

# LIBOR transition frequently asked questions

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#### I. Disclaimer

This document is intended to provide information to SMBC Group's<sup>[1]</sup> customers and counterparties in the EMEA markets regarding discontinuation of the London Interbank Offered Rate. The document contains general guidance only, is not tailored to individual circumstances and is not exhaustive. This document does not contain any advice and please refer to SMBC Group's disclaimer at the end of this document. Please contact your SMBC Group relationship manager, or other usual contact, if you wish to discuss any of the questions considered below.

## II. Background

#### 1. What are IBORs?

Interbank Offered Rates (**IBORs**) are interest rate benchmarks that are widely used in financial markets. These rates are used to set the interest rates that are payable under a wide range of financial products such as loans, bonds, mortgages and derivatives. They represent the average cost at which a group of "panel banks" could obtain wholesale unsecured funding. Rates are calculated daily for a range of currencies (e.g. EUR and USD) and a variety of forward-looking tenors (typically overnight, 1 week, 1-, 2-, 3-, 6- and 12-months).

As further explained in the rest of this section, the London Interbank Offered Rate (**LIBOR**), as one of the available IBORs, will cease to be published and will no longer be used as a benchmark in transactions; while other IBORs, such as the Euro Interbank Offered Rate (**EURIBOR**), will continue to be published and be used in financial transactions as at the date of this document. These FAQs will focus on LIBOR and the market's transitioning away from LIBOR in line with these developments.

#### 2. What is LIBOR transition?

The use of LIBOR was called into question following the global financial crisis. Regulatory reviews identified that shifts in the way banks fund their operations meant IBORs were increasingly calculated based on panel bank judgments as to their borrowing costs, rather than actual transaction data. Activity in the markets that LIBOR measures has significantly reduced and the low volume of underlying transactions meant LIBOR was no longer sustainable. Global regulators desire that interest rate benchmarks be founded upon actual transactions, not expert judgment, in order to be robust and reliable.

On 5 March 2021, the UK Financial Conduct Authority (**FCA**) made an announcement on the future cessation and loss of representativeness of all 35 LIBOR benchmark settings currently published by ICE Benchmark Administration (**IBA**), an authorised administrator, regulated and supervised by the FCA<sup>[2]</sup>. In this announcement, the FCA specifically confirmed that all LIBOR settings will either cease to be provided by any administrator or no longer be representative on the dates specified below:

| Currency | IBOR Benchmark Rate | Cessation Date                                 |
|----------|---------------------|--|
| USD      | USD LIBOR           | 31 December 2021 for 1-week and 2-month tenors |
|          |                     | 30 June 2023, for remaining tenors             |
| GBP      | GBP LIBOR           | 31 December 2021                               |
| JPY      | JPY LIBOR           | 31 December 2021                               |
| EUR      | EUR LIBOR           | 31 December 2021                               |
| CHF      | CHF LIBOR           | 31 December 2021                               |

In line with these developments, SMBC and other market participants have made and continue to make substantial progress in actively transitioning contracts which are based on LIBOR into the alternative risk-free rate based contracts. Other than transitioning any residual outstanding contracts for LIBOR currencies which have already been discontinued, the key focus will now be on the transition of legacy USD LIBOR contracts given the upcoming cessation date of 30 June 2023.

#### 3. What is replacing LIBOR?

This transition process is driven by a combination of global regulators, trade associations and financial



institutions. The authorities in the five LIBOR currency jurisdictions suggested the use of alternative risk-free rates ("**RFRs**") that have been developed for use instead of LIBOR. The table below shows the recommended RFR for each of the LIBOR currencies:

| LIBOR<br>currency | Administrator                    | Recomm | Recommended alternative benchmark rate |           |
|-------------------|----------------------------------|--------|--|-----------|
| GBP               | Bank of England                  | SONIA  | Sterling Overnight Index Average       | Unsecured |
| USD               | Federal Reserve Bank of New York | SOFR   | Secured Overnight Funding Rate         | Secured   |
| EUR               | European Central Bank            | €STR   | Euro Short Term Rate                   | Unsecured |
| CHF               | SIX Swiss Exchange               | SARON  | Swiss Average Rate Overnight           | Secured   |
| JPY               | Bank of Japan                    | TARON  | Tokyo Overnight Average Rate           | Unsecured |

See section IV on more details regarding the new RFRs and section V on conversion of existing contracts referencing LIBOR.

#### 4. How are the recommended alternative benchmark rates different from LIBOR?

All the recommended alternative benchmarks rates are "risk-free rates". They share certain characteristics that make them fundamentally different from LIBOR:

- **Backward-looking overnight rates**: Risk-free rates are overnight borrowing rates. They are published the following day and apply to the previous day's borrowings. Therefore, the applicable rate is only known in arrears and only for a period of a single day. In contrast, LIBOR is a forward-looking term rate and gives the term rate for a specific tenor of borrowing in advance.
- Credit risk premium: LIBOR prices in the implied credit risk of lending to a bank. Risk-free rates are
  overnight rates, so little to no credit risk is priced into them. Further, whilst LIBOR reflects the rate of
  lending to banks on an unsecured basis, some risk-free rates are derived from secured transactions
  whereas others are derived from unsecured transactions.
- **Liquidity premium**: LIBOR for a tenor prices in a liquidity premium to compensate for the cost of providing funds for the whole of that term. Risk-free rates do not include a significant liquidity premium as they only reflect overnight borrowing costs.

