

LIBOR Transition

November 2021



? FREQUENTLY ASKED QUESTIONS

1. BACKGROUND TO BENCHMARK RATE REFORM

- Interbank Offered Rates (IBORs) are benchmark interest rates used across the global economy for calculating interest and valuations in a wide variety of financial contracts, such as derivatives, bonds, loans and consumer lending products.
- These rates are also used for a vast number of financial instruments and products, including products that you may have entered into or may be considering entering into with BNY Mellon.
- One of the most widely used IBORs is LIBOR, which is quoted in British Pound Sterling (GBP), U.S. Dollar (USD), Euro (EUR), Swiss Franc (CHF) and Japanese Yen (JPY).
- These rates are derived from quotes submitted by a group of panel banks, and represent each bank's cost of obtaining a loan from another member bank in the London interbank market for each of the published tenors.
- Since the financial crisis, the aggregate amount of actual unsecured interbank borrowing transactions has declined sharply—sometimes to less than \$1 billion per day. However, IBORs also act as a benchmark for short-term interest rates across a wide spectrum of cash and derivative products. The volume of these transactions exceeds \$400 trillion globally.
- Global regulators are concerned about the robustness of these benchmark interest rates and expect market participants to plan for the cessation of LIBOR by the end of 2021. Regulators around the globe have initiated forums for market participants to identify alternative reference rates.

2. WHAT ARE IBOR RATES?

- IBORs are unsecured, short-term interest rates published for periods ranging from overnight to 12 months. In addition to being used for a vast number of financial instruments and products such as complex derivatives to residential mortgages, these rates are embedded in various financial activities, such as risk, valuation, performance modeling and commercial contracts. It has been called the “world’s most important number.”

3. WHAT IS LIBOR?

- The London Interbank Offered Rate (LIBOR) is a benchmark interest rate that is calculated using an average of panel bank submissions. LIBOR provides indication on the rate that banks pay to borrow unsecured money across five (5) currencies (British Pound Sterling, Euro, Japanese Yen, Swiss Franc and U.S. Dollar), seven (7) tenors (overnight, 1 week, and 1, 2, 3, 6 and 12 months) and used as a reference rate for financial contracts. Its administrator, ICE Benchmark Administration (IBA), publishes LIBOR rates every London business day. LIBOR is used across the global economy for calculating interest rates and valuations on for contracts such as derivatives, bonds, commercial loans and consumer lending products.

4. WHY ARE IBORS BEING REPLACED?

For decades, IBORs provided a reliable way to determine the cost of everything from student loans and mortgages to complex derivatives. Historically, these rates have been derived daily from a survey of up to 20 large banks that estimate how much it would cost to borrow from each other without posting collateral. Over time, fewer banks have entered into such unsecured loans and, lacking observable transactions, submitting banks had to use expert judgement or theoretical models to determine the daily IBOR rates. The appropriateness of this approach was undermined by the discovery of rate quote manipulation by some employees at a few panel banks.

Seeing the flaws in the IBOR determination process, the UK's Financial Conduct Authority (FCA) in 2017 announced that after 2021, it would no longer compel banks to submit the rates to calculate LIBOR. Since the FCA's announcement, regulators within each country or region have organized working groups comprised of market participants from both buy-side and sell-side institutions. These groups have worked to identify replacement risk-free rates (RFRs) or alternative reference rates (ARRs) for their currency, alongside a phased transition plan to avert market instability. RFRs or ARRs should ideally have a high volume of observable transactions, be robust in all market conditions and be difficult to manipulate.

However, publication of IBOR rates may not necessarily end after 2021. Nothing prevents submitting banks from continuing to submit the relevant data and ICE Benchmark Administration from publishing the rates. However, submitting banks are conscious of the inherent conduct risk in making judgment-based submissions on a benchmark that determines the market value of a vast number of contracts. Even if IBORs are not discontinued, regulatory pressure to transition to new rates is expected to increase.

5. WHAT IS AN RFR?

RFR stands for risk-free rate. The acronym was introduced by the Financial Stability Board in their July 2014 publication on benchmark interest rate reform. The phrases 'near risk-free rates', 'risk-free rates' and 'alternative reference rates' are generally accepted as interchangeable and should be defined as reference rates that are being developed by international central bank-led working groups as alternatives to LIBOR.

RFRs have a number of differences when compared to LIBOR, including:

- Each currency has its own distinct RFR and administrator.
- RFRs are overnight rates, not rates for a longer term such as 3 or 6 months. As such, there is very little perceived credit risk or term premium associated with RFRs.
- Some market participants have expressed the need for RFR based term rates in order to know the applicable interest rate in advance of any payments to be made. Each of the RFR working groups is considering the feasibility to produce a robust term rate.
- RFRs are based on a large number of overnight money market transactions, so risks associated with expert judgment are avoided.
- The underlying volumes of transactions which determine the RFRs are much higher than LIBOR.
- While all LIBORs are unsecured rates not backed by any exchange of collateral, two of the five RFR working groups selected secured, or collateralized, rates for their currencies based on transactions in each of their respective government security repo markets.

