July 2026

WMR Spot Rate Benchmarks

Methodology Consultation

WMR spot rate rounding methodology consultation

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1. Introduction

London Stock Exchange Group ("LSEG") is a leading global financial markets infrastructure and data provider, trusted to deliver excellence by customers, partners and markets around the world. We play a vital social and economic role in the world's financial system. With our trusted expertise and global scale, we enable the sustainable growth and stability of our customers and their communities. LSEG offers benchmark and index solutions through FTSE Russell. FTSE Russell is a global index provider of benchmarks, analytics, and data with capabilities across asset classes including the WMR FX Benchmarks.

FTSE International Ltd ("FTSE") is the administrator of WMR and is and committed to responding to feedback from market participants and ensuring that the WMR FX Benchmarks continue to be the most transparent and appropriate FX benchmarks for use across a wide range of diverse workflows. FTSE is focussed on maintaining and maximising the quality, integrity and robustness of the benchmarks to provide rates which, most accurately, represent the underlying currency markets at a point in time.

Consequently, FTSE is currently reviewing changes in methodology for the calculation of spot rates. Currently the methodology rounds input trades and rates to the decimal precision of the bid and offer published rates which is currently 4 decimal places (dps). Spot rates are calculated and then published as 4 decimal places for bid/offer and 5 decimal places for mid rates.

This consultation seeks your feedback on a proposal to use unrounded rates as input to the calculations and only round the final rates before publication using a round-to-even methodology. The consultation also seeks feedback on potential changes to the decimal places of published rates.

2. Overview – Current Methodology for WMR Spot Currencies

The WMR methodology is publicly available here and Section 4 details the calculation for the WMR Spot Rates. Specifically, WMR samples data throughout the benchmark calculation window

- Trade currencies

  Samples a trade every second from each trading platform as per Appendix 1 in the methodology

  Similarly, for when there are insufficient trades available the bid/offer order rates are sampled every second from the top of book of the published order books, from the same trading platforms referenced in Appendix 1.

- Non-Trade currencies

  Samples quoted rates every 15 seconds, from the LSEG D&A platform.

When captured from the respective platforms, these input rates are rounded mathematically to the decimal precision of the published WMR bid / offer benchmark rates which is currently 4 dps. The methodology calculates the median bid and median offer rates from these rounded input rates which are then used to calculate mean mid rates to 5 dps. The mid rates are rounded mathematically, so 0.5 would always round up to be the WMR benchmark mid-rate and subsequently used to calculate and publish the WMR benchmark bid and offer rates. The methodology publishes spot rates at 4 dps for bid/offer and 5 dps for mid rates.

3. Proposal – Changes to rounding and decimal precision of published rates

FTSE is proposing to make four changes to the calculation and publication of spot rates that may be launched in multiple phases.

The initial phase would include the first two changes below. The proposed increase of decimal precision of output rates would be made in a later release depending on client feedback.

Phase 1

3.1 Remove Rounding of Input Rates

Historically the trading platforms listed currency pairs for trading at 4 dps which was reflected in the WMR calculations. Over time the trading platforms have enabled trading at greater decimal precision for some pairs and this has become an ongoing capability that continues to extend across currency pairs.

So the change is to remove any rounding of input rates and any calculations in the methodology. The removal of rounding of input rates includes:

- Traded currencies:
  - Trade and order rates from the trading platforms
  - Quote data as a backup
- Non-Traded currencies:
  - Quote data

    Note that the quote data is largely only available at 4dps for bid / offer rates with a few currency exceptions.

No rounding will apply until the final benchmark calculation.

The removal of rounding of input rates and throughout the intermediate processing steps therefore preserves accuracy of the benchmark rates and improves representation of the input rates. The analysis (see section 4, Performance of Proposed Methodology Changes) shows that this change has the most significant improvement in representation and attainability.

3.2 Change Rounding of Mid Rates from Mathematical to "Round-to-Evens"

This change is to modify the rounding methodology for output rates from mathematical (always round 0.5 up) to round-to-evens. It will be applied to both trade and non-trade currencies.

Round-to-evens will behave the same as mathematical rounding except that if the rate is exactly 0.5 of the decimal precision being rounded to, then the method would round up or down to the even number in decimal figure being rounded to.

