

## **FTSE Russell**

# Independent Reasonable Assurance Report with respect to the IOSCO Principles for Financial Benchmarks

As at 21 January 2025

Report on the suitability of the design of internal controls relating to the FTSE Russell benchmark administration activities for the FTSE Russell WMR FX Benchmarks, Interest Rate Benchmarks, Convertible Bond Indices, and CoreCommodity CRB Indices, with respect to the IOSCO Principles for Financial Benchmarks.



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This Report is intended solely for the purpose of reporting on the internal control activities of FTSE Russell for the FTSE Russell WMR FX Benchmarks, Interest Rate Benchmarks, Convertible Bond Indices, and CoreCommodity CRB Indices in relation to the IOSCO report published on the Principles for Financial Benchmarks ("IOSCO Principles") 2013. This Report should be read in full.



## 1. Introduction

#### 1.1. Overview

In July 2013, the International Organization of Securities Commissions ("IOSCO") issued its final report on the Principles for Financial Benchmarks (the "IOSCO Principles", FR07/13) setting out the standards to which organisations that administer financial Benchmarks (as defined in the IOSCO Principles) should adhere. IOSCO's objective was to create an overarching framework of Principles for Benchmarks used in financial markets. The final report recommended that Benchmark Administrators adopt the Principles as Recommended Practices.

"The Principles should be understood as a set of recommended practices that should be implemented by Benchmark Administrators and Submitters. The application of these Principles should be proportional to the size and risks posed by each Benchmark and/or Administrator and the Benchmark-setting process."

## 1.2. Structure of this Report

This Report contains the 12 May 2025 declaration of FTSE Russell for suitably designing internal control activities in relation to the IOSCO Principles with respect to the benchmark administration activities for the In-Scope Products previously administered by Refinitiv Benchmark Services (UK) Limited (RBSL).

Section 2 of this Report provides an overview of FTSE Russell's organisation and business. Section 3 contains the list of benchmarks in-scope of this Assurance report. Section 4 contains the statements provided by the Management of FTSE Russell. Section 5 contains the KPMG LLP ("KPMG") Independent Assurance Report. Section 6 contains FTSE Russell's responses against each of the IOSCO Principles, the control objectives identified by Management of FTSE Russell to meet the requirements of these principles, and the control activities designed to achieve those control objectives for the In-Scope Products, alongside the work performed by KPMG.



## 2. Company Information

## 2.1. Company Information

FTSE International Limited (trading name "FTSE Russell") is wholly owned by the London Stock Exchange Group plc ("LSEG"). LSEG is one of the world's leading providers of financial market infrastructure and delivers data, analytics and index products in over 170 countries to over 40,000 customers. Backed by more than three centuries of experience, LSEG plays a vital social and economic role in the world's economy, driving financial stability, empowering economies and enabling sustainable growth with its open approach and trusted expertise.

FTSE Russell is a leading global provider of benchmarks, analytics, and data solutions, offering a true picture of global markets across asset classes, styles, and strategies. Its global perspective is underpinned by specialist knowledge gained from developing local market solutions and understanding client needs around the world.

On 29 January 2021, LSEG announced its acquisition of the Refinitiv business. This included Refinitiv Benchmark Services (UK) Limited ("RBSL", a wholly owned subsidiary of Refinitiv Limited). Refinitiv Benchmark Services (UK) Limited received its regulatory authorisation as a Benchmark Administrator under the EU BMR from the competent authority, the UK FCA, on 11 July 2018.

On 16 December 2024, the portfolio of In-Scope Products previously administered by RBSL were transferred to FTSE International Limited ("FIL"), following a re-branding on 18 November 2023 as FTSE Russell products. The benchmarks of FIL are provided under the FTSE Russell trading name. For more information on the previous RBSL and current FIL Benchmark Administration governance structure, please refer to Section 6 of this report.



## 3. Benchmarks & Indices Within Scope

FTSE Russell manages a diverse portfolio of benchmarks and indices. Below is a high-level description of the nature of those that are within the scope of this assurance report. Within this report we refer to the below FTSE Russell benchmarks and indices as the "In-Scope Products" or "In-Scope". For a more detailed description of each product, please refer to the FTSE Russell benchmark methodologies and benchmark statements.

## 3.1. WMR FX Benchmarks Spot, Forward, NDF, and Metals Rates

The WMR Closing Spot Rates service was introduced in 1994 to provide a standard set of currency benchmark rates so that portfolio valuations could be compared with each other, and their performance measured against benchmarks without having any differences caused by exchange rates. These rates were adopted by index compilers, the Financial Times and other users and became the de facto standard for Closing Spot Rates on a global basis.

FTSE Russell now offer a 24-hour intraday spot rate service in 157 currencies, intraday forward rates for 79 currencies and non-deliverable forward rates (NDFs) for 11 currencies, calculated up to 22 times a day. The WMR rates available are as follows:

- Closing spot rates; Produced daily Monday–Friday at 4:00 pm London time, with coverage including 157 currencies against the EUR, GBP, and USD.
- Closing forwards and NDFs; Produced daily Monday–Friday at 4:00 pm London time, with coverage including 79 forward currencies and 11 NDF currencies, against EUR, GBP, and USD.
- Intraday spot rates; Produced on the hour from Monday 6:00 am Hong Kong/Singapore time
   Friday 10:00 pm London time, with coverage including 150+ currencies against the EUR,
   GBP, and USD. Also proceeded on the half-hour for 25 (Trade) currencies against EUR,
   GBP, and USD.
- Intraday forwards and NDFs; Produced on the hour from 6:00 am 9:00 pm London time; 10:00 am and 4:00 pm Sydney time; 2:00 pm New Zealand time; 11:00 am Singapore time; 5:00 pm New York time; 11:00 am Bangkok time and 10:00 am Tokyo time.

WMR rates are built with data sourced directly from market transactions, applying multiple validation techniques on captured and calculated rates to result in accurate spot rates for each fix throughout the day.

## 3.2. FTSE Convertible Indices

FTSE Convertible Indices are a family of Indices that aim to represent the performance of the Global market of Convertible Bonds available to institutional investors.

The index family was previously known as the UBS Global Convertible Indices. It was acquired by Refinitiv (now LSEG) in June 2014. The Index family comprises the Global ('broad') Index and a number of Sub-Index families that are derived from the Global ('broad') Index based on a set of specific criteria defined for each Sub-Index family and is constructed to represent the market composition of a given segment of the Convertible Bond Market.



