MONTRÉAL EXCHANGE

Detailed analysis

Introduction of the One-Month CORRA futures (COA) and Three-Month CORRA futures (CRA) contracts

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I. DESCRIPTION

Bourse de Montréal Inc. (the "Bourse") hereby proposes to update its rules to allow for the listing of two new futures contracts: the One-Month CORRA Futures contract ("COA") and the Three-Month CORRA Futures contract ("CRA"). Given the recent local and international developments regarding the topic of interest rate benchmark reform and benchmark transition, the Bourse considers that it is appropriate to review and update its Canadian Overnight Repo Rate Average ("CORRA") based product offering. Therefore, the Bourse proposes to remove the 30-Day Overnight Repo Rate Futures ("ONX") and Overnight Index Swap Futures ("OIS") from its products offering and replace them with the COA and CRA products, which contain specifications that are more aligned with new international standards. The Bourse believes that these new futures contracts will better serve the needs of market participants and enhance market efficiency in the context of global interest rate benchmark reform.

II. PROPOSED AMENDMENTS

The Bourse proposes to amend the rules to allow the introduction of the One-Month and Three-Month CORRA futures contracts. Specifically, the Bourse proposes to remove the old ONX and OIS futures contracts and replace them with products that have specifications more adapted to international standards and suitable to market participants. The key specifications of the futures contracts are detailed in Table 7 below. Furthermore, the Bourse is amending rules pertaining to prearranged transactions, block trades, trade cancellation and/or price adjustment, and daily settlement (under Part 6 of the Rules) in order to take into account the newly introduced futures contracts.

Note that the proposed amendments with regards to position limits are subject to change based on the status of another rule modification project launched in parallel by the Bourse regarding its position limits (the "Position Limits Project"). Should the Position Limits Project be self-certified before the introduction of the COA and CRA futures contracts, the applicable position limits would be determined according to the rules then applicable, and the proposed amendments with regards to positions limits herein would not be retained.

III. ANALYSIS

a. Background

For decades, interbank offered rates ("IBORs") have been at the core of the financial markets, providing a reference for the pricing of a wide array of financial contracts, including derivatives contracts. The determination methodology of most IBORs is essentially an average of interest rate submissions by major banks.

In June 2012, it was discovered that for LIBOR[1], some banks were accused of falsely inflating or deflating their submissions to profit from their position in the market[2]. This led to multiple criminal charges against contributing banks (including fraud and collusion charges) and to a loss of confidence in survey-based benchmarks by the market. Following that scandal, a review of the major financial benchmark determination process was undertaken by many international jurisdictions (including Canada, with an initiative lead by IIROC[3]). Based on these reviews, a number of weaknesses were identified and recommendations were made to strengthen global benchmarks, including mainly the need to anchor benchmarks on actual transactions rather than following a survey-based model.

Alongside these initiatives, the Financial Stability Board established in 2013 a Steering Group, comprised of central banks and regulatory agencies, to focus on interest rate reform[4]. The main recommendations of that group were 1) the development of alternative reference rates (mainly overnight risk-free rates ("RFRs") as they have more desirable features of reliable reference rates), and 2) a transition away from IBORs across all major currencies.

Since then, working groups in the main jurisdictions have been formed to select alternative reference rates and provide an orderly transition[5]. In July 2017, the FCA announced LIBOR submissions would not be mandatory for panel banks after the end of 2021, triggering the race not only to determine an alternative reference rate of choice but also to develop the roadmap needed for transitioning to RFRs.

1. London Interbank Offered Rate - Arguably the most important short-term interest rate in the world
2. Also known as the LIBOR scandal
3. https://www.iiroc.ca/Documents/2013/a3c68190-1789-41d3-8a08-790fa56d9d70_en.pdf
4. https://www.fsb.org/work-of-the-fsb/policy-development/additional-policy-areas/financial-benchmarks/
5. See Figure 2 for a detailed timeline of events

Figure 1. RFRs that have been put forward by different working groups in different jurisdictions.

