



ICE Term SOFR - Compliance with the IOSCO Principles for Financial Benchmarks

December 2020



A. Governance
Principle 1 - Overall Responsibility of the Administrator
<p>IBA will have sole responsibility for all aspects of the benchmark determination process and, through the Term SOFR Oversight Committee, will regularly review all aspects of the determination of the benchmark, including the methodology, definition of the benchmark, suitability of inputs, scope of the benchmark and the setting of the benchmark.</p>
Principle 2 - Oversight of third parties
<p>IBA will handle all aspects of the benchmark administration and will use no Calculation Agent or Publication Agent.</p>
Principle 3 - Conflicts of interest for Administrators
<p>IBA's Conflicts of Interest Policy summarizes IBA's procedures for the identification, disclosure, management, mitigation or avoidance of conflicts of interest, to which all IBA directors and staff are required to adhere. IBA also maintains conflicts of interest registers to identify and manage all conflicts of interest in the production of its benchmarks. These are reviewed regularly by IBA's Board and are owned and managed by IBA senior management. Any material conflicts are disclosed to users of the benchmarks and relevant regulators.</p> <p>IBA is a separate legal entity within the ICE group of companies with a Board composed of a majority of independent directors, this is currently five out of seven. IBA's offices are physically separated from other ICE entities and have restricted key card access to prevent access by non-IBA staff. IBA's files and data are accessible only to the selected IBA staff and outsourced ancillary service providers who need access to the relevant information to perform their functions. The remuneration of IBA's staff is not linked to, and IBA staff are not otherwise incentivised in relation to, the level of its benchmarks.</p>
Principle 4 - Control framework for Administrators
<p>IBA has implemented a documented control framework that is available to regulators. The control framework is regularly reviewed by the IBA Board. A summary of its main features is published at https://www.theice.com/iba/governance.</p> <p>The control framework addresses the following: conflicts of interest management; integrity and quality of the design, calculation, maintenance and distribution of the benchmarks; IBA's whistleblowing procedure; and processes for ensuring IBA employee expertise.</p>
Principle 5 - Internal Oversight
<p>The composition of the new Term SOFR Oversight Committee will be reviewed at least annually and will be made public.</p> <p>The committee will review and provide challenge on all aspects of the benchmark determination process for the forward-looking SOFR term rates, including the following:</p> <ul style="list-style-type: none"> • Reviewing the definition, methodology and setting of the benchmark at least annually; • Assessing the underlying market and the usage of the forward-looking SOFR term rates; • Overseeing any changes to the benchmark methodology and requesting IBA to consult on proposed changes;



- Overseeing IBA's control framework insofar as it affects the benchmark and its management and operation;
- Overseeing IBA's adherence to its Published Methodologies; and
- Assessing internal and external audits or reviews insofar as they affect the benchmark and monitoring the implementation of identified remedial actions.

IBA publishes a [policy regarding the selection and appointment of oversight committee members](#) and will publish the terms of reference of its Oversight Committees and any declarations of conflicts of interest. Additionally, IBA's Conflicts of Interest Policy covers conflicts regarding the composition of any Oversight Committees associated with any of IBA's benchmarks.

B. Quality of the Benchmark

Principle 6 - Benchmark design

IBA has designed the forward-looking SOFR term rates to be representative of the underlying economic reality, being what the market expects (i.e. forward-looking) SOFR to average, over the next one, three, six and twelve months.

The forward-looking SOFR term rates will be calculated in accordance with the proposed methodology which is based on a waterfall approach that uses a hierarchy of inputs (see response to section VI Calculation Methodology Criteria for more information).

The first level uses transactions in SOFR linked futures and OIS contracts. If sufficient trading activity takes place in these markets over the course of a business day, prices derived from these transactions will be used to create forward-looking SOFR term rates.

In the event that trading activity is sparse and insufficient to meet established thresholds, IBA will source electronically displayed quotes in futures prices and OIS swaps across the business day to produce the rates.

Ultimately, if trading activity is sparse and quotes are not available, IBA will use the settlement prices of SOFR futures contracts to imply the forward-looking SOFR term rates.

IBA and the oversight committee will closely review and monitor the Underlying Economic Interest (i.e. the market expectation for the future path of forward-looking SOFR term rates over the next one, three, six and potential twelve months), the Methodology and the Input Data of the benchmark.

Principle 7 - Data Sufficiency

The forward-looking SOFR term rates will be calculated using Input Data satisfying the Input Data Specification, being:

- SOFR-linked Swaps and Futures transactions;
- For specified tenors (maturities); and
- Taken during a certain time (as defined in section VI Calculation Methodology Criteria).