These characteristics mean that the method of calculating interest under a product linked to a risk-free rate is very different from a product linked to LIBOR and will yield a different interest rate and amount. See more on calculation of these rates in Question 9.

#### 5. Is EURIBOR being replaced?

At present, EURIBOR (which is a forward-looking term rate) is not expected to be replaced. To enhance its robustness EURIBOR has been reformed to evolve away from being a quote-based determination to being derived from actual transaction data. However, this means that in multi-currency facilities parties may have to adapt to a combination of forward-looking and backward-looking calculation methodologies depending on the available currencies.

# III. Recent developments and next steps in LIBOR transition

#### 6. What are the recent developments in LIBOR transition?

According to a press release by the UK Working Group on Sterling Risk-Free Reference Rates (the UK Working Group) jointly with the Bank of England and the FCA, overnight SONIA (compounded in arrears) is now fully embedded across sterling markets and the Bank of England estimates that less than 2% of the total sterling LIBOR legacy stock remains across all asset types<sup>[3]</sup>.

On the USD LIBOR front, the FCA prohibited the use of the USD LIBOR on new contracts (unless specifically permitted under limited conditions) as of 1 January 2022<sup>[4]</sup>. Therefore, all new USD based transactions, as from the end of 2021, will need to be written referencing SOFR, the risk-free rate alternative to USD LIBOR.



In relation to any legacy contracts relying on USD LIBOR, it continues to be vital to transition into risk-free rate based contracts before the end of June 2023.

SMBC Group continues to monitor announcements by the relevant working groups to ensure its transition plan for new product issuance and legacy assets remains aligned with regulatory expectations.

#### 7. What can I do to prepare for the transition of USD LIBOR exposures?

We encourage you to identify and assess any USD LIBOR-linked exposures. Some exposures may be obvious, such as floating rate loan agreements, floating rate notes or interest rate derivatives. However, USD LIBOR may also be relevant to intra-group funding arrangements, commercial contracts or internal financial analysis, benchmarking and reporting.

You may wish to engage an independent consultant, particularly for review of the terms of any such exposure that matures after June 2023, to understand whether an amendment is feasible or refinancing option is more viable and for advice on the robustness of any fallback language. As cessation of the remaining USD LIBOR rates is imminent, you should contact your counterparties as soon as possible and agree on the timelines and plans for transitioning any USD LIBOR based contracts.

Financial markets have evolved to meet the challenges of LIBOR transition so far and will continue to develop as the USD LIBOR transition progresses. You should try to stay up to date with new developments. We have included as an appendix a selection of links to regulatory and industry working group sites that will stay up to date with the latest developments at the end of this text.

#### 8. Who can I contact if I have further questions?

If you have questions on SMBC Group's approach to LIBOR transition, alternative products we can offer you, or how we can help your business through the process, please contact your usual relationship manager. We welcome all engagement with our clients on this topic.

#### IV. New alternative risk-free rates

#### 9. How can risk-free rates (RFRs) be used to calculate interest?

Various industry groups and working groups exist in different markets to identify their preferred alternative benchmark rate and facilitate the process of transitioning their markets onto them. A key characteristic of each recommended alternative rate is that it is based on actual transaction data from deep and liquid markets, with the intention of making it more sustainable and robust than current LIBOR rates.

RFRs are backward looking rates and require a different method of calculating accrued interest from forward-looking term rates. In September 2020, the UK Working Group published its recommended conventions for loan facilities using SONIA on a "compounded in arrears" basis<sup>[5]</sup>. The recommendations follow consultation with lenders, borrowers and trade associations.

The most common approach for calculating accrued interest is to compound a series of daily readings for the risk-free rate over a look-back period of five business days called the "observation period". This is also provided for in all facilities agreement forms using RFRs published by the Loan Market Association (**LMA**) and has generally been adopted in the EMEA market for currencies other than GBP.

Whilst the compounding in arrears methodology is different from how loan markets have operated prior to LIBOR discontinuation, the UK Working Group considers that the methodology is appropriate and operationally achievable for approximately 90% (by value) of Sterling LIBOR loans<sup>[6]</sup>. There is no single and settled approach for using RFRs in loan products. Compounded RFRs may not be suitable for all transactions (see Question 11 below) and even if compounding is preferred, the calculation methodologies may differ depending on the choice of the finance parties or type of the product (see Question 14).

#### 10. What is the role of an "observation period" in an RFR based loan?

LIBOR for an interest period of a loan is determined at the start of such interest period. All finance parties would therefore know how much interest will be payable at the end of that interest period. Whereas with RFRs, the total interest rate applicable over a period, on a loan that is based on a compounded RFR, cannot be known until the end of that period, by which date interest would already become payable.



