and populated. 'ADDRESS3' must not be present and populated unless 'ADDRESS1' and 'ADDRESS2' are both present and populated. 'ADDRESS4' must not be present and populated unless 'ADDRESS1', 'ADDRESS2', and 'ADDRESS3' are present and populated.	Error
22528	Invalid format of Address Line on the Customer Record	When populated, an Address Line must be a valid value. This includes attribute addrLine1, addrLine2, addrLine3 and/or addrLine4.	Error
22529	Customer Record rejected because another version of the Customer was rejected	The Customer Record is rejected because another record for the same CAT Customer, as reconciled to a single <i>tidValue</i> , was rejected within the file.	Error
22530	Missing or Invalid legalName	legalName must be present and populated with a valid value for each Legal Entity Customer Record within the file.	Error
22531	Missing or Invalid lei	When populated, <i>lei</i> must be a valid value. Must be populated if the Input Identifier used to generate the Transformed Identifier of the Customer was an LEI.	Error

Error Code	Error Code Description	Explanation	Warning/ Error
22532	Invalid doingBusinessAs name	When populated, <i>doingBusinessAs</i> must be properly formatted for each Natural Person Customer Record.	Error
22533	Multiple instances of Customer with differing data	Multiple records for a single Customer (as reconciled to a single <i>tidValue</i>) within the CAIS Data File must have the same <i>ein</i> , <i>yearOfBirth</i> , and/or Customer Record Type (Natural Person or Legal Entity) values.	Error
22534	Natural Person CAT Customer reported with improper foreignTIDType	Natural Person CAT Customer Records must not be reported with a <i>foreignTIDType</i> of 'LEI'. In order to repair this error code, the Customer must be resubmitted in the <i>legalEntityCustomerList</i> with a <i>foreignTIDType</i> of 'LEI' and the same <i>tidValue</i> . This rejection is not repairable if the Industry Member erroneously reported the Natural Person Customer with a <i>foreignTIDType</i> of 'LEI' when it should have reported the Natural Person Customer with one of the <i>foreignTIDTypes</i> allowable for a foreign Natural Person Customer. While repair credit will not be given, if the Customer is required to be reported to CAIS, the Industry Member must resubmit the FDID Record (including all required LTID and Customer associations) with corrected Customer information. Otherwise, this rejection may be deleted with a	Error
	15 17 047	correctionAction of 'DELETE'. See the Full CAIS Industry Member Release Rollout for the effective dates of the expanded correctionList.	_
22535	Legal Entity CAT Customer reported with improper foreignTIDType	Legal Entity CAT Customer Records must not be reported with a foreignTIDType of 'DRIVERLICENSE', 'PASSPORT' or 'PERMANENT'. In order to repair this error code, the Customer must be resubmitted in the naturalPersonCustomerList with a foreignTIDType of 'DRIVERLICENSE', 'PASSPORT' or 'PERMANENT' (as applicable) and the same tidValue. This rejection is not repairable if the Industry Member erroneously reported the Legal Entity Customer with a foreignTIDType of 'DRIVERLICENSE', 'PASSPORT' or 'PERMANENT' when it should have reported the Legal Entity Customer with one of the foreignTIDTypes allowable for a foreign Legal Entity. While repair credit will not be given, if the Customer is required to be reported to CAIS, the Industry Member must resubmit the FDID Record (including all required LTID and Customer associations) with corrected Customer information. Otherwise, this rejection may be deleted with a correctionAction of 'DELETE'. See the Full CAIS Industry Member Release Rollout for the effective dates of the expanded correctionList	Error
22536	Reserved	Reserved for future use	
22537	Reserved	Reserved for future use	
22538	Reserved	Reserved for future use	
22539	Reserved	Reserved for future use	
22540	Invalid <i>middleName</i>	When populated, <i>middleName</i> must be properly	Error

Error Code	Error Code Description	Explanation	Warning/ Error
		formatted for each Natural Person CAT Customer Record.	
22541	Legal Entity CAT Customer reported with improper tidType	Legal Entity CAT Customer Records must not be reported with a tidType of 'SSN/ITIN'. In order to repair this error code, the Customer must be resubmitted in the naturalPersonCustomerList with a tidType of 'SSN/ITIN' and the same tidValue. This rejection is not repairable if the Industry Member erroneously reported the Legal Entity Customer with a tidType of 'SSN/ITIN' when it should have reported the Legal Entity Customer with a tidType of 'EIN'. While repair credit will not be given, if the Customer is required to be reported to CAIS, the Industry Member must resubmit the FDID Record (including all required LTID and Customer associations) with corrected Customer information. Otherwise, this rejection may be deleted with a correctionAction of 'DELETE'. See the Full CAIS Industry Member Release Rollout for the effective dates of the expanded correctionList.	Error
22542	Natural Person CAT Customer reported with improper tidType	Natural Person CAT Customer Records must not be reported with a <i>tidType</i> of 'EIN'. In order to repair this error code, the Customer must be resubmitted in the <i>legalEntityCustomerList</i> with a <i>tidType</i> of 'EIN' and the same <i>tidValue</i> . This rejection is not repairable if the Industry Member erroneously reported the Natural Person Customer with a <i>tidType</i> of 'EIN' when it should have reported the Natural Person Customer with a <i>tidType</i> of 'SSN/ITIN'. While repair credit will not be given, if the Customer is required to be reported to CAIS, the Industry Member must resubmit the FDID Record (including all required LTID and Customer associations) with corrected Customer information. Otherwise, this rejection may be deleted with a <i>correctionAction</i> of 'DELETE'. See the Full CAIS Industry Member Release Rollout for the effective dates of the expanded <i>correctionList</i> .	Error
22900	Malformed TID Record – CAT Customer Record not processed	The entry for this CAT Customer in the Transformed Identifiers File was malformed and could not be processed. See Section 6.6.2.1 for details on repairing the record or deleting the rejection.	Error
22914	Paired TID Record failed validation – CAT Customer Record not processed	The paired entry for this CAT Customer in the Transformed Identifiers File failed validation and was not processed. See the associated Warning Code in the Transformed Identifiers Feedback File.	Error
23999	Unhandled Exception	An unknown error occurred during processing.	Error

B.3 Data Layer Validation Error Codes

The table below contains error messages that are associated when validating data contained in a submission record against data previously accepted into CAT CAIS for the same submission record. Error codes are associated with specific fields within a submission record.

Table 27: Data Layer Validation Errors

Error Code	Error Code Description	Explanation	Warning/ Error
23004	replacedByFDID set to an unknown value	When populated, the <i>replacedByFDID</i> must reference a <i>firmDesignatedID</i> that is accepted without error in the current submission, or a <i>firmDesignatedID</i> that was previously accepted by CAIS.	Error
23005	fdidEndDate set prior to fdidDate of replacing record	When fdidEndReason is set as 'REPLACED', the fdidEndDate must not be set prior to the fdidDate of the FDID set as the replacedByFDID.	Error

B.4 Warning Error Codes

The table below contains Warning messages that are associated with Data Validation and included in the feedback file. Warning codes are associated with specific fields within a submission record. Warnings are not required to be repaired.

