

FTSE Term SONIA Methodology

Effective Date: 17 June 2024

Last Review Date: 21 March 2024

Document Classification: Public



Contents

Section 1 Introduction	3
Section 2 Management responsibilities	4
Section 3 FTSE Russell policies	6
Section 4 Input data	8
Section 5 Determination of the Benchmark	9
Section 6 Publication	11
Section 7 Further information	12
Section 8 Definition of key terms	13

Section 1

Introduction

1. Introduction

1.1 Overview

- 1.1.1 This document specifies the Methodology of the FTSE Term SONIA benchmark (“Benchmark”). It is published on the LSEG website¹ and is available on request.
- 1.1.2 The purpose of the FTSE Term SONIA benchmark is to represent the risk-free interest rate for Sterling over the relevant forward-looking tenors as implied by Overnight Index Swap (“OIS”) contracts that reference SONIA.

1.2 Description of the Benchmark

- 1.2.1 The FTSE Term SONIA benchmark comprises four tenors: 1 month, 3 months, 6 months and 12 months.
- 1.2.2 It is calculated using a waterfall methodology comprised of two levels (“Level 1” and “Level 2”) and a final integrated fallback level.
- 1.2.3 Input data for the calculation of Level 1 and Level 2 are committed (i.e. executable) quotes for spot starting SONIA Overnight Index Swap (“OIS”) contracts taken from, respectively, dealer-to-dealer Multilateral Trading Facilities (“MTFs”) and a dealer-to-client trading platform. The MTFs are the TP ICAP iSwap and Tradition Trad-X venues, and the dealer-to-client trading platform is Tradeweb. Input data for the integrated fallback level is compounded overnight SONIA and historical FTSE Term SONIA benchmark values.
- 1.2.4 The FTSE Term SONIA benchmark is published on every Business Day at 11:50am London Time.
- 1.2.5 The FTSE Term SONIA benchmark is calculated for Level 1 and Level 2 as the median of mid-rates taken from the MTFs and trading platform over a 20-minute window centred on 11:00am London time. The integrated fallback level is calculated by applying the historical spread of the FTSE Term SONIA benchmark to compounded overnight SONIA to an updated value of compounded overnight SONIA.

1.3 ESG factors

- 1.3.1 The FTSE Term Sonia benchmark does not take account of ESG factors in its index design.

¹ www.lseg.com/termsonia

Section 2

Management responsibilities

Management responsibilities

2.1 FTSE International Limited (FTSE)

2.1.1 FTSE is the benchmark Administrator² of the FTSE Term SONIA benchmark³.

2.1.2 As Administrator, FTSE International Limited is responsible for collecting input data, determining and publishing the Benchmark, and for all aspects of governance, oversight, compliance and integrity of the Benchmark.

2.2 Oversight Committee

2.2.1 The independent Oversight Committee is responsible for oversight of all aspects of the provision of the benchmark including the reviews of the benchmark definition and Methodology at least annually, overseeing any changes to the benchmark Methodology or cessation of the benchmark, and overseeing the Administrator's control framework, management and operation of the benchmark.

2.3 Benchmark manager

2.3.1 A benchmark manager is appointed from time to time by the Administrator who will be a subject matter expert responsible for interpreting the Methodology.

2.4 User feedback

2.4.1 FTSE International Limited shall communicate periodically with stakeholders in order to assess conditions in the market for risk-free interest rates for Sterling over the relevant Benchmark tenors as implied by OIS contracts that reference SONIA and to assess the ongoing fitness and suitability of the Methodology. Such feedback may be used as part of the periodic review of the Methodology.

2.5 Identification of potential limitations of the Benchmark

2.5.1 The ability of the MTFs and dealer-to-client trading platform to provide accurate input data relies on there being a liquid market in SONIA OIS contracts. If any ongoing constraint or fragmentation to liquidity in this market is identified or foreseen, the Administrator will consult with stakeholders as well as the independent Oversight Committee.

2.6 Review of the methodology and input data providers

2.6.1 The Administrator will carry out a review of the Methodology on at least an annual basis. Additional reviews may be conducted at the Administrator's discretion. Reviews will include an analysis of the underlying

² The term Administrator is used in this document in the same sense as it is defined in [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](#) (the European Benchmark Regulation) and [The Benchmarks \(Amendment and Transitional Provision\) \(EU Exit\) Regulations 2019](#) (the UK Benchmark Regulation).

