

DAILY TAQ CLIENT SPECIFICATIONS

Version

3.3

Date

May 20, 2020

© Copyright 2020 Intercontinental Exchange, Inc. ALL RIGHTS RESERVED. INTERCONTINENTAL EXCHANGE, INC. AND ITS AFFILIATES WHICH INCLUDE THE NEW YORK STOCK EXCHANGE, ("ICE" AND "NYSE") MAKE NO WARRANTY WHATSOEVER AS TO THE PRODUCT DESCRIBED IN THESE MATERIALS EXPRESS OR IMPLIED, AND THE PRODUCT IS PROVIDED ON AN "AS IS" BASIS. ICE AND NYSE EXPRESSLY DISCLAIM ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. NEITHER ICE, NYSE NOR THEIR RESPECTIVE DIRECTORS, MANAGERS, OFFICERS, AFFILIATES, SUBSIDIARIES, SHAREHOLDERS, EMPLOYEES OR AGENTS MAKE ANY WARRANTY WITH RESPECT TO, AND NO SUCH PARTY SHALL HAVE ANY LIABILITY FOR (i) THE ACCURACY, TIMELINESS, COMPLETENESS, RELIABILITY, PERFORMANCE OR CONTINUED AVAILABILITY OF PRODUCT, OR (ii) DELAYS, OMISSIONS OR INTERRUPTIONS THEREIN. ICE AND NYSE DO NOT, AND SHALL HAVE NO DUTY OR OBLIGATION TO, VERIFY, MONITOR, CONTROL OR REVIEW ANY INFORMATION IN RELATION TO THE PRODUCT.

PREFACE

SALES

DataSales@nyse.com

PRICING AND POLICY GUIDES

Historical Market Data Pricing

CONTRACTS AND LICENSING

Customers must execute the appropriate agreement (Exhibit A and/or NYSE Vendor Agreement) which will be generated upon submission of the online order from the product page for each product on the nyse.com website. Upon the approval, NYSE will issue the credentials for accessing the data. Please allow up to an hour for newly purchased data product(s) from the MFT-Managed File Transfer directory setup to complete. Customers may download the data once and place the data on their internal database for internal users to access the data.

NOTICES

Self-subscription services are available at <u>https://www.nyse.com/subscriptions</u> for the receipt of product news and/or operational status notifications for all proprietary data products.

REFERENCE

For additional product information, visit: <u>https://www.nyse.com/market-data/historical/daily-taq</u>

SAMPLE DATA

Sample data is available on the Public FTP at http://ftp.nyse.com/Historical%20Data%20Samples/

ALTERNATIVE PRODUCTS

For details of related TAQ products and the full range of TAQ offerings, visit: https://www.nyse.com/market-data/historical

SERVICE DESK / TECHNICAL SUPPORT

- Telephone: US +1 212 896 2830
- Email: support@nyse.com

Contents

PREFAC	٤2
1.	INTRODUCTION
1.1	File Content4
1.2	File Delivery6
1.3	File Format
1.4	Field Formats
1.5	Abbreviations9
2.	DAILY TAQ MASTER FILE
3.	DAILY TAQ TRADES FILE
4.	DAILY TAQ QUOTES FILE
5.	DAILY TAQ NBBO FILE
6.	DAILY TAQ QUOTE LULD FILE
7.	DAILY TAQ TRADE LULD FILE
8.	DAILY TAQ CTA ADMIN FILE
9.	DAILY TAQ UTP ADMIN FILE
10.	APPENDIX A: BBO QUALIFYING CONDITIONS
11.	APPENDIX B: NYSE STOCK SYMBOL SUFFIXES
12.	APPENDIX C: NASDAQ STOCK SYMBOL SUFFIXES
13.	APPENDIX D: QUOTE CONDITION CODES
14.	APPENDIX E: NYSE INDUSTRY CODES
15.	APPENDIX F: PARTICIPANT IDS62
16.	APPENDIX G: NATIONAL BBO INDICATOR CODES
17.	APPENDIX H: SECURITY STATUS INDICATOR CODES
18.	APPENDIX I: DETERMINING NBBO FROM THE CONSOLIDATED QUOTE FILES 69
19.	DOCUMENT HISTORY

1. Introduction

Daily TAQ (Trades and Quotes) is a set of files that contain all trades and quotes for all issues listed and traded on US regulated exchanges for a single trading day. The Daily TAQ data is derived from the output of the CTA and UTP SIPs (Tape A, Tape B, and Tape C).

The SIP data is published between 4:00am-8:00pm every trading day.

The NYSE Daily TAQ archive goes back to 1993. Historical data is available for download.

Customers can obtain a license to access specified months of historical data, or a license for ongoing access to the current Daily TAQ files. SFTP protocol is required for file transport.

For details, contact DataSales@theice.com

1.1 FILE CONTENT

One day's set of Daily TAQ files includes:

DAILY TAQ FILE	CONTENT
Master File	Master information for all symbols published by CTA and UTP
Trades File	All trades published by CTS and UTDF
Quotes (26 files)	All quotes published by CQS and UQDF (records are grouped into files alphabetically by symbol)
NBBO File	All National Best Bid and Offer updates published by CQS and UQDF
Quote LULD File	All Limit-up/Limit-down Price Band messages published by CQS and UQDF
Trade LULD File	All Limit-up/Limit-down Price Band messages published by CTS and UTDF
CTA Admin File	All administrative messages published by CTA
UTP Admin File	All administrative messages published by UTP

1.1.1 Typical File Sizes and Availability

Daily TAQ files are created and become available after the close of US equities markets on the same day.

Guidelines on typical file size and availability are shown in the chart below. File sizes, number of rows, and availability times shown below are estimates based on recent trading volumes. History availability dates are exact.

All times are in US Eastern time.

ICE/NYSE

DAILY TAQ FILE	FILE SIZE COMPRESSED	TYPICAL NUMBER OF RECORDS	TYPICAL FILE TIME AVAILABILITY	FILE AVAILABILITY DEADLINE	HISTORICAL DATES AVAILABLE
Master	360 KB	8,400	8:30 PM	9:00 PM	1/01/1993 – present
Trades	649 MB	25 MM	8:30 PM	9:00 PM	1/01/1993 – present
Quotes	17 GB	682 MM	9:00 PM	2:00 AM	1/1/1993 – present
NBBO	2.2 GB	114 MM	8:30 PM	11:00 PM	9/10/2003 – present
Trade LULD	77 MB	6.4 MM	8:30 PM	9:00 PM	4/8/2013 – present
Quote LULD	75 MB	6.4 MM	8:30 PM	9:00 PM	4/8/2013 – present
CTA Admin	70 MB	4.03 MM	8:30 PM	9:00 PM	2/28/2011 – present
UTP Admin	87 MB	2.4 MM	8:30 PM	9:00 PM	2/28/2011 – present

1.1.2 Availability Notifications

If today's Daily TAQ files are delayed beyond its deadline for whatever reason, a notice will be published to customers no later than 2am.

To register to receive product news and/or operational status notifications for all proprietary data products, visit <u>https://www.nyse.com/subscriptions</u>

Trader updates and announcements are available at: <u>https://www.nyse.com/trader-update/history.</u>

1.2 FILE DELIVERY

The Daily TAQ files can be downloaded via SFTP on the NYSE Managed File Transfer (MFT) Site, <u>https://mftus.nyx.com/</u>.

All Daily TAQ files are compressed using gzip.

1.2.1 NYSE MFT Directory Structure

Using the NYSE Managed File Transfer infrastructure, Daily TAQ files are accessible as follows:

Access the NYSE MFT portal (<u>https://mftus.nyx.com</u>) with the appropriate credentials, and navigate to the desired path below.

FILE	MFT (SFTP) Platform Path
Master	/EQY_US_ALL_REF_MASTER/EQY_US_ALL_REF_MASTER_yyyy/EQY_US_ALL_REF_MASTE R_yyyymm/ EQY_US_ALL_REF_MASTER_yyyymmdd.gz
	Note: Data also available in the EQY_US_ALL_REF_MASTER_PD from January 4, 2010 - February 28, 2017.
Quotes	SPLITS_US_ALL_BBO/SPLITS_US_ALL_BBO_yyyy/SPLITS_US_ALL_BBO_yyyymm/ SPLITS_US_ALL_BBO_yyyymmdd.gz
	Examples:
	/SPLITS_US_ALL_BBO/SPLITS_US_ALL_BBO_2016/SPLITS_US_ALL_BBO_201610/ SPLITS_U S_ALL_BBO_A_20161029.gz
	/SPLITS_US_ALL_BBO/SPLITS_US_ALL_BBO_yyyy/SPLITS_US_ALL_BBO_yyyymm/SPLITS_U S_ALL_BBO_B_20161029.gz
	/SPLITS_US_ALL_BBO/SPLITS_US_ALL_BBO_yyyy/SPLITS_US_ALL_BBO_yyyymm/ SPLITS_U S_ALL_BBO_C_20161029.gz
	The .done file (not gzipped) is created on completion of all 26 Daily TAQ Quotes files:
	/SPLITS_US_ALL_BBO/SPLITS_US_ALL_BBO_yyyy/SPLITS_US_ALL_BBO_yyyymm/ SPLITS_U S_ALL_BBO_20161029.done
	Note: Quotes prior to Nov 4, 2016, available in a single file, EQY_US_ALL_BBO
Trades	/EQY_US_ALL_TRADE/EQY_US_ALL_TRADE_yyyy/EQY_US_ALL_TRADE_yyyymm/ EQY_US _ ALL_TRADE_yyyymmdd.gz
NBBO	/EQY_US_ALL_NBBO/EQY_US_ALL_NBBO_yyyy/EQY_US_ALL_NBBO_yyyymm/ EQY_US_

FILE	MFT (SFTP) Platform Path
	ALL_NBBO_yyyymmdd.gz
Quote LULD	/EQY_US_ALL_BBO_ADMIN/EQY_US_ALL_BBO_ADMIN_yyyy/EQY_US_ALL_BBO_ADMIN_ yyyymm/ EQY_US_ALL_BBO_ADMIN_yyyymmdd.gz
Trade LULD	/EQY_US_ALL_TRADE_ADMIN/EQY_US_ALL_TRADE_ADMIN_yyyy/EQY_US_ALL_TRADE_A DMIN_yyyymm/ EQY_US_ALL_TRADE_ADMIN_yyyymmdd.gz
CTA Admin	/EQY_US_ALL_ADMIN/EQY_US_ALL_ADMIN_yyyy/EQY_US_ALL_ADMIN_yyyymm/ EQY_U S_ALL_ADMIN_CTS_yyyymmdd.gz
UTP Admin	/EQY_US_ALL_ADMIN/EQY_US_ALL_ADMIN_yyyy/EQY_US_ALL_ADMIN_yyyymm/ EQY_U S_ALL_ADMIN_UTP_yyyymmdd.gz

1.3 FILE FORMAT

Every Daily TAQ file

- Is in ASCII format
- Is compressed using gzip.
- Starts with a Header Record and ends with a Trailer Record:
 - The Header Record is a pipe-delimited list of the names of all the fields in the data records in this file.
 - The Trailer Record has the same number of pipe-delimited fields as this file's data records:
 - Field 1 The word "END", without quotation marks
 - Field 2 An 8-character date (YYYYMMDD)
 - Field 3 The number of records in this file, not counting the header and trailer
 - Fields 4 to the end are blank (empty)

Every record in a file between the Header and Trailer records

- Represents a single event published by CTA and UTP
- Consists of a sequence of pipe-delimited ASCII fields specified in this document
- Is terminated by a newline character ('\n')

1.4 FIELD FORMATS

1.4.1 Symbols

Symbols are expressed in NYSE Symbology, which consists of

Root (6 chars maximum), space, and Suffix (10 chars maximum)

See the <u>NYSE Symbology Specification</u> for details.

The Master File also includes the symbols in the original formats published by the SIPs. For CTA symbols, see <u>CTS Binary Output Spec</u> Appendix B. For UTP symbols, see <u>Nasdaq 5th Character</u> <u>Suffix List</u>.

Test Symbols are included in the Daily TAQ files. For the identification of Test Symbols, See <u>CTA</u> <u>Specifications for CTA Symbols</u> and the <u>NASDAQ-Listed for UTP Test Symbols</u>

1.4.2 Prices

Every price field represents a dollar amounts with an optional fractional component. A price consists of up to 14 ASCII numeric characters of whole value (with no leading zeroes), an optional decimal point ('.'), and up to 6 ASCII numeric characters of fraction (with no trailing zeroes). The whole field can be a maximum of 21 characters.

1.4.3 Sequence Numbers

For Tape C symbols (published by the UTP SIP), Daily TAQ sequence numbers are typical message sequence numbers as they appear in the UTP feeds, incrementing by 1 with every message.

For Tape A and B symbols (published by the CTA SIP), sequence numbers are derived from two different CTA fields: Block Sequence Number (appearing in the Block Header) and Message ID (appearing in the Message Header). For this reason, sequence numbers for Tape A and B symbols do not increase continuously. The formula for the Daily TAQ Sequence Number is:

Daily TAQ Sequence Number =

(CTA Block Sequence Number * 100) + CTA Message ID

	Example 1	Example 2	Example 3
CTA block seq num	1	24	4,567
MessageID	3	39	5
Daily TAQ sequence	103	2,439	456,705
number			

1.4.4 Timestamps

Current timestamps are a fixed length field of ASCII numeric characters in the following format:

HHMMSSxxxxxxxx

HHMMSS represents 2-digit values for hours, minutes and seconds since midnight, and the 9 x's represent a nine digit nanosecond value.