6. AT A HIGH LEVEL, WHAT DOES THE GLOBAL LIBOR TRANSITION TIMELINE LOOK LIKE?

The transition away from LIBOR to the new Alternative Reference Rates (ARRs) is in different stages depending on the jurisdiction and moving at different speeds based on key aspects, such as development of ARR by the relevant local monetary authorities, liquidity in ARR products and the potential development of term rates for ARR.

In Canada, the Canadian Alternative Reference Rate (CARR) Working Group published [results](#) in July 2021 following a consultation for proposed methodology for calculating CORRA-in-arrears and draft fallback language for floating rate notes (FRNs) that reference CDOR.

The Financial Conduct Authority (FCA) recently confirmed that all LIBOR settings will either cease to be provided by any administrator or no longer be representative:


- Immediately after December 31, 2021, in the case of all sterling, euro, Swiss franc and Japanese yen settings, and the 1-week and 2-month U.S. dollar settings; and
- Immediately after June 30, 2023, in the case of the remaining U.S. dollar settings

The FCA has also advised ICE Benchmark Administration Limited (IBA) that it will consult on requiring IBA to continue the publication on a “synthetic” basis of the 1-month, 3-month and 6-month GBP and JPY LIBOR settings beyond such dates, and will continue to consider the case for using these proposed powers in respect of the 1-month, 3-month and 6-month USD LIBOR settings.

For more information, read the FCA’s announcement regarding the [publication of synthetic LIBOR](#) and its update on [LIBOR cessation and synthetic methodology](#).



The table below highlights key global transition milestones (accurate at the time of publication):

Jurisdiction	Prior Benchmark	Potential Alternative Reference Rate (ARR)	Current Status
	CDOR	CORRA Canadian Overnight Repo Rate Average	CORRA has been published daily by The Bank of Canada since June 15, 2020. The Bank of Canada began publishing the CORRA Compounded Index on April 6, 2021. CDOR to co-exist next to CORRA. Montreal Exchange has listed new three-month CORRA futures contract since June 12, 2020. Refinitiv Benchmark Services (UK) Limited announced that it would cease calculation and publication of the 6-month and 12-month CDOR as of Monday, May 17, 2021. CARR publishes recommended draft fallback language for use in floating rate notes (FRNs) that reference CDOR on July 6, 2021
	USD LIBOR	SOFR Secured Overnight Financing Rate	No new USD LIBOR issuance after December 31, 2021 USD LIBOR settings (overnight, one-, three-, six- and 12-month) will cease to be provided by any administrator after June 30, 2023
	GBP LIBOR	SONIA Sterling Overnight Index Average	Reformed SONIA since April 2018 ICE SONIA SWAP rate to be added to ISDA rate option and collateral tables No new GBP LIBOR Issuance after March 31, 2021 All GBP LIBOR settings non-representative after December 31, 2021, and will cease publication in its current formulation
	EONIA	€STR (Euro Short-Term Rate)	Publication of €STR since October 2019
	EURIBOR	EURIBOR (Reformed)	Reforms to EURIBOR's methodology were completed in Q4 2019 and will continue as a BMR* compliant rate until at least 2023 EURIBOR to continue alongside €STR beyond 2021 All EUR LIBOR settings will cease publication and be non-representative after December 31, 2021
	JPY LIBOR and TIBOR (Japanese Yen TIBOR and Euro yen TIBOR)	TONAR (Tokyo Overnight Average Rate)	All JPY LIBOR settings non-representative after December 31, 2021, and will cease publication in its current formulation
	CHF LIBOR	SARON Swiss Average Overnight Rate	Secured rate that reflects interest paid on interbank overnight repo rate SARON swaps began trading in April 2017 All CHF LIBOR settings will cease publication and be non-representative after December 31, 2021
	Singapore Swap Offer Rate (SOR) Singapore Interbank Offered Rate (SIBOR)	SORA (Singapore Overnight Rate Average)	SORA now used in all derivative contracts
	Hong Kong Interbank Offered Rate (HIBOR)	HONIA (Hong Kong Dollar Overnight Index Average)	Hong Kong Treasury Markets Association identified HONIA as the alternative RFR but announced there is no plan to discontinue HIBOR. Hong Kong will therefore adopt a multi-rate approach, whereby HIBOR and HONIA will co-exist

7. WHAT IS SOFR?

SOFR—the Secured Overnight Financing Rate—is the ARRC’s recommended alternative to USD LIBOR. The New York Fed began publishing SOFR in April 2018. Unlike LIBOR, which has a term component for setting interest rates 1, 3, 6 or even 12 months out, the new SOFR rate is only an overnight rate. SOFR features a number of characteristics that LIBOR and other similar rates do not:

- It is derived from the large, active and well-defined overnight repo market with sufficient depth and ~\$1 trillion of transactions per day to make it extraordinarily difficult to manipulate or influence.
- It is produced in a transparent, direct manner and is based on observable transactions rather than being dependent on expert judgment or derived through models.
- It is derived from a market that was able to weather the global financial crisis and that the ARRC believes will remain active enough that it can reliably be produced in a wide range of market conditions.
- It is published on each New York business day by the New York Fed on their website for the prior New York business day.
- On each New York business day, the New York Fed also publishes a compounded average of SOFR in arrears for 30, 60 and 180 days, as well as a SOFR Index that measures the cumulative impact of compounding SOFR on a unit of investment over time since the first day SOFR was published.