The "look-back" mechanism allows the interest to be calculated, by taking into account a period that has the same number of business days as the actual interest period but starts and ends a specified number of business days before the start and end of the actual interest period. The period to be taken into account for the calculation of the RFRs would therefore shift by that specified number of business days. This mechanism would help the parties know the amount of interest that will be payable at the end of the relevant interest period a few days in advance of the payment date, giving the borrower sufficient notice of the total amount of interest.

#### 11. What is Compounding in Arrears?

A key challenge for LIBOR transition in the cash markets has been to identify new operational conventions to be used when calculating the interest rate on a compounded in arrears basis. According to the UK Working Group, the market has shown a strong preference for compounding the rate rather than compounding the balance<sup>[7]</sup>. This means that the RFR will be compounded on each business day over the relevant observation period (detailed in the above section), using the daily rates published during that period. It will not involve compounding of the accrued interest and therefore the principal amount of the loan will not increase as interest accrues during the interest period.

#### 12. Will RFR period averages be published along with daily rates?

Since 2020, the publishing institutions and administrators are making consultations and gathering opinions on whether period averages (similar to 1-month, 3-month or 6-month USD LIBOR or 1-week, 2-month or 12-month GBP LIBOR) should also be published for RFRs to ease the calculations for the market players.

Currently, daily rates are being published for different currencies by the relevant publishing authorities for each day. For USD loans, this will be the Federal Reserve Bank of New York publishing daily SOFR rates based on transactions in the US Treasury repurchase market since April 2018. When there are no period averages published alongside such daily rates, calculating the compounded RFR for a 3-month interest period will require identifying more than 50 published daily rates, taking into account weekends and bank holidays in that period and perform complicated calculations to reach the applicable compounded RFR.

However, publishing period averages has its own complications, including complexities arising from counting of the number of days in an interest period based on the currently existing day conventions. For example, the applicable compounded RFR rate for a certain interest period where the interest payment date falls on a non-business day (which will, according to the currently existing conventions, need to be moved either forward or backward to a business day) would be different than the rate for when such interest payment date falls on a business day.

To address this issue, the Bank of England stated on 11 June 2020 that due to lack of consensus on the usefulness of period averages and the conventions underpinning such rates, it will not be producing period averages for SONIA [8]. It nevertheless announced that it will publish a daily index of compounded overnight SONIA rates. The SONIA Compounded Index, which is now being published by the Bank of England as of August 2020, allows market participants to easily calculate the compounded overnight SONIA rate between any two specific start and end dates.

On the USD front, the Federal Bank of New York (as the administrator of SOFR) is publishing both the compounded SOFR index as well as compounded averages of the SOFR for 30, 90 or 180 days<sup>[9]</sup>.

The LMA facility agreement forms still assume that all calculations will be done manually using the daily compounded RFRs rather than using the period averages or the indexes. The daily compounded RFR approach has generally been adopted in the EMEA loan market.

#### 13. Are credit adjustment spreads used in new loans that use RFRs?

Unless the terms of a contract do not necessitate this, a credit adjustment spread will typically be factored in the calculation of interest in RFR based loans, where such loan has originally been based on LIBOR. The markets have adopted this practice to ensure that there is no transfer of economic value between the parties resulting from the switch from LIBOR to RFRs.

Based on that reasoning, it is not required to include a credit adjustment spread where interest is based on RFRs since inception. Nevertheless, there has been a variety of approaches in the market to the inclusion of credit adjustment spreads in new loans based on RFRs, as parties consider their margin levels during this time of transition.



For more information on credit adjustment spreads, see Question 18.

#### 14. Term RFRs – Can forward-looking term RFRs be an alternative to compounded RFRs?

Certain cash products, such as supply chain finance, receivables facilities, export financing and Islamic facilities require forward-looking rates either because they discount future cashflows (which requires the ability to interpolate a rate), or because they require contractual certainty of a payment amount at the start of an interest period.

As a result, forward-looking term rates derived from RFRs for each LIBOR currency are made available for specific tenors. As is the case with LIBOR, these term RFRs will allow calculation of interest payable over an interest period at the beginning of that interest period. Similar to backward-looking RFRs, and in contrast to LIBOR, term RFRs do not contain any credit risk or liquidity premium.

