CAT Reporting Technical Specifications for Industry Members

Addendum for Industry Members Operating an Inter-dealer Quotation System

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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 specification represents requirements for the reporting of OTC Equities Inside Quote information for Industry Members operating an inter-dealer quotation system.

Change Log

Table 1: Revision / Change Process

Version	Date	Author	Description
1.0.0 r0		Consolidated Audit Trail, LLC	Initial publication

1. Introduction

This specification represents the requirements for reporting OTC Equity Inside Quote information for Industry Members operating an inter-dealer quotation system.

This document is an Addendum to the <u>CAT Reporting Technical Specifications for Industry Members</u>, which includes the requirements for reporting Industry Member data to CAT along with supporting definitions.

2. BBO Quote Event Definition

The BBO Quote Event is used by Industry Members that operate an inter-dealer quotation system to report quote events representing the best bid, best offer and the total shares for each side available on the IDQS in OTC equity securities.

For two-sided BBO quote events, the *bidPrice, bidQty, askPrice*, and *askQty* fields must be populated. For one-sided events, the price and quantity of the applicable side must be populated. The side for which an inside quote is not available must be blank.

All BBO quote events are interpreted to begin at the specified *eventTimestamp* where the represented price and sizes are available until the *eventTimestamp* of the immediately subsequent BBO quote event in the same symbol.

IDQS BBO Quotes in OTC equity securities must be reported in Phase 2a.

Seq #	Field Name	Data Type	Description	Include Key
1	actionType	Choice	Indicates whether the event is a new event, a firm initiated correction or a repair of a CAT error. NEW - New Record RPR - Repair of event for which a CAT error was provided in feedback COR - Correction of event initiated by firm	R
2	errorROEID	Unsigned	Unique identifier assigned by CAT to an error record; used to support the corrections process. Required when actionType is 'RPR'	С
3	firmROEID	Text (64)	Unique identifier for the quote record assigned by the CAT Reporter; formatted as <eventdate>_<firm assigned="" identifier=""> Must be unique for the Event Date and CAT Reporter IMID.</firm></eventdate>	R
4	type	Message Type	Set to 'MBBO' to specify the Message Type.	R
5	CAT Reporter IMID	CAT Reporter IMID	The SRO assigned identifier that an Industry Member uses to report to CAT.	0
6	symbol	Symbol	The symbol of the stock in the FINRA symbology for OTC Equity Securities. Not required with the symbol has not been assigned.	С

Table 2: New Quote Event Field Specifications

Seq #	Field Name	Data Type	Description	Include Key
7	eventTimestamp	Timestamp	The date and time the quote was displayed. Required to be reported at the most granular level the Inter-dealer quotation system uses to capture data, with at least millisecond granularity.	R
8	seqNum	Alphanumeric (40)	The sequence number of the quote event, used to sequence events occurring at the same time The sequence number is required to be an increasing value for a CAT Reporter, Event Date and Symbol such that it can be used to sequence events having the same event timestamp in chronological order.	R
9	issueName	Alphanumeric (255)	Company name of issue; Required when symbol is blank.	С
10	bidPrice	Price	Inside bid price displayed representing the best bid price available on the IDQS. Must be blank when there is no bid price.	С
11	bidQty	Whole Quantity	Total bid quantity available for the inside bid price in total number of shares (not round lots). Must be blank when there is no bid quantity. Must be populated when <i>bidPrice</i> is populated.	С
12	bidType	Choice	Indication if the Bid is Priced, Unpriced or Bid Wanted. Choice values include: A – Actual Price U – Unpriced	R
13	askPrice	Price	Inside ask price displayed representing the best ask price available on the IDQS. Must be blank when there is no ask Price.	С
14	askQty	Whole Quantity	Total ask quantity available for the inside ask price in total number of shares (not round lots). Must be blank when there is no ask quantity. Must be populated when <i>askPrice</i> is populated.	С
15	askType	Choice	Indication if the Ask is Priced, Unpriced or Ask Wanted. Choice values include: A – Actual Price U – Unpriced	R

3. Submissions & Feedback

Submissions and feedback of BBO information will follow the requirements specified in the <u>CAT</u> <u>Reporting Technical Specifications for Industry Members</u> with the following exceptions:

- File Kind Submission and Feedback file names will distinguish BBO Events using File Kind.
- Submissions & Feedback
 Submissions and Feedback files will be managed independent of other File Kinds.
- **Processing Stages** BBO Events do not participate in Linkage Discovery
- Error Codes New Error codes have been defined for errors related to fields participating only in BBO Events. New error codes defined for fields that apply ONLY to BBO events are included in this document.

