NASDAQ Best Bid and Offer (QBBO) – Version 2.0

1   Product Description

NASDAQ Best Bid and Offer (QBBO) is a direct data feed product offered by The NASDAQ Stock Market, LLC. QBBO provides the exchange's best bid and offer position for securities listed on the NASDAQ, New York Stock Exchange (NYSE), NYSE MKT, NYSE Arca and U.S. regional exchanges.

QBBO – Version 2.0 will be released in the 1st Quarter 2014 and will feature the data feed enhancements detailed in Data Technical News #2013-45.

Market data distributors may use the QBBO data feed to feed dynamically updating stock tickers, portfolio trackers, trade alert programs, time and quote graphs, and other display systems. For market data administration purposes, QBBO is part of the NASDAQ Basic entitlement.

For pricing and ordering information:

- Refer to Market Data section of the NASDAQ OMX Trader website.
- Contact the NASDAQ OMX Global Data Products Account Team at +1 301 978 5307 or +45 33 93 33 66.

2   Network Protocol Options

For direct data feed subscribers, NASDAQ will offer QBBO in the following protocol options:

- SoupBinTCP
- Compression over SoupBinTCP
- MoldUDP64

In order to match the NASDAQ Basic entitlement structure, QBBO will support three outbound channels for both protocol options. The QBBO data set will be channelized based on the listing market of a security.

Data Channel	Securities coverage
1	NYSE-listed issues
2	NYSE MKT-, NYSE Arca-, BATS- and U.S. regional stock exchange-listed issues
3	NASDAQ-listed issues

3   Architecture

QBBO will be made up of a series of sequenced messages. Each message is variable in length based on the message type. The messages that make up the QBBO protocol are typically delivered using a higher level protocol that takes care of sequencing and delivery guarantees.

4   Data Types

All integer fields are unsigned big-endian (network byte order) binary encoded numbers.

All alphanumeric fields are ASCII fields which are left justified and padded on the right with spaces.

Prices are integer fields, supplied with an associated precision. When converted to a decimal format, prices are in a fixed point format, where the precision defines the number of decimal places. For example, a field flagged as Price (4) has an implied 4 decimal digits.

Timestamps reflects the NASDAQ system time at which the outbound message was generated. NASDAQ states time as the number of nanoseconds past midnight. The time zone is U.S. Eastern Time.

5   Message Formats

5.1 System Event Message

The System Event message is used to signal key market or data feed control events. QBBO will support the System Event messages.

SYSTEM EVENT MESSAGE				
Name	**Offset**	**Length**	**Value**	**Notes**
Message Type	0	1	"S"	System Event
Tracking Number	1	2	Integer	NASDAQ OMX internal tracking number
Time Stamp	3	6	Timestamp	Time stamp
Event Code	9	1	Alphanumeric	Denotes the type of event for which the message is being generated. See list below for allowable values.

On a daily basis, QBBO will support the following event codes:

SYSTEM EVENT CODES – DAILY	
Code	*Explanation*
O	*Start of Transmissions*: Denotes that QBBO has started its daily transmission schedule
S	*Start of System Hours*: This message indicates that NASDAQ is open and ready to start accepting orders.
Q	*Start of Market Hours:* This message is intended to indicate that Market Hours orders are available for execution.
M	*End of Market Hours:* This message is intended to indicate that Market Hours orders are no longer available for execution.

E	*End of System Hours:* It indicates that NASDAQ is now closed and will not accept any new orders today.
C	*End of Transmissions:* Denotes that QBBO has completed its daily transmission schedule.

5.2 Administrative Messages

5.2.1 Stock Directory

At the start of each trading day, NASDAQ disseminates stock directory messages for all active symbols in its market center system.

Market data vendors should process this message to populate the Financial Status Indicator (required display field) and the Market Category (recommended display field) for NASDAQ-listed issues.

