

Technical Notice **09-007**

TO: Montreal Exchange Participants, ISVs and Market Data Vendors
FROM: Participant Connectivity Coordinator
SUBJECT: **New Symbology Project – Update 3**
DATE: March 13, 2009

Changes in this version are:

- Update the Timeline section.**
- Add note on re-certification not required.**
- Change to the HSVF message types J and L.**
- Add information about the management of parallel production services.**
- Add port number for the new version of the ATR.**
- Add details on how the STAMP symbol is formatted.**

To coincide with the Options Symbology Initiative (OSI) being implemented in the United States by the Options Clearing Corporation (OCC), a joint Montréal Exchange (MX) / Canadian Derivatives Clearing Corporation (CDCC) project was launched. This project is to simplify the symbology of exchange-listed index and equity options and support long-term growth in the Options Industry. This initiative is a multi-phased program with conversion to the new message formats scheduled for February 12, 2010 followed by a phase of options symbol consolidations. In Canada, the first phase will be launched on March 30, 2009, when MX will begin receiving and sending OSI compliant messages in addition to the current production messages. To meet the March 30, 2009 launch, the Montréal Exchange will be making several messaging changes.

Please note that even though this initiative covers only exchange-listed index and equity options, there are impacts on some futures and future options related to common messages or fields.

Impact

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

Service	Impact	Product type impacted			
		Equity, Index ETF and Currency Options	Options on Futures	Futures	Strategies
FIX	The FIX interface will use the tag 205-MaturityDay to indicate the maturity day.	Yes	No	No	No
HSVF	Many HSVF messages will contain new or modified fields.	Yes	Yes	Yes	Yes

Service	Impact	Product type impacted			
		Equity, Index ETF and Currency Options	Options on Futures	Futures	Strategies
ATR	Several fields will be expanded.	Yes	Yes	Yes	Yes
TMS	A version supporting OSI will be released by MX. The formats of the DTM11B reports are impacted.	Yes	Yes	Yes	No
STAMP	The 55-Symbol field will be expanded.	Yes	No	No	No
SAIL	No impact. SAIL is an ID driven protocol and already compliant with OSI.	No	No	No	No
ClearingAPI	No impact.	No	No	No	No

No Formal Re-Certification Requirements

No formal re-certification is required for any impacted services. Participants are invited to test their changes in the MX test environment as they feel ready.

Timeline

End of January 2009	MX testing environment will support the new OSI formats. Participants, ISVs and Market Data Vendors are asked to begin testing their applications at the end of January 2009.
End of March	MX specification documents including the new symbology changes are ready.
March 30, 2009	In production, MX will start receiving and sending both the existing and the new OSI message formats. Both old and new message formats will be supported.
Q4 2009	Industry wide market simulations. The MX and CDCC will mirror US planned dates.
February 12, 2010	Industry wide, mandatory use of the OSI messaging format.
March 2010	Consolidation of symbols begins.

Technical Details - FIX

A new field will be added to specify the maturity day of instrument. The 205-MaturityDay field is **mandatory** for the new OSI format and optional for the old format. This change will impact Equity, Index, ETF and Currency Options.

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)
- Order Cancel Request (MsgTyp 35 = F)
- Quote Request (MsgTyp 35 = R)
- Execution Report (MsgTyp 35 = 8)
- Security Definition (MsgTyp 35 = d)

Parallel Production

If this new tag is supplied in the message sent to MX, it will be returned in responses. If not supplied, it will not be returned in responses. It is an optional tag until February 12, 2010, at which point it becomes mandatory.

Technical Details – HSVF

Here are the changes on the HSVF Market Data feed for each of the impacted message types.

Message Header – (Impacts all product types)

Field Name	L	Type	Definition / Validation Rules
Sequence Number	9	Numeric	Field length expanded from 8 to 9 bytes. Assigned sequence number for this message

HSVF Message type C, D, F, H and I - (Impacts Equity, Index, ETF and Currency Options)

Field Name	L	Type	Definition / Validation Rules
Symbol Root	6	Alphanumeric	Field length expanded from 5 to 6 bytes. Option base symbol.
Expiry Year	2	Numeric	Field length expanded from 1 to 2 bytes. Last two digits of the expiry year.
Expiry Day	2	Numeric	Field added next to the Expiry Year field. Expiry day.