Parties to any LIBOR-linked contract should give special attention to whether such contract is on a tenor that does not have a proposed forward term RFR. See below for a chart providing details on the forward term RFRs including tenors.

| Existing<br>LIBOR | RFR   | Administrator<br>of RFR                | RFR Term<br>Rate                           | Administrator of RFR<br>Term Rate   | Remark  | Tenors   |
|-------------------|---|--|--|---|---|--|
| EUR<br>LIBOR      | Euro Short-<br>Term Rate<br>(€STR)                | European<br>Central<br>Bank            | €STR<br>forward<br>looking<br>term<br>rate | Ice Benchmark<br>Administration<br>European Money<br>Market Institute (EMMI)<br>Refinitiv | Wholesale euro<br>unsecured overnight<br>borrowing costs of<br>banks in the euro area | 1 week<br>1 month<br>3 months<br>6 months<br>12 months |
| JPY<br>LIBOR      | Tokyo<br>Overnight<br>Average Rate<br>(TONAR)     | Bank of Japan                          | Tokyo<br>Term Risk<br>Free Rate<br>(TORF)  | QUICK Benchmarks Inc  | Uncollateralised overnight call rate  | 1 month<br>3 months<br>6 months                        |
| GBP<br>LIBOR      | Sterling<br>Overnight<br>Index Average<br>(SONIA) | Bank of<br>England                     | Term<br>SONIA<br>Reference<br>Rate         | Ice Benchmark<br>Administration<br>Refinitiv  | Unsecured overnight rate for wholesale funds  | 1 month<br>3 months<br>6 months<br>12 months           |
| CHF<br>LIBOR      | Swiss Average<br>Rate Overnight<br>(SARON)        | SIX                                    | No forward-l                               |   |   |  |
| USD<br>LIBOR      | Secured<br>Overnight<br>Financing Rate<br>(SOFR)  | Federal<br>Reserve Bank<br>of New York | SOFR Term<br>Rate                          | CME Group<br>Ice Benchmark<br>Administration  | Overnight SOFR based on market expectations implied from derivatives markets          | 1 month<br>3 months<br>6 months<br>12 months           |

There is a key distinction between GBP and USD loan markets regarding the eligibility of term RFRs for general business loans. The UK authorities have made clear their preference for the sterling market to adopt SONIA compounded in arrears for new transactions, with use of term SONIA limited to certain products and certain borrowers.

However, on the USD front, the Alternative Reference Rates Committee (**ARRC**) formally confirmed its support for the choice of Term SOFR in addition to other forms of SOFR for business loan activity. The ARRC further added that it does not support the use of Term SOFR for vast majority of the derivatives market. [10] The linked FAQs document dated 27 August 2021 by the ARRC provides more details on the suggested use of Term SOFR. [11] The UK Working Group confirmed the wider scope of use of Term SOFR for USD based products following ARRC's guidance. [12]

While there are clear recommendations from different working groups as to the circumstances in which the use of Term SOFR would be most appropriate, SMBC Group is able to support its customers' preferences based on commercial considerations in each case. You should consider seeking independent advice as to the risks and benefits of each RFR option to understand which option is more appropriate for your business.



#### 15. How are lenders documenting new RFR based transactions?

On 30 March 2021, the LMA published a series of recommended form of facility agreements providing for RFR-based pricing, including:

- · multicurrency term and revolving facilities agreement incorporating rate switch provisions;
- multicurrency term and revolving facilities agreement incorporating backward-looking compounded rates and forward-looking term rates with rate switch provisions; and
- single currency term and revolving facilities incorporating backward-looking compounded rates.

These forms have already been adopted by majority of the market. They incorporate backward-looking compounded rates and forward-looking term rates with rate switch provisions. They can be adapted to provide for any combination of IBOR and RFR linked facilities.

The LMA also published an exposure draft single currency term and revolving facilities agreement incorporating Term SOFR on 27 October 2021. This remains an exposure draft at this stage, as the LMA has noted that the market is still to develop a standardised approach to many issues for Term SOFR (such as fallbacks).

#### 16. How can I check if my company is charged the correct interest amount?

In relation to SONIA calculations, the UK Working Group has published a freely available independent RFR calculator. See the following link to make your individual calculations to validate the numbers your company has been charged.

https://www.bankofengland.co.uk/-/media/boe/files/markets/benchmarks/rfr/rfrwg-freely-available-calculator-summary.pdf

## V. Legacy contracts

# 17. What options are available for LIBOR-linked contracts in anticipation of the permanent cessation of LIBOR?

Since 1 October 2020, the UK regulators have requested lenders to include contractual arrangements in new and re-financed LIBOR-linked loans that will facilitate their conversion to RFR (or another alternative rate). Parties that entered into LIBOR based loans following the initial FCA discontinuation announcement with a tenor beyond 2021 (or June 2023 in the case of certain USD LIBOR settings) did so with the knowledge that LIBOR may be discontinued during the life of the loan and certain contractual fallbacks may have been adopted to address this. Contracts entered into before the announcement of discontinuation of LIBOR are likely not to include suitable fallbacks.