STOCK DIRECTORY				
Name	*Offset*	*Length*	*Value*	*Notes*
Message Type	0	1	"R"	Stock Directory Message
Tracking Number	1	2	Integer	NASDAQ OMX internal tracking number
Timestamp	3	6	Timestamp	Time at which the directory message was generated. Refer to Data Types for field processing notes.
Stock	9	8	Alphanumeric	Denotes the security symbol for the issue in the NASDAQ execution system.
Market Category	17	1	Alphanumeric	Indicates Listing market or listing market tier for the issue **Code** / **Definition** *NASDAQ-Listed Instruments* Q — NASDAQ Global Select Market^{SM} G — NASDAQ Global Market^{SM} S — NASDAQ Capital Market$^{®}$ *Non-NASDAQ-Listed Instruments* N — New York Stock Exchange (NYSE) A — NYSE MKT P — NYSE Arca Z — BATS Z Exchange <space> — Not available
Financial Status Indicator	18	1	Alphanumeric	For NASDAQ-listed issues, this field indicates when a firm is not in compliance with NASDAQ continued listing requirements. **Code** / **Definition** *NASDAQ-Listed Instruments* D — Deficient

					E	Delinquent
					Q	Bankrupt
					S	Suspended
					G	Deficient and Bankrupt
					H	Deficient and Delinquent
					J	Delinquent and Bankrupt
					K	Deficient, Delinquent and Bankrupt
					C	Creations and/or Redemptions Suspended for Exchange Traded Product
					N	Normal (Default): Issuer Is NOT Deficient, Delinquent, or Bankrupt
					Non-NASDAQ-Listed Instruments	
					\<space\>	Not available. Firms should refer to SIAC feeds for code if needed.
Round Lot Size	19	4	Integer	Denotes the number of shares that represent a round lot for the issue		
Round Lots Only	23	1	Alphanumeric	Indicates if NASDAQ system limits order entry for issue		
				Code / Definition: Y — NASDAQ OMX system only accepts round lots orders for this security. N — NASDAQ OMX system does not have any order size restrictions for this security. Odd and mixed lot orders are allowed.		
Issue Classification	24	1	Alphanumeric	Identifies the security class for the issue as assigned by NASDAQ. See Appendix for allowable values.		
Issue Sub-Type	25	2	Alphanumeric	Identifies the security sub-type for the issue as assigned by NASDAQ. See Appendix for allowable values.		
Authenticity	27	1	Alphanumeric	Denotes if an issue or quoting participant record is set-up in NASDAQ systems in a live/production, test, or demo state. Please note that firms should only show live issues and quoting participants on public quotation displays. Code / Definition		

				P	Live/Production	
				T	Test	

Short Sale Threshold Indicator	28	1	Alphanumeric	Indicates if a security is subject to mandatory close-out of short sales under SEC Rule 203(b)(3).

Code	Definition
Y	Issue is restricted under SEC Rule 203(b)(3)
N	Issue is not restricted
<space>	Threshold Indicator not available

IPO Flag	29	1	Alphanumeric	Indicates if the NASDAQ security is set up for IPO release. This field is intended to help NASDAQ market participant firms comply with FINRA Rule 5131(b).

Code	Definition
NASDAQ-Listed Instruments	
Y	NASDAQ listed instrument is set up as a new IPO security
N	NASDAQ listed instrument is not set up as a new IPO security
Non-NASDAQ-Listed Instruments	
<space>	Not available

LULD Reference Price Tier	30	1	Alphanumeric	Indicates which Limit Up / Limit Down price band calculation parameter is to be used for the instrument. Refer to LULD Rule for details.

Code	Definition
1	Tier 1 NMS Stocks and select ETPs
2	Tier 2 NMS Stocks
<space>	Not applicable

ETP Flag	31	1	Alphanumeric	Indicates whether the security is an exchange traded product (ETP):

Code	Definition
Y	Instrument is an ETP
N	Instrument is not an ETP
<space>	Not available

ETP Leverage Factor	32	4	Integer	Tracks the intgeral relationship of the ETP to the underlying index. Example: If the underlying Index increases by a value of 1 and the ETP's Leverage factor is 3, indicates the ETF will increase/decrease (see Inverse) by 3. Note: Leverage Factor of 1 indicates the ETP is NOT leveraged.

				This field is used for LULD Tier I price band calculation purposes.
Inverse Indicator	36	1	Alphanumeric	Indicates the directional relationship between the ETP and underlying index. **Code / Definition table below**

Code	Definition
Y	ETP is an Inverse ETP
N	ETP is not an Inverse ETP

Example: An ETP Leverage Factor of 3 and an Inverse value of 'Y' indicates the ETP will decrease by a value of 3.