The Indices are published overnight on an EOD basis for each Weekday. The calculation of the Indices takes place on or shortly after 22:00 GMT and relies readily available input data on a timely availability of the input data for each of the constituents.

## 3.3. FTSE CoreCommodity CRB Indices

The FTSE CoreCommodity CRB Indices are designed to provide exposure to the global commodities industry. The Index represents 19 commodities, grouped by liquidity into 4 groups. Petroleum products are capped at 33% whilst the other 3 groups are equal weighted.

FTSE CoreCommodity CRB Indices are calculated for the following segments ("Commodity Segments"):

- the Primary CRB index comprising 19 individual commodities,
- the Non-Energy CRB index which excludes energy commodities and comprises 15 individual commodities, and
- the Non-Agri and Livestock CRB index which excludes both agricultural and livestock commodities and comprises 9 individual commodities.

All commodity prices used in the FTSE CoreCommodity CRB indices are taken from commodity futures contract prices published by three regulated exchanges.

### 3.4. FTSE Term €STR

FTSE Term €STR is a forward-looking, risk-free rate available in spot-week, 1-month, 3-month, 6-month and 12-month tenors denominated in euros. The purpose of the Benchmark is to provide a EURIBOR® fallback in certain cash instruments. The benchmark is representative of nearly risk-free term rates for the euro.

Executed trades and streaming quotes are sourced from two dealer-to-client trading platforms for the previous TARGET2 business day between 09:00 and 18:00 CET. Both datasets are subject to quality criteria, such as minimum volume checks. For executed trade data the number of trades between the same counterparty pair, for the same tenor at the same rate is capped. Quote data is snapped every 10-minutes and a mid-rate per snap is calculated. Each valid mid-rate must be composed of a minimum number of dealers.

The FTSE Term €STR benchmark is published at or around 11:00CET on each TARGET2 business day.

### 3.5. Tokyo Swap Rate

The Tokyo Swap Rate (TSR) is a Japanese yen (JPY) interest rate swap (IRS) benchmark family, widely used in the valuation of swaptions, CMS, structured loans and notes, FRNs and private finance initiatives.

The Tokyo Swap Rate (for swaps referencing TONA) settings are based primarily upon dealer-to-client quotes in spot starting TONA OIS from a dealer-to-client trading platform. The data is collected during a 20-minute window centred on 10:00 (Tokyo time) in the morning and 14:40-15:00 (Tokyo time) in the afternoon and published at 10:30 (Tokyo time) and 15:30 (Tokyo time) respectively. In the event of low liquidity FTSE Russell uses spot starting TONA OIS rates from (i) two inter-dealer brokers, (ii) dealer-to-client trading platform (composite indicative rates) and (iii) any unused executable dealer-to-client quotes collected during the same windows.



The Tokyo Swap Rate benchmarks are published on each business day in Japan at 10:30 and 15:30 Tokyo time.

#### 3.6. FTSE Term SONIA

The FTSE Term SONIA benchmark is a forward-looking, risk-free reference rate available in 1-month, 3-month, 6-month and 12-month tenors denominated in sterling and designed to be an alternative to GBP LIBOR.

The primary source of data is executable quotes from electronic interdealer platforms for centrally cleared, spot-starting GBP SONIA OIS contracts and then the mid-price is calculated based on clearing a predetermined notional amount.

It is published prior to 12:00 London time on a daily basis and is available in one-month, three-month, six-month and twelve-month tenors.

#### 3.7. FTSE USD IBOR Cash Fallbacks

FTSE USD IBOR Cash Fallbacks are benchmarks for use in financial and nonfinancial corporate contracts. The purpose of the USD IBOR Institutional Cash Fallbacks benchmark and the USD IBOR Consumer Cash Fallbacks benchmark is to provide fallbacks for existing institutional and consumer cash financial products such as adjustable-rate mortgages, bilateral business loans, floating rate notes, securitizations, syndicated loans and variable rate private student loans that referenced US dollar LIBOR prior to its cessation.

The FTSE USD IBOR Cash Fallbacks capture both a risk-free rate, which is measured by different forms of Secured Overnight Financing Rate (SOFR), plus a fixed spread adjustment that measures the average difference between USD LIBOR and SOFR. Different markets adopt different conventions so rather than having a single fallback rate there are a family of rates, each of which is suitable in different markets.

FTSE USD IBOR Cash Fallbacks are benchmarks for use in financial and nonfinancial corporate contracts. The FTSE USD IBOR Institutional Cash Fallbacks benchmark and the USD IBOR Consumer Cash Fallbacks benchmark are published at approximately 08:20 ET.

# 3.8. Saudi Arabian Interbank Offered Rate (SAIBOR) and Saudi Arabian Interbank Bid Rate (SAIBID)

The objective of both the Saudi Arabian Interbank Bid Rate ("SAIBID") and the Saudi Arabian Interbank Offered Rate ("SAIBOR") is to reflect the true price of unsecured wholesale liquidity in the Kingdom of Saudi Arabia (KSA) Market. SAIBOR and SAIBID are determined using Contributions from a panel of Contributor Banks.

The SAIBOR benchmark is an indicative offer rate at which contributor panel banks would be able to borrow unsecured interbank funds in Saudi Riyals, anchored in transactions where possible together with a historical spread adjustment.

SAIBID is a benchmark representing the realised cost of contributor panel banks' wholesale unsecured funding in Saudi Riyals, anchored in transactions where possible.

A waterfall methodology is applied to both benchmarks to enable a rate to be published in a wide range of market circumstances. The benchmarks comprise the following tenors: overnight (O/N), 1-week, 1-month, 3-months, 6-months, and 12-months. The benchmarks are published Sunday to Thursday at 12:00 KSA subject to local market holidays.



## 4. FTSE Russell Executive Statement

As Management of FTSE International Limited (trading name "FTSE Russell") we are, and shall be, responsible for identifying control objectives in relation to the provision of benchmark administration activities for the indices and benchmarks set out in Section 3 (the "In-Scope Products"), and the design, implementation and operation of FTSE Russell's control activities to provide reasonable assurance that the control objectives in relation to the Principles for Financial Benchmarks published by the International Organization of Securities Commissions dated July 2013 (the "IOSCO Principles" or "the Principles") are achieved for the In-Scope Products.

We confirm that FTSE Russell has designed and implemented control activities to provide reasonable assurance that the control objectives in relation to the IOSCO Principles for the In-Scope Products were achieved as at 21 January 2025.