Input Data will be based on prices formed by the competitive forces of supply and demand and anchored by observable, arm's length transactions, quotes and futures settlement prices will only be used when there is insufficient transactional input data.



<p>A description of the methodology and its key features will be published on IBA’s website.</p>
<p>Principle 8 - Hierarchy of data inputs</p>
<p>The methodology is based on a waterfall approach that uses a hierarchy of inputs.</p> <p>At the first level, is transactions in SOFR linked futures and OIS contracts. Prices derived from these transactions will be used to create forward-looking SOFR term rates, if sufficient trading activity takes place in these markets over the course of a business day.</p> <p>In the event that trading activity is sparse and insufficient to meet establish thresholds. IBA will source electronically displayed quotes in futures prices and OIS swaps across the business day to produce the rates.</p> <p>Ultimately, if trading activity is sparse and quotes are not available, IBA will use the settlement prices of SOFR futures contracts to imply the forward-looking SOFR term rates.</p>
<p>Principle 9 - Transparency of Benchmark Determinations</p>
<p>IBA will publish the benchmark methodology, clearly and concisely explaining the source and types of Input Data used to derive the benchmark, the calculations and processes used in each determination in normal circumstances and in certain special cases. No expert judgement will be used in the benchmark determination process.</p> <p>IBA will publish quarterly statistics relating to the benchmark determinations based on the standard methodology or using a contingency procedure where there is insufficient Input Data to calculate the prices in accordance with the standard methodology.</p> <p>IBA will publish contingency procedures for the benchmark and an Error and Republication Policy</p>
<p>Principle 10 - Periodic Review</p>
<p>IBA monitors and regularly reviews all aspects of its benchmarks in conjunction with the relevant Oversight Committee.</p> <p>In accordance with IBA’s published Changes and Cessation Policy, any material change is subject to consultation.</p> <p>Consultation papers are widely published, are available on IBA’s website and include the process and timeline for the stakeholder feedback. IBA publishes feedback statements summarizing consultation responses on its website, with publication of responses if confidentiality is not requested.</p>
<p>C. Quality of the Methodology</p>
<p>Principle 11 - Content of the Methodology</p>
<p>IBA’s proposed methodology has been developed to create implied term settings based upon what the market expects SOFR to average, on a compounded basis, over the next one, three, six and twelve months.</p> <p>It does so by estimating the future path of SOFR based upon prices for SOFR-linked futures contracts and OIS sourced over the course of a business day. IBA has chosen to reference a full day of market</p>



activity in the proposed methodology in order to increase the likelihood that transactions serve as the primary source of input data to create the rates and to mirror how SOFR itself is calculated based upon a full day of trading activity.

The proposed waterfall methodology is described above (please see Principle 8).

Once the daily inputs are established based upon the waterfall, IBA will use an optimization model that will create a projected forward path for SOFR that best matches these prices. The optimization model follows the approach put forth by Heitfield and Park¹ with an adjustment that provides a greater weighting in the model to futures contracts or OIS swaps transactions that have greater transactional activity. From this projected forward path for SOFR, implied one, three, six and twelve month settings can be produced by compounding the expected overnight rates over the set time horizon.

Principle 12 - Changes to the Methodology

In conjunction with the Oversight Committee, IBA will monitor and regularly review the Underlying Economic Reality that the benchmark seeks to represent as well as the Input Data and Methodology.

Proposed changes to the benchmark methodology will be managed in accordance with a published procedure and subject to discussion with appropriate regulators and the Oversight Committee.

IBA will prepare any consultation in conjunction with the Oversight Committee and include the rationale and procedures for making any change. IBA publishes consultation papers on our website and feedback is subject to detailed review by IBA and the respective oversight committee. IBA publishes feedback statements summarizing responses together with the consultation responses received unless confidentiality has been requested.

The Oversight Committees review and oversee the policies and oversee the implementation of any proposed change.

Principle 13 - Transition

IBA publishes a Changes and Cessation Procedure for each benchmark, including potential cessation triggers such as where the benchmark could no longer be produced in a manner that is representative of the Underlying Economic Reality, and how the policy would apply in respect of such triggers.

The Changes and Cessation Procedure operates alongside IBA's Consultation Policy. Potential changes to a benchmark are discussed with the FCA and the relevant Oversight Committee.

On its website, IBA includes notifications to users of its benchmarks of the need to take steps to ensure they have robust fall-back provisions in their contracts.