HSVF Message type N – (Impacts Equity, Index, ETF and Currency Options)

Field Name	L	Type	Definition / Validation Rules
Symbol Root	6	Alphanumeric	Field length expanded from 5 to 6 bytes. Option base symbol.
Expiry Year	2	Numeric	Field length expanded from 1 to 2 bytes. Last two digits of the expiry year.
Expiry Day	2	Numeric	Field added next to the Expiry Year field. Expiry day.
Underlying Symbol Root	10	Alphanumeric	Field length expanded from 5 to 10 bytes. Symbol root for the underlying security.

HSVF Message type CS, DS, FS, HS, IS, JS – (Impacts Strategies)

Field Name	L	Type	Definition / Validation Rules
Symbol	30	Alphanumeric	Field length expanded from 20 to 30 bytes. Identification of the strategy.

HSVF Message L – Bulletin Type 2 – (Impacts all product types)

Field Name	L	Type	Definition / Validation Rules
Symbol	30	Alphanumeric	Field length expanded from 20 to 30 bytes. Identification of the strategy.
Bulletin	49	Alphanumeric	Field length reduced from 59 to 49 bytes. Bulletin in textual form.

HSVF Message type NS – (Impacts Strategies)

Field Name	L	Type	Definition / Validation Rules
Symbol (strategy)	30	Alphanumeric	Field length expanded from 20 to 30 bytes. Identification of the strategy.
Symbol (legs)	30	Alphanumeric	Field length expanded from 20 to 30 bytes. Identification of the underlying.

HSVF Message type GR – (Impacts all product types)

Field Name	L	Type	Definition / Validation Rules
Symbol Root	6	Alphanumeric	Field length expanded from 5 to 6 bytes. Root of the instrument group.

HSVF Message type J – (Impacts Equity, Index, ETF and Currency Options)

Field Name	L	Type	Definition / Validation Rules
Symbol Root	6	Alphanumeric	Field length expanded from 5 to 6 bytes. Option base symbol.
Expiry Year	2	Numeric	Field length expanded from 1 to 2 bytes. Last two digits of the expiry year.
Expiry Day	2	Numeric	Moved next to the Expiry Year field. Expiry day.
Conversion Ratio	6	Numeric	Field removed
Instrument	4	Alphanumeric	Field added next to the Group Instrument field. To replace the ISIN field.
Underlying Symbol Root	10	Alphanumeric	Field length expanded from 5 to 10 bytes. Symbol root for the underlying security.
ISIN	12		Field removed
Instrument external code	30	Alphanumeric	Field length expanded from 20 to 30 bytes. External identifier used by traders when entering an order.

HSVF Message type JE – (Impacts all product types)

Field Name	L	Type	Definition / Validation Rules
Group Instrument	2	Alphanumeric	Field added next to the Exchange I.D. field. To replace the ISIN field.
Instrument	4	Alphanumeric	Field added next to the Group Instrument. To replace the ISIN field.
ISIN	12		Field removed
Instrument external code	30	Alphanumeric	Field length expanded from 20 to 30 bytes. External identifier used by traders when entering an order.

HSVF Message type JB, JF and JS – (Impacts Futures, Options on Futures and Strategies)

Field Name	L	Type	Definition / Validation Rules
Instrument	4	Alphanumeric	Field added next to the Group Instrument field. To replace the ISIN field.
ISIN	12		Field removed
Instrument external code	30	Alphanumeric	Field length expanded from 20 to 30 bytes. External identifier used by traders when entering an order.

HSVF Message type RS – (Impacts all product types)

Field Name	L	Type	Definition / Validation Rules
Option classes requested	6	Alphanumeric	Field length expanded from 5 to 6 bytes. Options classes requested (using the 6 character symbol root, right padded with blanks). The client has to also specify the 6 character symbol root for all option symbols linked to an underlying.
HSVF Protocol Version	2	Alphanumeric	Field added next to the GAP Control field. Specify “D1” to receive the new symbology-compliant messages. Leave it blank to receive the current production message format. (Please also see information below concerning parallel production.)

HSVF Message type W – (Impacts all product types)

Field Name	L	Type	Definition / Validation Rules
Sequence number skipped	9	Numeric	Field length expanded from 8 to 9 bytes. Sequence number skipped.

Parallel Production

For the OSI change, the protocol version is introduced as part of the user connection request (HSVF Message Type RS above). Clients who want to receive the new symbology-compliant messages must include the new HSVF Protocol Version field and specify “D1” in this field at connection time.

The HSVF feed will still continue to recognize the current connection message (without the new protocol version field) and will return the current messages to those clients. Current HSVF version will be supported until conversion date (Feb 12, 2010).

The IP Address/port numbers will be the same whether clients receive the existing version or the new version that is OSI compliant.

