REFINITIV BENCHMARK SERVICES (UK) LIMITED

REFINITIV TERM €STR

BENCHMARK STATEMENT

Effective Date: 26 September 2023

Last Review Date: 26 September 2023

Refinitiv Document Classification: Public
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1. INTRODUCTION

The Refinitiv Term €STR benchmark (“Benchmark”) is a daily benchmark for nearly risk-free interest rates for the euro over the relevant forward-looking tenors as implied by Overnight Index Swap (“OIS”) contracts that reference €STR.

Refinitiv tested the Benchmark initially as a prototype until 25 September 2023 and launched the Benchmark on 26 September 2023 as a regulated benchmark that can be referenced in financial contracts, financial instruments and by funds. As of 26 September 2023, Refinitiv Benchmark Services (UK) Limited (“RBSL” or the “Administrator”) has been the administrator of Refinitiv Term €STR.

Refinitiv Term €STR is a readily available data benchmark subject to the UK Benchmark Regulation1 (“BMR”). RBSL has adopted policies and procedures to comply with this Regulation. The Benchmark is a “non-significant” benchmark for the purposes of the BMR. The Benchmark is not determined using contributions of input data. The Benchmark does not have an ISIN. The Benchmark does not have any geographical boundaries.

Refinitiv Term €STR is calculated using a waterfall Methodology comprising two levels: “Level 1” and the “Integrated Fallback”. Input data for the calculation of Level 1 are (i) committed (i.e. executable) quotes for spot starting €STR OIS taken from a dealer-to-client trading platform (Tradeweb) and (ii) rates for transacted spot starting €STR OIS contracts taken from a Central Clearing Counterparty (“CCP”: LCH SwapClear). Input data for the Integrated Fallback level is compounded overnight €STR and historical Benchmark values.

Refinitiv Term €STR comprises five tenors: spot-week, 1 month, 3 months, 6 months and 12 months. The Benchmark is considered to be reliable provided that:

- there is sufficient activity on the dealer-to-client platform and CCP to allow RBSL to establish a representative market level for nearly risk-free euro interest rates when determining the Benchmark in accordance with Level 1 of the waterfall Methodology; and
- the underlying dealer-to-client platform and CCP are sufficiently representative of overall market activity in €STR OIS.

Both conditions should be satisfied in order for Refinitiv Term €STR to be a reliable term benchmark for nearly risk-free euro interest rates. The underlying dealer-to-client platform and CCP are representative of wider market activity in €STR OIS.

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1 Following the UK’s withdrawal from the EU and the end of the transition period, the BMR has been onshored and brought into UK law (UK BMR). The BMR is Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016.
This benchmark statement shall be reviewed at least every two years, or whenever there is a material change to either the type of the Benchmark or to the Methodology used in the determination of the Benchmark.

2. OVERVIEW OF THE METHODOLOGY

Input data for Level 1 of the Methodology is taken from a dealer-to-client trading platform (Tradeweb) and a CCP (LCH SwapClear).

Refinitiv Term €STR is calculated using a waterfall Methodology comprising two levels: Level 1 (subject to a threshold) and Integrated Fallback. If the threshold for Level 1 is not reached, the Benchmark is calculated using the Integrated Fallback. The Level 1 threshold has been calibrated to ensure a sufficient quantity of eligible input data. Any use of the Integrated Fallback level is indicated when the resulting Benchmark value is published.

Input data for each tenor for the calculation of Level 1 are committed (i.e. executable) quotes for spot starting €STR OIS contracts taken from a dealer-to-client trading platform (Tradeweb) and transacted spot starting €STR OIS contracts taken from a CCP (LCH SwapClear). Input data for the Integrated Fallback level is compounded overnight €STR published by the European Central Bank and historical Benchmark values published by RBSL.

For Level 1, the quotes from the dealer-to-client trading platform (Tradeweb) are captured once every 10 minutes between 09:00 and 18:00CET on the previous TARGET2 business day. Quotes are captured for spot starting €STR OIS in respect of the relevant tenors for the Refinitiv Term €STR benchmark subject to minimum size and maximum spread requirements. A unique mid-rate is calculated for each 10 minute capture by taking the median of all valid dealer quotes for that 10 minute capture.

Additionally, rates for transacted €STR OIS contracts from the CCP (LCH Swapclear) are collected subject to a minimum size requirement and a cap on the number of similar transactions for the same pair of counterparties for a given tenor. Each rate must be for an €STR OIS contract that is transacted between 09:00 and 18:00CET on the previous TARGET2 business day.

Both the unique 10 minute mid-rates and the transacted rates are then collected for each tenor and used to determine the Benchmark if a minimum threshold comprising three alternative criteria is satisfied. For each tenor, the collected rates are sorted and a percentage is trimmed from the highest rates and lowest rates. The Benchmark tenor is then calculated as mean of the remaining rates.

If the minimum threshold is not satisfied, the Benchmark is determined using the Integrated Fallback. The Integrated Fallback is calculated by determining the spread between the Benchmark on the previous TARGET2 business day and €STR compounded over 10 TARGET2 business dates to the previous TARGET2 business day. This spread is then added to €STR compounded over 10 TARGET2 business days to the current TARGET2 business day.
The waterfall is applied individually to each tenor of the Benchmark. Consequently, it is possible that different tenors are determined using different levels of the waterfall on the same day.

