INTEREST RATE BENCHMARK REFORM

Several interest rate benchmarks are expected to be phased out or reformed, with the goal of producing more robust and representative rates and more robust fallbacks for those rates. The GBP LIBOR being already phased out as of 1st January 2022.

NIBC has been proactively monitoring developments and has formed a dedicated team to support the bank and its clients on the transition. Over the coming period, NIBC, along with other market participants, will be accelerating our efforts on benchmark reforms, mostly in relation to the cessation of USD LIBOR rates after 30th June 2023 . We have prepared this communication to give you an overview of key developments.

NIBC recommends for you to seek guidance from your professional advisors on the topics discussed within this communication, and the potential impacts on your business and financial products.

What are Benchmark Rates and what are IBORs?

A large variety of financial products use benchmark rates to determine interest rates and interest payment obligations. These benchmark rates often reflect the rates of underlying interbank financing markets and are referred to as interbank offered rates or IBORs. Key IBORs include, among others, the London Interbank Offered Rate ('LIBOR') and the Euro Interbank Offered Rate ('EURIBOR').

What is LIBOR and why is it being phased out?

LIBOR is one of the most widely used benchmark rates globally and serves as the interest rate benchmark for contracts worth an estimated ~US\$350 trillion [1]. LIBOR rates are calculated for five currencies (Sterling, Euro, Japanese Yen, Swiss Franc and US Dollar) and seven tenors, based on submissions provided by a designated panel of global banks.

The UK's Financial Conduct Authority ('FCA') announced in 2017^[2] of its plan to phase out LIBOR rates by the end of 2021. The FCA cites concerns that the underlying market that LIBOR seeks to measure is no longer sufficiently active, which raises the question of robustness and whether the benchmark remains a representative rate. Further, the lack of activity in the underlying market^[3] means LIBOR continues to rely on the use of expert judgement, leaving it vulnerable to manipulation.

On March 5th 2021 the FCA formally announced^[4] that all LIBOR rates will permanently cease to be provided or will no longer be representative. Immediately after December 31st 2021 all Sterling, Euro, Japanese Yen and Swiss Franc and the 1-week and 2-month US Dollar LIBOR rates will cease to be provided or will no longer be representative. Immediately after June 30th 2023 all remaining US Dollar LIBOR rates will cease to be provided or will no longer be representative. The FCA indicates that if certain rates will continue to be provided after these dates that those rates will be unrepresentative and that representativeness will not be restored. Based on undertakings received from the panel banks, the FCA does not expect that any LIBOR rates will become unrepresentative before the relevant dates set out above.

What is EURIBOR and what will happen to it?

EURIBOR is a widely-used benchmark rate for Euro-based transactions, and it is calculated for 5 different tenors. EURIBOR currently complies with EU Benchmark Regulations^[5], after its methodology was reformed in 2019. As a result, EURIBOR is not scheduled to be discontinued in the near future. However, more robust fallbacks to deal with the potential future unavailability of EURIBOR will be required.



What are the alternatives to IBOR rates?

Since the announcement of the planned transition away from certain IBOR rates, regulators around the world have initiated the forming of working groups, for each of the affected currencies, to guide, evaluate and recommend alternatives to IBOR rates. Working groups are comprised of market participants such as, banks, asset managers, insurance companies, and large corporates, as well as industry bodies and trade associations representing various segments of the market.

The efforts and consultations within working groups have resulted in the identification of certain Risk-Free Rates ('RFRs'), as set out in the table below.

| Currency | Rate | Alternative Risk-Free Rates | Publisher |
|----------|-------------------|--|-------------------------------|
| USD | LIBOR | Secured Overnight Financing Rate ('SOFR') | Federal Reserve Bank of NY |
| EUR* | LIBOR, EURIBOR | Euro Short Term Rate ('€STR') | European Central Bank |
| GBP | LIBOR | Sterling Overnight Index Average ('SONIA') | Bank of England |
| JPY | LIBOR | Tokyo Overnight Average ('TONAR') | Bank of Japan |
| CHF | LIBOR | Swiss Average Rate Overnight ('SARON') | SIX Exchange |

^{*} Please note that although EURIBOR is currently not envisaged to be phased out, for Euro transactions an alternative Risk-Free Rate (\in STR) is yet available and may gain traction in the coming years.

What are RFRs and how do they differ from IBOR rates?

