IBOR transition
Frequently asked questions

This FAQ provides you with recent and upcoming developments on the transition of interest rate benchmarks. This guide should not be used in the provision of legal, financial, tax, accounting or other advice. Consult your advisors on the implications of these changes. This FAQ is not intended to address all financial and other risks that may arise from these changes.

General
1. Why are some interest rate benchmarks being reformed or discontinued?
2. What are the latest expectations on the timing of cessation of LIBOR?
3. What are alternative reference rates?
4. What are the challenges of using RFRs?
5. What are the plans for forward-looking term RFRs?

Credit Adjustment Spread (CAS)
6. What is a Credit Adjustment Spread (CAS) and why is it needed?
7. What are the common approaches for calculating a CAS?
8. Are there differences between the use of CAS approaches on active transition versus fallback transition?

Cash and Loan products
9. What needs to happen to cash products that mature after the relevant LIBOR cessation date?
10. What are some of the major challenges on the active transition of loan products?
11. What are fallbacks? What are some of the major issues?
12. How does the amendment approach differ from a “hardwired” or “switch agreement”?
13. What remedies are being considered for (tough) legacy financial instruments?
14. What replacement rates have working groups recommended for LIBOR cash products?
15. What approach are the various trade associations taking to support the transition to RFRs?

Derivative products
16. How is ISDA approaching LIBOR's expected demise regarding a replacement rate?
17. What is ISDA's approach to defining a trigger event?
18. How and when will the ISDA changes to IBOR fallbacks be implemented?
19. Should an active transition be pursued and what are the options for non-linear trades?
20. What actions are central clearing parties (CCP) taking in response to IBOR Reforms?
21. What is ING’s approach on CSA repapering?
22. What are some of the key transition times for derivative products?
23. What are the current liquidity levels for the RFRs, especially for SOFR and credit sensitive rates in the US?
24. What RFR derivatives can ING now offer?

Transition USD LIBOR
25. What guidance and tools are available in the transition from USD LIBOR to SOFR?
26. What timetables and targets are in place for the transition to SOFR?
27. What about the development and availability of a USD credit sensitive benchmark?
28. Are some USD LIBOR dependent products already transitioning to using SOFR?
29. Will there be any legislative solutions for tough legacy contracts referencing USD LIBOR?

Transition GBP LIBOR
30. What guidance and tools are available for the transition from GBP LIBOR to SONIA?
31. What timetables and targets are in place for the transition to SONIA?
32. Are some GBP LIBOR-dependent products already transitioning to SONIA?

Other topics
33. What changes are happening to the euro overnight index average (EONIA)?
34. What are the latest developments regarding EURIBOR?
35. What is the Benchmark Regulation (BMR) about?
36. What relief is being considered by other regulatory authorities?
37. What other benchmarks are subject to reform?

What’s next for you?
38. What has ING done so far with IBOR transition?
39. What is the impact on ING’s product offering?
40. What can you do to prepare for the transition?
41. Does my loan document need to be changed? What options do I have if I do not wish to change my loan document?
42. What will happen to my derivatives in a hedge relationship upon the cessation of LIBORs? Can it impact my hedge accounting treatment?
43. Since USD LIBOR will be published until mid-2023, is it recommended to switch from USD LIBOR to an alternative rate in 2021 or 2022 or can I defer transition to 2023?
**General**

1. **Why are some interest rate benchmarks being reformed or discontinued?**

   Financial markets have changed significantly since the Global Financial Crisis. One major development is that banks no longer fund themselves in the interbank market to the same extent. This is one of the major drivers of reform to some Interbank Offered Rates (IBORs) and the development of alternatives. To illustrate the issue, the former chief executive of the Financial Conduct Authority (FCA) has referred to LIBOR as ‘measuring the rate at which banks are not borrowing from one another’ to highlight the growing risk of it no longer being representative.

   In 2013, the International Organisation of Securities Commissions (IOSCO) introduced a set of principles underpinning the calculation of a benchmark rate. In 2014, the Financial Stability Board (FSB) published a report called ‘Reforming Major Interest Rate Benchmarks’ which sets out recommendations, developed under the guidance of the Official Sector Steering Group (OSSG). The recommendations included measures to:

   - Strengthen IBORs by anchoring them to a greater number of transactions, where possible.
   - Improve the processes and controls around submissions.
   - Identify alternative rates designed to be nearly Risk Free Rates (RFRs).
   - Encourage derivative market participants to transition new contracts to an appropriate RFR, where suitable.

   Besides these recommendations, the report discusses transition issues and how market adoption will be monitored. The European Union (EU) followed with the introduction of the Benchmark Regulation (BMR), that requires benchmarks, including IBORs, be based on actual transactions, where possible.

   ICE Benchmark Administration (IBA), as the administrator of LIBOR, reformed the methodology of LIBOR to a more transaction-based one. However, the number of underlying transactions in the interbank market has fallen and as a result, the calculation under the reformed methodology is still reliant on the expert judgment of LIBOR panel banks. Therefore, discussion and plans for cessation were initiated.

   On 5 March 2021, the IBA announced its intention to cease the publication of most LIBORs at the end of 2021, with an extension provided for the most used USD LIBOR tenors to the end of June 2023. See question 2 for more details.

   The financial sector is working on the transition process to avoid risking any disorderly cessation events. In June 2021, IOSCO published a statement on benchmarks transition, and the FSB has published a package including roadmaps for transition to more robust financial benchmarks across multiple jurisdictions.

2. **What are the latest expectations on the timing of cessation of LIBOR?**

   On 5 March 2021, the IBA confirmed its intention to cease the publication of GBP, CHF, EUR and JPY LIBOR (all tenors) and USD LIBOR (one week and two month tenors) at the end of 2021. The remaining USD LIBOR tenors will be published by IBA until the end of June 2023.
Additionally, the FCA confirmed that it will use its new powers to enable LIBOR like rates to be published beyond the cessation date to support the transition of GBP and JPY legacy contracts (see question 13). Such a rate is commonly referred to as a ‘synthetic LIBOR’.

As a result, there will be some differences in timelines and transition approaches across LIBOR currencies:

<table>
<thead>
<tr>
<th></th>
<th>USD LIBOR</th>
<th>GBP LIBOR</th>
<th>CHF &amp; EUR LIBOR</th>
<th>JPY LIBOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected end date</td>
<td>30 June 2023 (except for one-month and two-month tenors, which will cease by 31 December 2021)</td>
<td>31 December 2021</td>
<td>31 December 2021</td>
<td>31 December 2021</td>
</tr>
<tr>
<td>Likelihood of a non-representative synthetic rate</td>
<td>Maybe</td>
<td>Yes</td>
<td>No</td>
<td>Yes (for one year only)</td>
</tr>
<tr>
<td>Expected methodology for synthetic LIBOR</td>
<td>(forward-looking) SOFR term rate + fixed spread</td>
<td>(forward-looking) SONIA term rate + fixed spread</td>
<td>n/a</td>
<td>TORF (Tokyo Term Risk Free Rate) + fixed spread</td>
</tr>
</tbody>
</table>

1) Note that market participants are expected to cease entering into new contracts referencing USD LIBOR as soon as practical or at the latest by 31 December 2021. A joint statement was issued by the Federal Reserve, Office of the Comptroller of the Currency (OCC) and the Federal Deposit Insurance Corporation (FDIC) on 30 November, stating that firms should not enter into new transactions referencing USD LIBOR after 31 December 2021. See question 25 and 26 for more discussion on USD LIBOR.

ISDA also confirmed that IBA and FCA’s announcements constitute an Index Cessation Event under the IBOR Fallbacks Supplement for all LIBOR settings. Accordingly, the credit adjustment spread for use in derivative fallbacks for each LIBOR currency and tenor as calculated by Bloomberg was fixed on 5 March 2021. See question 16 for more details.

These fixed adjustment spreads may also be used in contractual fallbacks and/or active conversion of loans and bonds (subject to parties agreement). Please also see the Sterling RFR Working Group’s guidance paper referred to in question 10.

In addition, the “5 March 2021 credit adjustment spreads” are likely to be used as the fixed spread component of the synthetic rates noted in the table above.

3. What are alternative reference rates?

Market participants and the industry bodies have put significant effort into finding ways to either improve existing benchmark rates or, alternatively, to develop replacements that meet regulatory requirements. The outcome is a set of alternative rates based on overnight transactions, which are designed to be representative of a nearly risk free rate.
They are frequently referred to as Risk Free Rates (RFR). Below is an overview of the recommended alternative rates per LIBOR currency.