Table 28: CAIS Data File Validation Warnings

Error Code	Error Code Description	Explanation	Warning/ Error
24001	Missing or Invalid rejectionID	When populated, the <i>rejectionID</i> must be a known <i>rejectionID</i> for the <i>catReporterCRD</i> whose data is included in the CAIS Data File.	Warning
24002	Missing or Invalid correctionAction	When populated, <i>correctionAction</i> must be populated with one of the allowable values. Must be populated if <i>rejectionID</i> is populated.	Warning
24003	Missing or Invalid correctingFirmDesignated ID	When populated, correctingFirmDesignatedID must reference a firmDesignatedID that is included in the current CAIS Data File or was accepted by CAT CAIS in a prior submission.	Warning
24005	Improper correction attempt	The <i>rejectionID</i> included in the <i>correctionList</i> is for an improper error code. See footnote 5 in <u>Section 6.6.2.1</u> for more information.	Warning
24006	Unknown Field Name	The correctionList contains a field that is not known under the reported schema version.	Warning
24007	Missing or Invalid correctingCustomerRecor dID	When populated, correctingCustomerRecordID must reference a customerRecordID that is included in the current CAIS Data File.	Warning
24008	Data type violation - correctionList	correctionList contains one or more field values that violate the data type for the field.	Warning

Table 29: Transformed Identifiers File Validation Warnings

Error Code	Error Code Description	Explanation	Warning/ Error	Correspond ing Data Validation Error Code
24901	Malformed TID Record - Missing or invalid customerRecordID	customerRecordID must be present and populated for each TID Record within the file.	Warning	22526
24902	Malformed TID Record - Missing or invalid tidType	tidType must be present and populated for each TID Record within the file.	Warning	22900
24903	Malformed TID Record - Missing or invalid foreignTIDType	foreignTIDType must be present and populated for each record in the file where tidType is 'FOREIGN'. foreignTIDType must not be populated for any record in the file where tidType is not set as 'FOREIGN'.	Warning	22900
24904	Malformed TID Record - Missing or invalid foreignTIDCountryCd	foreignTIDCountryCd must be present and populated with a valid value for each record in the file where tidType is 'FOREIGN' and foreignTIDType is not 'LEI'. foreignTIDCountryCd must not be populated for any record in the file where tidType is not set as 'FOREIGN', or where tidType is set as 'FOREIGN' and foreignTIDType is set as 'LEI'. foreignTIDCountryCd must not be 'US' when tidType is 'FOREIGN'.	Warning	22900
24905	Malformed TID Record - Missing or invalid tidValue	tidValue must be present and populated for each record in the file and must be a 64-byte hexadecimal value.	Warning	22900
24906	Malformed TID Record - Invalid Input Identifier used to generate tidValue for tidType of SSN/ITIN	When tidType is 'SSN/ITIN', the original Input Identifier used to generate the tidValue must be properly formatted and adhere to the valid range of the SSN/ITIN identifier type.	Warning	22900
24907	Malformed TID Record - Invalid Input Identifier used to generate tidValue for tidType of EIN	When <i>tidType</i> is 'EIN', the original Input Identifier used to generate the <i>tidValue</i> must be properly formatted and adhere to the valid range of the EIN identifier type.	Warning	22900
24908	Missing or invalid replacedByTIDType	When populated, replacedByTIDType must be populated with a valid value. replacedByTIDType must be present and populated when replacedByTID is populated.	Warning	22914
24909	Missing or invalid replacingForeignTIDTyp e	replacingForeignTIDType must be present and populated for each record in the file where replacedByTIDType is 'FOREIGN'. replacingForeignTIDType must not be populated for any record in the file where replacedByTIDType is not set as 'FOREIGN'.	Warning	22914
24910	Missing or invalid replacingForeignTIDCo	replacingForeignTIDCountryCd must be present and populated with a valid value for	Warning	22914

Error Code	Error Code Description	Explanation	Warning/ Error	Correspond ing Data Validation Error Code
	untryCd	each record in the file where replacedByTIDType is 'FOREIGN' and replacingForeignTIDType is not 'LEI'. replacingForeignTIDCountryCd must not be populated for any record in the file where replacedByTIDType is not set as 'FOREIGN', or where tidType is set as 'FOREIGN' and replacingForeignTIDType is set as 'LEI'. replacingForeignTIDCountryCd must not be 'US' when tidType is 'FOREIGN'.		
24911	Missing or invalid replacedByTID	When populated, replacedByTID must be a 64-byte hexadecimal value. Must be present when replacedByTIDType is populated. Each replacedByTID must have a corresponding valid entry in the Transformed Identifiers File.	Warning	22914
24912	Invalid Input Identifier used to generate replacedByTID for replacedByTIDType of SSN/ITIN	When replacedByTIDType is 'SSN/ITIN', the original Input Identifier used to generate the replacedByTID must be properly formatted and adhere to the valid range of the 'SSN/ITIN' identifier type.	Warning	22914
24913	Invalid Input Identifier used to generate replacedByTID for replacedByTIDType of EIN	When replacedByTIDType is 'EIN', the original Input Identifier used to generate the replacedByTID must be properly formatted and adhere to the valid range of the 'EIN' identifier type.	Warning	22914
24914	Malformed TID Record - customerRecordID not present in paired CAIS Data File	Each customerRecordID present in the Transformed Identifiers File must have a corresponding valid entry in the paired CAIS Data File.	Warning	22914
24915	Malformed TID Record - Duplicated customerRecordID	Each customerRecordID must be present in the Transformed Identifiers File only once. Affected records will not be processed for further validation checks.	Warning	22526 (if duplicated only in the Transformed Identifiers File) 22502 (if duplicated in both the CAIS Data and Transformed Identifiers Files)
24916	Data type violation - TID	TID Record contains one or more field values that violate the data type for the field.	Warning	22526, 22900, or 22914
24917	Unknown Field Name	The Transformed Identifiers File contains a record level attribute that is not known under the reported schema version.	Warning	22526

B.5 Inconsistency Codes

The table below contains error messages that are associated with Material Inconsistencies and are included in the feedback file. Inconsistency Codes are associated with a specific Customer Record.