We have prepared the accompanying description in Section 6 (the "Description") to set out the details of the IOSCO Principles together with FTSE Russell's benchmark administration activities for the In-Scope Products as at 21 January 2025, and the control activities that were designed and implemented to provide reasonable assurance that the control objectives in relation to the IOSCO Principles for the In-Scope Products were achieved as at 21 January 2025.

The Description was prepared given the requirement in the IOSCO Principles that Benchmark Administrators should publicly disclose the extent of their compliance with the IOSCO Principles annually and that, if implementation in any way deviates from the IOSCO Principles, the Administrators should explain why they believe it meets the objectives and functions of the IOSCO Principles, including the extent to which they are relying on a proportionate view of the IOSCO Principles (as that concept is described and permitted within the IOSCO Principles).

The Description has been prepared for stakeholders who have a sufficient understanding to consider the Description.

#### **Statement**

We confirm that, to the best of our knowledge and belief, the accompanying description 'IOSCO Principles and Responses' in Section 6 is fairly presented in that it presents the policies, procedures and controls undertaken for the In-Scope Products by FTSE Russell as at 21 January 2025 to achieve compliance with the IOSCO Principles. Where we have applied a proportionate approach (as described and permitted by the IOSCO Principles), it has been articulated against each relevant IOSCO Principle within Section 6 of this report. The Statement comprises this affirmation statement in Section 4, and the accompanying description 'IOSCO Principles and Control Responses' set out in Section 6.

### Criteria

We confirm that:

- 1) The accompanying Description, set out in Section 6, fairly presents FTSE Russell's benchmark administration activities for the In-Scope Products as at 21 January 2025. The criteria used in making this statement were that the accompanying Description:
  - a Presents how the processes and systems were designed and implemented, including, if applicable:



- The types of indices and benchmarks administered, and as appropriate, the nature of those indices and benchmarks;
- The procedures, both automated and manual, by which the input data is gathered and processed, and the In-Scope Products are calculated, published, corrected (as necessary) and administered;
- Relevant control objectives and control activities designed to achieve those control objectives; and
- Other aspects of our control system, risk assessment process, control activities and monitoring control activities that were relevant to administering the In-Scope Products.
- b. Does not omit or distort the information relevant to the scope of the benchmark administration activities being described, while acknowledging that the Description is prepared to meet the needs of a broad range of stakeholders and may not, therefore, include every element of the services that each individual stakeholder may consider important in its own particular environment.
- 2) The control activities related to the control objectives stated in the accompanying Description were suitably designed as at 21 January 2025 to achieve those control objectives if the described control activities operated effectively as at 21 January 2025. The criteria used in making this statement were that:
  - The risks that threatened achievement of the control objectives stated in the Description were identified; and
  - The identified control activities would, if operated as described, provide reasonable assurance that those risks did not prevent the control objectives stated in the Description from being achieved.

We acknowledge our responsibility for establishing appropriate internal controls to ensure continued compliance with the IOSCO Principles in relation to the In-Scope Products.

-DocuSigned by:

Fiona Basset

Fiona Bassett, CEO of FTSE Russell

For and on Behalf of FTSE International Limited.

12 May 2025



## 5. KPMG Independent Assurance Report

Independent Practitioner's Reasonable Assurance Report to FTSE International Limited in respect of the control system over the benchmark administration activities for the In-Scope Products in relation to the IOSCO Principles for Financial Benchmarks as at 21 January 2025.

#### Scope

In accordance with our statement of work dated 08 November 2024 ("Statement of Work" or "SoW"), we have been engaged to report to FTSE International Limited (trading name "FTSE Russell") and carried out procedures to enable us to form an independent opinion on whether FTSE Russell has fairly described, in all material respects, its control system over the benchmark administration activities for the indices and benchmarks set out in Section 3 (the "In-Scope Products") as at 21 January 2025 in the accompanying description set out in Section 6 (the "Description") and on the suitability of the design of control activities to achieve the related control objectives stated in the Description, based on the criteria identified in the FTSE Russell Executive Statement in Section 4. Our opinion is set out below and should be read and considered in conjunction with this report in full.

The scope of our engagement covers the control objectives and control activities applicable to the benchmark administration activities for the In-Scope Products determined by FTSE Russell, as set out in Section 3.

While the control activities and related control objectives may be informed by FTSE Russell's need to satisfy legal or regulatory requirements and the *Principles for Financial Benchmarks Final Report by the Board of the International Organization of Securities Commissions (IOSCO) published in July 2013* (the "IOSCO Principles"), our scope of work and our opinions do not constitute assurance over compliance with those laws and regulations or the IOSCO Principles.

### **Use of Our Report**

Our report and the description of tests of control activities has been prepared for FTSE Russell solely in accordance with the terms of our Statement of Work. We have consented to publication of our report on the FTSE Russell website for the purpose of FTSE Russell showing that it has obtained an independent assurance report in connection with its control system over the benchmark administration activities for the In-Scope Products.

Our report was designed to meet the agreed requirements of FTSE Russell determined by FTSE Russell's needs at the time. Our report should not therefore be regarded as suitable to be used or relied on by any party wishing to acquire rights against us other than FTSE Russell for any purpose or in any context. Any party other than FTSE Russell who obtains access to our report or a copy and chooses to rely on our report (or any part of it) will do so at its own risk. To the fullest extent permitted by law, KPMG LLP will accept no responsibility or liability in respect of our report to any other party.

### Management's Responsibilities

In this report, references to FTSE Russell's management or Management means the Directors of FTSE Russell and those employees to whom the Directors of FTSE Russell have properly delegated day-to-day conduct over matters for which the Directors of FTSE Russell retain ultimate responsibility.

Management is responsible for ensuring that FTSE Russell complies with the IOSCO Principles. This includes having responsibility for specifying the control objectives which they assert achieve compliance with the IOSCO Principles and designing, implementing and monitoring compliance with policies,



procedures and control activities to achieve those control objectives in relation to the In-Scope Products. Management are also responsible for: (i) preparing the Description in Section 6 and the accompanying FTSE Russell Executive Statement set out in Section 4, including the completeness, accuracy, and method of presentation of the Description and the FTSE Russell Executive Statement; (ii) providing the benchmark administration activities for the In-Scope Products covered by the Description; (iii) selecting the criteria to be used and stating them in the FTSE Russell Executive Statement; (iv) specifying the control objectives and stating them in the Description; (v) identifying the risks that threaten the achievement of the control objectives; and (vi) designing, implementing and documenting control activities that are suitably designed and operating effectively to achieve the related control objectives stated in the Description.