³ Prior to December 2024, Refinitiv Benchmark Services (UK) Limited was the benchmark Administrator for FTSE Term SONIA. This document has been updated to reflect the change in Administrator but the last review date and effective date of this Methodology are as shown on the cover.

market the Benchmark seeks to represent, the availability and sufficiency of quotes from the MTFs (TP ICAP iSwap and Tradition Trad-X) and dealer-to-client trading platform (Tradeweb), and a review of other potential platforms.

- 2.6.2 The aim of the review will be to ensure that the Benchmark is still representative of the underlying market, that the input data from the MTFs and dealer-to-client trading platform sufficiently represent the underlying market, and that the current MTFs and dealer-to-client trading platform have been providing input data in an accurate and timely manner.
- 2.6.3 Additional reviews may be conducted at the Administrator's discretion. Such additional reviews may be triggered by (i) events affecting the Benchmark that are not optimally treated by the Methodology, (ii) events in the underlying market, (iii) developments in the source of input data used in the Benchmark determination and (iv) issues raised by stakeholders in the Benchmark.
- 2.6.4 The independent Oversight Committee will provide input into reviews and reviews are approved by the appropriate FTSE International Limited board committee.
- 2.6.5 Any proposals for significant amendments to this Methodology are subject to the FTSE Russell Policy for Benchmark Methodology Changes and will be subject to consultation with FTSE Russell advisory committees and other stakeholders if appropriate. The feedback from these consultations will be considered by the FTSE Russell Index Governance Board before approval is granted.
- 2.6.6 Back-testing shall take place at least at each annual review of the Methodology and following any material change of the Methodology. The Methodology shall include an assessment of the back-testing results, including processes to ensure that systemic anomalies highlighted by back-testing are identified and properly addressed. No significant issues were found under the back-test for the 12 month period to the date of the last annual review shown on the cover of this Methodology.

Section 3

FTSE Russell policies

3. FTSE Russell policies

This Methodology should be read in conjunction with the following policies and policy documents.

3.1 Policy for Benchmark Methodology Changes

3.1.1 Details of FTSE Russell's policy for making benchmark methodology changes can be accessed using the following link:

[Policy for Benchmark Methodology Changes.pdf](#)

3.2 FTSE Russell Governance Framework

3.2.1 To oversee its indices, FTSE Russell employs a governance framework that encompasses product, service and technology governance. The framework incorporates the London Stock Exchange Group's three lines of defence risk management framework and is designed to meet the requirements of the IOSCO Principles for Financial Benchmarks⁴, the European benchmark regulation⁵ and the UK benchmark regulation⁶. The FTSE Russell Governance Framework can be accessed using the following link:

[FTSE Russell Governance Framework.pdf](#)

3.3 FTSE Russell organisational policies

3.3.1 FTSE Term SONIA is subject to the following FTSE Russell organisational policies:

[Index Series Decommissioning Statement](#),

[Benchmark Administration Governance and Conflicts of Interest Management](#) and

[Policy for Benchmark Methodology Changes](#).

3.4 Refix policy

3.4.1 If following publication, a material error is identified in the input data or the determination of the Benchmark before 12:50pm London time, FTSE International Limited will refix the Benchmark.

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

3.4.3 Errors that do not result in an intraday refix will be reported quarterly to the independent Oversight Committee and published on the Administrator's public website.

⁴ IOSCO Principles for Financial Benchmarks Final Report, FR07/13 July 2013

⁵ 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

⁶ The Benchmarks (Amendment and Transitional Provision) (EU Exit) Regulations 2019

3.5 Complaints, Operational Enquiries and Price Challenges

- 3.5.1 FTSE Russell's complaints procedure can be accessed using the following link: [FTSE Russell Benchmark Determination Complaints Handling Policy](#)
- 3.5.2 A Price Challenge is a request from a user or a stakeholder to verify and confirm the accuracy of one or more of the published Benchmark rates, inputs to those rates (if publicly available), or whether a specific benchmark determination is representative of market value.
- 3.5.3 Operational enquiries do not meet the definition of a compliant and include Benchmark Price Challenges. However, FTSE Russell may decide to treat an operational enquiry or a series of operational enquiries as a formal complaint.
- 3.5.4 Operational enquires must be submitted to FTSE Russell by e-mail and should contain as much information as possible, including your name, your title, the institution you represent, your e-mail address and telephone number, to enable the operational enquiry to be investigated in a timely manner.
- 3.5.5 The e-mail address to raise any benchmark related price challenge and operational enquiries is: benchmarkoperations@lseg.com