Table 30: CAT CAIS Inconsistency Codes

Inconsiste ncy Code	Inconsistency Code Description	Explanation	Material/ Minor
30002	Inconsistent data for yearOfBirth within the Industry Member	The Natural Person Customer Record has inconsistent data for the <i>yearOfBirth</i> .	Material
30003	Inconsistent data for <i>ein</i> within the Industry Member	The Legal Entity Customer Record has inconsistent data for the <i>ein</i> attribute.	Material
30004	Foreign TID reported as both Natural Person and Legal Entity within the Industry Member	The same Foreign TID has been reported as both a Natural Person and a Legal. Each CAT Customer must be only one record type.	Material
40002	Inconsistent data for yearOfBirth across Industry Members, or within a single clearing firm across correspondents	The Natural Person Customer Record has inconsistent data for the yearOfBirth attribute.	Material
40003	Inconsistent data for ein across Industry Members, or within a single clearing firm across correspondents	The Legal Entity Customer Record has inconsistent data for the ein attribute.	Material
40004	Foreign TID reported as both Natural Person and Legal Entity across Industry Members, or within a single clearing firm across correspondents	The same Foreign TID has been reported as both a Natural Person and a Legal Entity. Each CAT Customer must be only one record type.	Material

Appendix C: Glossary

Term	Definition
Account	For the purpose of the CAIS Technical Specification, the term Account is synonymous with Firm Designated ID (FDID). An Account may represent an account, Relationship ID, or Entity ID.
Account Opening Date	Account Opening Date is defined in the CAT NMS Plan. For Account data submission, Account Opening Date is to be reported as <i>fdidDate</i> within the CAIS Data File.
Authorized Trader	The CAT NMS Plan defines an Authorized Trader as "any person from whom the broker-dealer is authorized to accept trading instructions for such account, if different from the account holder(s)".
CAT Customer	SEC Rule 613(j)(3) defines a CAT Customer as "(i) the account holder(s) of the account at a registered broker-dealer originating the order; and (ii) any person from whom the broker-dealer is authorized to accept trading instructions for such account, if different from the account holder(s)".
CAT Reporter CRD	The Central Registration Depository identifier that an Industry Member uses to report CAT Account and Customer data.
CAT Submitter ID	The CAT-assigned identifier of the firm that submits data to CAT (for example, a CAT Reporting Agent).
CAT Trading Day	CAT Trading Day for Industry Members is defined as beginning immediately after 4:15:00 PM and no fractions of a second Eastern Time on one trade date and ending at exactly 4:15:00 PM and no fractions of a second Eastern Time on the next trading date.
	Weekends or any day that all equities or options national securities exchanges are closed are not considered a CAT Trading Day.
	Trading Days that close early end 15 minutes after the Market Close.
CCID	The Customer ID, also known as CAT Customer ID, is a unique identifier generated by the Plan Processor, that is defined within SEC Rule 613(j)(5) as "with respect to a customer, a code that uniquely and consistently identifies such customer for purposes of providing data to the central repository." The CCID is a globally unique identifier generated for each unique TID value generated from a well-formatted and valid Input Identifier, in a way that is not reversible to the TID or textual Input Identifier value. The translation of TID to CCID is completed in the CCID Subsystem, in isolation from any of the Customer or Account reference data. The CCID value is never provided to Industry Members or CAT Reporting Agents
	and is only used within CAT to uniquely reference a single Customer.
Discretion	If hasDiscretion is populated with 'true', this indicates the Authorized Trader has the ability to place orders on the Account without prior approval of the account holder(s). For CAIS reporting purposes, hasDiscretion value of 'true' does not indicate that an order was received with a "Not Held" instruction where the broker-dealer or trader only has discretion as to the price and time of execution.
FDID	FDID is defined in Section 1.1 of the CAT NMS Plan as "(1) a unique and persistent identifier for each trading account designated by Industry Members for purposes of providing data to the Central Repository provided, however, such identifier may not be the account number for such trading account if the trading account is not a proprietary account; (2) a unique and persistent relationship identifier when an Industry Member does not have an account number available to its order handling and/or execution system at the time of order receipt, provided, however, such identifier must be masked; or (3) a unique and persistent entity identifier when an employee of an Industry Member is exercising discretion over multiple client accounts and creates an aggregated order for which a trading account number of the Industry Member is not available at - 6 - the time of order

	origination" See <u>FAQ M2</u> for more information on the prohibition on use of actual account numbers. Refer to the <u>CAT Industry Presentation</u> on FDID for additional information.
Input Identifier	A generic term for the types of identifiers used to identify unique Customer Records, including SSN, ITIN, EIN, and FOREIGN. Input Identifiers are always translated to Transformed Identifier values prior to submission to CAT within the Transformed Identifiers File.
Legal Entity	For purposes of CAT reporting, a Legal Entity is a CAT Customer whose Input Identifier used to generate the Customer's TID is an EIN, or, for a Foreign Legal Entity, a National Registration or Tax Identifier, LEI or other Government-Issued Identifier issued by a non-national level government body or agency, such as a regional agency.
Natural Person	For purposes of CAT reporting, a Natural Person is a CAT Customer whose Input Identifier used to generate the Customer's TID is an SSN, ITIN; and for Foreign Natural Persons, a National Registration or Tax Identifier, Country of Domicile and Passport Number, Driver's License, or Permanent Resident Identifier.
CAT NMS Plan-Defined PII	As defined in the CAT NMS Plan, means personally identifiable information, including a social security number or tax identifier number or similar information; Customer Identifying Information and Customer Account Information.
Sensitive Identifier	Input Identifiers, including Social Security Number and Individual Taxpayer Identification Number, which must not be submitted to CAIS in plaintext and must be hashed into a Transformed Identifier using an SHA-256 hashing algorithm prior to submission to CAIS.
TID	The Transformed Identifier (TID) is a hashed version of the Input Identifier, submitted by the Industry Member to CAT in place of the Input Identifier, in accordance with the exemptive relief granted by the SEC on March 17, 2020. The Industry Member has the responsibility to translate Input Identifiers to TID values prior to submission, in accordance with the mathematical logic provided in Section 3.4 – Translation of Input Identifiers to TID Values. Input Identifiers used to generate TID values must be input in valid format – that is, 999-99-9999 for SSN or ITIN, and 99-9999999 for EIN
Trade Date	Trade Date for Industry Member is defined as beginning immediately after 23:59:59.999999 ET on Trade Date T - 1 and up to 23:59:59.999999 ET of the next Trade Date T. Weekends and holidays are not considered a Trade Date.