<table>
<thead>
<tr>
<th>Jurisdictions</th>
<th>Working Groups</th>
<th>Alternative (Reference Rates)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Euro area</td>
<td>Working group on euro risk-free rates</td>
<td>Euro short-term rate (ESTR)</td>
<td>Unsecured rate that captures overnight wholesale deposit transactions</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Working group on Sterling Risk-Free-Reference Rates</td>
<td>Sterling Overnight Index Average (SONIA)</td>
<td>Unsecured rate that covers overnight wholesale deposit transactions</td>
</tr>
<tr>
<td>United States of America</td>
<td>Alternative Reference Rates Committee (ARRC)</td>
<td>Secured Overnight Financing Rate (SONIA)</td>
<td>Secure rate that covers multiple overnight repo market segments</td>
</tr>
<tr>
<td>Switzerland</td>
<td>The National Working Group on Swiss Franc Reference Rates</td>
<td>Swiss Average Rate overnight (SARON)</td>
<td>Secured rate that reflects interest paid on interbank overnight repo rate</td>
</tr>
<tr>
<td>Japan</td>
<td>Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks</td>
<td>Tokyo Overnight Average Rate (TONA)</td>
<td>Unsecured rate that captures overnight call rate market</td>
</tr>
</tbody>
</table>

In other jurisdictions, authorities have started publishing RFRs that are intended to eventually replace or complement local IBOR benchmarks. These developments are ongoing and the approach and state of play differs for each jurisdiction. See question 37 for more information.

4. **What are the challenges of using RFRs?**

LIBOR is a forward-looking or ‘term’ rate quoted for five currencies (USD, GBP, CHF, JPY and EUR) and seven tenors (overnight/spot, one week, one month, two months, three months, six months and 12 months). Hence, the LIBOR-linked rate in a contract is known at the start of the relevant interest period.

All the RFRs are overnight rates and therefore the rate is not known in advance. One approach is to create a term rate using these overnight rates on a backward-looking basis. The backward-looking term rate can be constructed by calculating a simple or compounded average of the daily fixings of the RFR over the given term. This means the rate is not available until the end of the term, so the accounting for a three-month or six-month rate based on RFRs requires significantly different mechanics. Another approach is to derive a forward-looking term rate – see question 5.

Transitioning away from LIBOR to a RFR requires the use of a credit adjustment spread to account for the fact that IBORs typically incorporate a bank credit spread and liquidity premium, while RFRs do not. See questions 6-8 for more details.

5. **What are the plans for forward-looking term RFRs?**

The widespread use of overnight RFRs underpins a global transition effort overseen by the FSB, which is why several national working groups have made overnight RFRs (in arrears) the focus of markets. As a result, several working groups have stated that forward-looking term rates are only intended for use in certain products or in certain circumstances. See the sections on USD and GBP for more details on intended use.
In May 2021 the Alternative Reference Rates Committee in the US (ARRC) selected CME Group as the administrator of a term rate based on SOFR, and in July 2021 recommended to use the rate in fallbacks and other situations. See question 26 for further details.

In the UK, two versions of Term SONIA are available. See question 31 for further details.

The forward-looking term version of TONA (for Japanese Yen) is available, published by Quick Corp.

The Swiss RFR Working Group intends to proceed without a forward-looking term rate based on SARON, noting that even retail products, such as mortgages, are already transitioning to in-arrears based methodologies.

**Credit Adjustment Spread (CAS)**

6. **What is a Credit Adjustment Spread (CAS) and why is it needed?**

Compared to Risk-Free Rates, IBORs include additional elements such as a premium for banks’ credit risk, a premium for the term structure (as IBORs are usually available over a range of maturities), and a premium for holding liquidity over a period. Due to these missing risk premia, it is expected that in most cases RFR levels will be lower than IBORs. Since the move from IBORs to RFRs is intended to be economically neutral, a so-called credit adjustment spread (CAS) is needed to bridge the gap between these benchmarks and where possible minimise the economic impact and value transfer during the transition of legacy products referenced to IBORs.

For newly originated or refinanced RFR products, this CAS will, in most cases, be incorporated in the overall (commercial) margin, and will not be separately identifiable.

There are different approaches for calculating the CAS, and in this regard, ING aims to follow the recommendations of the national RFR Working Groups as closely as possible.

7. **What are the common approaches for calculating a CAS?**

In general, two approaches for calculating the CAS have emerged:

i) A backward-looking approach: This approach uses the logic that the historical differences between IBORs and RFRs is a good (proxy) indicator of the economic difference between these rates in future. After industry consultation, it was decided to use the median spread between IBOR and the relevant RFR over a five-year lookback period as a possibility to set the adjustment spread during the transition. The spreads calculated based on this approach are sometimes referred to as the ISDA spreads or five-year historical median spreads.

ii) A forward-looking approach: This approach uses the forward-looking basis swap spreads that are taken from the market. These spreads reflect the market’s view about implied future spreads between IBOR and the relevant RFR, which could change over time.
It is important to note that the five-year historical median spreads were fixed on 5 March 2021 (see question 2), and by default, are to be used in the following situations:

- Used as the adjustment spread for the vast majority of derivatives if transitioned via a fallback approach (see questions 16,17 and 20).
- Used as the adjustment spread component in synthetic LIBOR rates (see question 2).
- Used as the recommended adjustment spread in the hardwired fallback language for loans (see question 8).

Also it is widely expected that the adjustment spreads calculated based on the forward and historical approaches will converge near the cessation dates of the respective IBORs.

8. Are there differences between the use of CAS approaches on active transition versus fallback transition?

Following industry consultation, the Sterling RFR WG and ARRC have both recommended the use of five-year historical median spreads for use in fallback or replacement of screen rate provisions in GBP and USD LIBOR cash products (including loans) following a cessation or pre-cessation trigger (i.e. rate deemed non-representative). These recommendations are in line with the ISDA approach for the fallback language in the derivatives.

In December 2020, the Sterling RFR WG released a paper to help with the choice of a CAS for active transition (see question 9 for a definition of “active”) of GBP LIBOR referencing loans. It set out the two main approaches (i) the five-year historical median approach; and (ii) the forward approach; (see question 7) and outlined potential considerations of each approach with a few practical examples. The paper concluded that while both approaches can be used to calculate the adjustment spread during an active transition of a loan, it is ultimately for lenders and their borrowers to determine which approach and CAS to use, factoring the costs, risks and benefits of each option.

It is important to note that while the five-year historical median approach is used in the ISDA fallback approach (see question 16), it is market practice to use the forward basis swap spreads when a derivative contract is actively transitioned from IBORs to RFRs, ahead of cessation.

Cash and Loan products

9. What needs to happen to cash products that mature after the relevant LIBOR cessation date?

Cash products that reference LIBOR and mature after the relevant LIBOR ceases, require amendment ("repapering") ahead of the cessation date (unless they already have LIBOR transition provisions, like a benchmark replacement rate switch, embedded in the contract). Removing LIBOR dependencies from contracts can be done in two ways:

i) By amending a contract to reference a suitable alternative rate prior to the actual cessation date/non-representative date (‘active transition’).

ii) By using fallbacks that enable the contract to automatically move to a suitable alternative rate upon cessation/non-representative date (‘fallback transition’).
Active transition and fallback transition approaches do not apply to newly originated loan facilities or refinancing of existing loan facilities.

Some legacy LIBOR products will be almost impossible to transition to alternative rates. Either because their structure depends on a forward-looking term rate or because a high or unanimous consent requirement is required, meaning that obtaining consent to any necessary amendments will be nearly impossible. Please refer to question 13 for more information on “tough legacy” contracts.

10. What are some of the major challenges on the active transition of loan products?

RFR working groups and regulators generally prefer market participants to actively transition their legacy LIBOR contracts instead of relying on fallback language. Regulators have also strongly encouraged market participants to use RFRs in newly originated facilities. They believe that this supports the best and smoothest transition away from LIBOR. In addition, they believe that actively transitioning is the only way parties can have certainty over both the continued operation and the future economics of their contracts. As such, market participants have been strongly encouraged to focus on an active transition.

Specifically, the UK Risk Free Rates Working Group (RFRWG) issued guidance on active transition in September 2020. An updated paper was published in April 2021. See here for loans and here for bonds. These are the steps suggested for loans that are also applicable for other rates:

1. Review outstanding LIBOR referencing loans (including multi-currency loans containing a LIBOR option).
2. Identify the alternative reference rate to be used for each loan.
3. Familiarise yourself with how the alternative rates will be calculated and how to calculate any economic difference(1) between LIBOR and the selected alternative rate.
4. Consider whether systems and operations are ready to accommodate alternative rates.
5. Document the transition of the loans. All parties should undertake appropriate due diligence on any changes that are proposed.

