

REFINITIV BENCHMARK SERVICES (UK) LIMITED

Benchmark Methodology Change & Benchmark Cessation Policy

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1. Revision History

Name	Date	Version	Summary of changes
Brandon Meneguzzi	December 2017	1.0	Initial version
Brandon Meneguzzi	July 2018	1.1	BMR update
Brandon Meneguzzi	December 2019	1.2	Annual review
Edward Kendrick	January 2021	1.3	Annual review – revised wording, accounting for UK BMR, and policy governance

2. Review History

Reviewer name	Doc version reviewed	Date sent for review	Date review filed	Approved/Rejected (with revisions)
RBSL Board	1.2	09/12/2019	16/12/2019	Approved
RBSL Board	1.3	21/01/2021	28/01/2021	Approved

3. Policy Governance

Policy Owner	Chief Executive Officer, RBSL
Version	1.3
Enquiry/Functional Team	Refinitiv Compliance
Approving Committee	RBSL Board
Date of Issue	28/01/2021
Next Review Date	28/01/2022
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4. Introduction

4.1 Regulatory Environment

- 4.1.1 Refinitiv, through its wholly owned subsidiary Refinitiv Benchmark Services (UK) Limited (“RBSL”), administers, calculates and distributes Benchmarks across multiple asset classes across global jurisdictions.
- 4.1.2 RBSL Administers a number of Benchmarks in accordance with the relevant obligations of the International Organisation of Securities Commissions (“IOSCO”) Principles for Financial Benchmarks and the UK Benchmark Regulation (“BMR”).
- 4.1.3 RBSL is incorporated in the United Kingdom (“UK”) and is a wholly owned subsidiary of Reuters Limited (“RL”), itself a wholly owned subsidiary within the Refinitiv Group of companies
- 4.1.4 RBSL is authorised and regulated in the UK by the Financial Conduct Authority (“FCA”), FCA Reference Number 610678.

4.2 Document Scope

- 4.2.1 This document is, unless specifically provided otherwise, applicable to all benchmark families that are categorised as Critical, Significant or Non-significant per the thresholds designated in the BMR, as well as specific Benchmark classes such as Regulated-data, Interest Rate and Commodity Benchmarks.

4.3 Purpose of Document

- 4.3.1 This document contains the RBSL Benchmark Methodology Change and Benchmark Cessation Procedures.
- 4.3.2 These procedures are published in accordance with Article 28(1) of the BMR, which requires an administrator to “publish, together with the Benchmark statement referred to in Article 27, a procedure concerning the actions to be taken by the administrator in the event of changes to or the cessation of a Benchmark which may be used in the Union in accordance with Article 29(1). The procedure may be drafted, where applicable, for families of Benchmarks and shall be updated and published whenever a material change occurs”.

4.4 Notice to Supervised Entities

- 4.4.1 Supervised Entities that use Benchmarks are required, as per Article 28(2) of the BMR, to “produce and maintain robust written plans setting out the actions that they would take in the event that a Benchmark materially changes or ceases to be provided. Where feasible and appropriate, such plans shall nominate one or several alternative Benchmarks that could be referenced to substitute the Benchmarks no longer provided, indicating why such Benchmarks would be suitable alternatives. The supervised entities shall, upon request, provide the relevant competent authority with those plans and any updates and shall reflect them in the contractual relationship with clients.”

5. Benchmark Methodology Change Policy

5.1 Introduction

5.1.1 This document details the procedures followed by RBSL when changing a Benchmark Methodology.

5.2 Trigger for Change Procedures

5.2.1 These change procedures can be triggered for a Benchmark Methodology from a range of sources, including but not limited to:

- a) a periodic review of a Benchmark Methodology as described in the RBSL Benchmark Internal Review Policy;
- b) on the recommendation of the RBSL Board of Directors or the relevant Benchmark Oversight Committee;
- c) on the recommendation of management within Refinitiv's Content Operations division, Benchmarks and Indices division or the Compliance department;
- d) issues raised by stakeholders including Users of a Benchmark; or
- e) relevant regulatory or industry developments.

5.3 Analysis & Materiality

5.3.1 Once the Change Procedures are initiated for a Benchmark Methodology, RBSL will conduct an analysis of the impact of the proposed change on the Benchmark and will determine whether the proposed change:

- a) is beneficial to the quality and representativeness of the Benchmark with respect to the underlying market or reality that it represents; and
- b) constitutes a material or non-material change to the Benchmark Methodology. In making such determinations, RBSL will seek the advice and feedback of the relevant Benchmark Oversight Committee.

5.3.2 In determining the materiality of the proposed change, RBSL will have regard to:

- a) any fundamental change to the process by which the Benchmark is determined;
- b) any change to the underlying market or reality represented by the Benchmark or any significant change to how that underlying market or reality is represented;
- c) where applicable, whether any change to the panel of Contributors would adversely and materially affect the representativeness of the input data used in the Benchmark determination; and
- d) whether the change would significantly alter a Benchmark value after the usual rounding is applied to that Benchmark.