Appendix D: Data Dictionary

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
accountName	Extended Text (200)	FDID Record	R	Exactly One per FDID Record	The name applied to the 'ACCOUNT', 'RELATIONSHIP', or 'ENTITYID' at the Industry Member.	
accountType	Array [Choice]	FDID Record	R	Exactly One per FDID Record	Representation of the type or types of Account the FDID represents. All applicable values for the FDID must be included in the array. All values included in the array must be separated by commas. Values: AVERAGE – Industry Member-owned average price account. DVP/RVP – Delivery versus Payment account/Receipt versus Payment account/Receipt versus Payment account/Receipt versus Payment account account/Receipt versus Payment account account account allowable when the FDID represents the Entity ID of the firm when an employee of the firm is exercising discretion over multiple Customer Accounts. ERROR – Error account. FIRM – Is owned by the reporting Industry Member firm, including proprietary trading accounts and inventory accounts. INSTITUTION – An institutional account as defined in FINRA Rule 4512(c). MARKET – Market Making Account from which the Industry Member originates orders or to which it allocates shares/contracts in a	"AVERAGE" "DVP/RVP" "EDUCATION" "ENTITYID" "ERROR" "FIRM" "INSTITUTION" "MARKET" "MARGIN" "OPTION" "OTHER" "RELATIONSHIP" "RETIREMENT" "UGMA/UTMA"

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
	Type	Object	Key		security/securities for which the Industry Member is registered as a market maker, designated market maker, lead market maker, lead market maker or similar capacity on a national securities exchange or from which the Industry Member originates orders that clear in the OCC clearing range of 'M'. If the Industry Member reports New Order events with an accountHolderType of 'O', the accountType value of 'MARKET' must be included on the related FDID Record submitted to CAIS. See FAQ C5 for more information. MARGIN – Approved for trading on margin. OPTION – Approved for trading options. OTHER – Account which does not meet the criteria for any other listed value. RELATIONSHIP – Relationship type record. RETIREMENT – As defined by the IRS: Individual Retirement Arrangements (IRAs) Roth IRAs 401(k) Plans 51MPLE IRA Plans 63vings Incentive Match Plans for Employees SEP Plans (Simplified Employee Pension) SARSEP Plans (Savings Incentive Match Plans for Employees) Fer Plans (Simplified Employee Pension) Payroll Deduction IRAs Profit-Sharing Plans Defined Benefit Plans Honey Purchase Plans Employee Stock Ownership Plans Employee Stock Ownership Plans Employee Stock	Accepted Values

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					Governmental Plans 457 Plans UGMA/UTMA — Established as a custodial account under the Uniform Gift to Minors Act or Uniform Transfer to Minors Act.	
addressList	Multi- Dimensio nal Array	FDID Record	R	Exactly One per FDID Record	Structure for the array of Address Records that are associated to the FDID Record within the file. At a minimum, an 'ADDRESS1' record populated with the mailing address associated to the FDID must be included for each FDID Record within the file. Additional addresses may be included for the FDID if available within the Industry Member's system.	
addressList	Multi- Dimensio nal Array	Natural Person Custome r Record	С	Zero or One per Natural Person Customer Record	Structure for the array of Address Records that are associated to the Customer Record within the file. An 'ADDRESS1' record must be included for the Customer Record. Additional addresses may be included for the Customer if available within the Industry Member's system.	
addressList	Multi- Dimensio nal Array	Legal Entity Custome r Record	С	Zero or One per Legal Entity Customer Record	Structure for the array of Address Records that are associated to the Customer Record within the file. An 'ADDRESS1' record must be included for the Customer Record. Additional addresses may be included for the Customer if available within the Industry Member's system.	
addrLine1	Extended Text (40)	Address Record	R	Exactly One per Address Record	The first Address Line for the address.	
addrLine2	Extended Text (40)	Address Record	0	Zero or One per Address Record	Additional space for Address Line. Must not be provided if addrLine1 is not provided.	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/
444: 0				7 0	A 1 150	Accepted Values
addrLine3	Extended Text (40)	Address Record	0	Zero or One per Address Record	Additional space for Address Line. Must not be provided if addrLine2 is not provided.	
addrLine4	Extended Text (40)	Address Record	0	Zero or One per Address Record	Additional space for Address Line. Must not be provided if addrLine2 and addrLine3 are not provided.	
addrType	Choice	Address Record	R	Exactly One per Address Record	The type of the Address Record. Values : ADDRESSI – The mailing Address Record of the FDID.	"ADDRESS1" "ADDRESS2" "ADDRESS3" "ADDRESS4"
					ADDRESS2 – The second Address Record of the FDID.	
					ADDRESS3 – The third Address Record of the FDID.	
					ADDRESS4 – The fourth Address Record of the FDID.	
addrType	Choice	Address Record	R	Exactly One per Address Record	The type of the Address record. Values: ADDRESS1 – The first Address Record of the Customer. ADDRESS2 – The second Address Record of the Customer. ADDRESS3 – The third	"ADDRESS1" "ADDRESS2" "ADDRESS3" "ADDRESS4"
					Address Record of the Customer. ADDRESS4 – The fourth Address Record of the Customer.	
authTraderName	Extended Text (200)	Authoriz ed Trader Name List	R	Exactly One per Authorized Trader Name Record	The name of the Natural Person who has authority to place order for the account.	
authTraderNameID	Unsigned	Authoriz ed Trader Name List	R	Exactly One per Authorized Trader Name Record	A unique reference to a single Authorized Trader Name for a single FDID, for a single submission file.	
authTraderNamesList	Multi- Dimensio nal Array	FDID Record	С	Zero or One per FDID Customer Record	Structure for the array of Authorized Trader Names that are associated to the FDID Record within the file. Must only be used for Natural Person Authorized Traders	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					where the Industry Member does not have all data required to report a full Natural Person Customer Record. Required when the FDID has one or more Authorized Traders for which the Industry Member does not have all data required to report a full Natural Person Customer Record. Not to be used if the Industry Member has all data required to report a full Customer Record for the Natural Person Authorized Trader.	
branchOfficeCRD	Unsigned	FDID Record	С	Zero or One per FDID Record	The CRD for the branch office to which the FDID Record is assigned, if applicable. Required if a Customer Account is assigned to a branch office other than the main office.	
catReporterCRD	Unsigned	Main	R	Exactly One per submission file	The CRD number assigned to the Industry Member to which the data within the file belongs.	
catSubmitterID	Unsigned	Main	R	Exactly One per submission file	The ID of the firm submitting the file to CAT. Required even when the Industry Member is submitting data for itself.	
city	Extended Text (100)	Address Record	R	Exactly One per Address Record	City of the address.	
clearingBrokerID	Array [Alphanu meric (4)]	FDID Record	С	Zero or One per FDID Record	The NSCC Clearing ID of the Industry Member that clears the Accounts. Must be populated if known to the Industry Member. All values included in the array must be separated by commas. Each value must be exactly four characters, including leading zeros. If the Industry Member is a self-clearing firm, it must report its own NSCC Clearing ID.	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
correctingFirmDesignat edID	Text (40)	Correcti on Action Record	С	Zero or One per Correction Record	The firmDesignatedID that is repairing a previously rejected firmDesignatedID. The correctingFirmDesignate dID value must reference a corresponding firmDesignatedID value that is either included in the current submission file or was accepted by CAT CAIS in a prior submission. Required if the correctionAction is 'CORRECTION' and the prior error being corrected was against a firmDesignatedID.	
correctingCustomerRe cordID	Unsigned	Correcti on Action Record	С	Zero or One per Correction Record	A reference to the customerRecordID value in the submission file that is repairing a previously rejected Customer Record. The correctingCustomerRec ordID value must reference a customerRecordID that is included in the current submission file. Required if the correctionAction is 'CORRECTION' and the prior error being corrected was against a Customer Record.	
correctionAction	Choice	Correcti on Action Record	R	Exactly One per Correction Record	The action being taken to repair for the prior rejection. Values: CORRECTION – A new entry is included to correct for the prior rejected record using a new firmDesignatedID or new Customer Record. DELETE – The prior rejection needs to be cleared without a new record being submitted.	"CORRECTION" "DELETE"
correctionList	Multi- Dimensio nal Array	Main	С	Zero or One per Submission File	Structure for the array of Correction Action Records within the file. Required if the submission file contains one or more Correction Action Records.	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
correspondentCRD	Unsigned	Main	C	Zero or One per submission file	The CRD number of the related introducing broker or correspondent firm whose Customer and Account data is kept on record at the Industry Member reporting to CAT. Required to be populated by clearing firms with introducing brokers or correspondents and only when reporting Accounts to CAIS that are custodied for their introducing brokers/correspondents, including DVP/RVP accounts. For Accounts which are not correspondent Accounts, the correspondent Accounts, the correspondent CRD field must not be equal to catReporterCRD. All FDID and Customer data reported in the file will be associated to the catReporterCRD and correspondentCRD pairing.	
countryCode	Choice	Address Record	R	Exactly One per Address Record	Code of the country of the address, in ISO 3166-1 alpha-2 format. Please view Appendix E for acceptable values.	AA
customerRecordID	Unsigned	FDID Custome r Record	R	Exactly One per FDID Customer Record	A unique reference to a single Customer for a single submission file. The value in this field must also be a value present in the naturalPersonCustomer List or the legalEntityCustomerList; and present in the Transformed Identifiers File.	
customerRecordID	Unsigned	Legal Entity Custome r Record	R	Exactly One per Legal Entity Customer Record	A unique reference to a single Customer for a single submission file. The value in this field must also be a value present in the fdidCustomerList and present in the Transformed Identifiers File.	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
customerRecordID	Unsigned	Natural Person Custome r Record	R	Exactly One per Natural Person Customer Record	A unique reference to a single Customer for a single submission file. The value in this field must also be a value present in the fdidCustomerList and present in the Transformed Identifiers File.	
customerRecordID	Unsigned	TID Record	R	Exactly One per TID Record	A unique reference to a single Customer Record in the CAIS Data File. The value in this field must also be a value present in the customerRecordIDs in the CAIS Data File.	
customerType	Array [Choice]	Natural Person Custome r Record	R	Exactly One per Natural Person Customer Record	Representation of the characteristics of the CAT Customer. All applicable values for the CAT Customer must be included in the array. All values included in the array. All values included in the array must be separated by commas. Values: ACCREDITED — Customer was identified as an accredited investor by the Industry Member as set forth in Rule 501(a) of the Securities Act of 1933, if maintained in the Industry Member's general customer and account records. ADVISER — Customer was identified as being associated with a U.S. registered Investment Adviser, if maintained in the Industry Member's general customer and account records. CP — Customer identified itself as an officer, director, or 10% or more share owner of a public company at the time of account opening. EMPLOYEE — Customer is an employee or associated person of the Industry Member, as defined in	"ACCREDITED" "ADVISER" "CP" "EMPLOYEE" "FOREIGN" "NOTAPPLICABL E" "OTHBKR" "TRUST"

