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<input checked="" type="checkbox"/>	Back-office – Futures	<input checked="" type="checkbox"/>	Regulation
		<input type="checkbox"/>	MCeX

**CIRCULAR**  
**February 20, 2012**

**REQUEST FOR COMMENTS**

**CONTINUOUS TRADING**

**AMENDMENTS TO INTEREST RATES FUTURES, OPTIONS ON INTEREST RATES  
FUTURES, BOND FUTURES, OPTIONS ON BOND FUTURES AND INDEX FUTURES  
SPECIFICATIONS**

**AMENDMENTS TO THE DAILY SETTLEMENT PRICE PROCEDURES FOR FUTURES  
CONTRACTS  
AND OPTIONS ON FUTURES CONTRACTS**

The Rules and Policies Committee of Bourse de Montréal Inc. (the “**Bourse**”) has approved the amendments to the specifications of Interest Rates Futures, Options on Interest Rates Futures, Bond Futures, Options on Bond Futures, Index Futures (collectively, the “**Continuous Trading Products**”) and to the Daily Settlement Price Procedures for Futures Contracts and Options on Futures Contracts (the “**Procedures**”) of the Bourse in order to eliminate both the Early Session and the Extended Session for the Continuous Trading Products.

Under this proposal the regular session for Continuous Trading Products would open at 6:00am Eastern Standard Time (EST): the regular session for Interest Rates Futures, Options on Interest Rates Futures, Bond Futures and Options on Bond Futures would close at 4:00pm EST and the regular session for Index Futures would close at 4:15pm EST.

Comments on the proposed amendments must be submitted within 30 days following the date of publication of this notice, at the latest on **March 21, 2012**. Please submit your comments to:

*Mr. François Gilbert  
Vice-President, Legal Affairs, Derivatives  
Bourse de Montréal Inc.  
Tour de la Bourse  
P.O. Box 61, 800 Victoria Square  
Montréal, Quebec H4Z 1A9  
E-mail: [legal@m-x.ca](mailto:legal@m-x.ca)*

Circular no.:019-2012

A copy of these comments shall also be forwarded to the Autorité des marchés financiers (the Autorité) to:

*Ms. Anne-Marie Beaudoin  
Corporate Secretary  
Autorité des marchés financiers  
800 Victoria Square, 22<sup>nd</sup> Floor  
P.O. Box 246, Tour de la Bourse  
Montréal (Quebec) H4Z 1G3  
E-mail: [consultation-en-cours@lautorite.qc.ca](mailto:consultation-en-cours@lautorite.qc.ca)*

## **Appendices**

For your information, you will find in appendices an analysis of the proposed amendments as well as the amended Continuous Trading Products specifications and amended Procedures. The implementation date of the proposed amendments will be determined by the Bourse, in accordance with the self-certification process as determined by the *Derivatives Act* (R.S.Q., chapter I-14.01).

## **Process for Changes to the Rules**

The Bourse is authorized to carry on business as an exchange and is recognized as a self-regulatory organization (SRO) by the Autorité. The Board of Directors of the Bourse has delegated to the Rules and Policies Committee of the Bourse its powers to approve and amend the Rules and Procedures. The Rules of the Bourse are submitted to the Autorité in accordance to the self-certification process as determined by the *Derivatives Act* (R.S.Q., chapter I-14.01).

Circular no.: 019-2012

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## **AMENDMENTS TO INTEREST RATES FUTURES, OPTIONS ON INTEREST RATES FUTURES, BOND FUTURES, OPTIONS ON BOND FUTURES AND INDEX FUTURES SPECIFICATIONS**

### **AMENDMENTS TO THE DAILY SETTLEMENT PRICE PROCEDURES FOR FUTURES CONTRACTS AND OPTIONS ON FUTURES CONTRACTS**

#### **I. Introduction**

The Bourse proposes to eliminate both the Early Session and the Extended Session for Interest Rates Futures, Options on Interest Rates Futures, Bond Futures, Options on Bond Futures and Index Futures (collectively, the “Continuous Trading Products”). A list of the Continuous Trading Products is included below in *Section III. Proposed Regulatory Amendments, A. Amendments to the Specifications*.

Under this proposal the regular session for Continuous Trading Products would open at 6:00am Eastern Standard Time (EST): the regular session for Interest Rates Futures, Options on Interest Rates Futures, Bond Futures and Options on Bond Futures would close at 4:00pm EST and the regular session for Index Futures would close at 4:15pm EST (the “Continuous Trading Hours”).

This will result in a single uninterrupted trading session, with no breaks for market opens.

#### **II. Detailed Analysis**

##### **A. Rationale**

Opening the regular session at 6:00am EST for all Continuous Trading Products and closing the regular session for Interest Rates Futures, Options on Interest Rates Futures, Bond Futures and Options on Bond Futures at 4:00pm EST and at 4:15pm EST for Index Futures, would eliminate the pre-opening, no-cancel and closing breaks that currently exist in the trading day, allowing for an increase of twenty-four (24) minutes of trading time per trading day.

The implementation of Continuous Trading Hours offers several benefits:

1. Traders in UK and European time zones will not face an interruption in the trading of Continuous Trading Products during the middle of their trading day.
2. Liquidity providers will no longer face the risk of news and/or market moves during the mid-morning two-minute no-cancel period, during which orders cannot be cancelled or modified.
3. Market on Open orders will no longer be accepted for Continuous Trading Products; only limit orders will be accepted before the open. The requirement of entering a limit order, as opposed to a Market on Open order, will reduce the risk to participants of being filled at the open at a price that is outside their risk tolerance due to illiquidity in the order book.

All of these benefits should lead to improved liquidity and order book quality (size and depth), and ultimately, higher trading volumes.

The current and proposed trading hours and stages for the Bourse's Continuous Trading Products can be found below.

**Interest Rate Futures and Options on Interest Rate Futures**

Time	Current	Proposed
05:30	Pre-Open	Pre-Opening
05:58	No-Cancellation	No-Cancellation
06:00	Opening	Opening
...		
07:45	Pre-Opening	
07:58	No-Cancellation	
08:00	Opening	
...		
15:00	Closing	
15:05	Pre-Opening	
15:08	No-Cancellation	
15:09	Opening	
16:00	Closing	Closing

**Bond Futures and Options on Bond Futures**

Time	Current	Proposed
05:30	Pre-Opening	Pre-Opening
05:58	No-Cancellation	No-Cancellation
06:00	Opening	Opening
...		
08:15	Pre-Opening	
08:18	No-Cancellation	
08:20	Opening	
...		
15:00	Closing	
15:03	Pre-Opening	
15:05	No-Cancellation	
15:06	Opening	
16:00	Closing	Closing

**Index Futures**

Time	Current	Proposed
05:30	Pre-Opening	Pre-Opening
05:58	No-Cancellation	No-Cancellation
06:00	Opening	Opening
...		
09:15	Pre-Opening	
09:28	No-Cancellation	
09:30	Opening	
...		
16:15	Closing	Closing

**B. Benchmarking**

**Trading Hours and Phases of International Derivatives Exchanges**

Exchange	Trading Hours	Trading Phases
ASX	5.14pm - 7.00am and 8.34am - 4.30pm	Trading hours
CME	5:00pm – 4:00pm	Electronic Trading
Eurex	8:00am – 8:00pm	Trading, Post Trading, Last Trading Day Exercise Until
LIFFE Euronext	6:25pm – 5:30pm	Session Start, Pre-open, Open, Pre-close, Settlement, Close, Session Close

### **III. Proposed Regulatory Amendments**

#### **A. Amendments to the Specifications**

In order to adopt the Continuous Trading Hours for the Continuous Trading Products, the Bourse proposes to amend the contract specifications of the Continuous Trading Products listed below :

- a) Interest Rates Futures and Options on Interest Rates Futures
  - Three-Month Canadian Bankers' Acceptance Futures (BAX);
  - Options on Three-Month Canadian Bankers' Acceptance Futures (OBW, OBX, OBY & OBZ);
  - 30-Day Overnight Repo Rate Futures (ONX);
  - Overnight Index Swap Futures (OIS);
  
- b) Bond Futures and Options on Bond Futures
  - Ten-Year Government of Canada Bond Futures (CGB);
  - Five-Year Government of Canada Bond Futures (CGF);
  - Two-Year Government of Canada Bond Futures (CGZ);
  - 30-Year Government of Canada Bond Futures (LGB);
  - Options on Ten-Year Government of Canada Bond Futures (OGB);
  
- c) Index Futures
  - S&P/TSX Composite Index Mini Futures (SCF);
  - S&P/TSX 60 Index Standard Futures (SXF);
  - S&P/TSX 60 Index Mini Futures (SXM);
  - Index Sectorials (SXA, SXB, SXH & SXY);

The amendments to the Continuous Trading Products specifications will be made in accordance with the trading hours provided for in Section II. *Detailed Analysis A) Rationale*.