Jurisdiction	RFR	Description
US	Secured overnight financing rate (SOFR)	Secured overnight repo rate Calculated by FRBNY
UK	Reformed Sterling overnight Index Average (SONIA)	Unsecured overnight rate Calculated by Bank of England
Europe	Euro short-term rate (€STR)	Unsecured overnight rate Calculated by ECB (October 2, 2019)
Japan	Tokyo overnight average rate (TONA)	Uncollateralized call rate Calculated by Bank of Japan
Switzerland	Swiss Average Rate Overnight (SARON)	Secured overnight rate Published by SIX Swiss Exchange
Australia	Interbank overnight cash rate (Cash Rate)	Unsecured overnight rate Calculated by the Reserve Bank of Australia

Source: CARR website

In Canada, a working group (called the CARR - Canadian Alternative Reference Rate[6]) was created in 2018 (sponsored by the Canadian Fixed-Income Forum) to identify and seek to develop a new Canadian Dollar risk-free rate benchmark that is robust, reliable and resilient to market stress and manipulation (consistent with IOSCO principles[7]). This risk-free rate would act as a complementary reference rate for the Canadian market and would operate alongside the Canadian Dollar Offered Rate (CDOR).

The CARR is composed of the following subgroups:

- Alternative rates – Seeking to identify and evaluate options for an alternative Canadian risk-free or nearly-risk free overnight reference rate. This subgroup recommended enhancements to the existing CORRA as the preferred Canadian risk-free rate.
- Fallback language – Developing robust fallback language for non-derivatives products or contracts (i.e. floating rate notes, securitizations, hybrid capital notes and bank loans).
- Transition subgroup – Providing the underlying framework to transition towards the widespread use of CORRA as a reference rate in Canadian dollar financial products.
- Term risk-free rate subgroup – Assessing the need for a Canadian term risk-free rate benchmark. If required, develop the methodology and specifications for the term rate.

The Bank of Canada is predominantly involved in these transition efforts in Canada, as reflected in this statement[8]:

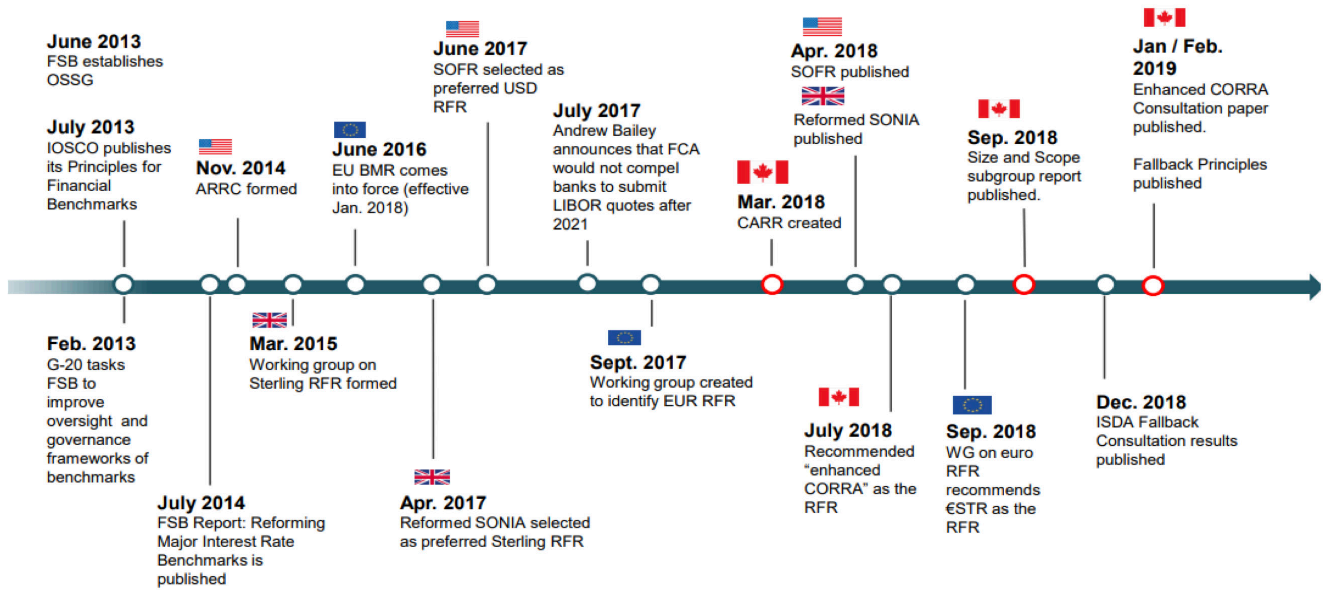
"The Bank expects that, over time, CORRA will be further adopted across a wide range of financial products and could potentially become the dominant Canadian interest rate benchmark, particularly in derivatives markets. It is very gratifying to see representatives of the public and private sectors come together to make real progress on our shared goal of making Canadian financial markets more resilient and efficient."