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					Section 3(a)(18) of the Securities Exchange Act of 1934. If employee attribute is maintained by the Industry Member at the group level, this value may also include Customers employed by affiliated group companies. FOREIGN – Customer	
					is a Natural Person that does not have a U.S. Tax Identifier. NOTAPPLICABLE – None of the defined terms are applicable to the Customer.	
					OTHBKR – Customer is associated with a U.S. registered broker-dealer other than the Industry Member. TRUST – Customer is a trust.	
customerType	Array [Choice]	Legal Entity Custome r	R	Exactly One per Legal Entity Customer Record	Representation of the characteristics of the CAT Customer. All applicable values for the CAT Customer must be included in the array. All values included in the array must be separated by commas. Values: ACCREDITED — Customer was identified as an accredited investor by the Industry Member as set forth in Rule 501(a) of the Securities Act of 1933, if maintained in the	"ACCREDITED" "ADVISER" "BD" "FOREIGN" "NOTAPPLICABL E" "RIC" "TRUST"
					Industry Member's general customer and account records. ADVISER – Customer was identified as a U.S. registered Investment Adviser, if maintained in the Industry Member's general customer and account records. BD – Customer is a U.S. registered brokerdealer, if maintained in the Industry Member's general customer and	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					account records. Effective July 11, 2023, 'BD' must be populated for all U.S. registered broker-dealer customer types, including for broker-dealer Customers that were not identified as 'BD' prior to July 11, 2023. FOREIGN – Customer is a Legal Entity that does not have a U.S. Tax Identifier. NOTAPPLICABLE – None of the defined terms are applicable to the Customer. RIC – Customer is a Registered Investment Company, as defined in the Investment Company Act of 1940 (15 U.S.C. § 80a—3(a)(1)), if maintained in the Industry Member's general customer and account records.	
doingBusinessAs	Extended Text (200)	Natural Person Custome r Record	С	Zero or One per Natural Person Customer Record	TRUST – Customer is a trust. The Doing Business As name for a sole proprietorship or other legal entity Customer reported to CAIS using SSN/ITIN as the Input Identifier, or for foreign Customers, one of the Input Identifiers allowable for a foreign natural person. Must be populated when reporting a CAT Customer as a Natural Person record that is a sole proprietorship, trust, or otherwise conducts business under a name other than the Natural Person's legal name.	
DVPCustodianID	Array [Alphanu meric (5)]	FDID Record	С	Zero or One per FDID Record	Required when accountType includes 'DVP/RVP'. All values included in the array must be separated by commas. Each value must be five characters	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
	Туре	Object	Key		or fewer, including leading zeros. If the custodian is a U.S. broker-dealer, this field must be populated with the clearing number of the custodian. If the custodian is a bank and is not a registered broker-dealer, this field must be populated with the DTC number of the bank. See FAQ Q66 for acceptable uses of the value 'DTCRM'. If there is no clearing number or DTC number because the custodian is foreign, this field must be populated with a	Accepted Values
ein	Text (10)	Legal Entity Custome r Record	С	Zero or One per Legal Entity Customer Record	value of 'FOR'. The Employer Identification Number (EIN) of the Customer, in 99-9999999 format. Must be included if the Input Identifier used to generate the Transformed Identifier of the Customer was 'EIN'.	99-9999999
fdidCustomerList	Multi- Dimensio nal Array	FDID Record	С	Exactly One per FDID Record	Structure for the array of Customer Records that are associated to the FDID Record within the file. Required when the FDID Record is being reported to CAIS for the first time. Also required when there is no fdidEndReason. Not required when ending an FDID Record that was previously accepted with one or more Customers.	
fdidDate	Date (Number) (8)	FDID Record	R	Exactly One per FDID Record	Date on which the FDID opened, as defined in Section 2.2.3 of this specification, in YYYYMMDD format.	YYYYMMDD
fdidEndDate	Date (Number) (8)	FDID Record	С	Zero or One per FDID Record	Date on which the FDID was closed or ended, in YYYYMMDD format. Must be provided if the fdidEndReason field is populated.	YYYYMMDD