What is the difference between SOFR and LIBOR?

Where LIBOR relied on the expectations of bankers, SOFR is based on real transactions between many types of firms including broker-dealers, money market funds, asset managers, insurance companies, banks and pension funds. It is also different from LIBOR in that it is a secured rate, since the repo rates from which it is derived are collateralized by assets. It is an overnight rate, based specifically on overnight repurchase transactions for one business day. LIBOR, by contrast, is a forward-looking term rate with maturities ranging from 1 day to 1 year.

8. WHAT IS SONIA?

The Sterling Overnight Index Average, or SONIA, is the effective overnight interest rate paid by banks for unsecured transactions in the British sterling market. It is used for overnight funding for trades that occur in off hours and represents the depth of overnight business in the marketplace.

SONIA is calculated each London business day, and is the weighted average rate of unsecured overnight sterling transactions brokered by Wholesale Markets Brokers’ Association members. It appears on the business day after the day the rate relates to, and is published at 9:00 a.m. London time. The minimum deal size for inclusion is £25 million. In April 2018, changes to SONIA meant that its remit was expanded to include overnight-unsecured transactions, which are negotiated bilaterally, as well as those arranged via brokers.

9. WHAT IS €STR?

€STR, the Euro short-term rate, is the European Central Bank's (ECB's) new unsecured overnight rate. The ECB publishes the rate no later than 9:00 a.m. CET on the next TARGET2 business day. This benchmark will be used to replace the Euro Overnight Index Average (EONIA) which will be discontinued in December 2021. Currently, both EURIBOR and EONIA are used to calibrate monetary policy, price trillions of euros worth of derivatives and, in some countries, determine interest rates on mortgages.

€STR is calculated for each TARGET2 day as a volume-weighted trimmed mean rounded to the third decimal. This is calculated by:

- Ordering transactions from the lowest rate to the highest rate
- Aggregating the transactions occurring at each rate level
- Removing the top and bottom 25% in volume terms
- Calculating the mean of the remaining 50% of the volume-weighted distribution of rates
- A pro rata calculation is applied to volumes that span the thresholds for trimming to ensure that exactly 50% of the total eligible volume is used in the calculation of the volume-weighted mean (Source: ECB website)

10. WHAT IS EURIBOR?

The Euro Interbank Offered Rate (EURIBOR) is a daily reference rate published by the European Money Markets Institute (EMMI). The 19 Panel Banks making up EURIBOR reflect the highest volume of business in the euro zone money markets. In recent months, the EURIBOR benchmark successfully completed the implementation of a hybrid methodology for calculating the EURIBOR Rate.

The new hybrid methodology consists of three (3) levels of contributions across the five (5) maturity rates (1 week, 1, 3, 6 and 12 months), reduced from 15 rates that were previously offered. These contribution levels account for euro money market transactions that reflect underlying interest as well as transactions that do not.

Factors considered for the new methodology include determining the rate for a given tenor, eligible transactions at a specific tenor, maturity of transactions at a specific tenor, and prior submissions to other contribution levels for a specific tenor in prior dates. (Source: EMMI Blueprint for the Hybrid Methodology for the Determination of EURIBOR, February 12, 2019).

11. WHAT IS SARON?

The Swiss Average Rate Overnight (SARON) was introduced in 2009 and officially adopted as a LIBOR replacement in December 2017. It is administered by SIX, which operates infrastructure for the Swiss financial center. SARON is the secured, overnight interest rate for the Swiss Franc (CHF) repo market. Term rates—spanning the spectrum up to 12 months—already exist for this alternate reference benchmark. SARON is based on concluded transactions and trade quotes posted on the SIX Repo trading platform, provided they lie within the parameters of the quote filter. The quote filter is parameterized in a way that limits the possibilities for manipulation.

SARON is continually calculated in real time and published every ten minutes. In addition, a fixing is conducted three times a day (12:00, 4:00 and 6:00 p.m. CET). The 6:00 p.m. fixing serves as a reference reading for derivative financial products and the valuation of financial assets. (Source: SIX Group publication)



12. WHAT IS CARR?

In March 2018, Bank of Canada announced the creation of the Canadian Alternative Reference Rate Working Group (CARR), which is sponsored by the Canadian Fixed-Income Forum (CFIF). The main objectives of CARR have been to review and enhance the existing Canadian overnight risk-free rate, the Canadian Overnight Repo Rate Average (CORRA), and to assess the need for and, if required, develop a Canadian term risk-free rate benchmark that is robust, reliable and resilient to market stress and manipulation. The enhanced CORRA rate is intended to act as a complementary reference rate for the Canadian market, which will operate alongside the Canadian Dollar Offered Rate (CDOR). The current proposed enhancements to CORRA are:

(a) the rate should remain risk-free (b) the rate should be calculated from more volume than CORRA currently is today (c) the rate should represent General Collateral (GC) funding (d) the rate should be simple and easy to explain

CORRA is determined by actual market transactions, and is used as a reference for overnight indexed swaps and related futures. It is calculated as an average based off designated inter-dealer brokers, including government of Canada collateral repo trades that happened from 6:00 a.m. to 4:00 p.m. ET that day.