- Lynn Patterson, Bank of Canada Deputy Governor

On July 16th, 2019, the Bank of Canada announced its intention to become the administrator of the CORRA when the enhancements to CORRA take effect next year (scheduled for Q2 2020). The Bank will take over this role from the current administrator (Refinitiv). In line with developments in other major economies, the Bank will provide the rate as a public good, at no cost.

6. https://www.bankofcanada.ca/markets/canadian-alternative-reference-rate-working-group/
7. https://www.iosco.org/library/pubdocs/pdf/IOSCOPD589.pdf
8. https://www.bankofcanada.ca/2019/07/bank-canada-become-administrator-key-interest/

Figure 2. Evolution of benchmark reforms



Source: CARR website

CORRA is a measure of the average cost of overnight collateralized funding. It is defined as the volume weighted average rate of overnight repo transactions, conducted on-screen through designated inter-dealer brokers, which involve general (non-specific) Government of Canada Collateral.

While the current CORRA broadly reflects overnight funding rates, it is based on a relatively small number of general collateral repo transactions. The enhancements to CORRA will focus primarily on increasing the transaction volumes upon which CORRA is based with the aim of improving the robustness and representativeness of the measure. CARR's view is that an overnight risk-free rate that reflects broader funding conditions would deliver on the objectives of increasing robustness and reliability and be better aligned with international standards. CARR also recommends that an enhanced CORRA should be based on the trimmed median repo rate of daily transactions that meet the above criteria; the trimmed median is computed after removing the lower volume-weighted 25th percentile of transactions by repo rate (with the intent to exclude transactions that aim to source a specific security, "specials," rather than general collateral funding transactions). The proposed enhancements to CORRA would result in a rate that is less volatile and closer to the Bank of Canada's target for the overnight rate than the current CORRA, on average[9].

The market size of the Canadian dollar overnight index swap market[10] is comparable to the interest rate swap market based on LCH cleared volume. However, the notional outstanding is relatively smaller as overnight index swap transactions generally have a much shorter maturity (under 1 year).

Table 1: LCH statistics on the CAD overnight index swap and interest rate swap market

Product	Average Daily Notional $ Value Turnover (YTD as of September)	Notional $ Amount Outstanding (As of September)
Overnight Index Swap	C$ 30B	C$ 3.4T
Interest Rate Swap	C$ 34B	C$ 13.3T
Total	C$ 64B	C$ 16.7T

Source: LCH website

In Canada, the latest Bank of Canada triennial survey of turnover activity in over-the-counter ("OTC") derivatives markets[11] highlights the activity observed in April 2019 by Canadian entities. The latest results for the OIS and IRS markets (all currency combined) are presented in table 2.

9. https://www.bankofcanada.ca/wp-content/uploads/2019/02/consultation-paper-proposed-enhancements-to-corra.pdf
10. currently the primary market referencing CORRA
11. https://www.bankofcanada.ca/wp-content/uploads/2019/09/BIS-triennial-2019-press-release.pdf

Table 2: Bank of Canada triennial survey: Interest rate derivatives turnover in Canada

Product	Average Daily Notional $ Value Turnover (April 2019)
Overnight Index Swap	C$ 22B
Interest Rate Swap	C$ 95B
Total	C$ 117B

Source: Bank of Canada

Participants in the overnight index swap market include a broad array of financial entities: banks, investment dealers, inter-dealer brokers, corporations, investment funds (including hedge funds), pension funds, insurance companies, trust companies, finance companies, government agencies and the Government of Canada. Commercial banks and investment dealers are the largest borrowers and lenders of funds in the overnight market, primarily because of their market making activities in a wide variety of financial assets (e.g. stocks and bonds), which required them to hold inventories of securities financed largely by borrowing in the overnight market.

