THOMSON REUTERS BENCHMARK SERVICES LIMITED

Benchmark Methodology Change & Cessation Policy
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Chapter 1  Introduction

1.1  Regulatory Environment

1.1.1  Thomson Reuters, through its wholly owned subsidiary Thomson Reuters Benchmark Services Limited (“TRBSL”), administers, calculates and distributes Benchmarks across multiple asset classes across global jurisdictions.

1.1.2  TRBSL 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 European Union (“EU”) Benchmark Regulation (“BMR”).

1.1.3  TRBSL is incorporated in the United Kingdom (“UK”) and is a wholly owned subsidiary of Reuters Limited (“RL”), itself a wholly owned subsidiary within the Thomson Reuters Group of companies.

1.1.4  TRBSL is authorised and regulated in the UK by the Financial Conduct Authority (“FCA”), FCA Reference Number 610678.

1.2  Document Scope

1.2.1  This document is, unless specifically provided otherwise, applicable to 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.

1.3  Purpose of Document

1.3.1  This document contains the TRBSL Benchmark Methodology Change and Benchmark Cessation Procedures.

1.4  Supervised Entity Statement

1.4.1  Supervised entities that use a Benchmark are responsible for the production and maintenance of their own robust written plans setting out the actions that they would take in the event that a benchmark materially changes or ceases to be provided.

1.5  Benchmark Stakeholder Statement

1.5.1  Subscribers and other Stakeholders who have financial instruments that reference Administered Benchmarks are responsible for taking steps to make sure that:

   a)  Contracts or other financial instruments that reference an Administered Benchmark have robust fall-back provisions in the event of material changes to, or cessation of, the referenced Benchmark.

   b)  Stakeholders, including clients of stakeholders are aware of the possibility that various factors, including external factors beyond the control of the Administrator, might necessitate material changes to a Benchmark.
Chapter 2  Benchmark Methodology Change Policy

2.1  Introduction

2.1.1  This document details the procedures followed by TRBSL when changing the Methodologies for Benchmarks.

2.2  Trigger for Change Procedures

2.2.1  These change procedures can be triggered for a Benchmark Methodology in the following ways:
(a) as the result of an annual or additional internal review of a Benchmark Methodology as described in the TRBSL Benchmark Internal Review Policy;
(b) on the recommendation of the TRBSL Board of Directors or the relevant Benchmark Oversight Committee;
(c) on the recommendation of management within Thomson Reuters’ Content Operations division, Benchmarks and Indices division or the Compliance department;
(d) issues raised by stakeholders including subscribers and other users of a Benchmark

2.3  Analysis & Materiality

2.3.1  Once the Change Procedures are initiated for a Benchmark Methodology, TRBSL 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 change to the Benchmark Methodology. In making such determinations, TRBSL will seek the advice of the relevant Benchmark Oversight Committee.

2.3.2  In determining the materiality of the proposed change, TRBSL 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) changes to the panel of Submitters or Contributors where relevant; and
(d) whether the change would alter a Benchmark determination after the usual rounding is applied to that Benchmark.

2.3.3  For the avoidance of doubt, changes to document formatting shall not constitute a material change to a Benchmark Methodology.

2.3.4  If TRBSL 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, TRBSL shall amend and publish the Benchmark Methodology.

2.3.5  If TRBSL 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, TRBSL shall follow the steps described in the sections below.
2.4 Stakeholder Consultation

2.4.1 For a proposed change to a Benchmark Methodology that constitutes a material change, TRBSL shall issue a consultation document with the purpose of soliciting comments and feedback. The consultation document shall describe the proposed change to the Methodology, the rationale for proposing the change, and provide an assessment of the impact that proposal. The consultation document shall include TRBSL’s assessment as to whether the representativeness of the benchmark and its appropriateness for its intended use are put at risk in the event that the proposed change is not implemented.

2.4.2 The consultation document shall be issued to stakeholders including the regulator as appropriate, any members belonging to a market advisory committee if applicable, subscribers and known users of the Benchmark. The consultation document shall also be published on the Thomson Reuters website and will be made available on request to any third party.

2.4.3 The consultation document shall specify a period for the consultation which will be set in accordance with the circumstances surrounding the proposed change but will typically be not less than 2 weeks. Comments received from the consultation, and TRBSL’s response to those comments, will be made accessible after any consultation, except where confidentiality has been requested.

2.5 Implementation

2.5.1 Following receipt of feedback, if any, at the conclusion of a consultation period as described in section 4 for a proposed change that constitutes a material change to a Benchmark Methodology, TRBSL will determine whether to proceed with the change and will seek the advice of the relevant Benchmark Oversight Committee in making such determination. TRBSL shall make available its consideration of feedback received on request except where such feedback has been supplied on a confidential basis.

2.5.2 If the determination is not to proceed, TRBSL will announce that determination.

2.5.3 If the determination is to proceed with the proposed change, TRBSL will announce that determination and state an effective date for the confirmed change. The notification period shall depend on the nature of the Benchmark and the confirmed change but shall typically be not less than one calendar month.

2.5.4 An amended Benchmark Methodology document will be issued following announcement of a confirmed change as soon as is practicable.

2.6 Force Majeure

2.6.1 Exceptional events may necessitate an immediate change to a Benchmark Methodology. In such exceptional circumstances, TRBSL will provide as much notice as is practicable and following such change will conduct an internal review of the Methodology in accordance with the TRBSL Benchmark Internal Review Procedures.
Chapter 3  Benchmark Cessation Policy

3.1  Introduction

3.1.1  This document addresses only those cases where TRBSL is the Administrator of a Benchmark, as those terms are defined in Article 3 point 6 of (EU) 2016/1011 ("EU BMR"); and by the IOSCO Principles for Financial Benchmarks or other competent authorities. In these cases TRBSL 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 EU BMR, and in the best interests of the markets each Benchmark serves.