#### **B. Daily Settlement Price Procedures for Futures Contracts and Options on Futures Contracts**

The Bourse proposes to amend the Daily Settlement Price Procedures for Futures Contracts and Options on Futures Contracts in order to reflect that instead of using the last period of trading prior to closing as a reference to calculate settlement prices, the Bourse will use the last period of trading prior to 3:00pm, or prior to 1:00pm on early closing days, to establish a settlement price. This amendment will realign the Procedures with the process executed by the Bourse as well as the industry standard.

### **IV. Objectives and Consequences**

The objectives of this proposal are to create the conditions for improved liquidity and order book quality and to allow participants to trade more fluidly and to better manage risk through an uninterrupted trading day.

### **V. Public Interest**

The Bourse's proposed amendments would harmonise MX trading hours with those of peer exchanges, delivering greater operational efficiency to market participants.

In addition to minimizing the amount of effort involved in managing multiple openings, this could lead to a reduction in trading errors, providing incentives for participants to provide greater liquidity and benefiting the market as a whole.

## **VI. Process**

The proposed modifications to all Continuous Trading Products specifications, including this Analysis, must be approved by the Bourse's Rules and Policies Committee and published for comment for a period of thirty (30) days.

## **VII. References**

ASX - Trading Hours/Market Phases

[http://www.asx.com.au/documents/products/asx\\_trade24\\_trading\\_hours.pdf](http://www.asx.com.au/documents/products/asx_trade24_trading_hours.pdf)

CME - Trading Hours

[http://www.cmegroup.com/trading\\_hours/](http://www.cmegroup.com/trading_hours/)

Eurex - Trading Hours

[http://www.eurexchange.com/trading/hours/INT\\_en.html](http://www.eurexchange.com/trading/hours/INT_en.html)

LIFFE Euronext - Trading Hours

<http://globalderivatives.nyx.com/en/nyse-liffe-us/trading-hours-equity-indices>

## **VIII. Attached Documents**

- Continuous Trading Products Amended Specifications
- Amended Daily Settlement Price Procedures for Futures Contracts and Options on Futures Contracts

## BAX – Three-Month Canadian Bankers' Acceptance Futures

<b>Trading Unit</b>	C\$1,000,000 of Canadian bankers' acceptances with a three-month maturity.
<b>Contract Months</b>	Quarterly: March, June, September and December. Serials: two (2) nearest non-quarterly months.
<b>Price Quotation</b>	Index: 100 minus the annualized yield of Three-month Canadian Bankers' Acceptances.
<b>Last Day of Trading</b>	Trading ceases at 10:00 a.m. (Montréal time) on the 2 <sup>nd</sup> London (Great Britain) banking day prior to the 3 <sup>rd</sup> Wednesday of the contract month. If the determined day is an exchange or banking holiday in Montréal or Toronto, the last trading day shall be the previous bank business day.
<b>Contract Type</b>	Cash settlement.
<b>Minimum Price Fluctuation</b>	0.005 = C\$12.50 per contract for the three (3) nearest listed contract months, including serials. 0.01 = C\$25 per contract for all other contract months.
<b>Reporting Limit</b>	300 contracts.
<b>Position Limits</b>	Information on position limits can be obtained from the Exchange as they are subject to periodical changes.
<b>Final Settlement Price</b>	Based on the average of Three-month Canadian bankers' acceptance bid rates as quoted on CDOR page of Reuters' Monitor Service on the last trading day at 10:15 a.m. (Montréal time), excluding the highest and the lowest values.
<b>Minimum Margin Requirements</b>	Information on minimum margin requirements can be obtained from the Exchange as they are subject to periodical changes.
<b>Daily Price Limits</b>	None.
<b>Trading Hours</b> (Montréal time)	<del>Early session: 6:00 a.m. to 7:45 a.m.</del> Regular session: <del>6:00 a.m. to 4:00 p.m.*8:00 a.m. to 3:00 p.m.</del> <del>Extended session*: 3:00 p.m. to 4:00 p.m.</del> * <del>The regular session closes at 3:00 p.m.</del> There is no extended session- 3:00 p.m. on the last trading day of the expiring contract month.
	Note: During early closing days, the <del>regular</del> regular session closes at <del>1:00 p.m., time at which the daily settlement price is established.</del> In those circumstances, the extended session is from 1:09 p.m. to 1:30 p.m.
<b>Clearing Corporation</b>	Canadian Derivatives Clearing Corporation (CDCC).
<b>Ticker Symbol</b>	BAX

## Options on Three-Month Canadian Bankers' Acceptance Futures

### Trading Unit

One Three-Month Canadian Bankers' Acceptance Futures (BAX).

### Underlying Futures Contract

- For standard OBX options, the underlying BAX futures contract is the futures contract that expires in the month in which the option expires.
- For Serial Mid-Curve Options (OBW), the underlying BAX futures contract is the futures contract that expires one-year from the next quarterly month that is nearest to the expiration of the option. For example, the underlying futures contract for the One-year Mid-Curve option that expires in January or February is the March futures contract in the next calendar year.
- For 1-Year (OBY) and 2-year (OBZ) Quarterly Mid-Curve Options, the underlying BAX futures contract is the corresponding quarterly futures contract that expires one or two years after the option expires, respectively. For example, the underlying futures contract for the One-year Quarterly Mid-Curve option that expires in June is the June futures contract in the next calendar year.

### Contract Months

- For standard OBX options and for 1-Year (OBY) and 2-year (OBZ) Quarterly Mid-Curve Options: Four nearest months of the quarterly cycle: March, June, September and December.
- For Serial Mid-Curve Options (OBW): Two nearest non quarterly months (serials): January, February, April, May, July, August, October and November.

### Price Quotation

Quoted in points where each 0.01 point (1 basis point) represents C\$25. For example, a quote of 0.465 represents a total option premium of C\$1,162.50 (i.e. 46.5 basis points x C\$25).

### Cabinet trades

Cabinet trades (defined as options with a premium lesser than 0.01) are quoted in 0.001 point (0.1 basis point) where each 0.001 point represents C\$2.50.

### Last Trading Day/Expiration

- For standard OBX Options: Trading ceases at 10:00 a.m. (Montréal time) on the 2nd London (Great Britain) banking day prior to the 3rd Wednesday of the contract month. If the fixed day is a Bourse or bank holiday in Montréal or Toronto, the last trading day shall be the previous bank business day.
- For all Mid-Curve Options: Trading ceases at 10:00 a.m. (Montréal time) on the Friday immediately preceding the 3rd Wednesday of the contract month. If the fixed day is an exchange or banking holiday in Montreal or Toronto, the last trading day shall be the previous bank business day.

### Contract Type

American style.

### Price Fluctuation

- 0.005 = C\$12.50 per contract.
- 0.001 = C\$2.50 per contract for cabinet trades.

### Strike Prices

Set at a minimum 0.125 point intervals.

### Reporting Limit

300 options or futures equivalent contracts. For the purpose of calculating this limit, positions in the options contracts are aggregated with positions in the underlying futures contracts. For aggregation purposes, one option contract is equivalent to one futures contract.



## Daily Price Limit

None

## Trading Hours (Montréal time)

~~Early session: 6:00 a.m. to 7:45 a.m.~~

~~Regular session: 6:00 a.m. to 4:00 p.m.\*8:00 a.m. to 3:00 p.m.~~

- ~~Extended session\*: 3:09 p.m. to 4:00 p.m.~~

\* ~~The regular session closes at 3:00 p.m. There is no extended session~~ on the last trading day of the expiring contract month.

