
ARTICLE 23D BENCHMARKS REGULATION –NOTICE OF REQUIREMENTS

To: ICE Benchmark Administration Limited

Reference Number: FRN 608291

Address: Milton Gate, 60 Chiswell Street, London EC1Y 4SA,
United Kingdom

Date: 1 January 2022

1. ACTION

1.1.. For the reasons given in this Notice and pursuant to Article 23D(2) of the Benchmarks Regulation, the Financial Conduct Authority (“the Authority”) imposes the following requirements (the “Requirements”) on ICE Benchmark Administration Limited (“IBA”) to change the way in which the following LIBOR versions (“6 LIBOR Versions”) are determined. IBA must calculate the figure for:

- (1) 1-month sterling LIBOR as the sum of the ICE 1-month Term SONIA Reference Rate and the ISDA Spread Adjustment for 1-month sterling LIBOR
- (2) 3-month sterling LIBOR as the sum of the ICE 3-month Term SONIA Reference Rate and the ISDA Spread Adjustment for 3-month sterling LIBOR
- (3) 6-month sterling LIBOR as the sum of the ICE 6-month Term SONIA Reference Rate and the ISDA Spread Adjustment for 6-month sterling LIBOR
- (4) 1-month yen LIBOR as the sum of the QBS 1-month TORF $\times (360/365)$ and the ISDA Spread Adjustment for 1-month yen LIBOR

- (5) 3-month yen LIBOR as the sum of the QBS 3-month TORF $*(360/365)$ and the ISDA Spread Adjustment for 3-month yen LIBOR
- (6) 6-month yen LIBOR as the sum of the QBS 6-month TORF $*(360/365)$ and the ISDA Spread Adjustment for 6-month yen LIBOR.

- 1.2.. In providing the 6 LIBOR Versions, IBA must comply with the technical specifications listed in Annex 1.
- 1.3.. The Requirements take effect immediately after this Article 23D(2) Notice is given to IBA in line with paragraph 6.1, and after the designation of the 6 LIBOR Versions as Article 23A benchmarks takes effect on 1 January 2022.

2. SUMMARY OF REASONS

- 2.1.. The Authority decided to compel IBA under Article 21(3) BMR to continue publication for 12 months starting immediately after the final publication of the 6 LIBOR Versions on 31 December 2021 and before the 6 LIBOR Versions would otherwise cease. In making this decision, the Authority noted that IBA would not be able to continue the publication of any of the 6 LIBOR Versions on the basis of its panel bank contributions-based methodology. The Authority intended, in line with its Article 23D Decision Consultation, to require IBA to continue to publish the 6 LIBOR Versions under a changed, "synthetic" methodology, which will no longer be representative. This was subject, in particular, to the Authority taking account of all responses provided to the consultation and also any representations IBA may make in respect of this notice and/or any notice to designate the 6 LIBOR Versions under Article 23A of the BMR. Please see paragraph 2.1 of the [Article 21\(3\) Notice](#) for more details.
- 2.2.. The Authority also designated each of the 6 LIBOR Versions under Article 23A BMR, taking effect on at 00:01 on 1 January 2022. Please see the [Article 23A Notice](#).
- 2.3.. The Authority has decided, taking into account responses it received to the Article 23D Decision Consultation and the [Article 23D Statement of Policy](#) published under Article 23F(1)(d) of the Benchmarks Regulation and for the reasons described in this Notice, to impose the Requirements on IBA as the Authority considers it:
 - (1) appropriate to do so having regard to the desirability of securing that the cessation of each of the 6 LIBOR Versions takes place in an orderly fashion; and
 - (2) desirable to do so in order to advance both our consumer protection and integrity objectives.

3. DEFINITIONS

3.1.. In this Notice, the following definitions apply:

“Article 23A benchmark” means a benchmark in relation to which a designation under Article 23A of the Benchmarks Regulation has effect

“Article 23D Statement of Policy” means the FCA’s statement of policy with respect to Article 23D of the Benchmarks Regulation dated March 2021, published pursuant to Article 23F(1)(d) BMR

“EMIR” means European Market Infrastructure Regulation

“the Benchmarks Regulation” or “BMR” means the Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds, which is part of UK law by virtue of the European Union (Withdrawal) Act 2018

“IBA” means ICE Benchmark Administration Limited

“ICE Term SONIA Reference Rate” or “ICE TSRR” means the forward-looking term SONIA reference rates provided by IBA

“ISDA” means the International Swaps and Derivatives Association, Inc.