#### **Our Responsibilities**

Our responsibility, based on the procedures performed and evidence obtained, is to express an independent opinion on the fairness of the presentation of the Description and on the suitability of the design of the control activities to achieve the related control objectives stated in the Description. The criteria we used to form our judgements are the criteria used by Management in making the FTSE Russell Executive Statement and are set out in Section 4.

We conducted our engagement in accordance with International Standard on Assurance Engagements (UK) 3000 Assurance Engagements Other Than Audits or Reviews of Historical Financial Information ("ISAE (UK) 3000") issued by the Financial Reporting Council ("FRC") and having regard to the guidance in the Institute of Chartered Accountants in England and Wales ("ICAEW") Technical Release 02/14 FSF Assurance Reports on Benchmarks and Indices ("TECH 02/14"). That standard and guidance requires us to comply with ethical requirements and to plan and perform our procedures to obtain reasonable assurance about whether, in all material respects, based on the criteria described in the FTSE Russell Executive Statement in Section 4, the Description is fairly presented, and the control activities were suitably designed to achieve the related control objectives stated in the Description.

Our assurance engagement to report on the Description and design of control activities for the In-Scope Products at FTSE Russell involved:

- performing procedures to obtain evidence about the fairness of the presentation of the Description of the benchmark administration activities for the In-Scope Products and the suitability of the design of the control activities to achieve the related control objectives stated in the Description:
- assessing the risks that the Description is not fairly presented and that the control activities were not suitably designed to achieve the related control objectives stated in the Description;
- evaluating the overall presentation of the Description, the suitability of the control objectives stated therein, and the suitability of the criteria specified by FTSE Russell and described in the FTSE Russell Executive Statement in section 4; and
- performing such other procedures as we considered necessary in the circumstances.

We did not perform any procedures regarding the operating effectiveness of control activities included in the Description and, accordingly, do not express an opinion thereon.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### **Our Independence and Quality Management**

We have complied with the ICAEW Code of Ethics, which includes independence, and other ethical requirements founded on fundamental principles of integrity, objectivity, professional competence and



due care, confidentiality and professional behaviour, that are at least as demanding as the applicable provisions of the International Ethics Standards Board for Accountants' ("IESBA") *International Code of Ethics for Professional Accountants (including International Independence Standards)*.

Our firm applies International Standard on Quality Management (UK) 1 Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements ("ISQM (UK) 1"), issued by the FRC, which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

#### **Additional Information**

The information provided in Section 2, 3 and Appendix 2 is presented by FTSE Russell to provide additional information and is not a part of the Description of the benchmark administration activities for the In-Scope Products. Such information has not been subjected to the procedures regarding the Description or the suitability of control activities to achieve the related control objectives stated in the Description, and accordingly, we express no opinion on it.

#### **Inherent Limitations of Control Activities**

The Description is prepared to meet the common needs of a broad range of stakeholders and may not, therefore, include every aspect of FTSE Russell's benchmark administration activities for the In-Scope Products that each individual stakeholder may consider important in its own particular environment. Also, because of their nature, control activities at a benchmark administrator may not prevent or detect and correct all errors or omissions in processing or administering benchmarks or indices. Such control activities cannot guarantee protection against (among other things) fraudulent collusion especially on the part of those holding positions of authority or trust.

Management is responsible for ensuring that FTSE Russell complies with the IOSCO Principles in respect of the In-Scope Products and so have specified control objectives which they assert, in the FTSE Russell Executive Statement in Section 4, achieve compliance with the IOSCO Principles. Whilst we perform procedures to test whether the control activities are suitably designed to achieve the related control objectives stated in the Description, we provide no assurance over whether Management's specified control objectives achieve compliance with the IOSCO Principles.

The validity and reliability of a benchmark or index is dependent on input data utilised by the benchmark administrators. Third parties providing this input data are solely responsible for the completeness, accuracy, and integrity of this input data. Our procedures did not extend to control activities at third parties providing input data, and we have not evaluated the suitability of the design or operating effectiveness of control activities at such third party input data providers. As a result, we do not express assurance over the third party input data.

FTSE Russell utilises certain third-party external technology services (e.g. third-party cloud infrastructure) to support its benchmark administration activities. Our procedures did not extend to control activities at these third parties, and we have not evaluated the suitability of the design or operating effectiveness of control activities at such third parties.

Our opinion is based on historical information and the projection to the future of any evaluation of the fairness of the presentation of the Description, or the suitability of the design of the control activities to achieve the related control objectives is subject to the risk that control activities at a benchmark administrator may become ineffective.

#### **Description of Tests of Control Activities**

The specific control activities tested and the nature, timing, and results of those tests are detailed in Section 6.



### **Opinion**

Our opinion has been formed on the basis of the matters outlined in this report. The criteria we used in forming our opinion are those described in the FTSE Russell Executive Statement in Section 4, which were designed by Management in context of the requirements of the IOSCO Principles.

In our opinion, in all material respects:

- The Description in Section 6 fairly presents FTSE Russell's control system over the benchmark administration activities for the In-Scope Products as designed and implemented as at 21 January 2025; and
- The control activities related to the control objectives stated in the Description in Section 6
  were suitably designed to provide reasonable, but not absolute, assurance that the specified
  control objectives would be achieved if the described control activities operated effectively as
  at 21 January 2025.

Signed by:

KPMG LLP

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**KPMG LLP** 

**Chartered Accountants** 

15 Canada Square

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E14 5GL

United Kingdom

12 May 2025



## 6. FTSE Russell Controls Tables and KPMG Testing

## 6.1. Description of tests performed by KPMG LLP

The tables below in this section include the IOSCO Principles applicable to the In-Scope Products administered by FTSE International Limited on the as at date of this report, 21 January 2025 ("Assurance Date"). The tables also include the control objectives specified by FTSE Russell, along with the associated business processes and control descriptions. Each control table contains KPMG's Test Procedures and associated results.

The tests performed in connection with determining the design of control activities in relation to the In-Scope Products as detailed in this section are described below:

Test Procedure	Description
Enquiry	Enquire of appropriate FTSE Russell personnel. Enquiries were used to obtain, among other things, knowledge, and additional information about the control.
Inspection	Read documents and reports that contain an indication of performance of the control. This includes, among other things, examining management reports, operational logs, and other relevant documentation.
Observation	Observe the application of a specific control.