Note: During early closing days, the ~~regular-regular~~ session closes at ~~1:00 p.m., time at which the daily settlement price is established. In those circumstances, the extended session is from 1:09 p.m. to 1:30 p.m.~~

## Ticker Symbol

- For standard OBX Options: OBX
- For Serial Mid-Curve Options : OBW
- For 1-Year Quarterly Mid-Curve Options : OBY
- For 2-Year Quarterly Mid-Curve Options : OBZ

**ONX – 30-Day Overnight Repo Rate Futures**

<b>Trading Unit</b>	Each contract shall be for a nominal value of C\$5,000,000.
<b>Contract Months</b>	March, June, September and December plus three nearest non-quarterly months (serials).
<b>Price Quotation</b>	Index: 100 minus the monthly average overnight repo rate for the contract month.
<b>Last Day of Trading</b>	Last business day of the contract month.
<b>Contract Type</b>	Cash settlement.
<b>Minimum Price Fluctuation</b>	0.005 = C\$20.55 (one-half of 1/100 of one percent of C\$5,000,000 on a 30-day basis).
<b>Reporting Limit</b>	300 contracts.
<b>Position Limits</b>	Information on position limits can be obtained from the Exchange as they are subject to periodical changes.
<b>Final Settlement Price</b>	The contract is cash settled against the monthly average of the daily overnight repo rate for the contract month. The daily overnight repo rate (CORRA) is calculated and reported by the Bank of Canada. The monthly average is a simple arithmetic average corresponding to the sum of the daily overnight repo rates divided by the number of calendar days in the month. Weekend and holiday rates are considered to be the rate applicable on the previous business day for which a rate was reported. For example, Friday's rate is used for Saturday and Sunday rates. The final settlement price is determined on the first business day following the last day of trading.
<b>Minimum Margin Requirements</b>	Information on minimum margin requirements can be obtained from the Exchange as they are subject to periodical changes.
<b>Daily Price Limits</b>	None
<b>Trading Hours</b> (Montréal time)	<p><del>Early session: 6:00 a.m. to 7:45 a.m.</del>            Regular session: <u>6:00 a.m. to 4:00 p.m.*8:00 a.m. to 3:00 p.m.</u>  <del>Extended session*: 3:09 p.m. to 4:00 p.m.</del>            * <u>The regular session closes at 3:00 p.m.</u> <del>There is no extended session</del> on the last trading day of the expiring contract month.</p> <p>Note: During early closing days, the <del>regular</del> <u>regular</u> session closes at <del>1:00 p.m., time at which the daily settlement price is established.</del> <u>1:00 p.m.</u> <del>In those circumstances, the extended session is from 1:09 p.m. to 1:30 p.m.</del></p>
<b>Clearing Corporation</b>	Canadian Derivatives Clearing Corporation (CDCC).
<b>Ticker Symbol</b>	ONX.

## CGB – Ten-year Government of Canada Bond Futures

<b>Trading Unit</b>	Each contract represents C\$100,000 nominal value Government of Canada bond with 6% notional coupon.
<b>Contract Months</b>	March, June, September and December.
<b>Price Quotation</b>	Per C\$100 nominal value.
<b>Last Day of Trading</b>	Trading ceases at 1:00 p.m. (Montréal time) on the 7 <sup>th</sup> business day preceding the last business day of the delivery month.
<b>Contract Type</b>	Delivery of eligible Government of Canada bonds.
<b>Minimum Price Fluctuation</b>	0.01 = C\$10 per contract.
<b>Reporting Limit</b>	250 contracts.
<b>Position Limits</b>	Information on position limits can be obtained from the Exchange as they are subject to periodical changes.
<b>Delivery Notices</b>	Delivery notices should be submitted before 5:30 p.m. or before such time set by the clearing corporation on any business day, between the 3 <sup>rd</sup> business day preceding the first business day of the delivery month and the 3 <sup>rd</sup> business day preceding the last business day of the delivery month, inclusively.
<b>Delivery Day</b>	Delivery should be made on the 3 <sup>rd</sup> business day following the submission of the delivery notice by the member holding a seller's position or on any other day as determined by the clearing corporation. Delivery shall be completed no later than the last business day of the delivery month.
<b>Delivery Standards</b>	Government of Canada bonds which: <ul style="list-style-type: none"> <li>i) have a remaining time to maturity of between 8 years and 10½ years as of the first day of the delivery month, calculated by rounding down to the nearest whole three-month period;</li> <li>ii) have an outstanding amount of at least C\$3.5 billion nominal value;</li> <li>iii) are originally issued at ten-year auctions;</li> <li>iv) are issued and delivered on or before the 15<sup>th</sup> day preceding the first delivery notice day of the contract.</li> </ul>
<b>Minimum Margin Requirements</b>	Information on minimum margin requirements can be obtained from the Exchange as they are subject to periodical changes.
<b>Daily Price Limits</b>	None.
<b>Trading Hours</b> (Montréal time)	<p><del>□ Early session: 6:00 a.m. to 8:05 a.m.</del></p> <p><del>□ Regular session: 6:00 a.m. to 4:00 p.m.*8:20 a.m. to 3:00 p.m.</del></p> <p><del>□ Extended session*: 3:06 p.m. to 4:00 p.m.</del></p> <p>* <del>The</del>There is no <del>regular</del>extended session <u>closes at 3:00pm</u> on the last trading day of the expiring contract month.</p> <p>Note: During early closing days, the <del>regular</del>regular session closes at <u>1:00 p.m., time at which the daily settlement price is established. In those circumstances, the extended session is from 1:06 p.m. to 1:30 p.m.</u></p>
<b>Clearing Corporation</b>	Canadian Derivatives Clearing Corporation (CDCC).
<b>Ticker Symbol</b>	CGB

# Specifications

## CGF – Five-Year Government of Canada Bond Futures

<b>Trading Unit</b>	Each contract represents C\$100,000 nominal value Government of Canada bond with 6% notional coupon.
<b>Contract Months</b>	March, June, September and December.
<b>Price Quotation</b>	Par is on the basis of 100 points, with one point equal to C\$1,000.
<b>Last Day of Trading</b>	Trading ceases at 1:00 p.m. (Montréal time) on the 7 <sup>th</sup> business day preceding the last business day of the delivery month.
<b>Contract Type</b>	Delivery of eligible Government of Canada bonds.
<b>Minimum Price Fluctuation</b>	0.01 = C\$10 per contract.
<b>Reporting Limit</b>	250 contracts.
<b>Position Limits</b>	Information on position limits can be obtained from the Exchange as they are subject to periodical changes.
<b>Delivery Notices</b>	Delivery notices should be submitted before 5:30 p.m. or before such time set by the clearing corporation on any business day, between the 3 <sup>rd</sup> business day preceding the first business day of the delivery month and the 3 <sup>rd</sup> business day preceding the last business day of the delivery month, inclusively.
<b>Delivery Day</b>	Delivery should be made on the 3 <sup>rd</sup> business day following the submission of the delivery notice by the member holding a seller's position or on any other day as determined by the clearing corporation. Delivery shall be completed no later than the last business day of the delivery month.
<b>Delivery Standards</b>	Government of Canada bonds which: <ul style="list-style-type: none"> <li>i) have a remaining time to maturity of between 3 years 6 months and 5 years 3 months as of the first day of the delivery month, calculated by rounding down to the nearest whole month period;</li> <li>ii) have an outstanding amount of at least C\$3.5 billion nominal value;</li> <li>iii) are originally issued at five-year Government of Canada bond auctions;</li> <li>iv) are issued and delivered on or before the 15<sup>th</sup> day preceding the first delivery notice day of the contract.</li> </ul>
<b>Minimum Margin Requirements</b>	Information on minimum margin requirements can be obtained from the Exchange as they are subject to periodical changes.
<b>Daily Price Limits</b>	None
<b>Trading Hours</b> (Montréal time)	<p><del>□ Early session: 6:00 a.m. to 8:05 a.m.</del></p> <p><del>□ Regular session: 6:00 a.m. to 4:00 p.m. 8:20 a.m. to 3:00 p.m.</del></p> <p><del>□ Extended session*: 3:06 p.m. to 4:00 p.m.*</del></p> <p>* <del>The regular session closes at 3:00pm. There is no extended session on the last trading day of the expiring contract month.</del></p> <p>Note: During early closing days, the <del>regular-regular</del> session closes at <del>1:00 p.m., time at which the daily settlement price is established. In those circumstances, the extended session is from 1:06 p.m. to 1:30 p.m.</del></p>
<b>Clearing Corporation</b>	Canadian Derivatives Clearing Corporation (CDCC).
<b>Ticker Symbol</b>	CGF