The Bank of Canada will take over the responsibility for publishing the Canadian Overnight Repo Rate Average (CORRA), effective Monday, June 15, 2020. Beginning on this date, the Bank will provide this key interest rate benchmark for financial markets, at no cost, and make it available on the Bank's website as a public good.

13. WHAT IS “FALLBACK LANGUAGE” IN THE CONTEXT OF THE BENCHMARK REFORM?

In the U.S., the ARRC advises that the smoothest transition away from LIBOR will be one in which new contracts are written and existing contracts are amended to include reference rates other than LIBOR. However, LIBOR-based products continue to be issued and the ARRC has developed recommended 'fallback language' that can be used in new cash product (non-derivatives) contracts with the aim of reducing the risk of serious market disruption following LIBOR cessation.

The ARRC has issued recommended contractual fallback language for USD LIBOR denominated bilateral business loans, floating rate notes, securitizations, syndicated loans and adjustable rate mortgages.

In EMEA, following the implementation of the EU Benchmark Regulation (BMR), all new contracts referencing a benchmark should provide for a robust fallback. Legacy contracts, to the extent possible, should also be amended to incorporate adequate and robust fallback language.

CIBC MELLON'S LIBOR OPERATIONAL READINESS

14. WHAT IS CIBC MELLON DOING TO PREPARE FOR THE LIBOR TRANSITION?

CIBC Mellon has established a central program governance program to manage the LIBOR transition across the company, which has been underway since 2019.

The program has a robust governance structure with oversight by an Executive Sponsor as well as an Executive and Operating Committee comprising the executive leadership of both CIBC Mellon and BNY Mellon, along with business, functional and regional leads. The LIBOR cessation date of December 31, 2021 remains unchanged and applies to the following currencies and tenors:

- I. Swiss franc and euro LIBOR settings, the 1-Week and 2-Month USD LIBOR settings, and the Overnight/Spot Next, 1-Week, 2-Month and 12-Month sterling and Japanese yen LIBOR settings will cease immediately after December 31, 2021.
- II. The publication of the 1-, 3- and 6-Month sterling and Japanese yen LIBOR settings will continue after December 31, 2021 under a changed, "synthetic" methodology.
- III. The Overnight and 1-, 3-, 6- and 12-Month USD LIBOR settings will cease immediately following the LIBOR publication on June 30, 2023.

15. HOW WILL CIBC MELLON CONTINUE TO ENGAGE CLIENTS DURING THIS TRANSITION?

We continue to work with our parent company, BNY Mellon, and adopt guidance from industry working groups to establish standards and best practices, and to confirm timing on a number of issues.

We will continue to actively engage with clients and keep clients apprised of key updates and deadlines related to CDOR, CORRA and the cessation of LIBOR through Straight Talk and knowledge leadership publications, along with direct communication with clients.

In the meantime, clients may refer to the Our Thinking section of CIBC Mellon's [website](#) for a wealth of more information, including our latest Transition Readiness and Overview white paper and our New Capabilities Summary.

16. WHAT ARE SOME OF THE KEY OPERATIONAL UPDATES CIBC MELLON IS MAKING TO TRANSITION AWAY FROM LIBOR TO ARRS?

As LIBOR has been in use for decades, it is deeply embedded in many systems and processes across financial markets. Some of the key operational updates we are making to operationalize the transition include:

- Updating, testing and validating pricing, valuation and risk management models that currently use LIBOR
- Upgrading operational systems and core platforms to support ARR products
- Refreshing our processes to include ARRs
- Amending any contracts that require amendment, if any

17. HAS CIBC MELLON IDENTIFIED THE IMPACTS TO ACCOUNTING STANDARDS AND PROCESSES?

Together with our parent company, BNY Mellon, we have implemented a number of new capabilities in anticipation of accounting standards and process impacts. These include data capture, calculations and data dissemination enhancements across various accounting applications and in a variety of markets, based on existing regulatory conventions.

Our fund accounting systems have been updated with relevant security data elements (e.g., lookback, lockout, observation shift and decimal precision) and we will continue to upgrade these in support of the new ARR calculation methodologies.

18. WILL CIBC MELLON'S CORE PLATFORMS BE ENHANCED TO SUPPORT ARR-SPECIFIC INTEREST RATE CALCULATION METHODOLOGIES AND PAYMENT CONVENTIONS?

With the introduction of new ARR products, impacted systems and models have been enhanced with new capabilities to support impacted listed securities and derivatives.

For more details, please read our [New Capabilities Summary](#), which highlights specific areas of change such as new calculations and the capturing and processing of new security reference data.