“ISDA 2020 IBOR Fallbacks Protocol” means the ISDA 2020 IBOR Fallbacks Protocol published on October 23, 2020 by ISDA

“ISDA IBOR Fallbacks Supplement” means the Amendments to the 2006 ISDA Definitions to include new IBOR fallbacks, in supplement number 70 to the 2006 ISDA Definitions, published by ISDA, final on October 23, 2020 and effective on January 25, 2021

“ISDA Spread Adjustment” means, with respect to each LIBOR Version, the fixed spread adjustment that applies as part of the ISDA IBOR fallback for each LIBOR Version (which may be a positive or negative value or zero), and that is published for the purpose of the ISDA 2020 IBOR Fallbacks Protocol and ISDA IBOR Fallbacks Supplement

“LIBOR” means the ICE LIBOR benchmark provided by IBA

“MiFIR” means Markets in Financial Instruments Regulation

“QBS” means Quick Benchmarks Inc.

“RFR” means risk-free rate

“SONIA” means the Sterling Overnight Index Average administered and published by the Bank of England

“TONA” means the Tokyo Overnight Average administered and published by the Bank of Japan

“TORF” means Tokyo Term Risk Free Rate, which is a forward-looking term TONA rate, provided by Quick Benchmarks Inc.

“TORF $\times (360/365)$ ” is to multiply the value of TORF published for an applicable London business day by 360/365 in the calculation of the relevant yen LIBOR Version under the changed methodology under paragraph 1.1 of this Notice to take into account day count differences between yen LIBOR and TORF.

“Version” has the meaning in Article 23G (2) of the BMR and is used to refer to LIBOR as provided for a particular currency and tenor, sometimes known as a LIBOR setting

Section 9 and section 23(3) of the Interpretation Act 1978 shall apply to the references to the time of day in paragraphs 1.3 and 2.2

4. REASONS FOR THE ACTION

Background

4.1.. IBA formally notified the Authority on 4 March 2021 of its intention to cease providing the following Versions of LIBOR immediately after 31 December 2021:

- 1) all 7 sterling Versions;
- 2) all 7 Japanese yen Versions;
- 3) the 1-week and 2-month US dollar Versions.
- 4) all 7 Swiss franc Versions; and
- 5) all 7 Euro Versions.

- 4.2.. IBA also formally notified the Authority on 4 March 2021 of its intention to cease providing the remaining US dollar Versions immediately following publication on 30 June 2023. IBA noted that it intended to cease providing LIBOR Versions on the proposed cessation dates, unless the Authority were to exercise its powers to require IBA to continue to publish LIBOR versions using a changed, “synthetic” methodology.
- 4.3.. The Authority decided to exercise its power under Article 21(3) in relation to 1-, 3- and 6- month Versions of sterling and Japanese yen LIBOR for a 12-month period immediately after the final publication of the 6 LIBOR Versions on 31 December 2021 and before the 6 LIBOR Versions would otherwise cease.
- 4.4.. The Authority also decided to designate each of the 6 LIBOR Versions under Article 23A, which allows the Authority to access the Article 23D power to sustain these Versions to secure their orderly wind down. Please see paragraph 2.2 of the Article 23A Notice.
- 4.5.. Article 23D (2) grants the Authority the ability to impose requirements on the administrator of a critical benchmark, here referring to each of the Versions of the benchmark which has been designated under Article 23A. These requirements may relate to the way in which the benchmark is determined, including the input data, the rules of the benchmark or, where the benchmark is based on submissions from contributors, the benchmark’s code of conduct.
- 4.6.. Article 23D (3) provides that the Authority may only use Article 23D powers if it considers it:
- (1) appropriate to do so having regard to the desirability of securing that the cessation of the benchmark takes place in an orderly fashion, and
 - (2) desirable to do so in order to advance either or both of its consumer protection objective and its integrity objective
- 4.7.. The Authority [consulted on](#) and subsequently [published](#) the Statement of Policy with respect to the exercise of Article 23D powers in March 2021.
- 4.8.. In June 2021, the Authority published a [consultation](#) seeking views on its proposed decision to exercise the Article 23D power in respect of each of the 6 LIBOR Versions and setting out how it had regard to the Article 23D Statement of Policy (“Article 23D Decision Consultation”). The consultation closed on 27 August 2021.

- 4.9.. There were 36 responses to Article 23D Decision Consultation. All respondents supported the Authority's proposal to use its Article 23D power to intervene for the 6 LIBOR Versions. Some respondents expressed different views on the proposed methodology. The Authority has taken into account all responses received to the Consultation. As a result, the Authority has decided to impose changes in relation to each of the 6 LIBOR Versions as set out in paragraph 1.1 and Annex 1 of this Notice. The Authority notes that the changes imposed in relation to the methodology for each of the 3 Japanese yen LIBOR Versions are adjusted from the proposals in the Article 23D Decision Consultation to account for day count differences between yen LIBOR and TORF. The Authority does not consider there are grounds to make other changes to the proposal in Article 23D Decision Consultation.
- 4.10.. The Authority gives IBA this Article 23D(2) Notice in accordance with Articles 23D (2) and (7). The Notice takes effect immediately after it is given to IBA in line with paragraph 6.1 of this Notice, and after the Article 23A Designation Notice takes effect.