5.2.2　　Stock Trading Action

NASDAQ uses this administrative message to indicate the current trading status of a security to the trading community.

Prior to the start of system hours, NASDAQ will send out a Trading Action spin. In the spin, NASDAQ will send out a Stock Trading Action message with the "T" (Trading Resumption) for all NASDAQ- and other exchange-listed securities that are eligible for trading at the start of the system hours. If a security is absent from the pre-opening Trading Action spin, firms should assume that the security is being treated as halted in the NASDAQ platform at the start of the system hours. Please note that securities may be halted in the NASDAQ system for regulatory or operational reasons.

After the start of system hours, NASDAQ will use the Trading Action message to relay changes in trading status for an individual security. Messages will be sent when a stock is:
- Halted
- Paused*
- Released for quotation
- Released for trading

* The paused status will be disseminated for NASDAQ-listed securities only. Trading pauses on non-NASDAQ listed securities will be treated simply as a halt.

STOCK TRADING ACTION MESSAGE				
Name	**Offset**	**Length**	**Value**	**Notes**
Message Type	0	1	"H"	Trading Action
Tracking Number	1	2	Integer	NASDAQ OMX internal tracking number
Time Stamp	3	6	Timestamp	Time Stamp.
Issue Symbol	9	8	Alphanumeric	NASDAQ-assigned indicator for issue for which the stock trading action message is being generated. For details

				on NASDAQ symbology, please refer to Appendix B.
Security Class	17	1	Alphanumeric	Indicates the primary listing market for the issue. Allowable values are:
				Code / **Value**
				Q — NASDAQ Listed Issue
				N — NYSE
				A — NYSE MKT
				P — NYSE Arca
				Z — BATS
Current Trading State	18	1	Alphanumeric	Reflects the current trading state for the issue. The allowable values are:
				Code / **Value**
				H — Halted or paused on NASDAQ and all UTP participants
				P — Paused across all U.S. equity markets / SROs (NASDAQ-listed securities only)
				Q — Quotation only period for cross-SRO halt or pause
				T — Trading on NASDAQ
Reason	19	4	Alphanumeric	Reflects the Market Ops or MarketWatch code for the trading state change. Refer to Appendix C for current code list.

Note: For NASDAQ-listed securities, NASDAQ conducts a cross when it releases an IPO security or when it re-opens a seasoned security after a trading halt or trading pause. To facilitate price transparency for its crosses, NASDAQ disseminates a Net Order Imbalance Indicator (NOII) message via the **NASDAQ TotalView** product suite at 5-second intervals during the quotation only period of the Trading Action release. The NOII data is especially valuable because it includes all order types (displayable and non-displayable) in its calculation.

5.2.3 Reg SHO Short Sale Price Test Restricted Indicator

In February 2011, the Securities and Exchange Commission (SEC) implemented changes to Rule 201 of the Regulation SHO (Reg SHO).   For details, please refer to SEC Release Number 34-61595.   In association with the Reg SHO rule change, NASDAQ introduced the following Reg SHO Short Sale Price Test Restricted Indicator message format.

For NASDAQ-listed issues, NASDAQ supports a full pre-opening spin of Reg SHO Short Sale Price Test Restricted Indicator messages indicating the Rule 201 status for all active issues.   NASDAQ also sends the Reg SHO Short Sale Price Test Restricted Indicator message in the event of an intraday status change.

NASDAQ will process orders based on the most Reg SHO Restriction status value.

REG SHO RESTRICTION				
Name	Offset	Length	Value	Notes
Message Type	0	1	"Y"	Reg SHO Short Sale Price Test Restricted Indicator
Tracking Number	1	2	Integer	NASDAQ OMX internal tracking number
Timestamp	3	6	Timestamp	Time at which the market participant position message was generated
Stock	9	8	Alphanumeric	Stock symbol right padded with spaces.
Reg SHO Action	17	1	Alphanumeric	Denotes the Reg SHO Short Sale Price Test Restriction status for the issue at the time of the message dissemination. Allowable values are: "0" = No price test in place "1" = Reg SHO Short Sale Price Test Restriction in effect due to an intra-day price drop in security "2" = Reg SHO Short Sale Price Test Restriction remains in effect

5.2.4 Market-Wide Circuit Breaker (MWCB) Messages

5.2.4.1 MWCB Decline Level Message

Informs data recipients what the daily MWCB breach points are set to for the current trading day.

