

Interest Rate Benchmarks Reform

What is Interest Rate Benchmarks Reform?

Interbank Offered Rates ("IBORs") such as the London Interbank Offered Rate ("LIBOR") and Singapore Swap Offer Rate ("SOR") are being discontinued. To facilitate the transition from use of IBORs, market participants should use alternative Risk-Free Rates ("RFRs") instead of IBORs once IBORs are permanently discontinued. A key objective of the transition is the creation of an interest rate market based on actual transactions, leading to a more transparent, reliable and representative interest rate market. Market consensus is that RFRs (which are principally overnight interest rates based on actual transactions) and Term RFRs will be used as a benchmark replacement for IBORs.

Background

IBORs are interest rate benchmarks that have been widely used in the market. They have been commonly adopted in financial markets to calculate interest rates or as a basis for valuations by market participants in a broad range of financial products such as loans, bonds and derivatives.

IBORs are generally calculated from estimates submitted by a selection of banks in relevant financial markets, and supposedly reflect the price of interbank funding markets. In some financial markets, banks no longer fund themselves in the interbank market to the same extent as they used to, leading to a decline in the transactions that underpin certain IBORs, creating growing concern they are no longer representative.

Which RFRs will replace IBORs?

A summary of certain major RFRs identified by the working groups and the anticipated approach for the transition is set out in the table below.

Currency	IBOR	Alternative Risk-Free Rates	Working Group	Cessation Date	Anticipated Approach
US Dollar	LIBOR	Secured Overnight Financing Rate (SOFR)	Alternative Reference Rates Committee	1-week and 2-month settings: 31 Dec 2021	Transition to SOFR
				Others: 30 Jun 2023	
Sterling	LIBOR	Sterling Overnight Index (SONIA)	Working Group on Sterling Risk-Free Reference Rates	31 Dec 2021	Transition to SONIA
Euro	EURIBOR	Euro Short Term Rate (€STR)	Working Group on Euro Risk-Free Rates	No plan for discontinuation	EURIBOR has been reformed, and allowed for continued use Multiple-rate approach
					the reformedEURIBOR continuesalongside €STR
Euro	LIBOR	Euro Short Term Rate (€STR)	Working Group on Euro Risk-Free Rates	31 Dec 2021	Transition to €STR
Japanese Yen	LIBOR	Tokyo Overnight Average Rate (TONA)	Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks	31 Dec 2021	Transition to TONA
Japanese Yen	TIBOR	Yen TIBOR: N/A Euroyen TIBOR: Tokyo Overnight Average	Cross-Industry Committee on Japanese Yen Interest Rate	Yen TIBOR: No plan for discontinuation	Multiple-rate approach – TIBOR continues alongside TONA
		Rate (TONA)	Benchmarks	Euroyen TIBOR: End of 2024	
				(under consultation)	
Swiss Franc	LIBOR	Swiss Average Rate Overnight (SARON)	National Working Group on Swiss Franc Reference Rates	31 Dec 2021	Transition to SARON
Singapore Dollar	SIBOR	Singapore Overnight Rate Average (SORA)	Steering Committee for SOR & SIBOR Transition to SORA	1-month and 3-month settings: 31 Dec 2024 6-month settings: 31 Mar 2022	Transition to SORA



Currency	IBOR	Alternative Risk-Free Rates	Working Group	Cessation Date	Anticipated Approach
Singapore Dollar	SOR	Singapore Overnight Rate Average (SORA)	Steering Committee for SOR & SIBOR Transition to SORA	30 Jun 2023	Transition to SORA
Hong Kong Dollar	HIBOR	Hong Kong Dollar Overnight Index Average (HONIA)	Treasury Markets Association	No plan for discontinuation	Multiple-rate approach – HIBOR continues alongside HONIA

Differences between IBORs and RFRs/Term RFRs

There are a number of fundamental differences between IBORs and RFRs/Term RFRs. It is important to consider these differences carefully in order to understand the implications brought about by the transition to RFRs. Some of the key differences are highlighted in the table below.