Reasons for Decision on whether to exercise Article 23D (2)

- 4.11.. The Authority considers that exercising the Article 23D(2) power is appropriate in order to secure an orderly cessation of each of the 6 LIBOR Versions that has been designated under Article 23A and is desirable to advance both consumer protection and integrity objectives.
- 4.12.. The Authority has taken into account the factors in paragraphs 2.2 to 2.12 in the Article 23D Statement of Policy, as set out below.

Appropriateness of using the powers having regard to the desirability of securing an orderly cessation

- 4.13.. In making the Article 21(3) decision, the Authority has considered the likely existence and scale of outstanding legacy contracts referencing each of the 6 LIBOR Versions that would not be able to move away from using these Versions upon or before the cessation of the 6 LIBOR Versions at end-2021. The Authority considered views, information and data, to the extent they are available, on the scale, duration and nature of these contracts, sophistication of parties to these contracts, as well as the practicability and likelihood of amending these contracts in a fair way by mutual agreement by 31 December 2021.

- 4.14.. The Authority concluded that none of the 6 LIBOR Versions would be able to cease in an orderly fashion at end-2021 due to significant legacy exposures and therefore decided to compel IBA under Article 21(3) to continue the publication of the 6 LIBOR Versions for a full 12-month period after panel banks depart at end-2021 as set out in paragraph 2.1 of this Notice.
- 4.15.. The Authority further decided to designate each of the 6 LIBOR Versions under Article 23A, which allows the Authority to access the Article 23D power. The Authority considers it appropriate to use the Article 23D power to impose a change of methodology, in conjunction with the Authority's decision under Article 21(3), so that IBA is required to continue the publication of each of the 6 LIBOR Versions on a robust, albeit non-representative basis (ie "synthetic" basis) for a limited period. This is desirable to secure an orderly wind down of the 6 LIBOR Versions.

1-, 3- and 6-month sterling LIBOR versions

- 4.16.. Across all asset classes, the Authority has estimated that there will be in excess of £472bn exposure to the 3 sterling LIBOR Versions, equating to at least 235,900 contracts outstanding at end-2021. These legacy contracts could be at risk of disruption should the Authority not intervene using the Article 23D(2) power.
- 4.17.. In the derivatives market, the Authority is aware of a small percentage of derivatives contracts that are intrinsically linked to cash products or are part of more exotic structures. For example, there are legacy securitisations referencing the 1-, 3- and 6-month sterling LIBOR Versions whose structures contain swaps. The Authority considers that it is likely a portion of these uncleared swaps will not adopt the ISDA 2020 IBOR Fallbacks Protocol to transition away by end-2021. Without active conversion of the whole structure, it is likely that there would be market disruption that can be avoided by exercising Article 23D (2) power to impose changes which would require the 3 sterling LIBOR Versions to be published on a changed, "synthetic" basis for a limited period.
- 4.18.. In the bond market, the Authority has estimated there to be around 278 outstanding bonds in the UK at end-2021 referencing one of the 3 sterling LIBOR Versions, with a total value of around £28 billion. The Authority is aware that many of these legacy bonds, by number and value of contracts, were written before it was envisaged that LIBOR would cease, and therefore contain no or inappropriate fallbacks. The Authority

considers it likely that many of these outstanding bonds cannot practicably be transitioned successfully before end-2021.

- 4.19.. In the securitisations market, the Authority has estimated that there are 659 outstanding securitisations at end-2021 referencing one of the 3 sterling LIBOR Versions, with a total value of around £57 billion. Securitisation structures often consist of bonds and swaps, some of which contain no or inappropriate fallbacks and are at risk of not being successfully transitioned as noted in paragraphs 4.17-4.18 of this Notice. Without active conversion of the whole structure, the Authority considers it likely that there would be disruption and even contractual frustration that can be avoided by exercising Article 23D(2) power to impose changes which would require the 3 sterling LIBOR Versions to be published on a changed, "synthetic" basis for a limited period.
- 4.20.. In the commercial loans market, the Authority has estimated there to be at least 35,000 outstanding syndicated and bilateral loans at end-2021 referencing one of the 3 sterling LIBOR Versions, with a total value of at least £350 billion. The Authority considers that there is likely to be a material amount of these legacy contracts with no or inappropriate fallbacks and that could not practicably be transitioned by end-2021.
- 4.21.. In the mortgage market, the Authority has estimated there to be at least 200,000 outstanding regulated and unregulated mortgages in the UK referencing 3-month sterling LIBOR, with a total mortgage value of around £37 billion. Many of these contracts do not contain fallbacks or other variation mechanisms, or where they do, firms may not be able to rely on them. The Authority has estimated that there will be significant mortgage exposures referencing 3-month sterling LIBOR Version at end-2021 that cannot practicably be transitioned. These mortgages will require a LIBOR rate beyond end-2021, otherwise they face uncertainty as to what rate to use, which could cause disruption and consumer harm.
- 4.22.. Please see paragraphs 4.11 – 4.18 of the Article 21(3) Notice and paragraphs 3.7-3.9 of the Article 23D Decision Consultation for more detail on the Authority's assessment in relation to outstanding legacy contracts referencing the 3 sterling LIBOR Versions.