3.2  Potential reasons for the Cessation of a Benchmark

3.2.1  In certain circumstances, it may be necessary for TRBSL to cease to offer a particular Benchmark Rate. This may be due to external factors beyond the control of TRBSL, such as a market structure change or deterioration in data sufficiency for a particular currency or instrument. Where further explanation for individual Benchmarks is required regarding cessation policy, these are detailed within the Appendix Section of this Policy.

3.2.2  The Administrator keeps under review:
   a) the structure and liquidity of the market underlying each Benchmark
   b) the representativeness of the sample used to construct 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
   d) to the extent feasible, the user base for each Benchmark and the use to which they apply each Benchmark

3.2.3  In its review of the above factors it may be that the Administrator takes the view that the Benchmark is no longer representative of its intended interest, 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.

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

3.3  Benchmark Cessation Procedures

3.3.1  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, TRBSL will carry out an analysis of the estimated breadth and depth of usage, contracts and financial instruments 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.

3.3.2  The administrator 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).

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

3.3.4  The administrator will hold an emergency Oversight Committee meeting and request approval/rejection of the proposal to cease calculation and distribution of the benchmark.

3.3.5  Where judged appropriate and proportionate, TRBSL will carry out a public consultation to take into account the views of Stakeholders and any relevant Regulatory and National Authorities in determining what specific policies and procedures are appropriate in ceasing a particular benchmark.

3.3.6  In all cases, TRBSL 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.

3.3.7  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 the Administrators’ website as well as all the usual alert pages maintained on the Administrators’ products.
Following the consultation, the Administrator will publish a summary of comments received, and a decision on whether to cease or not in a Cessation Notice.

If the decision is to cease, the Administrator the Cessation Notice will include an indicative calendar for this. The calendar will include a period of suspension, following which any further comments received will be considered before the final cessation of the Benchmark.

Where possible and appropriate, the Administrator will publish along with the Cessation Notice guidance for users and other stakeholders on potential alternative or replacement Benchmarks.

### 3.4 Additional Benchmark Cessation Procedures for Critical Benchmarks

#### 3.4.1

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 EU BMR.

#### 3.4.2

If an administrator of a critical benchmark intends to cease providing such benchmark, the administrator 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).

#### 3.4.3

During the period referred to in point (b), the administrator shall not cease provision of the benchmark.

#### 3.4.4

Upon receipt of the assessment of the administrator referred to in paragraph 3.4.1, 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).

#### 3.4.5

During the period of time referred to in point (b) of 3.4.1 the administrator shall not cease the provision of the benchmark without the written consent of the competent authority.

#### 3.4.6

Following completion of the assessment referred to in point (b) of 3.4.2, the competent authority shall have the power to compel the administrator 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.

#### 3.4.7

For the purposes of 3.4.6, the period for which the competent authority may compel the administrator to continue to publish the benchmark shall not exceed 12 months.

#### 3.4.8

By the end of that period, the competent authority shall review its decision to compel the administrator 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.

#### 3.4.9

Without prejudice to 3.4.2, in the event that 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).
3.5 Emergency Benchmark Cessation Procedures

3.5.1 It is possible in extremis that circumstances beyond the Administrators’ 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.

3.5.2 Under these extreme circumstances, the Administrator will ensure that all relevant information including back-up plans and, where possible and appropriate, information on alternative Benchmarks is published for users and stakeholders as rapidly as possible, and updates are given as circumstances evolve.

Appendix 1 - Cessation of WM/Reuters FX Rates Policy

3.5.3 Thomson Reuters through its wholly owned subsidiary Thomson Reuters Benchmark Services Limited (“TRBSL”) provides the WM/Reuters 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.

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

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

When we identify a possible cessation event, we will:

(1) review the circumstances and consider whether we believe that there is a viable alternative to ceasing a particular WM/R Benchmark Rate;
(2) where practicable undertake a consultation with key stakeholders and consider any feedback that we feel may identify a viable solution;
(3) where practicable provide notice to key stakeholders of any cessation of a particular WM/R Benchmark Rate; and
(4) publish a zero rate while we consider whether to cease a WM/R Benchmark Rate in relation to a particular currency or tenor. In these circumstances we 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.

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

We 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 TRBSL 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.

3.5.7 Alternative Benchmark Rates

In the event of any cessation of a particular WM/R Benchmark Rate, we will attempt to assist our clients in identifying an alternative benchmark rate. However, we recommend 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, TRBSL will consider the provision of a parallel benchmark rate to accommodate an orderly transition.
Chapter 4  Record Keeping

4.1  TRBSL Record Keeping Policy
4.1.1  TRBSL must maintain relevant records in accordance with the TRBSL Records Keeping Policy

Chapter 5  Document Review Cycle

5.1  Document Review Frequency
5.1.1  This document must be reviewed on an annual or ad hoc basis to ensure it remains appropriate and consistent with industry standards.
5.1.2  The document will also be reviewed each time there is a change in the regulatory environment and in the event of business changes.
5.1.3  The TRBSL Board are responsible for approving new versions of this document.

Chapter 6  Document Approval

6.1  TRBSL Board Approval
6.1.1  The TRBSL Board are responsible for approving final versions of this document.
Legal Information

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