Refinitiv Benchmark Services (UK) Limited

WMR Closing and Intraday Metals Benchmark Statement

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Section 1 Introduction

The WMR Metals Closing and Intraday benchmarks were launched on the 12 August 2024. Similar to the WMR Spot, Forward and NDF Rates the service was introduced to provide a standard set of metal benchmark rates to support users in the market and enable accurate valuations, settlement pricing, trading and drive price validation and transparency. The Closing Metal benchmark rates are provided as at 4pm UK time and the Intraday benchmarks are provided hourly, to align with the other WMR services.

Refinitiv Benchmark Services Limited ("RBSL" or "the Administrator") is the administrator of all of the WMR Metal benchmarks based on readily available data and subject to the UK Benchmark Regulation ("UK BMR") and has adopted policies and procedures to comply with the Regulation.

The WMR Metals benchmarks cover Gold, Silver, Platinum and Palladium as detailed in the WMR methodology.

The primary infrastructure used to source the metal rates used in the determination of the benchmarks is the LSEG Market Data System. Other systems may be used by exception where the appropriate rates are not available on the LSEG architecture.

WMR Metal Benchmarks

The metal benchmarks are referred to as "Trade Metals" or "Non-trade Metals".

For "Trade Metals", Gold and Silver, the primary data source ("Data Source") to be used is EBS transaction data assessed by RBSL and based primarily on the accessibility and liquidity available on the trading platform. Data Sources are reviewed periodically with respect to their quality and the representativeness of the wider market. The underlying market is considered to be broad and liquid with multiple participants active on a regular basis.

The readily available input data for determination of the benchmarks from EBS is either traded rates or order rates, with traded rates taking precedence where available subject to the RBSL's expert judgment.

For the "Non-Trade Metals", Platinum and Palladium, the Data Source is LSEG indicative quote data from multi contributor instrument codes.

The metal benchmarks are not based on the contribution of input data. Determination of the metal benchmarks includes a validation process whereby, among other steps, RBSL reviews input data and the calculated benchmark pursuant to certain pre-determined tolerance checks. When applying tolerance checks, an authorised LSEG analyst has discretion (subject to internal policies and procedures) to include or reject certain input data in the determination of the benchmark rates.

The benchmarks are considered to be a reliable reference rate for the metals markets provided that the input data are both reliable and observable market data that reflect the economic realities of the market for each metal.

None of the benchmarks are 'regulated-data benchmarks', 'interest rate benchmarks', or 'commodity benchmarks' as those terms are defined in the BMR. In addition, none of the benchmarks are 'critical benchmarks' or 'significant benchmarks' as those terms are defined in the BMR. All of the benchmarks would be deemed 'non significant'.

The benchmarks do not have ISINs and do not have any geographical boundaries.

Overview of WMR Metals methodology

The Data Source for the determination of Non-Trade Metals is LSEG indicative quote data. Over a five- minute period starting 2 minutes and 30 seconds before the hour to 2 minutes and 30 seconds after the hour, snapshots of quoted rates are taken every 15 seconds. The median bid and offer rates are calculated from the individual snapshots for each metal. These bid and offer rates are validated prior to publication against specific thresholds and this may result in expert judgment being applied.

The primary Data Source for the determination of Trade Metals is the order matching platform from EBS. Over a five-minute period, traded rates and bid and offer order rates from EBS are captured every second from 2 minutes 30 seconds before the hour to 2 minutes 30 seconds after the hour. All traded rates are subjected to validation checks which may result in some input data being excluded from the benchmark determination.

Subject to a minimum number of valid traded rates being present, using a threshold determined by RBSL using expert judgment, the traded rates are used as the input data in the determination of the benchmarks. A median bid and offer traded rate are calculated independently and the mid-rate is calculated from the median bid and offer traded rates. A minimum standard spread is applied to the mid-rate to calculate a new bid and offer. These bid, offer and mid rates are the benchmark rates for these metals and will be validated prior to publication using specific tolerance thresholds and this may result in expert judgment being applied.

If the minimum number of traded rates is not reached, then order rates are used to determine the benchmark rate. Best bid and offer order rates are captured simultaneously to the capture of traded rates. All order rates are subjected to validation checks which may result in some input data being excluded from the benchmark determination.

A median bid and offer order rate is calculated and the mid-rate is calculated from the median bid and offer order rates. A minimum standard spread is applied to the mid-rate to calculate a new bid and offer. The benchmark calculations will be validated prior to publication using specific tolerance thresholds and this may result in expert judgment being applied.

No models or method of extrapolation or interpolation are used by RBSL when determining the benchmarks. Further, the benchmarks are not determined by means of a portfolio of constituents.

RBSL determines the benchmark in respect of the following steps:

- the Data Source to use for each metal comprised in the benchmark;
- setting the threshold for determining when to use order rates rather than traded rates; and
- validation of rates taken from Data Sources for Trade Metals and Non-Trade Metals.