1.4.5 Timestamp History

The accuracy of timestamps published by the SIPs has improved in steps over time, with CTA and UTP on different schedules from each other. Timestamps in Historical Daily TAQ reflect this evolution. For consumers of historical Daily TAQ, here is the dated change list for SIP timestamps.

Timestamps are durations since midnight, eg: seconds since midnight, nanoseconds since midnight

DATE OF CHANGE	UTP CHANGES	CTA CHANGES
January 1993	seconds HHMMSS	seconds HHMMSS
October 2003	milliseconds HHMMSSxxx	milliseconds HHMMSSxxx
July 27, 2015	microseconds HHMMSSxxxxxx	
August 3, 2015		microseconds HHMMSSxxxxxx
October 24, 2016	nanose conds HHMMSSxxxxxxxxx	microseconds HHMMSSxxxxxx000
September 18, 2017		nanoseconds HHMMSSxxxxxxxxx

1.4.6 Blank Fields vs. Space Characters

When a field has no meaningful content, it is generally left blank, meaning there are no characters between the delimiting pipe characters. Occasionally a field has a set of SIP-defined values which includes a space character as a valid value, usually meaning not applicable or normal. In this case, the field will contain a space character (ASCII 0x20) between the delimiting pipe characters.

Blank	
Space	11

1.4.7 Fields from One SIP Only

Certain fields contain data that is only published by one of the two SIPS: ie, published by CTA and not by UTP, or vice-versa. In these cases, the description of the field is marked CTA or UTP as appropriate. Unless otherwise specified, such a field will be blank for records originating with the other SIP.

1.5 ABBREVIATIONS

TERM	MEANING
BBO	Best Bid and Offer
LULD	Limit Up – Limit Down
MWCB	Market-Wide Circuit Breaker
NBB	National Best Bid
NBO	National Best Offer
NBBO	National Best Bid and Offer

2. Daily TAQ Master File

The Daily TAQ Master file contains static security information for all securities traded by participants of CTA and UTP. The Daily TAQ Master File is sorted by symbol.

	FIELD NAME	MAX SIZE	FORMAT	DESCRIPTION
1	Symbol	17	Symbol	Stock symbol in NYSE format
2	Security Description	500	Text	Name of listing. Full name/Security short description
3	CUSIP	9	Text	S&P's CUSIP security identifier.
4	Security Type	3	Text	 Identifies the type of the security: A = Common Stock B = Preferred Stock C = Warrant D = Rights E = Corporate Bond ETF = Exchange Traded Fund (includes Nasdaq and BATS listed ETPs) ETN = Exchange Traded Note G = Structured Product H = ADR Common I = ADR Preferred J = ADR Warrants K = ADR Rights P = Fund Q = Basket R = Unit S = Liquidating Trust U = Unknown
5	SIP Symbol	16	Symbol	Stock Symbol expressed in the format used by the SIP (CTA for Tapes A & B, UTP for Tape C).
6	Old Symbol	16	Symbol	If the symbol has changed, contains the previous symbol in NYSE format. blank = symbol did not change today
7	Test Symbol Flag	1	Text	 Indicates whether the security is a SIP test symbol and not an actual tradable security. Y = Test symbol N = Not a test symbol

	FIELD NAME	MAX SIZE	FORMAT	DESCRIPTION
8	Listed Exchange	1	Text	Listing exchange of the security. Primary Listing Market codes and description.
				See <u>Participant IDs</u> for codes
9	Таре	1	Text	The tape of this symbol. Valid values: A, B, C
10	Unit of Trade	3	Numeric	Minimum incremental size of a trade, in shares. Defaulted to 1.
11	Round Lot	3	Numeric	The number of shares the security quotes at. Valid values: 100,50,10,1
12	NYSE Industry Code	4	Text	The issue's industry code. Applies only to NYSE Group Listed securities (NYSE, NYSE American, NYSE Arca, NYSE National, and NYSE Chicago). See <u>NYSE Industry Codes</u> . blank = this is a non-NYSE security.
13	Shares Outstanding	10	Numeric	Total number of shares outstanding for the current day in millions, with no trailing or leading zeroes.
14	Halt Delay Reason	1	Text	Reason for the trading status of this security, such as Trading Halt. CTA Values D = News dissemination I = Order Imbalance M = LULD Trading Pause P = News Pending X = Equipment changeover Y = Sub-Penny Halt 1 = Market-Wide Circuit Breaker Level 1 – Breached 2 = Market-Wide Circuit Breaker Level 2 – Breached 3 = Market-Wide Circuit Breaker Level 3 – Breached blank = Reason Not Available UTP Values A = Halt News Pending B = Halt News Dissemination C = Single Stock Trading Pause In Affect D = Regulatory Halt Extraordinary Market Activity E = Halt ETF F = Trading Halted; For information requested

	FIELD NAME	MAX SIZE	FORMAT	DESCRIPTION
				 by NASDAQ G = Halt Non Compliance H = Halt Filings Not Current I = Halt SEC Trading Suspension J = Halt Regulatory Concern K = Operations Halt, Contact Market Operations L = IPO Issue not yet Trading M = Corporate Action N = Quotation Not Available O = Volatility Trading Pause P = Volatility Trading Pause – Straddle Condition Q = News and Resumption Times R = Single Stock Trading Pause/Quotation-Only Period S = Qualifications Issues Reviewed/Resolved; Quotations/Trading To Resume T = Filing Requirements Satisfied/Resolved; Quotations/Trading To Resume U = Issuer News Not Forthcoming; Quotations/Trading To Resume V = Qualifications Halt ended; maint. Req. met; Resume W = Qualifications Halt Concluded; Filings Met; Quotes/Trades To Resume X = Trade Halt Concluded By Other Regulatory Auth; Quotes/Trades Resume Y = New Issue Available Z = Issue Available I = Market Wide Circuit Breaker Halt – Level 1 2 = Market Wide Circuit Breaker Halt – Level 2 3 = Market Wide Circuit Breaker Halt – Level 3 4 = Market Wide Circuit Breaker Halt – Level 3 4 = Market Wide Circuit Breaker Halt – Carry over from previous day 5 = Market Wide Circuit Breaker Resumption 6 = IPO security – positioning window extension blank = Reason Not Available
15	Specialist Clearing Agent	4	Text	Specialist Clearing Firm (NYSE, NYSE American). blank = this is a non-NYSE/NYSE American security.
16	Specialist Clearing	4	Numeric	For NYSE/NYSE American listings, Specialist Clearing Number (if applicable).

	FIELD NAME	MAX SIZE	FORMAT	DESCRIPTION
	Number			blank = this is a non-NYSE/NYSE American security.
17	Specialist Post Number	2	Numeric	For NYSE/NYSE American listings, Specialist identifier. blank = this is a non-NYSE/NYSE American security.
18	Specialist Panel	2	Text	For NYSE/NYSE American listings, this symbol's trading floor location. blank = this is a non-NYSE security.
19	TradedOn NYSE American	1	Numeric	 Did the issue trade on NYSE American today: ■ 0 = No ■ 1 = Yes
20	TradedOn Nasdaq OMX BX	1	Numeric	 Did the issue trade on NASDAQ OMX BX today: 0 = No ■ 1 = Yes
21	TradedOn NYSE National	1	Numeric	 Did the issue trade on NYSE National today: 0 = No ■ 1 = Yes
22	TradedOn FINRA	1	Numeric	Did the issue trade on FINRA today: ■ 0 = No ■ 1 = Yes
23	TradedOn ISE	1	Numeric	Did the issue trade on ISE today: ■ 0 = No ■ 1 = Yes
24	TradedOn CBOE EDGA	1	Numeric	 Did the issue trade on CBOE EDGA Exchange today: 0 = No ■ 1 = Yes
25	TradedOn CBOE EDGX	1	Numeric	 Did the issue trade on CBOE EDGX Exchange today: 0 = No ■ 1 = Yes
26	TradedOn NYSE Chicago	1	Numeric	 Did the issue trade on NYSE Chicago today: 0 = No ■ 1 = Yes
27	TradedOn NYSE	1	Numeric	Did the issue trade on NYSE today: ■ 0 = No ■ 1 = Yes
28	TradedOn NYSE Arca	1	Numeric	Did the issue trade on NYSE Arca today: ■ 0 = No ■ 1 = Yes

	FIELD NAME	MAX SIZE	FORMAT	DESCRIPTION
29	Traded On Nasdaq	1	Numeric	Did the issue trade on Nasdaq today: ■ 0 = No ■ 1 = Yes
30	TradedOn CBSX	1	Numeric	Did the issue trade on CBSX today: ■ 0 = No ■ 1 = Yes
31	TradedOn PSX	1	Numeric	 Did the issue trade on NASDAQ OMX PHLX today: 0 = No 1 = Yes
32	TradedOn CBOE BYX	1	Numeric	Did the issue trade on CBOE BYX today: ■ 0 = No ■ 1 = Yes
33	TradedOn CBOE BZX	1	Numeric	Did the issue trade on CBOE BZX today: ■ 0 = No ■ 1 = Yes
34	TradedOn IEX	1	Numeric	Did the issue trade on IEX today: ■ 0 = No ■ 1 = Yes
35	Tick Pilot Indicator	1	Text	 Tick Pilot Securities Group C = Control Group - business as usual (\$0.01 increments) 1 = Group 1 Pilot securities in the first test group quoted in \$0.05 increments; trading is business as usual. 2 = Group 2 - Pilot securities in the second test group quoted in \$0.05 increments; trade in \$0.05 increments except for midpoint liquidity and retail orders. 3 = Group 3 - Pilot securities in the third test group quote in \$0.05 increments; trade in \$0.05 increments; protection is provided to displayed liquidity over dark liquidity at the same price, known as the "trade at" rule. blank = Not applicable (not part of the tick pilot program) Refer to: https://www.nyse.com/tick-pilot
36	Effective Date	8	Numeric	The date this security was admitted to trading. Format: YYYYMMDD Field may be blank in some cases, including symbols admitted before 2012.

ICE/NYSE

	FIELD NAME	MAX SIZE	FORMAT	DESCRIPTION
37	TradedOn LTSE	1	Numeric	Did the issue trade on LTSE today: ■ 0 = No ■ 1 = Yes
38	TradedOn MEMX	1	Numeric	Did the issue trade on MEMX today: ■ 0 = No ■ 1 = Yes
39	TradedOn MIAX	1	Numeric	Did the issue trade on MIAX today: ■ 0 = No ■ 1 = Yes

3. Daily TAQ Trades File

Every trade reported to the consolidated tape by all CTA and UTP participants.

The Daily TAQ Trades File is sorted by symbol, time, and message sequence number.

	FIELD NAME	MAX SIZE	FORMAT	DESCRIPTION
1	Time	15	Timestamp	Time the trade was published by the SIP
2	Exchange	1	Text	The ID of the exchange where the trade took place See <u>Participant IDs</u> for codes
3	Symbol	17	Symbol	Stock symbol
4	Sale Condition	4	Text	A special condition associated with the trade. Up to four codes are displayed per trade. CTA issues blank = Regular Trade (no associated conditions) B = Average Price Trade C = Cash Trade (Same Day Clearing) E = Automatic Execution F = Intermarket Sweep Order H = Price Variation Trade I = Odd Lot Trade K = Rule 127 (NYSE only) or Rule 155 Trade (NYSE American only) L = Sold Last (Late Reporting) M = Market Center Official Close N = Next Day Trade (Next Day Clearing) O = Market Center Opening Trade P = Prior Reference Price Q = Market Center Official Open R = Seller T = Extended Hours Trade U = Extended Hours (Sold Out of Sequence) V = Contingent Trade X = Cross Trade Z = Sold (Out of Sequence) A = Derivatively Priced S = Market Center Closing Trade G = Market Center Closing Trade A = Derivatively Priced S = Rarket Center Closing Trade G = Market Center Closing Trade A = Derivatively Priced S = Reserved P = Corrected Consolidated Close Price per the Listing Market

	FIELD NAME	MAX SIZE	FORMAT	DESCRIPTION
				<pre>UTP issues @ = Regular Trade A = Acquisition B = Bunched Trade C = Cash Sale D = Distribution E = Placeholder for future use F = Intermarket Sweep G = Bunched Sold Trade H = Price Variation Trade I = Odd Lot Trade K = Rule 155 Trade (NYSE American Only) L = Sold Last M = Market Center Close Price N = Next Day O = Opening Prints P = Prior Reference Price Q = Market Center Open Price R = Seller S = Split Trade U = Extended Trading Hours V = Stock-Option Trade W = Average Price Trade X = Cross Trade Y = Yellow Flag Z = Sold (Out of Sequence) I = Stopped Stock - Regular Trade 4 = Derivatively Priced S = Re-opening Prints F = Closing Prints F = Closing Prints F = Seller S = Re-opening Prints F = Seller S = Re-opening Prints S = Seller Trade Y = Yellow Flag Z = Sold (Out of Sequence) I = Stopped Stock - Regular Trade Y = Yellow Flag Z = Sold (Out of Sequence) S = Re-opening Prints S = Seller Trade Y = Yellow Flag Z = Sold (Cout of Sequence) S = Re-opening Prints G = Closing Prints S = Seller Trade Y = Yellow Flag S = Re-opening Prints S = Seller Trade Y = Yellow Flag Y = Seller Trade Y = Yellow Flag Y = Yellow Flag Y = Yellow Flag Y = Seller Trade Y = Yellow Flag Y = Seller Trade Y = Yellow Flag Y = Second Contingent Trade ("QCT") X = Placeholder for 611 Exempt Y = Secorrected Consolidated Close (per listing market) </pre>
5	Trade Volume	10	Numeric	The number of shares traded
6	Trade Price	21	Numeric	The share price of this trade
7	Trade Stop Stock Indicator	1	Text	CTA blank = UTP trade N = Not a Stop Stock trade Y = Stop Stock trade