## CGZ – Two-Year Government of Canada Bond Futures

# Specifications

<b>Trading Unit</b>	C\$200,000 nominal value Government of Canada Bond with 6% notional coupon
<b>Contract Months</b>	March, June, September and December.
<b>Price Quotation</b>	Par is on the basis of 100 points, with one point equal to C\$2,000.
<b>Last Trading Day</b>	Trading ceases at 1:00 p.m. (Montréal time) on the seventh business day preceding the last business day of the delivery month.
<b>Contract Type</b>	Physical delivery of eligible Government of Canada Bonds.
<b>Delivery Notices</b>	Delivery notices should be submitted before 5:30 p.m. or before such time set by the clearing corporation on any business day, between the second business day preceding the first business day of the delivery month, and the second business day preceding the last business day of the delivery month inclusively.
<b>Delivery Date</b>	Delivery shall be made on the second business day following the submission of the delivery notice by the member holding a seller's position or on any other day as determined by the clearing corporation. Delivery shall be completed no later than the last business day of the delivery month.
<b>Minimum Price Fluctuation</b>	0.005 = C\$10 per contract.
<b>Reporting Level</b>	250 contracts.
<b>Position Limits</b>	Information on position limits can be obtained from Exchange as they are subject to periodic changes.
<b>Minimum Margin Requirements</b>	Information on minimum margin requirements can be obtained from the Exchange as they are subject to periodic changes.
<b>Delivery Standards</b>	Government of Canada Bonds which: <ul style="list-style-type: none"> <li>i) have a remaining time to maturity of between 1½ year and 2½ years as of the first day of the delivery month, calculated by rounding down to the nearest whole month period;</li> <li>ii) have an outstanding amount of at least C\$2.4 billion nominal value;</li> <li>iii) are originally issued at two-year Government of Canada bond auctions;</li> <li>iv) are issued and delivered on or before the 15th day preceding the first delivery notice day month of the contract.</li> </ul>
<b>Daily Price Limit</b>	None.
<b>Trading Hours</b> (Montréal time)	<p><del>Early session: 6:00 a.m. to 8:05 a.m.</del>  Regular session: <del>6:00 a.m. to 4:00 p.m.</del>*<del>8:20 a.m. to 3:00 p.m.</del>  <del>Extended session*: 3:06 p.m. to 4:00 p.m.</del>  * <del>The regular session closes at 3:00 p.m.</del> <del>There is no extended session</del> on the last trading day of the expiring contract month.</p> <p>Note: During early closing days, the <del>regular</del><del>regular</del> session closes at <del>1:00 p.m., time at which the daily settlement price is established. In those circumstances, the extended session is from 1:06 p.m. to 1:30 p.m.</del></p>
<b>Clearing Corporation</b>	Canadian Derivatives Clearing Corporation (CDCC).
<b>Ticker Symbol</b>	CGZ

## LGB – 30-Year Government of Canada Bond Futures

# Specifications

<b>Trading Unit</b>	C\$100,000 nominal value Government of Canada Bond with 6% notional coupon
<b>Contract Months</b>	March, June, September and December.
<b>Price Quotation</b>	Per C\$100 nominal value.
<b>Last Trading Day</b>	Trading ceases at 1:00 p.m. (Montréal time) on the seventh business day preceding the last business day of the contract month.
<b>Contract Type</b>	Physical delivery of eligible Government of Canada Bonds.
<b>Delivery Notices</b>	Delivery notices must be submitted before 5:30 p.m. or before such time set by the clearing corporation on any business day, between the third business day preceding the first business day of the delivery month and the third business day preceding the last business day of the delivery month inclusively.
<b>Delivery Date</b>	Delivery must be made on the third business day following the submission of the delivery notice by the member holding a seller's position or on any other day as determined by the clearing corporation. Delivery shall be completed no later than the last business day of the delivery month.
<b>Minimum Price Fluctuation</b>	0.01 = C\$10 per contract.
<b>Reporting Level</b>	250 contracts.
<b>Position Limits</b>	Information on position limits can be obtained from the Exchange as they are subject to periodic changes.
<b>Minimum Margin Requirements</b>	Information on minimum margin requirements can be obtained from the Exchange as they are subject to periodic changes.
<b>Delivery Standards</b>	Government of Canada Bonds which: <ul style="list-style-type: none"> <li>i) have a remaining time to maturity of between 21 years and 33 years as of the first day of the delivery month, calculated by rounding down to the nearest entire three-month period;</li> <li>ii) have an outstanding amount of at least C\$3.5 billion nominal value;</li> <li>iii) are originally issued at thirty-year Government of Canada Bond auctions;</li> <li>iv) are issued and delivered on or before the 15th day preceding the first delivery notice day of the contract month.</li> </ul>
<b>Daily Price Limit</b>	None.
<b>Trading Hours</b> (Montreal time)	<p><del>Early session: 6:00 a.m. to 8:05 a.m.</del>  Regular session: <u>6:00 a.m. to 4:00 p.m.</u> <del>8:20 a.m. to 3:00 p.m.</del>  Extended session*: <u>3:06 p.m. to 4:00 p.m.</u>*</p> <p>* <del>The regular</del> <del>There is no extended</del> session <u>closes at 3:00 p.m.</u> on the last trading day of the expiring contract month.</p> <p>Note: During early closing days, the <del>regular</del> <del>regular</del> session closes at <u>4:00 p.m.</u>, <del>time at which the daily settlement price is established. In those circumstances, the extended session is from 1:06 p.m. to 1:30 p.m.</del></p>
<b>Clearing Corporation</b>	Canadian Derivatives Clearing Corporation (CDCC).
<b>Ticker Symbol</b>	LGB

## OGB – Options on Ten-Year Government of Canada Bond Futures

# Specifications

<b>Trading Unit</b>	One Ten-Year Government of Canada Bond Futures (CGB)
<b>Contract Months</b>	March, June, September and December, plus monthly options contracts based on the next quarterly futures contract that is nearest to the options contract.
<b>Price Quotation</b>	Quoted in points where each 0.005 point (0.5 basis point) represents C\$5.
<b>Last Trading Day / Expiration</b>	Trading ceases on the 3 <sup>rd</sup> Friday of the month preceding the options contract month, provided however, that such Friday is a business day and precedes at least 2 business days the 1 <sup>st</sup> notice day of the underlying futures contract.
<b>Contract Type</b>	American Style
<b>Minimum Price Fluctuation</b>	0.005 = C\$5
<b>Reporting Limits</b>	250 options or futures equivalent contracts. For the purpose of calculating the reporting limit, positions in the options contracts are aggregated with positions in the underlying futures contracts. For aggregation purposes, the futures equivalent of one in-the-money option contract is one futures contract and the futures equivalent of one out-of-the-money option contract is half a futures contract.
<b>Strike Prices</b>	Set at a minimum of 0.5 points intervals per Ten-Year Government Bond Futures
<b>Position Limits</b>	Information on position limits can be obtained from the Exchange as they are subject to periodical changes.
<b>Minimum Margin Requirements</b>	Information on minimum margin limits can be obtained from the Exchange as they are subject to periodical changes.
<b>Daily Price Limits</b>	None
<b>Trading Hours</b> (Montréal time)	<p><del>Early session: 6:00 a.m. to 8:05 a.m.</del>            Regular session: <del>6:00 a.m. to 4:00 p.m.</del> <del>8:00 a.m. to 3:00 p.m.</del>            Extended session*: <del>3:06 p.m. to 4:00 p.m.*</del>            * <del>The regular</del> <del>There is no extended</del> session <del>closes at 3:00 p.m.</del> on the last trading day of the expiring contract month.</p> <p>Note: During early closing days, the <del>regular</del> <del>regular</del> session closes at <del>1:00 p.m., time at which the daily settlement price is established. In those circumstances, the extended session is from 1:06 to</del> 1:30 p.m.</p>
<b>Clearing Corporation</b>	Canadian Derivatives Clearing Corporation (CDCC).
<b>Ticker Symbol</b>	OGB

## SCF - S&P/TSX Composite Index Mini Futures

<b>Underlying</b>	The S&P/TSX Composite Index is a capitalization-weighted index designed to measure the market activity of stocks listed on the Toronto Stock Exchange.
<b>Contract Size</b>	C\$5 times the level of the S&P/TSX Composite Index Mini futures
<b>Contract Months</b>	March, June, September and December.
<b>Price Quotation</b>	Quoted in index points
<b>Minimum Price Fluctuation</b>	5 index points for outright positions 1 index point for calendar spreads
<b>Last Trading Day</b>	The trading day prior to the Final Settlement Day.
<b>Final Settlement Day</b>	The 3 <sup>rd</sup> Friday of the contract month, providing it be a business day; if not, the 1 <sup>st</sup> preceding business day.
<b>Contract Type</b>	Cash settlement. The final settlement price is the Official Opening Level of the underlying index to the Final Settlement Day.
<b>Reporting Level</b>	1,000 contracts gross long and short in all contract months combined.
<b>Position Limits</b>	Information on Position Limits can be obtained from the Exchange as they are subject to periodical changes.
<b>Minimum Margin Requirements</b>	Information on Minimum Margin Requirements can be obtained from the Exchange as they are subject to periodical changes.
<b>Daily Price Limits</b>	A trading halt in the index futures contract will be invoked in conjunction with the triggering of circuit breakers in the underlying stocks.
<b>Trading Hours</b>	<del>Early session*: 6:00 a.m. to 9:15 a.m.</del> Regular session: <del>6:00 a.m. to 4:15 p.m.</del> *9:30 a.m. to 4:15 p.m.
<b>Clearing Corporation</b>	Canadian Derivatives Clearing Corporation (CDCC)
<b>Ticker Symbol</b>	SCF

\* A trading range of -5% to +5% (based on previous day's settlement price) has been established for the 6:00 a.m. to 9:30 a.m. time period of only for this the regular session.