Expert judgement

Expert judgement is subject to RBSL's internal guidelines and quality control procedures and is exercised with the intent of ensuring the quality and integrity of the benchmarks. In particular, RBSL may rely on its own judgement more frequently in an active albeit low liquidity market where transactions may not be consistently available.

RBSL's internal guidelines and quality control procedures governing the application of expert judgement are intended to provide consistency and oversight to this process. Analysts receive initial and on-going training in how to comply with these guidelines and procedures. All instances of expert judgement are evaluated by peers and decided by Benchmark Management as well as documented in line with the governance framework and reported to the Oversight Committee for challenge and scrutiny.

Potential limitations of the benchmarks

The ability of RBSL to determine and publish the WMR Metals benchmarks in accordance with this Methodology depends on

- activity in each metal on a case by case basis, and
- the quality and representativeness of the rates available to RBSL for the calculation of the benchmark.

Use of Data Sources including order matching platforms and quotes available on the LSEG Market Data System, both of which represent the trading and quote activity of a range of market participants, maintains the representativeness of the rates available to RBSL and mitigates the risk of a concentration of input data.

If any reduction of quality in the rates or fragmentation of activity is identified or foreseen, RBSL shall review the Benchmark Methodologies and their effectiveness in determining suitable benchmarks given conditions in the underlying markets. Such reviews shall be in accordance with the RBSL Benchmark Internal Review Procedures.

The design of the benchmarks are resilient against disruptions and periods of low liquidity. However, technical problems or extreme market events may lead to unusually illiquid or fragmented markets, resulting in inadequate input data. Expert judgment is used to determine such circumstances. In such cases, RBSL will endeavour to re-publish the most recent benchmark rates for the affected metal or metals until the disruption has ended or changes have been implemented.

Republication of a benchmark

Under exceptional circumstances and in accordance with the WMR Republication Rates Policy, it may be necessary to amend the benchmark rates for one or more metals after publication. This will be determined by RBSL, after consultation with key users, if appropriate. Under no circumstances will a benchmark for one day be amended after the publication of the following weekday's benchmark.

In the event that there is a disruption to the publication of the benchmark, or it is necessary to amend a published benchmark, RBSL will notify clients as early as possible.

Methodology changes and benchmark cessation

The WMR Metals benchmark Methodology has been adopted as being a reliable and resilient means for providing a benchmark that accurately represents market rates for the metals it comprises.

The benchmark methodology is subject to a review in order to assess the 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 Procedures 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 a benchmark before implementing such change or changes.

Circumstances beyond the control of RBSL may necessitate an immediate change to or the cessation of a benchmark. Such circumstances include without limitation (i) a sustained loss of liquidity in the underlying metals markets and (ii) a loss of liquidity in the available Data Sources such that the Data Sources are no longer representative of metals in the wider market.

In the event that an immediate change is required, RBSL will provide as much notice as is practicable in accordance with the RBSL Benchmark Methodology Change Procedures and following such change will conduct an internal review of the Benchmark Methodology.

If it becomes necessary to cease calculation and distribution of a 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 a benchmark methodology or cessation of a 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. Financial instruments that may reference a benchmark include exchange traded and OTC derivative contracts. Benchmarks may also be used in indices and such indices may themselves be replicated by funds or serve as benchmarks for derivative contracts.

A material change to a Methodology may lead to a change in the economic reality represented by a benchmark and therefore to the economic exposure of any financial contract or financial instrument that references the benchmark. A cessation of a benchmark would require the selection of an alternative benchmark or the implementation of any fallback procedures for financial contracts or financial instruments that reference a benchmark.

Further information

The Benchmark Methodology document which provides additional information and definitions on the determination and administration of the WMR Metals Rates is available on RBSL's website: FTSE Benchmark Services Limited: WM/FTSE FXBenchmarks (Iseg.com)

This benchmark statement shall be reviewed at least every two years, or whenever there is a change to either the type of the Benchmark or to the Methodology used in the determination of the benchmark.

For further information about the WMR Metals benchmark rates, please refer to the website: <u>WMR Metals | LSEG</u> or contact the Administrator at <u>wmr.sales@lseq.com</u>.

ANNEX

Climate Related Disclosures

EXPLANATION OF HOW ESG FACTORS ARE REFLECTED IN THE BENCHMARK STATEMENT	
Item 1. Name of the benchmark administrator.	Refinitiv Benchmark Services (UK) Limited
Item 2. Type of benchmark or family of benchmarks.	Other
Item 3. Name of the benchmark or family of benchmarks.	WMR Metals
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?	□ Yes ⊠ No
Item 5. Does the benchmark or family of benchmarks pursue ESG objectives?	□ Yes ☑ No
Date on which information has been last updated and reason for the update:	12 August 2024 Benchmarks launch

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For over 35 years we have been at the forefront of driving change for the investor, always innovating to shape the next generation of benchmarks and investment solutions that open up new opportunities for the global investment community.

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