1-, 3- and 6-month Japanese yen LIBOR versions

- 4.23.. Across all asset classes except mortgages, the Authority has identified c.£175bn exposure and at least 17,400 contracts referencing the 3 Japanese yen LIBOR Versions. The Authority anticipates that a material proportion will remain outstanding

at the end of the year. These legacy contracts could be at risk of disruption should the Authority not intervene using the Article 23D (2) power. The Authority is not aware of a material amount of mortgages referencing Japanese yen LIBOR.

- 4.24.. The Authority has also taken into account the view of the Japanese Financial Services Agency and the Bank of Japan that if the 1-, 3- and 6- month Japanese yen LIBOR Versions were to cease at the end of 2021 there is a risk of disruption to orderly cessation.
- 4.25.. In the derivatives market, the Authority is aware of a small percentage of derivatives contracts that are intrinsically linked to cash products or are part of more complex structures. For example, there are legacy securitisations referencing the 1- and 3-month Japanese yen LIBOR Versions whose structures contain swaps. The Authority considers that it is likely a portion of these uncleared swaps will not adopt the ISDA protocol to transition away by end-2021. Without active conversion of the whole structure, they could be disrupted should the Authority not impose changes using the Article 23D power which would require the 3 yen LIBOR Versions to be published on a changed, "synthetic" basis for a limited period.
- 4.26.. In the bond market, the Authority has estimated there to be 179 outstanding bonds that expire after end-2021 referencing 3- or 6- month Japanese yen LIBOR Versions, with a total value of approximately £41 billion. The Authority is aware that many of these legacy bonds, by number and value of contracts, were written before it was envisaged that LIBOR would cease, and therefore contain no or inappropriate fallbacks. The Authority considers it likely that a material proportion of these outstanding bonds cannot practicably be transitioned successfully before end-2021.
- 4.27.. In the securitisations market, the Authority has estimated there to be around 659 outstanding transactions at end-2021 referencing 1- and 3- month Japanese yen LIBOR Versions, with a total value of £4 billion. Securitisations consist of bonds and swaps, some of which contain no or inappropriate fallbacks and are at risk of not being successfully transitioned as discussed in paragraphs 4.25-4.26 of this Notice. Without active conversion of the whole structure, the Authority considers it likely that there would be disruption and even contractual frustration that can be avoided by exercising Article 23D (2) power to impose changes which would require the 3 yen LIBOR Versions to be published on a changed, "synthetic" basis for a limited period.
- 4.28.. In the commercial loans market, the Authority has estimated there to be at least 16,650 outstanding loans that expire beyond end-2021 that reference one

of the 3 Japanese yen LIBOR Versions, with a total value of approximately £130 billion. The Authority considers that there is likely to be a material amount of these legacy contracts with no or inappropriate fallbacks and that cannot practicably be transitioned by end-2021.

- 4.29.. Please see paragraphs 4.19 – 4.27 of the Article 21(3) Notice and paragraphs 3.10-3.12 of the Article 23D Decision Consultation for more detail on the Authority’s assessment in relation to legacy contracts referencing the 3 Japanese yen LIBOR Versions.
- 4.30.. Based on the above, the Authority has concluded that none of the 6 LIBOR Versions would be able to cease in an orderly fashion at end-2021 without our intervention using the Article 23D power to require that these Versions continue to be published by IBA under a changed, “synthetic” methodology for a further limited period.

Desirability of using the powers to advance our consumer protection and/or integrity objectives

- 4.31.. Given the existence and scale of legacy LIBOR-referencing contracts that would be adversely affected should any of the 6 LIBOR Versions cease at end-2021, the Authority considers it desirable to use the Article 23D power to advance its objectives of consumer protection and integrity.

Consumer protection

- 4.32.. In the absence of the Authority using the Article 23D power, together with its Article 21(3) power, in order to compel IBA to continue the publication of the 6 LIBOR Versions under a changed, “synthetic” methodology, the Versions would cease. The cessation would likely have a negative impact on consumers who have exposure to those legacy LIBOR-referencing contracts discussed in paragraphs 4.16-4.30 of this Notice (eg retail mortgages, or, through their pensions or other investments, bonds and securitisations). Should LIBOR cease, these legacy contracts may no longer function as intended, and consumers may suffer financial loss or unexpected change in the cost of their contracts, posing a material risk to ensuring an appropriate degree of consumer protection.
- 4.33.. The Authority has decided to use the Article 23D power to help consumers achieve fair outcomes, where they are unlikely to be able to manage the consequences of the

cessation of LIBOR without our intervention. Having taken into account the likely financial effect on consumers, the Authority has decided to use the Article 23D power in a way to ensure fair approximation of LIBOR and least disturbance to affected consumers, as discussed in further detail in paragraphs 4.39-4.62 of this Notice.

