

REFINITIV TERM SONIA

CONSULTATION PAPER

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1. **RESPONDING TO THIS CONSULTATION**

Introduction

Refinitiv is committed to transparency when reviewing benchmark methodologies or considering material changes to its benchmarks. To that end, Refinitiv is seeking feedback from interested parties on key features of the recently introduced Refinitiv Term SONIA prototype. Refinitiv invites comments on all proposals put forward in this paper and in particular on the specific questions summarised in the appendix. Please structure your comments to:

- Respond to the questions stated
- Contain a clear rationale that includes evidence to support the views expressed
- Describe any alternative choices that Refinitiv should consider.

Submission of responses

Please email your comments to <u>index_queries@refinitiv.com</u> with 'Refinitiv Term SONIA Consultation' in the subject by no later than 17:00 UK time on October 16, 2020. Please note that comments submitted after this deadline or submitted via other means may not be processed.

Handling of responses

All responses to this consultation will be treated as confidential and will not be made public.

2. EXECUTIVE SUMMARY

On July 20, 2020 Refinitiv started production of a Term SONIA prototype. This is a new reference rate designed to support users of GBP LIBOR transition to alternative rates. Unlike central bank-administered risk-free reference rates such as SONIA, Term SONIA is forward-looking and therefore from an operational perspective is more akin to LIBOR without the credit spread element.

The Refinitiv Term SONIA prototype comprises four tenors: 1 month, 3 months, 6 months and 12 months and is published from Monday to Friday at 11:50 am UK Time, subject to UK bank holidays. It is calculated using a waterfall methodology composed of two levels (Level 1 and Level 2) and a final integrated fallback level. Input data for the calculation of Level 1 and Level 2 are executable quotes for spot starting SONIA Overnight Index Swap (OIS) contracts taken from dealer-to-dealer Multilateral Trading Facilities (MTFs) and a dealer-to-client trading platform. Input data for the integrated fallback level is compound overnight SONIA and historical Refinitiv Term SONIA prototype values.

The Refinitiv Term SONIA prototype is provided for informational purposes only. It is not intended to be construed or used as a benchmark whether as a reference rate in financial instruments or financial contracts or for valuation and pricing activities (see disclaimer on page 2) until a production version is made available. We anticipate the production version will be available in Q4 2020. The purpose of the prototype is to enable market participants to assess its behaviour over a period of several months. Pending feedback from market participants during the prototype phase, Refinitiv will finalise the methodology and release Refinitiv Term SONIA as a benchmark subject to relevant benchmark regulations.

The purpose of this consultation paper is to collect feedback on the data sources, methodology and distribution of the prototype rate in order to identify any opportunities to more closely align the rate with the needs of market participants. All feedback received in compliance with Section 1 will be evaluated and changes to the Refinitiv SONIA Term may be made in response to the feedback received.

3. INPUT DATA

Level 1 Input Data

In line with findings from the 2018 Working Group on Sterling Risk-Free Reference Rates Consultation on Term SONIA Reference Rates, input data for Level 1 of the Methodology is taken from the Central Limit Order Books (CLOB) of dealer-to-dealer MTFs. Following an evaluation of data available, Refinitiv identified two dealer-to-dealer MTFs that have pricing information that is representative of the market.

Input data comprises committed (i.e. executable) quotes for spot starting SONIA OIS in respect of the relevant tenors for the Refinitiv Term SONIA prototype. For each CLOB, quotes are captured every 30 seconds over a 20-minute window from 10:50 am to 11:10 am UK time. Quotes are captured 40 times for each MTF.

Level 2 input data

Input data for Level 2 of the methodology is taken from a dealer-to-client trading platform. Input data comprises spot starting SONIA OIS quotes from each dealer captured over the same period and frequency as used in Level 1.

Level 3 Input data (currently out of scope)

Refinitiv evaluated the inclusion of futures data for Level 3 of the methodology and concluded that due to the persistent Level 2 data and low level of liquidity in SONIA futures the data would do little to improve the robustness of the prototype rate. Even during periods of high volatility such as on March 12, 2020 when the S&P 500 suffered its fifth worst day on record, the Refinitiv Term SONIA would have been able to publish a rate using Level 2 input data. In addition, a review of the futures market highlights that very little of the liquidity has migrated from 3M Short Sterling into 3M SONIA creating questions whether the market depth is sufficient to generate a robust prototype Term SONIA.

As liquidity develops in the futures market, Refinitiv will revisit this decision to determine whether futures data should be included in the Refinitiv Term SONIA Methodology. In keeping with Refinitiv's commitment to transparency when reviewing benchmarks including the Refinitiv Term SONIA prototype, Refinitiv would seek feedback from interested parties when considering the addition of input data from SONIA futures as a distinct level in the Methodology's waterfall.