3.1. File Names

File names for data submissions and related feedback must distinguish BBO events using File Kind. The following rules apply:

1. For Submission files, File Kind within the file name must be set to 'BBOEvents'.

Example: SUBID_MYID_20170101_FileGroup1_BBOEvents_000122.meta.csv

2. For Feedback files, File Kind within the file name will be set to 'BBOEvents'.

Example: SUBID_MYID_20170101_FileGroup1_BBOEvents_000122.meta.ack.csv

3.2. Submissions & Feedback

Submissions and Feedback files will be managed independent of other File Kinds. Additionally, a separate Schema related to BBO Events will be defined. The following rules apply:

- 1. Metadata File Submissions with a file name having File Kind equal to 'BBOEvents' may only pair with data files with a File Kind equal to 'BBOEvents'.
- 2. Metadata File Submissions related to data files containing BBO Events must set *fileVersion* equal to the applicable Schema version for BBO Events.
- 3. Meta Feedback provided by CAT related to BBO Events will set the *feedbackVersion* equal to the applicable Schema version for BBO Events.

3.2.1. Metadata File Submission JSON Example

Original Metadata Submission File Name	SUBID_MYID_20170101_BBOEvents_000122.meta.json
Contents of Meta File	<pre>{"type":"META","doneForDay":false,"fileGenerationDate":20170 101,"reporter":"MYID","submitter":"SUBID","fileVersion":"1.0 .0","files":[{"fileName":"SUBID_MYID_20170101_FileGroup1_BB0 Events_000122.json.bz2","recordCount":5217,"compressedHash": "99A7712E2CC1CB3A5789B91E3C1D1E76D7F83D82C8D35FF1F56B156A49C 228E2"}]}</pre>

3.2.2. Metadata Feedback File CSV Example

Original File Submission File Name	SUBID_MYID_20170101_BBOEvents_000122.meta.csv		
Meta Feedback File Name	SUBID_MYID_20170101_BBOEvents_000122.meta.ack.csv		
Acknowledgement of Meta File	LINE 1	1.0.0,SUBID,MYID,20170307, SUBID_MYID_20170101_BBOEvents_000122.meta.csv, 20170101T153552.000001089,FILE_ACKNOWLEDGEMENT, 20170101T154152.000001089,Success,,,,,,,	

3.3. Error Codes

This section defines the error and warning codes generated by CAT. Each code is defined to include the reason for the error or warning, including the associated fields. Codes are assigned in ranges to represent similar types of errors within the same range, related by validation type. Codes are organized by the CAT Processing stages including:

- File Integrity
- Data Ingestion
- Note: BBO Events do not participate in Linkage Discovery.

3.3.1. File Integrity Errors

Refer to File Integrity Errors specified in Appendix E of the <u>CAT Reporting Technical Specifications for</u> <u>Industry Members.</u>

3.3.2. Data Ingestion Errors

Refer to Data Ingestion Errors specified in Appendix E of the <u>CAT Reporting Technical Specifications for</u> <u>Industry Members.</u>

Additional errors codes for fields that only participate in the BBO Events schema include:

Error Code	Error Code Description	Explanation	Warning/ Error
2801	Missing or Invalid issueName	When required, <i>issueName</i> must be in the correct format.	Error
2802	Missing or Invalid <i>bidType</i>	<i>bidType</i> must be populated with one of the allowable values.	Error
2803	Missing or Invalid askType	askType must be populated with one of the allowable values.	Error