Integrity of the UK financial system

- 4.34.. Should the 6 LIBOR Versions cease at end-2021, there could be disruption to the integrity of certain markets and the wider UK financial system. The Authority has decided to use the Article 23D power to sustain these Versions on a changed, robust basis, thus advancing the integrity of the UK financial system as following.
- 4.35.. Sustaining the 6 LIBOR Versions on a changed basis would minimise market disruption by allowing relevant contracts to continue to function in an orderly manner. It will maintain transparency and resilience in the market, as it allows outstanding LIBOR-referencing contracts to continue to function in line with the already defined rights and obligations in the contracts through the wind-down period. This will help firms party to legacy contracts referencing the 6 LIBOR Versions to continue serving their customers and meet obligations to counterparties.
- 4.36.. The Authority has chosen robust and transparent component inputs for the changed, “synthetic” methodology, which means that the 6 LIBOR Versions will be robust against market abuse, maintaining the cleanliness of the financial system.
- 4.37.. Please see paragraphs 3.15 – 3.25 of the Article 23D Decision Consultation for more detail.
- 4.38.. The Authority considers it feasible to produce the 6 LIBOR Versions through the changed methodology, as set out below in paragraphs 4.40-4.70 of this Notice.

Reasons for Decision on how to exercise Article 23D (2)

- 4.39.. The Authority has taken into account the factors in paragraphs 2.13 – 2.26 of the Article 23D Statement of Policy in deciding how to exercise the Article 23D (2) power to impose a requirement on IBA to change the methodology of the 6 LIBOR Versions.

Fair approximation of the value the benchmark would have had

- 4.40.. The panel-bank LIBOR methodology is 'designed to produce an average rate that is representative of the rates at which large, leading internationally active banks with access to the wholesale, unsecured funding market could fund themselves in such market in particular currencies for certain tenors.'
- 4.41.. In the Authority's view, in economic terms, LIBOR is composed of:
- 4.41.1. a measure of the expectation of RFRs over a fixed period; plus
 - 4.41.2. an adjustment reflecting bank credit risk and liquidity conditions in funding markets over the corresponding fixed period
- 4.42.. The 6 LIBOR Versions cannot continue to be published on a representative basis after panel banks cease contributing at end-2021. To ensure continued publication, the Authority has decided to require IBA to change the methodology, in conjunction with exercising its power to compel publication under Article 21(3), so that each of the 6 LIBOR Version will be calculated based on the relevant forward-looking term RFR plus the ISDA spread adjustment for the relevant LIBOR Version. Please see paragraph 1.1 and Annex I of this Notice for details of the changed methodology.

First component – forward-looking term RFR

- 4.43.. The first component of the changed methodology is a forward-looking term rate based on the relevant RFR chosen by the industry to facilitate transition away from LIBOR (ie SONIA for sterling LIBOR and TONA for yen LIBOR).
- 4.44.. For sterling LIBOR, the Authority has selected the ICE Term SONIA Reference Rate (TSRR) provided by IBA as a component for the purpose of producing 1-, 3- and 6-month sterling LIBOR Versions under the changed methodology. The TSRR measures the expectation of SONIA interest rates over the relevant forward-looking time period. It is based on the fixed rates offered in SONIA-referencing derivatives markets, e.g. overnight indexed swaps ("OIS"), which provide information on market expectations of the varying overnight SONIA rates over a forward-looking 1-, 3-, or 6-month period.
- 4.45.. For Japanese yen LIBOR, the Authority has selected TORF as a component for the purpose of producing 1-, 3- and 6-month Japanese yen LIBOR Versions under the changed methodology. TORF provided by QBS is [recommended](#) by the Japanese Cross-Industry Committee and is the only forward-looking term RFR for yen. TORF measures the expectation of TONA interest rates over the relevant forward-looking

time period. It is based on the fixed rates offered in TONA-referencing derivatives markets, e.g. OIS, which provide information on market expectations of the varying overnight TONA rates over a forward-looking 1-, 3-, or 6-month period. The Authority has decided that TORF should be adjusted as $TORF \times (360/365)$ in calculating a synthetic yen LIBOR to take into account day count differences between yen LIBOR and TORF/TONA.

- 4.46.. The Authority considered and discounted two alternatives, eg RFRs calculated “in arrears” at the end of the relevant interest period and backward-looking measures of the relevant RFRs calculated at the beginning of the relevant interest period (ie RFRs “in advance”). This is because RFRs “in arrears” are operationally unsuitable as a component for LIBOR under the changed methodology to support many legacy contracts which require a payment amount to be identified or made at the beginning of or well in advance of the end of the relevant interest period (see detail in paragraph 4.61 of this Notice). RFRs “in-advance”, which measure interest in the previous period, would be less effective in measuring the first economic component of LIBOR which is the forward-looking expectation of RFR.
- 4.47.. Please see paragraphs 3.27 – 3.37 of the Article 23D Decision Consultation for more detail on this first component.