KPMG's tests of design may identify exceptions in control activities. KPMG evaluate whether those control activities exceptions are material, i.e., are such that the related control objective is not achieved and so whether their opinion should be qualified. This evaluation may include assessing the materiality of individual exceptions in control activities in the context of the related control objective as a whole, and considering whether there are compensating control activities and aggregating exceptions in all control activities related to the same control objectives.

## 6.2. Business Context

On 29 January 2021 the London Stock Exchange Group (LSEG) acquired Refinitiv. This included the benchmark administrator Refinitiv Benchmark Services (UK) Limited (RBSL) who administered a portfolio of benchmarks and indices.

On the 16 December 2024 benchmarks and indices administered by RBSL were transferred to FTSE International Limited (FIL), another Benchmark Administrator within LSEG. The change of Benchmark Administrator did not have an impact on the operational arrangements of the benchmarks and



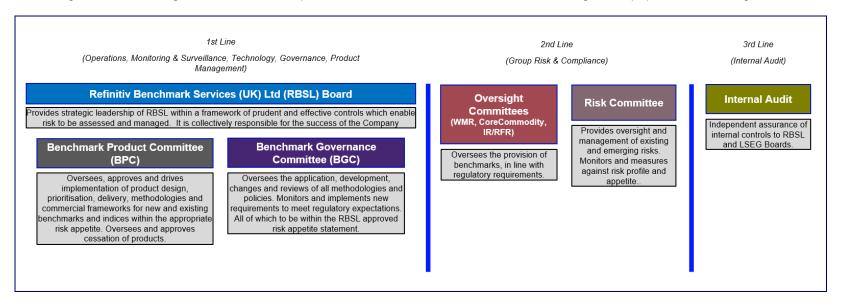
indices or the contractual arrangements between LSEG entities and their clients. This change aligns the benchmark administration activities of RBSL and FIL under a single entity.

Internally a programme was run to manage the risks associated with this transfer. Clients were notified of the transfer on the 18 November, 2 December and 16 December 2024 (Benchmark Administration Transfer | LSEG). The changes associated with the change of Administrator are outlined in further detail below.

## 6.3. RBSL Governance Framework (applied until 15 December 2024)

On 11 July 2018, RBSL became an Authorised Benchmark Administrator by the FCA under the EU Benchmarks Regulation ("EU BMR"). RBSL continued to administer its benchmarks, including the In-Scope Products, until 16 December 2024 when the administration was transferred to FTSE International Limited.

With the Assurance date as at 21 January 2025, a number of controls relating to the In-Scope Products that occur on a frequency less than daily (e.g. annual approvals of policies / procedures) most recently operated under the previous RBSL governance framework. The following sub-section outlines the RBSL governance arrangements that were in place for RBSL within the London Stock Exchange Group, prior to the change of administrator.





#### **RBSL Board**

The Board was collectively responsible for the long-term success of the RBSL legal entity, with its primary role to provide strategic leadership of RBSL within a framework of prudent and effective controls which enable risks to be assessed and managed.

The Board sought to meet at least 4 times per year. Responsibilities and areas of duty were documented within the Terms of Reference and include, but are not limited to:

- Reviewing the output and escalation from the Benchmark Governance Committee and Benchmark Product Committee.
- Reviewing the Company's business and financial performance.
- Approval of cessation/launch or any other material matter concerning critical benchmarks administered by the Company.

#### **Benchmark Governance Committee**

The Benchmark Governance Committee was one of two RBSL committees implemented to ensure that there was sufficient management and oversight on the benchmark governance. The Benchmark Governance Committee oversaw the application, development, changes and reviews of all RBSL benchmark methodologies, policies and governance structures.

#### **Benchmark Product Committee**

The Benchmark Product Committee provided oversight of benchmark products including oversight and approval for the implementation of product design, prioritisation, delivery, methodologies and commercial frameworks for new and existing benchmarks within the appropriate risk appetite.

## **Oversight Committees**

RBSL Oversight Committees alongside the Benchmark Governance Committee, were responsible for maintaining oversight over the development, issuance, and operation of the benchmarks, including the benchmark methodology and control framework.

The WMR Oversight Committee performed oversight of aspects of the provision of the WMR Spot, Forward, NDF and Spot Rate Metals. The Refinitiv Benchmark Oversight Committee performed oversight on SAIBOR/SAIBID, FTSE Convertible Indices, FTSE Term SONIA, Tokyo Swap Rate, FTSE USD IBOR Cash Fallbacks and FTSE Term ESTR. The FTSE CoreCommodity CRB Indices Oversight Committee performed oversight of all aspects of the provision of the FTSE CoreCommodity CRB Indices.

The responsibilities of the Oversight Committees are detailed in the Terms of References and include, but are not limited to:

- reviewing the benchmark's definition and methodology at least annually;
- overseeing any changes to the benchmark's methodology;
- overseeing the administrator's control framework, the management and operation of the benchmark;
- overseeing any exercise of expert judgement; and



assessing audits or reviews and monitoring implementation of identified remedial actions.

#### **RBSL Risk Committee**

The Risk Committee was constituted by the Board of Directors (the "Board"), with the purpose of assisting in the oversight of the Company's internal risk management systems and controls, risk appetite, tolerance and strategy.

## 6.4. FTSE Russell Governance Framework (applied from 16 December 2024)

On 16 December 2024 the In-Scope Products previously administered by RBSL were transferred to FIL. The change aligned the benchmark administration activities of RBSL and FIL under a single regulated benchmark administrator.

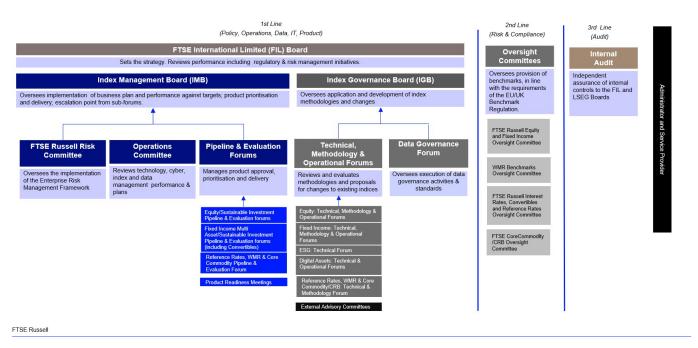
As part of the change in administration, a number of changes occurred within the business, including the rebranding of materials to align to FTSE Russell, the migration of webpages to ftserussell.com and changes to the governance and oversight structure.