We list below the main approaches adopted by the market to address this LIBOR risk under existing contracts:

- Agreement to Amend: This is a provision that was incorporated into contracts in the early stages after the initial FCA announcement. In 2018 (updated further in 2020), the LMA published a form "Replacement of Screen Rate" clause, under which amendments relating to the use of a replacement benchmark can be made with the majority lenders' vote and parties are obliged to negotiate these terms in good faith by a certain date before the cessation of LIBOR. In some cases, key terms of the replacement benchmark may have been included. Nevertheless, this method is an agreement to agree and requires active amendment of the contract to address LIBOR discontinuation. One of the key purposes of the clause for syndicated facilities is that majority lender consent is required to effect the amendments rather than all lender consent.
- Rate Switch Agreements (also known as Hard-wired Switch): One of the other ways parties may have addressed LIBOR cessation is by including pre-agreed conversion terms. Under this approach, the loan would have begun life linked to LIBOR, but the parties agreed on (i) all the terms that will apply following the loan's conversion to risk-free rates, and (ii) the trigger events that will cause the switch from LIBOR to risk-free rates. This ensures a "hard-wired" transition and is known as a "rate switch agreement", meaning that no further negotiation or amendments are required. The LMA published its recommended form of multicurrency term and revolving facilities agreement incorporating rate switch provisions (updated on 28 March 2021), facilitating documentation of transactions requiring a rate switch system rather than being based on RFRs at the outset.



Repapering Legacy Contracts: Existing contractual fallback clauses in most loan agreements were not
designed with permanent LIBOR cessation in mind, and the consensus view is that an amendment to
switch from LIBOR to an alternative rate (e.g. RFRs, term rates or fixed rates) is likely to be the best way
of protecting the parties' interests in addressing LIBOR discontinuation.

Each LIBOR-linked loan agreement with our customers will either need to be individually amended or refinanced where there is no existing hard-wired switch to a risk-free rate. Clearly this represents a significant undertaking of time and resource for lenders and borrowers, particularly for borrowers with multiple financings. Together with our external legal counsel, SMBC Group has developed solutions to allow repapering in a streamlined and cost-effective manner. Since 2021, we continue to reach out to our bilateral and agency loan clients to communicate our thoughts on contractual re-papering and are also pleased to speak with any clients to whom we lend under a syndicated deal. It is important for borrowers to understand any consents required to amend a financing's terms and form their own view on the commercial likelihood they can be achieved.

#### 18. What is credit adjustment and its significance in LIBOR transition?

LIBOR rates include a measure of bank credit risk. Risk-free rates do not and therefore they are typically lower than LIBOR. To ensure the transition to risk-free rates minimises any transfer of economic value from one counterparty to another, industry working groups have recommended the use of a credit adjustment spread, which is added to the risk-free rate to compensate for its lack of a credit risk premium. An alternative approach is to increase a product's margin on account of a credit adjustment spread but this does not offer full transparency over the product's pricing and may have other consequences (such as increasing commitment fees payable on undrawn facilities).

The established approach to calculating the adjustment, as recommended by International Swaps and Derivatives Association, Inc (ISDA)<sup>[13]</sup>, and for cash products by the UK Working Group<sup>[14]</sup> and the ARRC<sup>[15]</sup>, is based on the historical median average between LIBOR and the relevant risk-free rate over a five-year lookback period in circumstances where the spread is engaged pursuant to a contractual fallback or replacement of screen rate provisions.

ISDA announced on 5 March 2021 that such five-year lookback will be calculated from 5 March 2021 as well as each LIBOR tenor, ticker and the associated spread adjustment which shall be fixed for the duration of the product they are applied to<sup>[16]</sup>. The ARRC stated that, for cash products other than consumer products, its recommended spread adjustment will match the value of ISDA's spread adjustments to USD LIBOR.

Another common method of calculating credit adjustment spread is the "forward approach". This approach is used to calculate the implied future difference between LIBOR and RFR based on the forward-looking basis swap market. It is calculated as the linear interpolation between differing tenors of LIBOR vs RFR swaps. The tenor of basis used should match the weighted average life of the existing loan.

The historical median approach may not necessarily represent the actual difference between LIBOR and RFR rates; therefore, using this approach may give a spread that is not reflective of such difference on a particular date which is why some market participants prefer the "forward approach". On the other hand, use of a long lookback period rather than a single observation makes the five-year historical median less susceptible to market distortions over short periods. Actual calculations of credit adjustment spread using any methodology may vary on a currency-by-currency basis and according to an interest period's tenor. Market participants are free to choose which credit adjustment spread methodology to apply but should give special consideration to the risks associated with different approaches. Industry working groups have shown a strong preference for consistency in credit adjustment methodologies across derivatives and cash products.

#### 19. What are fallbacks and their significance in LIBOR transition?

Fallback language refers to provisions that cover LIBOR's unavailability, suggesting replacement rates that would apply if a trigger event, such as cessation of LIBOR, occurs. As LIBOR rates have ceased to be published at the end of 2021 (with some USD LIBOR rates ceasing on 30 June 2023), availability of, and understanding, fallback provisions are vital in parties' application of interest rates while transitioning to alternative RFRs.

Fallback language can be triggered upon different events depending on the parties' agreement. This may be upon a certain date, a declaration of LIBOR's non-representativeness by an authority or by the implementation of an "early opt-in" by either one of the parties. The fallback language could be in the form of a waterfall (set of alternatives listed in priority of application) or an amendment process.



