

Consultation on Term SONIA Reference Rates – Summary of Responses

The Working Group on Sterling Risk-Free Reference Rates

Term Sonia Reference Rates Consultation - Summary of Responses¹

The Working Group on Sterling Risk-Free Reference Rates (RFRWG) issued a consultation on forward-looking Term Sonia Reference Rates (TSRR) on 17 July 2018. The consultation ran until 26 October 2018² and attracted 45 responses from a wide variety of market participants.

Responses commented on the relative usefulness and importance of a TSRR; on the features a term rate would need in order to be robust and reliable; and on how a TSRR could or should be implemented.

This paper summarises the main content of responses in those areas; **Annex 1** sets out a more detailed description of responses to each of the 10 questions posed in the consultation.

The RFRWG welcomes this rich response, and will discuss the aggregated summary at its forthcoming meetings, including the steps necessary to catalyse further developments.

Key takeaways

- *A TSRR would facilitate the transition for some cash market segments*
- *Current SONIA-referencing derivatives markets were seen as capable of providing the basis for a TSRR, but would need a step change before such a measure would be sufficiently robust*
- *An alternative way forward could be to use a consistent methodology with inputs from both futures contracts and OIS swaps contracts*
- *Building a robust TSRR would benefit from further development and growth in OIS and SONIA futures markets*
- *Compliance with IOSCO principles is necessary, including appropriate governance and controls, to ensure risks related to TSRR production are appropriately managed*
- *Finding ways to avoid the systematic usage of TSRRs in derivatives markets will be essential as TSRRs develop*
- *International consistency across currencies was viewed as desirable*

1. Overall view of the role of a TSRR

1. There was strong support for a TSRR being useful in specific market segments. In particular, responses reflected a broad view that a TSRR could play an important role in facilitating transition from LIBOR to SONIA by providing cash-flow certainty for loan and mortgage markets, and to a lesser extent bonds and securitisations. A strong use case was identified for small and medium sized corporates given the simplicity of a transparent forward-looking term rate. It was also seen as preserving consistency with current practices.

2. However, consultation feedback suggested that a TSRR is not generally needed for sterling derivatives markets, for two reasons: first, derivative markets have already adapted to SONIA OIS; and, second, it is important to avoid undermining the development of the so-far nascent SONIA-referencing market. Respondents however felt that derivatives referencing TSRRs might be useful in a more limited way in order to hedge cash market products that themselves referenced a TSRR.

¹ This summary is prepared by the Bank of England on behalf of the RFRWG

² The closing date was extended by 4 weeks following feedback for further interest

3. A small number of respondents warned against the risk of fragmentation of derivatives market liquidity if it becomes split between derivatives referencing a TSRR and derivatives referencing an overnight SONIA directly.

2. Desirable features of a TSRR

4. Respondents identified a range of characteristics that they would like to see in a robust TSRR, many of which echo those set out in the IOSCO³ Principles for Financial Benchmarks. Specifically, respondents felt that a TSRR should:

- i. Be based on a transparent and centralised methodology, with as much consistency across markets and currencies as is practically possible;
- ii. Be based on a “critical mass” of underlying transactions, limiting fragmentation and hence basis risk (e.g. due to different margin models between inputs);
- iii. Have participation from a varied range of participants in the underlying market from which it is derived, minimising the risk of a one-way market (e.g. if all users of TSRR are found to be receivers of fixed-interest cash flows);
- iv. Benefit from clear, effective, well-defined and transparent governance, management and surveillance standards and practices designed to minimise conflicts of interest, ensure the integrity of the underlying data and reduce manipulation risk;
- v. Allow for data sources and methodologies to evolve, transparently, over time; and
- vi. Be resilient and reliable in normal and stressed market conditions, and have clearly defined fallback clauses to cover the risk of the TSRR not being available.

3. Potential sources of a TSRR

5. Respondents noted overall that sterling markets benefited from developed bilateral OIS markets, but that those markets would need a number of developments to become suitable as data sources for a forward looking term benchmark.

6. The table in **Annex 2**, originally published in the consultation paper, sets out a number of possible data sources and methodologies. Of the options shown in the table, two key preferred alternatives emerged from the consultation responses:

- i. Firstly, there was recognition that usage of spot OIS swap quotes, the proposed data source in the consultation, would be feasible as an option, provided that:
 - a. Liquidity for spot starting contracts improves significantly;
 - b. Participation grows and diversifies in that market; and
 - c. Executed trades can be also sourced intra-day (e.g. if traded on an exchange) and be used as an input to TSRR.