Section 4

Input data

4.1 Level 1 input data

- 4.1.1 Input data for Level 1 of the Methodology is taken from the central limit order books (“CLOB”) of two dealer-to-dealer multilateral trading facilities (“MTFs”): TP ICAP iSwap and Tradition Trad-X. Input data comprises committed (i.e. executable) quotes from each CLOB captured every 30 seconds over a 20 minute window from 10:50am to 11:10am London time. The precise time of capture within each 30 second period varies. Quotes are captured 40 times for each MTF over the 20 minute window.
- 4.1.2 Quotes are captured for spot starting SONIA OIS in respect of the relevant tenors for the FTSE Term SONIA benchmark.
- 4.1.3 The MTFs have been selected as sources of input data as they involve a representative number of dealers active in the market for SONIA OIS contracts. The Level 1 input data is therefore sufficient to represent accurately and reliably the market for SONIA OIS contracts.

4.2 Level 2 input data

- 4.2.1 Input data for Level 2 of the Methodology is taken from a dealer-to-client trading platform: Tradeweb. Input data comprises quotes from each dealer captured every 30 seconds over a 20 minute window from 10:50am to 11:10am London time. The precise time of capture within each 30 second period varies. Quotes are captured 40 times over the 20 minute window.
- 4.2.2 Quotes are captured for spot starting SONIA OIS in respect of the relevant tenors for the FTSE Term SONIA benchmark.
- 4.2.3 The dealer-to-client platform has been selected as a source of input data as it involves a representative number of dealers active in the market for SONIA OIS contracts. The Level 2 input data is therefore sufficient to represent accurately and reliably the market for SONIA OIS contracts.

4.3 Integrated fallback level input data

- 4.3.1 Input data for the integrated fallback level comprises overnight SONIA published daily by the Bank of England and historical values of the FTSE Term SONIA benchmark.

Section 5

Determination of the Benchmark

5.1 Waterfall methodology

- 5.1.1 The FTSE Term SONIA benchmark is calculated using Level 1 of the Methodology subject to a threshold. If the threshold is not reached, the Benchmark is calculated using Level 2 of the Methodology subject to a second threshold. If the second threshold is not met, the Benchmark is calculated using the integrated fallback level. The Level 1 and Level 2 thresholds have 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.
- 5.1.2 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.

5.2 Level 1 determination

- 5.2.1 Every 30 seconds between 10:50am and 11:10am London time, the committed quotes from the CLOBs of two dealer-to-dealer MTFs (TP ICAP iSwap and Tradition Trad-X) are captured. For each set of captured quotes, volume weighted bid and volume weighted offer rates are calculated using a standard clearing notional amount that is specified for each tenor.
- 5.2.2 A mid-rate is calculated using the volume weighted bid and offer rates, resulting in up to 40 mid-rates for each of the two MTFs. The FTSE Term SONIA benchmark is then determined as the median rate of the mid-rates.
- 5.2.3 In order for a mid-rate to be valid, the volumes of the captured quotes must exceed the standard clearing notional amount on both the bid side and the offer side, and the spread between the volume weighted bid and volume weighted offer rates must be less than or equal to a maximum spread that is specified for each tenor.
- 5.2.4 The threshold for use of Level 1 in the determination of the FTSE Term SONIA benchmark is that at least 36 valid mid-rates are available.

5.3 Level 2 determination

- 5.3.1 Every 30 seconds between 10:50am and 11:10am London time, the quotes from a dealer-to-client trading platform (Tradeweb) are captured. In order to be valid, each bid rate to offer rate must be less than or equal to a maximum spread that is specified for each tenor, and the volume on the bid and offer rate must be greater than or equal to a minimum notional amount.
- 5.3.2 A mid-rate is calculated using each valid bid rate and offer rate pair. The FTSE Term SONIA benchmark is then determined as the median rate of the mid-rates.
- 5.3.3 The threshold for use of Level 2 in the determination of the FTSE Term SONIA benchmark is that at least 100 valid mid-rates are available and that these rates comprise at least a minimum number of valid midrates from each of a minimum number of separate dealers.