#### 20. What happens if my contract does not contain fallback language when USD LIBOR ceases?

You are strongly encouraged to review your contracts and identify whether robust fallback language has been implemented to address USD LIBOR's cessation. If no amendments have been made to a document in preparation of USD LIBOR's cessation, a loan written on market standard terms will generally fall back to a rate calculated by reference to lenders' cost of funds. There are a variety of challenges associated with calculating interest by reference to cost of funds over a long-term period. It is clearly unattractive for the borrowers. It would also create additional calculation work for the agent in syndicated loans. Therefore, this fallback is not generally regarded to be suitable.

#### 21. What fallback languages are suggested for use?

For compounded SONIA or SOFR loans, the most common fallback is to a central bank rate plus the applicable central bank rate adjustment as the first step. The central bank rate adjustment calculation typically uses a trimmed mean of the difference between the RFR and the relevant Central Bank Rate over the previous five days. This approach is supported by the LMA's recommended form facilities agreement incorporating compounded RFRs.

In the LMA's Exposure Draft for loans incorporating Term SOFR, the suggested fallback is the Interpolated Term SOFR which is a linear interpolation using the Term SOFR for the longest period that is less than the relevant interest period (or, if not available, the daily SOFR) and the Term SOFR for the shortest period that exceeds the relevant interest period. With regard to Euro LIBOR, the LMA forms suggest a move to EURIBOR which at the moment will not be discontinued.

# 22. What happens to the interest in a period that starts before and ends after LIBOR cessation date?

LIBOR interest rate would be used in calculation of interest for the full period. For the following interest periods, the interest would be calculated based on what fallback mechanism is in place. If both parties have adhered to the IBOR Fallbacks Protocol or the ISDA 2021 Fallbacks Protocol (see Question 25), compounded SOFR in arrears method (plus the credit adjustment spread) would be applicable for such subsequent interest periods.

#### VI. Derivatives market

#### 23. How is ISDA approaching LIBOR's cessation?

Since the initial announcement by the FCA, ISDA has made a number of publications to address LIBOR cessation:

- On 23 October 2020, ISDA published Supplement number 70 to the 2006 ISDA Definitions (**IBOR Fallbacks Supplement**). The IBOR Fallbacks Supplement and the ISDA 2020 IBOR Fallbacks Protocol (**IBOR Fallbacks Protocol**)<sup>[17]</sup> both became effective on 25 January 2021. The IBOR Fallbacks Supplement introduces fallback provisions in the definitions of rate options that use certain IBORs, including LIBOR, as the applicable rate. The fallback provisions would apply if the relevant IBOR ceases to be published, and, in the case only of LIBOR, after a determination and announcement by the Financial Conduct Authority that LIBOR is no longer representative. In these circumstances, if it is not possible to determine a rate using linear interpolation, the applicable rate for the relevant IBOR rate option will first fall back to a term adjusted risk-free rate in the same currency plus a spread. The RFR will be adjusted by being compounded in arrears for the relevant term to reflect the fact that the IBOR is a term rate rather than an overnight rate.
- On 11 June 2021, ISDA published the 2021 ISDA Interest Rate Derivatives Definitions (2021
   Definitions) to succeed the 2006 ISDA Definitions as the market standard definitional booklet, with an implementation date of 4 October 2021. It substantially mirrors the IBOR Fallbacks Supplement with additional fallback related provisions.
- On 16 December 2021, ISDA published Supplement 90 to the 2006 ISDA Definitions and a new version of the 2021 Definitions to enable parties to include fallbacks for new derivatives transactions referencing certain IBORs not covered by the IBOR Fallbacks Supplement and the IBOR Fallbacks Protocol.
- The December 2021 Benchmark Module of the ISDA 2021 Fallbacks Protocol was also published on



16 December 2021 to allow firms to incorporate new fallbacks for one or more benchmarks into their legacy contracts incorporating the 2006 ISDA Definitions or the 2021 Definitions.

#### 24. What is the effective date for the new IBOR Fallbacks Supplement?

The new IBOR triggers and fallbacks contained in the IBOR Fallbacks Supplement will automatically apply to all transactions referencing the 2006 ISDA Definitions that are entered into on or after 25 January 2021 (Effective Date) without any further action needed unless the relevant supplement is excluded from the relevant derivative transaction. Derivative transactions incorporating the 2006 ISDA Definitions entered into prior to the Effective Date will not automatically incorporate the new triggers and fallbacks from the IBOR Fallbacks Supplement. For these transactions, ISDA has published the IBOR Fallbacks Protocol, pursuant to which parties can agree to amend those transactions to incorporate the same triggers and fallbacks contained in the IBOR Fallbacks Supplement. By adhering to the IBOR Fallbacks Protocol on the ISDA website, parties can make such amendments to their existing derivative transactions with other adhering parties.

#### 25. What is the scope of use of Term RFRs in the derivatives market?

In the USD market, the ARRC announced that it does not support the use of Term SOFR for the vast majority of the derivatives market. These markets are anticipated to reference SOFR compounded in arrears and transition to such robust overnight RFRs is important to ensure financial stability.