19. WHAT IS CIBC MELLON DOING TO STAY UP-TO-DATE ON THE LIBOR TRANSITION AND ENGAGED WITH VARIOUS INDUSTRY BODIES?

Through our parent company BNY Mellon, we are actively engaged in various industry bodies that are developing solutions to help smooth the transition from LIBOR to alternative benchmarks. These include:

- International Swaps and Derivatives Association (ISDA)
- Alternative Reference Rates Committee (ARRC)
- The Bankers Association for Finance and Trade (BAFT)
- UK Working Group on Sterling Risk-free Reference Rates (UK RFR)
- The International Capital Market Service Association (ICMSA)



INDUSTRY UPDATES AND KEY CONSIDERATIONS

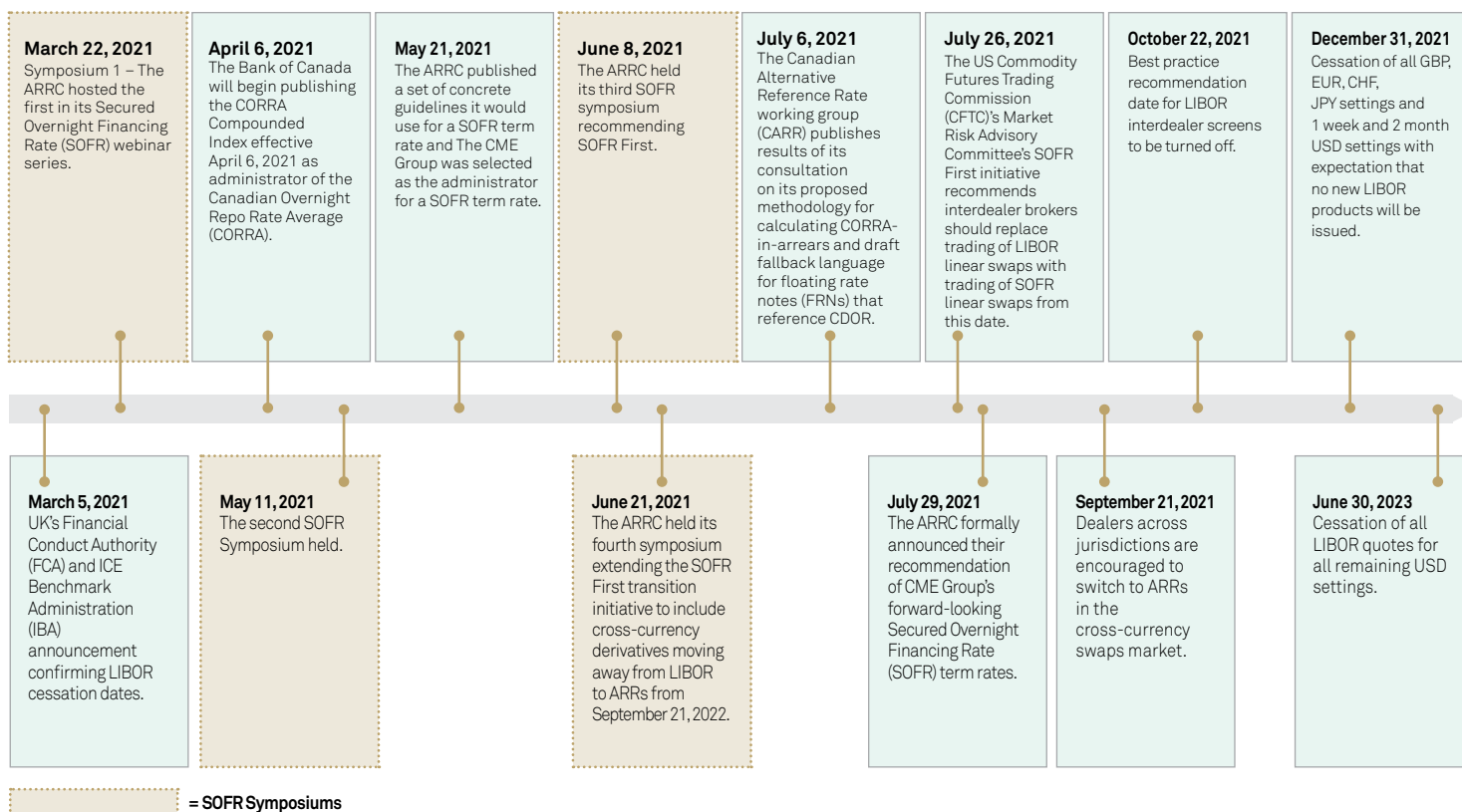
Section A: Alternative Reference Rates Committee (ARRC) SOFR Symposium Series

20. WHAT ARE SOME OF THE LATEST MARKET UPDATES AND UPCOMING TRANSITION DEADLINES?

- Various national RFR Working Groups have stated that any forward-looking term rates that may become available are only intended for use in certain products or in certain circumstances.
- The Sterling RFR Working Group has established a Term Rate Task Force, with the current ambition to have a forward rate available in the first quarter of 2021.
- The ARRC has included the production of a forward-looking term rate as one of the final steps of its Paced Transition Plan, with the latest plan indicating that such a rate may become available in Q2 2021.
- The expected publication of the forward-looking term version of TONAR (for Japanese Yen) is mid-2021.
- The Swiss RFR Working Group has expressed its intention to proceed without a forward-looking term rate based on SARON.

