



## NOTICE TO MEMBERS

No. 2012-233

December 6, 2012

### REQUEST FOR COMMENTS

#### AMENDMENT TO SECTION C-1802 DELIVERY STANDARD OF RULE C-18 OF CDCC 30-YEAR GOVERNMENT OF CANADA BOND FUTURES CONTRACT (LGB)

On November 2, 2012, The Board of Directors of Canadian Derivatives Clearing Corporation (CDCC) approved the amendment to the CDCC Rules. The purpose of the proposed amendment is to change the maturity of the deliverable bonds from a range of 21 to 33 years to a minimum of 25 years.

Please find enclosed an analysis document as well as the proposed amendment.

#### Process for Changes to the Rules

CDCC is recognized as a clearing house under section 12 of the *Derivatives Act* (Québec) by the Autorité des marchés financiers (AMF).

The Board of Directors of CDCC has the power to approve the adoption or amendment of Rules of CDCC. Amendments are submitted to the AMF in accordance with the self-certification process.

Comments on the proposed amendments must be submitted within 30 days following the date of publication of the present notice. Please submit your comments to:

*Me Pauline Ascoli*  
*Assistant Secretary*  
*Canadian Derivatives Clearing Corporation*  
*Tour de la Bourse*  
*P.O. Box 61, 800 Victoria Square*  
*Montréal, Québec H4Z 1A9*  
*E-mail: [legal@m-x.ca](mailto:legal@m-x.ca)*

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#### Canadian Derivatives Clearing Corporation

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Tel. : 416-367-2463	Tel. : 514-871-3545
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A copy of these comments shall also be forwarded to the AMF to:

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

For any question or clarification, Clearing Members may contact the CDCC Member Services.

Glenn Goucher  
President and Chief Clearing Officer



## MODIFICATION TO THE DELIVERY STANDARDS

### 30-YEAR GOVERNMENT OF CANADA BOND FUTURES CONTRACT (LGB)

#### AMENDMENT TO SECTION C-1802 DELIVERY STANDARD OF RULE C-18 OF CDCC

##### A. Overview

Bourse de Montréal Inc. (the “Bourse”) proposes to modify the delivery standards for the 30-Year Government of Canada Bond Futures contract (LGB) in order to change the basket of deliverable bonds from a maturity range of 21-33 years to a maturity of not less than 25 years. CDCC requires a Rule amendment to reflect this change.

The Bourse’s Analysis: “Modification to the delivery standards 30-Year Government of Canada Bond Futures (LGB)” is attached to the present to provide the background information necessary to understand the change.

##### B. Analysis

###### **Nature and Purpose of Proposed Changes:**

Subsection C-1802 (1) of CDCC Rules governs the delivery process as it pertains to 30-Year Canada Bond Futures. CDCC hereby proposes to modify its Rules in order to eliminate the current remaining maturity range of 21-33 years in order for a bond to be deemed eligible for delivery and replace the range described above with a remaining maturity of not less than 25 years in order for the bond to be deemed eligible for delivery.

###### **Description and Analysis of Impacts:**

This proposed change would only allow bonds with a minimum of 25 years to maturity to be delivered when a clearing member of CDCC wishes to make a delivery when holding a short position in a 30-Year Government of Canada Bond Futures.

###### **Drafting Process:**

The proposed changes were elaborated through an internal process following the proposed modifications by the Bourse.

###### **Impacts on Technological Systems:**

The proposed changes should have no impact on the technological systems of CDCC, Clearing Members or other market participants.

### **Benchmarking:**

The proposed changes are aligned with the operations of other global CCPs which are active in the Futures markets. For example:

- CME Group U.S. Treasury Bond Futures

Section 18101.A. of the CME Group Rulebook provides for a similar process which defines the characteristics, specifically time to maturity, of the bonds that can be delivered relating to the CME Group U.S Treasury Bond Futures.

Reference: <http://www.cmegroup.com/rulebook/CBOT/V/18/18.pdf>

### **Public Interest:**

These amendments to the Rules of CDCC are not contrary to the public interest.

### **C. Process**

The proposed regulatory amendment is submitted for approval by the CDCC Board. Once the approval has been obtained, the proposed amendment, including this analysis, will be transmitted to the *Autorité des marchés financiers* in accordance with the self-certification process and to the Ontario Securities Commission for information. The proposed amendment and analysis will also be submitted for approval to the Bank of Canada in accordance with the Oversight Regulatory Agreement.