(1) The discussion and determination of a credit adjustment spread (intended to minimise the effect of the economic difference between LIBOR and the selected alternative rate) is important when preparing for an active/fallback transition of your contracts to an alternative reference rate. Refer to the section Credit Adjustment Spread.

11. What are fallbacks? What are some of the major issues?

Fallback language, if present, typically sets out the steps for the replacement rate in the form of a waterfall (a set hierarchy of available alternatives) or an amendment process. However, many existing cash-market contracts do not contain appropriate fallbacks. For example, some traditional fallbacks could have the unintended effect of converting many debt securities to a fixed rate (last published rate) when LIBOR ceases.

For most syndicated loans, each individual loan agreement that references LIBOR needs to refer to a replacement benchmark rate in order to have a robust fallback. In Europe, the Loan Markets Association (LMA) has published several recommended drafts that have rate switch language hardwired into them and a Reference Rate Selection Agreement to support the LIBOR transition.
For fallback provisions in loan agreements, if the benchmark rate ceases to exist, there is an optional replacement screen rate clause (since 2014 with a much more detailed version published in 2018), which can be included in the recommended forms of the LMA loan agreements and which sets out a process for the parties to agree on a replacement reference rate.

In the United States, in the event that USD LIBOR is unavailable, most loan agreements fallback to a “base rate” (typically the higher of a banks prime rate and the Federal Funds Effective Rate plus 50 bps). Historically, the base rate has been higher than LIBOR, hence more costly for the borrowers.

To address the permanent cessation of LIBOR, the ARRC favours a hardwired approach that does not require a lender vote, making it easier to put into effect upon cessation. The approach has been taken up widely in new loans by the market in 2021. Recommendations by the ARRC for syndicated and bilateral loans, promote ARRC’s best practice of adopting the use of hardwired fallback language (instead of the use of the amendment approach).

The hardwired approach for syndicated and bilateral loans recommends the use of Term SOFR. If that is unavailable, then daily simple SOFR is recommended as the second step of the waterfall (which can be modified to daily compounded SOFR if market participants prefer to reference this rate in the waterfall instead). Following the 5 March 2021 announcements, ARRC released a supplemental version of the hardwired fallbacks. More information is available here.

For other currencies, traditional fallback mechanics include using interpolated rates, reference bank rates or lenders’ cost of funds. All these historical fallback mechanisms were not originally intended to address a permanent cessation of LIBOR.

12. How does the amendment approach differ from a “hardwired” or “switch agreement”?

Existing fallback language, if present, typically sets out the steps for the replacement rate in the form of a waterfall (a set hierarchy of available alternatives) or an amendment process. Fallback language will also typically define a certain “trigger event” that initiates the process of transitioning from one benchmark rate to another.

The “amendment approach" provides a process that parties can follow in the negotiation of a benchmark’s replacement if a trigger event occurs. The approach may not define the replacement benchmark but may set out some parameters for its selection.

Parties can agree on an “amendment approach" where the replacement benchmark and (all or some) conventions are specified and pre-agreed. This approach provides certainty upfront by defining trigger events and outlining either a direct replacement or a waterfall approach to determine an RFR-based or other successor rate.

Rate Switch (or flip) mechanisms in loan documentation are a form of hardwired fallback but differ from the approach described above in that all the relevant changes which are required to be made in the loan documentation to allow the facility to switch from LIBOR to an RFR are built into the agreement on day one. This means that there is no need for further discussions and amendments at a later stage. Such agreements provide a built-in switch from LIBOR to RFRs upon a specified date (or event) and set out the provisions for the use of that rate. This approach requires an upfront consideration of the credit adjustment spread calculation, RFR conventions and documentation issues. The rate switch approach has been included in a number of syndicated loan transactions in
the UK market and we are seeing an upward trend at the moment. The Loan Market Association (LMA) has published several recommended drafts of a rate switch agreement.

13. What remedies are being considered for (tough) legacy financial instruments?

“Tough legacy” contracts are contracts that have no or inappropriate fallbacks and cannot be realistically renegotiated or amended. On 29 April 2021, the Financial Services Act 2021 received Royal Assent, granting the FCA stronger powers to manage an orderly transition for specific cases. Note that the FCA’s powers are in general restricted to the UK and to a certain extent, UK law.

One such power is to ensure that certain LIBORs such as GBP and JPY LIBOR continue to be published, for a specified period, using an amended methodology based on a (forward-looking) RFR + fixed ISDA spread with the express purpose of assisting legacy contracts that cannot be realistically amended by 31 December 2021. It is permitted to use Synthetic GBP and JPY LIBOR in all contracts except cleared derivatives (whether directly or indirectly cleared).

It is important to note that synthetic LIBOR is a temporary solution to support contractual continuity. Synthetic LIBOR will not be published indefinitely (e.g. synthetic JPY LIBOR will be available for only one year). It is important that market participants understand how their contract terms interact with the winding down of a critical benchmark. Contracts have to be analysed to determine if synthetic LIBOR could be applicable, considering the wording of existing fallbacks, the definition of LIBOR in the contract and the governing law. It is to be noted that synthetic LIBOR is not a representative rate and cannot be used in new contracts.

In 2020, the ARRC issued a proposal focusing on USD legacy contracts whose fallback language is most likely to lead to disputes or unintended economic consequences. If a contract has no fallback provision or falls back to a LIBOR-based rate (such as the last available LIBOR rate), the legislation imposes the ARRC’s recommended replacement benchmark rate (‘SOFR’) and an adjustment spread. On 30 March 2021, this proposal was enacted for contracts governed by New York State legislature. At the US federal level, work is ongoing on similar legislation to deal with “tough legacy” contracts under US law. See question 29 for further details.

These recommendations are helpful in highlighting both the challenges and the potential solutions of dealing with (tough) legacy contracts across multiple currencies and jurisdictions. The recommendations are also consistent with other efforts to ensure that authorities are suitably equipped. For instance, the European Commission has adopted amendments to the EU Benchmarks Regulation (BMR) – already in force, which aims to ensure the orderly cessation of critical benchmarks such as LIBOR and includes the power to mandate the continued provision of LIBOR using a different methodology.

The European Commission has released legislation that establishes a statutory replacement rate for EONIA. The replacement rate is calculated using the already updated EONIA methodology that is based on recommendations by the Working Group on Euro RFRs (i.e. €STR + 8.5bps). The designated rate will replace contractual references to EONIA in the EU on 3 January 2022, for those contracts between EU counterparties that do not include (suitable) fallback provisions, independent of whether these contracts are governed by EU or a 3rd country law.
The European Commission has also issued legislation that establishes a statutory replacement rate for CHF LIBOR. A fixed spread adjustment will be added to the designated replacement rates, based on SARON, equivalent to the ISDA spread for each relevant tenor as fixed on 5 March 2021. The statutory replacement rate will apply to all contracts between EU counterparties that do not include (suitable) fallback provisions, independent of whether these contracts are governed by EU or a 3rd country law.

There is no guarantee that any of the above solutions will be applicable to all situations (in time, across all relevant legal jurisdictions, or available for all products and circumstances). Also such solutions may not be economically neutral, or suitable for particular contracts. Hence, market participants should continue their efforts in actively transitioning away from LIBOR.

14. What replacement rates have been recommended for LIBOR cash products?

The ARRC and the Sterling RFRWG have both issued guidance on recommended replacement rates in fallback clauses that are based on RFR rates.

To best preserve the economics of the contract and replacement of screen rate provisions following cessation, a credit adjustment spread reflecting the difference between LIBOR and the replacement benchmark must be included.

Both the ARRC and the Sterling RFRWG see benefits in using the five-year lookback approach set out by ISDA and fixed on the 5 March 2021 as the basis for the CAS being applied to the RFR rate for cash products upon cessation and/or pre-cessation. This approach helps to align the spread-adjusted SOFR (or SONIA) used in cash products with any related hedging derivatives.

For active transition prior to cessation events, see question 10.

For more information on USD LIBOR and GBP LIBOR transition refer to questions 25 and 30 respectively.

15. What approach are the various trade associations taking to support the transition to RFRs?

Traditional conventions and operations in the LIBOR loan market are based on rates that are fixed at the start of each interest period. Even though the proposed new benchmarks do not naturally have a term structure, regulators and working groups have made it clear that they expect the loan market to be able to move to interest calculated using in arrears methodologies.

Moving to calculation of interest in arrears will mark a significant change in loan operations for banks, agents and borrowers. For example, an agent will only be able to notify a borrower of the amount of interest to be paid towards the end of the interest period. To support the market in the transition, the LMA has produced an issued guidance and standard forms to support new loans where interest is compounded in arrears. The LMA has also released recommended templates for rate switch agreements that incorporate the steps for the calculation of interest compounded in arrears. The Loan Syndications and Trading Association (LSTA) has also produced concept credit agreements where interest is either daily simple SOFR in arrears or daily compounded SOFR in arrears.