	FIELD NAME	MAX SIZE	FORMAT	DESCRIPTION
				See the Glossary in the <u>CTS Specification</u>
8	Trade Correction Indicator	2	Numeric	 00 = Regular trade which was not corrected, changed or signified as cancel or error. 01 = Original trade which was late corrected (This record contains the original time - HHMM and the corrected data for the trade). 07 = Original trade which was later marked as erroneous 08 = Original trade which was later cancelled 10 = Cancel record (This record follows '08' records) 11 = Error record (This record follows '07' records) 12 = Correction record (This record follows '01' records and contains the correction time and the original "incorrect" data). The final correction will be published.
9	Sequence Number	16	<u>Sequence</u> Number	Message sequence number
10	Trade ID	20	Text	Identifier for tracking Trades. The TradelD is unique per participant per symbol per session within a trading session. For CTA symbols, (Tape A or B) this value is the CTA Participant Reference Number, which can be negative or 0.
11	SourceofTrade	1	Text	 C = CTA N = UTP
12	Trade Reporting Facility	1	Text	 The ID of the Trade Reporting Facility (TRF) / Exchange where trade was reported, if applicable. Identifies the Participant with whom a Trade Reporting Facility (TRF) has been formed. In cases of Bonds and Local Issues, which are not eligible for TRF transactions, the TRF Identifier field will be Space-filled. Possible values are: blank = The trade was reported directly by the participant B = FINRA / NASDAQ TRF Chicago N = FINRA / NASDAQ TRF Carteret (CTA) Q = FINRA / NASDAQ TRF Carteret (UTP) Space = Trade originates from FINRA Alternative

	FIELD NAME	MAX SIZE	FORMAT	DESCRIPTION
				Display Facility (UTP) See <u>Participant IDs</u> for codes
13	Participant Timestamp	15	<u>Timestamp</u>	Time when the trade was reported to the SIP.
14	Trade Reporting Facility (TRF) Timestamp	15	<u>Timestamp</u>	 A FINRA Alternative Display Facility (ADF) or A FINRA Trade Reporting Facility-provided timest Market-Wide Circuit Breaker Status amp. If from an Exchange or if the FINRA ADF does not have a proprietary quotation feed, then will be set to blank. If the FINRA ADF or a FINRA TRF provides a proprietary feed of its quotation information, then FINRA will publish the time of the quotation.
15	Trade Through Exempt Indicator	1	Numeric	 Denotes whether or not a trade is exempt from Trade Through rules (Rule 611). Used with certain Sale Conditions. 0 = Not a Trade Through 1 = Exempt Trade Through

4. Daily TAQ Quotes File

Every quote reported to the consolidated tape by all CTA and UTP participants.

The Daily TAQ Quotes (BBO) file is sorted by symbol, time, and message sequence number.

	FIELD NAME	MAX SIZE	FORMAT	DESCRIPTION
1	Time	15	Timestamp	Time the quote was published by the SIP
2	Exchange	1	Text	The Exchange that issued the quote. See <u>Participant IDs</u> for codes
3	Symbol	17	Symbol	Stock symbol
4	Bid Price	21	Numeric	The highest price any buyer is willing to pay for shares of this security.
5	Bid Size	10	Numeric	The maximum number of shares the highest bidder is willing to buy, in round lots.
6	Offer Price	21	Numeric	The lowest price any seller is willing to take for shares of this security.
7	Offer Size	10	Numeric	The maximum number of shares available at the offer price, in round lots.
8	Quote Condition	1	Text	 Denotes a particular condition applicable to the quote. Determines whether a quote qualifies for the Best Bid and Best Offer calculation. Condition of Quote issued: CTA Space = Quote Condition Not Applicable A = Slow on the Offer Side B = Slow on the Bid Side C = Closing E = Slow Quote on the Bid due to LRP or GAP Quote F = Slow Quote on the Offer due to LRP or GAP Quote H = Slow Quote on the Bid and Offer Sides L = Closed Market Maker (FINRA) N = Non-Firm Quote O = Opening Quote R = Regular, two-sided open quote (FINRA Open) U = Slow on the Bid and Offer Sides due to

	FIELD NAME	MAX SIZE	FORMAT	DESCRIPTION
				Liquidity Replenishment Point(LRP), or GAP Quote W = Slow Quote due to a Set Slow list on both the Bid and Offer sides 4 = On Demand Intra-Day Auction UTP A = Manual Ask, automated Bid B = Manual Bid, automated Ask F = Fast Trading H = Manual Bid and Ask I = Order Imbalance L = NBBO Closed Market Maker N = Non-firm quote O = Opening quote automated R = NBBO Regular, two-sided open quote U = Manual Bid and Ask (non-firm) X = Order Influx Y = NBBO Regular – One Sided Quote Z = No Open/no resume 4 = Intraday Auction
9	Sequence Number	20	<u>Sequence</u> <u>Number</u>	Message sequence number.
10	National BBO Indicator	1	Text	 The effect this quote has on the NBBO, on any quote appendage published by the SIP, and on the NBBO file. See Appendix G for a complete list of the National BBO Indicator codes. CTA A = No Best Bid change, No Best Offer change. New quote does not affect the Best Bid or Best Offer. No appendage is required (formerly '0'). G = Quote contains Best Bid, Quote contains Best Offer. New quote is itself the Best Bid and Best Offer. No appendage is required (formerly '1'). O= No Best Bid, No Best Offer. There is no Best Bid, and no Best Offer. No appendage is required (formerly '1'). T = Best Bid Short Appendage, Best Offer Short Appendage. A new Best Bid is generated and the new Best Bid information is contained in the Best Bid Short Appendage, a new Best Offer is generated and the new Best Offer information is

	FIELD NAME	MAX SIZE	FORMAT	DESCRIPTION
				 contained in the Best Offer Short Appendage (formerly '6'). U=Best Bid Long Appendage, Best Offer Long Appendage. A new Best Bid is generated and the new Best Bid information is contained in the Best Bid Long Appendage, a new Best Offer is generated and the new Best Offer information is contained in the Best Offer Long Appendage (formerly '4').
				 UTP 0 = This quote does not affect the NBBO. No appendage or NBBO record is required. 1 = No NBBO (eg outside of market hours). No Appendage or NBBO record is required. 2 = Short Form NBBO Appendage – A new NBBO is contained in NBBO file. 3 = Long Form NBBO Appendage - A new NBBO is contained in the NBBO File. 4 = This quote is itself the new NBBO. No appendage is required but an NBBO record is.
11	FINRA BBO (FBBO) Indicator	1	Text	CTA Indicates the effect this quote has on the FINRA BBO. Space = Not Applicable A = No FINRA BBO change B = FINRA BBO does not exist For UTP-published messages, this field is blank.
12	FINRA ADF MPID Appendage Indicator	1	Numeric	 Denotes the type of appendage to be included. If the FINRA ADF participant's BBO quotation impacts their single participant at either the Bid or Offer side of their market for the issue, a FINRA ADF MPID Appendage will be added. This appendage will include the ADF's single participant for its best bid and size and/or the ADF's single participant for its best offer and size. FINRA ADF MPID for UTP: 0 = No ADF MPID changes – Current ADF quote does not affect the FINRA MPID. No

	FIELD NAME	MAX SIZE	FORMAT	DESCRIPTION
				 appendage. 1 = No ADF MPID exists –No appendage. 2 = ADF MPID(s) attached - A new FINRA MPID is contained in the attached appendage. 3 = Not Applicable – Quote originates from a non-FINRA UTP participant . No appendage.
13	Quote Cancel/ Correction	1	Text	 Indicates that this record is a cancel or a correction of a previous quote blank = Not a Cancel Quote B = Cancel quote/Cancel Price Indication/Cancel Trading Range Indication C = Corrected Price Indication
14	Source of Quote	1	Text	 C = CTA N = UTP
15	Retail Interest Indicator (RPI)	1	Text	 Indicates the presence of Retail Price Improvement (RPI) interest between the Bid and the Offer blank = Retail Interest not applicable A = Retail Interest on Bid Quote B = Retail Interest on Offer Quote C = Retail Interest on the Bid and Offer Quotes
16	Short Sale Restriction Indicator	1	Text	 Short Sale Restriction status A Short Sale Restriction is to be in effect if a security's price decreases by 10% or more from the previous day's closing price. Once activated, the Short Sale Restriction will remain in effect for the remainder of the day as well as the following day, unless deactivated. CTA: blank = Short Sales Restriction Not in Effect A = Short Sales Restriction Activated C = Short Sales Restriction Deactivated D = Short Sales Restriction in Effect E = Short Sales Restriction in Effect

	FIELD NAME	MAX SIZE	FORMAT	DESCRIPTION
				 UTP: 0 = No Price test in effect 1 = Reg SHO in effect due to an intra-day price drop in security 2 = Reg SHO Restriction remains in effect
17	LULD BBO Indicator	1	Text	 blank = LULD Not Applicable A = Bid Price above Upper Limit Price Band – Bid is Non Executable B = Offer Price below Lower Limit Price Band – Offer is Non-Executable C = Bid Offer outside price band -Non Executable
18	SIP-generated Message Identifier	1	Text	 Originator of the message blank = originated from a market participant E = originated from a SIP
19	NBBO LULD Indicator	1	Text	 LULD Limit Price Band effect on the NBB and NBO blank = LULD Not Applicable A = NBB and/or NBO are Executable B = NBB below Lower Band – NBB is Non-Executable C = NBO above Upper Band – NBO is Non-Executable D = NBB below Lower Band and NBO above Upper Band – NBB and NBO are Non-Executable E = NBB equals Upper Band – NBB is in Limit State F = NBO equals Lower Band and NBO above Upper Band – NBB is in Limit State G = NBB equals Upper Band – NBO is in Limit State G = NBB equals Upper Band and NBO above Upper Band – NBB is in Limit State and NBO is Non-Executable H = NBB below Lower Band and NBO equals Lower Band – NBB is Non-Executable and NBO is in Limit State I = NBB equals Upper Band and NBO equals Lower Band – NBB is Non-Executable and NBO is in Limit State
20	Participant Timestamp	15	<u>Timestamp</u>	Time the quote was published by the Participant to the SIP.
21	FINRA ADF	15	<u>Timestamp</u>	A FINRA ADF- or a FINRA TRF-provided timestamp.

	FIELD NAME	MAX SIZE	FORMAT	DESCRIPTION
	Timestamp			Blank = From an Exchange or the FINRA ADF or a FINRA TRF Facility does not have a proprietary quote feed
22	FINRA ADF Market Participant Quote Indicator	1	Text	 UTP - FINRA ADF Market Participant Quote Indicator representing the Top of book quotations for each FINRA ADF participant 0 = This quote is the BBO from the FINRA ADF 1 = This quote is from a single FINRA ADF venue blank = This quote is from CTA or UTP, not from a FINRA ADF
23	Security Status Indicator	2	Text	The Security Status Indicator field is used to report trading suspensions in a security, price indications, trading range indications, LULD Price Bands and Market Wide Circuit Breaker activity. See Appendix H for a complete list of the Security Status Indicator codes.

5. Daily TAQ NBBO File

The Daily TAQ NBBO file is a record of all quotes that cause the NBBO to change. The file shows the exchange and quote that caused the change and also provides the NBBO and the exchange(s) that is/are currently setting the NBBO.

However, if a quote sets both the National Best Bid and the National Best Offer, that quote is not included in the Daily TAQ NBBO file. These records are found in the TAQ Daily Quote file where the NBBO Indicator is "G" for CTA securities (src = "C") or the NASD Indicator is "4" for UTP securities (src = "N").

	FIELD	MAX SIZE	FORMAT	DESCRIPTION
1	Time	15	<u>Timestamp</u>	Time the quote was published by the SIP
2	Exchange	1	Text	The Exchange that issued the quote See <u>Participant IDs</u> for codes
3	Symbol	17	<u>Symbol</u>	Stock symbol
4	Bid Price	21	Numeric	The highest price any buyer is willing to pay for shares of this security.
5	Bid Size	10	Numeric	The maximum number of shares the highest bidder is willing to buy, in round lots.
6	Offer Price	21	Numeric	The lowest price any seller is willing to take for shares of this security.
7	Offer Size	10	Numeric	The maximum number of shares available at the offer price, in round lots.
8	Quote Condition	1	Text	 Special condition applicable to the quote CTA Space = Quote Condition Not Applicable A = Slow on the Offer Side B = Slow on the Bid Side C = Closing E = Slow Quote on the Bid due to LRP or GAP Quote F = Slow Quote on the Offer due to LRP or GAP Quote H = Slow Quote on the Bid and Offer Sides

The Daily TAQ NBBO File is sorted by symbol, time, and message sequence number.

