ICE Benchmark Administration™

ICE Swap Rate®

Feedback Statement on Consultation on Benchmarks Based on SOFR Swap Spreads and on €STR

February 2024

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Executive Summary

Background

ICE Swap Rate® (ISR) is recognised as the principal global benchmark for swap rates and spreads for interest rate swaps, representing the mid-price for interest rate swaps (the fixed leg) and spreads for interest rate swaps (the applicable mid-price minus a corresponding specified government bond yield), at particular times of day in USD, GBP and EUR in tenors ranging from 1 year to 30 years.

ICE Benchmark Administration Limited (IBA) is the benchmark administrator for ISR and is authorised and regulated by the Financial Conduct Authority (FCA) for the regulated activity of administering a benchmark.

IBA has consulted on aspects of its intention to extend the current suite of ISR benchmarks to include:

- ISR SOFR Swap Spreads, being the applicable swap mid-price minus a corresponding specified government bond yield; and
- ISR based on the euro short-term rate, €STR, published since October 2019 by the European Central Bank (ECB).

A questionnaire was made available for completion and IBA asked for feedback by 17.00 London time on Friday, December 01, 2023.

Responses

IBA is grateful for the feedback in response to the consultation.

IBA stated that completed questionnaires would be published unless the respondent requested confidentiality. IBA did not receive any non-confidential responses.

Conclusion

Following the feedback, IBA intends to launch ISR SOFR Swap Spreads and ISR based on €STR as soon as possible (around the end of Q1 2024), with the following attributes:

New ISR run	ISR SOFR Swap Spreads	ISR based on €STR
Publication time	11.15 New York	11.15 Frankfurt
Tenors	Two Years, Three Years, Five Years, Seven Years, Ten Years, Twenty Years and Thirty Years.	One Year, Two Years, Three Years, Four Years, Five Years, Six Years, Seven Years, Eight Years, Nine Years, Ten Years, Twelve Years, Fifteen Years, Twenty Years, Twenty Five Years and Thirty Years

The day counts and interest rate basis for the underlying interest rate swaps will be as follows:

Benchmark	Fixed Rate Leg Day-Count	Fixed Rate Leg Period	Floating Leg Interest Rate Basis
USD SOFR Spreads	Actual /360	Annual	SOFR compounded in arrears for twelve months using standard market conventions
EUR €STR 1100	Actual /360	Annual	€STR compounded in arrears for twelve months using standard market conventions

The launch date for ISR SOFR Swap Spreads and ISR based on €STR will be advised to ISR licence holders and will be posted on IBA's website at ICE Swap Rate.

About the ICE Swap Rate

Introduction

ICE Swap Rate® (ISR) is recognised as the principal global benchmark for swap rates and spreads for interest rate swaps, representing the mid-price for interest rate swaps (the fixed leg) and spreads for interest rate swaps (the applicable mid-price minus a corresponding specified government bond yield), at particular times of day in USD, GBP and EUR in tenors ranging from 1 year to 30 years.

ISR is used as the exercise value for cash-settled swaptions, for close-out payments on early terminations of interest rate swaps, for some floating rate bonds and for valuing portfolios of interest rate swaps.

ICE Benchmark Administration Limited (IBA) became the administrator of ISR in March 2015, and changed the methodology from a polled rate to one based on transaction quotes sourced from regulated, electronic trading venues. ISR was the first global benchmark to transition from a submission-based rate to IBA's patented methodology based on tradable quotes sourced from regulated electronic trading venues.

Methodology

The ISR methodology is based on finding the volume-weighted average mid-price (VWAMP) from theoretically filling a trade in Standard Market Size (SMS) on both the bid and offer side at the relevant time.

Movement interpolation was introduced into the ISR methodology in November 2017, where a tenor is interpolated from the day-to-day movement in adjacent tenors if certain conditions are fulfilled. The current Waterfall methodology was adopted in May 2020.

Each published ISR benchmark setting is currently calculated using eligible prices and volumes for specified interest rate derivative products, provided by trading venues in accordance with IBA's published Methodology.

The first level of the Waterfall (Level 1) uses eligible, executable prices and volumes provided by regulated, electronic, trading venues.

If these trading venues do not provide sufficient eligible input data to calculate a setting in accordance with Level 1 of the Methodology, then the second level of the Waterfall (Level 2) uses eligible dealer to client prices and volumes displayed electronically by trading venues.

If there is insufficient eligible input data to calculate a setting in accordance with Level 2 of the Methodology, then the third level of the Waterfall (Level 3) uses movement interpolation, where possible for applicable tenors, to calculate a setting.

Where it is not possible to calculate an ISR setting at Levels 1, 2 or 3 of the Waterfall, the ICE Swap Rate Insufficient Data Policy applies for that setting. This involves making a No Publication in respect of that ISR setting for that day.