Second component – the ISDA spread adjustment

- 4.48.. The forward-looking term RFR does not reflect the credit and liquidity component of panel-bank LIBOR because the relevant RFRs do not incorporate material bank credit risk and liquidity conditions in specific funding markets.
- 4.49.. The Authority considers that adding the ISDA spread adjustment to the relevant forward-looking RFR provides for a reasonable and fair approximation of the relevant LIBOR Version and reduces the value transfer that would occur if only the forward-looking RFR were used. This will also align with the approach being taken by parties who are amending their contracts to adopt the same ISDA spread to transition away from LIBOR at the point the relevant LIBOR panel ceases, thus reducing disturbance to affected parties (see detail in paragraphs 4.59-4.62 of this Notice).
- 4.50.. The ISDA spread adjustment is calculated based on a 5-year historical median spread between LIBOR and the corresponding RFR “in-arrears”. This approach was established by market consensus in the derivatives markets in major jurisdictions

(including but not limited to the 5 LIBOR currency jurisdictions) through [a series of ISDA consultations](#) launched at the request of international authorities.

- 4.51.. The Authority considers that a historical median is robust against manipulation and better in calculating a representative spread to minimise value transfer, as a median is less affected by data outliers under unusual market conditions. The Authority considers that a 5-year lookback period is better at capturing a range of economic and market conditions that could occur in the future than a shorter lookback period. The [vast majority of industry responses](#) to ISDA consultation settled upon the same approach.
- 4.52.. Following the Authority's announcement on 5 March 2021 on the end of LIBOR, the ISDA spread adjustment has been [calculated and published](#) for the purposes of the ISDA IBOR Fallbacks Supplement and Protocol that will apply to derivatives fallbacks for certain IBORs (including LIBOR). Fixing the spread adjustments at the point of this announcement ensured that the data used to calculate the historical median were not affected, or perceived to have been affected, by knowledge of this event.
- 4.53.. The ISDA spread adjustment has also been endorsed by the [Financial Stability Board's Official Sector Steering Group](#), as well as national working groups in the [UK](#), the [US](#), [EU](#), [Switzerland](#) and [Japan](#) to be incorporated in fallback arrangements for cash contracts.
- 4.54.. For the 6 LIBOR Versions, the Authority has decided to require IBA to add the ISDA spread adjustment to the relevant forward-looking term RFR to achieve a reasonable and fair approximation for the corresponding panel-bank LIBOR Versions after 31 December 2021.
- 4.55.. Please see paragraphs 3.38 – 3.49 of the Article 23D Decision Consultation for more detail on this second component.

Market support

- 4.56.. As discussed in paragraphs 4.50-4.53 of this Notice, the Authority has taken into account market support that has already been established on a fair way of calculating a replacement value for LIBOR, ie relevant RFRs plus the relevant ISDA spread adjustment.

4.57.. National working groups in both UK and Japan recommended certain limited use cases in the cash market for forward-looking term RFRs (TSRRs for sterling and TORF for yen) to facilitate transition away from LIBOR.

4.58.. Please see paragraphs 3.50 – 3.52 of the Article 23D Decision Consultation for more detail.

Least disturbance or disadvantage to affected parties

4.59.. In the case of the 6 LIBOR Versions, there are parties to outstanding legacy contracts referencing these Versions that cannot realistically renegotiate, amend or transition away from LIBOR by 31 December 2021. These contracts would continue to reference LIBOR under the changed methodology. The Authority has sought to ensure the least disturbance or disadvantage to these affected parties in requiring the changed methodology.

4.60.. The methodology, based on the relevant forward-looking term RFR and the ISDA spread adjustment, provides certainty on the interest payment due to be calculated, made or received on dates specified in the contract in a way very similar to how these legacy contracts would have operated under panel-bank LIBOR. This will allow those parties to continue to use LIBOR and minimise the need for parties to make consequential changes to ensure their contracts continue to operate.

4.61.. The methodology will facilitate continued hedging of relevant products as legacy contracts that continue to reference LIBOR under the changed methodology would have the same expected value of interest payments as those that are being amended to use RFRs "in-arrears" over the same calendar period plus those same ISDA spread adjustments from the point that the relevant panel-bank LIBOR Versions cease. The basis between a forward-looking term RFR and an RFR "in-arrears" can be easily hedged. Operationally, the Authority did not consider the RFR "in-arrears" as a suitable component for the changed methodology as affected parties to legacy contracts would have to wait until the relevant interest period has ended to calculate and make interest payments under an RFR "in-arrears". As legacy contracts cannot be practicably amended within the timeframe available by end-2021 to accommodate this change and therefore could be disrupted, RFRs "in-arrears" is not a suitable option for the purpose of the changed methodology.