Integrated fallback level input data

Input data for the integrated fallback level comprises overnight SONIA published daily by the Bank of England and historical values of the Refinitiv Term SONIA prototype. This ensures that the Refinitiv Term SONIA can be published in almost all circumstances.

Questions

- Refinitiv has concluded that two dealer-to-dealer MTFs have pricing information that is most representative of the market. Are
 there any alternative sources that have sufficient liquidity from which to calculate the rate and therefore Refinitiv should evaluate
 for inclusion in Level 1 of the waterfall methodology? Please share any supporting evidence.
- 2. Following analysis Refinitiv has concluded that the institutional spot starting SONIA OIS market is the best Level 2 input data source (i.e. alternative data in the event there is insufficient liquidity in the interdealer market). Do you agree?
- 3. Refinitiv has concluded that given the current liquidity, futures data would not improve the robustness of the rate. Do you believe, given the current liquidity, that futures data should be included in the methodology? If so, please share detail on how you'd prefer it to be incorporated.

4. DETERMINATION OF THE PROTOTYPE

Waterfall methodology

The Refinitiv Term SONIA prototype is calculated using Level 1 of the Methodology subject to a threshold. If the threshold is not reached, the prototype is calculated using only Level 2 of the Methodology subject to a second threshold. If the second threshold is not met, the prototype is calculate using only 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 Refinitiv Term SONIA prototype value is published.

Level 1 determination

Committed quotes are captured between 10:50 am and 11:10 am UK time. The 20-minute collection window is designed to achieve the optimum balance to produce a rate that reflects the market conditions at a particular point in time while it is a wide enough window to minimise any risk of short-term price movements negatively impacting the rate. The precise time of capture within each 30-second period varies, enhancing the robustness of the methodology further. 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.

A mid-rate is calculated using the volume-weighted bid and volume-weighted offer rates, resulting in up to 40 mid-rates for each of the two MTFs. The Refinitiv Term SONIA prototype is then determined as the median rate of the mid-rates. Use of the median supports stability of the prototype rate since more than half of the mid-rates would need to be impacted by an event to influence the published rate.

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. For additional robustness and resilience, these parameters are not disclosed.

The threshold for use of Level 1 in the determination of the Refinitiv Term SONIA prototype is that at least 36 valid mid-rates (out of a possible 80) are available. This amount permits Refinitiv to publish Term SONIA in the event a single venue has a technical outage during the collection window.

Level 2 determination

In order for the quotes from the dealer-to-client trading platform 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.

A mid-rate is calculated using each valid bid rate and offer rate pair. The Refinitiv Term SONIA prototype is then determined as the median rate of the mid-rates.

The threshold for use of Level 2 in the determination of the Refinitiv Term SONIA prototype is that at least 100 valid mid-rates are available and that these rates comprise at least 10 valid mid-rates from each of at least four separate dealers. This approach ensures consistency of quote data across multiple dealers during periods of reduced liquidity in the interdealer market.

Integrated fallback level determination

If the thresholds for use of Level 1 and Level 2 of the waterfall are not reached, the Refinitiv Term SONIA prototype is determined in accordance with the integrated fallback level.

Under the integrated fallback level, the spread between the Refinitiv Term SONIA prototype on the previous business day and overnight SONIA compounded to the previous business day is applied to compound SONIA to the day of the prototype determination.

Exercise of expert judgment by the administrator

The administrator, Refinitiv, will not exercise expert judgment in the determination of the Refinitiv Term SONIA.

Questions

- 1. Refinitiv has concluded that a 20-minute collection window provides the optimum balance between capturing market conditions at a particular point in time and minimising the risk of being impacted by short-term price movements. Do you believe an alternative collection window could further improve the rate? If so, please provide details of the time window and rationale.
- 2. Data is sampled at a customised time within each 30-second interval. Do you believe there should be any adjustments to the sampling frequency? Please provide supporting rationale.
- 3. Refinitiv conducts extensive quality checks on the input data and has robustness and resilience (i.e. anti-gaming) features. These include minimum-volume checks, bid-offer spread checks, variable data capture within 30-second snaps and use of median to calculate the average. Are there any other robustness and resilience features that you require?
- 4. In relation to the integrated fallback level, should SONIA be compounded over the same period for each tenor or a different period to reflect each tenor?
- 5. In relation to the integrated fallback level, what do you believe is the optimal compound period (for all tenors or for each depending on your response to question 5 immediately above)?
- 6. In relation to the integrated fallback level, compounding SONIA reduces the volatility of overnight SONIA, but also understates legitimate market moves (for example in response to a change in the Bank of England rate). Given that updating compounded SONIA to T and applying the T-1 spread will result in an integrated fallback value that is very similar to the T-1 benchmark fixing, would it be optimal for the integrated fallback to republish the previous day's rate or apply the change in compounded SONIA to the previous day's date?