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
fdidEndReason	Choice	FDID Record	С	Zero or One per FDID Record	Reason why the FDID was closed or ended. Must be provided if the fdidEndDate field is populated. Values: CORRECTION – FDID was not required to be reported to CAIS. ENDED – FDID was ended (e.g., account was closed). INACTIVE – Indicates the FDID has had no CAT-reportable transaction activity associated with the FDID in the prior six months. REPLACED – FDID replaced by another FDID within the Industry Member. See FAQ M16 regarding FDID replacements. OTHER – Other unlisted reason for ending the FDID. TRANSFER - FDID was transferred to another Industry Member as part of a mass transfer as described in Section 3.3.	"CORRECTION" "ENDED" "INACTIVE" "REPLACED" "OTHER" "TRANSFER"
fdidRecordCount	Unsigned	Main	R	Exactly One per submission file	The count of firmDesignatedID field occurrences within the file. Used to validate the count of FDID Records intended to be submitted within the file matches the count of records present in the file.	
fdidRecordID	Unsigned	FDID Record	R	Exactly One per FDID Record	A unique reference to a single FDID Record for a single submission file.	
fdidRecordList	Multi- Dimensio nal Array	Main	С	Zero or One per submission file	Structure for the array of FDID Records that are included in the file. Required if the submission file contains one or more FDID Records; not required if no FDID Records are included in the file.	
fdidType	Choice	FDID	R	Exactly One	Representation of the	"ACCOUNT"

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
		Record		per FDID Record	type of record of the reported FDID. Values: ACCOUNT – Account type record. RELATIONSHIP – Relationship type record. ENTITYID – Entity ID type record. Only allowable when the FDID represents the Entity ID of the firm when an employee of the firm is exercising discretion over multiple Customer Accounts.	"RELATIONSHIP" "ENTITYID"
firmDesignatedID	Text (40)	FDID Record	R	Exactly One per FDID Record	The Firm Designated ID of the 'ACCOUNT', 'ENTITYID', or 'RELATIONSHIP' being reported by the Industry Member.	
firstName	Extended Text (40)	Natural Person Custome r Record	R	Exactly One per Natural Person Customer Record	The First Name known for the Customer. If the Customer legally has one name, this field must be populated with 'NNVE' (No Name Value Exists).	
foreignTIDCountryCd	Choice	TID Record	С	Zero or One per TID Record	Code of the country that issued the Input Identifier used to generate the 'FOREIGN' tidType, in ISO 3166-1 alpha-2 format. Please view Appendix E for acceptable values. Required if the tidType is 'FOREIGN' and the foreignTIDType is not 'LEI'.	AA
foreignTIDType	Choice	TID Record	С	Zero or One per TID Record	The specific type of foreign Input Identifier used to generate a 'FOREIGN' tidType. Required to be populated if the tidType is 'FOREIGN'. The following hierarchy must be followed if more than one identifier type is available for a foreign CAT Customer: Values:	"DRIVERLICENS E" "LEI" "NATIONALID" "OTHGOVT" "PASSPORT" "PERMANENT"
					NATIONALID – National registration or tax identifier, if the	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					Industry Member knows the identifier was issued by a national-level government body or agency, or when the Industry Member cannot distinguish if the issuer is a national-level government body or agency. 2. LEI – Legal Entity Identifier. 3. PASSPORT – Country of issuance and passport number. 4. PERMANENT – Permanent resident identifier. 5. DRIVERLICENSE – Driver's license identifier. 6. OTHGOVT – Other government-issued identifier, if the Industry Member knows the identifier was issued by a non-national level government body or agency, such as a regional agency. Must not be used if one of the other allowable values apply.	
hasDiscretion	Boolean	FDID Custome r Record	С	Zero or One per FDID Customer Record	Indicates if the Authorized Trader has the ability to place orders on the Account without prior approval of the Holder(s). Must be present and populated if role is 'AUTH3RD' or 'AUTHREP'. Must be omitted or 'false' if role is 'NTHOLDER' or 'TRDHOLDER'.	True false
largeTraderID	Text (13)	Large Trader Record	R	Exactly One per Large Trader Record	The LTID or ULTID associated to the FDID in the Industry Member's system. For LTID Records, the identifier must be eight numeric characters, followed by a dash, followed by four numeric characters. For ULTID Records, the identifier must start with 'ULT', followed by alphanumeric [0-9A-Z]	For LTID — 99999999-9999 For ULTID — ULTXXXXX-XXXX