- 4.62.. The component parts for the changed methodology are visible and available to market participants. This will help minimise disruption should market participants want to extend their use of the relevant components following the end of the Authority's requirement on IBA to determine LIBOR based on the changed methodology.
- 4.63.. Please see paragraphs 3.53 – 3.56 of the Article 23D Decision Consultation for more detail.

Availability to the benchmark administrator of robust and transparent inputs

- 4.64.. As discussed in paragraph 4.44 of this Notice, the Authority has chosen ICE TSRR provided by IBA as a component in the changed methodology for the 1-month, 3-month and 6-month sterling LIBOR Versions. IBA is a benchmark administrator authorised and regulated by the Authority for the regulated activity of administering a benchmark.
- 4.65.. As discussed in paragraph 4.45 of this Notice, the Authority has chosen TORF provided by QBS as a component in the changed methodology for the 1-month, 3-month and 6-month Japanese yen LIBOR Versions. QBS is a benchmark administrator supervised by the JFSA and is [committed](#) to complying with the IOSCO Principles for Financial Benchmarks. The Authority considers TORF as a robust and transparent input. TORF is available to IBA for the production of the relevant yen LIBOR Versions under the changed methodology.
- 4.66.. The ISDA spread adjustments for each of the 6 LIBOR Versions are available to IBA for the production of these LIBOR Versions under the changed methodology.
- 4.67.. Please see paragraphs 3.57 – 3.61 of the Article 23D Decision Consultation for more detail.

Impact on the benchmark administrator

- 4.68.. The Authority has established that IBA will operationally be able to produce the 6 LIBOR Versions under the changed methodology after end-2021 using the available inputs, without being subject to unreasonable financial or commercial loss. In the event where the component inputs are not available for an applicable London business day, the Authority requires IBA to act in accordance with Annex I of this Notice.

4.69.. The Authority has also taken into account any potential knock-on financial effect on consumers under the changed methodology. The Authority has sought to ensure that consumers do not bear any reasonably avoidable additional costs by using the Article 23D(2) power in a way that would achieve a fair and reasonable approximation of the value panel-bank LIBOR would have had, as described in paragraphs 4.43- 4.55 of this Notice; and by seeking to ensure the least disturbance to affected parties, as described in paragraphs 4.59-4.63 of this Notice.

4.70.. Please see paragraphs 3.62 – 3.63 of the Article 23D Decision Consultation for more detail.

Length of publication on a changed basis

4.71.. There is no constraint on the length of the Article 23D power in the BMR. However, as set out in the Article 23D Statement of Policy, the Authority intends to intervene for as short a time as appropriate to ensure an orderly wind-down in line with the Authority's statutory objectives. Article 23E of the BMR requires the Authority to review every 2 years, in relation to each of the 6 LIBOR Versions, whether the use of the Article 23D power has advanced the objectives of consumer protection and integrity.

4.72.. The Authority explains in paragraphs 2.1-2.3 of this Notice that the requirement of a changed methodology for the 6 LIBOR Versions will be imposed in conjunction with the Authority's Article 21(3) decision for these Versions. The Authority has decided to compel IBA to continue publication of the 6 LIBOR Versions under Article 21(3) for a full 12-month period until end-2022 as set out in paragraph 2.1 of this Notice.

4.73.. Please see paragraphs 4.28-4.34 of the Article 21(3) Notice for more detail.

Likely effect outside the UK of exercising the power

4.74.. In making the Article 23D (2) decision to require the changed methodology for the 6 LIBOR Versions, the Authority has taken into account data and information, to the extent the Authority was able to access them, on the use of these LIBOR Versions both within and outside the UK, in order to consider the likely effect of the use of the Article 23D(2) power. These include:

4.74.1. data from the Authority's regular joint data requests with the Prudential Regulation Authority to regulated firms

- 4.74.2. regulatory data reporting sets available to the Authority, eg under EMIR and MiFIR, and product sales data reporting for mortgages
- 4.74.3. data, views and information provided to the Authority through responses to the Article 23D Decision Consultation
- 4.74.4. data and information provided to the Authority by firms, trade associations and their representatives in the context of the Authority's regular engagement with them
- 4.74.5. publicly available data on securities referencing LIBOR
- 4.74.6. views, data and other publicly available information (eg surveys) from overseas authorities, national working groups (including their sub-working groups such as the Sterling RFRWG Tough Legacy Task Force), market participants and LIBOR users both within and outside the UK

5. Effects of the exercise of the power

- 5.1.. Article 23B of the BMR provides that all use (as defined in Article 3.1(7) of the BMR) by supervised entities of an Article 23A benchmark is prohibited when the Article 23A designation takes effect, except where the Authority permits legacy use under Article 23C of the BMR. In addition, the Authority may, by issuing a public notice, delay the prohibition for up to four months beginning with the day on which the Article 23A designation takes effect.
- 5.2.. The prohibition on use of the 6 LIBOR Versions under Article 23B of the BMR takes effect on 1 January 2022.