Principle 14 - Submitter Code of Conduct

¹ Heitfield, Erik, and Yang-Ho Park (2019). "Inferring Term Rates from SOFR Futures Prices," Finance and Economics Discussion Series 2019-014. Washington: Board of Governors of the Federal Reserve System, <https://doi.org/10.17016/FEDS.2019.014>



<p>This Principle is not applicable since the benchmark will not be based on submissions.</p>
<p>Principle 15 - Internal Controls over Data Collection</p>
<p>Data integrity is maintained through validation checks performed on the input data before being accepted into the benchmark calculation.</p> <p>The input data accepted into the benchmark calculation is then processed through the calculation steps detailed under Principle 11 above.</p> <p>IBA also performs surveillance over the input data to the benchmark calculation. Each benchmark administered by IBA has a separate and specifically tailored suite of system-generated surveillance alerts developed by IBA to capture and assess the distinctive characteristics of each benchmark and its respective underlying market. The surveillance team treats the alerts and takes follow up action as required.</p>
<p>D. Accountability</p>
<p>Principle 16 - Complaints Procedures</p>
<p>IBA's Complaints Policy sets out the procedure, including the handling of complaints by senior management of IBA not involved in the matter. The policy explicitly covers complaints regarding the Underlying Economic Reality, Methodology and IBA decisions.</p>
<p>Principle 17 - Audits</p>
<p>IBA's Audit and Risk Committee agrees each year's schedule of internal and external audits, reviews output from audits and assesses the implementation of any recommendations. IBA commissions annual audits of BMR compliance. IBA also commissions audits of compliance with the IOSCO Principles where the majority of the potential users are not based in the European Union and so may be less familiar with the BMR.</p>
<p>Principle 18 - Audit Trail</p>
<p>IBA keeps all relevant records in retrieval formats for at least five years.</p>
<p>Principle 19 - Cooperation with Regulatory Authorities</p>
<p>IBA responds promptly and openly to regulatory queries.</p> <p>IBA liaises co-operatively with the FCA with regular supervisory meetings/conference calls and frequent ad hoc telephone conversations.</p>



Disclaimers

Important Information

This tender response is not, and should not be construed as, an offer or agreement to provide the services described herein or to enter into any other transaction or arrangement. The provision of the services described herein is subject to further negotiation and discussion between the parties, appropriate due diligence, entering into satisfactory documentation and obtaining all relevant internal approvals.

This response does not constitute, and should not be taken as or relied upon as constituting, financial, investment, legal, tax, regulatory or any other form of advice, recommendation or assurance. IBA reserves the right to amend any aspect of this response or withdraw its participation in the tender process at any time. None of IBA, any of its officers, employees or agents will have any liability in connection with the submission or contents of this response, any use you make of it, any reliance you place upon it or any subsequent amendment or withdrawal. IBA makes no warranties or representations in, or in connection with, this response.

General

IBA is authorised and regulated by the Financial Conduct Authority. ICE, LIBOR, ICE LIBOR, ICE Swap Rate and ICE Benchmark Administration are trademarks of ICE and/or its affiliates. All rights in these trademarks are reserved and none of these rights may be used without a written license from ICE and/or its affiliates, as applicable.

[Intercontinental Exchange](#) (NYSE: ICE) is a Fortune 500 company formed in the year 2000 to modernise markets. ICE serves customers by operating the [exchanges](#), [clearing houses](#) and information services they rely upon to invest, trade and manage risk across global financial and commodity markets. A leader in market data, [ICE Data Services](#) serves the information and connectivity needs across virtually all asset classes. As the parent company of the [New York Stock Exchange](#), the company is the premier venue for raising capital in the world, driving economic growth and transforming markets.

Trademarks of ICE and/or its affiliates include Intercontinental Exchange, ICE, ICE block design, NYSE and New York Stock Exchange. Information regarding additional trademarks and intellectual property rights of Intercontinental Exchange, Inc. and/or its affiliates is located at:

<http://www.intercontinentalexchange.com/terms-of-use>.

Key Information Documents for certain products covered by the EU Packaged Retail and Insurance-based Investment Products Regulation can be accessed on the relevant exchange website under the heading "Key Information Documents (KIDS)."

Safe Harbour Statement under the Private Securities Litigation Reform Act of 1995 -- Statements in this press release regarding ICE's business that are not historical facts are "forward-looking statements" that involve risks and uncertainties. For a discussion of additional risks and uncertainties, which could cause actual results to differ from those contained in the forward-looking statements, see ICE's Securities and Exchange Commission (SEC) filings, including, but not limited to, the risk factors in ICE's Annual Report on Form 10-K for the year ended December 31, 2019, as filed with the SEC on February 6, 2020.