5. PUBLICATION, DISTRIBUTION, REFIX POLICY AND HISTORICAL PERFORMANCE

Publication

The Refinitiv Term SONIA prototype is published at 11:50 am UK time from Monday to Friday. The prototype is currently published to five decimal places but Refinitiv believes it may be more appropriate to publish the rate to four decimal places in order to align with standard market convention. Any use of the integrated fallback level is indicated when the resulting Refinitiv Term SONIA prototype value is published.

The prototype is made available at no charge through all core Refinitiv products, including desktops such as Eikon and Refinitiv Workspace, as well as feed products such as Elektron and DataScope. The rate is accessible using the following Refinitiv RICs:

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

The prototype is also available by searching in Eikon for 'Term SONIA' or through the Eikon IBOR transition app. The prototype is published at <u>www.refinitiv.com/termsonia</u> where it is available free of charge. The historical time series starts on July 1, 2020.

Refix policy

If following publication a material error is identified in the input data or the determination of the prototype before 12:50 pm UK time, the administrator, Refinitiv, will refix the prototype.

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

Delayed publication

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

Historical performance

Chart 1 below illustrates that from July 1 to August 31, 2020 all four tenors of the Refinitiv Term SONIA performed in line with expectations. Each tenor consistently performed in line with the end-of-day indicative bid-sk spread for GBP SONIA OIS.

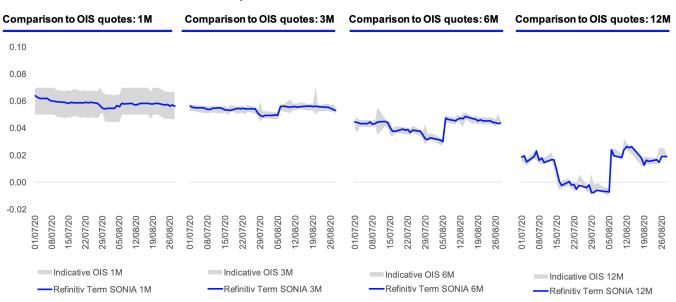


Chart 1: Refinitiv Term SONIA vs. indicative OIS quotes

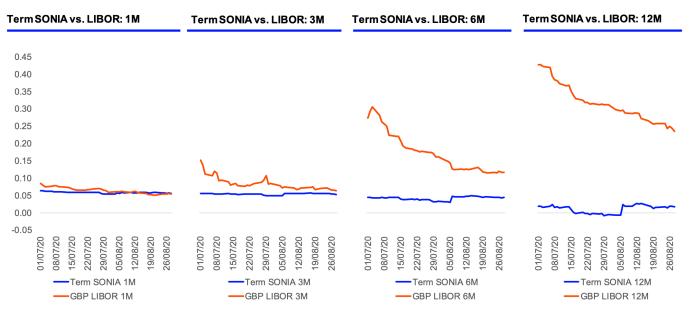
The Level 2 data aligns very closely with Level 1 data. Chart 2 below shows a comparison of the Refinitiv Term SONIA rate generated using Level 1 and Level 2 of the waterfall. The average of the absolute difference between the two levels is low and significantly less than 0.1bps for all four tenors.



Chart 2: Refinitiv Term SONIA Level 1 vs. Level 2 output

Refinitiv Term SONIA behaves differently from GBP LIBOR since it is a risk-free rather than interbank rate. Chart 3 below shows that for a period of two months the spread between Refinitiv Term SONIA and GBP LIBOR fluctuated and was most material for longer tenors.

Chart 3: Refinitiv Term SONIA vs. GBP LIBOR



Questions

- 1. Would you prefer Refinitiv Term SONIA to be published to four or five decimal places?
- 2. Refinitiv Term SONIA is available through many distribution channels including Workspace, Eikon, Elektron, DataScope and the Refinitiv website. Are there any other applications or delivery mechanisms (either Refinitiv or third parties) that you would like to receive Refinitiv Term SONIA through?
- 3. The historical time-series of the Refinitiv Term SONIA started on July 1, 2020. Please provide details on the length of time-series required.
- 4. Do you have any concerns with the historical performance of Refinitiv Term SONIA? Please provide details.
- 5. Are there any tools or support from Refinitiv that you'd like to aid the migration process?
- 6. Do you require a credit spread-adjusted version of Refinitiv Term SONIA? If so, do you have any preference on the methodology for calculating the credit spread adjustment (e.g. via the ISDA historical median approach)?
- 7. Are there any benchmarks or derived data products that you would like to see Refinitiv Term SONIA integrated into?
- 8. Are there any additional tenors that you require?
- 9. Do you require any changes to the publication time of Refinitiv Term SONIA?
- 10. Would you prefer the integrated fallback to be published as a separate benchmark (i.e. accessible via independent identifier and license agreements)?

APPENDIX: LIST OF QUESTIONS

Input data

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Publication, distribution, refix policy and historical performance

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REFINITIV® DATA IS JUST THE BEGINNING®

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