MWCB Decline Level Message				
Name	Offset	Length	Value	Notes
Message Type	0	1	"V"	Market wide circuit breaker Decline Level Message.
Tracking Number	1	2	Integer	NASDAQ OMX internal tracking

				number
Timestamp	3	6	Timestamp	Time at which the MWCB Decline Level message was generated
Level 1	9	8	Price (8)	Denotes the MWCB Level 1 Value.
Level 2	17	8	Price (8)	Denotes the MWCB Level 2 Value.
Level 3	25	8	Price (8)	Denotes the MWCB Level 3 Value.

5.2.4.2 MWCB Status Message

Informs data recipients when a MWCB has breached one of the established levels

MWCB Breach Message				
Name	*Offset*	*Length*	*Value*	*Notes*
Message Type	0	1	"W"	Market-Wide Circuit Breaker Status message
Tracking Number	1	2	Integer	NASDAQ OMX internal tracking number
Timestamp	3	6	Timestamp	Time at which the MWCB Breaker Status message was generated
Breached Level	9	1	Alphanumeric	Denotes the MWCB Level that was breached. "1" = Level 1 "2" = Level 2 "3" = Level 3

5.3 Quotation Message

QBBO will broadcast a real-time update every time that the exchange's best bid and offer quote is updated during the trading day.

QBBO QUOTATION MESSAGE				
Name	Offset	Length	Value	Notes
Message Type	0	1	"Q"	QBBO Quotation Message
Tracking Number	1	2	Integer	NASDAQ OMX internal tracking number
Time Stamp	3	6	Timestamp	Time stamp
Stock	9	8	Alphanumeric	Denotes the NASDAQ market center system issue identifier for which the QBBO quotation message is being generated.

Security Class	17	1	Alphanumeric	Indicates the primary listing market for the stock. The allowable values are as follows:
				Code / **Value** table below

Code	Value
N	NYSE-listed security
A	NYSE MKT-listed security
P	NYSE Arca-listed security
Q	NASDAQ-listed security
Z	BATS-listed security

Field	Pos	Len	Type	Description
NASDAQ Best Bid Price	18	4	Price (4)	Denotes the NASDAQ best bid price – the highest price for market buy order(s) in the NASDAQ system.
NASDAQ Best Bid Size	22	4	Integer	Denotes the aggregated number of shares available for display within the NASDAQ market center system at the NASDAQ best bid Price.
NASDAQ Best Offer Price	26	4	Price (4)	Denotes the NASDAQ exchange's best offer price – the lowest price for market sell order(s) in the NASDAQ system.
NASDAQ Best Offer Size	30	4	Integer	Denotes the aggregated number of shares available for display within the NASDAQ

				market center system at the NASDAQ Best Offer Price.

5.4 Retail Price Interest Indicator (RPII)

Identifies a retail interest indication of the Bid, Ask or both the Bid and Ask for NASDAQ-listed securities.

Retail Interest Message				
Name	**Offset**	**Length**	**Value**	**Notes**
Message Type	0	1	"N"	Retail Interest message
Tracking Number	1	2	Integer	NASDAQ OMX internal tracking number
Time Stamp	3	6	Timestamp	Time stamp
Stock	9	8	Alphanumeric	Denotes the security symbol for the issue in the NASDAQ execution system. Refer to Appendix B for stock symbol convention information.
Interest Flag	17	1	Alphanumeric	"B" = RPI orders available on the buy side "S" = RPI orders available on the sell side "A" = RPI orders available on both sides (buy and sell) "N" = No RPI orders available

5.5 IPO Quoting Period Update

Indicates the anticipated IPO quotation release time of a security.