### **D. Attached Documents**

- Amended Rule C-18 of CDCC, 30-Year Canada Bond Futures.
- The Bourse's Analysis: "Modification to the delivery standards 30-Year Government of Canada Bond Futures (LGB)" (without attached documents).

**RULE C-18 30-YEAR CANADA BOND FUTURES  
(SYMBOL - LGB)**

The Sections of this Rule C-18 are applicable only to Futures where the Underlying Interest is Government of Canada bonds as defined in Section C-1802, herein referred to as “30-year Canada Bond Futures”. For further clarification, this Rule C-18 replaces Rule C-11 in so far as the Underlying Interest is a 30-year Canada Bond.

**Section C-1801 Definitions**

Notwithstanding Section A-102 for the purposes of 30-year Canada Bond Futures the following terms are as defined:

“Assignment File” – means the computer file constructed to enable Tenders to be assigned on a first-in-first-out basis pursuant to Section C-1805.

“Underlying Interest” – means Government of Canada Bonds which meet the criteria established in Section C-1802 of this Rule.

**Section C-1802 Delivery Standards**

1. For all 30-year Canada Bond Futures

(a) The delivery unit for 30-Year Canada Bond Futures shall be Government of Canada Bonds which do not mature and are not callable for ~~at least 21~~ a minimum of 25 years ~~and no more than 33 years~~ from the first calendar day of the Delivery Month, having a coupon rate of 6%, an aggregate face value at maturity of \$100,000, an outstanding face value, net of all potential purchases by the Government of Canada up until the end of the delivery period of the corresponding Delivery Month, of at least \$3.5 billion, are issued and delivered on or before the 15th calendar day preceding the first tender date corresponding to the Delivery Month of the contract, and which are originally issued at 30-year auctions.

All bonds in a delivery unit must be of the same issue.

(b) Substitution at the option of the Clearing Member holding the Short Position, bonds with coupon rates other than 6% are deliverable, at a discount for bonds with coupons less than 6%, and at a premium for bonds with coupons more than 6%. The amount of premium or discount for each different deliverable issue shall be determined on the basis of yield equivalency with a 6% bond selling at par. The price at which a bond having a particular maturity and coupon rate will yield 6% shall be determined according to bond tables prepared by the Exchange on which the Future trades. The Settlement Amount of such delivery unit shall be \$1,000 multiplied by the product of such price and the Settlement Price of that series of 30 year Canada Bond Futures. Interest accrued on the bonds shall be charged to the Clearing Member taking delivery.

(c) The Exchange on which the Future trades shall publish a list of deliverable issues prior to each Delivery Month. The time to maturity of a given issue is calculated in complete three month increments (rounded down to the nearest quarter) from the first day of the Delivery Month. New issues of Government of Canada bonds which satisfy the standards of this Section shall be added to the deliverable list as they are issued by the Government of Canada. In the event that, at any regular issue or auction, the Government of Canada reopens an existing bond not issued at a 30-year auction that would otherwise meet the standards of this Rule, thus rendering the existing issue indistinguishable from the newly issued one, then the older issue is deemed to meet the standards of this Rule and would be deliverable if the reopening of such an existing issue has a total minimum face value amount of \$3.5

billion during the last 12 month period preceding the first tender date of the contract month. The Exchange shall have the right to exclude any new issue from deliverable status or to further limit outstanding issues from deliverable status, whether or not they otherwise satisfy the standards of this Section.

- (d) In the event the Corporation determines that there exists a shortage of deliverable Government of Canada Bond issues it may designate as deliverable on a 30 year Canada Bond Futures such other Government of Canada issues as it deems suitable, and may specify any adjustments in the settlement amount that it considers appropriate and equitable.

#### **Section C-1803 Submission of Tender Notices**

- (1) A Clearing Member who holds a Short Position in the currently deliverable series and who wishes to make delivery must submit a Tender Notice to the Corporation no later than the time established by the Corporation on a Business Day from three Business Days prior to the first Business Day of the Delivery Month up to and including the third last Business Day preceding the last Business Day of the Delivery Month indicating the maturity of the Government of Canada bonds being delivered.
- (2) A Clearing Member who, at the time that trading has ceased, holds a Short Position of the currently deliverable series shall submit a Tender Notice to the Corporation indicating the maturity of the Government of Canada Bonds being delivered. Such Notice must be tendered no later than the third Business Day preceding the last Business Day of the Delivery Month.