	FIELD	MAX SIZE	FORMAT	DESCRIPTION
				 L = Closed Market Maker (FINRA) N = Non-Firm Quote O = Opening Quote R = Regular, two-sided open quote (FINRA Open) U = Slow on the Bid and Offer Sides due to Liquidity Replenishment Point(LRP), or GAP Quote W = Slow Quote due to a Set Slow list on both the Bid and Offer sides 4 = On Demand Intra-Day Auction UTP A = Manual Ask, automated Bid B = Manual Bid, automated Ask F = Fast Trading H = Manual Bid and Ask I = Order Imbalance L = NBBO Closed Market Maker N = Non-firm quote O = Opening quote automated R = NBBO Regular, two-sided open quote U = Manual Bid and Ask (non-firm) X = Order Influx Y = NBBO Regular – One Sided Quote Z = No Open/no resume 4 = Intraday Auction
9	Sequence Number	20	<u>Sequence</u> Number	Message sequence number.
10	National BBO Indicator	1	Text	 Indicates the affect the new quote has on the NBBO. Denotes the type of appendage to be included. See Appendix G for a complete list of the National BBO Indicator. CTA - NBBO Indicator: T = Best Bid Short Appendage, Best Offer Short Appendage. A new Best Bid is generated and the new Best Bid information is contained in the Best Bid Short Appendage, a new Best Offer is generated and the new Best Offer

	FIELD	MAX SIZE	FORMAT	DESCRIPTION
				 information is contained in the Best Offer Short Appendage (formerly "6"). U = Best Bid Long Appendage, Best Offer Long Appendage. A new Best Bid is generated and the new Best Bid information is contained in the Best Bid Long Appendage, a new Best Offer is generated and the new Best Offer information is contained in the Best Offer Long Appendage (formerly "4"). UTP - NBBO Appendage Indicator: 2 = Short Form NBBO Appendage Attached – A new NBBO was generated as a result of the UTP participant's quote update and the new information is contained in the short form appendage (NBBO File) 3 = Long Form of NBBO Appendage - A new NBBO was generated as a result of the UTP participant's quote update and the new BBO information is contained in the Long NBBO
				appendage (NBBO File). See <u>UTP Specification</u>
11	FINRA BBO Indicator	1	Text	CTA FINRA BBO Indicator indicates the effect this quote has on the FINRA BBO: Space = Not Applicable A = No FINRA BBO change B = FINRA BBO does not exist See <u>CTA Specifications</u>
12	FINRA ADF MPID Indicator	1	Numeric	UTP Denotes the type of appendage to be included. If the FINRA ADF participant's BBO quotation impacts their single participant at either the Bid or Offer side of their

	FIELD	MAX SIZE	FORMAT	DESCRIPTION
				market for the issue, a FINRA ADF MPID Appendage will be added. This appendage will include the ADF's single participant for its best bid and size and/or the ADF's single participant for its best offer and size.
				 FINRA ADF MPID for UTP: 0 = No ADF MPID changes – Current ADF quote does not affect the FINRA MPID. No appendage. 1 = No ADF MPID exists – No appendage. 2 = ADF MPID(s) attached - A new FINRA MPID is contained in the appendage. 3 = Not Applicable – Quote originates from a UTP participant other than the FINRA. No appendage. See <u>UTP Specification</u>
13	Quote Cancel/ Correction	1	Text	 Indicates that this record is a cancel or a correction of a previous quote. CTA only: blank = Not a Cancel Quote B = Cancel quote, Cancel Price Indication, or Cancel Trading Range Indication C = Corrected Price Indication
14	Source of Quote	1	Text	Originating SIP of this message C = CTA N = UTP
15	Best Bid Quote Condition	1	Text	See <u>Quote Condition Codes</u> for valid values
16	Best Bid Exchange	1	Text	The Exchange associated with the Best Bid See <u>Participant IDs</u> for codes
17	Best Bid Price	21	Numeric	The Best Bid Price on a consolidated basis
18	Best Bid Size	10	Numeric	The Bid Size associated with the Best Bid Price on a consolidated basis, in units of trade
19	Best Bid FINRA Market Maker ID	4	Text	Best Bid FINRA Market Maker ID (Long Appendage)

	FIELD	MAX SIZE	FORMAT	DESCRIPTION
20	Best Offer Quote Condition	1	Text	See <u>Quote Condition Codes</u> for valid values
21	Best Offer Exchange	1	Text	The Exchange associated with the Best Offer: See <u>Participant IDs</u> for codes
22	Best Offer Price	21	Numeric	The Best Offer Price on a consolidated basis
23	Best Offer Size	10	Numeric	The Offer Size associated with the Best Bid Price, in units of trade
24	Best Offer FINRA Market Maker ID	4	Text	Best Offer FINRA Market Maker ID (Long Appendage)
25	LULD BBO Indicator	1	Text	 Indicates whether the participant quote is executable due to the price bands for the issue. blank = LULD Not Applicable A = Bid Price above Upper Limit Price Band –Bid is Non-Executable B = Offer Price below Lower Limit Price Band – Offer is Non-Executable C = Bid and Offer outside price band - not executable
26	NBBO LULD Indicator	1	Text	 LULD Limit Price Band effect on the NBB and NBO blank = LULD Not Applicable A = NBB and/or NBO are Executable B = NBB below Lower Band – NBB is Non-Executable C = NBO above Upper Band – NBO is Non-Executable D = NBB below Lower Band and NBO above Upper Band – NBB and NBO are Non-Executable E = NBB equals Upper Band – NBB is in Limit State F = NBO equals Lower Band – NBO is in Limit State G = NBB equals Upper Band and NBO above Upper Band – NBB is in Limit State H = NBB equals Upper Band and NBO above Upper Band – NBB is in Limit State and NBO above Upper Band – NBB is in Limit State and NBO above Upper Band – NBB is in Limit State and NBO above Upper Band – NBB is in Limit State and NBO is Non-Executable H = NBB below Lower Band and NBO equals Lower Band – NBB is Non-Executable and NBO is in Limit State I = NBB equals Upper Band and NBO equals Lower Band – NBB is NON-Executable and NBO is in Limit State
27	SIP-generated Message	1	Text	Valid values: E = originated from a SIP (CTA or UTP)

	FIELD	MAX SIZE	FORMAT	DESCRIPTION
	Identifier			 blank = originated from a participant
28	Participant Timestamp	15	<u>Timestamp</u>	Timestamp when this quote was submitted to the SIP
29	FINRA ADF Timestamp	15	<u>Timestamp</u>	The time when FINRA ADF or FINRA TRF published this quote to its proprietary feed. blank = this quote is from an Exchange or the FINRA ADF or FINRA TRF Facility does not have a proprietary quotation feed
30	Security Status Indicator	2	Text	The Security Status Indicator field is used to report trading suspensions in a security, price indications, trading range indications, LULD Price Bands and Market Wide Circuit Breaker activity. When the Security Status Indicator is provided, the Quote Condition field must be space filled. If the Security Status Indicator is populated with either a regulatory or a non-regulatory status (other than Market Wide Circuit Breaker Levels), it will result in the NBBO being recalculated excluding the Participant from the NBBO if that Participant was part or all of the NBBO. See Appendix H for a complete list of the Security Status Indicator codes.

6. Daily TAQ Quote LULD File

All Limit-up/Limit-down Price Band messages published by CQS and UQDF.

The Daily TAQ Quote LULD File is sorted by time.

	FIELD	MAX SIZE	FORMAT	DESCRIPTION
1	Time	15	<u>Timestamp</u>	Time this message was published by the SIP
2	Sequence Number	20	Numeric	Message sequence number
3	Source	1	Text	 C = CTA N = UTP
4	Symbol	17	<u>Symbol</u>	Stock symbol
5	LULD Price Band Indicator	1	Text	 The LULD Price Band Indicator denotes the event that initiated the price band message being disseminated. UTP A = Opening Update B = Intra-Day Update C = Restated Value D = Suspended during trading halt or trading pause E = Re-Opening Update F = Outside price band rule hours X = Auction extension (Auction Collar message) blank = None provided CTA X = Auction extension (Auction Status message) blank = All other events
6	Low Price	21	Numeric	If LULD Price Band Indicator = X, Low Price is the Lower Auction Collar Price for this security, otherwise it is the LULD Lower Limit Price Band. Note that Price Bands are 0 during trading pauses.
7	High Price	21	Numeric	If LULD Price Band Indicator = X, High Price is the Upper Auction Collar Price for this security, otherwise it is the LULD Upper Limit Price Band. Note that Price Bands are 0 during trading pauses.

	FIELD	MAX SIZE	FORMAT	DESCRIPTION
8	NBBO LULD Indicator	1	Text	 LULD Limit Price Band effect on the NBB and NBO blank = LULD Not Applicable A = NBB and/or NBO are Executable B = NBB below Lower Band – NBB is Non- Executable C = NBO above Upper Band – NBO is Non- Executable D = NBB below Lower Band and NBO above Upper Band – NBB and NBO are Non-Executable E = NBB equals Upper Band – NBB is in Limit State F = NBO equals Lower Band and NBO above Upper Band – NBB is in Limit State G = NBB equals Upper Band – NBO is in Limit State G = NBB equals Upper Band and NBO above Upper Band – NBB is in Limit State and NBO is Non- Executable H = NBB below Lower Band and NBO equals Lower Band – NBB is Non-Executable and NBO is in Limit State I = NBB equals Upper Band and NBO equals Lower Band (Crossed - NOT in Limit State)
9	Reference Price	21	Numeric	If LULD Price Band Indicator = X, this field is the Auction Collar Reference Price, otherwise it is blank.
10	Num Extensions	3	Numeric	If LULD Price Band Indicator = X,this field is the number of extensions the current auction has received, otherwise, it is blank.

7. Daily TAQ Trade LULD File

All Limit-up/Limit-down Price Band messages published by CTS and UTDF.

The Daily TAQ Trade LULD File is sorted by time.

	FIELD	MAX SIZE	FORMAT	DESCRIPTION
1	Time	15	<u>Timestamp</u>	Time of message published by the SIP
2	Sequence Number	20	Numeric	The Message Sequence Number
3	Source	1	Text	 C = CTA N = UTP
4	Symbol	17	<u>Symbol</u>	Stock symbol
5	Low Price	21	Numeric	If LULD Price Band Indicator = X, Low Price is the Lower Auction Collar Price for this security, otherwise it is the LULD Lower Limit Price Band. Note that Price Bands are 0 during trading pauses.
6	High Price	21	Numeric	If LULD Price Band Indicator = X, High Price is the Upper Auction Collar Price for this security, otherwise it is the LULD Upper Limit Price Band. Note that Price Bands are 0 during trading pauses.
7	LULD Price Band Indicator	1	Text	CTA: Identifies the LULD action (e.g., Price Bands, Consolidated Quotation system NBBO Limit State Entered/Exited) related to a security blank = LULD Not Applicable A = LULD Price Band B = Republished LULD Price Band C = NBB Limit State Entered D = NBB Limit State Entered E = NBO Limit State Entered F = NBO Limit State Entered G = NBB and NBO Limit State Entered H = NBB and NBO Limit State Exited I = NBB Limit State Entered and NBO Limit State Exited J = NBB Limit State Entered and NBO Limit State Entered

	FIELD	MAX SIZE	FORMAT	DESCRIPTION
				 X = Auction extension (Auction Status message) UTP: Denotes the event that initiated the price band message being disseminated. A = Opening Update B = Intra-Day Update C = Restated Value D = Suspended during trading halt or trading pause E = Re-Opening Update F = Outside price band rule hours X = Auction extension (Auction Collar message) blank = None provided
8	Reference Price	21		If LULD Price Band Indicator = X, this field is the Auction Collar Reference Price, otherwise it is blank.
9	Num Extensions	3		If LULD Price Band Indicator = X, this field is the number of extensions the current auction has received, otherwise, it is blank.

8. Daily TAQ CTA Admin File

Administrative messages disseminated by CTA.

The Daily TAQ CTA Admin File is sorted by Symbol, Time and Message sequence number.

	FIELD	MAX SIZE	FORMAT	DESCRIPTION
1	Timestamp	15	<u>Timestamp</u>	Time of message published by the SIP
2	Symbol	17	<u>Symbol</u>	Stock symbol
3	Message Category	1	Text	 M = Market Status
4	Message Type	1	Text	 If Message Category = M, this field contains K = Market-Wide Circuit Breaker Decline Level Status L = Market-Wide Circuit Breaker Status
5	Sequence Number	20	<u>Sequence</u> Number	Message Sequence Number
6	Participant Identifier	1	Text	Participant ID of the Exchange or SIP that initiated the message. See <u>Participant IDs</u> for codes.
7	Participant Timestamp	15	<u>Timestamp</u>	Participant-provided timestamp (Timestamp 1)
8	Financial Status	1	Text	 The financial status of the security. 0 = Not Bankrupt / Not Below Continuing Listing Standards/Not Late Filing/ Not Creations Suspended (for Exchange Traded Products) / Not Redemptions Suspended (for Exchange Traded Products) / Not Liquidation (for Exchange Traded Products) 1 = Bankrupt 2 = Below Continuing Listing Standards (For NYSE, NYSE American & Regional Listings) 3 = Bankrupt & Below Continuing Listing Standards (For NYSE, NYSE American & Regional Listings) 4 = Late Filing 5 = Bankrupt & Late Filing 6 = Below Continuing Listing Standards & Late Filing (For NYSE, NYSE American & Regional

	FIELD	MAX	FORMAT	DESCRIPTION
		SIZE		
				 Listings) 7 = Bankrupt, Below Continuing Listing Standards & Late Filing (For NYSE, NYSE American & Regional Listings) 8 = Creations Suspended (for Exchange Traded Products) 9 = Redemptions Suspended (for Exchange Traded Products) A = Liquidation (for Exchange Traded Products)
9	Reserved	1	Text	blank (ignore any content)
10	Security Status	1	Text	 The trading status applicable to this transaction. 2 = Trading Halt 3 = Resume 5 = Price Indication 6 = Trading Range Indication 7 = Market Imbalance Buy 8 = Market Imbalance Sell 9 = Market On Close Imbalance Buy A = Market On Close Imbalance Sell B = Reserved C = No Market Imbalance D = No Market On Close Imbalance E = Short Sale Restriction F = LULD
11	Halt Reason	1	Text	 The reason for the Trading Halt. See Appendix B in the CTA Specifications for definition of values. space = not applicable D = News Dissemination I = Order Imbalance M = LULD Trading Pause P = News Pending X = Operational Y = Sub-Penny Trading 1 = Market-Wide Circuit Breaker Level 1 – Breached 2 = Market-Wide Circuit Breaker Level 2 – Breached 3 = Market-Wide Circuit Breaker Level 3 –