## SXF – S&P/TSX 60 Index Standard Futures

# SPECIFICATIONS

Underlying	The S&P/TSX 60 index is a capitalization-weighted index of the 60 largest and most liquid stocks listed on the Toronto Stock Exchange.
Trading Unit	Size: C\$200 X the futures value
Contract Months	March, June, September and December
Price Quotation	Quoted in index points, expressed to two decimals.
Last Trading Day	Trading ceases on the trading day prior to the Final Settlement Day
Final Settlement Day	The 3 <sup>rd</sup> Friday of the contract month, providing it be a business day; if not, the 1 <sup>st</sup> preceding day.
Contract Type	Cash settlement. The final settlement price is the Official Opening Level of the underlying index on the Final Settlement Day.
Price Fluctuation	0.10 index points for outright positions 0.01 index points for calendar spreads
Reporting Threshold	1,000 futures contracts (standard and mini combined) on the S&P/TSX 60 Index gross long and short in all contract months combined.
Price Limits	A trading halt will be invoked in conjunction with the triggering of "circuit breaker" in the underlying stocks.
Trading Hours (Montréal Time)	<p>◆ <del>Early session*: 6:00 a.m. to 9:15 a.m.</del></p> <p>☒ Regular session: <u>6:00 a.m. to 4:15 p.m.</u> *<u>9:30 a.m. to 4:15 p.m.</u></p> <p>* Note: A trading range of – 5% to + 5% (based on previous day's settlement price) has been established <u>for the 6:00 a.m. to 9:30 a.m. time period of the regular only for this</u> session.</p>
Clearing Corporation	Canadian Derivatives Clearing Corporation (CDCC)
Ticker Symbol	SXF

SPECIFICATIONS

**SXM – S&P/TSX 60 Index Mini Futures**

Underlying	The S&P/TSX 60 index is a capitalization-weighted index of the 60 largest and most liquid stocks listed on the Toronto Stock Exchange.
Trading Unit	Size: C\$50 X the futures value
Contract Months	March, June, September and December
Price Quotation	Quoted in index points, expressed to two decimals.
Last Trading Day	Trading ceases on the trading day prior to the Final Settlement Day.
Final Settlement Day	The 3 <sup>rd</sup> Friday of the contract month, providing it be a business day; if not, the 1 <sup>st</sup> preceding day.
Contract Type	Cash settlement. The final settlement price is the Official Opening Level of the underlying index on the Final Settlement Day.
Price Fluctuation	0.10 index points for outright positions 0.01 index points for calendar spreads
Reporting Threshold	1,000 futures contracts (standard and mini combined) on the S&P/TSX 60 Index gross long and short in all months combined.
Price Limits	A trading halt will be invoked in conjunction with the triggering of "circuit breaker" in the underlying stocks.
Trading Hours (Montréal Time)	<p>◆ <del>Early session*: 6:00 a.m. to 9:15 a.m.</del></p> <p>▣ Regular session: <u>6:00 a.m. to 4:15 p.m.</u> <del>9:30 a.m. to 4:15 p.m.</del></p> <p>* Note: A trading range of – 5% to + 5% (based on previous day's settlement price) has been established <u>for the 6:00 a.m. to 9:15 a.m. time period of the regular only for this session.</u></p>
Clearing Corporation	Canadian Derivatives Clearing Corporation (CDCC)
Ticker Symbol	SXM

## SECTORIAL INDEX FUTURES

# Specifications

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**Underlying**

The designated S&P/TSX Sectorial Index:

- S&P/TSX Capped Information Technology Index
- S&P/TSX Capped Energy Index
- S&P/TSX Capped Financials Index
- S&P/TSX Global Gold Index

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**Contract Size**

- SXH: C\$500 times the S&P/TSX Capped Information Technology Index
- SXY: C\$200 times the S&P/TSX Capped Energy Index
- SXB: C\$200 times the S&P/TSX Capped Financials Index
- SXA: C\$200 times the S&P/TSX Global Gold Index

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**Contract Months**

March, June, September and December.

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**Price Quotation**

Quoted in index points, expressed to two decimals.

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**Minimum Price Fluctuation**

- 0.05 index points for the S&P/TSX Capped Information Technology Index
- 0.10 index points for the S&P/TSX Capped Energy Index
- 0.10 index points for the S&P/TSX Capped Financials Index
- 0.10 index points for the S&P/TSX Global Gold Index

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**Last Trading Day**

The trading day prior to the Final Settlement Day.

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**Final Settlement Day**

The 3rd Friday of the contract month, providing it be a business day; if not, the 1st preceding business day.

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**Contract Type**

Cash settlement. The final settlement price is the Official Opening Level of the underlying sectorial index on the Final Settlement Day.

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**Reporting Level**

500 net long or short in all contracts months combined.

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**Position Limits**

Information on Position Limits can be obtained from the Bourse as they are subject to periodical changes.

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**Minimum Margin Requirements**

Information on Minimum Margin Requirements can be obtained from the Bourse as they are subject to periodical changes.

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**Daily Price Limit**

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A trading halt in the sectorial index futures contracts will be invoked in conjunction with the triggering of circuit breakers in the underlying stocks set in coordination with the New York Stock Exchange and the Toronto Stock Exchange.

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**Trading Hours (Montréal time)**

~~Early session\*: 6:00 a.m. to 9:15 a.m.~~

Regular session: ~~6:00 a.m. to 4:15 p.m. \*9:30 a.m. to 4:15 p.m.~~

\* A trading range of -5% to +5% (based on previous day's settlement price) has been established ~~only~~ for the 6:00 a.m. to 9:30 a.m. this time period of the regular session.

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**Ticker Symbols**

SXA- Gold                      SXH- Information Technology  
SXB- Financials              SXY- Energy

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**Clearing Corporation**

Canadian Derivatives Clearing Corporation (CDCC).

## OIS – Overnight Index Swap Futures

<b>Trading Unit</b>	Each contract shall be for a nominal value of C\$5,000,000.
<b>Underlying</b>	The compounded daily overnight repo rate (CORRA) quoted in terms of an overnight repo rate index.
<b>Fixed Rate and Floating Rate of the Swap</b>	Fixed for floating interest rate swap where a fixed rate is swapped against a floating rate. The floating rate is the compounded daily overnight repo rate (CORRA) over the period of the contract month.
<b>Contract Months</b>	Contract months will be listed to match the Bank of Canada's schedule of Fixed Announcement Dates.
<b>Price Quotation</b>	<p>Index: 100 – R</p> <p>R = the compounded daily overnight repo rate (CORRA) for the contract month. It is calculated in accordance with the following formula:</p> $R = \left[ \prod_{i=1}^{d_o} \left( 1 + \frac{ORR_i \times n_i}{365} \right) - 1 \right] \times \frac{365}{d} \times 100$ <p>where:</p> <p>“<math>d_o</math>”, the number of Business Days in the calculation period;</p> <p>“<math>i</math>” is a series of whole numbers from one to <math>d_o</math>, each representing the relevant Business Day in chronological order from, and including, the first Business Day in the relevant Calculation Period;</p> <p><math>ORR_i</math> = Overnight Repo Rate (CORRA) on the <math>i^{th}</math> day of the calculation period (if the <math>i^{th}</math> day is not a business day, the previous available CORRA is used);</p> <p>“<math>n_i</math>” is the number of calendar days in the relevant Calculation Period on which the rate is <math>ORR_i</math>;</p> <p>“<math>d</math>” is the number of calendar days in the relevant Calculation Period.</p>
<b>Last Trading Day</b>	The day of a Bank of Canada Fixed Announcement Date.
<b>Contract Type</b>	Cash settlement.
<b>Minimum Price Fluctuation</b>	0.001 = C\$6.25 (one-tenth of 1/100 of one percent of C\$5,000,000 on a 45.625/365 day basis).
<b>Reporting Limit</b>	300 contracts.