Refinitiv Term €STR is published at 11:00am CET on each TARGET2 Business Day. The Benchmark is published to 3 decimal places. Any use of the Integrated Fallback level is indicated when the resulting Refinitiv Term €STR benchmark value is published. If following publication a material error is identified in the input data or the determination of the Benchmark before 12:00pm CET, RBSL shall endeavour to refix the affected tenor or tenors of the Benchmark as soon as possible. No refix will be issued after 16:00CET on the day of publication.

A material error is one that results in a change of + or – 0.1 basis points to the published value of a Benchmark setting.

No models or method of extrapolation or interpolation are used by RBSL when determining Refinitiv Term €STR in accordance with Level 1 or the Integrated Fallback. The compound return of €STR over 10 TARGET2 business days is calculated when the Benchmark is determined in accordance with the Integrated Fallback. The Benchmark is not determined by means of a portfolio of constituents. No expert judgment or discretion is exercised by RBSL in the determination of Refinitiv Term €STR.
3. POTENTIAL LIMITATIONS OF THE BENCHMARK

The Benchmark is calculated using Level 1 of the Methodology subject to a threshold. If the threshold is not reached, the Benchmark is calculated using the Integrated Fallback level.

Determination of Refinitiv Term €STR using Level 1 of the waterfall is dependent on receiving sufficient input data from the dealer-to-client trading platform and the CCP for each Benchmark tenor. Technical problems or extreme market events may lead to insufficient input data as defined by the threshold for Level 1 of the waterfall, resulting in the determination of the Benchmark in accordance with the Integrated Fallback. RBSL considers that the dealer-to-client trading platform and the CCP provide input data that is representative of market activity among a wide range of market participants and that the input data avoids any concentration in sources of input data.

The Methodology of Refinitiv Term €STR is therefore resilient in the event of a lack of liquidity in the underlying market for €STR OIS. However, an extreme market event may lead to a loss of liquidity on the platforms that supply input data, preventing the determination of the Benchmark in accordance with Level 1 of the waterfall and resulting in the use of the Integrated Fallback in its determination.

4. METHODOLOGY CHANGES AND BENCHMARK CESSION

The Methodology of Refinitiv Term €STR has been adopted as being a reliable and resilient means for providing a benchmark that accurately represents nearly risk-free interest rates for the euro over the relevant forward-looking tenors.

The Benchmark Methodology is subject to a review in order to assess its ongoing fitness for purpose on at least an annual basis. In the event that the review leads RBSL to believe that a change to the Methodology is required and that the change is material in its effect on the Benchmark, a market consultation will be conducted in accordance with the RBSL Benchmark Methodology Change Policy in order to seek feedback from a representative range of stakeholders. RBSL will review all feedback and, if following such review it resolves to proceed with the proposed change or changes, will provide sufficient notice to users of the Benchmark before implementing such change or changes.

Circumstances beyond the control of RBSL may necessitate an immediate change to or the cessation of the Benchmark. Such circumstances include without limitation a loss of liquidity in the underlying €STR OIS markets.

In the event that an immediate change is required, RBSL will provide as much notice as is practicable and following such change will conduct an internal review of the Methodology.
If it becomes necessary to cease calculation and distribution of the Benchmark, RBSL will implement the RBSL Benchmark Cessation Policy. This includes conducting an analysis of the estimated usage of the Benchmark and, where feasible, the selection of a credible alternative benchmark. In all cases, RBSL will take all reasonable steps to ensure that all users and other stakeholders are made aware as soon as possible of any intention or possible necessity to cease the Benchmark.

Any material change to the Methodology or cessation of the Benchmark may have an impact on any financial contract or financial instrument that references the Benchmark or on the measurement of the performance of an investment fund that uses or refers to the Benchmark. A material change to the Methodology may lead to a change in the economic reality represented by the Benchmark and therefore to the economic exposure of any financial contract or financial instrument that references the Benchmark. A cessation of the Benchmark would require the selection of an alternative benchmark or the implementation of any fallback procedures for financial contracts or financial instruments that reference the Benchmark.

5. FURTHER INFORMATION

The Methodology of Refinitiv Term €STR provides additional information and definitions of key terms and is available at RBSL’s website.

For further information about Refinitiv Term €STR, please contact RBSL at index_queries@refinitiv.com and include “Refinitiv Term €STR” in the email subject line.
6. DISCLAIMER

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This disclaimer is subject change from time to time without notice from Refinitiv.
## ANNEX CLIMATE RELATED DISCLOSURES

### EXPLANATION OF HOW ESG FACTORS ARE REFLECTED IN THE BENCHMARK STATEMENT

<table>
<thead>
<tr>
<th>Item 1. Name of the benchmark administrator.</th>
<th>Refinitiv Benchmark Services (UK) Limited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 2. Type of benchmark or family of benchmarks.</td>
<td>Other</td>
</tr>
<tr>
<td>Item 3. Name of the benchmark or family of benchmarks.</td>
<td>Refinitiv Term €STR</td>
</tr>
<tr>
<td>Item 4. Are there in the portfolio of the benchmark administrator any EU Climate Transition Benchmarks, EU Paris-aligned Benchmarks, benchmarks that pursue ESG objectives or benchmarks that take into account ESG factors?</td>
<td>□ Yes ☒ No</td>
</tr>
<tr>
<td>Item 5. Does the benchmark or family of benchmarks pursue ESG objectives?</td>
<td>□ Yes ☒ No</td>
</tr>
<tr>
<td>Date on which information has been last updated and reason for the update:</td>
<td>26 September 2023 Benchmark launch date</td>
</tr>
</tbody>
</table>
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