This Section C-1803 supplements Section C-503.

#### **Section C-1804 Delivery Through the Central Securities Depository**

- (1) Day of Delivery - Delivery of Government of Canada bonds as required by this Rule shall be made by the Clearing Member on the third Business Day following submission of a Tender Notice, or on a day as otherwise determined by the Corporation. Delivery must be made no later than the last Business Day of the Delivery Month.
- (2) Time of Delivery - Each Clearing Member who is to make delivery of Government of Canada bonds shall do so in accordance with Paragraph A-801(2)(d) and each Clearing Member who is to take delivery of Government of Canada bonds shall do so in accordance with Paragraph A-801(2)(c).
- (3) If delivery of the Underlying Interest by the delivering Clearing Member, or payment therefor by the assigned Clearing Member, is not effected by the Time of Delivery, Section A-804 shall apply.

### **Section C-1805 Assignment of Tender Notice**

- (1) Tender Notices accepted by the Corporation shall be assigned, at the end of each Business Day on which the Contract Specifications permits Tender Notices to be tendered, to Clearing Members with open Long Positions as of the close of trading on the day on which the Tender Notice is submitted. Tenders Notices will be assigned in accordance with the Corporations procedures of assigning Tender Notices to the oldest open contract (First In, First Out).
- (2) A Tender Notice shall not be assigned to any Non-Conforming Member which has been suspended for default or insolvency. A Tender Notice assigned to a Clearing Member which is subsequently so suspended shall be withdrawn and thereupon assigned to another Clearing Member in accordance with this Section.

This Section C-1805 replaces Section C-505.

### **Section C-1806 Assignment File Procedures**

The following rule shall apply to the compilation of the Assignment File.

- (1) On the sixth Business Day prior to the first Business Day of the Delivery Month each Clearing Member holding Long Positions in the relevant Series of Futures must enter into the Assignment File in CDCS all the Clearing Member's Long Positions in that Series of Futures in chronological order.
- (2) Prior to the Close of Business on each subsequent Business Day up to and including the next to last Business Day on which Tender Notices may be submitted, each Clearing Member shall access the Assignment File and either make changes to reflect the current chronological order of all Long Positions in the relevant Series of Futures or confirm that the existing Assignment File records are correct.
- (3) Every Clearing Member shall ensure that an Authorized Representative is available by telephone to the Corporation until the Close of Business on every day on which an amendment to the Assignment File can be made.
- (4) It shall be the duty of each Clearing Member to review daily the relevant reports available on CDCS.
- (5) Failure to access the Assignment File and maintain the current chronological order of all the Clearing Member's Long Positions in the relevant Series of Futures on a daily basis or to have an Authorized Representative available by telephone shall be deemed a violation of the Rules pursuant to Paragraph A-1A04(3)(a) and shall be subject to disciplinary action pursuant to Rule A-4 and Rule A-5.



## MODIFICATION TO THE DELIVERY STANDARDS

### 30-YEAR GOVERNMENT OF CANADA BOND FUTURES CONTRACT (LGB)

#### AMENDMENT TO ARTICLE 15613 OF RULE FIFTEEN OF BOURSE DE MONTRÉAL INC.

##### I. INTRODUCTION

Bourse de Montréal Inc. (the “**Bourse**”) proposes to modify the delivery standards for the 30-Year Government of Canada Bond Futures contract (“**LGB**”) in order to change the basket of deliverable bonds from a maturity range of 21-33 years to a maturity of not less than 25 years. This proposed change is intended to increase the efficiency of the LGB.

A consultation with selected approved participants and end-user clients has indicated that the duration of the cheapest-to-deliver (“**CTD**”) bond in the LGB basket of deliverables is too short relative to the most recently auctioned (“**on-the-run**”) 30-Year Government of Canada (“**GoC**”) bond. A longer duration CTD bond will be both more cost effective for clients and more liquid, and will more closely align the LGB with other 30-Year Government Bond Futures and Ultra Government Bond Futures listed on international exchanges.

##### II. PROPOSED AMENDMENT

It is proposed to amend article 15613 of Rule Fifteen of the Bourse in order to allow the Bourse to modify the delivery standards of the LGB futures contract. The amendments to Rule 15613 with respect to the LGB futures contract are as follows:

1. Eliminate the current remaining maturity range of 21-33 years in order for a bond to be deemed eligible for delivery;
2. Replace the range described above with a remaining maturity of not less than 25 years in order for a bond to be deemed eligible for delivery.