- 5.3.3 In order to assess potential materiality, RBSL may seek informal views from Benchmark Users.
- 5.3.4 For the avoidance of doubt, changes to document formatting shall not constitute a material change to a Benchmark Methodology.
- 5.3.5 If RBSL determines that the change is beneficial to the quality and representativeness of the Benchmark with respect to the underlying market or reality that it represents but does not constitute a material change to the Benchmark Methodology, RBSL shall amend and publish the Benchmark Methodology.
- 5.3.6 If RBSL determines that the change is beneficial to the quality and representativeness of the Benchmark with respect to the underlying market or reality that it represents and does constitute a material change to the Benchmark Methodology, RBSL shall follow its Consultation Process described below.

5.4 Stakeholder Consultation

- 5.4.1 For a proposed change to a Benchmark Methodology that constitutes a material change, RBSL shall issue a consultation document with the purpose of soliciting comments and feedback. The consultation document shall include the proposed change to the Methodology, the rationale for proposing the change, the reason the proposed change is material, any regulatory or legal implications of the proposed changes, and an impact assessment of the proposal. The consultation document shall include RBSL's assessment as to whether the representativeness of the Benchmark and its appropriateness for its intended use are impacted by the proposed change.
- 5.4.2 Consultation papers are reviewed and agreed by the relevant Benchmark Oversight Committee and approved by the RBSL Board before publication.
- 5.4.3 The consultation document shall be issued to stakeholders including known Users of Benchmark, Contributors to the Benchmark if applicable, Redistributors of the Benchmark, and Market Advisory Committee Members if applicable. The consultation document shall also be published on the Refinitiv website and will be made available on request to any third party.
- 5.4.4 The consultation document shall specify a period for the consultation which will be set in accordance with the circumstances and urgency surrounding the proposed change, but will typically be two weeks. Comments received and RBSL's response to those comments will be accessible after any consultation, except where confidentiality has been requested by the originator of the comments.

5.5 Implementation

- 5.5.1 Following the end of a consultation, RBSL will give due consideration to any feedback received. RBSL may choose to publish an outcome of the consultation, including anonymised comments frequently received and RBSL's response to such feedback if appropriate.
- 5.5.2 Following receipt of feedback, RBSL will determine whether to proceed with the change whilst also considering the advice of the relevant Benchmark Oversight Committee in making such determination. All material changes to a benchmark methodology are subject to final approval by RBSL's Board.
- 5.5.3 If the determination is to proceed with the proposed change, RBSL will announce that determination and set out the applicable effective dates for the confirmed change. The notice period shall depend on the nature of the Benchmark and the confirmed change.
- 5.5.4 If the determination is not to proceed, RBSL will announce that determination.
- 5.5.5 The amended Benchmark Methodology and, if applicable, Benchmark Statement documents will be issued following announcement of a confirmed change.

5.6 Force Majeure

- 5.6.1 Exceptional events may necessitate an immediate change to a Benchmark Methodology. In such exceptional circumstances, RBSL may elect not to follow this Procedure, but will provide as much notice as is practicable.

Following such a change RBSL will conduct an internal review of the Methodology in accordance with the RBSL Benchmark Internal Review Procedures.

6. Benchmark Cessation Policy

6.1 Introduction

6.1.1 This document addresses only those cases where RBSL is the Administrator of a Benchmark, as per Article 3(6) of the BMR; and by the IOSCO Principles for Financial Benchmarks or other competent authorities. In these cases RBSL will carry out the Administration of Benchmarks in a manner that is aligned with the IOSCO Principles for Financial Benchmarks, consistent with any applicable regulation such as BMR, and in the best interests of the markets each Benchmark serves.

6.2 Potential reasons for the Cessation of a Benchmark

6.2.1 In certain circumstances, it may be necessary for RBSL to cease the provision of a particular Benchmark rate. This may be due to external factors beyond the control of RBSL, including a market structure change or deterioration in input data sufficiency for a particular currency, tenor, or instrument. Where further explanation for individual Benchmarks is required regarding cessation policy, these are detailed within the Appendix Section of this Policy.

6.2.2 RBSL keeps under review:

- a) the structure and liquidity of the market underlying each Benchmark;
- b) the representativeness of the input data used to determine each Benchmark, whether this is an automated feed of data, submissions from a panel, or other mechanism or combination of mechanisms;
- c) the products each Benchmark seeks to facilitate or underpin; and
- d) to the extent feasible, the User base for each Benchmark and the use cases for each Benchmark.

