



€STR Term Structure

Fallback in Euribor-linked contracts

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Transforming global markets

Overview of ICE Benchmark Administration

- ICE Benchmark Administration (IBA) was established in 2013 as an independent entity in order to provide important, widely-used benchmarks and key market services that help facilitate transparent and well functioning markets.
- IBA has been authorised under the EU Benchmarks Regulation (BMR) since April 2018. Benchmark administration is at the core of what IBA does. We do not operate any other businesses that could potentially conflict us.
- Today, IBA is responsible for the following benchmarks and services.

Benchmark	ICE LIBOR ¹	ICE Swap Rate ²	LBMA Gold Price ³	LBMA Silver Price ³	Tradeweb ICE U.S. Treasury Closing Prices
Awarded by / Collaboration with	 HM Treasury		 LBMA	 LBMA	
Market Service	ISDA SIMM Crowdsourcing Tool ⁴				
Awarded by					

¹ A widely-used global benchmark for short-term interest rates. IBA was awarded the administration by a committee appointed by HM Treasury.

² Formerly known as ISDAFIX, the global benchmark for interest rate swaps and spreads (USD, EUR, GBP), mainly used in cash-settled swaptions and CMS contracts.

³ Most widely used precious metals benchmarks for unallocated gold and silver delivered in London, determined via an auction mechanism.

⁴ A tool to aggregate and publish asset risk data for use in ISDA SIMM (Standard Initial Margin Methodology) margin calculations, for non-centrally cleared derivatives.

Term Risk-Free Rates – Two Approaches

- Realised risk-free rates (RFRs) sourced from published data over certain set time periods (e.g. one month, three months, etc.):
 - Simple average; and
 - Compounded.
- Forward-looking RFRs based upon contracts traded in financial markets that reference the new alternative rates that predict where the RFRs will average over certain set time periods.

Why Develop Forward-Looking Term Rates?

- Based on the summary responses of the second public consultation¹ that the working group on euro risk-free rates has published, the recommendations of the working group² and direct feedback received by IBA. It is IBA's view that many market participants value having a €STR-based forward-looking term structure as a **fallback in EURIBOR-linked contracts**³.
- This structure needs to be:
 - Compliant with the EU benchmarks regulation (BMR);
 - Based on transparent and regulated underlying derivatives markets with sufficient liquidity and data sources; and
 - Able to evolve with the market.

¹ www.ecb.europa.eu/paym/pdf/cons/euro_risk-free_rates/ecb_consultation_details_201812.en.pdf and www.ecb.europa.eu/paym/pdf/cons/euro_risfree_rates/ecb_summaryofresponses01_201902.en.pdf

² www.ecb.europa.eu/pub/pdf/annex/ecb.sp190314_annex_recommendation.en.pdf

³ www.emmi-benchmarks.eu/euribor-org/euribor-rates.html

Term Risk-Free Rates: Forward-Looking

Forward-Looking Term €STR Rates

- IBA is committed to the development of a Forward-Looking €STR Reference Rate in accordance with:
 - Principles laid out by the FSB / OSSG;
 - Goals put forth by the working group for euro risk-free rates; and
 - The BMR.
- IBA is following and will follow the guidance of the working group and the relevant sub-groups.
- IBA will leverage existing infrastructure¹ (e.g. ICE Term RFR Portal) and available benchmark methodologies (e.g. EUR ICE Swap Rate) to be able to produce term settings that are robust and have sufficient redundancies to ensure daily publication.
- IBA wants to work with a partner in the Eurozone in order to ensure a local presence and oversight.

¹ Formerly known as the EUR ISDAFIX, the global benchmark for interest rate swaps, mainly used in cash-settled swaptions and CMS contracts.

IBA's Risk-Free Rates Portal

Preliminary framework to help raise market awareness

Report Date
04-Mar-2019

Submit

ICE Term Risk Free Rates (RFR) Portal

Export to Excel Show Methodology

04-Mar-2019

Currency	RFR Benchmark	Last Setting (%)	Publication Date	Publication Time (London Time)
GBP	SONIA	0.7057	04-MAR-19	09:00
USD	SOFR	2.3800	04-MAR-19	13:00
JPY	TONA	-0.0490	04-MAR-19	01:00
EUR	€STR	-	-	-

GBP

	ICE RFR - Forward Looking		ICE RFR - Realised	
	Futures Derived (%)	Swaps Derived (%)	Average (%)	Compounded in Arrears (%)
1 Month	0.7106	-	0.7063	0.7065
3 Months	0.7145	-	0.7048	0.7054
6 Months	0.7328	-	0.7030	0.7042
Last Published (London Time)	04-MAR-19 11:56	-	04-MAR-19 11:56	04-MAR-19 11:56

ICE Term RFR Portal

- Launched: 10 October 2018
- Published daily
- 4.500+ unique views to date
- Working on incorporating €STR data
- Developing a Calculator for all currencies (realised calculations)

IBA's Proposed Approach – Waterfall Methodology

Longer term sustainable solution to produce IOSCO / BMR compliant term €STR settings

Three level process to ensure daily publication

1. Use €STR OIS Swaps tradable quotes to derive term €STR settings¹ using a methodology similar to the ICE Swap Rate Methodology:
 - Set window from which to take €STR data to build the benchmark²
 - Incorporate random data “snap shots” in order to enhance integrity
 - Use quality control checks to help ensure a representative benchmark
2. If there is **insufficient** liquidity in the €STR OIS market, IBA will use €STR Futures quotes from regulated Exchanges to derive the term €STR settings
 - Apply “step-function”³ model to futures data to produce the forward looking €STR rates
3. If there is **insufficient** liquidity in both €STR OIS and €STR futures markets, IBA will use €STR Futures settlement prices