ISDA has been very active in the transition of derivative contracts. See the next section.
16. How is ISDA approaching LIBOR’s expected demise regarding a replacement rate?

ISDA has conducted a number of consultations to support the transition journey for the derivatives markets. The main questions being considered are what is the replacement rate and CAS to use and when such fallbacks are applied.

To create a replacement rate, the term adjustment will be based on the “compounded setting in arrears rate”, where the relevant RFR is observed over the relevant term and compounded daily.

The CAS based on a five-year historical lookback (5YHLB) has been selected by ISDA for the purposes of transitioning LIBOR derivatives to RFRs on cessation/pre-cessation. On 5 March 2021, following the FCA’s announcement on the permanent cessation / non-representativeness of all LIBOR settings, ISDA confirmed that the “credit adjustment spread fixing date” had occurred. Consequently, a CAS had been fixed for all 35 LIBOR settings under the terms of the Bloomberg IBOR Fallback Rate Adjustments Rulebook. The fixed CAS per LIBOR tenor, as calculated by Bloomberg, can be found [here](#).

The replacement rate will equal the term-adjusted RFR plus the fixed CAS.

Even with spreads or other adjustments, RFRs used as fallbacks are only an approximation of the relevant IBOR and may not result in a rate that is the economic equivalent of the specific IBOR. In addition, any credit adjustment spread that becomes fixed as a consequence of discontinuation of the relevant IBOR may reflect a historical behaviour of the relevant rates without taking into account future changes in the unsecured short-term funding costs of banks.

ISDA has selected Bloomberg Index Services Limited (BISL) to calculate and publish the fallback rates. For the IBOR fallback rates, go to Bloomberg LIBOR-transition page[1]. For more information, go to ISDA’s website: Benchmark Reforms and Transition from LIBOR.

17. What is ISDA’s approach to defining a trigger event?

The relevant RFR and the credit adjustment spread will be used to determine the interest amount after the relevant IBOR ceases to exist. This is typically when the benchmark administrator announces that the benchmark will no longer be published, i.e. the rate is no longer available (Index cessation effective date).

For derivatives that reference LIBOR, an additional trigger is added. The use of the adjusted RFR and credit adjustment spread will also be activated as a replacement rate if the FCA determines that LIBOR (in that currency and tenor) is no longer representative of its underlying market, even if the rate continues to be published on non-representative/synthetic basis. This is referred to as a pre-cessation trigger.

18. How and when will the ISDA changes to IBOR fallbacks be implemented?

The IBOR Fallback Supplement (IBOR Supplement) to the 2006 ISDA Definitions was published on 23 October 2020 and came into effect on 25 January 2021.

---

1 For those using Bloomberg terminal, ISDA IBOR fallback rates are available on the page (FBAK <GO>).
The IBOR supplement amends the 2006 ISDA definitions to incorporate robust fallbacks for derivatives referencing relevant IBORs\(^2\). All new derivatives entered after the effective date of 25 January 2021 that reference the 2006 ISDA definitions, incorporate the fallback mechanisms as set out in questions 16 and 17.

Simultaneously, with the IBOR Supplement, ISDA also published the 2020 ISDA IBOR Fallback Protocol (IBOR Protocol) for market participants who wish to incorporate these updates into derivatives entered into before 25 January 2021, i.e. legacy contracts. A protocol is a multilateral contractual amendment mechanism that is used to make standard amendments to ISDA documentation. It is an efficient way of implementing industry standard contractual changes to legacy trades with a large number of adhering counterparties, while avoiding the need to individually negotiate the same amendments with each party.

Participants that wish to incorporate the IBOR supplement will be required to complete an adherence process with ISDA. If both parties adhere to the IBOR Protocol, the IBOR fallback triggers and replacement rates will apply to all trades between them referencing the 2006 ISDA Definitions and/or relevant IBORs and executed under a covered Master Agreement. Please refer to the register on the ISDA site.

ING Bank N.V. and several\(^3\) subsidiaries have registered adherence to the IBOR Protocol in line with the recommendations of various industry bodies and working groups.

If you have any further questions about the ISDA IBOR Protocol, go to the IBOR FAQ on www.isda.org

**19. Should an active transition be pursued and what are the options for non-linear trades?**

Some market participants view the updating of fallbacks as a necessary first step in removing some of the risks associated with the cessation of an IBOR. As a result, regulators expect focus and urgency from market participants to transition from LIBOR by actively switching from LIBOR contracts to RFR contracts.

For example, ISDA recently stated:

“The new fallbacks were never intended to be a primary means of transition – they are instead a one-size-fits-all safety net intended to mitigate the systemic impact of an IBOR cessation in the worst-case scenario. Various regulators have recommended that firms implement robust, well-defined fallbacks in their derivatives contracts as a first step, and then use the remainder of 2021 to proactively negotiate a shift from LIBOR to alternative reference rates in order to achieve more tailored outcomes. Firms would then be safe in the knowledge that if they don’t finish their transition efforts in time, a workable back-up will automatically kick in.”

The inclusion of robust fallbacks reduces legal risks but requires derivative counterparties to update systems and processes at a later date. Additionally, for a number of products (such as non-linear derivatives), the ISDA fallback rates do not preserve the original economics of the trade and as a result, many counterparties, in addition to incorporating the updated ISDA fallbacks to their

---

\(^2\) Relevant IBORs include LIBOR for all five currencies; the Euro Interbank Offered Rate (Euribor); the Tokyo Interbank Offered Rate (TIBOR, on-shore (Japanese yen) and off-shore (euroyen) varieties); the Australian Dollar Bank Bill Swap Rate (BBSW); the Canadian Dollar Offered Rate (CDOR); the Hong Kong Interbank Offered Rate (HIBOR), the Singapore Dollar Swap Offer Rate (SOR), and the Thai Baht Interest Rate Fixing (THB-SOR).

\(^3\) The subsidiaries that have adhered are: ING Bank N.V., ING Groep N.V., ING-Diba AG, ING Belgium, ING Capital Markets LLC, ING Bank Śląski S.A., ING Bank (Australia) Limited, ING Bank Anonim Şirketi, and ING Bank (Euroasia) Joint Stock Company.
derivatives, may wish to take other remediation action to transition their derivatives from LIBOR to RFR reference rates.

In certain cases, alternative approaches such as transitioning away from LIBOR using compression of offsetting trades, early termination and conversion to market-standard Overnight Index Swaps (OIS) derivatives, could be operationally and economically advantageous to counterparties.

Key considerations:

- The effective date of conversion will be on a mutually agreed date before the permanent discontinuation of the LIBOR or EONIA rates. For a smooth transition, it is recommended to start the conversion on day one of a new calculation period.
- An adjustment spread will be required to accommodate the difference between (L)IBOR and the chosen alternative risk-free rate and may be based on the forward-looking basis swap market close to the effective date of conversion. EONIA will be replaced by €STR + 8.5bps.
- Each party needs to be ready to process the amended trade(s) that reference an alternative risk-free rate which is to be compounded in arrears and works with different conventions.

20. What actions are central clearing parties (CCP) taking in response to IBOR Reforms?

The CCPs have been very active in supporting the global benchmark reform initiatives. Major CCPs have organised a multi-step approach to transition the portfolio of cleared derivatives to new risk free rates.

1) Discounting curve switch and transition of Price Alignment Interest (PAI):
- LCH, Eurex and CME completed the task of replacing EONIA with €STR as the discount rate for cleared euro derivatives on 27 July 2020. As this discounting change (a shift of 8.5 basis points) led to a valuation impact, a one-off cash compensation payment was made to compensate for any value transfer.
- CME and LCH switched from using the effective federal funds rate (EFFR) to using SOFR on 16 October 2020. The discount curve changed to SOFR for cleared USD derivatives and for the calculation of interest due on collateral posted, known as Price Alignment Interest (PAI). These CCPs applied a combination of cash compensation for the economic impact as well as a number of standardised EFFR–SOFR basis swaps to account for the change in risk profile.

2) Transitioning derivatives referencing EONIA:
After consulting market participants, LCH and Eurex are planning to convert any outstanding EONIA-linked swaps as of 15 October 2021 to equivalent €STR-linked swaps. According to current plans, LCH and Eurex will replace any reference to EONIA with €STR flat and leave other attributes of the contract unchanged. The economic difference before and after the conversion will be cash settled on a net basis at account level.