6.2.3 In its review of the above and potentially other factors it may be that RBSL takes the view that the Benchmark is no longer representative of its intended interest or market, and that this cannot be remedied by a corrective change to the Benchmark methodology, design, or other aspect of the processes and procedures around the creation and usage of the Benchmark. All proposed cessations are subject to final approval by RBSL's Board.

6.2.4 In the above case, RBSL will follow the Benchmark Cessation Procedures laid out below. In extreme circumstances RBSL believes are beyond its control, it may be necessary to follow the Emergency Benchmark Cessation Procedures laid out below.

6.3 Benchmark Cessation Procedures

6.3.1 On becoming aware that due to the circumstances listed above or other circumstances that it may be necessary to cease calculation and distribution of a Benchmark, RBSL will carry out a detailed analysis of the estimated breadth and depth of usage, including financial contracts, financial instruments, and funds that reference the Benchmark and the economic and financial stability impact that might result from the cessation of the Benchmark, to ensure that the response is proportionate.

6.3.2 RBSL will consider the selection of a credible, alternative Benchmark such as, but not limited to, criteria that seek to match to the extent practicable the existing Benchmark's characteristics (e.g. credit quality).

6.3.3 RBSL will consider the practicality of maintaining parallel Benchmarks (where feasible) in order to accommodate an orderly transition to a new Benchmark.

6.3.4 RBSL will hold an extraordinary Benchmark Oversight Committee meeting to seek advice and a recommendation with regard to the possible cessation the Benchmark.

6.3.5 RBSL will carry out a public consultation to take into account the views of stakeholders and any relevant regulatory bodies in determining what specific procedures are appropriate and the impact of ceasing a particular Benchmark.

Consultation papers are reviewed and agreed by the relevant Benchmark Oversight Committee and approved by the RBSL Board before publication.

- 6.3.6 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 a Benchmark.
- 6.3.7 Such communications will be designed to give Users and stakeholders as much warning as possible of an intention to cease calculation and will be published on RBSL's website as well as all the usual alert pages maintained on RBSL's products.
- 6.3.8 Following the consultation, RBSL may publish a summary of comments received, and a decision on whether to cease or not in a Cessation Notice. All cessations are subject to final approval by RBSL's Board.
- 6.3.9 If the decision is to cease, RBSL will include an indicative calendar in the Cessation Notice. The calendar will include a period of suspension, following which any further comments received will be considered before the final cessation of the Benchmark.
- 6.3.10 Typically, Users will be given a six-month notice period prior to the cessation of the benchmark. The exact length of the notice period would take into consideration relevant factors, including but not limited to:
- a) the urgency of ceasing the benchmark;
 - b) the length of time Users need to adequately prepare;
 - c) technology issues; and
 - d) legal and / or regulatory provisions.
- 6.3.11 Where possible and appropriate, RBSL will publish along with the Cessation Notice guidance for Users and other stakeholders on potential alternative or replacement Benchmarks.

6.4 Additional Benchmark Cessation Procedures for Critical Benchmarks

- 6.4.1 The following procedures will be performed if the Benchmark being ceased is a Critical Benchmark as defined by the conditions included in Article 20(1) of BMR.
- 6.4.2 If RBSL intends to cease providing a critical Benchmark, RBSL shall:
- a) immediately notify its competent authority; and
 - b) within four weeks of such notification submit an assessment of how the Benchmark:
 - i. is to be transitioned to a new administrator; or
 - ii. is to be ceased to be provided, taking into account the procedure established in Article 28(1).
- 6.4.3 During the period referred to in point (b), RBSL shall not cease provision of the Benchmark.
- 6.4.4 Upon receipt of the assessment of RBSL referred to in paragraph 6.4.2, the competent authority shall:
- a) inform ESMA and, where applicable, the college established under Article 46; and
 - b) within four weeks, make its own assessment of how the Benchmark is to be transitioned to a new administrator or be ceased to be provided, taking into account the procedure established in accordance with Article 28(1).
- 6.4.5 During the period of time referred to in point (b) of 6.4.2 RBSL shall not cease the provision of the Benchmark without the written consent of the competent authority.
- 6.4.6 Following completion of the assessment referred to in point (b) of 6.4.2, the competent authority shall have the power to compel RBSL to continue publishing the Benchmark until such time as:
- a) the provision of the Benchmark has been transitioned to a new administrator;

- b) the Benchmark can be ceased to be provided in an orderly fashion; or
- c) the Benchmark is no longer critical.

6.4.7 For the purposes of 6.4.6, the period for which the competent authority may compel RBSL to continue to publish the Benchmark shall not exceed 12 months.

6.4.8 By the end of that period, the competent authority shall review its decision to compel RBSL to continue to publish the Benchmark and may, where necessary, extend the time period by an appropriate period not exceeding a further 12 months. The maximum period of mandatory administration shall not exceed 24 months in total.