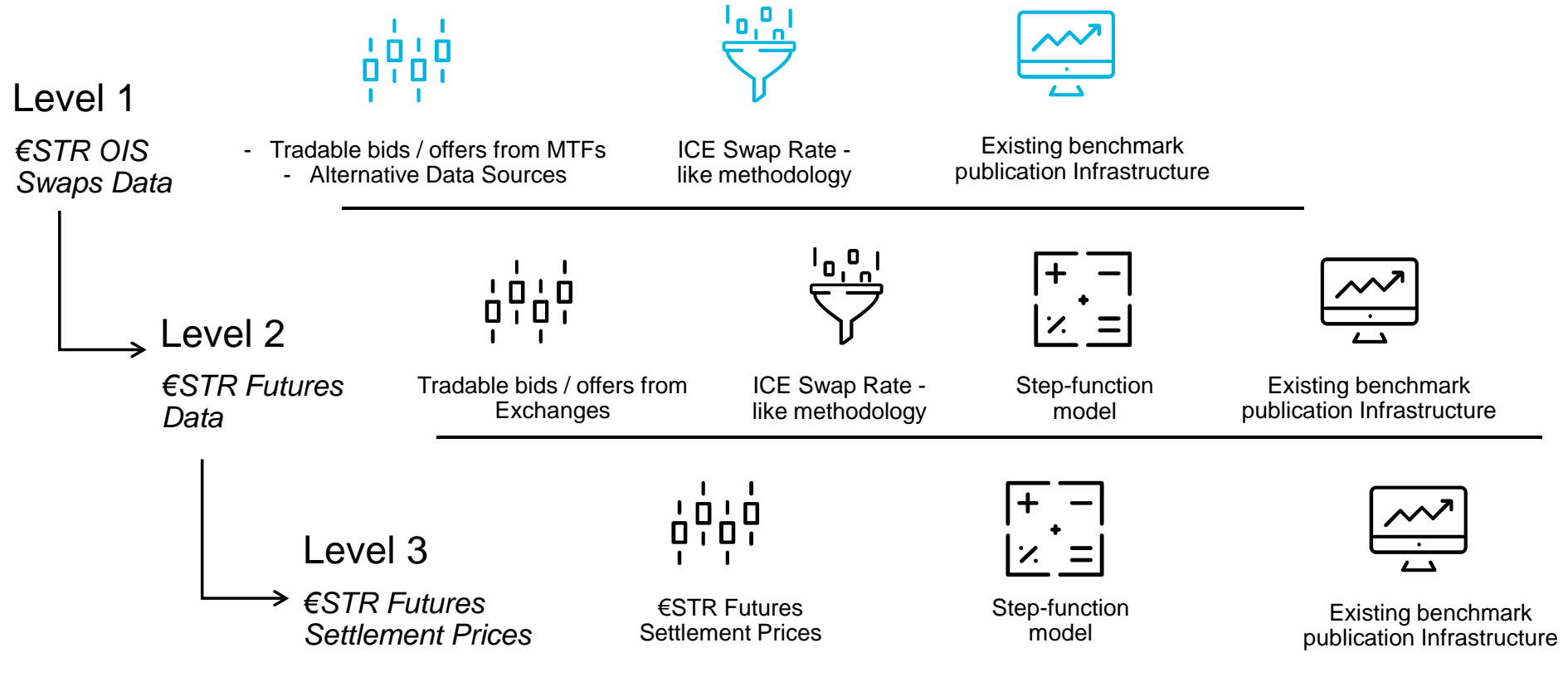
¹The ICE Swap rate methodology, from which the proposed steps above are derived, has been cited by the official sector: <https://www.fca.org.uk/insight/power-benchmark-ice-swap-rate>

²The duration of the window should be determined and periodically reviewed by the Oversight Committee, based on evolution of the liquidity in the underlying markets

³Step-function methodology: <https://www.theice.com/marketdata/reports/244> under ‘Show Methodology’

IBA's Proposed Approach – Waterfall Methodology

Longer term sustainable solution to produce an IOSCO / BMR compliant term €STR settings



Key Market and Process Considerations

Development needs and open questions



Liquidity of underlying market

Robust term rates would benefit from:

- Increased transparency in €STR swap prices and / or firm bid – ask levels on regulated venues
- Volumes in futures contracts



Trading window

IBA is seeking feedback from market participants on the length of the window to be used to determine the settings:

- Data over the course of an extended window (e.g. 8:00am – 10:30am CET)
- Point in time data (e.g. 10:30am +/- a few minutes)?



Publication process

IBA is seeking feedback on when the rate should be published (contingent on trading window decisions)

Governance and Evolution

IBA's commitment to stakeholders if selected to be part of a team producing benchmark term €STR rates



An Independent Benchmark Administrator

Experienced in financial services, regulation and systemically important benchmarks



A Term €STR Oversight Committee

To review the methodology, scope and definition of the rate, including the underlying market and usage



Defined Policies and Procedures

Applicable to all parties associated with the production of the benchmark

Any Benchmark Administrator and Oversight Committee associated with a term RFR will need to have the ability to assess and evolve the benchmark as the underlying market develops

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