The changes described above will offer participants a cleaner hedge, facilitate the execution of cash-and-carry trades, and make the LGB more efficient. In addition, the modified delivery standards will offer more efficient exposure with reduced tracking error to the CTD.



The Bourse intends to make the changes described above effective starting with the June 2013 LGB futures contract month, and for all other subsequent contract months. There is currently no volume or open interest in the June 2013 LGB futures contract.

### III. DEFINITIONS

**On-The-Run Bond:** the most recently issued, and hence most liquid, periodically issued bond. On-the-run bonds are generally more liquid and trade at a premium to other bonds.

**Off-The-Run Bond:** a bond issued prior to the most recently issued bond of a particular maturity, and as such, older than an on-the-run bond. Off-the-run bonds trade at a discount to on-the-run bonds.

**Duration:** percentage change in the price of a bond to a given change in the bond's yield. Duration is expressed as a number of years. The higher the duration number, the greater the interest-rate risk or reward for bond prices.

**Cheapest to Deliver (CTD):** the bond that maximizes the net return to buying the cash bond, carrying the bond to delivery and delivering the bond into the bond futures contract.<sup>1</sup>

### IV. RATIONALE

Following a consultation with selected approved participants and end-user clients, the Bourse has determined that the delivery standards of the LGB futures contract should be amended in order to increase its utility as a hedging and trading instrument. The feedback has been that the current delivery standards are too broad, and that they result in overly short durations which impede the liquidity of the LGB by increasing the tracking error to 30-Year Government of Canada bonds. This modification would result in the removal from the basket of deliverables of older off-the-run 30-Year Government of Canada bonds whose durations are too short relative to the duration of the most recently auctioned 30-Year Government of Canada bond.

The key factors identified during this consultation were:

- a) **The duration of the cheapest-to-deliver bond is currently too short in comparison to the duration of the most recently auctioned 30-Year Government of Canada bond**

At the present time, the duration of the cheapest-to-deliver bond for the LGB is too short relative to the duration of the most recently auctioned 30-Year GoC bond (on-the-run bond).

The replacement of the current remaining maturity range of 21-33 years with a simplified minimum remaining time to maturity of not less than 25 years will result in older off-the-run GoC bonds dropping out of the basket sooner. This would result in an increase in the duration of the

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<sup>1</sup> Burghardt, Galen et al, *The Treasury Bond Basis* (Third Edition), New York, MacGraw-Hill, 2005.

cheapest-to-deliver bond of the LGB, making the LGB more cost effective and more efficient, while reducing the tracking error to the on-the-run 30-Year GoC bond. Specifically, the duration of the cheapest-to-deliver bond will increase from 24.8 to 26.0 years.

For illustrative purposes, the following table shows the impact of duration on the cheapest-to-deliver bond for the LGB contract, by comparing the actual delivery standards to the proposed delivery standards.

**Table I: LGB Basket of deliverables – Duration Impact Analysis (Actual versus Proposed Delivery Standards)**

Basket		Description of eligible bonds	DV01	Amount Issued
Actual	Proposed	CAN 5% June 2037	24.80	13 999 089 000
		CAN 4% June 2041	26.00	15 800 000 000
		CAN 3½% Dec 2045	27.78	6 100 000 000

Source: Montréal Exchange Research

**b) Under the current standards, the cheapest-to-deliver bond is always a less liquid off-the-run 30-Year GoC bond**

Current yields of 30-Year GoC bonds (2.248% as at July 18, 2012) are considerably below the LGB’s notional coupon of 6%. Shorter duration bonds are therefore the cheapest-to-deliver for the LGB contract. Consequently, the cheapest-to-deliver bond is always an older off-the-run 30-Year GoC bond that is not actively traded in the cash market – thus reducing the efficiency of the LGB contract.

Specifically, the LGB basket of deliverables includes GoC bonds originally issued at 30-Year Government of Canada auctions that have a remaining term to maturity of between 21 and 33 years. Despite the large amount outstanding, these older 30-Year GoC bonds that are currently part of the LGB basket of deliverables are not actively traded in the cash market. Many of them have been accumulated by institutional investors who intend to hold them until maturity as part of an investment strategy, rather than for trading purposes. Consequently, a large part of this supply is not readily available to the market and this makes it difficult for market makers to fulfill their market making obligations, and for participants to obtain these bonds for the purpose of executing basis trades, or cash and carry trades, using the LGB.