<b>Position Limits</b>	Information on position limits can be obtained from the Exchange as they are subject to periodical changes.
<b>Final Settlement Price</b>	<p>The final settlement price shall be determined by the Bourse and shall be equal to 100 minus the compounded daily overnight repo rate (CORRA) expressed in terms of an overnight repo rate index and calculated over the period of the contract month that begins the day following the last Bank of Canada Fixed Announcement Date to the day of the next Bank of Canada Fixed Announcement Date. Weekend and holiday rates are considered to be the rate applicable on the previous business day for which a rate was reported. For example, Friday's rate is used for Saturday and Sunday rates.</p> <p>The daily overnight repo rate (CORRA) is calculated and reported by the Bank of Canada.</p> <p>The final settlement price is rounded to the nearest 1/10th of one basis point (0.001). In the case a decimal fraction ends with 0.0005 or higher, the final settlement price shall be rounded up</p> <p>The final settlement price is determined on the first business day following the last day of trading.</p>
<b>Minimum Margin Requirements</b>	Information on minimum margin requirements can be obtained from the Exchange as they are subject to periodical changes.
<b>Daily Price Limit</b>	None
<b>Trading Hours</b> (Montréal time)	<p><del>Early session: 6:00 a.m. to 7:45 a.m.</del>  Regular session: <del>6</del>8:00 a.m. to <del>4</del>3:00 p.m. *  <del>Extended session*: 3:09 p.m. to 4:00 p.m.</del>  * <del>The regular session closes at 3:00 p.m. There is no extended session</del> on the last trading day of the expiring contract month.</p> <p>Note: During early closing days, the regular session closes at <del>1:00 p.m., time at which the daily settlement price is established. In those circumstances, the extended session is from 1:09 p.m. to</del> 1:30 p.m.</p>
<b>Clearing Corporation</b>	Canadian Derivatives Clearing Corporation (CDCC).
<b>Ticker Symbol</b>	OIS

Specifications – Trading  
2012. ~~XX02.XX46~~

## DAILY SETTLEMENT PRICE PROCEDURES FOR FUTURES CONTRACTS AND OPTIONS ON FUTURES CONTRACTS

### 1. RULE

Article 6390 of the Rules of Bourse de Montréal Inc. (the Bourse) stipulates that:

“The daily settlement price or the closing quotation are determined according to the procedures established by the Bourse for each derivative instrument.”

### 2. SUMMARY

#### FUTURES CONTRACTS AND OPTIONS ON FUTURES CONTRACTS DAILY SETTLEMENT PRICES

- These markets use an average price during the last minutes of trading [prior to 3:00pm, or prior to 1:00pm on early closing days](#), to establish a single settlement price. These calculations are executed manually by market officials or, as the case may be, by an automated algorithm using pre-established guidelines for each product.
- The prices at which block trades, Exchange for Physical (EFP), Exchange for Risk (EFR) or Substitution transactions are arranged shall not be used to establish the open, high, low or daily settlement price.

### 3. OBJECTIVES

The objectives of establishing daily settlement prices are [to](#):

- Ensure a fair and orderly market close and pricing for approved participants, so that they can properly mark-to-market their positions for margin calculations and back office processing, including the clearing and settlement of their transactions ;
- Ensure that the Canadian Derivatives Clearing Corporation (CDCC) and all market participants are informed of the settlement prices.

### 4. DESCRIPTION

#### 4.1 THREE-MONTH CANADIAN BANKERS' ACCEPTANCE FUTURES CONTRACTS (BAX)

The daily settlement price procedure for the Three-Month Canadian Bankers' Acceptance Futures contract (BAX) is executed by a fully automated pricing algorithm which utilizes the parameters described in sections 4.1.1, 4.1.2 and 4.1.3 to ensure accuracy in the process.

## **DEFINITIONS:**

**“Regular orders”:** Orders routed by approved participants to the Montréal Exchange trading system.

**“Implied orders”:** Orders generated by the implied pricing algorithm (using regular orders) and registered in the order book by the trading engine.

### **4.1.1 IDENTIFICATION OF THE FRONT QUARTERLY CONTRACT MONTH**

The automated daily settlement pricing algorithm identifies the front quarterly contract month from the first two quarterly contract months. The front quarterly contract month is the one, among the first two quarterly contract months, that has the largest open interest and the required market information. In the absence of both these criteria together, then the front quarterly contract month shall be determined by market officials based on available market information.

### **4.1.2 ALGORITHM UTILIZED FOR THE DETERMINATION OF THE DAILY SETTLEMENT PRICE OF THE FRONT QUARTERLY CONTRACT MONTH**

Once the front quarterly contract month has been identified, the automated daily settlement price algorithm will determine the settlement price of the front quarterly contract month according to the following priorities: first, it will use the last three minute weighted average price of cumulated trades [prior to 3:00pm, or prior to 1:00pm on early closing days.](#) amounting to at least 50 contracts on that contract month; if no such average price is available, it will then use the last 30 minute weighted average price of cumulated trades [prior to 3:00pm, or prior to 1:00pm on early closing days.](#) amounting to at least 50 contracts on that contract month. Trades resulting from both regular and implied orders will be used in the process. If no such average price is yet available, then the least variation between the bid or offer price that is not as a result of implied orders and the previous day settlement price will be used.

Once the daily settlement price for the front quarterly contract month has been established, it will be verified against the booked orders and if there is a better outright bid or offer that is not as a result of implied orders, the latter will take precedence over the daily settlement price calculated as described in the paragraph above.



#### 4.1.3 PROCEDURE FOR THE DETERMINATION OF THE DAILY SETTLEMENT PRICE OF THE REMAINING BAX CONTRACT MONTHS

Upon completion of the aforementioned steps, the automated daily pricing algorithm will then establish the settlement prices for all other BAX contract months sequentially. The daily settlement prices of all other BAX contract months will be based first on the last three minute outright market (resulting from regular and implied orders) prior to 3:00pm, or prior to 1:00pm on early closing days, and strategy combination traded weighted average or, if no weighted average price can be determined in this manner, the least variation between the bid or offer for booked orders.

#### 4.1.4 ANCILLARY PROCEDURE

In the absence of any required items to apply the aforementioned procedure, market officials will establish the settlement price based on available market information. They may also disregard any event (trade, bid or offer) which occurs close to ~~near~~ 3:00pm, or close to 1:00pm on early closing days, the end of the regular trading session and which is not compatible with a given settlement price.

In this situation, market officials will keep a record of the criteria used to establish the settlement price.

### 4.2 FUTURES CONTRACTS ON S&P/TSX INDICES

The settlement price shall be the weighted average of all trades during the closing range. The closing range is defined as the last minute of the trading session for all contract months. In the case of mini futures contracts on S&P/TSX indices, the settlement price shall be the same as the standard futures contracts on S&P/TSX indices when such standard futures contracts exist.

#### 4.2.1 MAIN PROCEDURE

- **Booked orders**

If there is an unfilled order with a higher bid or lower offer in an outright month, this bid or offer will override the settlement price obtained from the weighted average. The order must have been posted for 20 seconds or longer prior to 3:00pm, or for 20 second or longer prior to 1:00pm on early closing days, the close and its size must be for a total of 10 contracts or more.

- **Last trades**

If there are no trades in the last minute of trading, then the last trade will be taken into account while still respecting posted bids and offers in the market.

#### 4.2.2 FIRST ANCILLARY PROCEDURE

When two contract months and the spread are trading (quarterly calendar roll), the ancillary procedure of this section will apply.

- The front month must be settled first (the establishment of the front month is based on the month with the greatest open interest).
- The spread between the two contract months must be settled next by taking into account the last minute average trading price [prior to 3:00pm, or prior to 1:00pm on early closing days](#), and by examining the trades executed during the previous 10 minutes.
- The settlement price for the back month or far month is obtained by the difference between the front month settlement price and the value of the spread.

#### 4.2.3 SECOND ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.2.1 and the ancillary procedure in 4.2.2, the following ancillary procedure will apply.

Market officials will post a settlement price that will reflect the same differential that was applied on the previous day settlement. The settlement price will be adjusted accordingly to respect that contract's previous settlement price.

#### 4.2.4 THIRD ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.2.1 and the ancillary procedures in 4.2.2 and in 4.2.3, the following ancillary procedure will apply.