IBA determines and publishes GBP SONIA Spread-Adjusted ISR settings in line with the methodology proposed by the Non-Linear Task Force of the Working Group on Sterling Risk-Free Reference Rates in its paper "Transition in Sterling Non-Linear Derivatives referencing GBP LIBOR ICE Swap Rate (ISR)".

IBA determines and publishes USD SOFR Spread-Adjusted ISR settings in line with the methodology proposed by the Alternative Reference Rates Committee in its white paper "[Suggested Fallback Formula for the USD LIBOR ICE Swap Rate]()".

Tenors

ISR is currently published as follows:

Benchmark run	Tenor(s)
EUR EURIBOR RATES 1100	One Year, Two Years, Three Years, Four Years, Five Years, Six Years, Seven Years, Eight Years, Nine Years, Ten Years, Twelve Years, Fifteen Years, Twenty Years, Twenty-five Years, Thirty Years
EUR EURIBOR RATES 1200	
GBP SONIA RATES 1100	
GBP SONIA Spread-Adjusted	
USD SOFR RATES 1100	One Year, Two Years, Three Years, Four Years, Five Years, Six Years, Seven Years, Eight Years, Nine Years, Ten Years, Fifteen Years, Twenty Years, Thirty Years
USD SOFR Spread-Adjusted 1100	

Calculation steps

The calculation of each ISR rate involves the following steps:

Waterfall Level 1

1. IBA collects tradeable bid and offer prices and volumes available on the central limit order books of regulated, electronic trading venues in respect of a two-minute window before the relevant ISR Rate calculation (e.g. 10:58 to 11:00).

2. The two-minute window is divided into 24 blocks of five seconds each and a random snapshot time is selected for each of these five-second blocks (i.e. 24 snapshots).

3. A synthetic order book is created at each snapshot time by combining and ranking (by price) the eligible bids and offers from each trading venue. These prices (and the associated volumes) are used to calculate the volume weighted bid (VWB) and the volume weighted offer (VWO) of the prices that would result from filling a hypothetical trade of Standard Market Size (SMS) [2] on each side of the market. A volume weighted average mid-price (VWAMP) is then calculated from the VWB and the VWO.

4. Snapshots with insufficient tradable volume to fill the SMS, or that contain crossed or zero-spread bid and offer prices, are not included in the calculation. Remaining snapshots are ranked in order of their VWAMPs and the snapshots with a VWAMP above the 75th percentile or below the 25th percentile are also discarded.

5. If at least six snapshots remain, the VWAMPs from these snapshots are quality-weighted based on the difference between the VWB and the VWO and averaged, in order to determine the applicable ISR Rate.

Waterfall Level 2

6. If fewer than six snapshots remain after Level 1, IBA will use dealer to client bid and offer prices and volumes displayed electronically by trading venues in respect of the same two-minute window to calculate the applicable ISR Rate.

7. The two-minute window is again divided into 24 blocks of five seconds each and a random snapshot time is selected for each block.

8. Where a trading venue provides prices from dealers for multiple categories of clients within a snapshot, IBA will select the prices from a single client category per dealer, based on the tightest spread and largest volume for each client category within the snapshot.

9. The selected, eligible bids and offers from each dealer from each trading venue are combined and ranked (by price) to create a synthetic order book at each snapshot time and any crossed bid and offer volume within the orderbook is discarded. The remaining prices and associated volumes are used to calculate the VWB and the VWO of the prices that would result from filling a hypothetical trade of SMS in the same manner as for Level 1, with the VWAMP also calculated in the same way.

10. Illiquid snapshots are excluded in the same manner as for Level 1, and remaining snapshots are ranked in order of their VWAMPs and the snapshots with a VWAMP above the 75th percentile or below the 25th percentile are also discarded.

11. If at least six snapshots remain, the applicable ISR Rate is determined as the quality weighted average of the applicable VWAMPs in the same manner as for Level 1.

Waterfall Level 3

12. If fewer than six snapshots remain after Level 2, IBA will apply movement interpolation (linear interpolation of the daily rate movement between adjacent tenors) to calculate the applicable ISR Rate, provided that such ISR Rate: a) was calculated at Level 1 or Level 2 of the Waterfall (i.e. was not interpolated) on the previous publication day; and b) has adjacent tenors that are one year shorter and one year longer than the tenor of such ISR Rate (thus movement interpolation can only apply to a limited number of ISR Rate tenors), each of which was not interpolated on both the previous and the current publication day.