IPO Quoting Period Update				
Name	**Offset**	**Length**	**Value**	**Notes**
Message Type	0	1	"K"	IPO Release Message
Tracking Number	1	2	Integer	NASDAQ OMX internal tracking number
Timestamp	3	6	Timestamp	Time at which the NOII message was generated
Stock	9	8	Alphanumeric	Denotes the security symbol for the issue in the NASDAQ execution system.
IPO Quotation Release Time	17	4	Integer	Denotes the IPO release time, in seconds since midnight, for quotation to the nearest second.

				NOTE: If the quotation period is being canceled/postponed, we should state that 1. IPO Quotation Time will be set to 0 2. IPO Price will be set to 0	
IPO Quotation Release Qualifier	21	1	Alphanumeric	**Code**	**Description**
				A	**Anticipated quotation release time** *This value would be used when NASDAQ Market Operations initially enters the IPO instrument for release.*
				C	**IPO release canceled/postponed** *This value would be used when NASDAQ Market Operations cancels or postpones the release of the IPO instrument.*
IPO Price	22	4	Price (4)	Denotes the IPO price to be used for intraday net change calculations. Prices are given in decimal format with 6 whole number places followed by 4 decimal digits. The whole number portion is padded on the left with spaces; the decimal portion is padded on the right with zeros. The decimal point is implied by position; it does not appear inside the price field.	

6   Contact Information

Questions about the NASDAQ Basic entitlement and QBBO specification document may be directed to NASDAQ OMX Global Data Products at +1 301 978 5307.

Questions about QBBO transmissions may also be directed to NASDAQ OMX Operations Center.

Appendix A - Stock Symbol Convention

For NASDAQ-listed issues, NASDAQ OMX currently restricts its symbol length to a maximum of 8 characters. For common stock issuances, NASDAQ, PSX and BX will only assign root symbols of 1 to 4 characters in length with possible fifth and or sixth character denoting a suffix. In certain instances, a dot "." delimiter may be applied to symbols after the root and between the suffix eg., XXXX.A. For subordinate securities, NASDAQ and BX will assign a 5 character symbol for which the last character relays information about the issue class or issue type. For the current list of fifth and or six character symbol suffixes, please refer to Ticker Symbol Convention page on the NASDAQ OMX Trader website.

For NYSE-, NYSE MKT- and NYSE Arca-listed securities with subordinate issue types, please refer to Ticker Symbol Convention page on the NASDAQ OMX Trader website.

Appendix B – Trading Action Reason Codes

For NASDAQ-listed issues, NASDAQ acts as the primary market and has the authority to institute a trading halt or trading pause in an issue due to news dissemination or regulatory reasons.

For CQS issues, NASDAQ abides by any regulatory trading halts and trading pauses instituted by the primary or listing market as appropriate.

For both issue types, NASDAQ may also halt trading for operational reasons.

NASDAQ will send out a trading action message to inform its market participants when the trading status of an issue changes. For informational purposes, NASDAQ also attempts to provide the reason for each trading action update. For bandwidth efficiency reasons, NASDAQ uses a 4-byte code for the reason on its outbound data feeds.

REASON CODES FOR TRADING HALT ACTIONS	
Code	Value
T1	Halt News Pending
T2	Halt News Disseminated
T5	Single Stock Trading Pause In Effect
T6	Regulatory Halt — Extraordinary Market Activity
T8	Halt ETF
T12	Trading Halted; For Information Requested by Listing Market
H4	Halt Non-Compliance
H9	Halt Filings Not Current
H10	Halt SEC Trading Suspension
H11	Halt Regulatory Concern
O1	Operations Halt; Contact Market Operations
LUDP	Volatility Trading Pause
LUDS	Volatility Trading Pause – Straddle Condition
MWC1	Market Wide Circuit Breaker Halt – Level 1
MWC2	Market Wide Circuit Breaker Halt – Level 2
MWC3	Market Wide Circuit Breaker Halt – Level 3
MWC0	Market Wide Circuit Breaker Halt – Carry over from previous day
IPO1	IPO Issue Not Yet Trading
M1	Corporate Action
M2	Quotation Not Available
<space>	Reason Not Available