Technical Details - ATR

A new message format will be used for the following message types:

- Message Type 30 – Trade
- Message Type 31 – Trade Cancel

This new message format will impact all product types.

Field Name	L	Type	Definition / Validation Rules
Message header	22		No change
Trade Number	6	Numeric	No change
Transaction Type	1	Alphanumeric	No change
Stamp Time	6	Alphanumeric	No change
Symbol	30	Alphanumeric	Field length expanded from 20 to 30 characters. Instrument symbol
Expiration Date	6	Alphanumeric	Field length expanded from 4 to 6 character, addition of DD part. Expiration date of the instrument. Format is YYMMDD Explicit Expiration Date to the day will be populated for all MX instruments, including futures and options on futures.
Strike Price	8	Numeric	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	Numeric	New field added. Define the number of decimal places or fraction positions.
Option Type	1	Alphanumeric	No change
Volume	8	Numeric	No change
Price (x 10000)	8	Numeric	No change
Opposite Broker	3	Numeric	No change
Account Type	1	Alphanumeric	No change
Pro ID	3	Alphanumeric	No change
Open Close	1	Alphanumeric	No change
Spec Hedge	1	Alphanumeric	No change
Executing Broker	3	Numeric	No change
Account Info	9	Alphanumeric	No change

Parallel Production

A new port number (28250) will be associated with the OSI-compliant version. Service on existing port (28220) will remain available until the conversion on February 12, 2010. IP address remains unchanged.

Technical Details - STAMP

The following message types are impacted:

- New Order
- Cancel Order
- Order/Cancel Confirmation Report
- Change Former Order (CFO)
- Change Former Order Confirmation Report
- Cross
- Cross Confirmation Report
- Fill Report
- Request for Quote
- Query Request
- Query Response

Only Equity, Index, ETF, and Currency Options are impacted.

In these message types, the field "55-Symbol" is expanded from 17 to 30 characters.

Field Name	L	Type	Definition / Validation Rules
55-Symbol	30	Alphanumeric	<p>Field length expanded from a maximum of 17 to a maximum of 30 bytes.</p> <p>The security/issue symbol.</p> <p>The new symbol format is: <Root><ExpiryDate><C/P><Strike Price></p> <p>where</p> <p><Root>: Underlying symbol, no trailing spaces required. <ExpiryDate>: Expiry date of the product, using the YYMMDD format. <C/P>: Identify Call or Put. <Strike Price>: Decimal point is required if the strike price contains a fractional part, no leading zeroes required.</p> <p>Examples of valid option Symbol for the underlying ABC: ABC081020C38 ABC081020C38.0 ABC081020C38.00 ABC081020C38.000 ABC081020P22.5 ABC1081020C5 (underlying ABC with corporate action will be distinguished with a digit after the symbol)</p> <p>Examples of valid option Symbol for the underlying Z: Z091218C105</p> <p>Symbol format for Futures, Options on Futures and Strategies remains unchanged.</p>

Parallel Production

MX will support both formats, the existing format and new OSI-compliant format in this field starting end of March 2009. The new format is mandatory as of the conversion date of February 12, 2010. From end of March 2009 until the conversion date, either format can be sent to MX.

Clients must notify MX for receipt of new field as this need to be configured in the MX system. THD coordinates are included at the end of the present Technical Notice.

Technical Details – TMS DTMIIB Reports

These changes impact all product types except Strategies.

Trex Format

The symbol format will be expanded from 5 to 6 characters in position 53 in the actual format.

The rest of the report will remain unchanged.

BSI Format

The symbol format will be expanded from 4 to 6 characters in position 22 in the actual format.

The strike price will be expanded from 6 to 8 digits in position 35 in the actual format, and will still be using 3 digits for the decimal portion.

The rest of the report will remain unchanged.

A new version of the TMS software will be supplied by MX that participants and clearing members will install. The new format of the DTMIIB files will be supported in the new version of TMS. The existing version of TMS will still be compatible until the conversion date of February 12, 2010 with the existing DTMIIB file format.

Accordingly, TMS users must coordinate installation with any vendor that they use to process the DTMIIB files.

Contact

Please contact the Technical Help Desk at 1-877-588-8489 or by e-mail samsupport@m-x.ca, if you require assistance or any additional information on this Technical Notice.

Information sessions are planned to follow the progress of the symbology initiative. Please ensure that a representative from your firm has registered to receive communications and updates regarding this project. To register, send an email to symbology@m-x.ca indicating your contact details, company, and area of interest (e.g. business operations or technical support, trading, clearing, market data, etc.).

Thank you,

Participant Connectivity Coordinator