	FIELD	MAX SIZE	FORMAT	DESCRIPTION
				Breached
12	Reserved	1	Text	 ASCII '0' (ignore any content)
13	Reserved	1	Text	 ASCII '0' (ignore any content)
14	Last Price	21	Price	Last Price
15	Reserved	1	Numeric	 blank
16	Upper Price	21	<u>Price</u>	 Upper price band value for a security. This field = the LULD upper limit price band when Security Status field = F (LULD) and LULD Indicator field = A or B (LULD Price Bands) This field = the Indication High Price when Security Status field = 5 (Price Indication) This field is blank when no LULD Price Bands or Price Indications are in effect for this security
17	Lower Price	21	<u>Price</u>	 Lower price band value for a security. This field = the LULD lower limit price band when Security Status field = F (LULD) and LULD Indicator field = A or B (LULD Price Bands) This field = the Indication Low Price when Security Status field = 5 (Price Indication) This field is blank when no LULD Price Bands or Price Indications are in effect for this security
18	Buy Volume	10	Numeric	The reported imbalance of buy orders without matching sell orders for this security and Participant. See Appendix B for Market Imbalance and Market on Close Imbalance (MOC) definitions. See Appendix B in the <u>CTA Specifications</u> for definition of values.
19	Sell Volume	10	Numeric	The reported imbalance of sell orders without matching buy orders for this security and Participant. See Appendix B for Market Imbalance and Market on Close Imbalance (MOC) definitions. See Appendix B in the <u>CTA Specifications</u> for definition

	FIELD	MAX	FORMAT	DESCRIPTION
		SIZE		
				of values.
20	Short Sale Restriction Indicator	1	Text	Identifies whether a Short Sale Restriction is in effect for a security. A Short Sale Restriction goes into effect if a security's price decreases by 10% or more from the previous day's closing price. Once activated, the Short Sale Restriction remains in effect for the remainder of the day as well as the following day, unless deactivated. blank = Short Sales Restriction Not in Effect A = Short Sales Restriction Activated C = Short Sales Restriction Continued D = Short Sales Restriction Deactivated E = Short Sales Restriction in Effect
21	LULD Indicator	1	Text	Identifies the LULD action related to a security (e.g., Price Bands, NBBO Limit State Entered/Exited). When this field = A or B, the price band values will be contained in the Upper Price and Lower Price fields. blank = LULD Not Applicable A = LULD Price Band B = Republished LULD Price Band C = NBB Limit State Entered D = NBB Limit State Entered E = NBO Limit State Entered F = NBO Limit State Exited G = NBB and NBO Limit State Entered H = NBB and NBO Limit State Exited J = NBB Limit State Entered and NBO Limit State Exited J = NBB Limit State Entered and NBO Limit State Exited
22	MWCB Decline Level 1	12	Text	The daily Level 1 MWCB trigger value (7% of the Previous Close of the S&P 500 Value) An index value (not a price) with implied 2 decimal places.
23	MWCB Decline Level 2	12	Text	The daily Level 1 MWCB trigger value (13% of the Previous Close of the S&P 500 Value) An index value (not a price) with implied 2 decimal places.

	FIELD	MAX SIZE	FORMAT	DESCRIPTION
24	MWCB Decline Level 3	12	Text	The daily Level 1 MWCB trigger value (20% of the Previous Close of the S&P 500 Value) An index value (not a price) with implied 2 decimal places.
25	MWCB Status	1	Text	Set to non-blank when the MWCB threshold level that has been breached. Each Level will be disseminated only once during the trading day, unless a Level is breached as a result of erroneous activity. The most recently disseminated breached Level will be in effect. Valid values: 1, 2, 3 Blank = no MWCB level has been breached
26	Message Text	1,000	Text	Text of the administrative message

9. Daily TAQ UTP Admin File

Administrative messages disseminated by UTP .

The Daily TAQ UTP Admin file is sorted by Symbol, Time and Message sequence number.

	FIELD	MAX SIZE	FORMAT	DESCRIPTION
1	Timestamp	15	<u>Timestamp</u>	Time of message published by the SIP
2	Symbol	17	<u>Symbol</u>	Stock symbol
3	Message Category	1	Text	 A = Administrative
4	Message Type	1	Text	 Valid values for UTP: A = General Administrative B = Issue Symbol Directory C = Market Wide Circuit Breaker Decline D = Market Wide Circuit Breaker Status H = CROSS SRO Trading Action K = Market Center Trading Action P = Limit Up –Limit Down Price Band V = Reg SHO Short Sale Restriction Indicator
5	Sequence Number	20	<u>Sequence</u> <u>Number</u>	Message Sequence Number
6	Market Center OriginatorID	1	Text	The ID of the UTP participant that originated the message. See <u>Participant IDs</u> for codes
7	Sub-Market Center Identifier	1	Text	 The ID of the originating market center of a FINRA reported trading action. See <u>Participant IDs</u> for codes blank = No sub-market; Message originates from FINRA Alternative Display Facility.
8	Participant Timestamp	15	<u>Timestamp</u>	Participant-provided timestamp (Timestamp 1)
9	Financial Status Indicator	1	Text	 Identifies the financial status of this security: C = Creations and/or Redemptions Suspended for Exchange Traded Product

	FIELD	MAX	FORMAT	DESCRIPTION
		SIZE		
				 D = Deficient: Issuer Failed to Meet NASDAQ Continued Listing Requirements E = Delinquent: Issuer Missed Regulatory Filing Deadline Q = Bankrupt: Issuer Has Filed for Bankruptcy N = Normal (Default): Issuer Is NOT Deficient, Delinquent, or Bankrupt G = Deficient and Bankrupt H = Deficient and Delinquent J = Delinquent and Bankrupt K = Deficient, Delinquent, and Bankrupt blank = no value provided
10	Short Sale Threshold Indicator	1	Text	 Short Sales Threshold Indicator: Y= Issue is restricted N = Issue is not restricted blank = Threshold Indicator Not Available
11	Short Sale Restriction Indicator	1	Numeric	 Identifies the Reg SHO short sale price test status for a NASDAQ-listed issue at the time of dissemination: 0 = No Price test in effect 1 = Reg SHO in effect due to an intraday price drop in security 2 = Reg SHO Restriction remains in effect
12	Trading Action Code	1	Text	 Trade Action Code H = Trading Halt Q = Quotation Resumption T = Trading Resumption P = Volatility Trading Pause Z = Regular Trading In Effect blank = no value provided
13	Trading Action Sequence Number	21	Sequence Number	UTP Trading Action Sequence Number
14	Trading Action	15	Timestamp	Timestamp of when the action occurred

	FIELD	MAX	FORMAT	DESCRIPTION
		SIZE		
	Timestome			
	Timestamp			
15	Trading Action	6	Text	Trading Action Reason Code for UTP:A = Halt News Pending
	Reason			 B = Halt News Dissemination
				 C = Single Stock Trading Pause In Affect
				 D = Regulatory Halt Extraordinary Market Activity
				 E = Halt ETF
				 F = Trading Halted; For information requested by NASDAQ
				 G = Halt Not Compliance
				 H = Halt Filings Not Current
				 I = Halt Trading Suspension
				 J = Halt Regulatory Concern
				 K = Operations Halt, Contact Market Operations
				 L = IPO Issue not yet Trading
				 M = Corporate Action
				 N = Quotation Not Available
				 O = Volatility Trading Pause D = Volatility Trading Pause
				 P = Volatility Trading Pause – Straddle Condition A News and Pause Times
				 Q = News and Resumption Times B = Single Stock Trading Pause /Quotation-Only
				 R = Single Stock Trading Pause/Quotation-Only Period
				 S = Qualifications Issues Reviewed/Resolved;
				Quotations/Trading to Resume
				 T = Filing Requirements Satisfied/Resolved;
				Quotations/Trading To Resume
				 U = Issuer News Not Forthcoming; Outstations (Trading To Desume)
				Quotations/Trading To ResumeV = Qualifications Halt ended; maint. Req. met;
				Resume
				 W = Qualifications Halt Concluded; Filings Met;
				Quotes/Trades To Resume
				 X = Trade Halt Concluded By Other Regulatory
				Auth,; Quotes/Trades Resume
				 Y = New Issue Available
				 Z = Issue Available
				 A1 = Market Wide Circuit Breaker Halt – Carry over
				from previous day
				 A2 = Market Wide Circuit Breaker Resumption
				 A3 = IPO security released for quotation

	FIELD	MAX SIZE	FORMAT	DESCRIPTION
				 A4 = IPO security – positioning window extension 1 = Market Wide Circuit Breaker Halt – Level 1 2 = Market Wide Circuit Breaker Halt – Level 2 3 = Market Wide Circuit Breaker Halt – Level 3 blank = Reason not provided
16	LULD Lower Limit Price Band	21	Numeric	The lower band price for this security. During a trading pause, this field = 0.
17	LULD Upper Limit Price Band	21	Numeric	The upper band price for this security. During a trading pause, this field = 0.
18	LULD Price Band Indicator	1	Text	 Indicates the event that initiated this price band message: A = Opening Update B = Intra-Day Update C = Restated Value D = Suspended during trading halt or trading pause E = Re-Opening Update F = Outside price band rule hours blank = None provided
19	MWCB Decline Level 1	12	Text	Informs participants and the UTP data recipients what the daily MWCB breach points are set to for the current trading day. MWCB Decline Level 1 Breached (7% of the Previous Close of the S&P 500 Value)
20	MWCB Decline Level 2	12	Text	MWCB Decline Level 2 Breached (13% of the Previous Close of the S&P 500 Value)
21	MWCB Decline Level 3	12	Text	MWCB Decline Level 3 Breached (20% of the Previous Close of the S&P 500 Value)
22	MWCB Status	1	Numeric	Informs participants and the UTP data recipients when a MWCB has breached one of the established levels. The MWCB Status message will be generated once for each level if the S&P 500 declines past the established breaker decline level for the trading day.

	FIELD	MAX SIZE	FORMAT	DESCRIPTION
				 1 = MWCB Level 1 2 = MWCB Level 2 3 = MWCB Level 3
23	Message Text	1,000	Text	Text of the administrative message

10. APPENDIX A: BBO QUALIFYING CONDITIONS

Quote conditions that are eligible to be the best bid or offer.

Source: CTA Specifications

CODE	BBO QUALIFYING QUOTE CONDITIONS
Α	Slow Quote on the Offer Side
В	Slow Quote on the Bid Side
Н	Slow Quote on the Bid and Offer Sides
0	Opening Quote
R	Regular Quote (FINRA – Market Marker Open)
W	Slow Quote due to a Set Slow list on both the Bid and Offer sides

11. APPENDIX B: NYSE STOCK SYMBOL SUFFIXES

SUFFIX	DESCRIPTION
<v></v>	<v> represents a character; Series (or Class) A-T & V-Z Example: ZZZ A is the same as ZZZ.A</v>
<v>CL</v>	Series (or Class) A-T & V-Z Called. Example: ZZZ ACL is the same as ZZZ.A.CL
<v>CV</v>	Series (or Class) A-T & V-Z Convertible. Example: ZZZ ACV is the same as ZZZ.A.CV
<v>WI</v>	Series (or Class) A-T & V-Z When Issued. Example: ZZZ AWI is the same as ZZZ.Aw
CL	Called. Example: ZZZ CL is the same as ZZZ.CL
ст	Certificates. Example: ZZZ CT is the same as ZZZ.CT
cv	Convertible. Example: ZZZ CV is the same as ZZZ.CV (ZZZ.CV)
CVR	Contingent Value Right. Example: ZZZ CVR is the same as ZZZ.CVR
CVCL	Convertible Called. Example: ZZZ CVCL is the same as ZZZ.CV.CL
DP	Amount of most-recent dividend togo "ex-distribution". Example: ZZZ DP is the same as ZZZ.DP
DV	Accumulated dividend per share, net of expenses, through and including the previous day's close of trading. Example: ZZZ DV is the same as ZZZ.DV
EC	Emerging Company Marketplace. Example: ZZZ EC is the same as ZZZ.EC
EU	Estimated cash amount for creation unit. Example: ZZZ EU is the same as ZZZ.EU

FN	Foreign News. Example: ZZZ FN is the same as ZZZ.F.N
ID	Index – differentiates an index from a stock with the same root symbol. Example: III ID is the same as III.ID
IV	Intra-day Net Asset Value per share. Example: ZZZ IV is the same as ZZZ.IV
NV	Net Asset Value per share, as of the close on the previous trading day. Example: ZZZ NV is the same as ZZZ.NV
РР	Partial Paid. Example: ZZZ PP is the same as ZZZ.PP
PTCL	Part Called.
	Example: ZZZ PTCL is the same as ZZZ.PT.CL
PR	Preferred. Example: ZZZ PR is the same as ZZZp
PR <v></v>	<v> represents a character; Preferred Series A-T & V-Z. Example: ZZZ PRA is the same as ZZZpA ZZZ, PRB is the same as ZZZpB</v>
PR <v>CL</v>	<v> represents a character; Preferred Series A-T & V-Z Called. Example: ZZZ PRACL is the same as ZZZpA.CL ZZZ, PRBCL is the same as ZZZpB.CL</v>
PR <v>CV</v>	<v> represents a character; Preferred Series A-T & V-Z Convertible. Example: ZZZ PRACV is the same as ZZZpA.CVZZZ, PRBCV is the same as ZZZpB.CV</v>
PR <v>WI</v>	<v> represents a character; Preferred Series A-T & V-Z When Issued. Example: ZZZ PRAWI is the same as ZZZpAw ZZZ, PRBWI is the same as ZZZpBw</v>
PRWI	Preferred When Issued. Example: ZZZ PRWI is the same as ZZZpw
PRCL	Preferred Called. Example: ZZZ PRCL is the same as ZZZp.CL
PRCV	Preferred Convertible. Example: ZZZ PRCV is the same as ZZZp.CV
PRWD	Preferred When Distributed. Example: ZZZ PRWD is the same as ZZZp. WD
PRC <v></v>	Indicates Class A; could also be B-K and M-S; Second Category of Preferred. Example: ZZZ PRCA is the same as ZZZpCA ZZZ, PRCB is the same as ZZpCB
RT	Rights. Example: ZZZ R is the same as ZZZr
RWI	Rights When Issued. Example: ZZZ RWI is the same as ZZZrw
SC	Small Corporate Offering Registration. Example: ZZZSC is the same as ZZZ.SC