It is recommended that any use of Term SOFR derivatives be limited to end-user facing derivatives intended to hedge cash products that reference Term SOFR. An entity would be considered an end user if it is a direct party or guarantor to a new Term SOFR business loan or securitisation linked to Term SFOR assets, or to a legacy LIBOR product that has converted to Term SOFR through contractual fallback or legislation.

An end user can enter into a Term SOFR derivative contract to hedge its Term SOFR cash product exposure. A dealer counterparty to these hedges, however, would not be considered an end user and it is not recommended for such dealer counterparty to hedge its own resulting Term SOFR exposure with an additional Term SOFR derivative.

In the Sterling market, SONIA compounded in arrears is already widely used in the derivatives and bond markets. FICC Markets Standards Board (**FMSB**), in its Draft Market Standard on Use of Term SONIA, confirms that using compounded SONIA would help preserve the most robust market structure. A broad-based adoption of Term SONIA in derivative contracts may detract from liquidity in products referencing compounded SONIA, reducing volumes in the SONIA-based interest rate swaps from which Term SONIA is derived. Similar to the USD market, there is therefore a limited scope of use of Term SONIA in the markets. FMSB's understanding of the potential areas of limited use of Term SONIA matches the ARRC's abovementioned approach and the market largely follows this approach.

#### 26. What are some key considerations in determining the appropriate manner to transition?

- Change in value: It is important to understand that the RFRs, even with the adjustment and addition of a spread, will not necessarily be a like-for-like replacement rate for their corresponding IBORs. This means that adopting the updated fallbacks in existing derivative transactions or triggering the fallbacks may cause the value of the derivative transaction to change. The extent of any such value change may not be known until the relevant spread is calculated, which may limit the parties' ability to prepare for the related economic effect.
- Hedging mismatches: Generally, there are risks associated with using a derivative transaction to hedge
  underlying exposure under a different product, such as a loan or a bond. The time at which and the way
  in which the fallback operates under the derivative transaction as compared with the product being
  hedged may cause the derivative transaction to serve as a less effective hedge.

Examples of differences in operation include differences in: (i) the compounding methodology for the RFR; (ii) lookback periods and use of an observation shift (which would need to be aligned to reduce the basis risk); (iii) credit adjustment spread calculation methodologies (prompting the need to consider basis risk); (iv) fallback rates; (v) interest accrual periods or payment dates resulting from varying accrual or payment conventions; and (vi) a difference in triggers (such as the inclusion of a precessation or non-representativeness trigger in one instrument but not the other). Any mismatches may also impact the accounting treatment (such as hedge accounting) or tax treatment.

Parties to derivative transactions need to familiarise themselves with how IBORs are defined within



their documentation and how the related fallbacks apply and interact with related arrangements and take professional advice as to the potential impact and risks associated with the discontinuation of these IBORs. This should include assessing the effect of the triggers and fallbacks set out in the IBOR Fallbacks Supplement and the Supplement 90 to the 2006 ISDA Definitions.

- Need for consents: Derivatives which are used to hedge a specific product such as a loan may require lender or other consent before any amendment can be made. As adherence to the IBOR Fallbacks Protocol has the effect of an amendment, we would encourage clients to obtain any required consents before adhering.
- Bilateral amendments: If the ISDA published provisions are not appropriate for a particular
  transaction, whether for a new or existing derivative transaction, parties will need to bilaterally
  negotiate and agree adjustments to the basis on which they adopt these provisions to reflect the needs
  of the particular transaction.
- Non-ISDA documentation: For derivative transactions that are documented under non-ISDA documentation, parties need to understand and take advice on the potential legal, regulatory and financial impact on those transactions of possible changes in, disruption to, or discontinuance of, the interest rate referenced in those transactions.

The scope of ISDA's work on IBOR fallbacks may not extend to all such derivative transactions and parties may be required to enter into bilateral negotiations and/or amendments to moderate the impact of changes in, disruption to, or discontinuance of, interest rates referenced in those transactions. SMBC Group will continue to explore possible approaches to these transactions as market standards continue to develop.

- Credit support documentation: Parties to derivative transactions may also have entered into related credit support documentation, such as a credit support annex. These documents may also reference overnight interest rate benchmarks. The amendment of overnight rates in these documents (such as the Euro OverNight Index Average (EONIA) or the Effective Federal Funds Rate) will not be covered by the IBOR Fallbacks Protocol or the ISDA 2021 Fallbacks Protocol. Consideration must therefore be given to the consequences of any reform to, or disruption of, any of those benchmarks.
- **SMBC's position**: Multiple SMBC Group entities have either adhered to the IBOR Fallbacks Protocol already or are in the process of doing so. Therefore, if you decide to adhere to the IBOR Fallbacks Protocol, Protocol Covered Documents (as defined in the IBOR Fallbacks Protocol) between you and any adhering member of the SMBC Group will be amended by the terms of the IBOR Fallbacks Protocol.
- Next steps: We encourage clients to consider, together with their financial and legal advisers, an
  appropriate manner to transition existing derivative agreements which also takes into account the
  considerations set out above.