For the news of latest developments on CDOR, CORRA and LIBOR, please visit [CIBC Mellon's website](#).

LIBOS TRANSITION DEADLINES



21. IS THERE A SOFR TERM RATE AVAILABLE NOW FOR MARKET USE?

On July 29, 2021, the ARRC formally announced their recommendation of a [SOFR term rate](#) for loans and certain classes of securitizations.

The recommendation of a SOFR term rate also follows the completion of [a key change](#) in interdealer trading conventions on July 26, 2021, under the SOFR First initiative.

The availability of a term SOFR marks a major milestone in the transition away from U.S. Dollar (USD) LIBOR, providing market participants with an essential transition tool and marking the completion of the [Paced Transition Plan](#) that the ARRC outlined in 2017. [Click here](#) to read the official ARRC announcement.

Section B: SOFR First LIBOR Transition Initiative

22. WHAT IS THE SOFR FIRST TRANSITION INITIATIVE?

- The Commodity Futures Trading Commission (CFTC)'s Market Risk Advisory Committee (MRAC) voted to recommend a market best practice for switching interdealer trading conventions from LIBOR to SOFR for USD linear interest rate swaps.
- SOFR First is a best practice modelled after the U.K.'s "SONIA First" and it represents a prioritization of interdealer trading in SOFR rather than LIBOR. The initiative includes a key recommendation for switching dealer to dealer trading conventions from LIBOR to SOFR, for USD linear interest rate swaps from July 26, 2021. The initiative also includes a recommendation for interdealer brokers' screens for USD linear interest swaps to switch off from October 22, 2021.
- To find out more about the SOFR First transition initiative, please see our SOFR First initiative Client Factsheet [here](#).

23. WHAT SWAPS ARE IN SCOPE FOR THE SOFR FIRST TRANSITION INITIATIVE?

- Within the context of the SOFR First transition initiative, USD linear swaps deemed in scope include: outright swaps, swap spreads, curve trades, non-linear derivatives, and exchange traded derivatives.
- LIBOR/SOFR basis swaps, Forward Rate Agreements and Single Period Swaps are not included in the initiative and are expected to continue trading in the interdealer market beyond July 26, 2021, and until October 22, 2021.

24. HAVE CROSS CURRENCY SWAPS NOW RECEIVED SOFR FIRST DESIGNATION ALONG WITH LINEAR SWAPS AND NON-LINEAR DERIVATIVES?

- With the SOFR First transition initiative underway since July 26, 2021, for linear swaps and non-linear derivatives, the ARRC and FCA have extended this initiative to include cross currency swaps. Participants in the LIBOR cross currency swaps market were asked to take the steps necessary to prepare for and implement these changes to market conventions on September 21, 2021, and to shift liquidity away from LIBOR to ARRs.
- Following the September 21 move, it is expected that all interdealer trading cross currency basis swaps between U.S. Dollar, Japanese Yen, Sterling, and Swiss Franc will be based on these conventions and will reference the SOFR, the Tokyo Overnight Average rate (TONAR) the Sterling Overnight Index Average rate (SONIA), and the Swiss Average Rate Overnight (SARON) rather than LIBOR. Cross currency basis swaps between USD LIBOR and other currencies are expected to move to SOFR by the end of 2021 given supervisory guidance encouraging new use of USD LIBOR to cease by the end of the year.
- In the U.K., according to the FCA, dealers have been asked to cease initiation of new cross currency derivatives with a LIBOR-linked sterling leg expiring after 2021, during Q3 2021, other than for risk management of existing positions. In the U.S., dealers have been asked to cease initiation from late Q2 2021 onwards with the initiation of SOFR First.

Section C: Alternatives to USD Risk Free Rates (RFRs)

25. IN THE PAST YEAR, SEVERAL USD ALTERNATIVES TO SOFR HAVE EMERGED. WHAT ARE SOME OF THESE ALTERNATIVE BENCHMARKS AND HOW DO THEY FUNCTION?

As markets move closer to transitioning away from LIBOR, new Alternative Reference Rates (ARRs) other than SOFR are gaining traction.

Importantly, the International Organization of Securities Commissions (IOSCO) recently released a statement highlighting that alternative financial benchmarks will need to be compliant with the IOSCO principles on Financial Benchmarks, and that demonstrating compliance is not a one-time exercise. IOSCO called for greater attention to Principles 6 and 7; the former principle asks administrators to consider the ‘relative size of the underlying market in relation to the volume of trading’ and the latter principle, emphasises ‘data sufficiency in a benchmark’s design to accurately and reliably represent the underlying market’ measured by the benchmark.