SP	Special. Example: ZZZ SP is the same as ZZZ.SP
SD	Stamped. Example: ZZZ SD is the same as ZZZ.SD
SO	Current Shares Outstanding, in thousands. Example: ZZZ SO is the same as ZZZ.SO
тс	Total cash amount per creation unit, in thousands. Example: ZZZ TC is the same as ZZZ.TC
TT	Tier II Securities. Example: ZZZ TT is the same as ZZZ.TT
U	Units (a combination of securities composed of two or more of warrants, common stocks, preferred stocks and/or bonds). Example: ZZZ U is the same as ZZZ.U
VR	Variable Common Rights. Example: ZZZ VR is the same as ZZZ.VR
WD	When Distributed. Example: ZZZ WD is the same as ZZZ.WD
WI	When Issued. Example: ZZZ WI is the same as ZZZw
WS	Warrants. Example: ZZZ WS is the same as ZZZ.WS
WWS	With Warrants. Example: ZZZ WWS is the same as ZZZ.W.WS
WS <v></v>	Warrants Series <v>; Series A-T & V-Z. Example: ZZZ WSA is the same as ZZZ.WSA</v>
WSWI	Warrants When Issued
Called	An issue being redeemed by its issuing corporation under definite conditions before maturity.
Certificate	A negotiable certificate representing deposit of stock with a pending change in its condition.
Convertible	A preferred share which its owner may convert into common stock or another security, usually in the same company, in accordance with the terms of issue.
Preferred	A class of stock with priority over common stock in regard to earnings and/or liquidations.
Rights	Represents the privilege to subscribe (in proportion to the number of shares owned) to new or additional securities, usually at or below the current market price. Rights ordinarily have market values of their own and are traded actively. In most cases they must be exercised within a relatively short period of time.
Stamped	Indicates rights and privileges different from securities of the same issue, class, or series not stamped.

Warrant	A certificate giving its holder the right to purchase securities at a stipulated price, either within a specified time limit or in perpetuity.
When Distributed	A short form of "when, as, and if distributed" (see 'When Issued').
When Issued	A short form of "when, as, and if issued"; indicates a transaction in a security authorized for issuance, but not yet issued. All "When Issued" transactions are on an "if" basis, to be settled if and when the actual security is issued.
With Warrants	A security with a warrant attached that entitles the holder to purchase another security at stipulated price(s), either within a specified time or in perpetuity. Warrants may be immediately detachable from their underlying securities or detachable after specified periods.
Without Warrants	A security from which the warrant(s) has been removed.

12. APPENDIX C: NASDAQ STOCK SYMBOL SUFFIXES

Source: NASDAQ Website

http://www.nasdaqtrader.com/content/technicalsupport/specifications/dataproducts/nasdaqfift hcharactersuffixlist.pdf or http://www.nasdaq.com/reference/glossary.stm

SUFFIX	DESCRIPTION
Α	Class A
В	Class B
С	Issuer qualification exception – the issuer has been granted a continuance in NASDAQ under an exception to the qualification standards for a limited period.
D	New
E	Delinquent in required filings with the SEC
F	Foreign
G	First convertible bond
Н	Second convertible bond, same company
I	Third convertible bond, same company
J	Voting
К	Nonvoting
L	Miscellaneous situations, such as depositary receipts, stubs, additional warrants, and units
М	Fourth preferred, same company
N	Third preferred, same company
0	Second preferred, same company
Р	First preferred, same company
Q	Bankruptcy - the issuer is involved in bankruptcy proceedings.
R	Rights
S	Shares of beneficial interest
т	With warrants or with rights

U	Units
V	When-issued and when-distributed
W	Warrants
Y	ADR (American Depositary Receipt)
Z	Miscellaneous situations, such as depositary receipts, stubs, additional warrants, and units

13. APPENDIX D: Quote Condition Codes

Valid values for all Quote Condition fields

<u>CTA</u>

CODE	Description
Space	Quote Condition Not Applicable. When Quote Condition is space filled, the Security Status Indicator field must contain a value other than space.
Α	Slow Quote on the Offer Side(Eligible for BBO)
В	Slow Quote on the Bid Side(Eligible for BBO)
С	Closing(Not eligible for BBO)
E	Slow Quote on the Bid due to LRP or GAP Quote(Only Offer Side is eligible for BBO)
F	Slow Quote on the Offer due to LRP or GAP Quote(Only Bid Side is eligible for BBO)
Н	Slow Quote on the Bid and Offer Sides(Eligible for BBO)
L	Closed Market Maker (FINRA)(Not eligible for BBO)
N	Non-Firm Quote(Not eligible for BBO)
0	Opening Quote (Eligible for BBO)
R	Regular (FINRA Open) (Eligible for BBO)
U	Slow Quote Due to Liquidity Replenishment Point (LRP), or Gap Quote on Both the Bid and Offer Sides(Not Eligible for BBO)
w	Slow Quote due to a Set Slow List on Both the Bid and Offer Sides (Eligible for BBO)
4	On DemandIntra-DayAuction(Not eligible for BBO)

<u>UTP</u>

CODE	Description
Α	Manual Ask, automated Bid (Quote is NBBO eligible)
В	Manual Bid, automated Ask (Quote is NBBO eligible)
F	Fast Trading
н	Manual Bid and Ask (Quote is NBBO eligible)
I	Order Imbalance
L	NBBO Closed Market Maker
N	Non-firm quote
0	Opening quote automated (Quote is NBBO eligible)
R	NBBO Regular, two-sided open quote (Quote is NBBO eligible)
U	Manual Bid and Ask (non-firm)
х	Order influx
Y	NBBO Regular - One Sided Quote (Quote is NBBO eligible)
Z	No open/no resume
4	Intraday Auction

14. APPENDIX E: NYSE INDUSTRY CODES

INDUSTRY GROUP	SECTOR	DIVISION	CODE
Industrials			100
	Aerospace		102
		Aircraft	102A
		Parts and Equipment	102B
	Business Supplies and Services		104
		Machines and Equipment (Excl. Computers)	104A
		Supplies	104B
		Services	104C
	Chemicals		106
		Diversified Chemicals	106A
		Specialized	106B
	Computers, Data Processing		108
		Computer Systems	108A
		Data Processing, Software	108B
		Peripheral Devices and Supplies	108C
	Construction		110
		Residential	110A
		Industrial	110B
		Cement	110C
		Lumber, Wood	110D
		Other Building Materials and Products	110E

Electrical Equipment		1
Electronics		1
	Semi Conductors and Other	1
	Components	
	Telecommunications Equipment	1
	Test, Control Instruments and	1
	Systems	
	Other Systems and Equipment	1
Environmental Control		1
Foods, Beverages		1
	Beverages	1
	Branded Food Products	1
	Processing and Production	1
	Wholesalers	1
Health and Beauty Products		1
	Personal Health Products	1
	Toiletries, Cosmetics, Perfumes	1
Health Care Services		1
	Equipment and Supplies	1
	Health Care Facilities	1
Household Goods		1
	Appliances	1
	Furnishings and Fixtures	1
	Housekeeping Products	1
	House-wares	1

Industrial Machinery and Equipme	nt	126
	Heavy Machinery	126A
	Machine Tools	126B
	Measuring and Control Devices	126C
	Transmissions and Engines	126D
	Other Industrial Equipment	126E
Lodging, Restaurants		128
	Hotels, Motels	128A
	Restaurants	128B
Mining, Refining, Fabricating		130
	Aluminum	130A
	Coal	130B
	Gold, Silver	130C
	Steel, Iron	130D
	Other Non-Ferrous Metals	130E
Motor Vehicles		132
	Auto and Truck	132A
	Parts and Equipment	132B
Oil and Gas		134
	Crude Production	134A
	Contract Drilling, Exploration	134B
	Integrated Domestic Refiners	134C
	Integrated International Refiners	134D
	Non-Integrated Refiners	134E
	Services and Equipment	134F

Packaging		136
	Glass	13
	Metal	13
	Paper	13
	Other	136
Paper Production		138
Pharmaceuticals		14(
Publishing		142
	Newspaper Chains	142
	Magazines	142
	Books	142
Recreation Services and Products		144
	Broadcasting	14
	Gaming Operations and Services	14
	Leisure Time Products	14
	Motion Pictures, Entertainment	14
	Services	
	Outdoor Recreational Vehicles and	14
	Equipment	
Retail Trade		14
	Department Store Chains	14
	Discount Variety Chains	14
	Drug Store Chains	140
	Supermarkets, Food Stores	14
	Hardware, Furniture Stores	146

		Specialty Apparel Ships	146F
		Other Retail Operations	146G
	Textiles, Apparel		148
		Textile and Mill Products	148A
		Clothing Companies	148B
		Shoes	148C
	Tires, Rubber		150
	Tobacco		152
	Wholesalers, Distributors		154
		Consumer Products (Non-Food)	154A
		Industrial Products	154B
	Multi-Industry		170
	Other		180
		Manufacturing	180A
		Services	180B
Transportation			200
	Air		202
		Passenger Airlines	202A
		Freight Airlines	202B
	Rail		204
	Trucking		206
	Other Transportation Services		208
Utilities			300
	Electric Services		302
	Gas Services		304

Daily TAQ Client Specification

		Distribution and Integrated Natural Gas Cos.	304A
		Natural Gas Transmission Companies	304B
		Other Gas Services	304C
	Telecommunications		306
	Water Supply Companies		308
	Multi-Service Companies		310
Financials			400
	Banks		402
		Multinational	402A
		Regional	402B
		Savings and Loan Associations	402C
	Brokerage Services		404
	Closed-End Investment Companies		406
		Bond Funds	406A
		Stock Funds	406B
		Specialty Funds	406C
	Finance Companies		408
	Insurance		410
		Brokers, Agents	410A
		Carriers	410B
	Trusts		412
		Real Estate Investment Trusts (REITS)	412A

Daily TAQ Client Specification

		Oil Royalty Trust	412B
		Other Trusts	412C
	RealEstate		414
	Diversified Financial Services		416

15. APPENDIX F: PARTICIPANTIDs

In this table, the Participant ID is 1 byte alphabetic character field, which identifies the Exchange or Participant that initiated the message:

CODE	Description		
Α	NYSE American, LLC (NYSE American)		
В	NASDAQ OMX BX, Inc. (NASDAQ OMX BX)		
С	NYSE National, Inc (NYSE National)		
D	FINRA Alternative Display Facility (ADF)		
н	MIAX Pearl, LLC (MIAX)		
I	International Securities Exchange, LLC (ISE)		
J	Cboe EDGA Exchange (Cboe EDGA)		
к	Cboe EDGX Exchange (Cboe EDGX)		
L	Long-Term Stock Exchange, Inc. (LTSE)		
М	Chicago Stock Exchange, Inc. (NYSE Chicago)		
N	New York Stock Exchange, LLC (NYSE)		
Ρ	NYSE Arca, Inc. (NYSE Arca)		
S	Consolidated Tape System (CTS)		
т	NASDAQ Stock Market, LLC (in Tape A, B securities) (NASDAQ)		
Q	NASDAQ Stock Exchange, LLC (in Tape C securities)		
U	Members Exchange (MEMX)		
v	The Investors' Exchange, LLC (IEX)		
w	Chicago Broad Options Exchange, Inc. (CBSX)		
х	NASDAQ OMX PSX, Inc. (NASDAQ OMX PSX)		
Y	Cboe BYX Exchange, Inc (Cboe BYX)		
Z	Cboe BZX Exchange, Inc (Cboe BZX)		

16. APPENDIX G: National BBO Indicator Codes

Valid values for all National BBO Indicator Codes

<u>CTA</u>

*Indicator Codes to be used in the future.

CODE	Description	
Space*	Indicates that the new quote did not meet the BBO requirements. This quote is not included in the BBO.	
A No Best Bid change, No Best Offer change. New quote does affect the Best Bid or Best Offer. No appendage is required (formerly '0').		
B* No Best Bid change, Quote contains Best Offer. New quote de not affect the Best Bid, but is the Best Offer. No appendage is required.		
C*	No Best Bid Change, Best Offer Short Appendage. New quote does not affect the Best Bid, a new Best Offer is generated and the new Best Offer information is contained in the Best Offer Short Appendage.	
D*	No Best Bid Change, Best Offer Long Appendage. New quote does not affect the Best Bid, a new Best Offer is generated and the new Best Offer information is contained in the Best Offer Long Appendage.	
E*	No Best Bid Change, No Best Offer. New quote does not affect the Best Bid, and there is no Best Offer. No appendage is required.	
F*	Quote contains Best Bid, No Best Offer Change. New quote is itself the Best Bid, but does not affect the Best Offer. No appendage is required.	
G	Quote contains Best Bid, Quote contains Best Offer. New quote is itself the Best Bid and Best Offer. No appendage is required (formerly '1').	
H*	Quote contains Best Bid, Best Offer Short Appendage. New quote is itself the Best Bid, a new Best Offer is generated and the new Best Offer information is contained in the Best Offer Short Appendage.	