3) Transitioning derivatives referencing LIBOR:
LCH and Eurex have incorporated the core provisions of the published ISDA IBOR Fallbacks Supplement in their rulebooks, ensuring legal certainty in case of LIBOR cessation for all cleared LIBOR contracts. Additionally, in its recent consultation, LCH has set out its proposed plans to actively transition the portfolio of legacy LIBOR derivatives at or shortly before cessation. This would mean during December 2021 for those LIBORs due to cease on 31 December 2021. According to current proposed plans, at the conversion date, LCH will actively convert any remaining contracts referenced to LIBOR to market-standard RFR trades (i.e. OIS derivatives).
Based on the feedback received from market participants, LCH intends to replace LIBOR with the relevant compounded RFR plus a non-compounded CAS in the LIBOR leg. The adjustment spread added by LCH to the RFR leg is the relevant five-year historical median spread as fixed on 5 March 2021. CME and Eurex have announced similar plans.

21. What is ING’s approach on CSA repapering?

Counterparties that enter into bilateral (non-cleared) OTC derivative transactions and have a Credit Support Annex (CSA) to mitigate credit risks are also affected by benchmark changes. It is the intention of the market to transition bilateral CSA agreements that rely on a reference rate that is subject to reform or cessation.

ING aims to align the PAI and discounting curve used for derivatives to the greatest extent possible with the standard convention used by the CCPs. As such, ING aims to amend CSAs to reflect PAI on new RFRs for uncleared derivatives business.

On August 18, ISDA launched the ISDA 2021 EONIA Collateral Agreement Fallbacks Protocol which market participants can use to incorporate a fallback to €STR+8.5bps into collateral agreements (CSA’s). ING Bank NV has adhered to this protocol, with other ING bank legal entities likely to follow. ING’s preference is to repaper and amend CSA’s that reference EONIA to €STR flat.

ING has started the bilateral CSA repapering process for a substantial group of its legal entities and has entered into discussions with counterparties on required amendments to CSA agreements and required valuation adjustments. Once agreed, an effective date will be determined for the discount curve change and any valuation adjustment amount will be agreed on and compensated for.

22. What are some of the key transition times for derivative products?

Some of the key dates for transitioning derivative products are summarised in the timeline below. These derivative timelines may impact funding decisions, as derivatives are often used to risk manage such activities.

<table>
<thead>
<tr>
<th>GBP LIBOR</th>
<th>EONIA</th>
<th>USD LIBOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>27 OCT 2020</td>
<td>Q3-Q4 2020</td>
<td>27 OCT 2020</td>
</tr>
<tr>
<td>31 DEC 2020</td>
<td>Q1-Q2 2021</td>
<td>31 DEC 2021</td>
</tr>
<tr>
<td>31 MARCH 2021</td>
<td>Q3-Q4 2021</td>
<td>30 JUNE 2023</td>
</tr>
<tr>
<td>30 JUNE 2021</td>
<td>2022</td>
<td>30 JUNE 2023</td>
</tr>
<tr>
<td>Q2/Q3</td>
<td>2023</td>
<td></td>
</tr>
</tbody>
</table>

1. An exception is where new linear derivatives are executed for risk management of existing legacy positions.
23. What are the current liquidity levels for the RFRs, especially for SOFR?

National working groups have been strongly advocating the use of alternative reference rates where possible to improve the liquidity of these benchmarks. Presently, the development in liquidity differs by currency and tenor. For example, current market indicators show that the adoption of SONIA is ahead of other RFRs. Liquidity of RFRs is generally expected to increase over time at the expense of liquidity in LIBOR. We would recommend clients looking to transition away from LIBOR to consider the current liquidity levels and contact their ING representatives to discuss available solutions.

For USD LIBOR, on 8 June 2021, the CFTC’s Market Risk Advisory Committee's (MRAC) recommended a “SOFR First” initiative – prioritisation of SOFR trading in interdealer derivatives market and a de-prioritisation of LIBOR. This “SOFR first” switch took place on 26 July 2021. It has already contributed to higher SOFR derivatives trading and increased SOFR liquidity.

24. What RFR derivatives can ING now offer?

ING is following market evolution to support your requests for RFR linked products in the main indices (SONIA, SOFR, SARON, TONA, €STR) using the most common conventions (payment delay, lookback with lag or shift). The actual combinations depend on the market standard for the product / Index / convention. If you have any requests, contact your usual ING Financial Markets Sales contact.

Transition USD LIBOR

25. What guidance and tools are available in the transition from USD LIBOR to SOFR?

To facilitate the adoption of SOFR, the Federal Reserve Bank of New York has published:

1) a SOFR Index to measure the cumulative impact of compounding on a unit of investment over time, with the initial value set to 1 on 2 April 2018, the first value date of SOFR (SOFR Index); and

2) SOFR compounded averages over rolling 30, 90, and 180-calendar day periods (SOFR Averages).

The SOFR Index value reflects the effect of compounding SOFR each business day and allows the calculation of compounded SOFR rates over custom time periods. The SOFR Index and Averages can be referenced in a variety of products and as a result, the publication (“one golden source”) is intended to help accelerate the transition away from USD LIBOR. The SOFR Index and Averages are published daily on the Federal Reserve Bank of New York’s website.

However, specific conventions for and characteristics of many syndicated and bilateral loans may make the existing SOFR Index less useful for these types of products. The existing SOFR Index is a compounded index, so it is not applicable to daily simple SOFR Loans or daily compounded SOFR Loans. The SOFR Index also requires an observation shift, which is not the recommended convention for syndicated or bilateral business loans, and it also does not work well with optional prepayments and interest rate floors, both common features in commercial loans.
Using SOFR Averages (in advance) for periods longer than 30 day raises concerns for lenders of staleness and borrower arbitrage as SOFR Averages do not necessarily reflect the market reality for the upcoming interest period.

The ARRC has produced a number of tools that can help facilitate the transition away from USD LIBOR including:

- **ARRC progress report**: outlining key reference rate reform efforts, progress to date, and areas requiring further work
- **Recommended best practices** which provide critical timelines for the transition from USD LIBOR to SOFR
- A **guide** on the endgame for USD LIBOR
- **Frequently asked questions**
- A practical implementation **checklist for SOFR adoption**, which is developed as an informational document for market participants.
- A **User’s guide** to explain how those unfamiliar with overnight rates can use SOFR in cash products. The user’s guide covers a number of conventions, including simple versus compound averaging; in arrears versus in advance payment structures; lookback, payment delay, and lockout conventions for providing payment notice.
- The **SOFR starter kit**, a set of factsheets to inform the public about the transition away from USD LIBOR to SOFR. The SOFR starter kit includes background on the impetus for the transition and the ARRC’s work to select a preferred rate, facts and figures about SOFR, and next steps for market participants.
- The ARRC’s recommended **Term SOFR use cases** and the related **Term SOFR FAQ**.
- **Forward Looking Term SOFR and SOFR Averages conventions** for syndicated and bilateral business loans.

The ARRC has also released recommended contractual fallback language for new syndicated and bilateral business loans referencing USD LIBOR. The hardwired approach includes the use of Term SOFR as the first step in the fallback waterfall, daily simple SOFR in the second step of the waterfall although a daily compounded SOFR in arrears may be used to ensure closer alignment with any related derivative(s).

In addition, the ARRC has released recommended conventions for using both daily simple and compounded SOFR in arrears, as well as Term SOFR and SOFR Averages, in syndicated and bilateral business loans. In Europe, the market has followed the LMA’s available templates that use SOFR compounded in arrears rather than daily simple; hence the US and European USD loan markets have diverged on these conventions.

26. What timetables and targets are in place for the transition to SOFR?

The ARRC and U.S regulators have published recommended best practices and guidance to assist market participants in all jurisdictions to achieve an orderly transition away from USD LIBOR.

These recommendations and guidance include:

1. USD LIBOR cash products originated in 2021 should include ARRC recommended (or substantially similar) fallback language.
2. No new USD LIBOR loans (both bilateral and syndicated) should be originated after 31 December 2021.

3. For contracts specifying that a party can select a replacement rate at their discretion following a LIBOR transition event, the determining party should disclose their planned selection to relevant parties at least six months prior to the date when a replacement rate would become effective.

It should be noted that the FCA has recently issued under article 21A of the benchmark regulation a notice of prohibition on use of USD LIBOR consistent with the guidance provided by US regulators. For more details see here.

Furthermore, the ARRC confirmed that announcements made by IBA and FCA in March 2021 constitute a Benchmark Transition Event with respect to all USD LIBOR settings pursuant to the ARRC recommendations regarding more robust fallback language for new issuances or originations of LIBOR floating rate notes, securitisations, syndicated business loans, and bilateral business loans.