The following sub-section outlines the FTSE Russell governance arrangements that are in place following the transition of administration responsibilities to FIL and at the Assurance date.

To oversee its benchmarks and indices, FTSE Russell employs a governance framework that encompasses the benchmark and index products, services and supporting technology infrastructure. The framework incorporates the London Stock Exchange Group's three lines of defence risk management framework and is designed to support the requirements of the UK Benchmarks Regulation ("UK BMR"). The bodies involved in the framework are shown in figure 1 and their respective roles are summarised below.



## FTSE Russell Governance Structure



## FTSE International Limited (FIL) Board

The FIL Board is responsible for defining the objectives and strategic direction of FTSE Russell. The FIL Board is responsible for the overall management of FTSE Russell and its subsidiaries, holding management to account for its implementation of a framework of prudent and effective controls which enables risk to be assessed and managed.

The FTSE Board is chaired by a member of the LSEG Executive Committee and includes three non-executive directors from LSEG, in addition to the Chief Executive Officer of FTSE Russell. The Board periodically receives reports from the Chief Executive Officer and Head of Compliance addressing potential risks that might impact the ongoing provision of benchmarks and indices.



#### FTSE Russell Index Governance Board (IGB)

The methodologies for all new FTSE Russell benchmarks and indices are approved by the FTSE Russell Index Governance Board ("IGB") to ensure that they meet appropriate technical standards before they are launched or released to clients. The Index Governance Board approves changes to the methodologies of existing Benchmarks or Indices where these have been proposed by Index Policy or Product managers as a result of suggestions made by members of the external advisory committees, by FTSE Russell staff, Oversight Committees or arise from the results of market consultations. The Index Governance Board is also responsible for approving benchmark policies and authorising consultations.

To assist with its work, the FTSE Russell Index Governance Board requests assessments and approvals from specialist internal bodies to ensure that a proposed new methodology will adequately meet the perceived demand, is suitable for the FTSE Russell brand, and can be calculated and maintained to the high standards of accuracy demanded by FTSE Russell.

#### FTSE Russell Index Management Board (IMB)

The Index Management Board oversees and drives implementation of the FTSE Russell Index Business Plan and manages day to day financial, commercial, operational and service performance of the Index Business. It manages the approval process for new index products and index decommissions in line with the FTSE Russell Index Series Decommissioning Statement. Evaluation and product readiness meetings are held to support the management of the product delivery process

The Operations Committee is a sub-committee of the IMB and considers the performance of services against agreed metrics, reviews the services of third-party suppliers and considers planned service improvements and risk remediations. The IMB receives updates on the main topics considered at the Operations Committee and any points requiring escalation.

## **Oversight Committees**

The Refinitiv Benchmark Oversight Committee has been renamed to the FTSE Russell Benchmarks Oversight Committee following the transition of administration responsibilities from RBSL to FIL. There have been no other changes to the FTSE CoreCommodity CRB Indices Oversight Committee and the WMR Oversight Committee. Refer to sub-section 6.3 above for more details.

#### **FTSE Russell Risk Committee**

The FTSE Russell Risk Committee oversees the implementation of the LSEG Enterprise Risk Management Framework across the FTSE Russell business. It is responsible for setting the Risk Appetite, monitoring risk exposure, and assessing plans to bring risks which are near or outside appetite back within appetite. The Committee assesses newly identified risks, effectiveness of risk mitigation plans and reports on the status of 'top risks' to the Index Management Board, FTSE Board and Group Risk Committees.



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
Overall responsibility of the Administrator		
The Administrator should retain primary	Control Objective	Test Procedures
responsibility for all aspects of the Benchmark determination process. For example, this includes:	To provide reasonable assurance that the administrator maintains primary responsibility across all aspects of their benchmark determination process, including the definition and methodology of their benchmark.	Obtained the in-scope benchmark methodologies and inspected for evidence that it includes language to confirm FTSE Russell's responsibility for input data, determining, and
a) Development: The definition of the Benchmark and Benchmark Methodology;	Business Process	publishing the Benchmark, and for all aspects of governance, oversight, compliance and integrity of the Benchmark.
b) Determination and Dissemination: Accurate and timely compilation and publication and	FTSE Russell defines a benchmark methodology document for each benchmark family. The benchmark methodologies are subjected to regular Product Manager review, the outputs of which are presented to the relevant Oversight Committees and Index Governance Board for review and	Please see Principle 11 for the review and approval of the In- Scope Products' methodologies.
distribution of the Benchmark	approval.	Please refer to Principle 1(c) for Business Processes and
	Control: Benchmark Methodologies Review and Approval	Controls relating to the FTSE Russell Benchmarks Administration Manual and the FTSE Russell RACI and
	The benchmark methodologies state that FTSE International Limited (FIL) is the Benchmark Administrator. As Administrator, FIL is responsible for collecting input data, determining and publishing the Benchmark, and for all aspects of governance, oversight, compliance and integrity of the Benchmark.	Accountability Matrices.
		Test Result
		No exceptions noted.
	Please see Principle 11 for the review and approval of the In-Scope Products' methodologies.	
	The FTSE Russell Benchmarks Administration Manual and the FTSE Russell RACI and Accountability Matrices define additional responsibilities relating to benchmark administration. Please refer to Principle 1(d) for Business Processes and Controls relating to these documents.	
c) Operation: Ensuring appropriate	Control Objective	Test Procedures
transparency over significant decisions affecting the compilation of the Benchmark and any related determination process, including contingency measures in the event of absence	operations of their benchmark, including:	1. Obtained and inspected LSEG's Business Continuity Risk Policy and Business Continuity Minimum Standards policy for evidence it outlined the approach to business continuity and
of or insufficient inputs, market stress or disruption, failure of critical infrastructure, or other relevant factors; and	<ul> <li>Transparency over decisions affecting their benchmark compilation and determination process;</li> </ul>	confirmed they were periodically reviewed and approved.
	<ul> <li>Contingency measures if inputs are absent orinefficient;</li> <li>Market stress or disruption;</li> </ul>	Please refer to Principle 9 for further details of transparency of benchmark determination.
	Failure of critical infrastructure; or	Test Result
	Other relevant factors.	No exceptions noted.
	Control: Business Continuity Risk Policy	
	The Business Continuity Risk Policy and Business Continuity Minimum Standards outline the firm's approach to business continuity for the Benchmark's administrations. For each benchmark, the firm maintains a Business Impact Analysis document, which identifies and measures potential	