I*	Quote contains Best Bid, Best Offer Long Appendage. New quote is itself the Best Bid, a new Best Offer is generated and the new Best Offer information is contained in the Best Offer Long Appendage.
J*	Quote contains Best Bid, No Best Offer. New quote is itself the Best Bid, and there is no Best Offer. No appendage is required.
К*	No Best Bid, No Best Offer Change. There is no Best Bid, and the quote does not affect the Best Offer. No appendage is required.
L*	No Best Bid, Quote contains Best Offer. There is no Best Bid, and the quote is itself the Best Offer. No appendage is required.
M*	No Best Bid, Best Offer Short Appendage. There is no Best Bid, a new Best Offer is generated and the new Best Offer is contained in the Best Offer Short Appendage.
N*	No Best Bid, Best Offer Long Appendage. There is no Best Bid, a new Best Offer is generated and the new Best Offer is contained in the Best Offer Long Appendage.
0	No Best Bid, No Best Offer. There is no Best Bid, and no Best Offer. No appendage is required (formerly '2').
Р*	Best Bid Short Appendage, No Best Offer Change. A new Best Bid is generated and the new Best Bid information is contained in the Best Bid Short Appendage, but the quote does not affect the Best Offer.
Q*	Best Bid Long Appendage, No Best Offer Change. A new Best Bid is generated and the new Best Bid information is contained in the Best Bid Long Appendage, but the quote does not affect the Best Offer.
R*	Best Bid Short Appendage, Quote contains Best Offer. A new Best Bid is generated and the new Best Bid information is contained in the Best Bid Short Appendage, and the quote is the Best Offer.
S*	Best Bid Long Appendage, Quote contains Best Offer. A new Best Bid is generated and the new Best Bid information is contained in the Best Bid Long Appendage, and the quote is the Best Offer.
т	Best Bid Short Appendage, Best Offer Short Appendage. A new Best Bid is generated and the new Best Bid information is contained in the Best Bid Short Appendage, a new Best Offer is generated and the new Best Offer information is contained in the

	Best Offer Short Appendage (formerly '6').			
U	Best Bid Long Appendage, Best Offer Long Appendage. A new Best Bid is generated and the new Best Bid information is contained in the Best Bid Long Appendage, a new Best Offer is generated and the new Best Offer information is contained in the Best Offer Long Appendage (formerly '4').			
V*	Best Bid Short Appendage, No Best Offer. A new Best Bid is generated and the new Best Bid information is contained in the Best Bid Short Appendage, and there is no Best Offer.			
W*	Best Bid Long Appendage, No Best Offer. A new Best Bid is generated and the new Best Bid information is contained in the Best Bid Long Appendage, and there is no Best Offer.			

*Indicator Codes to be used in the future

<u>UTP</u>

CODE	Description
0	This quote does not affect the NBBO. No appendage or NBBO record is required.
1	No NBBO (e.g. outside of market hours). No Appendage or NBBO record is required.
2	Short Form NBBO Appendage – A new NBBO is contained in NBBO file.
3	Long Form NBBO Appendage - A new NBBO is contained in the NBBO File.
4	This quote is itself the new NBBO. No appendage is required but an NBBO record is.

17. APPENDIX H: Security Status Indicator Codes

<u>CTA</u>

CODE	Description		
Space	Security Status Indicator Not Applicable. When Security Status Indicator is space filled, the Quote Condition field must contain a value other than space.		
D	News Dissemination		
G	Trading Range Indication		
I	Order Imbalance		
Μ	Limit-Up-Limit Down (LULD) Trading Pause		
Р	News Pending		
т	Resume		
X	Equipment Changeover		
Y	Sup-Penny Trading		
0	Limit Up-Limit Down (LULD) Price Band		
1	Market-Wide Circuit Breaker Level 1 - Breached		
2	Market-Wide Circuit Breaker Level 2 - Breached		
3	Market-Wide Circuit Breaker Level 3 – Breached		
9	Republished Limit Up-Limit Down (LULD) Price Band		

<u>UTP</u>

CODE	Description
Α	Halt News Pending
В	Halt News Dissemination
С	Single Stock Trading Pause In Affect

D	Regulatory Halt Extraordinary Market Activity		
E	Halt ETF		
F	Trading Halted; For information requested by NASDAQ		
G	Halt Not Compliance		
н	Halt Filings Not Current		
I	Halt Trading Suspension		
J	Halt Regulatory Concern		
к	Operations Halt, Contact Market Operations		
L	IPO Issue not yet Trading		
М	Corporate Action		
Ν	Quotation Not Available		
0	Volatility Trading Pause		
Р	Volatility Trading Pause – Straddle Condition		
Q	News and Resumption Times		
R	Single Stock Trading Pause/Quotation-Only Period		
S	Qualifications Issues Reviewed/Resolved; Quotations/Trading to Resume		
т	Filing Requirements Satisfied/Resolved; Quotations/Trading To Resume		
U	Issuer News Not Forthcoming; Quotations/Trading To Resume		
V	Qualifications Halt ended; maint. Req. met; Resume		
W	Qualifications Halt Concluded; Filings Met; Quotes/Trades To Resume		
X	Trade Halt Concluded By Other Regulatory Auth,; Quotes/Trades Resume		
Y	New Issue Available		
Z	Issue Available		

A1	Market Wide Circuit Breaker Halt – Carry over from previous day
A2	Market Wide Circuit Breaker Resumption
A3	IPO security released for quotation
A4	IPO security – positioning window extension
1	Market Wide Circuit Breaker Halt – Level 1
2	Market Wide Circuit Breaker Halt – Level 2
3	Market Wide Circuit Breaker Halt – Level 3
Blank	Reason not provided

18. APPENDIXI: Determining NBBO from the Consolidated Quote Files

Calculating the National Best Bid and National Best Offer (NBBO) at any time requires a simple merge of the Consolidated Quote and Consolidated NBBO files. The Consolidated Quote file contains all quote from each exchange. However, not every quote updates the NBBO.

The basic methodology is to capture all quotes from the Consolidated Quote file where the exchange's quote represents both the national best bid and the national best offer:

1. All quotes where the source is "C" (Tape A and Tape B), use quotes where the NBBO indicator = "G".

2. All quotes where the source is "N" (Tape C), use quotes where the NASD indicator = "4".

Merge these results with all records from the Consolidated NBBO file, using these fields:

- National best bid exchange
- National best bid
- National best offer exchange
- National best offer

Please note that the Consolidated NBBO file also includes the quote from the exchange that resulted in the NBBO changing, but this may not represent the NBB or the NBO.

This methodology does not allow you to determine the total number of round lots across all exchanges at the best price. To calculated that, you would need to find all exchanges that have a best bid or best offer in the Consolidated Quote file that matches the national best bid (offer) price and add up the bid (offer) sizes for those quotes from the individual exchange quotes.

19. Document History

VERSION	DATE	CHANGE DESCRIPTION
1.0	07/07/2011	Approved version for release
1.0a	07/26/2011	Updated exchange codes
1.0b	07/28/2011	Added Appendix D (NYSE Industry Codes)
1.0c	12/07/2011	Updated description of "CUSIP" fields
		Updated Exchange codes
		Amended "Alternative Products" section
1.0d	02/16/2012	Added exchange codes '12' (BATS), '13' (Direct Edge A), '14' (Direct Edge X)
		and '15' (BATSY)
1.1	06/13/2012	Updated references to NYSE MKT
1.2	07/24/2012	Added the 'Retail Interest Indicator (RPI)' field to the Daily Quotes File
		Document rebranded with new NYSE Technologies template
1.3	09/11/2012	Updated description of values for the Sale Condition field in Daily Trades File
1.4	09/20/2012	Updated description of CUSIP field values in Table 3 (Daily TAQ Master File
		Data Fields)
1.5	12/21/2012	Added LULD BBO Indicator(CQS), LULD BBO Indicator (UTP), FINRA ADF MPID Indicator and SSR Indicator to the BBO file
		Added LULD NBBO Indicator(CQS) and LULD NBBO Indicator (UTP) to the
		NBBO file. Changes applicable only to files with a .new suffix until February
		1, 2013. Changes applicable to standard files from February 4, 2013.
	01/21/2013	Update to MarketMaker description for Quotes and NBBO
1.6	04/04/2013	Added new Daily Quotes Admin Message file and Daily Trades Admin
		Message file to the product to capture LULD Price Bands
1.7	05/10/2013	Corrected errors in Daily TAQ Master File Beta Data Fields field descriptions
	05/16/2013	Minor change to field naming in Master file description

Daily TAQ Client Specification

VERSION	DATE	CHANGE DESCRIPTION
	06/03/2013	Added section with link to previous versions.
	08/06/2013	Clarification on Trade, Quote and NBBO timestamps. Updated UTP Sale Condition codes.
1.8	12/02/2013	Added new fields and modified existing fields, in response to LULD pilot review, to Daily Quotes, Daily Trades, Quote Admin Message and Trade Admin Message files
	12/02/2013	Changed definition of Sale Condition codes 'I' and '9' (change effective from December 9 th , 2013)
1.9	01/15/2014	Amended the RECORD SIZE (BYTES) fields for TAQ Master, TAQ Quotes and TAQ NBBO in section 1.4.1. File Details
2.0	05/02/2014	Source-Listed Exchange and Symbol Compressed fields updated to align with client specification.
2.1	06/01/2015	Changed definition of Sale Condition code 'V' (change effective from July 30th 2015 to August 3 rd 2015) from Stock Option Trade to Contingent Trade. Reference: <u>https://www.ctaplan.com/index</u>
2.1	06/01/2015	Updated description of Sale Condition code '7' (change effective from July 30th 2015 to August 3rd 2015) from Reserved to Qualified Contingent Trade. Reference: <u>https://www.ctaplan.com/index</u>
2.1	06/01/2015	 Effective change for the SIP (NMS) Consolidated Tape System (CTS) and Consolidated Quotation System (CQS) on August 3rd 2015. Effective change for the (UTP) NASDAQ on July 27th 2015: A modified Timestamp from a 9-character field for milliseconds (HHMMSSXXX) to an expanded 12 character field for microseconds (HHMMSSXXXX) on the Daily TAQ Quotes, Daily TAQ Trades, Daily TAQ NBBO, Daily TAQ Quote Admin Message LULD and Daily TAQ Trade Admin LULD Message. The inclusion in the Daily TAQ Quotes, Daily TAQ Trades and Daily TAQ NBBO of a new Participant Timestamp field, represented as a 12 character field for microseconds (HHMMSSXXXXX), that will be used by the Participants to provide the Participant Timestamp in terms of the number of microseconds since midnight Eastern Time (ET). The addition of a Regional Reference Number (RRN) representing the RRN transaction ID provided by the Participant on the Daily TAQ NBBO. The inclusion in the Daily TAQ Quotes, Daily TAQ Trades and Daily TAQ Quotes, Daily TAQ Trades and Daily TAQ Quotes, Daily TAQ Augustes, Daily TAQ NBBO.

VERSION	DATE	CHANGE DESCRIPTION
		NBBO of Trade Reporting Facility (TRF), represented as a 12 character field for microseconds (HHMMSSXXXXX), will be used by the TRFs to provide the TRF Timestamp in terms of the number of microseconds since midnight Eastern Time (ET).
2.2	04/29/2016	Effective change on October 10, 2016 for UTP Binary Migration and format changes for all Daily TAQ files (Daily TAQ Master, Daily TAQ Master Beta, Daily TAQ Quotes, Daily TAQ Trades, Daily TAQ NBBO, Daily TAQ Quote Admin Message LULD, Daily TAQ Trade Admin Message LULD, Daily TAQ UTP Admin Message, Daily TAQ CTA Admin Message). The change are outlined as follows:
	04/29/2016	Consolidation of the Daily TAQ Master and Daily TAQ Master Beta files to create a new Daily TAQ Master with the inclusion of the Tick Pilot Securities Group Indicator to reflect that a security is part of the SEC Tick Pilot Program. Reference https://www.nyse.com/tick-pilot .
	04/29/2016	Inclusion of specifications for the Daily TAQ CTA Administrative Message and the Daily TAQ UTP Administrative Message files. These files provide trading administrative actions such as Opening Delay, Trading Halt, Trading Resumption, Price Indication, Financial Status Indicator, etc.
	04/29/2016	Addition of APPENDIX E: Participant ID Codes with Participant ID 'V' - The Investors' Exchange (IEX).
	04/29/2016	A format change for all Daily TAQ files (Daily TAQ Master, Daily TAQ Quotes, Daily TAQ Trades, Daily TAQ NBBO, Daily TAQ Quote Admin Message LULD, Daily TAQ Trade Admin Message LULD, Daily TAQ UTP Admin Message, Daily TAQ CTA Administrative Message from fixed length, zip uncompressed format to a pipe-delimited format compressed, using gzip.
	04/29/2016	The revised Header Row identifies the name of each column in the file. The new Trailer Row in a pipe-delimited format indicating the "END" of the Record with an eight-character date (YYYYMMDD) and Record Count (the number of records) stored in each file
	04/29/2016	Daily TAQ files made available on a new MFT-Managed File Transfer infrastructure for current files (revolving five days' worth of data). Each file is delivered in a pipe-delimited format compressed, using gzip. Daily TAQ files made available on <u>ftp2.nyxdata.com</u> (T+3) and further back history of Daily TAQ files can be accessed from <u>ftp2.nyxdata.com</u> per customers' entitlement.
	04/29/2016	The Field Order denotes the order each field appear in each record. A Field Terminator '\n' added to indicate the end of the record.