The ARRC's Paced Transition Plan envisaged the creation of a term reference rate based on SOFR derivatives markets once liquidity has developed sufficiently to produce a robust rate. In May 2021, the ARRC announced that it has selected CME Group as the administrator for a forward-looking SOFR term rate, once market indicators for the term rate are met. At the Financial Services Oversight Committee (FSOC) meeting on 11 June 2021, US Treasury and the Fed endorsed Term SOFR. The successful SOFR first convention change, combined with the continued growth in SOFR cash and derivatives markets, allowed the ARRC to formally recommend Term SOFR as well on 29 July 2021.

With ARRC's official endorsement of Term SOFR for business loan activity, the forward-looking convention is expected to become quite popular and one of the main conventions for business lending. In light of the ARRC's recommendation, the LSTA has prepared a draft Term SOFR Concept Document to add to its list of SOFR-based concept documents.

The availability of a recommended Term SOFR by ARRC is important because it is referenced directly in the ARRC fallback contract language and in the New York State legislation (refer to question 29).

The ARRC has also published best practices for the use of the term rate, endorsing the forward-looking rate for loan market activity with limited use in derivatives. Term SOFR is limited to end-users intending to hedge cash products that reference Term SOFR.

27. What about the development and availability of a USD credit sensitive benchmark?

A number of US regional and international loan market participants have expressed a desire for using credit-sensitive alternatives to USD LIBOR rather than solely using SOFR (which is not a credit sensitive rate).

After convening a series of working sessions during 2020 with market participants, US Regulatory agencies stated that they are not planning to recommend a specific credit-sensitive supplement or rate for use in commercial lending products.

---

4 There may be limited circumstances when it would be appropriate for a financial institution to enter into new USD LIBOR contracts after 31 December 2021. These circumstances have been briefly described in the US Regulators' announcement.
Instead, they indicated support for continual innovation and development of suitable reference rates, including those that may have credit sensitive elements.

Nonetheless, developments of credit sensitive rate continued in 2021. The table below provides an overview of current, or soon to be expected credit sensitive rates:

<table>
<thead>
<tr>
<th>Comparison of CSRs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Names</strong></td>
</tr>
<tr>
<td>Underlying transactions</td>
</tr>
<tr>
<td>IOSCO Compliant</td>
</tr>
<tr>
<td>Availability</td>
</tr>
<tr>
<td>Term structure</td>
</tr>
<tr>
<td>Panel Bank</td>
</tr>
<tr>
<td>Available as Rate or Spread Adjustment</td>
</tr>
</tbody>
</table>

It remains to be seen if these benchmarks are sufficiently robust, if they meet the expectations of regulatory agencies and whether or not they will be adopted by the industry.

A very limited number of publicly available transactions have been executed referencing Ameribor and BSBY to date however these developments portend the existence of a multi-rate environment for the USD loan market. In September 2021, IOSCO emphasized its concerns regarding CSRs robustness and stated that credit sensitive rates may not be resilient during times of stress, in line with its Principles 6 (“relative size of the underlying market”) and 7 (“data sufficiency in a benchmark’s design to accurately and reliably represent the underlying market”).

28. Are some USD LIBOR dependent products already transitioning to using SOFR?

Loan market practices are still evolving. Although USD LIBOR remains dominant, SOFR cash and derivatives markets have begun to grow:

- Since SOFR’s publication, approximately $889bn notional in floating rate debt instruments tied to SOFR have been issued, with over $519bn outstanding notional at December 2020 month-end; please refer to ARRC’s April-May Newsletter for further details.
- In 2021, SOFR liquidity measured by the ISDA-Clarus RFR adoption indicator showed an increase to 12.5% of total USD IRD DV01 transacted in August as opposed to 7.4% in the prior month. In September, SOFR liquidity has increased to 30% in derivatives market, partly as a result of the SOFR-first initiative from July.
- As of September 2021,Term SOFR usage is limited reflecting that approval for this rate was only given in July 2021.
- Hardwired fallback and rate switch provisions enabling a switch from USD LIBOR to SOFR are now market standard for syndicated and bilateral loans.
- Fewer than 5 publicly available syndicated and bilateral loans have closed using SOFR (sometimes referred to as “day 1 SOFR loans”) as of mid-September 2021.
29. Will there be any legislative solutions for tough legacy contracts referencing USD LIBOR?

On 6 April 2021, New York enacted into law state legislation for an approach to help address the challenges of tough legacy contracts governed by New York law.

This law aims to help minimise the legal uncertainty and adverse economic impacts associated with the transition of legacy LIBOR contracts that mature after mid-2023 and do not have effective fallbacks.

For the law to apply, a New York-law governed contract, security or instrument must refer to USD LIBOR as a benchmark interest rate and not include fallback provisions, or include fallback provisions that would cause the benchmark rate to fall back to a rate that would continue to be based on USD LIBOR. Moreover, parties that have contractual rights to select a fallback rate will have the right to opt out/opt in.

The NY legislation is expected to have limited use in the US loan and derivatives markets as contracts for such products generally include adequate fallbacks.

The Adjustable Interest Rate (LIBOR) Act, U.S. federal legislation to address “tough legacy” contracts was introduced in the House of Representatives in July 2021. It aims to address contracts that currently reference LIBOR but lack adequate fallback language and can’t be amended to add it. In a letter to committee leaders, proponents of the legislation wrote that as all tenors of U.S. dollar LIBOR will cease to be published in June 2023, there is currently no realistic ability to amend a group of hard-to-modify financial contracts that use LIBOR. They noted that the legislation provides a solution for those contracts with insufficient fallback language, is limited in scope, ensures that there is no interference with contracts that can be amended, offers uniform treatment and creates a safe harbour from litigation.

Transition GBP LIBOR

30. What guidance and tools are available for the transition from GBP LIBOR to SONIA?

The Bank of England published the SONIA Compounded Index on 3 August 2020 to support the transition from LIBOR to Risk-Free Rates in Sterling markets. The SONIA Compounded Index simplifies the calculation of compounded interest rates and is seen as a standardised official source. Similarly, RFR compounded indices for SOFR and SARON are available on the websites of the New York Fed and SIX respectively.

In September 2020, the Sterling RFRWG released recommendations for conventions for loans based on SONIA compounded in arrears; Conventions for compounded in arrears SONIA. The recommendations stress that SONIA remains the Working Group’s recommended alternative to Sterling LIBOR, implemented via a compounded in arrears methodology, and that loan markets should move consistently towards this. The RFRWG concluded that compounded in arrears SONIA is appropriate for around 90% of new loans by value, a position supported by the Bank of England and FCA.
Recommendations include:

- Use of a Five Banking Days Lookback (without observation period shift).
- Where an interest rate floor is used, it may be necessary to apply a floor to each daily interest rate before compounding.
- Accrued interest should be paid at the time of any principal prepayment.

In addition, the Sterling RFRWG have produced guidance and tools that can help to facilitate the transition away from GBP LIBOR including:

- A factsheet providing more information on the LIBOR transition.
- Priorities and roadmap for transition by end 2021.
- Best practice guide for GBP loans.
- Updates on market conventions, such as a statement for bond markets.
- A guidance paper to support loan market participants in considering credit adjustment spreads for active conversion.
- A document on ‘lessons learned’ from past conversions of legacy LIBOR contracts.
- A document setting out the Sterling RFRWG’s views on which types of business and clients should use overnight SONIA, compared to alternatives including forward-looking term rates.
- A summary of the main attributes of the Term SONIA Reference Rates.

The LMA has also published new recommended templates for loan agreements to accommodate SONIA compounded in arrears for multicurrency term and revolving facilities agreement incorporating rate switch provisions.

Moreover, the ICE SONIA Indices have been developed by IBA to support the GBP lending market to satisfy the varying needs of market participants in a simplified way when it comes to offering new SONIA-based products. More information can be found here.

For legacy contracts that cannot be realistically amended before 31 December 2021, synthetic LIBOR could be a possible temporary solution to ensure contractual continuity (see question 13).

31. What timetables and targets are in place for the transition to SONIA?

Lenders (including ING) have worked hard to meet the targets set by the Sterling RFRWG to make SONIA-based loan products available from the end of Q3 2020 and at scale shortly after.

Taking this into consideration, the Sterling RFRWG recommends that:

1. By the end of Q1 2021:
   - Cease all new issuance of GBP LIBOR referencing loans, bonds and securitisations (and linear derivatives) that expire after the end of 2021.
   - Identify the legacy LIBOR contracts that expire after the end of 2021 that can be actively converted.
   - Accelerate the active conversion of cash products, where viable, to reduce legacy volume.