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					characters for the fifth through eighth positions, followed by a dash, followed by four alphanumeric [0-9A-Z] characters.	
largeTraderList	Multi- Dimensio nal Array	FDID Record	С	Zero or One per FDID Record	Structure for the array of LTID and ULTID Records that are associated to the FDID Record within the file. Required if the submission file contains one or more LTID/ULTID Records associated to the FDID Record; not required if no LTID/ULTID Records are included in the file in association to the reported FDID Record.	
largeTraderRecordID	Unsigned	Large Trader Record	R	Exactly One per Large Trader Record	A unique reference to a single LTID or ULTID in reference to a single FDID Record for a single submission file.	
lastName	Extended Text (200)	Natural Person Custome r Record	R	Exactly One per Natural Person Customer Record	The Last Name known for the Customer.	
legalEntityCustomerLis t	Multi- Dimensio nal Array	Main	С	Zero or One per submission file	Structure for the array of Legal Entity type Customer Records that are included in the file. Required if the submission file contains one or more Legal Entity Customer Records; not required if no Legal Entity Customer Records are included in the file.	
legalEntityCustomerRe cordCount	Unsigned	Main	R	Exactly One per submission file	The count of customerRecordID field occurrences within the file for Legal Entity type Customers. Used to validate the count of Legal Entity Customer Records intended to be submitted within the file matches the count of records present in the file.	
legalName	Extended Text (200)	Legal Entity Custome	R	Exactly One per Legal Entity	The Legal Name known for the Customer.	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/
	Туре	r Record	rtey	Customer		Accepted Values
		rivecolu		Record		
lei	Alphanum eric (20)	Legal Entity Custome r Record	С	Zero or One per Legal Entity Customer Record	The Legal Entity Identifier (LEI) of the Customer. Must be provided if known to the Industry Member. Must be included if the Input Identifier used to generate the Transformed Identifier of the Customer was an LEI.	
ltidEffectiveDate	Date (Number) (8)	Large Trader Record	R	Exactly One per Large Trader Record	Date on which the LTID or ULTID became associated to the FDID within the Industry Member's system, in YYYYMMDD format.	YYYYMMDD
ltidEndDate	Date (Number) (8)	Large Trader Record	С	Zero or One per Large Trader Record	Date on which the LTID or ULTID was no longer associated to the FDID within the Industry Member's system, in YYYYMMDD format. Must be provided if the ItidEndReason field is populated.	YYYYMMDD
ItidEndReason	Choice	Large Trader Record	С	Zero or One per Large Trader Record	Reason why the LTID or ULTID was no longer associated to the FDID. Must be populated in order to end date an LTID-to-FDID association in the system. Must be provided if the <i>ltidEndDate</i> field is populated.	"CORRECTION" "ENDED" "INACTIVE" "REPLACED" "OTHER" "TRANSFER"
					Values: CORRECTION – LTID	
					was erroneously reported as associated to the FDID or FDID was not required to be reported to CAIS.	
					ENDED – LTID-to-FDID association was ended.	
					INACTIVE – Indicates the associated FDID has had no CAT-reportable transaction activity in the prior six months.	
					REPLACED – LTID was replaced by a different LTID or the FDID was replaced by a different	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					FDID. OTHER – Other unlisted reason for ending the LTID-to-FDID association or per FAQ Q12, the reason why an LTID-to-FDID association was ended could not be reasonably ascertained. TRANSFER – LTID association was ended because the FDID was transferred to another Industry Member as part of a mass transfer as described in Section 3.3.	
middleName	Extended Text (20)	Natural Person Custome r Record	0	Zero or One per Natural Person Customer Record	The Middle Name or initial known for the Customer.	
nameSuffix	Choice	Natural Person Custome r Record	0	Zero or One per Natural Person Customer Record	The Name Suffix known for the Customer. Values: FIFTH FOURTH JUNIOR SENIOR THIRD	"FIFTH" "FOURTH" "JUNIOR" "SENIOR" "THIRD"
naturalPersonCustome rList	Multi- Dimensio nal Array	Main	С	Zero or One per submission file	Structure for the array of Natural Person type Customer Records that are included in the file. Required if the submission file contains one or more Natural Person Customer Records. Not required if no Natural Person Customer Records are included in the file.	
naturalPersonCustome rRecordCount	Unsigned	Main	R	Exactly One per submission file	The count of customerRecordID field occurrences within the file for Natural Person type Customers. Used to validate the count of Natural Person Customer Records intended to be submitted within the file matches the count of records present in the file.	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
postalCode	Text (15)	Address Record	С	Zero or One per Address Record	Postal code of the address. Must be provided if postal codes exist for the country of the address. Please view Appendix E for acceptable formatting per country.	
priorCATReporterCRD	Unsigned	FDID Record	С	Zero or One per FDID Record	CRD of the Industry Member from which the Account was acquired as part of a mass transfer as described in Section 3.3. Must be provided if the Account was acquired by the Industry Member. Must be provided if priorCATReporterFDID is populated.	
priorCATReporterFDID	Text (40)	FDID Record	С	Zero or One per FDID Record	The original firmDesignatedID for the record acquired as part of a mass transfer as described in Section 3.3. Must be provided by the acquiring Industry Member if the Account was acquired by the as part of a mass transfer.	
regionCode	Extended Text (40)	Address Record	С	Zero or One per Address Record	Code of the local region of the address. Required if the countryCode is 'US' or 'CA' and must be provided in ISO 3166-2 format. For all other countryCodes, the regionCode must be provided in text format if known to the Industry Member.	AA-XX* *Format when countryCode is 'US' or 'CA'
registeredRepCRD	Array [Unsigned]	FDID Record	0	Zero or One per FDID Record	The CRD number assigned to the Registered Representative(s) responsible for the FDID Record (as identified as such per SEC Rule 17a-3) that can provide trading advice for the Account. When optionally populated, all CRDs included in the array must be only numeric values, must not contain any leading zeroes, and must be separated by commas.	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
rejectionID	Unsigned	Correcti on Action Record	R	Exactly One per Correction Record	The CAT-assigned rejectionID from a prior submission that was created for the particular data validation error being corrected.	
replacedByFDID	Text (40)	FDID Record	С	Zero or One per FDID Record	The new firmDesignatedID replacing the currently reported firmDesignatedID. Used to provide historical linkage across replaced records over time. Must be provided if the fdidEndReason is 'REPLACED'. Must not be provided if the fdidEndReason is any value other than 'REPLACED'.	
replacedByTID	Hexadeci mal (64)	TID Record	С	Zero or One per TID Record	The obfuscated Input Identifier of the Customer when the Customer's Input Identifier has changed. Must be provided if the roleEndReason is 'REPLACED'. Must not be provided when roleEndReason is a value other than 'REPLACED'.	
replacedByTIDType	Choice	TID Record	С	Zero or One per TID Record	The specific type of Input Identifier used to generate the replacedByTID when a Customer's Input Identifier has changed. Required when replacedByTID is populated. Values: EIN – The replacedByTID was generated using an Employer Identification Number (EIN). FOREIGN – An identifier other than an EIN, SSN, or ITIN was used to generate the replacedByTID. SSN/ITIN – The replacedByTID was generated using a Social Security Number (SSN) or Individual Taxpayer Identification Number (ITIN).	"EIN" "FOREIGN" "SSN/ITIN"

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
replacingForeignTIDCo untryCd	Choice	TID Record	С	Zero or One per TID Record	Code of the country that issued the Input Identifier used to generate the 'FOREIGN' replacedByTIDType when a foreign Customer's Input Identifier has changed; in ISO 3166-1 alpha-2 format. Please view Appendix E for acceptable values. Required if the replacedByTIDType is 'FOREIGN' and the replacingForeignTIDTyp e is not 'LEI'.	AA
replacingForeignTIDTy pe	Choice	TID Record	C	Zero or One per TID Record	The specific type of foreign Input Identifier used to generate a 'FOREIGN' replacedByTIDType when a foreign Customer's Input Identifier has changed. Required to be populated if the replacedByTIDType is 'FOREIGN'. The following hierarchy must be followed if more than one identifier type is available for a foreign CAT Customer: Values: 1. NATIONALID – National registration or tax identifier, if the Industry Member knows the identifier was issued by a national-level government body or agency, or when the Industry Member cannot distinguish if the issuer is a national-level government body or agency. 2. LEI – Legal Entity Identifier. 3. PASSPORT – Country of issuance and pasport number. 4. PERMANENT – Permanent resident identifier. 5. DRIVERLICENSE – Driver's license identifier.	"DRIVERLICENS E" "LEI" "NATIONALID" "OTHGOVT" "PASSPORT" "PERMANENT"