Market participants predominantly use the overnight index swap market for hedging activities, which are often related to risk management. Specifically, participants can use the overnight index swap to hedge either their funding costs or their exposure to short-term interest rate movements. The overnight index swap market can be used as well to alter the term structure of a portfolio or for taking a speculative position on the path of the Bank of Canada's target overnight rate.

In September 2018, the CARR group also published a report[12] on the estimated notional value of securities that reference CORRA/CDOR[13], highlighting the importance of these two main interest rate benchmarks for the Canadian financial markets. The following table summarizes the survey results.

Table 3: Total outstanding of financial products referencing CORRA/CDOR.

Product	Outstandings (CAD billions)
OTC Interest Rate Derivatives	10,737
Exchange Traded Derivatives	1,089
Business Loans	60
Consumer Loans	1
Deposits	22
Bonds	137
Securitized Products	131
Others	26
Bankers Acceptances	103
Total	**12,307**

		Repricing Index			
	Amount	CORRA	1M CDOR	3M CDOR	Other
Interest Rate Swaps	9,449	13%	15%	72%	0%
Interest Rate Options	59	0%	14%	86%	0%
Cross Currency Swaps	1,171	0%	5%	95%	0%
Total Return Swaps	45	0%	30%	70%	0%
Other OTC Derivatives	12	0%	57%	40%	3%
Total	**10,737**				

Source: CARR website

b. Objectives

The objective of the proposed amendments is to update the CORRA-based product offering of the Bourse and to make it relevant and attractive for market participants. The Bourse believes that the proposed modifications will increase the utility and the effectiveness of its derivatives market for hedgers and speculators involved in the short-term interest rate markets.

The Bourse's new product proposal should attract additional trading volume by offering market participants a convenient way to hedge their exposure on the CORRA benchmark rate. A contract that is better tailored to participants' needs and market requirements will be more liquid and will attract more activity to the transparent and centrally-cleared futures market.

c. Comparative Analysis

Global derivative exchanges throughout the world are supporting the interest rate benchmark transition efforts, as it creates opportunities to enhance the array of risk management product offering. As a result, global derivatives exchanges have started positioning themselves to benefit from the emergence of new benchmark rates, by launching futures contracts on these new risk-free rates in the course of 2018. Some of them have even dedicated web pages providing general information about the state of the transition in their respective jurisdictions[14].

12. https://www.bankofcanada.ca/wp-content/uploads/2018/10/CDOR-CORRA-in-Financial-Markets-%E2%80%93Size-and-Scope.pdf
13. Canadian Dealer Offered Rate
14. https://www.cmegroup.com/trading/interest-rates/sofr-sonia-and-other-alternative-reference-rates.html
https://www.eurexclearing.com/clearing-en/markets-services/ibor

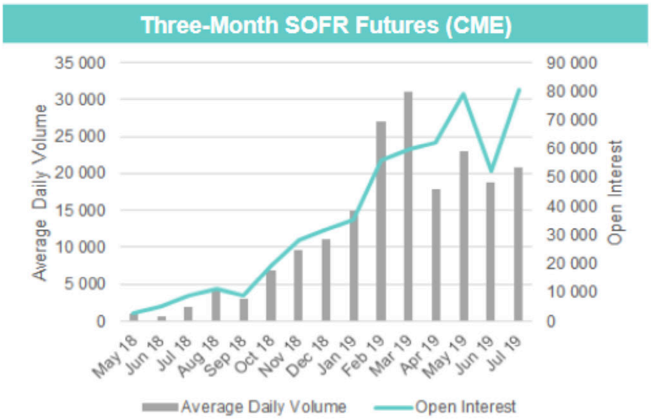
Table 4: Listed risk-free rate products launched by derivatives exchanges since 2018