Risk Free Rates are an alternative benchmark rate to IBOR rates and are generally based on overnight deposit rates. There are key differences between RFRs and IBOR, some of which are:

Robustness – RFRs are based on large volumes of actual transactions within the overnight lending markets and are not dependent on quotes or the use of expert judgement. They are considered to be more robust compared to LIBOR rates (which generally rely on data from less active markets, and to some extent expert judgement). [6][7]

Daily Rate vs Term Rate – As IBOR rates reflect borrowing in the interbank market for a longer period of time (up to 1 year) these term rates include a risk and a liquidity premium. IBORs are therefore generally higher than RFRs, which are overnight rates and therefore (near) risk-free. For existing contracts that need to switch from IBORs to RFRs this generally means that a spread adjustment ('Credit Adjustment Spread') will apply to compensate for this difference to avoid one party benefitting from the switch over the other.

Forward Looking vs Backward Looking Rates – IBOR rates are produced for different forward-looking tenors. This has the advantage that rates are known at the start of the interest period. As RFRs are overnight backward looking rates, the interest rate applied to a period will generally not be known until (close to) the end of the interest borrowing period. See also below the practical implications this may have on your business.

What are key areas of attention for you?

Given the significant volume of financial contracts linked to IBOR rates, you will likely be affected in some form by the transition away from IBORs, or the introduction of more robust fallbacks. We therefore encourage you to review your outstanding financial products, and associated documentation and seek professional advice in assessing the potential implications on your business and financing arrangements. Here we highlight a (non-exhaustive) list of areas of importance:



Operational Considerations – The differences between RFRs and LIBOR rates (as discussed above) have operational implications for banks and for borrowers. Key implications are the different, more complex, calculation methods for RFRs and the backward-looking nature of RFR rates. You should consult with your IT / operational staff, as well as external advisors in assessing the impact of processing financing products and derivatives referencing RFRs.

Cashflow Planning – The backward-looking nature of RFRs may impact your cashflow planning. It could be that your interest rate and interest payments amount are not known until (close to) the end of the interest period.

Hedging of RFR Cash Products – For IBOR-referencing cash products, such as loans, that will transition to RFRs and where interest rate hedging is in place, the alignment between transition of the loans and the derivatives is a key item for you to consider. Furthermore, the market for certain RFR-based derivatives products, such as caps, floors and other non-linear interest rate derivatives, is still developing. This may impact your ability to hedge your interest rate exposure or to transition existing non-linear derivatives. We encourage you to discuss the potential impacts, and how best to address potential mismatches between your loan and hedging products with your professional advisors and hedge counterparties.

Pricing of New RFR Cash Products – As indicated in the previous section, RFRs are generally lower than the IBOR rates they replace. For new cash products, such as loans, lenders will likely incorporate the lower RFR benchmarks in their pricing models, which could impact the margin they require on new transactions. In assessing the pricing of (new) loans, especially where IBOR-based offers need to be compared with RFR-based offers, borrowers should assess and compare the all-in pricing (benchmark + margin) for a fair comparison.

Accounting Implications – The transition from IBOR rates to RFRs may have accounting implications on your financing or hedging arrangements. Where hedge accounting is applied, attention should be paid to the potential impact the transition may have on the conditions to applying hedge accounting.

What are the key milestones that have been reached so far?

- **2012** with the emergence of the LIBOR scandal in 2012, regulators sought to reform interest rate benchmarks [8].
- **2015** Since 2015, industry working groups have been established and identified alternative risk-free benchmark rates in each of the five LIBOR currencies.
- 2016 EU-wide benchmark regulation (BMR) was finalized, to become effective January 2018. [9]
- **2017** the UK's FCA announced in 2017 that by the end of 2021 it will no longer compel panel banks to support the LIBOR benchmark^[2].
- **2017** the UK's Working Group on Sterling Risk Free Rates ('UK Working Group') identified SONIA as its recommended alternative to GBP LIBOR [7]
- **2017** the US' Alternative Reference Rates Committee ('ARRC') identified SOFR as its recommended alternative to USD LIBOR^[10]
- **2019** EURIBOR is reformed to a hybrid methodology making it less dependent on expert judgement and thereby compliant with the BMR benchmark regulation.^[11]
- **September 2020** The UK Working Group publishes recommendations for the use of SONIA for the loan markets using a compounded in arrears methodology. Their publications include detailed supporting slides and worked examples^{[12][13][14]}.
- **February 2021** The ARRC publishes an Updated User's Guide to SOFR. They view SOFR compounded in arrears (in line with the recommended use for SONIA) as one of several robust calculation methods for business loans.^[15]
- March 5th 2021 The FCA formally announced that as of specified dates all LIBOR rates will
 cease to be provided or will no longer be representative.^[4]
- March 5th 2021 The FCA's announcement constituted a trigger event for the spread adjustments as applied by the International Swaps and Derivatives Association ('ISDA'), based on the 5-year historical median methodology. The spread adjustments for all LIBOR rates have now been fixed and are published by Bloomberg. [16][17]