IBORs	RFRs	Term RFRs	
Based largely upon expert judgement by banks making relevant IBOR submissions	Based mainly upon transaction data in active markets	Based on market expectations implied from derivatives markets	
Forward-looking rates	Backward-looking rates calculated using historic transaction data	Forward-looking rates	
Available in multiple tenors	Currently overnight rates are available	For USD, Term SOFR with 1,3,6- and 12-month tenor.	
		For Non-USD, Term RFRs are under development	

Term SOFR

On 29th July, 2021, the Alternative Reference Rates Committee ("ARRC") <u>formally recommended</u> making the SOFR term rates widely available. Legacy contracts that adopted the ARRC's fallback language without modifying the rate waterfall will, if the relevant tenor exists, fall back to the SOFR term rate on the contractual LIBOR replacement date.

The ARRC supports use of SOFR term rates in business loans especially where the use of overnight rate has proven to be difficult such as multi-lender facilities, middle market loans, and trade finance loans. The ARRC does not support the use of the SOFR term rate for vast majority of the derivatives markets unless for end-user facing derivatives intended to hedge cash products that reference SOFR Term Rate.

CME Term SOFR Reference Rates (one-month, three-month, six-month and twelve-month) are administered and published by CME Group Benchmark Administration Limited ("CBA") and can be accessed here: https://www.cmegroup.com/market-data/cme-group-benchmark-administration/term-sofr.html.

When will the changes take effect?

LIBOR Cessation Timeline

On March 5th, 2021, following the announcement by the LIBOR administrator, the Intercontinental Exchange ("ICE") Benchmark Administration ("IBA"), the Financial Conduct Authority ("FCA") announced that all 35 LIBOR settings for all currencies will either cease to be provided by any administrator or no longer be representative after the following dates:

- Immediately after 31st December, 2021 in the case of all GBP, EUR, CHF and JPY LIBOR settings in all tenors, and one-week and two-month USD LIBOR settings
- Immediately after 30th June, 2023 in the case of Overnight, one-month, three-month, six-month and 12-month USD LIBOR settings.

Spread Adjustment

When parties replace IBORs with relevant RFRs in an existing contract, the credit risk premium element of the rate is removed. In order to preserve the economic equivalence, a spread adjustment needs to be added to RFRs for proper transition.



The International Swaps and Derivatives Association ("ISDA") stated that the announcement constitutes an "Index Cessation Event" under the IBOR Fallbacks Supplement (Supplement Number 70 to the 2006 ISDA Definitions) and the ISDA 2020 IBOR Fallbacks Protocol for all 35 LIBOR settings. The ISDA fallback rate adjustments published by Bloomberg are fixed as of the date of the announcement for all USD, GBP, EUR, CHF and JPY LIBOR settings.

The fallback rates will apply to outstanding derivatives contracts for derivatives that incorporate the IBOR Fallbacks Supplement or are subject to adherence to the ISDA IBOR Fallback Protocol, and for cash products (other than consumer products) that adopt the ARRC's proposed fallback language, including floating rate notes, securitisations, syndicated loans, and bilateral business loans. These will also apply the same spread adjustment to the recommended fallback rates.

One-week and two-month USD LIBOR settings will continue to be published until the end of 2021, while other USD LIBOR settings will continue to be published until the end of June 2023. After one-week and two-month USD LIBORs cease, the new fallbacks for these two LIBOR settings will not immediately take effect. The fallbacks for all USD LIBOR settings will apply after the end of June 2023, when the remaining USD LIBOR tenors cease or become non-representative.

Possible impact to customers

Forward looking v. backward looking:

- As an IBOR has a forward-looking term structure, in a usual loan contract referencing an IBOR with interest
 payable in arrears, each interest payment amount can be fixed and known at the beginning of the
 corresponding interest calculation period, which borrowers may find useful for cash-flow forecasting.
- For a typical loan referencing an RFR with interest payable in arrears, as the RFR is backward-looking and based on actual transaction data, the interest rate for the corresponding interest period would be based on the simple/compounded RFR accruing in arrears during the interest period. In such cases, the interest rate and interest amount to be paid may only be known near the end of the interest period.
- Term SOFR is forward-looking in nature and can be adopted for cash products, loans, and derivatives intended for hedging purposes denominated in USD. Currently, one-month, three-month, six-month and twelve-month Term SOFR rates are available for use.