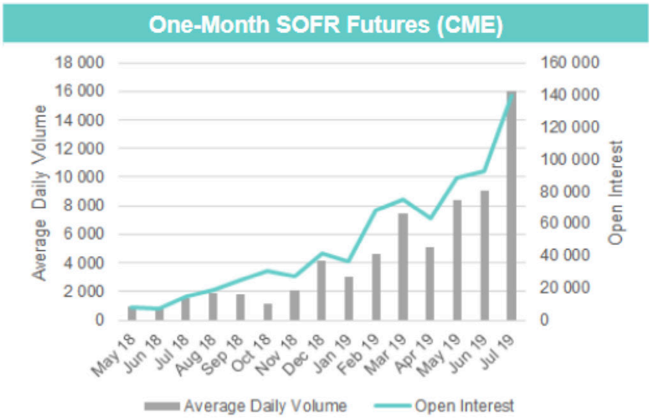
Exchange	Product	Launch Date
CME	3M SONIA Futures (Quarterly IMM-dated contracts)	October 1 2018
	SONIA Futures (Monetary Policy Committee - dated contracts)	October 1 2018
	1M SOFR Futures	May 7 2018
	3M SOFR Futures	May 7 2018
ICE	1M SONIA Futures	June 1 2018
	3M SONIA Futures	June 1 2018
	1M SOFR Futures	October 1 2018
	3M SOFR Futures	October 1 2018
CurveGlobal (LSE)	1M SONIA Futures	April 30 2018
	3M SONIA Futures	July 29 2019

Source: CME, CurveGlobal (LSE) and ICE Exchange websites

Thus far, CME products have been the most successful. Both the 1-Month and 3-Month SOFR futures have seen a quick uptake in volume and open interest over the last few months. The average daily volume of the combined products reached 40k in August 2019, with an end of month open interest of 283k contracts. Contrary to CORRA, SOFR is a new benchmark rate built expressly to respond to the benchmark reform need. It was first published in April 2018 by the Federal Reserve of New York. Even with that short assessment period for the market, the below figures illustrate the success and potential of futures contracts based on recommended risk-free rates. Furthermore, CME announced their intention to extend their offering by adding more contract expiries and also options on SOFR futures[15].

Table 5: Volume and open interest of CME's One-month and Three-month SOFR Futures





Source: CME

With regards to the proposed specifications of the COA and CRA Futures, they are aligned with international standards to facilitate market acceptance globally. The Bourse also launched a CORRA Future web page this summer that will be continually updated as the project evolves, to help market participants understand the context and get accustomed to the new product offering[16]. Table 6 below presents the key similarities and differences between the proposed COA contract versus the 1M SOFR (CME) and the 1M SONIA (ICE), and between the proposed CRA contract versus the 3M SOFR (CME) and the 3M SONIA (ICE).

15. https://www.cmegroup.com/media-room/press-releases/2019/9/04/cme_group_to_launchsofroptionsonjanuary62020.html
16. https://www.m-x.ca/produits_taux_int_corra_en.php

Table 6: CORRA based futures contracts compared to 1M and 3M SOFR and SONIA based futures contracts

Product specification	COA (MX)	1M SOFR (CME)	1M SONIA (ICE)
Trading Unit	Average daily Canadian Overnight Repo Rate Average ("CORRA") during the Contract Month, such that each basis point per annum of interest = $25 per contract. Contract size is C$2500 x Rate Index.	Average daily Secured Overnight Financing Rate ("SOFR") interest during the futures contract Delivery Month, such that each basis point per annum of interest is worth $41.67 per futures contract.	£2,500 * Rate Index
Expiry Cycle	Nearest 7 calendar months	Nearest 7 calendar months*	Up to 24 contracts
Price Quotation	Index: 100 – R R = the average daily overnight repo rate for the contract month		
Minimum Price Fluctuation	Nearest contract month: 0.0025 = C$6.25 All other contracts: 0.005 = C$12.50	First contract month: 0.0025 = US$10.4175 All other contracts: 0.005 = US$20.835	First contract month: 0.0025 = £6.25 All other contracts: 0.005 = £12.50
Contract Type	Cash-settled		
Last Trading Day	Last business day preceding the end of the contract month		
Final Settlement Price	The final settlement price shall be 100 minus the average daily overnight repo rate over the Reference Quarter.		
Block thresholds	2am - 6am: 100 contracts 6am : 4:30pm: 500 contracts	ATH: 125 contracts ETH: 250 contracts RTH: 500 contracts	White months (1-12): 1000 contracts Reds months (13-24): 500 contracts