5.4 Integrated fallback level determination

- 5.4.1 If the thresholds for use of Level 1 and Level 2 of the waterfall are not reached, the FTSE Term SONIA benchmark is determined in accordance with the integrated fallback level.
- 5.4.2 Under the integrated fallback level, the spread between the FTSE Term SONIA benchmark on the previous business day and overnight SONIA compounded to the previous business day is applied to SONIA compounded to the day of the Benchmark determination.
- 5.4.3 On each day t , the spread for Benchmark tenor f , denoted $S(t, f)$ is calculated as

$$S(t, f) = RTS(t - 1, f) - \frac{365}{d(t_0, t - 1)} \cdot \left[\prod_{\tau=t_0}^{t-2} \left(1 + \frac{d(\tau, \tau + 1) \cdot R(\tau)}{365} \right) - 1 \right]$$

where $RTS(t - 1, f)$ is the FTSE Term SONIA benchmark published on the preceding Business Day ($t - 1$) for tenor f , $R(\tau)$ is the SONIA rate published by the Bank of England in respect of the day τ , $d(\tau, \tau + 1)$ is the number of calendar days from τ to $\tau + 1$ and $d(t_0, t - 1)$ is the number of calendar days from t_0 to $t - 1$. The product is over all Business Days from t_0 to $t - 2$ where t_0 is 30 calendar days before $t - 2$. If t_0 does not fall on a Business Day, it is moved back to the first preceding Business Day.

- 5.4.4 The integrated fallback for the Benchmark with tenor f on day t , denoted $IF(t, f)$ is then calculated as

$$IF(t, f) = S(t, f) + \frac{365}{d(t_1, t)} \cdot \left[\prod_{\tau=t_1}^{t-1} \left(1 + \frac{d(\tau, \tau + 1) \cdot R(\tau)}{365} \right) - 1 \right]$$

The product is over all Business Days from t_1 to $t - 1$ where t_1 is 30 calendar days before $t - 1$. If t_1 does not fall on a Business Day, it is moved back to the first preceding Business Day.

5.5 Exercise of expert judgment by the administrator

- 5.5.1 The Administrator, FTSE International Limited, will not exercise expert judgment in the determination of the FTSE Term SONIA benchmark.

Section 6

Publication

6.1 Publication

6.1.1 The FTSE Term SONIA benchmark is published at 11:50am London time on each Business Day. The benchmark is published to 4 decimal places. Any use of the integrated fallback level is indicated when the resulting FTSE Term SONIA benchmark value is published.

6.1.2 The Benchmark will be made available on the following RICs:

- 1-month: <GBPTRR1M=RFTB>
- 3-month: <GBPTRR3M=RFTB>
- 6-month: <GBPTRR6M=RFTB>
- 12-month: <GBPTRR1Y=RFTB>

6.1.3 The benchmark is also available via additional LSEG products including Elektron, DataScope and Workspace, via third party data vendors and is published on a delayed basis at www.lseg.com/termsonia.

6.2 Delayed publication

The Administrator, FTSE International Limited, may at its discretion delay publication of the FTSE Term SONIA benchmark in the event that technical difficulties are preventing receipt of input data or if FTSE International Limited has reason to believe that either the input data or the determination of the Benchmark includes a potential error. In such cases, all reasonable efforts will be made to publish the Benchmark at the earliest opportunity.

Section 7

Further information

7.1 Third party disclaimer

7.1.1 The “SONIA” mark is used under licence from the Bank of England (the benchmark administrator of SONIA), and the use of such mark does not imply or express any approval or endorsement by the Bank of England. “Bank of England” and “SONIA” are registered trademarks of the Bank of England.

7.2 Further information

7.2.2 Further information regarding FTSE Term SONIA is available on the [FTSE Term SONIA website](#).

Section 8

Definition of key terms

Capitalised terms used in this document but not otherwise defined are defined in the following table.

Key Term	Definition
Administrator	Administrator is used in this document in the same sense as it is defined in the Benchmark Regulation
Benchmarks Regulation	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 (the European Benchmark Regulation) and The Benchmarks (Amendment and Transitional Provision) (EU Exit) Regulations 2019 (the UK Benchmark Regulation)
Business Day	Any day on which banks in London are open for business
Methodology	The written rules and procedures according to which information is collected and the Benchmark is determined
SONIA	The overnight SONIA benchmark administered and published daily by the Bank of England

Disclaimer

© 2024 London Stock Exchange Group plc and its applicable group undertakings ("LSEG"). LSEG includes (1) FTSE International Limited ("FTSE"), (2) Frank Russell Company ("Russell"), (3) FTSE Global Debt Capital Markets Inc. and FTSE Global Debt Capital Markets Limited (together, "FTSE Canada"), (4) FTSE Fixed Income Europe Limited ("FTSE FI Europe"), (5) FTSE Fixed Income LLC ("FTSE FI"), (6) FTSE (Beijing) Consulting Limited ("WOFE") (7) Refinitiv Benchmark Services (UK) Limited ("RBSL"), (8) Refinitiv Limited ("RL") and (9) Beyond Ratings S.A.S. ("BR"). All rights reserved.