As examples of round-to-even to 5 dps, the decision how to round when the value beyond the 5th decimal is exactly 5 would depend on whether that 5th decimal value is even or odd:

- 1.3467**8**5 would round down to 1.34678
- 1.3467**5**5 would round up to 1.34676

This is expected to have a smaller but significant improvement in representation of the input rates.

Phase 2

3.3 Publish Bid / Offer rates to 5 DPS

This would be made as a potential separate change after Phase 1.

At the final rounding step the bid and offer rates would be rounded and published to 5 dps rather than 4 dps.

3.4 Publish Mid Rates to 6 DPS

This would be made as a potential separate change after or at the same time as the change to publish bid and offer rates to 5 dps.

At the final rounding step the mid rates would be rounded and published to 6 dps rather than 5 dps

Note that the minimum and maximum spreads will not be modified as part of these changes. But these changes to decimal precision may result in rounding of bid/offer rates either not being needed or having reduced impact.

4. Performance of Proposed Methodology Changes

4.1 Summary

The analysis assesses the impact of three potential methodology enhancements on the quality of WMR FX benchmark rates, measured using the distance between executed trade prices and the benchmark calculation mid-rates. This metric provides a proxy for both the attainability of the rate and representativeness, given the benchmarks target of representing transaction data. Across both the theoretical and empirical analysis, the evidence shows that removing benchmark input rounding provides by far the largest benefit, while changes to additional decimal precision deliver materially smaller improvements.

The analysis was done on all benchmark calculations in Q2 2025. Benefits were calculated in terms of basis points (a hundredth of a percent of the currency pair rate) in order to have a standardised measure across pairs.

4.2 Key Findings (Benefits in Basis Points - BPS)

Methodology Change	Typical Benefit (All Intraday Fixes)	Typical Benefit (London 4pm Fix)	Assessment
Remove input rounding	~0.03–0.12 bps improvement for major currencies on average	~0.04–0.26 bps improvement on average	Largest and most meaningful benefit
Change output rounding from "round-up-at-5" to "round-to-even"	~0.006–0.022 bps improvement on average	~0.006–0.034 bps improvement on average	Small but removes systematic directional differences
Extend mid rates from 5 to 6 decimal places	Generally <0.01 bps	Generally <0.01 bps	Marginal benefit for mid rates

4.3 Benefits from Removing Input Rounding

This change retains trades and quotes at platform precision throughout the benchmark calculation, only rounding the final published rate.

These improvements are statistically significant (at a 5% significance level) for NZD, CHF, AUD, CAD, and EUR.

4.4 Benefits from Changing Output Rounding Convention to Round-to-Evens

This benefit is not as significant as the removal of input rounding. However, the systematic upward directional differences from mathematical rounding are removed.

4.5 Benefits from Extending Mid Rates to 6 DPS and Bid / Offer rates to 5 DPS

The change to the mid-rate precision provides a marginal benefit in terms of representation.

It was not measured as part of this analysis, but the benefit of increasing precision of rates is in improved accuracy when calculating contra-currency amounts. For each decimal place added to the rates any difference in the contra amount would be reduced by a factor of 10.

5. Action Required – Responding to this Consultation

FTSE welcomes user engagement when reviewing benchmark methodologies or considering material changes to its benchmarks.

Therefore, we invite feedback to these proposed methodology changes and request that your responses are as detailed as possible and with consideration to the questions below.

Questions:

1. Do you have any concerns about the proposed change to remove rounding of input rates?
2. Do you have any concerns about the proposed change to mid-rate output rounding from mathematical to round-to-even?
3. Do you have any concerns about the proposed change to increase DPS for bid / offer spot rates to 5?
4. Do you have any concerns about the proposed change to increase DPS for mid spot rates to 6?
5. Would you need to make changes in your systems to manage more DPS precision in published rates? If so, could you make changes and how much notice would you need before DPS on published rates is changed?
6. Please indicate if there are any other aspects you would like us to consider in the calculation of Spot rates?
7. Are there any additional data points that WMR should consider making available to clients?

Please email your comments to wmr.ops@lseg.com with “WMR Spots Rounding Consultation” in the subject by no later than 1700UK on 14 August 2026. Please note that comments submitted after this deadline or submitted via other means may not be processed.

All responses to this consultation will be treated as confidential and will not be made public. A summary of anonymised feedback received, and decisions made may be made available in due course.

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