In this situation, market officials will establish the settlement price based on available market information. They may also disregard any event (trade, bid or offer) which occurs [close to 3:00pm, or close to 1:00pm on early closing days](#), ~~near the end of the regular trading session~~ and which is not compatible with a given settlement price.

In this situation, market officials will keep a record of the criteria used to establish the settlement price.

### 4.3 GOVERNMENT OF CANADA BOND FUTURES CONTRACTS

#### 4.3.1 MAIN PROCEDURE

The settlement price shall be the weighted average of all trades during the closing range. The closing range is defined as the last minute of ~~the~~ trading [prior to 3:00pm, or prior to 1:00pm on early closing days](#), ~~session~~ for all contract months.

- **Booked orders**

If there is an unfilled order with a higher bid or lower offer in an outright month, this bid or offer will override the settlement price obtained from the weighted average. This order must have been posted for 20 seconds or longer prior to [3:00pm, or prior to 1:00pm on early closing days,~~the close~~ and its size must be for 10 contracts or more.](#)

- **Last trades**

If there are no trades in the last minute of trading, then the last trade will be taken into account while still respecting posted bids and offers in the market.

#### **4.3.2 FIRST ANCILLARY PROCEDURE**

When two contract months and the spread are trading (quarterly calendar roll), the following ancillary procedure will apply.

- The front month must be settled first (the establishment of the front month is based on the month with the greatest open interest).
- The spread between the two contract months must be settled next by taking into account the last minute average trading price [prior to 3:00pm, or prior to 1:00pm on early closing days,](#) and by examining the trades executed during the previous 10 minutes.
- The settlement price for the back month or far month is obtained by the difference between the front month settlement price and the value of the spread.

#### **4.3.3 SECOND ANCILLARY PROCEDURE**

In the absence of the items required to apply the main procedure in 4.3.1 and the ancillary procedure in 4.3.2, the following ancillary procedure will apply.

Market officials will post a settlement price that will reflect the same differential that was applied on the previous business day. The settlement price will be adjusted accordingly to respect that contract's previous settlement price.

#### 4.3.4 THIRD ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.3.1 and the ancillary procedures in 4.3.2 and 4.3.3, the following ancillary procedure will apply.

In this situation, market officials will establish the settlement price based on available market information. They may also disregard any event (trade, bid or offer) which occurs ~~near the end of the regular trading session~~ close to 3:00pm, or close to 1:00pm on early closing days, and which is not compatible with a given settlement price.

In this situation, market officials will keep a record of the criteria used to establish the settlement price.

#### 4.4 OPTIONS ON THREE-MONTH CANADIAN BANKERS' ACCEPTANCE FUTURES CONTRACTS

##### 4.4.1 MAIN PROCEDURE

###### 4.4.1.1 Weighted average

The settlement price shall be the weighted average of the prices traded in the closing range (last minute of trading prior to 3:00pm, or prior to 1:00pm on early closing days). If there is, at the close, a higher bid or lower offer than the settlement price so obtained, that bid or offer shall be the settlement price.

###### 4.4.1.2 Last trades

If no trade occurs during the closing range, the market officials will consider transactions executed during the last 30 minutes of trading prior to 3:00pm, or prior to 1:00pm on early closing days. Also, to be considered, the bids and offers shall be for a minimum of 25 contracts and shall have been posted at least one minute before the 3:00pm~~close,~~ or before 1:00pm on early closing days,~~close~~ to be considered.

If no trade occurs in the closing range (or in the last 30 minutes of trading prior to 3:00pm, or prior to 1:00pm on early closing days), the settlement price shall be the theoretical price calculated by the Bourse (as described in section 4.4.2). If there is, at the close, a higher bid or lower offer than the settlement price so obtained, that bid or offer shall be the settlement price.

##### 4.4.2 ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.4.1, the following ancillary procedure will apply.

The settlement price shall be determined by inserting the following parameters into a standard option pricing model (Black & Scholes):

**Price of the underlying:**

- The Bourse will capture the settlement price of the underlying BAX futures contract. This will be the price of the underlying.

**Interest rate:**

- The interest rate used will be the rate implied by the settlement price of the BAX futures contract nearest to expiration.

**Volatility:**

- The Bourse will use the implied volatility (per contract month, for puts and calls) obtained from the acting Market Maker. The same volatility will be applied for both calls and puts.

The strike price of the options' series and the time to expiration are the other parameters that will be inserted into the model.

In determining the closing price, the Bourse shall take into account the information provided by the posted strategy, for example; if the SEP 9200 straddle is 98 bid, the total of the closing prices of these two series should not be inferior to 98.

## **4.5 30-DAY OVERNIGHT REPO RATE FUTURES CONTRACTS (ONX)**

### **4.5.1 MAIN PROCEDURE**

The settlement price shall be the weighted average of all trades during the closing range. The closing range is defined as the last three minutes of ~~the~~ trading ~~session~~ prior to 3:00pm, or prior to 1:00pm on early closing days, for all contract months.

#### **4.5.1.1 Weighted average of closing range trades**

The weighted average will be derived from trades that occurred in the outright months during the closing range. The total volume traded in each outright month must be for 25 or more contracts.

#### **4.5.1.2 Booked orders**

If there is an unfilled order with a higher bid price or lower offer price in a month, this bid or offer will override the settlement price obtained from the weighted average. This order must have been posted for 15 seconds or longer prior to ~~the~~ 3:00pm, or prior to 1:00pm on early closing days, ~~close~~ and its size must be for a total of 25 or more contracts in each of the months.

#### 4.5.1.3 Remaining balances of booked orders partially executed at the close

In the case of a booked order as stipulated in paragraph 4.5.1.2 above, which would be only partially executed, the trades during the closing period as well as the remaining balance of booked orders will be considered to establish the settlement price.

Example 1: If there is a booked order for 25 ONX contracts at 97.92 and 15 of those contracts are executed, the 10 remaining contracts, if they are still present on the market at the same price, will be considered to establish the required minimum of 25 contracts.

Example 2: If there is a trade of 15 ONX contracts during the closing period at 97.92 and there is a booked order bid for 10 ONX contracts at 97.91 (respecting the required time limit), the bid will be considered in addition to the trades in the closing period to establish a settlement price.

#### 4.5.1.4 Strips and spreads

All trades and unfilled booked orders for strips and spreads related to any expiry months will be ignored.

### 4.5.2 FIRST ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.5.1, the following ancillary procedure will apply.

#### 4.5.2.1 Weighted average of trades on strategies

The settlement price shall be the weighted average of the trades on the strategies traded during the last five minutes of trading prior to 3:00pm, or prior to 1:00pm on early closing days, provided the volume for the strategy taken into account was of 25 or more contracts.

#### 4.5.2.2 Booked orders

If there is an unfilled order with a higher bid or lower offer, this bid or offer will override the settlement obtained from the weighted average described in 4.5.2.1. It has to have been posted for three minutes or longer prior to 3:00pm, or prior to 1:00pm on early closing days, ~~the else~~ and the size must be for 25 or more contracts.

### 4.5.3 SECOND ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.5.1 and the ancillary procedure in 4.5.2, the following ancillary procedure will apply.

#### 4.5.3.1 Differential with the previous contract month's settlement price

The settlement price will be defined by a price that reflects an appropriate differential with the settlement price of the previous contract month always starting with the contract month closest to expiry.

#### 4.5.3.2 Conflicts between spreads

If two spreads are in conflict, the calendar spread closest to expiry will have priority.

#### 4.5.4 THIRD ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.5.1 and the ancillary procedures in 4.5.2 and 4.5.3, the following ancillary procedure will apply.

In this situation, market officials will establish the settlement price based on the available market information. They may also disregard any event (trade, bid or offer) which occurs close to 3:00pm, or close to 1:00pm on early closing days, near the end of the regular trading session and which is not compatible with a given settlement price.

In this situation, market officials will keep a record of the criteria used to establish the settlement price.

### 4.6 FUTURES CONTRACTS ON CARBON DIOXIDE EQUIVALENT (CO<sub>2</sub>e) UNITS

#### 4.6.1 MAIN PROCEDURE

The settlement price shall be the weighted average of all traded prices during the closing range. The closing range is defined as the last fifteen minutes of ~~the~~ trading prior to 3:00pm, or prior to 1:00pm on early closing days, session for all contract expiries.