Many respondents agreed that expected liquidity, rather than existing liquidity, will be sufficient since this market was relatively new, and improving. Responses envisioned an underlying market with high liquidity and diverse participation. Increased liquidity in spot inputs would provide unambiguous results and should withstand manipulation even during periods of stress.

³ <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf>

- ii. Secondly, there was also support for a uniform and consistent methodology to build a TSRR using liquid futures alongside all OIS swaps⁴. Such an approach was viewed as capable of capturing greater volume and increased price discovery, provided liquidity in futures develops.
7. A small number of respondents flagged that fragmentation could occur if several TSRRs develop, hence the importance of a consistent approach in constructing TSRR in one way only.
8. It was acknowledged by some respondents that deriving a TSRR from executed trades is the ideal outcome but might not be feasible in the available time frame. There was strong support for international consistency with respect to forward looking term rates.
9. The majority of respondents expressed strong support for the early publication of 'prototype' term rate(s), allowing market participants to scrutinise the quality of methodologies and inputs, and aiding market development. Respondents stressed that such prototypes should not be used for actual trades.

4. Specific implementation/construction proposals

10. Consultation responses suggested that firm quotes for SONIA OIS in central limit order books ("CLOBs") are likely to offer the most feasible and robust data sources for TSRRs in the near-term. However the consultation also suggested that the production of a TSRR using firm quotes requires further development in the trading of OIS.
- i. In this context, some respondents proposed relevant ideas on how to implement a robust TSRR, including:
 - a. Using time-weighted average price or randomised timings (or some mixture of the two) for capturing sampling quotes, alongside flexibility to respond actively to changing market dynamics. This would help reduce manipulation risk.
 - b. Daily auctions to supplement the robustness of the TSRR (i.e. by providing additional price discovery if it is also run during the day, but this may supplant liquidity).
 - ii. Feedback relevant to market structure was also received, including:
 - a. A benefit for TSRR-referencing derivatives would be to allow for more effective hedges of TSRR exposure. A result would be a greater unification of cash and derivatives and reduced hedging-costs.
 - b. Some respondents felt that, even in times of moderate stress, the SONIA OIS swap market had a tendency to gravitate to a one way market. They felt that, in order to encourage the development of the market, inducements might need to be considered for participants to enter and reduce any frictions to adoption (e.g. authorities' mandated participation for dealers).
 - iii. Some respondents felt that the calculation of any TSRR would benefit from being managed by a non-commercial administration agent, in order to strengthen governance and surveillance.
 - iv. For the OTC markets, given recent developments in reporting requirements, a few responses suggested a benchmark administrator could leverage these developments to help support TSRRs.

⁴ See para 23-24 on spot starting and forward starting SONIA activity from the consultation paper

5. Should a TSRR be temporary or permanent?

11. Although not explicitly part of the consultation, a number of respondents raised the question of whether a TSRR should be a permanent or temporary feature of sterling markets.

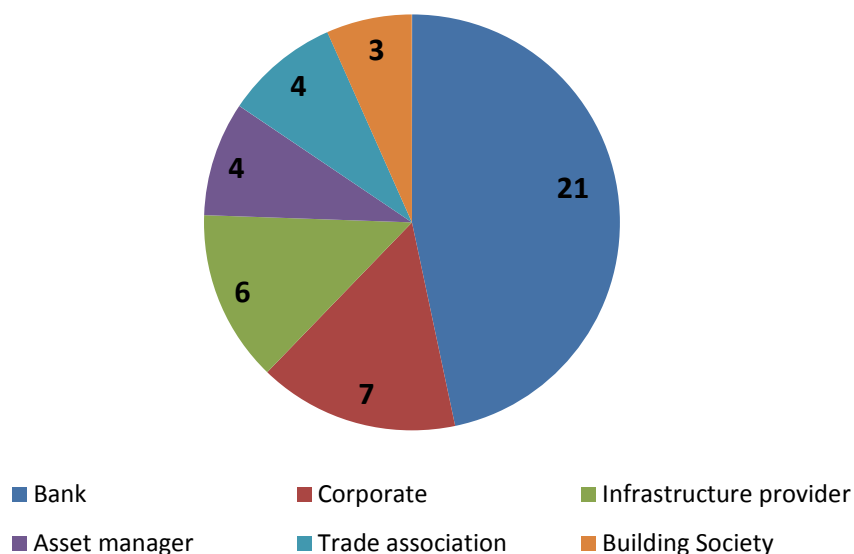
12. Most respondents interpreted the consultation as relating to the implementation of a permanent TSRR, with some highlighting the significant sunk costs that creating a temporary TSRR could involve. However, some respondents saw merit in considering a temporary arrangement that might help enable transition, without encouraging over-reliance on TSRRs at the expense of development of markets directly referencing the RFR. Additionally, some also felt that a temporary TSRR might avoid a fragmentation of the derivatives market, referring to SONIA on one hand, or a TSRR on the other.