#### VII. Links to further information

Further information on the topics discussed in this guide can be found at the following sites:

#### **General resources**

- Financial Conduct Authority https://www.fca.org.uk/markets/libor
- Financial Stability Board https://www.fsb.org/work-of-the-fsb/policy-development/additional-policy-areas/financial-benchmarks/
- Association of Corporate Treasurers https://www.treasurers.org/hub/technical/libor
- Association for Financial Markets in Europe https://www.afme.eu/key-issues/ibor-transition
- International Swaps and Derivatives Association https://www.isda.org/category/legal/benchmarks/
- Loan Market Association https://www.lma.eu.com/libor



#### **Resources by currency**

- GBP: Working Group on Sterling Risk-Free Reference Rates https://www.bankofengland.co.uk/markets/transition-to-sterling-risk-free-rates-from-libor
- USD: Alternative Reference Rates Committee https://www.newyorkfed.org/arrc
- EUR: EURO Risk-Free Rates Working Group
   https://www.ecb.europa.eu/paym/interest\_rate\_benchmarks/WG\_euro\_risk-free\_rates/html/index.en.html
- CHF: National Working Group on Swiss Franc Reference Rates https://www.snb.ch/en/ifor/finmkt/fnmkt\_benchm/id/finmkt\_reformrates
- JPY: Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks https://www.boj.or.jp/en/paym/market/jpy\_cmte/index.htm/

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This document may describe one or more products which reference forward-looking term rates derived from overnight risk-free rates ("**Term RFRs**"). Whilst Term RFRs offer the convenience and certainty of a forward-looking rate there may be limitations or risks to referencing a Term RFR that do not apply to other interest rate options that may be available. Term RFRs are derived from derivatives markets and their robustness depends on liquidity in those markets. Liquidity in derivatives markets may vary significantly across currencies and can be subject to market conditions and other factors, such as expectations about central bank policy changes. Liquidity in derivatives markets may not be as deep or continuous as in overnight funding markets. Accordingly, Term RFRs may not match the robustness of their underlying overnight risk-free rate and may be more volatile than the corresponding overnight risk-free rate.

Further, hedging a product that references a Term RFR may require a dynamic strategy. It may be more difficult or expensive to execute a derivative contract that references a Term RFR than one that references an overnight risk-free rate. If hedging a loan's interest payments in a liquid derivatives market is an important



consideration for you, you should take all necessary professional advice whether it may be most costeffective for the loan to reference an overnight risk-free rate or a Term RFR.

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- $2. \quad https://www.fca.org.uk/publication/documents/future-cessation-loss-representativeness-libor-benchmarks.pdf$
- 3. https://www.bankofengland.co.uk/news/2022/february/sterling-risk-free-reference-rates-finalising-libor-transition
- $4. \quad https://www.fca.org.uk/publication/libor-notices/article-23c-benchmarks-regulation-draft-permitted-legacy-notice.pdf$
- https://www.bankofengland.co.uk/-/media/boe/files/markets/benchmarks/rfr/statement-on-behalf-of-rfrwg-recommendations-forsonia-loan-market-conventions.pdf?la=en&hash=074583D7080993CE84B6A381B554BEFD6594C076
- 6. https://www.bankofengland.co.uk/-/media/boe/files/markets/benchmarks/rfr/use-cases-of-benchmark-rates-compounded-in-arrears-term-rate-and-further-alternatives.pdf
- https://www.bankofengland.co.uk/-/media/boe/files/markets/benchmarks/rfr/statement-on-behalf-of-rfrwg-recommendations-forsonia-loan-market-conventions.pdf?la=en&hash=074583D7080993CE84B6A381B554BEFD6594C076
- 8. https://www.bankofengland.co.uk/-/media/boe/files/paper/2020/supporting-rfr-transition-through-the-provision-of-compounded-sonia-summary-and-response.pdf?la=en&hash=BC9ECD8D46BDF801CD085BFD485E8E8C9F8F7EC9
- 9. Statement Regarding Publication of SOFR Averages and a SOFR Index Federal Reserve Bank of New York newyorkfed.org
- 10. https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2021/ARRC\_Scope\_of\_Use.pdf
- 11. https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/ARRC-faq.pdf
- 12. https://www.bankofengland.co.uk/minutes/2021/september/rfr-september-2021
- 13. https://www.isda.org/2019/11/15/isda-publishes-results-of-consultation-on-final-parameters-for-benchmark-fallback-adjustments/
- 14. https://www.bankofengland.co.uk/-/media/boe/files/markets/benchmarks/rfr/recommendation-of-credit-adjustment-spread.pdf?la=en&hash=3F7198EBBE9866DC362B6F6BAF6BEE91F7C2AA58
- https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2020/ARRC\_Recommendation\_Spread\_Adjustments\_Cash\_ Products\_Press\_Release.pdf
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- 17. https://www.isda.org/2020/10/23/isda-launches-ibor-fallbacks-supplement-and-protocol/#:~:text=The%20supplement%20will%20 amend%20ISDA%27s,effect%20on%20January%2025%2C%202021