2. By the end of Q2 2021:
   - Cease initiation of new GBP LIBOR non-linear and exchange traded derivatives that expire after end 2021, except for risk management of existing positions.
3. By the end of Q3 2021:
   - Complete the active conversion of cash products. Where active conversion is not possible for loans, ensure robust fallbacks are adopted.
   - This action is unlikely to be completed by this target date given the challenges and volume of work. ING, consistent with other financial institutions, will continue to work on remaining contracts during Q4 2021.

The importance of these interim targets has been stressed in an open letter to UK supervised entities. See: Dear CEO letter.

On 11 January 2021, Refinitiv and IBA both launched their (forward-looking) Term SONIA benchmark production rates. Such forward-looking term SONIA rates aim to help market participants who may, in certain limited use-cases, not be able to use SONIA compounded in arrears. The Sterling RFRWG released a guidance paper setting out why the use of such a term rate must be limited and describing use cases within cash markets where such a term rate would be beneficial and appropriate.

In this regard, FMSB has published a transparency draft that is expected to set out the standards to the use of term SONIA in new transactions in the UK and other jurisdictions.

32. Are some GBP LIBOR-dependent products already transitioning to SONIA?

There has been good progress in establishing SONIA as the successor to GBP LIBOR. From 1 April 2021, ING ceased the initiation of new GBP LIBOR loans, bonds, securities (and linear derivatives) that expire after the end of 2021 with alternatives based on SONIA available.

A number of positive developments have taken place in the markets, including:

- SONIA-linked FRN issuance now dominates Sterling floating rate financials issuance and there is clear momentum towards using the compounded SONIA rate across bond markets more generally.
- In August 2021, the cumulative subtotal of SONIA-linked Floating Rate Notes (2018 - 2021) is 211 deals, totalling approximately £96bn.
- Use of compounded SONIA has become the market standard for Sterling securitisations.
- A number of consent solicitations have taken place to convert legacy transactions to a SONIA-based reference.

The LMA provides a regular summary of syndicated and bilateral loans referencing RFRs which have been publicly disclosed to date. The July 2021 version can be found here.

Other topics

33. What changes are happening to the euro overnight index average (EONIA)?

As a result of insufficient transaction volumes preventing EONIA from becoming BMR compliant, the European Money Markets Institute (EMMI) announced that EONIA will no longer be published as of 3 January 2022.
The Euro Risk Free Rate Working Group has recommended the Euro Short-Term Rate (€STR) as the alternative rate and eventual replacement rate of EONIA. €STR measures the wholesale euro unsecured overnight borrowing cost for banks in the euro area based on transaction data collected by the Euro-system for money market statistical (MMSR) purposes. €STR is administered by the ECB and was first published on 2 October 2019.

To bridge the period of transition, EONIA is published on the basis of €STR + 8.5 basis points (0.085%). The ECB calculated this spread based on daily EONIA and pre-€STR data from mid-April 2018 to mid-April 2019. This approach is designed to ensure that EONIA's economic value is not modified by the new calculation methodology. Between 2 October 2019 and 3 January 2022, both benchmarks will co-exist to facilitate a smooth transition from EONIA to €STR. During this period, the market (and ING) will increasingly offer products based on €STR.

To read more about the statutory rate replacement solution for EONIA please refer to question 13. For more information on the ISDA 2021 EONIA Collateral Agreement Fallbacks Protocol consult question 21.

For further details, refer to the Working Group on Euro Risk-Free Rates’ FAQ and checklist on the transition from EONIA to €STR.

34. What are the latest developments regarding EURIBOR?

EURIBOR Panel banks progressively transitioned to a new submission methodology in 2019. EURIBOR is now BMR compliant and can therefore continue to be used in new and legacy contracts. In September 2020, ESMA (who will substitute the Belgian FSMA as supervisor of EURIBOR in January 2022) indicated that the discontinuation of EURIBOR is not part of their plans and reinforced the importance of introducing effective fallbacks in EURIBOR contracts to ensure their continuity in the unlikely scenario of discontinuation of EURIBOR.


The recommendations relate to the use of:
1. EURIBOR fallback trigger events; and
2. EURIBOR fallback measures for cash products, i.e. €STR-based term structures and spread adjustment, and market conventions.

The recommendations are not legally binding for market participants. They do, however, provide guidance and represent the prevailing market consensus on EURIBOR fallback trigger events and €STR-based fallback rates, which market participants may consider in their contracts.
Now that the €STR-based fallback recommendations for EURIBOR have been finalised, the working group will focus among other things, on:

- Transition from EONIA to €STR for a diverse range of financial products by the end of 2021.
- Raising awareness and educating users about interest rates reform in the EU.
- The timely adoption of EURIBOR fallback provisions by EU supervised entities.
- Identify potential issues related to the impact of LIBOR discontinuation in the EU; and
- Coordinate on cross currency issues with working groups in other jurisdictions.

For further details, refer to the Working Group on Euro Risk-Free Rates website.

35. What is the Benchmark Regulation (BMR) about?

In September 2014, the European Commission proposed a draft regulation on indices used as benchmarks in financial instruments and financial contracts (EU BMR). It applies to many categories of benchmarks in addition to IBORs. The regulation came into force on 1 January 2018. It introduces a common framework to ensure the accuracy and integrity of indices used as benchmarks in financial instruments and financial contracts.

It also requires that robust fallback language is included in relevant contracts and agreements. There may be contracts that fall into the scope of EU BMR that were entered into after 1 January 2018 that do not satisfy this requirement and therefore will require remediation.

For contracts that need to be remediated to make them BMR compliant, ING will contact impacted clients and discuss available options.

36. What relief is being considered by other regulatory authorities?

Numerous regulatory bodies, such as those that govern accounting and taxation, appreciate the challenges this transition brings to the banking and corporate sector. As such, a number of actions have been taken, either in the form of clarification or targeted reliefs. Some key examples include:

1. The International Accounting Standards Board has issued the following Interest Rate Benchmark Reform amendments which can be applied provided that certain conditions are met:
   - Changes to contractual cash flows — a company will not have to derecognise or adjust the carrying amount of financial instruments for changes required by the reform, but will instead update the effective interest rate to reflect the change to the alternative benchmark rate.
   - Hedge accounting — a company will not have to discontinue its hedge accounting solely because it makes changes required by the reform, if the hedge meets other hedge accounting criteria.

In the US, the Financial Accounting Standards Board (FASB) has already provided a similar update (ASU 2020-04) which was subsequently updated in January 2021.

2. Regulatory agencies and other institutions in different jurisdictions have issued relief to reduce certain requirements that a benchmark transition event could create provided they meet the conditions. For example:
• EU: The amendments to the BMR which were adopted by the European Parliament on 19 January 2021 make it clear to market participants that legacy contracts will not be subject to clearing and margin requirements if contracts are amended for the sole purpose of implementing a replacement for a benchmark or introducing fallback provisions as part of benchmark reform.
• US: The Commodity Futures and Trading Commission (CFTC) announced relief, subject to various terms and conditions, for swap dealers (SD) and other market participants relating to the industry-wide transition from swaps that reference alternative benchmarks. The relief is expected to smooth the transition away from IBORs by removing regulatory obstacles and certain reporting requirements.

In the UK, in January 2021, the Financial Conduct Authority reconfirmed that amending a reference rate or adding a fallback would not necessitate the application of margin or clearing requirements under EMIR, where this amendment relates to the treatment of legacy LIBOR trades.

37. What other benchmarks are subject to reform?

In a number of other jurisdictions authorities have started publishing RFRs intended to replace or complement local IBOR benchmarks.

These developments are ongoing and the approach and state of play differs for each jurisdiction.

For example:

<table>
<thead>
<tr>
<th>Jurisdictions</th>
<th>(Alternative) Reference Rate</th>
<th>Multi Rate approach?</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>Canadian Overnight Repo Rate Average (CORRA)</td>
<td>CORRA and CDOR</td>
<td>Calculation and publication of the six-month and 12-month CDOR tenors have ceased to exist since Monday 17 May 2021. The last day of publication for the six-month and 12-month CDOR tenors was Friday 14 May 2021. The one-month, two-month and three-month tenors are not affected by this action. The CORRA compounded index that measures the cumulative impact of CORRA daily compounding over time has been published since 6 April 2021.</td>
</tr>
<tr>
<td>Singapore</td>
<td>Singapore Overnight Rate Average (SORA)</td>
<td>Single Rate</td>
<td>In 2021, significant developments have been made regarding the implications for the industry benchmark transition to SORA. These include finalisation of the mid-2023 discontinuation date for the overnight, 1M, 3M, 6M and 12M USD LIBOR tenor settings, as well as the decision to discontinue the Singapore Interbank Offered Rate (“SIBOR”) by end-2024 and shift to a SORA-centred interest rate landscape.</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>Hong Kong Dollar Overnight Index Average (HONIA)</td>
<td>HONIA and HIBOR</td>
<td>The Working Group on Alternative Reference Rates and Hong Kong Treasury Markets Association announced that they have no plan to discontinue HIBOR.</td>
</tr>
<tr>
<td>Australia</td>
<td>Australian Overnight Index Average (AONIA)</td>
<td>AONIA and BBSW</td>
<td>BBSW’s new methodology became effective on 21 May 2018. The Cash Rate, also referred to as AONIA, is a pre-existing rate that will become the RFR for AUD. Australia is adopting a multi-rate approach that maintains the BBSW as the credit-based benchmark for the Australian dollar.</td>
</tr>
<tr>
<td>Turkey</td>
<td>Turkish Lira Overnight Reference Rate (TLREF)</td>
<td>Likely to have a single rate approach</td>
<td>Turkey pursues to follow global timelines in discontinuing TRLIBOR and transitioning to the collateralised TLREF which has already been widely adopted, including functioning derivatives markets.</td>
</tr>
</tbody>
</table>
What's next for you?