*Increased to nearest 13 contract months at the end of September 2019

Product specification	CRA (MX)	3M SOFR (CME)	3M SONIA (ICE)
Trading Unit	Compounded daily Canadian Overnight Repo Rate Average ("CORRA") during the Reference Quarter, such that each basis point per annum of interest = $25 per contract. Contract size is C$2500 x Rate Index	Compounded daily Secured Overnight Financing Rate ("SOFR") interest during contract Reference Quarter, such that each basis point per annum of interest = $25 per contract. Contract unit: $2,500 x contract-grade IMM Index	£2,500 * Rate Index
Reference Quarter	Based on IMM dates: For a given contract, interval from (and including) 3rd Wed of 3rd month preceding Delivery Month, to (and not including) 3rd Wed of Delivery Month.		
Expiry Cycle	Nearest 12 quarterly Contract Month	Nearest 20 quarterly Contract Months*	Nearest 24 quarterly Contract Months
Contract Reference Month	For each contract, the Contract Reference Month is the month in which Reference Quarter begins. Example (IMM date context): For a "Sep" contract, Reference Quarter starts on IMM Wednesday of Sep and ends with Termination of Trading on the first business day before IMM Wednesday of Dec, the contract Delivery Month.		
Price Quotation	Index: 100 – R R = the compounded daily overnight repo rate for the Reference Quarter.		
Minimum Price Fluctuation	Nearest quarterly contract: 0.0025 = C$6.25 All other quarterly contracts: 0.005 = C$12.50	Contracts with four months or less until expiry: 0.0025 = US$ 6.25 All other contracts: 0.005 = US$12.50	Front Quarterly: 0.0025 = £6.25 All other months: 0.005 =£12.50
Contract Type	Cash-settled		
Last Trading Day	First business day preceding the end of the Reference Quarter		
Final Settlement Price	The final settlement price shall be 100 minus the compounded daily overnight repo rate over the Reference Quarter.		
Block thresholds	2am - 6am: 100 contracts 6am : 4:30pm: 500 contracts	ATH: 250 contracts ETH: 500 contracts RTH: 1,000 contracts	Whites and Reds: 250 contracts Greens: 150 contracts Blues and Golds: 50 contracts Purple: 25 contracts

*Increased to nearest 39 contract months at the end of September 2019

Source: Montreal Exchange, CME and ICE Exchange websites

Based on this international benchmarking, the Bourse considers that the proposed futures contracts are justified as their launch represents an opportunity to better serve the needs of market participants, by offering products based on the recognized Canadian risk-free rate benchmark going forward.

d. Analysis of Impacts

i. Impacts on Market

The Bourse proposes to modify multiple articles of the Rules to allow for the listing and trading of two new products, the 1-Month and 3-Month CORRA Futures, that will replace the old ONX and OIS products that were also based on CORRA but for which the specifications were outdated. To avoid any confusion between the products at a later stage, the ONX and OIS futures contracts has been discontinued after the close on Friday June 7th[17], and all references to these products were removed from the website and from the marketing documents. Table 7 below summarizes the key product specifications of the proposed new products.