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
	dependencies in the index calculation process, and a <i>Business Continuity Plan</i> , which outlines the mitigation plans for each identified dependency.	
	Please refer to Principle 9 for further details of transparency of benchmark determination.	
d) Governance: Establishing credible and	Control Objective	Test Procedures
transparent governance, oversight and accountability procedures for the Benchmark determination process, including an identifiable oversight function accountable for the	To provide reasonable assurance that the administrator maintains primary responsibility of the governance of their benchmark, including:	1. Obtained the FTSE Russell Benchmark Administration Manual and inspected for evidence that it documents the roles and responsibilities for benchmark administration activities.
development, issuance and operation of the	<ul> <li>Establishing credible and transparent governance;</li> </ul>	2. Obtained the FTSE Russell Index Management Board
Benchmark	Maintaining oversight and accountability procedures for their benchmark determination process; and	meeting minutes and inspected for evidence of the review and approval of the FTSE Russell Benchmark Administration
	<ul> <li>Having an identifiable oversight function that is accountable for developing, issuing, and operating the benchmark.</li> </ul>	Manual on an annual basis.
	Business Process	3. Obtained the FTSE Russell RACI and Accountability Matrices and inspected for evidence that it documents the roles
	The FTSE Russell Benchmark Administration Manual documents FTSE Russell's governance framework over the indices administered by FTSE International Limited, including the In-Scope	and responsibilities for governance and oversight of FTSE Russell's benchmark administration activities.
	Products. This includes the minimum standard required on management of conflicts of interest, administration of expert judgements, and the roles and responsibilities for those involved in benchmark provision.	4. Obtained the FTSE Russell Index Management Board and inspected for evidence of the review and approval of the FTSE Russell RACI and Accountability Matrices on an annual basis.
	The FTSE Russell RACI and Accountability Matrices provides further details over the roles and responsibilities for governance and oversight of FTSE Russell's benchmark administration activities.	5. Obtained the <i>Terms of Reference</i> for the three Oversight Committees and inspected for evidence that responsibilities
	Governance and oversight forums	outlined in the Response were documented.
	FTSE Russell has implemented a number of governance forums including the FTSE Russell Board of Directors, the Index Governance Board (IGB), the Index Management Board (IMB) and the Oversight Committees, which are responsible for maintaining oversight for developing, issuing, and operating the benchmarks. Details of their responsibilities are outlined in their <i>Terms of Reference</i> and a summary of their activities are outlined in Section 6.4.	6. Obtained meeting minutes for the three Oversight Committees and inspected for evidence of the Oversight Committees meeting on a frequent basis, conducting the responsibilities documented within the <i>Terms of Reference</i> and that the <i>Terms of Reference</i> were reviewed and approved at least annually.
	The WMR Oversight Committee provides oversight on all aspects of the provision of the WMR Spot, Forward, NDF and Spot Rate Metals. The FTSE Russell Benchmarks Oversight Committee provides oversight on SAIBOR/SAIBID, FTSE Convertible Indices, FTSE Term SONIA, Tokyo Swap Rate, FTSE USD IBOR Cash Fallbacks and FTSE Term ESTR. The FTSE CoreCommodity CRB Indices Oversight Committee provides oversight of all aspects of the provision of the FTSE CoreCommodity CRB Indices.	7. Obtained and inspected the <i>Tems of Reference</i> documents for the FTSE Russell Board of Directors, the FTSE Russell Index Management Board and the FTSE Russell Index Governance Board and inspected for evidence that they document the responsibilities in relation to FTSE Russell's benchmark administration activities.
	The responsibilities of the Oversight Committees detailed in the <i>Terms of References</i> include, but are not limited to:  • review the benchmark's definition and methodology at leastannually;  • overseeing any changes to the benchmark'smethodology;	8. Obtained the FTSE Russell Board of Directors, FTSE Russell Index Management Board and FTSE Russell Index Governance Board meeting minutes and inspected for



IOSCO Principle	FTSE Russell Response and Controls  Work Performed by KPMG	
	• overseeing the administrator's control framework, the management and operation of the benchmark. evidence that the relevant <i>Terms of Reference</i> documents were reviewed and approved at least annually.	
	Control: Review and Approval of FTSE Russell Benchmark Administration Manual  Test Result	
	The FTSE Russell Benchmark Administration Manual is reviewed and approved by the FTSE Russell No exceptions noted. Index Management Board on an annual basis.	
	Control: Review and Approval of FTSE Russell RACI and Accountability Matrices	
	The FTSE Russell RACI and Accountability Matrices are reviewed and approved by the FTSE Russell Index Management Board on an annual basis.	
	Control: Review of the Oversight Committees Terms of Reference	
	The Oversight Committees Terms of Reference, detailing the committees' responsibilities, are approved on an annual basis by the relevant Oversight Committee before being made publicly available. The WMR Oversight Committee and FTSE Russell Benchmarks Oversight Committee meet on at least a quarterly basis. The FTSE CoreCommodity CRB Indices Oversight Committee meet at least annually.	
	Control: Review of Terms of Reference	
	The FIL Board Terms of Reference detailing the Board's responsibilities were reviewed on an annual basis by the Company Secretary and approved by the FIL Board.	
	The FIL Index Management Board Terms of Reference, detailing the body's responsibilities, was approved on an annual basis by the FIL Index Management Board. The body met on a monthly basis.	
	The FIL Index Governance Board Terms of Reference detailing the body's responsibilities, was approved by the FIL Index Governance Board on an annual basis.	

## 2. Oversight of third parties



Where activities relating to the Benchmark determination process are undertaken by third parties - for example collection of inputs, publication or where a third-party acts as Calculation Agent - the Administrator should maintain appropriate oversight of such third parties. The Administrator (and its oversight function) should consider adopting policies and procedures that:

- a) Clearly define and substantiate through appropriate written arrangements the roles and obligations of third parties who participate in the Benchmark determination process, as well as the standards the Administrator expects these third parties to comply with;
- b) Monitor third parties' compliance with the standards set out by the Administrator
- c) Make Available to Stakeholders and any relevant Regulatory Authority the identity and roles of third parties who participate in the Benchmark determination process; and
- d) Take reasonable steps, including contingency plans, to avoid undue operational risk related to the participation of third parties in the Benchmark determination process.