Transition from existing IBORs Rate to RFRs or Term RFRs:

- In economic terms, IBORs (which incorporate credit risk premiums) are usually offer higher interest rates than corresponding RFRs.
- Using RFRs (which are overnight rates) for interest calculation for a term (of say three months) requires
 appropriate rate conversion methodology to achieve proper calculation for the term interest period.
- Term SOFR are known in advance of an interest period, an approach similar to that of LIBOR-based products, and generally adopted in the cash market.
- Term SOFR can be adopted for cash products, loans and derivatives intended for hedging purposes denominated in USD with one-month, three-month, six-month and twelve-month tenors.

Accordingly, if customers have any existing contracts referencing IBORs or enter into any new contracts referencing IBORs, they should be aware of the following:

- The IBORs may disappear and there is a need to determine or agree on RFRs (and RFRs identified by the relevant industry bodies behave differently from IBORs in many respects).
- Some IBORs subject to reform may result in different calculation methodology and may perform differently than in the past.
- The conversion from IBORs to RFRs for term financings is dependent upon the development of futures trading and other methods that are still being developed, and might not be fully developed when the conversion needs to occur.
- Financial contracts referencing IBORs (in particular those linked to LIBOR) may require adjustment to
 incorporate necessary fallback provisions (i.e. contractual provisions for RFRs as replacement rates for
 IBORs), to substitute the benchmark replacement rate for the IBORs and to include any other appropriate
 amendments such as addition of applicable spread adjustment.
- The occurrence of any of the above may: materially impact the economic value of the relevant financial transactions; and result in a mismatch between the rate referenced in the relevant financial instrument and the rates referenced in customers' other financial instruments, potentially including those that are intended as hedges. This may have other unforeseen consequences.



The above list only highlights some of the matters pertaining to the IBORs transition, and should not be treated as an exhaustive list of all the relevant risks.

The IBORs transition will impact certain BEA products and services that BEA customers now hold or use and those that may be provided in the future. The extent of the impact will depend on a range of factors, which include the particular IBOR adopted in products or services, evolving market and industry developments, changes to valuations, legal documentation, and the terms and conditions of the products or services. BEA is closely monitoring the developments and may provide more information on the changes when there is greater certainty on the agreed new benchmarks, their methodology and the transition process.

Customers are advised to conduct their own independent assessment and analysis of the potential consequences of any relevant risks, including the potential market, financial, legal, accounting, tax and regulatory impact on their financial contracts and transactions.

What BEA has done and will do for the reform

BEA will continuously evaluate and address the risks associated with the transition, with specific considerations for product and client exposures.

BEA greatly values its customers and will proactively engage, communicate with, and educate impacted customers. Achieving smooth and orderly transition in partnership with customers is BEA's priority.

To align its approach with industry practice and the regulatory expectation, BEA has closely monitored the developments of the interest rate benchmarks reform, both in Hong Kong and internationally, and has updated and implemented its transition programme and action plans as appropriate.

What can customers do to prepare for the reform?

Customers are encouraged to stay up-to-update on the latest developments of the transition. It is important that you are aware of what the change from IBORs to RFRs might mean to you, including any financial, accounting, legal and taxation impact. The initial steps that customers may wish to take to prepare for the transition include:

- Understanding your exposures to IBORs by reviewing your existing documentation;
- For LIBOR-referenced contracts in particular, assessing how existing transactions may behave if reliance on LIBOR is phased out or LIBOR publication ceases;
- Evaluating how the differences between current IBORs references and the potential RFRs which may be incorporated in contractual documentation in the future may impact you;
- Considering what other impacts the IBORs transition may have to you or your business;
- Engaging professional advisors (financial, accounting, tax, legal or other) as you consider appropriate to help you assess the transition's impact.

The above is not an exhaustive list and is only intended to outline some of the initial steps you may consider.

More information

BEA may periodically update this page as appropriate to reflect market developments. For further information on specific BEA products and services you currently have, please get in touch with your usual BEA contact.