17. https://www.m-x.ca/f_circulaires_en/083-19_en.pdf and https://www.m-x.ca/f_circulaires_en/084-19_en.pdf

Table 7: Proposed key COA and CRA product specifications

Specification	1M CORRA Futures (COA)	3M CORRA Futures (CRA)
Trading Unit	Average daily Canadian Overnight Repo Rate Average ("CORRA") during the contract month, such that each basis point per annum of interest = $25 per contract. Contract size is C$2500 x Rate Index	Compounded daily Canadian Overnight Repo Rate Average ("CORRA") during the Reference Quarter, such that each basis point per annum of interest = $25 per contract. Contract size is C$2500 x Rate Index
Expiry cycle	7 nearest calendar months	12 quarterly contracts Reference Quarter based on "IMM" dates (3rd wed of Mar/Jun/Sep/Dec) Contract Reference Month: The month in which Reference Quarter begins. Ex: For a September contract, Reference Quarter starts in September and ends in December
Last Trading Day	Last business day of the contract month	First business day preceding the end of the Reference Quarter
Price quotation	100 - R (average daily CORRA for the contract month)	100 - R (compounded daily CORRA for the Reference Quarter)
Minimum fluctuation price	Nearest quarterly contract: 0.0025 = C$6.25 All other quarterly contracts: 0.005 = C$12.50	Nearest quarterly contract: 0.0025 = C$6.25 All other quarterly contracts: 0.005 = C$12.50

Main differences between the COA and CRA Futures

- Calculation period: The pricing of both contracts considers the realized CORRA values over a certain time period, which is one calendar month for the COA contract and three months (called a "Reference Quarter") for the CRA contract. On the latter product, this Reference Quarter starts on the International Monetary Market ("IMM") Wednesday of the Contract Reference Month and ends three months later on the first business day before IMM Wednesday of the contract expiry month.
- Final settlement price: The final settlement price will be determined based on (i) the arithmetic average of the realized CORRA values during the contract month for the COA contract and (ii) the geometric average of the realized CORRA values during the Reference Quarter CRA contract.

These different calculation period and final settlement price conventions aim to respond to different market needs and are aligned with international standards for new listed risk-free rate futures. The proposed contract specifications are based on a consultation with market participants and end-user clients, in order to increase the effectiveness of CORRA-based products as trading and hedging instruments. The feedback the Bourse has received from the industry is that a better alignment between the contracts specifications and international standards will help grow the acceptance of the futures contract. The Bourse believes that this new product offering will be beneficial for market participants desiring to hedge not only overnight index swap transactions, but also any new floating rate exposure that will be based on CORRA going forward.

Given the projected similarities between the BAX and the CORRA Futures markets (trading behaviors, volatility, etc.), the Bourse proposes to initially align the rules applicable to the COA and CRA Futures with those of the BAX contract, except for the prearranged transactions on which the Bourse proposes a 5 second prescribed time period for all expiry months and strategies for both COA and CRA. The trade cancellation (and/or price adjustment) and the block transaction rules will be based on the same parameters[18] as for the BAX contract. For the daily settlement process, the initial minimum volume threshold will be set at 25 contracts. The Bourse proposes to monitor the activity in the COA and CRA Futures contracts and reevaluate this threshold as liquidity builds up in the products. Any subsequent amendments will be communicated to the market. Table 8 below summarizes the key rules applicable to the new COA and CRA contracts.

18. For proposed block transaction procedure, the alignment will be done with the BAX "green" level.

Table 8: Proposed key COA and CRA procedures

Prearranged Transaction	Prescribed time period	Minimum Volume Threshold
One-Month CORRA Futures Contracts (COA): all expiry months and strategies	5 seconds	No threshold
Three-Month CORRA Futures Contracts (CRA): all expiry months and strategies	5 seconds	No threshold

Block Transactions	Minimum volume threshold	Prescribed time delay
One-Month CORRA Futures Contracts (COA): from 2AM until 5h59m59s from 6AM until the end of the Trading Day	100 contracts 500 contracts	1 hour 15 minutes
Three-Month CORRA Futures Contracts (CRA): from 2AM until 5h59m59s from 6AM until the end of the Trading Day	100 contracts 500 contracts	1 hour 15 minutes

Trade cancellation and or price adjustment	Increment
One-Month CORRA Futures (COA) Regular strategy orders -Implied strategy orders	5 basis points 5 basis points Sum of the strategy's individual legs' increments.
Three-Month CORRA Futures (CRA) Regular strategy orders -Implied strategy orders	5 basis points 5 basis points Sum of the strategy's individual legs' increments.