6. PROCEDURAL MATTERS

- 6.1.. The Notice is given to IBA under Article 23D(2) of the Benchmarks Regulation and shall be deemed to have been received in accordance with regulation 6(b) of The Benchmarks (Provision of Information and Documents) Regulations 2021.
- 6.2.. The Notice is given to the Treasury pursuant to Article 23D(10)(a) of the Benchmarks Regulation and is published under Article 23D (9) BMR.

7. AUTHORITY CONTACTS

- 7.1.. For more information concerning this matter generally, contact Christopher Simon at the Authority (email: Christopher.Simon@fca.org.uk).

EDWIN SCHOOLING LATTER

Director Markets and Wholesale Policy and Wholesale Supervision, for and on behalf of the Authority

CLARE COLE

Director of Market Oversight, for and on behalf of the Authority

Annex 1

Technical Specifications

1. The Authority requires IBA to change the way the following 6 LIBOR Versions are determined, which will take immediate effect after their Article 23A designations become effective on 1 January 2022:
 - 1) 1-month sterling LIBOR is to be calculated as the sum of the ICE 1-month Term SONIA Reference Rate and the ISDA Spread Adjustment for 1-month sterling LIBOR.
 - 2) 3-month sterling LIBOR is to be calculated as the sum of the ICE 3-month Term SONIA Reference Rate and the ISDA Spread Adjustment for 3-month sterling LIBOR.
 - 3) 6-month sterling LIBOR is to be calculated as the sum of the ICE 6-month Term SONIA Reference Rate and the ISDA Spread Adjustment for 6-month sterling LIBOR.
 - 4) 1-month yen LIBOR is to be calculated as the sum of the QBS 1-month TORF $\times (360/365)$ and the ISDA Spread Adjustment for 1-month yen LIBOR.
 - 5) 3-month yen LIBOR as the sum of the QBS 3-month TORF $\times (360/365)$ and the ISDA Spread Adjustment for 3-month yen LIBOR.
 - 6) 6-month yen LIBOR as the sum of the QBS 6-month TORF $\times (360/365)$ and the ISDA Spread Adjustment for 6-month yen LIBOR.
2. Each of the 6 LIBOR Versions under the methodology in paragraph 1 should continue to be published at or around 11:55 am London time on each applicable London business day, except for London public holidays.
3. IBA should use the latest available value of the required input data, under the methodology in paragraph 1, as published by its provider prior to the scheduled publication time for the relevant LIBOR version on an applicable London business day, subject to the below.

4. IBA should use the required input data, under the methodology in paragraph 1 for the relevant LIBOR Version, in the same form as they are published by the respective provider.
5. Each of the 6 LIBOR Versions under the methodology in paragraph 1 should continue to be rounded and published to 5 decimal places. Where any input data is published to fewer than 5 decimal places, IBA should continue to publish the relevant LIBOR Version to 5 decimal places, by adding zero(s) at the end of the decimal value of the relevant LIBOR Version.
6. In the event where the required input data, under the methodology in paragraph 1 for the relevant LIBOR Version, is not published by its provider for an applicable London business day in accordance with its normal publication schedule, IBA should use the last published value for that input data to produce the relevant LIBOR Version under the methodology in paragraph 1 unless the Authority decides and notifies IBA otherwise.
7. In the event where the required input data under the methodology in paragraph 1 for the relevant LIBOR Version are not available prior to the scheduled publication time for the relevant LIBOR Version on an applicable London business day, IBA should act in accordance with the requirement in either subparagraph 1) or subparagraph 2) as below.
 - 1) Where IBA has been informed by the relevant provider of the input data that the required input data will become available within 1 hour after the scheduled publication time for the relevant LIBOR Version on that applicable London business day, IBA should delay the publication of the relevant LIBOR Version and publish as soon as practicable once the required input data becomes available to IBA for that applicable London business day. If the required input data do not become available to IBA within 1 hour after the scheduled publication time for the relevant LIBOR Version on that applicable London business day, IBA should use the last published value for that input data to produce the relevant LIBOR Version under the methodology in paragraph 1 for that applicable London business day and publish as soon as practicable after the 1 hour delay, unless the Authority decides and notifies IBA otherwise
 - 2) In other circumstances except the one described under subparagraph 1), IBA should use the last published value for that input data to produce the relevant LIBOR Version under the methodology in paragraph 1 for that applicable London business day unless the Authority decides and notifies IBA otherwise.

8. In the event where after the publication of the relevant LIBOR Version on an applicable London business day, IBA is notified that the relevant forward-looking term RFR is subsequently republished by its provider on that day, IBA should re-calculate and re-publish the relevant LIBOR version using the relevant republished forward-looking term RFR for that applicable London business day.