For general information on IBOR-related market developments, a non-exhaustive list of websites of external industry bodies or organisation sources is included below:

Financial Stability Board (https://www.fsb.org/)

FCA (https://www.fca.org.uk/markets/benchmarks)

ISDA (https://www.isda.org/category/legal/benchmarks/)

USD – The Alternative Reference Rates Committee (https://www.newyorkfed.org/arrc)

GBP – The Working Group on Sterling Risk-Free Reference Rates (https://www.bankofengland.co.uk/markets/transition-to-sterling-risk-free-rates-from-libor)



EUR – The Working group on euro risk-free rates (https://www.ecb.europa.eu/paym/initiatives/interest_rate_benchmarks/WG_euro_risk-free_rates/html/index.en.html)

HKD - Treasury Markets Association (https://www.tma.org.hk/)

JPY – Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks (https://www.boj.or.jp/en/paym/market/jpy_cmte/index.htm/)

CHF – National Working Group on Swiss Franc Reference Rates (https://www.snb.ch/en/ifor/finmkt/fnmkt_benchm/id/finmkt_reformrates)

SGD SOR – Steering Committee for SOR & SIBOR Transition to SORA (https://www.abs.org.sg/benchmark-rates/about-sc-sts)

Frequently Asked Questions

Q1: What should customers do to prepare for the transition away from LIBOR?

To ensure a smooth transition away from LIBOR, bank regulators around the world, including the HKMA have required the banks to cease entering into new LIBOR contracts after 2021. Bank customers will therefore have to reference RFRs/ Term RFRs in any new contracts with banks from 1 January 2022 onwards.

Customers should identify and review all of their existing contracts that use LIBOR as the reference rate (e.g. loans, derivatives, floating rate notes, etc.). If these contracts do not contain fallback provisions setting out how LIBOR will be replaced when it becomes unavailable, customers should contact their banks and counterparties to discuss and agree on the fallback arrangements or amend these contracts to reference alternative interest rate directly. Customers should consider using alternative interest rate for new contracts. In case customers need to enter into new LIBOR-linked contracts between now and end-2021 due to practical considerations, they should ensure that these contracts contain adequate fallback provisions.

Q2: What is LIBOR? Will LIBOR cease to be available at some point in the future?

London Interbank Offered Rate ("LIBOR") is the benchmark interest rate calculated based on the submissions by a panel of banks in London for five currencies (GBP, USD, EUR CHF and JPY), intended to represent an estimate of how much it would cost a bank to borrow money from other banks in the London interbank market.

However, there is an appreciable risk that LIBOR may cease to be published after 2021 due to the lack of bank submissions, as the panel banks would be no longer compelled to continue making submissions after 2021.

Even if some panel banks may continue to submit their rates for LIBOR calculation after 2021, it remains possible that the LIBOR rate would no longer be a robust and representative benchmark. Regulators expect that market participants will end their reliance on LIBOR by the end of 2021. In response to this, various working industry groups comprising public and private sector representatives across jurisdictions have been established in order to identify appropriate RFRs/ Term RFRs for different markets.

ICE Benchmark Administration consulted the industry regarding the "potential extension of some LIBOR cessation dates to June 2023" in November 2020 with the result published on 5th March, 2021. Following this, the FCA <u>announced</u> that all 35 LIBOR settings for all currencies will either cease to be provided by any administrator or no longer be representative after the following dates:

- Immediately after 31st December 2021, in the case of all Sterling, Euro, Swiss Franc and Japanese Yen LIBOR settings in all tenors, and 1-week and 2-month US Dollar LIBOR settings; and
- Immediately after 30th June 2023, in the case of Overnight, one-month, three-month, six-month and 12-month US Dollar LIBOR settings.



Q3: I have a six-month USD term loan with maturity date beyond 2021 using LIBOR as the interest rate benchmark. Will said term loan be impacted by IBORs transition?

On 8th March 2021, ARRC confirms that the FCA announcement on 5th March 2021 constitutes a "Benchmark Transition Event" for all USD LIBOR settings under the ARRC recommended fallback provision. ARRC clarifies in the FAQs Regarding the Occurrence of a Benchmark Transition Event that the occurrence of a "Benchmark Transition Event" does not require an immediate transition of interest rate from LIBOR to RFR, and the actual transition under the ARRC recommended fallback provision will be based on the cessation dates for various USD LIBOR settings as proposed in the FCA announcement. Hence, for a loan referencing 6-month USD LIBOR, the actual transition in the interest rate to its RFR term rate – term SOFR will take place after 30th June 2023.

Q4: I have an interest rate swap with your Bank referencing USD LIBOR, which is expected to last beyond 2021. Will said interest rate swap be impacted by IBORs transition?

One-week and two-month USD LIBOR settings will be discontinued by 31st December 2021 while remaining USD LIBOR settings will be discontinued by 30th June 2023. After 31st December 2021, one-week and two-month USD LIBOR will be an interpolated value based on the nearest USD LIBOR tenor available that can be determined. The actual transition in the interest rate to its RFR - Secured Overnight Financing Rate ("SOFR") will take place after 30th June 2023.