Daily settlement price	Minimum threshold used in the algorithm (initial level*)
One-Month CORRA Futures (COA)	25 contracts for all contracts
Three-Month CORRA Futures (CRA)	25 contracts for quarterly contracts month 1 to 12

ii. Impacts on Technology

Some development in the Bourse's systems is required to launch these new futures contracts, notably to offer trading with 4 decimals for the nearest 1M and 3M CORRA futures contracts. Specifically, the proposed tick size structure will permit trading in 1/4th of a basis point (0.0025) for these two contracts. Additionally for the 3M CORRA futures product, proper configuration will need to be set up since the contract reference month does not correspond to the expiry month, as it is the case with the 1M CORRA futures and most of standard futures contract. This particularity is necessary to align the interval of interest rate exposure between BAX and 3M CORRA futures contracts. It also aligns with emerging international standards applied to new products such as CME's SOFR Futures. By construction, the underlying of BAX contracts is a forward-looking exposure at expiry (3M CDOR) while the underlying for the 3M CORRA futures is a backward-looking exposure at expiry (CORRA).

In addition to the foregoing, the proposed changes will have some technological impacts on the systems of CDCC. Specifically, IT development will be required to support tick size with 4 decimals (defined in the products specifications). CDCC will also have to develop a margin methodology to determine appropriate margin levels for outright contracts and strategies. Product specifications and requirements were already shared with approved participants and independent software vendors to ensure a smooth product launch. The Bourse has not identified any other impediments, whether technical, operational or other, to the implementation of the proposed amendments.

iii. Impacts on regulatory functions

Subject to Part II. Proposed modifications, the Bourse proposes to set the position limit to the maximum of 10,000 contracts or 20% of the open interest, for both the COA and CRA contracts. This limit will apply to the maximum net long position or net short position in all contract months combined. This proposition is aligned with the Bourse's methodology for cash-settled interest rate products (such as BAX), with the floor level being adjusted (from 4,000 contract to 10,000 contracts) to accommodate products in development phases. This would give market participants more flexibility while the open interest is still relatively low, which is often required to help new products grow. Even with the increase of the floor level, this proposition is still more restrictive than what is being done on other exchanges for comparable cash settled products, as CME and ICE do not impose any position limit on their SOFR and SONIA futures contracts[19]. Moreover, the underlying rate of the proposed contracts is the most robust benchmark in Canada, being determined by a very large number of transactions. Therefore, it is unlikely for a market participant to have an impact on the underlying and thus, on the final settlement price.

The position reporting threshold for the COA and CRA products will be set at 300 contracts, the same level currently applicable for the BAX contract and that was also applicable to the ONX and OIS products.

iv. Impacts on clearing functions

CDCC will update its margin methodology to accommodate the launch of the 1M and 3M CORRA futures, even though the products will be margined using a methodology very similar to that of BAX contracts. Development with regards to margin relief for intra-group and inter-group strategies will also be required. As for every new product, the margin file published by the Division will be modified to include 1M and 3M CORRA Futures contracts. Appropriate coordination with Independent Software Vendors ("ISVs") and technology providers will be made to ensure a smooth product rollout.

v. Public Interest

The Bourse considers these amendments to be in the interest of the public as the CORRA rate has been identified as the primary interest rate benchmark to be used in financial contracts going forward. The Bank of Canada (through the CARR working group) is leading the benchmark transition efforts in Canada and the Bourse wants to support and facilitate that transition by offering products which designs are appealing to market participants. The new market environment is favorable to the development of these new products which should benefit the entire marketplace.

IV. PROCESS

The drafting process was initiated by the desire of the Bourse to offer CORRA-based products that meet participant needs and to align its product offering with international standards. Given recent development regarding the benchmark reforms in multiple jurisdictions, the Bourse believes that having an updated product suite on the newly primary Canadian interest rate benchmark should help generate further interest and activity in its listed market.

The proposed amendments, including this analysis, must 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 purposes.

19. Note that SOFR and SONIA futures contracts are subject to accountability levels (soft limits) at CME.