



Boston Options Exchange Technical Notice 09-004

TO: BOX Participants and ISVs

FROM: Participant Connectivity Coordinator

SUBJECT: **BOX Options Symbology Initiative Update**

DATE: April 15, 2009

This notice replaces BOX Technical Notice 08-007 which supports the Symbology initiative.

The Options Clearing Corporation (OCC) launched the Options Symbology Initiative (OSI) to simplify the symbology of exchange-listed index and equity options and support long-term growth in the Options Industry. OSI is a multi-phased program ending in the second quarter of 2010.

To support the initiative, several changes have been made.

Impact

The following BOX services will be impacted by the OSI changes:

Service	Impact	Status
FIX	The FIX interface will use the field tag 205 to indicate the maturity day.	The new field is available and will be mandatory beginning February 12, 2010
HSVF	The 'Instrument Description', used in many HSVF messages, will contain new or modified fields.	The enlarged root symbol, enlarged expiry year and expiry day have been added and will be mandatory beginning February 12, 2010
ATR	Several fields will be expanded. The Strike Price format will also be aligned with the OSI format. The message format will include new fields for client order id, client memo and liquidity status	The enlarged symbol, expiration date, strike price and strike price fraction indicator have been added and will be mandatory beginning February 12, 2010
TMS	TMS will be updated to support external symbols up to 30 characters. (Current limit is 20 characters)	Will be available on February 12, 2010
SAIL	No impact. SAIL is an ID driven protocol and already compliant with OSI.	SAIL is already OSI compliant

Timeline

June 30, 2008	The BOX testing and production environments support the new OSI formats. Both old and new message formats are now supported
June 1, 2009 – December 15, 2009	Participants and ISVs are asked to recertify their applications in the BOX testing environment. BOX will send recertification packets to participants
September 2009 - January 2010	Scripted industry testing of the new environment under OSI pre and post symbol consolidation. For more detailed information, please see the OSI Testing quick link.
February 12, 2010	Mandatory cut-over for use of explicit data elements by all market participants. BOX will decommission the old formats and only the OSI formats will be supported.
March 1, 2010	Symbol consolidation begins



Technical Details - FIX

A new field has been added to specify the maturity day of instrument. The MaturityDay field is mandatory for the new OSI and optional for the old format. This field #205 will be defined as follows:

Field #	Field Name	Description	Field Length
205	MaturityDay	Can be used in conjunction with MaturityMonthYear to specify a particular maturity date (expiration date).	1 to 2

This new field will be present in the following message types:

- New Order – Single (MsgTyp 35 = D)
- Order Cancel/Replace Request (MsgTyp 35 = G)
- PIP Initial Order (MsgTyp 35 = PI)
- Order Cancel Request (MsgTyp 35 = F)
- Quote Request (MsgTyp 35 = R)
- Execution Report (MsgTyp 35 = 8)
- Security Definition (MsgTyp 35 = d)



Technical Details - HSVF

Several HSVF message types are impacted.

HSVF Instrument Description – 20 bytes

The 'Instrument Description' data group modifications are as follows:

Field Name	L	T	Definition / Validation Rules
Symbol Root	6	A	Field length expanded from 5 to 6 bytes. Symbol for the Option series
Month Code	1	A	No change
Strike Price Code	1	A	No change
Strike Price	7	N	No change
Strike Price Fraction Indicator	1	X	No change
Expiry Year	2	N	Field length expanded from 1 to 2 bytes. Last 2 digits of the option expiry year
Expiry Day	2	N	Field added. Delivery day for the contract

HSVF Messages Types A, C, D, F, H, I, M, N, O and T

In these message types, the field "Instrument Description" is expanded from 16 to 20 characters. The rest of the fields remain unchanged.

Field Name	L	T	Definition / Validation Rules
Instrument Description	20	X	Refer to Instrument Description

HSVF Message Types GC and GR

The field "Symbol Root" is expanded from 5 to 6 bytes.

The content of this field is the option symbol, not the underlying

HSVF Message Type RS

The field "Option classes requested" is expanded up to 5994 bytes.

HSVF Message Types L, Q, S, U, V and W

These HSVF messages are not impacted.



HSVF Message Type J – Option Instrument key – 119 bytes

The modifications are as follows:

Field Name	L	T	Definition / Validation Rules
Message Header	11	X	No change
Exchange ID	1	A	No change
Instrument Description	20	X	Field length expanded from 16 to 20 bytes. Refer to Instrument Description.
Strike Price Currency	3	X	No change
Expiry Day	2		Field moved in the 'Instrument Description' data group
Filler	6		Field removed
Max number of contracts per order	6	X	No change
Min number of contracts per order	6	X	No change
Max Threshold Price	6	X	No change
Max Threshold Price Fraction Indicator	1	X	No change
Min Threshold Price	6	X	No change
Min Threshold Price Fraction Indicator	1	X	No change
Tick Increment	6	X	No change
Tick Increment Fraction indicator	1	N	No change
Option type	1	X	No change
ISIN	12		Field removed
Market Flow Indicator	2	X	No change
Group	2	X	No change
Instrument	4	X	Field added to replace the 'ISIN' field.
Instrument external code	30	X	Field length expanded from 20 to 30 bytes. External identifier used by traders when entering an order
Option marker	2	A	No change
Underlying Symbol	10	A	No change



Technical Details - ATR

A new message format for the following message types:

- Message Type 30 – Trade
- Message Type 31 – Trade Cancel
- Message Type 35 – As Of Trade
- Message Type 36 – As Of Trade Cancellation
- Message Type 40 – Allocation
- Message Type 41 – Allocation Cancel
- Message Type 45 – As Of Trade Allocation
- Message Type 46 – As Of Trade Allocation Cancel

Length 157 bytes

Field Name	Length	Type	Comment
Message Header	22		No change
Trade Number	6	N	No change
Transaction Type	1	A	No change
Timestamp	6	A	No change
Symbol	30	A	Field Length expanded from 20 to 30 characters Instrument Symbol
Expiration Date	6	A	Field length expanded from 4 to 6 characters, addition of dd part. Expiration date of the instrument. Format is YYMMDD
Strike Price	8	N	Field modified from a fix to a variable number of decimal. Option strike price. The format is defined by the new field “Strike Price Fraction Indicator.”
Strike Price Fraction Indicator	1	X	New field added Define the number of decimal places or fraction positions. The default will be four to be identical to the existing format.
Option Type	1	A	No change
Volume	8	N	No change
Price (x 10000)	8	N	No change
CMTA Broker	3	N	No change
Account Type	1	A	No change
Sub-trader ID	3	A	No change
Open Close	1	A	No change
Executing Broker	3	N	No change
Client Account Number	12	A	No change
Client Order ID	20	A	New Field
Client Memo	16	A	New Field
Liquidity Status	1	A	New Field



Contacts

Please contact the BOX Market Operation Center at 1-866-768-8845 or by e-mail at boxmoc@bostonoptions.com if you require assistance or any additional information on this Technical Notice.

Thank you,

BOX Participant Connectivity Coordinator