- March 30th 2021 The London-based Loan Market Association ('LMA') published the first recommended form of Risk-Free Rate facilities agreement, applying a compounded in arrears methodology for Risk-Free Rates. [18]
- April 1st 2021 All new issuance of GBP LIBOR referencing loan products and linear derivatives
 ceased as per April 1st 2021. This includes transactions where Sterling is an optional currency
 and increases of existing transactions.
- **16th November 2021** The Financial Conduct Authority (FCA) confirmed availability of synthetic sterling LIBOR rates and permitted use in all legacy LIBOR contracts that could not be changed at or ahead the end of 2021. Publication is expected to be limited till December 31st 2022 (with options to extend). [27][28][29][30][31]
- December 31st 2021 The FCA will no longer compel panel banks to submit rates used for the
 calculation of LIBOR. EONIA and all GBP, CHF, JPY and EUR LIBOR reference rates were
 permanently discontinued.^{[32][33]}
- February 9th 2022 The Bank of England, FCA and Working Group encouraged firms continued
 pursuing the active transition of legacy sterling LIBOR contracts currently using the temporary
 synthetic LIBOR.^[34]
- March 16th 2022 ICE Benchmark Administration Limited (IBA) launched its ICE Term SOFR Reference Rates as a benchmark for use in financial instruments by licensees.^[35]
- May 16th 2022 RBSL as the benchmark administrator for the Canadian Dollar Offered Rate (CDOR) announced that the calculation and publication of the 1/3/6-months CDOR rates would permanently cease after June 28th 2024. ISDA also confirmed that this announcement constituted a Index Cessation Event under the ISDA 2020 IBOR Fallbacks Supplement, the 2021 ISDA Interest Rate Derivatives Definitions and the ISDA 2020 IBOR Fallbacks Protocol. [36][37][38][39][40][41]
- May 19th 2022 The ARRC had announced its endorsement of CME Group 12-month Term SOFR rate to be used primarily as part of a fallback in legacy products that reference the 12month LIBOR and in trade or receivables finance, in line with its Best Practice Recommendations.^[42]
- June 20th 2022 Given the eventuality of EURIBOR being discontinued, the European Central Bank (ECB) recommended the €STR as a basis for fallback rates for successful transition from EONIA to €STR according to schedule.^[43]
- **June 29**th **2022** The European Money Markets Institute (EMMI) published the outcome of its second annual review for the hybrid methodology for EURIBOR.^[44]
- July 11th 2022 Refinitiv Benchmark Services (UK) Limited (RBSL) announced its intention to launch forward looking term rate versions of its ARCC recommended fallback rates – USD IBOR Cash Fallbacks.^[45]
- October 26th 2022 Refinitiv introduced a prototype forward-looking risk-free Term €STR rate
 to support market participants as they commence testing in preparation for the introduction of
 robust fallback language in EURIBOR contracts. The practical application of EFTERM and Term
 €STR requires corresponding bank-internal authorisations and the conclusion of licence
 agreements. [46][47]
- November 14th 2022 The European Money Markets Institute (EMMI) the reference rate administrator of the EURIBOR announced the introduction of the Euro Forward-Looking Term Rate (EFTERM) as successor rate for the EURIBOR, as part of its obligations under the EU Benchmark Regulationin providing an alternative benchmark to EURIBOR users in the event of a EURIBOR failure. [48][49][50][51]
- **November 23rd 2022** The FCA proposed in a further consultation on to require LIBOR's administrator, IBA, to continue to publish the 1/3/6 months' USD LIBOR settings under an unrepresentative 'synthetic' methodology for a temporary period until end of September 2024. After this, publication would cease permanently. The consultation was until January 6th 2023. The FCA expects to announce its final decision in Q2 2023. [52]
- April 3rd 2023 FCA decided to require LIBOR's administrator, ICE Benchmark Administration Limited (IBA), to continue the publication of the 1, 3 and 6 months' USD LIBOR settings until September 30 2024, using an unrepresentative 'synthetic' methodology ('synthetic USD LIBOR'). FCA will publish a detailed Feedback Statement later in Q2 2023. [53]
- May 31rd 2023 Based on further consultation, FCA that they did not consider any change
 to the earlier publication that the 1, 3 and 6 months' USD LIBOR settings are available until
 September 30 2024, using an unrepresentative 'synthetic' methodology ('synthetic USD
 LIBOR').^[54]