Regulators have expressed concern that some of LIBOR’s shortcomings may be replicated using credit-sensitive rates that lack sufficient underlying transaction volumes. The disproportionality between the low/modest volume of transactions underlying credit-sensitive rates and the increasingly higher volumes of activity in markets referencing them could raise concern about market integrity, conduct risks and financial stability risks. To continue to give market confidence in the reliability and integrity of financial benchmarks, IOSCO will be monitoring closely how the IOSCO badge is used in compliance assessments of the relevant credit-sensitive rates.

Below is a non-exhaustive summary of several non-SOFR ARR’s emerging across the market, listed in alphabetical order.

- [AFX Ameribor](#) The rate is based on a weighted average of member banks unsecured loans. It is published in overnight and 30-day terms. LSTA has advised market participants that plan to use Ameribor to refer to the “[Credit Sensitive Rate’ Slot-in Rider for Fallback Language](#)” they have provided to ensure that all contract amendments will have adequate fallback language for rates that are not SOFR. Futures are available for this market on the CME, which could help with hedging strategies, however volume remains relatively low compared to the size of the SOFR futures market.
- [AXI](#) is an interest rate index designed to serve as a potential credit-sensitive spread added to the SOFR to support the transition of loan products away from LIBOR. The index is a measure of the recent cost of wholesale unsecured debt funding for publicly listed U.S. bank holding companies and their commercial banking subsidiaries. The index is a weighted average of credit spreads for unsecured debt instruments with maturities ranging from overnight to five years, with weights that reflect both transaction volumes and issuance volumes.
- [Bloomberg Short-Term Bank Yield Index \(BSBY\)](#) is constructed using aggregated and anonymized data based on transactions of commercial paper, certificates of deposit, USD bank deposits and short-term bank bond trades, reflecting banks’ marginal funding costs. The rate includes a forward-looking term structure and a systemic credit spread. BSBY will be calculated daily and published at 8.00 a.m. ET, using the prior day’s transaction data, on a T+1 basis. The index can be accessed via the Bloomberg Terminal and will be posted publicly on Bloomberg.com on a delayed basis. The index is available for five tenors: overnight (BSBYON), one-month (BSBY1M), three-months (BSBY3M), six-months (BSBY6M) and 12-months (BSBY12M). CME has announced they will proceed with the initial listing of Three-Month Bloomberg Short-Term Bank Yield Index (BSBY) Futures Contract effective Sunday, August 22, 2021.

- [The IHS Markit U.S. Dollar Credit Inclusive Term Rate](#), or CRITR, is intended for use on a standalone basis for lending agreements. The U.S. Dollar Credit Inclusive Term Spread, or CRITS – can be layered on top of SOFR and is available in one-day, one-month, three-, six- and 12-month term settings. CRITR and CRITS are designed to provide broad-based measures of funding levels for banking institutions in USD denominations in institutional markets, on an unsecured basis. IHS Markit will publish both a spread and an all-in rate. The USD CRITR and CRITS utilize USD institutional certificate of deposit, commercial paper, and corporate bond transactions issued by banking institutions.
- [U.S. Dollar ICE Bank Yield Index](#) is a forward-looking, credit-sensitive benchmark, developed specifically as a potential replacement for LIBOR for USD lending activity. The Index has been designed to measure the average yields at which investors are willing to invest USD funds over one-month, three-month and six-month periods on a wholesale, senior, unsecured basis in large internationally active banks.

26. IS CIBC MELLON PREPARED TO SUPPORT THE USE OF ALTERNATIVE USD RFRS?

CIBC Mellon is prepared to support a variety of alternatives to RFRs based upon demand from our clients.

Section D: Global developments and ongoing considerations

27. WHAT ARE SOME OF THE KEY DEVELOPMENTS IN THE LIBOR TRANSITION AROUND THE WORLD (AT THE TIME OF PUBLICATION)?

Canada

- The Canadian Alternative Reference Rate working group (CARR) published the [results of its consultation](#) on its proposed methodology for calculating CORRA-in-arrears on July 6, 2021. It included draft fallback language for floating rate notes (FRNs) that reference CDOR. At the same time, CARR published its final recommended CDOR FRN fallback language.

U.S.

- Trading volumes have risen notably in derivatives following the launch of the SOFR First initiative recommending that SOFR replace LIBOR in interdealer USD swap trading conventions.
- Meanwhile, the Loan Syndications and Trading Association (LSTA) prepared a draft [Term SOFR Concept Document](#) to augment its suite of SOFR-based Concept Documents. A blackline against Daily Simple SOFR Concept Document is available [here](#) and a webcast explaining the concept document is [available here](#).

U.K.

- The U.K. continues to progress in its move away from LIBOR to SONIA, with [liquidity increasing](#).
- On June 26, 2021, the [FCA published](#) a consultation regarding the publication of synthetic LIBOR for six Sterling and Yen settings after December 31, 2021.
- The FCA has selected ICE Benchmarks Administration (IBA) as the provider of the potential GBP synthetic LIBOR rate and QUICK Benchmarks Inc. as the provider of a potential synthetic JPY LIBOR rate.