6.4.9 Without prejudice to 6.4.2, in the event that RBSL as the administrator of a critical Benchmark is to be wound down due to insolvency proceedings, the competent authority shall make an assessment of whether and how the critical Benchmark can be transitioned to a new administrator or can cease to be provided in an orderly fashion, taking into account the procedure established in accordance with Article 28(1).

6.5 Emergency Benchmark Cessation Procedures

6.5.1 It is possible in extremis that circumstances beyond RBSL's control arise which mean that it is necessary to cease a Benchmark with little notice. This may include a sudden change in circumstances or markets that result in it being impossible to collect sufficient data to produce a viable Benchmark, and impossible to source alternative or back up inputs.

6.5.2 Under these extreme circumstances, RBSL will ensure that all relevant information including back-up plans and, where possible and appropriate, information on alternative Benchmarks is published for Users and stake as rapidly as possible, and updates are given as circumstances evolve.

6.6 Cessation of WM/Reuters FX Rates Policy

6.6.1 Refinitiv through its wholly owned subsidiary Refinitiv Benchmark Services Limited ("RBSL") provides the WM/R FX Benchmarks; a global foreign exchange rate Benchmark service, offering spot, forward, and non-deliverable forward foreign exchange Benchmark rates (each a "WM/R Benchmark Rate" and together the "WM/R Benchmark Rates") at fixed points throughout the global trading day.

6.6.2 In certain circumstances, it may be necessary for RBSL to cease to offer a particular WM/R Benchmark Rate. This may be due to external factors beyond the control of RBSL such as a market structure change or deterioration in data sufficiency for a particular currency. This policy sets out the process that RBSL follows in relation to any cessation of a WM/R Benchmark Rate

6.6.3 What process will RBSL follow in relation to a potential cessation of a WM/R Benchmark Rate?

When RBSL identifies a possible cessation event, RBSL will:

- a. review the circumstances and consider whether RBSL believe that there is a viable alternative to ceasing a particular WM/R Benchmark Rate;
- b. where practicable undertake a consultation with key stakeholders and consider any feedback that RBSL feels may identify a viable solution;
- c. where practicable provide notice to key stakeholders of any cessation of a particular WM/R Benchmark Rate; and
- d. publish a zero rate while RBSL considers whether to cease a WM/R Benchmark Rate in relation to a particular currency or tenor. In these circumstances RBSL will continue to review the market and availability of data periodically to determine in our discretion whether to cease to publish a WM/R Benchmark Rate or whether to reinstate that WM/R Benchmark Rate.

6.6.4 Who has approval authority for any cessation of a WM/R Benchmark Rate?

RBSL may need to cease a particular WM/R Benchmark Rate urgently in order to protect the integrity and accuracy of the WM/Reuters service. In these circumstances, the decision as to whether to cease a particular WM/R Benchmark Rate shall be made by RBSL's Board and reviewed pre implementation by the Benchmark Oversight Committee (the "Benchmark Oversight Committee") and before any consultation materials are published to stakeholders.

Where practicable given time constraints, any potential cessation shall be reviewed and approved by the Benchmark Oversight Committee prior to implementation.

6.6.5 Alternative Benchmark Rates

In the event of any cessation of a particular WM/R Benchmark Rate, RBSL will attempt to assist our clients in identifying an alternative Benchmark rate. However, RBSL recommends that all contracts and other financial instruments that reference a WM/R Benchmark Rate have robust contingency provisions in the event of material changes to, or cessation of, the referenced WM/R Benchmark Rate.

Where practicable, upon client request, RBSL will consider the provision of a parallel Benchmark rate to accommodate an orderly transition.

7. Record Keeping

7.1 Record Keeping Requirements

7.1.1 RBSL must maintain relevant records in accordance with the RBSL Record Keeping Policy. Closed public consultations will be retained on the relevant website or be available upon request.

7.1.2 Benchmark Managers are responsible for keeping a 'Methodology Review & Change Log' to note the relevant information for how the change is reviewed and approved:

- a. Analysis of the impact (relevant document to be retained where needed);
- b. Materiality of the change;
- c. Consultation document, consultation period, and feedback (relevant document to be retained where needed);
- d. Determination of whether to proceed with evidence of approval; and
- e. Updated Methodology with effective date.

7.1.3 RBSL must maintain relevant records when it intends to cease a Benchmark in accordance with the RBSL Record Keeping Policy. Records regarding the cessation such as, rationale, relevant discussions and meeting minutes, key communication points with regulator, and other key records shall be retained.

8. Document Review Cycle

8.1 Document Review Frequency

8.1.1 This document must be reviewed on at least an annual basis to ensure it remains appropriate and consistent with regulatory requirements, industry standards, and business changes.

9. Document Approval

9.1 RBSL Board Approval

9.1.1 The RBSL Board is responsible approving this document.