REASON CODES FOR QUOTATION/TRADING RESUMPTION ACTIONS	
Code	Value
T3	News and Resumption Times
T7	Single Stock Trading Pause / Quotation Only Window
R4	Qualifications Issues Reviewed/Resolved; Quotations/Trading to Resume
R9	Filing Requirements Satisfied/Resolved; Quotations/Trading To Resume
C3	Issuer News Not Forthcoming; Quotations/Trading To Resume
C4	Qualifications Halt ended; Maintenance Requirements Met; Resume
C9	Qualifications Halt Concluded; Filings Met; Quotes/Trades To

	Resume
C11	Trade Halt Concluded By Other Regulatory Auth.; Quotes/Trades Resume
MWCQ	Market Wide Circuit Breaker Resumption
R1	New Issue Available
R2	Issue Available
IPOQ	IPO Security Released for Quotation (NASDAQ Securities Only)
IPOE	IPO Security — Positioning Window Extension (NASDAQ Securities Only)
<space>	Reason Not Available

For the current list of regulatory halts, please refer to the Trading Halts page on the NASDAQ OMX Trader website.

Appendix C - Issue Classification Values

Identifies the security class for the issue as assigned by NASDAQ

CODES FOR ISSUE CLASSIFICATION VALUES	
Code	**Value**
A	American Depositary Share
B	Bond
C	Common Stock
F	Depository Receipt
I	144A
L	Limited Partnership
N	Notes
O	Ordinary Share
P	Preferred Stock
Q	Other Securities
R	Right
S	Shares of Beneficial Interest
T	Convertible Debenture
U	Unit
V	Units/Benif Int
W	Warrant

Appendix D - Issue Sub-Type Values

CODES FOR ISSUE CLASSIFICATION VALUES	
Code	**Value**
A	Preferred Trust Securities
B	Index Based Derivative
C	Common Shares
CB	Commodity Based Trust Shares
CF	Commodity Futures Trust Shares
CL	Commodity-Linked Securities
CM	Commodity Index Trust Shares
CT	Currency Trust Shares
CU	Commodity-Currency-Linked Securities
CW	Currency Warrants
D	Global Depositary Shares
E	ETF-Portfolio Depositary Receipt
EG	Equity Gold Shares
EI	ETN-Equity Index-Linked Securities
EN	Exchange Traded Notes
FI	ETN-Fixed Income-Linked Securities
FL	ETN-Futures-Linked Securities
G	Global Shares
H	Debt-Based Derivative
I	ETF-Index Fund Shares
IX	Index-Linked Exchangeable Notes
K	Callable Common Stock
L	Contingent Litigation Right
LL	Identifies securities of companies that are set up as a Limited Liability Company (LLC)
M	Equity-Based Derivative
MF	Managed Fund Shares
ML	ETN-Multi-Factor Index-Linked Securities
MP	Master Limited Partnership
MT	Managed Trust Securities
N	NY Registry Shares
O	Open Ended Mutual Fund
P	Privately Held Security
PU	Partnership Units
R	Reg-S
RC	Commodity-Redeemable Commodity-Linked Securities
RF	ETN-Redeemable Futures-Linked Securities
RU	Commodity-Redeemable Currency-Linked Securities
S	SEED
T	Tracking Stock
TC	Trust Certificates
TU	Trust Units
U	Portal
V	Contingent Value Right
W	Trust Issued Receipts

Appendix E – Documentation Version Control Log

QBBO Version 2.00   **October 31, 2013**

Released a new version of the QBBO documentation to support the following changes:
- Corrected the Timestamp length in the MWCB Status Message

QBBO Version 2.00   **October 1, 2013**

Released a new version of the QBBO documentation to support the following changes:
- Conversion to binary

QBBO Version 2.00   **August 2, 2013**

Released a new version of QBBO documentation to support the following changes:
- Inclusion of the Appendices for Issue Classification and Issue Sub-Type
- Changed the IPO Quotation Release Message Type to "K"
- Updated offsets in the IPO Quotation Release Message
- Updated offsets in the Symbol Directory Message
- Updated offsets and lengths for the MWCB Decline Level Message
- Renamed the Compliance ID field to TrackingID
- Updated the offsets for the Reg SHO Short Sale Price Test Restricted Indicator

QBBO Version 2.00   **July 10, 2013**

Released a new version of the QBBO documentation to support the following changes:

- Addition of the Enhanced Symbol Directory
- Addition of IPO Quotation Release Message
- Addition of Market-Wide Circuit Breaker (MWCB) Messaging
    - MWCB Decline Level Message
    - MWCB Status Message
- Addition of an internal tracking number to the Stock Trading Action Message and the Quotation Message
- Addition of 'C' to the Financial Status Indicator field in the Symbol Directory message

QBBO Version 1.10   **March 11, 2013**

Released a new version of the QBBO documentation to support the following changes:

- Added the following Trading Action Reason Code for LULD to reflect when the National Best Bid is below the lower price band and/or the National Best Offer is above than the upper price band and the NMS Stock is not in a Limit State.
    - LUDS - Volatility Trading Pause – Straddle Condition

QBBO Version 1.10   **January 9, 2013**

Released a new version of the QBBO documentation to support the following changes:

- Added the following Trading Action Reason Code:
    - MWC0 - Market Wide Circuit Breaker Halt – Carry over from previous day
- Removed the Trading State, "R", from the Stock Trading Action message.

QBBO Version 1.10   **January 8, 2013**

Released a new version of the QBBO documentation to support the following changes:

- Modified the Retail Price Interest Indicator Message. Changed the message type from "G" to "N".

QBBO Version 1.10   **November 6, 2012**

Released a new version of the QBBO documentation to support the following changes:

- Added the "P" value to the Trading State in the Stock Trading Message.
- Modified the values for the Trading Action Reason Codes. Added the following codes:
    - LUDP - Volatility Trading Pause
    - MWC1 - Market Wide Circuit Breaker Halt – Level 1
    - MWC2 - Market Wide Circuit Breaker Halt – Level 2
    - MWC3 - Market Wide Circuit Breaker Halt – Level 3
    - MWCQ - Market Wide Circuit Breaker Resumption
- Removed the Trading Action values related to the Volatility Guard Program. Removed Trading State, "V". Eliminated Trading Action Reason Codes, V1 and V2.
- Added Retail Price Interest Indicator Message

QBBO Version 1.10   **November 1, 2011**

NASDAQ OMX added a new Market Center code, "Z", for BATS-listed securities to the Market Category and Security Class fields.

QBBO Version 1.10   **April 6, 2011**

NASDAQ OMX added two new Trading Action – Reason codes to Appendix B for the NASDAQ Volatility Guard pilot program.   New Reason codes were V1 and V2.

QBBO Version 1.10   **November 4, 2010**

NASDAQ OMX updated the Reg SHO message description to reflect the new SEC implementation date.

QBBO Version 1.10   **October 14, 2010**

NASDAQ OMX fixed a documentation error related to the field layout for the the Stock Trading Action message.   (Error was introduced in July of 2010.)

QBBO Version 1.10   **September 3, 2010**

NASDAQ OMX corrected time stamp error in Stock Trading Action message format.

QBBO Version 1.10   **July 14, 2010**

NASDAQ OMX added a new Regulation SHO Short Sale Price Test Restricted Indicator message format to be introduced in the fourth quarter of 2010.

QBBO Version 1.10   **July 2, 2010**

NASDAQ OMX added new Action Trading code(s) to the Stock Trading Action message for the NASDAQ Volatility Guard trading pause.

QBBO Version 1.10   **May 25, 2010**

NASDAQ updated the QBBO specification to reflect the following change:

- Added two new Trading Action – Reason Code values (T5 and T7) for the Single Stock

Trading Pause.

QBBO Version 1.10   **January 26, 2010**
Released a new version of the QBBO documentation to support the following changes:

- Increased length of the symbol field from 6 characters to 8 characters in multiple message formats in support of the equity symbology initiative.
- Modified the values for the Market Category / Security Class fields to delineate among NYSE-, NYSE Amex- and NYSE Arca-listed issues.
- Added note to Appendix B to reflect that NASDAQ OMX is reviewing its stock symbol conventions to determine if changes are needed.

QBBO Version 1.00   **September 21, 2009**
Corrected line channel numbering to match MoldUDP address list.

QBBO Version 1.00   **October 30, 2008**
Modified the Stock Directory and the Stock Trading Action message formats to match the NASDAQ Last Sale (NLS) data formats.

QBBO Version 1.00   **September 17, 2008**
Initial release of the QBBO data feed specification for internal NASDAQ use.