In current market conditions, the higher the coupon, the greater the extent to which the CTD becomes the bond with the shortest duration. With shorter duration, the futures contract distances itself from the bonds it is intended to track.

For illustrative purposes, the following table illustrates the actual LGB basket of deliverables compared to the proposed basket of deliverable bonds under the revised delivery standards.

**Table II: LGB Basket of deliverables – Actual versus Proposed Delivery Standards**

<b>CURRENT 30-year LGB BASKET: (21 yrs to 33 yrs)</b>						
<b>Government of Canada Bonds</b>			<b>30-Year GoC Futures Contract Month</b>			
Coupon	Maturity	Issue Type	sept-12	dec-12	march-13	june-13
5.00%	june-2037	30-year	14,00	14,00	14,00	14,00
4,00%	june-2041	30-year	15,80	15,80	15,80	15,80
3,50%	june-2045	30-year	7,50	8,90	10,40	11,80
Total Outstanding (C\$ billion)			37,30	38,70	40,20	41,60

  

<b>NEW 30-year LGB BASKET: (25+ yrs)</b>						
<b>Government of Canada Bonds</b>			<b>30-Year GoC Futures Contract Month</b>			
Coupon	Maturity	Issue Type	sept-12	dec-12	march-13	june-13
4,00%	june-2041	30-year	15,80	15,80	15,80	15,80
3,50%	june-2045	30-year	7,50	8,90	10,40	11,80
Total Outstanding (C\$ billion)			23,30	24,70	26,20	27,60

denotes cheapest-to-deliver bond issue  
projected

Source: Montréal Exchange Research

- c) **The duration of the LGB will be more in-line with the duration of comparable 30-Year Government Bond Futures contracts listed on international exchanges**

The changes to the delivery terms of the LGB will result in a duration that is more in line with other Ultra Government Bond Futures listed on international exchanges.

Specifically, the duration of the cheapest-to-deliver bond (adjusted for the conversion factor of the LGB bond futures contract) will increase from 24.8 to 26.0.

**Table III: International Benchmarking**

Specifications	MX	CME Ultra	Euro-Buxl Futures
Notional Coupon	6%	6%	4%
Remaining maturity of eligible bond at expiration	21 to 33 years	Not less than 25 years	24-35 years
No. of eligible bonds for delivery	3	15	4
Current CTD bond coupon / maturity	5,75% / 2033	4,5% / 2038	4% / 2037

<b>Current Futures DV01 (front month contract)</b>	21,67	26,13	22,03
<b>ADV 2010</b>	0	30 488	5 314
<b>ADV 2011</b>	0	61 357	7 028
<b>ADV 2012</b>	0	67 875	7 607

Source: Montréal Exchange Research

## **V. SUMMARY OF THE PROPOSED AMENDMENT TO THE RULES OF THE BOURSE**

### **Article 15613 of Rule Fifteen**

The Bourse proposes to amend article 15613 of Rule Fifteen of the Bourse to modify the delivery standards of the LGB. Specifically, the Bourse proposes eliminating the current remaining maturity range of 21-33 years and replacing it with a simplified minimum remaining time to maturity of not less than 25 years.

## **VI. OBJECTIVE OF THE PROPOSED AMENDMENT TO THE RULES OF THE BOURSE**

The objective of the proposed amendment to article 15613 of Rule Fifteen of the Bourse is to increase the duration of the LGB by changing the time window for Government of Canada (GoC) bonds deemed eligible in the basket of deliverables of the LGB contract from 21-33 years to not less than 25 years. The proposed amendment will increase the utility of the LGB for hedgers and speculators.

## **VII. PUBLIC INTEREST**

The specifications and amendments to the Rules of the Bourse are proposed in order to increase the efficiency and cost-effectiveness of the LGB for both hedgers and speculators. A contract that is better tailored to participants' requirements will be more liquid and will attract more activity to transparent and centrally cleared futures markets.

## **VIII. PROCESS**

The proposed amendment to Rule Fifteen, including this Analysis, are to be approved by the Bourse's Rules and Policies Committee and submitted to the Autorité des marchés financiers in accordance with the self-certification process and to the Ontario Securities Commission for information.

**IX. ATTACHED DOCUMENTS**

- Rule Fifteen of Bourse de Montreal Inc.: amendment to Article 15613
- Revised Contract Specifications for the LGB