Annex 1: Summary of responses to the consultation questions

Overall participation

The consultation received 45 responses. Respondents included: members of the RFR Working Group; trade associations; infrastructure firms; corporates; and other financial firms including asset managers. There were a good number of responses covering both cash and derivative markets.

Chart 1: Distribution of respondent

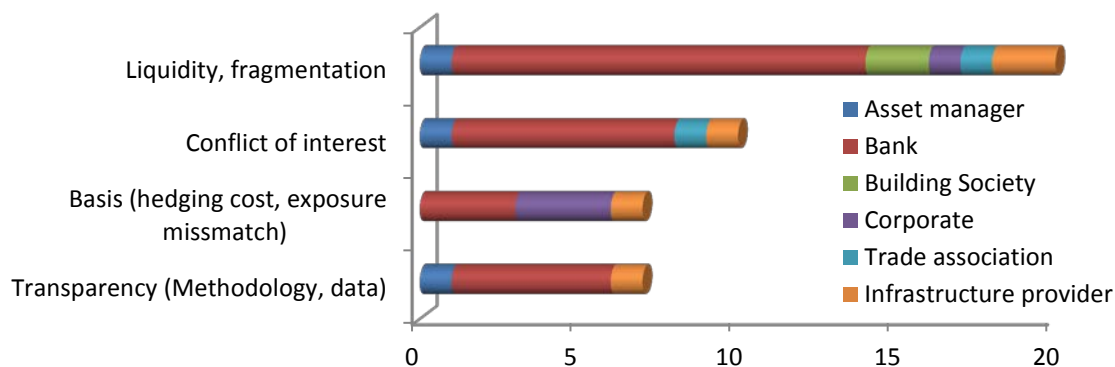


Question 1: *Would the availability of robust TSRRs facilitate transition to SONIA for end users in loan and debt capital markets? Are there other use cases which should be considered?*

1. The majority of respondents were of the view that the availability of robust TSRRs would facilitate (and, on some views, were necessary for) transition for loans and mortgages, and to a lesser extent bonds and securitisation.
2. The key perceived usefulness of such TSRRs was to provide predictable cash-flows. Respondents supporting the availability of TSRRs nevertheless underscored the importance of ensuring they were robust – in the sense that they could withstand attempts to manipulate the rate, and were constructed using a transparent and consistent methodology. Some also favoured limiting their application to a limited period of time or only for certain legacy contracts. A small number of respondents opposed TSRRs, feeling that they would delay necessary changes and/or lead to confusion.
3. A small number of respondents mentioned that in the context of intercompany lending, forward looking term rates would be useful for consistency purposes with current practice.

Question 2: In what context would you foresee use of TSRRs in OTC and listed derivative markets? What risks might arise with their use and how could they be managed?

Chart 2: Aggregated distribution of main risk mentioned by respondents⁵



4. The majority of respondents felt that the usage of TSRRs in derivatives should be limited, e.g. to cases where those derivatives hedged cash products that referenced the TSRR, or in legacy situations, where transition is not feasible. Respondents felt limitation of this kind was necessary to prevent a fragmented market where split liquidity could undermine both OIS and the TSRR.

5. In terms of potential risks, respondents identified the need for clear governance to prevent conflicts of interest and manipulation. A small number of respondents expressed an unwillingness to move to the use of a TSRR if it were only a transitional measure, due to the costs and legal complexity of having to transition twice.

Question 3: Do you foresee a risk that, once introduced, TSRR referencing derivatives will supplant liquidity in short-dated OIS markets and/or inhibit growth of the long-dated OIS market? Or do you believe that SONIA OIS offer distinct benefits in either or both markets?

6. A meaningful number of respondents, in particular on the banks side, stated that TSRR-referencing derivatives (if used widely) could have a potential impact on OIS liquidity and/or inhibit market growth. To address that risk, some proposed that the use of a TSRR should be limited or restricted in some way (e.g. made ineligible for clearing or allowed for loan products only).