- **Booked orders**

If there is an unfilled order with a higher bid or lower offer in a particular contract expiry, this bid or offer will override the settlement price obtained from the weighted average. This order must have been posted for 20 seconds or longer prior to 3:00pm, or prior to 1:00pm on early closing days, the close and its size must be for 10 contracts or more.

- **Last trades**

If there are no trades in the last fifteen minutes of trading prior to 3:00pm, or prior to 1:00pm on early closing days, then the last trade will be taken into account while still respecting posted bids and offers in the market.

#### 4.6.2 FIRST ANCILLARY PROCEDURE

When two contracts expiries and the spread are trading (calendar roll), the following ancillary procedure will apply.

- The contract having the earliest expiry must be settled first.
- The spread between the two contracts must be settled next by taking into account the last fifteen minutes average trading price prior to 3:00pm, or prior to 1:00pm on early closing days. and by examining the trades executed during the previous 30 minutes.
- The settlement price for the far-dated contracts corresponds to the difference between the settlement price of the contract having the earliest expiry and the value of the spread.

#### 4.6.3 SECOND ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.6.1 and the ancillary procedure in 4.6.2, the following ancillary procedure will apply.

Market officials will post a settlement price that will reflect the same differential that was applied on the previous trading day. The settlement price will be adjusted accordingly to respect that contract's previous settlement price.

#### 4.6.4 THIRD ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.6.1 and the ancillary procedures in 4.6.2 and 4.6.3, the following ancillary procedure will apply.

In this situation, market officials will establish the settlement price based on available market information. They may also disregard any event (a trade, a bid or an offer) which occurs close to 3:00pm, or close to 1:00pm on early closing days. ~~near the end of the regular trading session~~ and which is not compatible with a given settlement price.

Market officials will register in the “daily settlement price record” the criteria considered for determining the settlement price.

### 4.7 FUTURES CONTRACTS ON CANADIAN CRUDE OIL

The daily settlement price procedure for Futures contracts on Canadian Crude Oil is executed by a fully automated pricing algorithm which utilizes the parameters described in sections 4.7.1, 4.7.2 and 4.7.3 to ensure accuracy in the process.

#### DEFINITIONS:

“**Regular orders**”: Orders routed by approved participants to the Bourse’s trading system.



**“Implied orders”**: Orders generated by the implied pricing algorithm (using regular orders) and registered in the order book by the trading engine.

#### **4.7.1 IDENTIFICATION OF THE FRONT CONTRACT MONTH**

The automated daily settlement pricing algorithm identifies the front contract month from the first two contract months. The front contract month is the one, among the first two contract months, that has the largest open interest and the required market information. In the absence of both these combined criteria, the front contract month shall be determined by market officials based on available market information.

#### **4.7.2 ALGORITHM UTILIZED FOR THE DETERMINATION OF THE DAILY SETTLEMENT PRICE OF THE FRONT CONTRACT MONTH**

##### **4.7.2.1 Main Procedure**

- A.** Once the front contract month has been identified, the automated daily settlement price algorithm will determine the settlement price of the front contract month according to the following priorities:
  - 1)** first, it will use a weighted average price of cumulated trades executed during the last five minutes of the regular trading prior to 3:00pm, or prior to 1:00pm on early closing days, session and amounting to at least 10 contracts on that contract month;
  - 2)** if no such average price is available, it will then use the weighted average price of cumulated trades executed during the last 30 minutes of the regular trading prior to 3:00pm, or prior to 1:00pm on early closing days, session and amounting to at least 10 contracts on that contract month.
- B.** Trades resulting from both regular and implied orders will be used in the process.
- C.** If no such average price is yet available, the bid price or offer price, that is not the result of implied orders and representing the smallest variation compared to the previous day settlement price will be used.

Once the daily settlement price for the front contract month has been established, it will be verified against the booked orders and if there is a better outright bid or offer that is not resulting from implied orders, the latter will take precedence over the daily settlement price calculated as described in paragraphs 4.7.2.1 A), B) and C) above.

### 4.7.3 PROCEDURE FOR THE DETERMINATION OF THE DAILY SETTLEMENT PRICE OF THE REMAINING CONTRACT MONTHS

Upon completion of the aforementioned steps, the automated daily pricing algorithm will then establish the settlement prices for all other contract months sequentially. The daily settlement prices of all other contract months will be established as follows:

- A. first it will use the weighted average price of transactions (resulting from regular and implied orders) and strategies executed during the last five minutes of ~~the regular~~ trading prior to 3:00pm, or prior to 1:00pm on early closing days, session; or,
- B. if no weighted average price can be determined in this manner, then the same variation from the previous day's settlement price as calculated for the preceding contract expiry will be applied while respecting the posted market;

### 4.7.4 ANCILLARY PROCEDURE

- A. In the absence of the required items to apply the aforementioned procedure, market officials will establish the daily settlement price based on available market information. They may also disregard any event (trade, bid or offer) which occurs close to 3:00pm, or close to 1:00pm on early closing days, near the end of the regular trading session and which is not compatible with a given settlement price.
- B. In this situation, market officials will keep a record of the criteria used to establish the settlement price.

## 4.8 OVERNIGHT INDEX SWAP FUTURES CONTRACTS (OIS)

### 4.8.1 MAIN PROCEDURE

The settlement price shall be the weighted average of all trades during the closing range. The closing range is defined as the last three minutes of ~~the trading session~~ prior to 3:00pm, or prior to 1:00pm on early closing days, for all contract months.

#### 4.8.1.1 Weighted average of closing range trades

The weighted average will be derived from trades that occurred in the outright months during the closing range. The total volume traded in each outright month must be for 25 or more contracts.

#### 4.8.1.2 Booked orders

If there is an unfilled order with a higher bid price or lower offer price in a month, this bid or offer will override the settlement price obtained from the weighted average. This order must have been posted for 15 seconds or longer prior to ~~the~~ 3:00pm, or prior to 1:00pm on early

closing days, close and its size must be for a total of 25 or more contracts in each of the months.

#### **4.8.1.3 Remaining balances of booked orders partially executed at the close**

In the case of a booked order as stipulated in paragraph 4.8.1.2 above, which would be only partially executed, the trades during the closing period as well as the remaining balance of booked orders will be considered to establish the settlement price.

Example 1: If there is a booked order for 25 OIS contracts at 97.92 and 15 of those contracts are executed, the 10 remaining contracts, if they are still present on the market at the same price, will be considered to establish the required minimum of 25 contracts.

Example 2: If there is a trade of 15 OIS contracts during the closing period at 97.92 and there is a booked order bid for 10 OIS contracts at 97.91 (respecting the required time limit), the bid will be considered in addition to the trades in the closing period to establish a settlement price.

#### **4.8.1.4 Strips and spreads**

All trades and unfilled booked orders for strips and spreads related to any expiry months will be ignored.

### **4.8.2 FIRST ANCILLARY PROCEDURE**

In the absence of the items required to apply the main procedure in 4.8.1, the following ancillary procedure will apply.

#### **4.8.2.1 Weighted average of trades on strategies**

The settlement price shall be the weighted average of the trades on the strategies traded during the last five minutes of trading prior to 3:00pm, or prior to 1:00pm on early closing days, provided the volume for the strategy taken into account was of 25 or more contracts.

#### **4.8.2.2 Booked orders**

If there is an unfilled order with a higher bid or lower offer, this bid or offer will override the settlement obtained from the weighted average described in 4.8.2.1. It has to have been posted for three minutes or longer prior to 3:00pm, or prior to 1:00pm on early closing days,~~the close~~ and the size must be for 25 or more contracts.

### **4.8.3 SECOND ANCILLARY PROCEDURE**

In the absence of the items required to apply the main procedure in 4.8.1 and the ancillary procedure in 4.8.2, the following ancillary procedure will apply.

#### **4.8.3.1 Differential with the previous contract month's settlement price**

The settlement price will be defined by a price that reflects an appropriate differential with the settlement price of the previous contract month always starting with the contract month closest to expiry.

#### **4.8.3.2 Conflicts between spreads**

If two spreads are in conflict, the calendar spread closest to expiry will have priority.

### **4.8.4 THIRD ANCILLARY PROCEDURE**

In the absence of the items required to apply the main procedure in 4.8.1 and the ancillary procedures in 4.8.2 and 4.8.3, the following ancillary procedure will apply.

In this situation, market officials will establish the settlement price based on the available market information. They may also disregard any event (trade, bid or offer) which occurs close to 3:00pm, or close to 1:00pm on early closing days, near the end of the regular trading session and which is not compatible with a given settlement price.

In this situation, market officials will keep a record of the criteria used to establish the settlement price.