What are the key milestones ahead?

• **June 30th 2023** – All remaining USD LIBOR rates will cease to be provided or will no longer be representative.

Provision of synthetic LIBOR settings

GBP LIBOR

- The 1 and 6 months synthetic GBP LIBOR settings will cease at end-March 2023
- Publication of the 3-month synthetic GBP LIBOR setting to be extended until end-March 2024, when it will permanently cease

JPY LIBOR

- The 3 months synthetic JPY LIBOR settings were terminated at end-2022 $\ensuremath{\textit{USD LIBOR}}$

- the overnight, 1/3/6/12 months USD LIBOR settings will cease at end-June 2023
- Publication of 1/3/6 months synthetic USD LIBOR settings until end-September 2024
- Use of CME Term SOFR plus the relevant ISDA fixed spread adjustment as the methodology for a synthetic USD LIBOR.
- Permit all legacy contracts other than cleared derivatives to use a synthetic USD LIBOR.

How is NIBC approaching Benchmark Reform and the transition away from LIBOR?

Benchmark reform, and the transition away from LIBOR specifically, is a significant undertaking for NIBC and the financial markets, given the magnitude of financial products linked to LIBOR rates. It is acknowledged that benchmark reform will affect both new and existing products offered by NIBC and will require changes to contractual documentation, and the adaptation of operational processes.

At NIBC we have a dedicated, multi-disciplinary project team in place which is supported by external advisors. We have been proactively tackling the transition by assessing our portfolios, reviewing our LIBOR-linked exposures, and actively evaluating potential wider impacts of the LIBOR transition. NIBC has worked intensively with its system providers, and is now able to offer and service Risk Free Rate products.

Existing USD LIBOR referencing Contracts

NIBC is in the process of transitioning existing USD LIBOR referencing contracts, with the aim to finalize this before end of June 2023except for certain contracts expiring in 2023 and 1H2024, for which synthetic USD LIBOR will be offered until expiry. If you have an existing USD LIBOR referencing contract with NIBC maturing beyond 1H2024, and we have not entered into discussions with you yet, we will reach out to you shortly to start the amendment process. We advise you to prepare for such a process by seeking guidance from your professional advisors on the topics discussed within this communication, and the potential impacts on your business and financial products.

Contact details

Please contact your normal NIBC relationship point of contact with any questions concerning details found in this communication; or our internal dedicated LIBOR transition task force at Benchmark-reform@nibc.com.

LIBOR Transition Information Sources

You will find useful information available through the <u>FCA</u> website, the <u>Bank of England / UK Working Group's</u> website and the <u>ARRC's</u> website, with materials on benchmark interest rate reform, the LIBOR transition and Risk Free Rates.

Legal Disclaimer

NIBC does not, via this communication, provide any advice or recommendation. NIBC recommends for you to seek guidance from your professional advisors on the possible implications of the changes outlined in this article on your business, including financial, legal, accounting and tax impacts.



Other Frequently Asked Questions

What constitutes Active and Passive Transition?

Existing LIBOR referencing contracts are being amended to reflect a transition from LIBOR to Risk Free Rates. The amended contracts specify at which date the switch to the Risk Free Rate will become effective.

<u>Passive transition</u> implies that all remaining LIBOR rates until cessation will be used and that the switch to the Risk Free Rate will become effective on the first roll-over or payment date when LIBOR is not available anymore (which would then be in 2022 for most LIBOR rates). This approach aligns with the ISDA's fallback approach for derivatives and use of the ISDA spread adjustments.

<u>Active transition</u> implies that the switch to the Risk Free Rate will become effective on a date prior to the cessation date of LIBOR. As the ISDA spread adjustments are intended for passive transition, for active transition these are considered less appropriate and transaction specific adjustment spreads will have to be calculated. These should reflect market spreads between LIBOR and the RFR on or around the effective switch date, taking (ia) amortization schedules and maturity into account.