7. Other respondents felt that TSRR-referencing derivatives would either leave OIS liquidity little changed, or could enhance it. Those expecting little or no change in OIS liquidity either felt the use of TSRR-referencing derivatives would coexist with the OIS market, or did not expect TSRR use to pick up. Those believing that TSRR-referencing derivatives would actually enhance OIS liquidity and/or growth saw a strong OIS market running parallel to a TSRR swap market, the latter more related to TSRR-indexed cash products.

⁵ The same respondent might have mentioned a few of the risks in this chart, contributing to each column

Question 4: *In your view, is existing liquidity in short-dated SONIA OIS markets sufficient to support the price discovery for TSRRs in at least some spot-starting tenors? If yes, which tenors?*

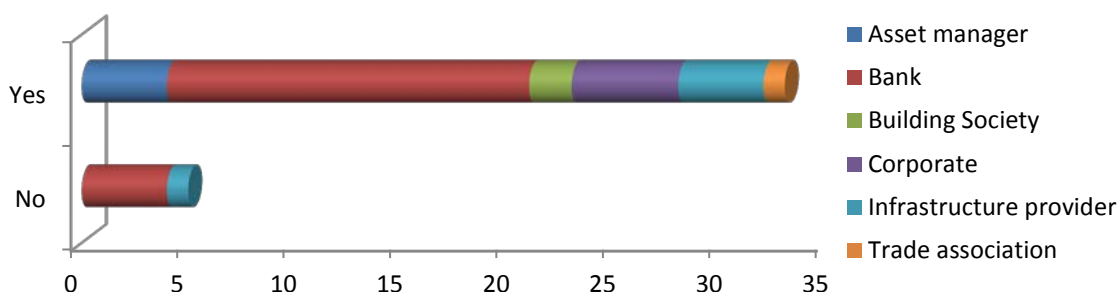
8. The responses to this question were varied and several respondents did not provide a response, others responded caveating not having access to the data. Two main themes nevertheless emerged:

- a. A majority of those with access to data, or dealing in markets that explicitly quoted spot starting trades, felt that current spot starting SONIA OIS activity was insufficient. It was also observed that the market needed a broader set of participants. Others felt that market depth and price discovery was sufficient, but felt more participation was needed to generate the necessary liquidity.
- b. A majority of end users that provided a view felt that current market depth was sufficient for price discovery.

9. On other issues, the majority of respondents called for one, three and six month tenors, with a minority calling only for three months. A small number of responses questioned whether traders would quote prices if/when they were carrying significant positions themselves, and how that may impact the level of liquidity. Some questioned the ability of a TSRR to withstand stressed market conditions.

Question 5: *Do you believe that, subject to improving liquidity over time, the SONIA futures market could support price discovery in TSRRs, either independently or alongside SONIA OIS?*

Chart 3: Respondents opinion about futures market to support price discovery of TSRR



10. A large majority of respondents felt that a SONIA futures market could support price discovery in TSRRs, subject to liquidity improving over time (**Chart 3**). A large majority proposed that futures should be used alongside SONIA OIS. Futures were not necessarily deemed the ideal solution, but judged as having the potential to help price discovery for TSSR alongside OIS quotes. A minority view was that the price formation of the TSRR should be based on the OTC instrument itself, driven by the needs of market participants, in order to provide transparency and market acceptance.

11. A small number of respondents expressed the view that in situations where hedging products with bespoke terms, dates and profiles, a futures market was not necessarily an ideal solution (given reliance on model assumptions).

Question 6: *Do you agree that firm OIS quotes on regulated, electronic trading platforms are likely to offer the most feasible and robust data source for TSRRs in the near term? Are there alternative proposals which merit further consideration?*

12. A large majority of respondents to this question agreed with the proposal. But many pointed to important caveats, including a strong desire for underlying transactions, and concerns around liquidity in a range of market conditions.