VERSION	DATE	CHANGE DESCRIPTION
VENSION	DATE	CHANGE DESCRIPTION
	04/29/2016	A modified Timestamp from a 12 character field for microseconds (HHMMSSXXXXX) to a 15 character field for nanoseconds (HHMMSSXXXXXX) on the Daily TAQ Master, Daily TAQ Quotes, Daily TAQ Trades, Daily TAQ NBBO, Daily TAQ Quote Admin Message LULD, Daily TAQ Trade Admin Message LULD, Daily TAQ UTP Admin Message, and Daily TAQ CTA Administrative Message. For UTP, nanoseconds timestamp provided by the SIP. For CTA, microseconds timestamp provided by the SIP appended with three trailing zeroes.
	04/29/2016	The Participant Timestamp (timestamp 1) field changed from a 12 character field for microseconds (HHMMSSXXXXXX) to a 15 character field for nanoseconds (HHMMSSXXXXXXX) on the Daily TAQ Quotes, Daily TAQ Trades, Daily TAQ NBBO, Daily TAQ UTP Admin Message, and Daily TAQ CTA Administrative Message. For UTP, nanoseconds timestamp provided by the SIP. For CTA, microseconds timestamp provided by the SIP appended with three trailing zeroes.
	04/29/2016	The Trade Reporting Facility (TRF) Timestamp 2 field changed from a 12 character field for microseconds (HHMMSSXXXXXX) to a 15 character field for nanoseconds (HHMMSSXXXXXXX) on the Daily TAQ Quotes, Daily TAQ Trades and Daily TAQ NBBO files. For UTP, nanoseconds timestamp provided by the SIP. For CTA, microseconds timestamp provided by the SIP appended with three trailing zeroes.
	04/29/2016	On the Daily TAQ Quote file, the Trade Reporting Facility (TRF) Timestamp field renamed FINRA ADF Timestamp. See <u>CTA Specifications</u> and <u>UTP Specification</u>
	04/29/2016	The Bid Price and Offer Price changed in Daily TAQ files from an 11 character to a 21 character maximum field size. For CTA, allow up to 12 characters. For UTP, allow up to 21 characters. Each price field excludes leading and trailing zeroes. The fields containing prices are:
		Daily TAQ Quotes file -Bid Price, and Offer Price
		Daily TAQ Trades - Trade Price, Bid Price, and Offer Price
		Daily TAQ NBBO file - Bid Price, Offer Price, Best Bid Price, and Best Offer Price
		Daily Trade Admin Message LULD - LULD Upper Limit Price Band, and LULD Upper Limit Price Band
		Daily TAQ Quote Admin Message LULD - LULD Upper Limit Price Band, and LULD Upper Limit Price Band
		Daily TAQ UTP Admin Message-Last Price, Upper Limit Price Band, Lower Limit

VERSION	DATE	CHANGE DESCRIPTION
		Price Band
		Daily TAQ CTA Administrative Message- Upper Limit Price Band, Lower Limit Price Band
	04/29/2016	The field changed for the Bid Size and Offer Size from 7 characters to 10 characters in the Daily TAQ Quotes, Daily TAQ Trades, and Daily TAQ NBBO files. For CTA, allow up to 7 characters. For UTP, allow up to 10 characters. Daily TAQ Quotes and Daily TAQ Trades - Bid Size, and Offer Size
		Daily TAQ NBBO file- Bid Size, Offer Size, Best Bid Size, and Best Offer Size
	04/29/2016	The Message Sequence Number field changed from 16 bytes to a maximum file size of 20 characters on the Daily TAQ Quotes file, Daily TAQ Trades, Daily TAQ NBBO file, Daily Trade Admin Message LULD, Daily TAQ Quote Admin Message LULD, Daily TAQ UTP Admin Message, and Daily TAQ CTA Admin Message. For UTP, allow up to 20 characters for the Message Sequence Number. The Message Sequence Number excludes leading zeroes.
	04/29/2016	The removal of the Regional Reference Number (RRN) for CTA or Participant Token field in UTP on the Daily TAQ Quotes, Daily TAQ Trades and Daily TAQ NBBO files.
	04/29/2016	A new field, FINRA ADF Market Participant Quote Indicator, added in the Daily TAQ Quote file. It represents a quote from a single ATS in the FINRA ADF. For FINRA quotes that do not affect the NBBO or FINRA BBO, a FINRA ADF Market Participant Quotation Message Indicator will be sent. (UTP Quote Feed Only). With the removal of OTC Montage Data Feed (OMDF), FINRA ADF Participant quotes will be included in UQDF Top of book quotations for each FINRA ADF participant, disseminated on a separate data feed (OMDF). UTP data feed recipients that wish to receive the individual. Reference <u>UTP Specification</u>
	04/29/2016	The Trade Volume maximum size changed from 9 to 10 characters on the Daily TAQ Trade file. For CTA, allow up to 9 characters. For UTP, allow up to 10 characters.
	04/29/2016	For the Trade Sequence Number for UTP on the Daily TAQ Trades file, allow up to 12 characters. For CTA, allow up to 16 characters. This field excludes Leading zeroes.
	04/29/2016	The Quote Condition '4' = On Demand Intra-Day Auction added on the Daily TAQ Quotes and Daily TAQ NBBO files.
	04/29/2016	The Trade Through Exempt Indicator (TTE) added on the Daily TAQ Trade file. It denotes whether or not a trade through is exempt. When used jointly with

VERSION	DATE	CHANGE DESCRIPTION
		certain Sale Conditions, the TTE will more fully describe the characteristics of a particular trade. Reference <u>CTA Specification</u> and <u>UTP Specification</u>
	04/29/2016	The Participant Listing Market Participant Identifier (PLMPID) added on the Daily TAQ Trades file. The PLMPID identifies when a participant trades a Tape B security and shows which regional exchange is the listing market.
	04/29/2016	The addition of the FINRA ADF MPID Indicator on the Daily TAQ NBBO file. If the FINRA ADF participant's BBO quotation impacts their single participant at either the Bid or Offer side of their market for the issue, a FINRA ADF MPID Appendage will be added to the original short- or long-form message. This appendage will include the ADF's single participant for its best bid and size and/or the ADF's single participant for its best offer and size. Within the Quotation message, the FINRA ADF MPID Indicator will denote the type of appendage to be included. Refer <u>UTP Specification</u>
	04/29/2016	The Best Bid MM Location (Best Bid NASDAQ Market Maker geographic location, Long Appendage) and Best Bid MM Desk Location (Best Bid NASDAQ Market Maker desk location, Long Appendage) are no longer used. These fields were removed on the Daily TAQ NBBO file. Reference <u>UTP Specification</u>
	04/29/2016	The Best Offer MM Location (Best Offer NASDAQ Market Maker geographic location, Long Appendage) and Best Offer MM Desk Location (Best Offer NASDAQ Market Maker desk location, Long Appendage) are no longer used. These fields were removed on the Daily TAQ NBBO file. Reference <u>UTP</u> . <u>Specification</u>
2.2a	7/6/2016	Added the Trade ID on the Daily TAQ Trades file as an identifier for tracking trades across corrections and cancels.
	7/6/2016	Added instructions and file directory for accessing Daily TAQ files on the MFT- Managed File Transfer Infrastructure (mftus.nyx.com) using SFTP (current last 5days worth's of data). Daily TAQ files made available on a new MFT-Managed File Transfer infrastructure for current files (revolving five days' worth of data). Each file is delivered in a pipe-delimited format compressed, using gzip. Daily TAQ files made available on <u>ftp2.nyxdata.com</u> (T+3) and further back history of Daily TAQ files can be accessed from <u>ftp2.nyxdata.com</u> per customers' entitlement.
	7/6/2016	A file naming convention change for Daily TAQ Quotes (BBO) file from a single file to 26 splits alphabetical files. Daily TAQ Quotes file name and location changed From:
		/EQY_US_ALL_BBO/EQY_US_ALL_BBO_yyy/EQY_US_ALL_BBO_yyyymm/EQY_

VERSION	DATE	CHANGE DESCRIPTION
		US_ALL_BBO_yyyymmdd.zip
		To: MFT (Uploaded Daily):
		/DAILYTAQ/SPLITS_US_ALL_BBO/SPLITS_US_ALL_BBO_[A-Z]_yyyymmdd.gz
		To: FTP2 (Uploaded on T+3 basis):
		/SPLITS_US_ALL_BBO/SPLITS_US_ALL_BBO_yyyy/SPLITS_US_ALL_BBO_yyyym m/SPLITS_US_ALL_BBO_[A-Z]_yyyymmdd.gz
		Includes a .done file to indicate the last file that uploaded for that day.
	7/6/2016	Effective October 24, 2016 NYSE MKT will cease trading of Nasdaq-listed symbols when the legacy UTP SIP technology protocol is sunset.
3.0	4/17/2017	Complete re-write of the spec. Support for CTA binary formats.
		CTA timestamps are in nanoseconds since midnight CTA sequence numbers based on Block Seq Num & Msg Seq Num, per CTA
		CTA eliminated Due to Related Security and In View of Common processing
		enterminated bue to related security and in view of common processing
		Fields 12 & 13 of CTA Admin File became reserved fields
		• Quote conditions J, K, Q, S, and V are eliminated
		.TEST removed from Appendix B - CTA introduced dedicated test symbols
		Master File, SIP Symbol field - CTA changed symbol delimiter from '/' to '.'
		CTA Admin file, Currency Indic and Status Indic fields became reserved fields NBBO File, NBBO Quote Condition field became 2 fields: Best Bid Quote
		Condition and Best Offer Quote Condition
		Master File, CTA Symbol field renamed SIP Symbol
		Master File added new field 36 named Effective Date
		CTA Admin File, field 16 & 17 renamed to Upper Price and Lower Price
		Quotes field 19, NBBO field 26, Quote LULD field 8 renamed NBBO LULD Indic
		Quotes and NBBO files: Finra BBO Indic field has revised values per CTA CTA Admin file, Message Category field: values E and F are removed
		CTA Admin file, Message Type field: value S is removed
		Changed Quote and Trade LULD files to Support CTA Auction Status message
		Added value X to LULD Price Band Indicator
		LULD Limit Price Band fields
		 Renamed Lower Price and Upper Price Magning a bay and when LUUD Drives David Indicators - Y
		 Meaning changed when LULD Price Band Indicator = X Added Reference Price anD Num Extensions field
3.0a	6/29/2017	Symbol field revised from 16 to 17 max size in all files
		In section 1.4.1 corrected the symbol format

VERSION	DATE	CHANGE DESCRIPTION
VERSION	DATE	CHANGE DESCRIPTION
3.0b	8/29/2017	Changed the National BBO Indicator for CTA from numeric to alpha values in the Quotes (BBO). For a transitional period, only the below new NBBO Indicator Codes will be disseminated on October 30, 2017 in the Daily TAQ Quotes file. • A = formerly '0' • G = formerly '1' • O = formerly '2' • T = formerly '6' Short Appendage • U= formerly '4' Long Appendage
		All other Indicator Codes will be made available in the future. See Appendix G for a complete list of National BBO Indicator Codes.
3.0b	8/29/2017	 Changed the National BBO Indicator for CTA from numeric to alpha values in the NBBO files. For a transitional period, only the new NBBO Indicator Codes will be disseminated and reflected in the NBBO file effective on October 30, 2017. The new values are: T = formerly '6' Short Appendage U = formerly '4' Long Appendage Indicator Codes G and O may be added to the NBBO file in the future. All other Indicator Codes will be made available in the future. See Appendix G for a
		complete list of National BBO Indicator Codes.
3.0b	8/29/2017	Updated the Quote Condition values for CTA and UTP in the Quotes (BBO) and NBBO files. Added new Quote Condition value of "Space". Repositioned Quote Conditions 'D, G, I, M, P, T, X, Y, Z, 0, 1, 2 and 3' in the Security Status field (some of which in different values).
3.0b	8/29/2017	Added new Security Status Indicator field at the end of Quotes and NBBO files with some of previous Quote Conditions 'D, G, I, M, P, T, X, Y, Z, 0, 1, 2 and 3'.
3.0b	8/29/2017	Added Appendix H for the new Security Status Indicator Codes. Added Appendix G for the National BBO Indicator Codes. Renamed Appendix G from the Document History to contain the National BBO Indicator Codes. Repositioned the Document History to Appendix I.
3.0c	11/2/2017	Updated "Effective Date" field description to mention that field may be blank Redefined "blank" within the CTA context for "Sale Condition" field

VERSION	DATE	CHANGE DESCRIPTION
3.0d	5/1/2019	Updated description of Participant IDs. Updated description from FTP to NYSE MFT platform. Modified Trade Reporting Facility IDs in the Trades File in support of the second Trade Reporting Facility (TRF) by FINRA/Nasdaq. Updated the Halt Reason for 'X' from Equipment Changeover to Operational. Updated the Daily TAQ NBBO File to exclude 'G' and '4'.
3.1	02/26/2020	Added Long-Term Stock Exchange, Inc. (LTSE) Participant ID 'L' - Industry Activation Effective 04/17/2020 Modified Chicago Stock Exchange, Inc. (CHX) to NYSE Chicago, Inc.
3.2	03/02/2020	 Added Support for CTA: CQS and CTS Migration to new Pillar SIP Platform - Effective 07/13/2020 Eliminated Security Status for Opening Delay and No Open/No Resume Eliminated Category A Message Type H Message in the Daily TAQ CTA Admin Message
3.3	05/20/2020	Added Members Exchange, Inc. (MEMX) Participant ID 'U' - Industry Activation Effective 07/24/2020 and new field in Daily TAQ Master file Added MIAX Pearl, LLC (MIAX) Participant ID 'H' - Industry Activation Effective 09/25/2020 and new field in Daily TAQ Master file