38. What has ING done so far with IBOR transition?

ING has been actively involved in the Euro Working Group which recommended in 2018 that €STR be used as the RFR for the Euro area, and is now supporting the market with the transition from EONIA to €STR and has released recommendations for fallbacks in EURIBOR contracts. Additionally, ING has updated its product offering, issued various market research, client webinars, and documents such as this FAQ to help inform the market and our clients of the ongoing and upcoming changes.

39. What is the impact on ING’s product offering?

Issuance of new contracts referencing USD LIBOR

ING will continue to offer Daily Simple and Daily Compounded SOFR for lending products. In line with the ARRC’s recent recommended uses cases for CME Term SOFR, ING will soon provide Term SOFR for products that require the rate to be known in advance.

When USD LIBOR is used for contracts that mature after 30 June 2023, we will include contractual provisions such as the ARRC’s hardwired fallback language or a “switch mechanism” to ensure transition prior to 30 June 2023.

In line with current regulatory guidance, we will stop offering USD LIBOR from 1 January 2022 for lending facilities and derivatives, unless the derivatives are used for risk management purposes or to facilitate LIBOR transition. Additional drawdowns under existing committed or uncommitted USD LIBOR facilities will be accompanied by a discussion about suitable alternatives, and in any event subject to the inclusion of clear fallback or switch arrangements.

The aforementioned dates are subject to ongoing review of regulatory guidance and market developments. Your relationship manager will inform you of availability and conditions depending on the product and jurisdiction.

Issuance of new contracts referencing GBP LIBOR

In line with the Working Group on Sterling Risk-Free Reference Rates’ recommendation, ING has been offering contracts based on SONIA in arrears instead of GBP LIBOR for lending transactions, since 1 April 2021.

ING has also been offering SONIA instead of GBP LIBOR for linear derivatives such as futures, forwards, and swaps since 1 April 2021, and has done the same for non-linear derivatives. We expect our clients and counterparties for the remainder of 2021 to only enter into GBP LIBOR based derivatives for the purposes set out in the RFRWG guidance document, which includes the risk management of existing positions.
Issuance of new contracts referencing EUR LIBOR

ING will continue to offer EURIBOR for lending and derivatives with ESTR offered instead of EONIA for certain cash products and derivatives. No EONIA products will be offered after 1 January 2022.

Issuance of new contracts referencing CHF LIBOR

In line with the National Working Group on Swiss Franc Reference Rates, ING is already offering lending facilities and derivatives based on SARON in arrears. From 1 January 2022, ING will only offer SARON instead of CHF LIBOR.

Issuance of new contracts referencing JPY LIBOR

In line with the Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks, ING has already started offering lending facilities based on the Tokyo Overnight Average rate (TONA) in arrears, O/N TONA, Tokyo Term Risk Free Rate (TORF), or the Tokyo Interbank Offered Rate (TIBOR) instead of JPY LIBOR, depending on the product, jurisdiction and eligibility criteria.

40. What can you do to prepare for the transition?

While uncertainties are part of the transition, we encourage you to perform an assessment of the LIBOR-referenced exposures and stay up-to-date with ongoing developments. We recommend that you familiarise yourself with the RFRs and make the necessary preparations to transact in RFR-referenced products. You may want to engage independent consultants for advice, particularly when reviewing the contractual terms governing exposures that mature after 2021 and assessing the robustness of the current fallback language. From an accounting, tax and regulatory perspective, you may also want to consider the potential impacts of the LIBOR discontinuation on your businesses’ treasury and risk management systems and processes. Last but not least, if not done already, you should directly contact your bank and agree with them on the timelines and plans for transitioning the legacy (L)IBOR contracts.

<table>
<thead>
<tr>
<th>Scenarios</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>GBP LIBOR</td>
<td>USD LIBOR</td>
</tr>
<tr>
<td>Existing contracts redeemed in full by 31 Dec 2021</td>
<td>Existing contracts redeemed in full by 30 June 2023</td>
</tr>
<tr>
<td>Existing contracts which expires after 31 Dec 2021</td>
<td>Existing contracts which expires after 30 June 2023</td>
</tr>
<tr>
<td>Contract expires after 31 Dec 2021, but consist of a “hardwire fallback”</td>
<td>Contract expires after 30 June 2023 but consist of a robust hardwire fallback</td>
</tr>
</tbody>
</table>

1) Hardwire fallback: Replacement rate with specific contract details
2) Hardwire fallback recommended by ARRC.
41. Does my loan document need to be changed? What options do I have if I do not wish to change my loan document?

ING recommends that you review your loan documents to identify how they would address the anticipated cessation of (L)IBOR. Many agreements have been amended in recent years to include, or if recently issued already include, robust fallback provisions addressing LIBOR transition. However, some older documents may still lack robust fallback provisions. Other legacy contracts may reference a prime based rate or the “cost of funds” upon the permanent cessation of LIBORs, which are not considered robust replacement rates.

To maintain a consistent approach to address a cessation of IBORs, ING encourages the use of recommended approaches and fallback languages developed by the various national working groups to ensure impacted contracts are smoothly transitioned to an endorsed alternative reference rate.

42. What will happen to my derivatives in a hedge relationship upon the cessation of LIBORs? Can it impact my hedge accounting treatment?

The cessation of LIBOR may have an impact on the hedging structure of your portfolios and could potentially result in a mismatch between a cash instrument (such as a bond or loan) and other instruments such as a derivatives contract that are in hedge relationship.

Mismatches may arise as a result of timing of transition, differences in the alternative reference rates and CAS used, and conventions that apply to each side of the hedge structure. The need for alignment between the hedging and hedged item should be considered on a case by case basis. When applying hedge accounting, it is important to note that the International Accounting Standards Board (IASB) has provided accounting reliefs if certain conditions are met. For further information, go to the IASB’s website.

Moreover, national RFRWGs have been advocating consistency on conventions across derivatives and cash products. The outcome of these consultations have generally resulted in some level of consistency in the CAS used in various products, especially when transitioned via the fallback approach. However there are still possibilities that a mismatch between a cash and a derivatives product in a hedging structure may arise resulting in value transfer and hedge ineffectiveness post migration.

ING is working on providing solutions to clients to minimise the impact of your hedging structures. However, we encourage you to seek independent advice on the potential implications of LIBOR transition on your hedging structures. Please contact your ING relationship manager to further discuss alignment options.

43. Since USD LIBOR will be published until mid-2023, is it recommended to switch from USD LIBOR to an alternative rate in 2021 or 2022 or can I defer transition to 2023?

Since the cessation date for USD LIBOR has been postponed to June 2023 (except for 1W and 2M tenors which stop being published after 31 Dec 2021), there is clearly more time to decide on your transition options. The FCA has indicated that based on undertakings received from the panel banks, they don’t expect USD LIBOR to become unrepresentative before 30 June 2023.
Therefore, if you have USD LIBOR contracts that mature prior to 30 June 2023, it is probable that you can hold the contract until maturity. Note however that after 31 December 2021, the deadline set by US Regulators (and other regulators included the FCA) to cease entering into new USD LIBOR contracts, liquidity may shift rapidly from USD LIBOR to SOFR so it may cost more to close out derivative contracts before maturity.

Contracts that reference USD LIBOR (1, 3, 6 and 12M) that mature after 30 June 2023 need to have been transitioned to an alternative reference rate by no later than 30 June 2023.

ING is working on the transition, and will continue that effort throughout 2021 and 2022. This will include contacting you for impacted contracts that reference USD LIBOR. If you have any questions about IBOR transition that are not answered here, please contact your ING relationship manager.