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					6. OTHGOVT – Other government-issued identifier, if the Industry Member knows the identifier was issued by a non-national level government body or agency, such as a regional agency. Must not be used if one of the other allowable values apply.	
role	Choice	FDID Custome r Record	R	Exactly One per FDID Customer Record	Representation of the type of role the Customer has on the FDID. Values: AUTH3RD – An Authorized Trader who is not a holder of the Account, nor an employee of the reporting Industry Member, who has authority to place orders for the Account without prior approval of the account holder(s). AUTHREP – An Authorized Trader who is not a holder of the Account but does have authority to place orders for the Account without prior approval of the account holder(s) and is either the reporting Industry Member or an employee of the reporting Industry Member, if the account holder specifically designates the natural person employee as authorized to trade for the Account independent of the authority granted to the entity Authorized Trader. See FAQ Q56 for more information. This role must also be used for affiliated group companies (for Legal Entity Customers) and employees of affiliated group companies (for Natural Person Customers) (see FAQ Q56 for more information), if the	"AUTHREP" "NTHOLDER" "TRDHOLDER"

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					Industry Member maintains in its books and records that the Legal Entity Customer or Natural Person Customer is an affiliate. For example, if the Industry Member maintains in its books and records that the Legal Entity Registered Investment Advisor Authorized Trader is affiliated with the reporting Industry Member, the role must be 'AUTHREP'. If the Industry Member does not maintain in its books and records that the Legal Entity Registered Investment Advisor Authorized Trader is affiliated with the reporting Industry Member, the role may be 'AUTH3RD'. NTHOLDER – Holder of the Account that does not have authorization to trade on the Account. TRDHOLDER – Holder of the Account that also has authorization to trade on the Account.	
roleEndDate	Date (Number) (8)	FDID Custome r Record	С	Zero or One per FDID Customer Record	Date on which the Customer ceased having the specified <i>role</i> on the FDID, in YYYYMMDD format. Must be provided if the <i>roleEndReason</i> field is populated.	YYYYMMDD
roleEndReason	Choice	FDID Custome r Record	С	Zero or One per FDID Customer Record	Reason why the Customer ceased having the specified role on the FDID. Must be provided if the roleEndDate field is populated. Values: CORRECTION – Customer was erroneously reported as associated to the FDID or FDID was not required to be reported to CAIS. ENDED – Customer	"CORRECTION" "ENDED" "INACTIVE" "REPLACED" "OTHER" "TRANSFER"

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					was reported to CAIS with an incorrect role (e.g., erroneously reported as 'AUTH3RD' rather than correctly reported as 'AUTHREP'), role on FDID was ended or FDID was ended (e.g., account was closed upon death of account holder). INACTIVE – Indicates the associated FDID has had no CAT-reportable transaction activity in the prior six months. REPLACED – Customer role on FDID was ended because the FDID was replaced with another FDID, or because the Customer Input Identifier was replaced with another Input Identifier. OTHER – Other unlisted reason for ending the Customer role on FDID or per FAQ Q12, the reason why a Customer-to-FDID association was ended could not be reasonably ascertained. TRANSFER – Role ended because the FDID was transferred to another Industry Member as part of a mass transfer as described in Section 3.3.	
roleStartDate	Date (Number) (8)	FDID Custome r Record	R	Exactly One per FDID Customer Record	Date on which the Customer entered into the specified <i>role</i> on the Account, in YYYYMMDD format.	YYYYMMDD
tidType	Choice	TID Record	R	Exactly One per TID Record	The specific type of Input Identifier used to generate the tidValue. Values: EIN – The tidValue was generated using an Employer Identification Number (EIN). FOREIGN – An identifier other than an	"EIN" "FOREIGN" "SSN/ITIN"

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					EIN, SSN, or ITIN was used to generate the tidValue. SSN/ITIN – The tidValue was generated using a Social Security Number (SSN) or Individual Taxpayer Identification Number (ITIN).	
tidRecordCount	Unsigned	Main	R	Exactly One per submission file	The count of TID Record occurrences within the file. Used to validate that the count of TID Records intended to be submitted within the file matches the count of records present in the file.	
tidRecordList	Multi- Dimensio nal Array	Main	С	Zero or One per submission file	Structure for the array of TID Records that are included in the file. Required if the submission file contains one or more TID Records; not required if no TID Records are included in the file.	
tidValue	Hexadeci mal (64)	TID Record	R	Exactly One per TID Record	The obfuscated Input Identifier of the Customer whose data is being reported.	
updateNotification	Boolean	Legal Entity Custome r Record	С	Zero or One per Legal Entity Customer Record	Required as 'true' when the Customer Record is being reported to resolve a Material Inconsistency, or is being reported with known updates to material attributes.	true false
updateNotification	Boolean	Natural Person Custome r Record	С	Zero or One per Natural Person Customer Record	Required as 'true' when the Customer Record is being reported to resolve a Material Inconsistency or is being reported with known updates to material fields.	true false
version	Text (10)	Main	R	Exactly One per submission file	The version of the CAIS Data File Schema under which the data is reported. The version utilized for full Customer and Account reporting is 2.0.0.	2.0.0
version	Text (10)	Main	R	Exactly One per	The <i>version</i> of the Transformed Identifiers	2.0.0

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
				submission file	File Schema under which the data is reported. The <i>version</i> utilized for full Customer and Account reporting is 2.0.0	
yearOfBirth	Year (Number) (4)	Natural Person Custome r Record	R	Exactly One per Natural Person Customer Record	The Year of Birth known for the Customer in YYYY format.	YYYY

Appendix E: Country and Region Codes

Appendix E is located on www.catnmsplan.com/specifications/im. The appendix contains two lists, one list uses the Country Code, Country Name, and Postal Code formatting, while the other list uses the Region Code and Region Name. For countries present in Appendix E, the ISO 3166-2 formatted Region Code must be used. For countries not present in Appendix E, the Region Code is not required to be in ISO 3166-2 format. If no Postal Code format is noted, Postal Code is optional for inclusion for the Country and no formatting validation will occur.6

⁶ ISO 3166-2 format validations for the *regionCode* and *postalCode* fields will NOT be applied to American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, or U.S. Minor Outlying Islands.