Data collection windows and publication times

The data collection windows and publication times in the applicable time zone are shown below:

Benchmark run	Time zone	Data collection	Publication
EUR EURIBOR RATES 1100	Frankfurt	10.58 - 11.00	11.15
EUR EURIBOR RATES 1200	Frankfurt	11.58 - 12.00	12.15
GBP SONIA RATES 1100	London	10.58 - 11.00	11.15
GBP SONIA Spread-Adjusted	London	10.58 - 11.00	11.15

USD SOFR RATES 1100	New York	10.58 - 11.00	11.15
USD SOFR Spread-Adjusted 1100	New York	10.58 - 11.00	11.15

UK Benchmarks Regulation (BMR)

ISR is a Significant benchmark in terms of the UK Benchmarks Regulation (BMR).

The general requirements in Title II of the BMR and associated technical standards apply to ISR. These include requirements in respect of a benchmark's input data and methodology; governance and management of conflict of interest requirements; benchmark oversight; maintenance of Control and Accountability Frameworks; record-keeping; and reporting of infringements.

Oversight Committee

The ICE Swap Rate and Term Reference Rates Oversight Committee is comprised of an independent Chairperson and market representatives. The Oversight Committee monitors IBA's administration of the benchmark. The composition and terms of reference of the Committee are published here.

Further Information

Further information about ISR, including how to access the benchmark rates, can be found here.

Consultation Feedback and Conclusion

Feedback

IBA sought feedback on its intention to extend the current suite of ISR benchmarks to include:

- ISR SOFR Swap Spreads, being the applicable swap mid-price minus a corresponding specified government bond yield; and
- ISR based on the euro short-term rate, €STR, published since October 2019 by the European Central Bank (ECB).

ISR SOFR Swap Spreads

The consultation questionnaire asked the following:

Q1 What should be the publication time or times for ISR SOFR Swap Spreads? (e.g. 11.15 in New York)

Q2 What tenors would be appropriate for ISR SOFR Swap Spreads? (e.g. same as current ISR SOFR tenors or a subset)

Q3 Should the day counts and interest rate basis for the underlying interest rate swaps for ISR SOFR Swap Spreads be the same as for the current ISR SOFR runs? Yes/No

Q4 If your answer is No to Q3, what would you propose?

Q5 Please suggest when IBA should introduce ISR SOFR Swap Spreads (e.g. Earliest introduction: as soon as possible around the end of Q1 2024; Latest introduction: Q3 2024)

Q6 Please explain the rationale for your answer to Q5

Q7 Do you have any additional comments about the proposed introduction of ISR SOFR Swap Spreads? Yes/No

Q8 If your answer is Yes to Q7, please add your additional comments

IBA received useful feedback and now intends to launch ISR SOFR Swap Spreads as soon as possible (around the end of Q1 2024), with publication at 11.15 New York, which is the same time as IBA publishes the existing USD SOFR RATES 1100 run.

The tenors for ISR SOFR Swap Spreads will be Two Years, Three Years, Five Years, Seven Years, Ten Years, Twenty Years and Thirty Years. The day counts and interest rate basis for the underlying interest rate swaps for ISR SOFR Swap Spreads will be the same as for the current ISR SOFR.

ISR based on €STR

The consultation questionnaire asked the following:

Q9 What should be the publication time or times for ISR based on €STR? (e.g. 11.15 and/or 12.15 in Frankfurt)

Q10 What tenors would be appropriate for ISR based on €STR? (e.g. same as current EUR ISR tenors)

Q11 Should the day counts and interest rate basis for the underlying interest rate swaps for ISR based on €STR be the same as for the current EUR ISR runs? Yes/No

Q12 If your answer is No to Q11, what would you propose?

Q13 Please suggest when IBA should introduce ISR based on €STR (e.g. Earliest introduction: as soon as possible around the end of Q1 2024; Latest introduction: Q3 2024)

Q14 Please explain the rationale for your answer to Q13

Q15 Do you have any additional comments about the proposed introduction of ISR based on €STR? Yes/No

Q16 If your answer is Yes to Q15, please add your additional comments

Following the feedback, IBA intends to launch ISR based on €STR as soon as possible (around the end of Q1 2024), with publication at 11.15 Frankfurt, which is the same time as IBA publishes the existing EUR EURIBOR RATES 1100 run.

The tenors for ISR based on €STR will be the same time as for EUR EURIBOR RATES 1100 - i.e. One Year, Two Years, Three Years, Four Years, Five Years, Six Years, Seven Years, Eight Years, Nine Years, Ten Years, Twelve Years, Fifteen Years, Twenty Years, Twenty Five Years and Thirty Years. The day counts and interest rate basis for the underlying interest rate swaps for ISR based on €STR will be Fixed leg Ann Act360 vs Ann Act360 (daily compounded rate).

Launch timing

The launch date for ISR SOFR Swap Spreads and ISR based on €STR will be advised to ISR licence holders and will be posted on IBA's website at ICE Swap Rate.

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