FTSE Russell® is a trading name of FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, WOFE, RBSL, RL, and BR. "FTSE®", "Russell®", "FTSE Russell®", "FTSE4Good®", "ICB®", "Refinitiv", "Beyond Ratings®", "WMR™", "FR™" and all other trademarks and service marks used herein (whether registered or unregistered) are trademarks and/or service marks owned or licensed by the applicable member of LSEG or their respective licensors and are owned, or used under licence, by FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, WOFE, RBSL, RL or BR. FTSE International Limited is authorised and regulated by the Financial Conduct Authority as a benchmark administrator. Refinitiv Benchmark Services (UK) Limited is authorised and regulated by the Financial Conduct Authority as a benchmark administrator.

All information is provided for information purposes only. All information and data contained in this publication is obtained by LSEG, from sources believed by it to be accurate and reliable. Because of the possibility of human and mechanical inaccuracy as well as other factors, however, such information and data is provided "as is" without warranty of any kind. No member of LSEG nor their respective directors, officers, employees, partners or licensors make any claim, prediction, warranty or representation whatsoever, expressly or impliedly, either as to the accuracy, timeliness, completeness, merchantability of any information or LSEG Products, or of results to be obtained from the use of LSEG products, including but not limited to indices, rates, data and analytics, or the fitness or suitability of the LSEG products for any particular purpose to which they might be put. The user of the information assumes the entire risk of any use it may make or permit to be made of the information.

No responsibility or liability can be accepted by any member of LSEG nor their respective directors, officers, employees, partners or licensors for (a) any loss or damage in whole or in part caused by, resulting from, or relating to any inaccuracy (negligent or otherwise) or other circumstance involved in procuring, collecting, compiling, interpreting, analysing, editing, transcribing, transmitting, communicating or delivering any such information or data or from use of this document or links to this document or (b) any direct, indirect, special, consequential or incidental damages whatsoever, even if any member of LSEG is advised in advance of the possibility of such damages, resulting from the use of, or inability to use, such information.

No member of LSEG nor their respective directors, officers, employees, partners or licensors provide investment advice and nothing in this document should be taken as constituting financial or investment advice. No member of LSEG nor their respective directors, officers, employees, partners or licensors make any representation regarding the advisability of investing in any asset or whether such investment creates any legal or compliance risks for the investor. A decision to invest in any such asset should not be made in reliance on any information herein. Indices and rates cannot be invested in directly. Inclusion of an asset in an index or rate is not a recommendation to buy, sell or hold that asset nor confirmation that any particular investor may lawfully buy, sell or hold the asset or an index or rate containing the asset. The general information contained in this publication should not be acted upon without obtaining specific legal, tax, and investment advice from a licensed professional.

Past performance is no guarantee of future results. Charts and graphs are provided for illustrative purposes only. Index and/or rate returns shown may not represent the results of the actual trading of investable assets. Certain returns shown may reflect back-tested performance. All performance presented prior to the index or rate inception date is back-tested performance. Back-tested performance is not actual performance, but is hypothetical. The back-test calculations are based on the same methodology that was in effect when the index or rate was officially launched. However, back-tested data may reflect the application of the index or rate methodology with the benefit of hindsight, and the historic calculations of an index or rate may change from month to month based on revisions to the underlying economic data used in the calculation of the index or rate.

This document may contain forward-looking assessments. These are based upon a number of assumptions concerning future conditions that ultimately may prove to be inaccurate. Such forward-looking assessments are subject to risks and uncertainties and may be affected by various factors that may cause actual results to differ materially. No member of LSEG nor their licensors assume any duty to and do not undertake to update forward-looking assessments.

No part of this information may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of the applicable member of LSEG. Use and distribution of LSEG data requires a licence from LSEG and/or its licensors.

About FTSE Russell

FTSE Russell is a leading global provider of benchmarks, analytics and data solutions with multi-asset capabilities, offering a precise view of the markets relevant to any investment process. For over 30 years, leading asset owners, asset managers, ETF providers and investment banks have chosen FTSE Russell indexes to benchmark their investment performance and create investment funds, ETFs, structured products and index-based derivatives. FTSE Russell indexes also provide clients with tools for performance benchmarking, asset allocation, investment strategy analysis and risk management.

To learn more, visit lseg.com/en/ftse-russell; email info@ftserussell.com; or call your regional Client Service team office:

EMEA +44 (0) 20 7866 1810

North America +1 877 503 6437

Asia-Pacific

Hong Kong +852 2164 3333

Tokyo +81 3 6441 1430

Sydney +61 (0)2 7228 5659



**FTSE
RUSSELL**
An LSEG Business