Q5: What is SOFR and Term SOFR? Where can I find more information about these benchmarks?

The Secured Overnight Financing Rate ("SOFR"). This is a secured treasury repo rate. The ARRC, which is the US working group leading the transition away from LIBOR, has selected SOFR as the recommended RFR for USD LIBOR. SOFR is calculated based on actual repo transaction data. SOFR was first published in April 2018 and is published each business day on the New York Fed's website.

CME Term SOFR Reference Rates provide an indication of the forward-looking measurement of overnight SOFR, based on market expectations implied by derivatives markets. CME Term SOFR Reference Rates (one-month, three-month, six-month and twelve-month) are administered and published by CME Group Benchmark Administration Limited ("CBA") and can be accessed via https://www.cmegroup.com/market-data/cme-group-benchmark-administration/term-sofr.html.

Q6: What is HIBOR? Is HIBOR expected to continue in the near future?

Hong Kong Interbank Offered Rate (HIBOR). This is an interest rate benchmark for Hong Kong Dollars ("HKD") and Chinese Renminbi in Hong Kong ("CNH"), calculated based on submissions by a panel of banks in Hong Kong, intended to represent an estimate of how much it would cost a bank to borrow money from other banks in the Hong Kong interbank market.

There is currently no plan to discontinue HIBOR according to the Treasury Markets Association. HIBOR has been in place for decades and is still well recognised by market participants as a representative and robust interest rate benchmark. Whilst Hong Kong Dollar Overnight Index Average ("HONIA") has been identified as the RFR to HKD HIBOR, it is expected that HKD HIBOR and HONIA will co-exist in the market. Market participants may continue to use HKD HIBOR as an interest rate benchmark for their Hong Kong Dollar financial products.

For financial contracts referencing CNH HIBOR, as HIBOR is expected to continue in the foreseeable future, we do not anticipate that the current IBORs transition would result in the change in the interest benchmark rates in those financial contracts.

Q7: I have a Hong Kong Dollar facility (for example, a personal loan or mortgage loan) with BEA using HIBOR as an interest rate benchmark. Would IBORs transition materially affect the contractual terms of such HKD facility contract?

Currently, as HIBOR is expected to continue, we do not anticipate that the IBORs transition will result in the replacement of HIBOR by a RFR/ Term RFR in existing Hong Kong Dollar facility contracts with us in the near future. As the IBORs transition is still ongoing, if there are any new developments in the IBORs transition which would result in any change to your HKD facility contract with us, we will let you know.



Q8: What is EURIBOR? Will EURIBOR continue to be available in the near future?

The Euro Interbank Offered Rate ("EURIBOR"). EURIBOR is a daily reference rate published by the European Money Market Institute, representing the rate at which credit institutions in the European Union (EU) can borrow wholesale funds in Euros in the unsecured money markets.

EURIBOR has been reformed for compliance with EU Benchmark Regulation. EURIBOR is not expected to discontinue in the foreseeable future.

Q9: I have Euro financial products with BEA referencing EURIBOR. Will the IBORs transition materially affect the contractual terms of the EURIBOR products?

Currently, as EURIBOR is expected to continue, we do not anticipate that the IBORs transition will result in the replacement of EURIBOR by a RFR/ Term RFR in the existing Euro financial products contracts with us in the near future. As the IBORs transition is still ongoing, if there are any new developments which would result in any change to your Euro financial product contract with us, we will let you know.

Q10: Will interest rate and interest amount be available at drawdown date for a loan using RFR for calculation of interest?

For Term RFR, the practice is similar with LIBOR in which interest rate and interest amounts are available on loan drawdown date. Currently, only Term SOFR for USD is available for use.

For interested collected in arrear with RFR, interest rate will not be available until near the end of interest period.

For interest collected in advance with RFR, interest rate will be available on the first day of the interest period, which uses averaged RFR for the reference period as the interest rate for the current interest period.

Q11: Where can I find more information on the IBORs transition?

If you wish to discuss the IBORs transition's impact on the products you currently have with BEA, please get in touch with your usual BEA contact.

For general market information on IBORs transition, you may refer to the information available from external industry bodies or organisation sources indicated in the "More Information" section on this webpage.

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