- a. A large majority of respondents identified a preference for centralised OIS quotes (as a means of avoiding the emergence of multiple TSRRs).
- b. Respondents highlighted a range of challenges to moving trading away from brokers and bilateral relationships. They noted that posting the individual interests of market participants to pay or receive in certain tenors on a regulated trading platform might require a partnership with regulators (e.g. by mandating dealer participation). Accessing such platforms would also bring a range of practical challenges and costs to price providers and end users, with uncertain implications for liquidity and market depth.
- c. Some viewed that the picture would change completely if futures were incorporated into the CLOB solution. This would most likely result in data sufficiency. For this scenario a centralized yield curve model would be required.
- d. A small number of respondents suggested that institutions streaming quotes would need to be appointed, as some may not quote to avoid being involved in implicit setting of a term rate.
- e. A small number of respondents indicated that access to CLOBs may lead to additional costs to end users (e.g. due to new rules and requirements).
- f. Respondents highlighted that multilateral trading facility (MTF) venues will require meaningful levels of participation to support an appropriate level of underlying activity.
- g. Some viewed that the morning time slot⁶ to capture data for TSRR could be practically challenging for some participants.

Question 7: *Do you agree that greater transparency and verifiable quotes would be required to support the development of robust TSRRs? How would trading practices in SONIA derivatives need to evolve in support of robust TSRRs?*

13. The vast majority of respondents agreed that greater transparency is required. Key themes emerging included:

- a. A desire for TSRRs to reflect rates available to all users to transact.
- b. Mandating MiFiD II rules to all SONIA swaps maturities would force a shift of liquidity from OTC to platforms.
- c. Some respondents expressed a preference for a trusted central authority, including in some cases the central bank, to manage (administer/oversee) term rate publication.
- d. Some respondents believed that in times of moderate stress, SONIA swap liquidity gravitates to a one way market. Additionally, because of the limited nature of end user interest in the product, there is no continuous buying and selling interest as prices move up and down.

⁶ As per para 41 of the consultation paper

Question 8: *Do you see benefit in early publication of 'prototype' TSRRs based on currently available data sources?*

14. The vast majority of respondents supported early publication of prototype rates as a means of: building support for a TSRR; establishing the necessary underlying infrastructure; and, aiding refinement in methodology and inputs. But they pointed to the need to make more progress on specific methodologies before doing so and making it clear that prototypes should not be used for live trading.

15. A minority opposed the proposal believing it could lead to confusion, legal complications and/or discourage the further development of OIS markets and products referencing to SONIA directly.

Question 9: *Do you agree that the definition of TSRR benchmarks should allow data sources to evolve (for example, to include inputs from listed futures) to reflect potential future changes in market structure?*

16. The majority of respondents agreed with the proposal.

- a. Some recommended making the evolution process transparent (e.g. by specifying volume thresholds).
- b. Some other use cases mentioned that a possible evolution could be the inclusion of multiple data sources, dynamically weighted, and collected over a randomised collection period.


Question 10: *Do you have any additional views on the potential use cases, data sources and calculation methodologies, and risks associated with TSRRs?*

17. Some respondents noted additional views, in particular:

- a. The importance of coordination between jurisdictions.
- b. The need for a strong governance model to be put in place by the appropriate benchmark administrator.
- c. A desire for a TSRR to be published close to 11am to supplant LIBOR procedures.
- d. Due to a basis between products, an OTC derivative involving TSRRs cannot properly be hedged by banks using SONIA OIS. This may result in either increased use of TSRRs or increased costs for corporates, as basis exposure cost is passed on to end users.

Annex 2: Proposed data sources and methodologies, as per the consultation paper⁷

Table 3 from page 14 of the consultation paper

Table 3 – Summary of data source and methodologies for producing a TSRR						
	Data source	Market	Methodology	Data sufficiency	Transparency	Ease of implementation
Degree of connection to executed trades 	Executed transactions	Spot-starting OIS	Weighted average rate	Low	High	Medium
	Executed transactions	All OIS or Futures	Average rates and a centralised yield curve model	High	Medium (due to model)	Harder
	Firm quotes on CLOBs;	Spot-starting OIS	Weighted average rate at top of order book	High	High	Medium
	Firm quotes on CLOBs;	Futures	Weighted average rate at top of order book; then centralised yield curve model	Low (currently)	Medium (due to model)	Harder
	Firm quotes in daily point-in-time auction	Spot-starting OIS	Weighted average rate at top of auction order book	High	Medium	Medium
	Streamed indicative quotes on RFQ venues	Spot-starting OIS	Average of best bids and offers	Medium	Medium	Easier
	Survey of indicative quotes	OIS	Weighted average of all submissions	High	Low	Easier

⁷ <https://www.bankofengland.co.uk/-/media/boe/files/markets/benchmarks/consultation-on-term-sonia-reference-rates.pdf>