Europe

- The European Commission, the European Central Bank, the European Banking Authority and the European Securities and Markets Authority [issued a joint statement](#) in which they strongly encourage market participants to use the time remaining until the cessation or loss of representativeness of USD LIBOR, GBP LIBOR, JPY LIBOR, CHF LIBOR and EUR LIBOR to substantially reduce their exposures to these rates.

Singapore

- Singapore reiterates the need for active transition to SORA, [in a report](#) providing guidance on new industry timelines to cease issuance of SOR derivatives and SIBOR-linked financial products.

China

- Major lending institutions have been asked to proactively advance the transition for USD loans from USD LIBOR to SOFR. [More information can be found here](#).

Hong Kong

- On July 8, 2021, the Hong Kong Monetary Authority (HKMA) [issued a circular](#) to all Authorized Institutions (AIs) requesting them to give a further push to promote the corporate sector's awareness of the LIBOR transition.

India

- The Reserve Bank of India (RBI) [issued an advisory](#) to banks and other regulated entities on July 8, 2021, emphasizing the need for them to stop signing new financial contracts that reference LIBOR as a benchmark.

28. WHAT ARE SOME OF THE LATEST DEVELOPMENTS IN THE MOVE AWAY FROM LIBOR IN JAPAN?

There are three main options for Japanese Yen LIBOR replacement rates in Japan:

- **TIBOR** – which is calculated and published based on interbank rates submitted by 15 financial institutions in Japan, including major banks.
- **TONAR** – which is essentially the call rate (weighted average value) for uncollateralized overnight call transactions calculated based on the Explanation of “Statistics on Call Market” published by the Bank of Japan, and,
- **TORF** (Tokyo Term Risk Free Rate) – which is [recommended](#) by the Japanese Cross-Industry Committee to help transition in the cash market and is the only forward-looking term RFR for Japanese Yen. TORF is calculated and has been published by market data provider QUICK since April 2021.

Furthermore, the U.K.'s FCA published a consultation paper on June 26, 2021, on continued publication of a synthetic LIBOR for Japanese Yen settings after December 31, 2021, to support the orderly wind-down of LIBOR. The FCA selected TORF as a component for a potential synthetic Japanese Yen LIBOR.

NEXT STEPS AND FURTHER INFORMATION

29. HOW CAN MARKET PARTICIPANTS PREPARE FOR THE TRANSITION?

Given the use of LIBOR in many financial products, any potential termination of its publication could have a financial and operational impact. It is essential that market participants seek to understand how this transition may affect them by taking some initial steps, which may include:

- Reviewing their portfolio to identify which products are linked to LIBOR.
- Documenting the amount of exposure products have to LIBOR, including those that mature after the proposed end dates. Such a review may include specific currencies and indices, notionals, risk, transactions numbers, maturity profiles, product types and counterparty concentration.
- Examining and, if necessary/possible, amending existing and new legal contracts to ensure robust language is in place that outlines the steps to be taken or the interest rate that must be applied in the event LIBOR is no longer published.
- Producing an inventory of relevant systems used (e.g., trade booking, risk systems) which may be affected should LIBOR no longer be published in the future. Consider making changes that will allow those systems to use alternative rates.
- Ensuring appropriate documentation is in place to adequately disclose or mitigate risks associated with the discontinuation of LIBOR.
- Continuing to monitor industry and regulatory bodies for updates with regards to the LIBOR transition.

To find out more about the latest industry updates, please [click here](#).

30. WHERE CAN CLIENTS FIND OUT MORE ABOUT THE TRANSITION AWAY FROM LIBOR AND OTHER IBORS?

- Clients can visit [CIBC Mellon's website](#) for the latest industry developments and information.
- In addition, clients may follow these links for the latest news and resources from some of the key industry participants in LIBOR/IBOR transitions:
 - [Bank of Canada \(CORRA\)](#)
 - [Canadian Alternative Reference Rate Working Group \(CARR\)](#)
 - [Rifinitiv \(CDOR\)](#)
 - [Alternative Reference Rates Committee \(ARRC\) \(US\)](#)
 - [Loan Syndications & Trading Association \(LSTA\) \(US\)](#)
 - [Mortgage Bankers Association \(MBA\) \(US\)](#)
 - [International Swaps and Derivatives Association \(ISDA\)](#)
 - [The Bankers Association for Finance and Trade \(BAFT\)](#)
 - [Bank of England \(UK\)](#)
 - [Financial Conduct Authority \(UK\)](#)
 - [Loan Market Association \(LMA\) \(EMEA\)](#)
 - [IFRS \(International Financial Reporting Standards\) – IBOR Reform and its Effect on Financial Reporting \(Phase 1\)](#)
 - [IFRS \(International Financial Reporting Standards\) – IBOR Reform and its Effect on Financial Reporting \(Phase 2\)](#)
 - [Asia Pacific Loan Market Association \(APLMA\)](#)
 - [Asia Securities Industry and Financial Markets Association \(APLMA\)](#)



For more information on CIBC Mellon's preparedness for LIBOR and CORRA, please contact a member of the CIBC Mellon Business Development team or your Relationship Executive or Relationship Manager at 416-643-5000, or visit www.cibcmellon.com.

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