NIBC prefers a passive transition approach as this is viewed as less complex in execution, and more transparent in determining the spread adjustment.

What methods are there in calculating interest for loans using Risk Free Rates?

There are several calculation methods that can be used to 'convert' daily RFR rates into an average rate that can be applied to an interest period. In *Simple Interest* calculations, the daily rates are applied to the interest period based on a simple average rate, without compounding. In *Compounding Interest* calculations, the daily rates are compounded into a compounded rate applied to the interest period. Where Simple Interest calculations are simpler to administer, Compounding Interest better reflects the time value of money and best aligns with the calculation methods in the derivatives market, thereby allowing for more accurate hedging.^[15] Compounding Interest can be calculated *in advance* or *in arrears*, we refer to the Updated User's Guide to SOFR for further elaboration on different calculation methods. ^[15]

The UK Working Group has recommended using SONIA compounded in arrears as preferred method for the professional (non-retail) market, such as business loans, syndicated loans and derivatives. The ARRC has indicated that SOFR compounded in arrears is one of several robust methods in calculating interest rates based on RFRs.^{[25][26]} The LMA has published a recommended form of Risk Free Rate facilities agreement, applying a compounded in arrears methodology.

For all RFR transactions (both for new RFR-based transactions and for existing LIBOR-referencing transactions that transition to RFRs) NIBC currently adopts a compounded in arrears methodology, implemented using the LMA's recommended form RFR / rate switch provisions.

Will Term Rates based on Risk Free Rates become widely used?

For SONIA a term rate produced by Refinitiv is currently available.^[23] For SOFR the ARRC has selected CME Group to produce a SOFR Term Rate.^[24] Term Rates for RFRs are / will be derived from transactions in the derivatives market, where these markets are considerably smaller in transaction volumes than the underlying overnight financing market reflected by the RFRs. Consequently, both the UK Working Group and the ARRC have indicated that Term Rates based on Risk Free Rates will be less robust than direct use of RFRs in contracts (such as a compounded in arrears methodology) and therefore should be restricted to a limited scope of use cases.



NIBC currently does not view RFR Term Rates as an appropriate alternative for the majority of the products within NIBC's current suite of products.

• Is a synthetic LIBOR rate a viable option for my product?

NIBC offers synthetic LIBOR as a viable option for the LIBOR referencing contracts that it is a party to and which are, in principle, expiring on or before the December 31st, 2023.

Footnotes:

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- [2] FCA Statement published 24/11/17, available at https://www.fca.org.uk/news/statements/fca-statement-libor-panels
- [3] Alternative Reference Rates Committee https://www.newyorkfed.org/arrc/sofr-transition#aboutsofr
- [4] FCA announcement on cessation of LIBOR https://www.fca.org.uk/news/press-releases/announcements-end-libor
- [5] About EURIBOR® https://www.emmi-benchmarks.eu/euribor-org/about-euribor.html#:~:text=EURIBOR%C2%AE%20is%20BMR%2Dcompliant,existing%20and%20new%20contracts%2Finstruments.
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- [13] UK Working Group's recommendation on SONIA conventions for loan market Supporting Slides https://www.bankofengland.co.uk/-/media/boe/files/markets/benchmarks/rfr/uk-loan-conventions-supporting-slides.pdf
- [14] UK Working Group's recommendation on SONIA conventions for loan market Illustrative Worked Example https://www.bankofengland.co.uk/-/media/boe/files/markets/benchmarks/rfr/uk-loan-conventions-worked-examples.xlsx
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- [17] Bloomberg Notice on Fixing of Spread Adjustments https://assets.bbhub.io/professional/sites/10/IBOR-Fallbacks-LIBOR-Cessation Announcement 20210305.pdf
- [18] LMA's recommended form Risk Free Rate / Rate Switch facilities agreements https://www.lma.eu.com/libor/documents#rate-switch-documentation-and-commentary152



- [19] UK Working Groups' roadmap for 2021 LIBOR transition https://www.bankofengland.co.uk/-/media/boe/files/markets/benchmarks/rfr/rfr-working-group-roadmap.pdf?la=en&hash=92D95DFA056D7475CE395B64AA1F6A099DA6AC5D
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