This Principle does not apply in relation to a third party from whom an Administrator sources data if that third party is a Regulated Market or Exchange.

#### **Control Objective**

To provide reasonable assurance that when a third party undertakes activities relating to their benchmark determination process (e.g., collecting input data, publication, or acting as a calculation agent), the administrator should maintain appropriate oversight through policies and procedures that:

- a) Clearly define written arrangements outlining the roles and obligations of third parties participating in the benchmark determination process, including the standards they are expected to comply with.

  \*\*\*\*\*\*Location process in a point of participating participating in the benchmark determination process, including the standards they are expected to comply with.

  \*\*\*\*Location participating participating participating in the benchmark determination process, including the standards they are expected to comply with.
- b) Monitor the third parties' compliance with the administrator's standards;
- Define the identities and roles of these third parties to stakeholders and relevant Regulatory Authorities:
- d) Include reasonable steps (e.g., contingency plans) to avoid undue operational risk from the participation of these third parties.

#### **Business Process**

FTSE Russell does not outsource any of the functions of benchmark determination and calculation for the In-Scope Products. FTSE Russell outsources a number of technology infrastructure services to other entities and teams within LSEG.

Input data sourced from third parties are considered and assessed under Principle 15.

To manage and oversee outsourcing risks FTSE Russell has defined and implemented an outsourcing framework. The FTSE Russell Outsourcing Framework Procedures define the governance framework and regulatory obligations related to outsourcing. This includes managing business risks related to both internal and external third parties. The procedures require that:

- FTSE Russell shall cooperate with and make available to the FCA and any other relevant regulator, any requested information on outsourced activities
- FTSE Russell retain sufficient skills and expertise of the activity being outsourced in order to ensure adequate selection and ongoing management of outsourced activities

Technology services provided to FIL from within the group are documented within formal SLAs including:

- FTSE Russell Engineering Services
- Corporate Services SLA Technology Colleague Services
- BSL Standard Service Model
  - BSL Infrastructure & Cloud (On-Prem) Services
  - BSL Infrastructure & Cloud Cloud Services
  - BSL Corporate Services Engineering
  - o BSL CRM Engineering
  - o BSL Data & Operational Resilience Engineering

#### **Test Procedures**

- 1. Obtained the FTSE Russell Engineering SLA and inspected for evidence that it detailed the key technology services provided by FTSE Russell Engineering teams, in accordance with LSEG policies and policies specific toBSL.
- Obtained the FTSE Russell Operations Committee meeting pack and inspected for evidence that the FTSE Russell Engineering services SLA was approved, with go-live confirmation documented within the meeting materials.
- 3. Obtained the *Corporate Services SLA Technology Colleague Services* and inspected for evidence that it detailed the Service Levels of Corporate Services Technology Colleague Services that are delivered to LSEG customers and colleagues.
- 4. Obtained the *Corporate Services SLA Technology Colleague Services* and inspected for evidence that it was reviewed and approved by the Accountable Individuals, within the SLA.
- 5. Obtained the following BSL SLAs and inspected for evidence that they detailed the technology services and solutions provided from within the group, as per the business process:
  - BSL Standard Service Model
  - BSL Infrastructure & Cloud (On-Prem) Services
  - BSL Infrastructure & Cloud Cloud Services
  - BSL Corporate Services Engineering
  - BSL CRM Engineering
  - BSL Data & Operational Resilience Engineering
  - BSL Digital, Events & Marketing Engineering
  - BSL Finance Engineering
  - BSL People Engineering
- 6. Obtained the list of BSL SLAs in (5) and inspected for evidence that they were reviewed and approved via DocuSign by the Accountable Individuals, within the SLA.
- 7. Obtained the FTSE Russell Outsourcing Framework Procedures and inspected for evidence that it defined the governance framework and regulatory obligations required for outsourcing, including the management of business risks related to both internal and external third parties, as per the Response.
- 8. Obtained the meeting minutes for FTSE Russell Index Management Board and inspected for evidence that the FTSE



- BSL Digital, Events & Marketing Engineering
- BSL Finance Engineering
- BSL People Engineering

A report on Third Party & Outsourcing Risk is provided to the Operations Committee, highlighting forthcoming initiatives/status against planned improvements and any escalation items.

#### Control: Review and approval of FTSE Russell SLA

The FTSE Russell Engineering SLA is reviewed by the Accountable Individuals and approved on an annual basis, with approval formally recorded within the FTSE Russell Operations Committee.

The Corporate Services SLA – Technology Colleague Services is reviewed by the Accountable Individuals and approved via a DocuSign signature on an annual basis, with this recorded within the SLA.

The BSL Group Engineering SLAs are reviewed by the Accountable Individuals and approved via a DocuSign signature on an annual basis, with this recorded within the SLA.

#### Control: FTSE Russell Outsourcing Framework Procedures Review and Approval

The FTSE Russell Outsourcing Framework Procedures defining the governance framework and regulatory obligations are reviewed and approved annually via the FTSE Russell Index Management Board.

#### **Control: Outsourcing Operations & Oversight Report**

To ensure sufficient oversight of FTSE Russell outsourcing relationships, a *Third Party & Outsourcing Risk Report* is provided to the Operations Committee on a monthly basis.

Russell Outsourcing Framework Procedures was reviewed and approved at least annually

 Obtained the FTSE Russell Operations Committee meeting pack and inspected for evidence that a report on Third Party & Outsourcing was provided to the FTSE Russell Operations Committee on a monthly basis.

#### Test Result

No exceptions noted.



## **IOSCO Principle**

### **FTSE Russell Response and Controls**

#### **Work Performed by KPMG**

## 3. Conflicts of Interests for Administrators

To protect the integrity and independence of Benchmark determinations, Administrators should document, implement and enforce policies and procedures for the identification, disclosure, management, mitigation or avoidance of conflicts of interest. Administrators should review and update their policies and procedures as appropriate.

Administrators should disclose any material conflicts of interest to their users and any relevant Regulatory Authority, if any. The framework should be appropriately tailored to the level of existing or potential conflicts of interest identified and the risks that the Benchmark poses and should seek to ensure:

- a) Existing or potential conflicts of interest do not inappropriately influence Benchmark determinations
- b) Personal interests and connections or business connections do not compromise the Administrator's performance of its functions;
- c) Segregation of reporting lines within the Administrator, where appropriate, to clearly define responsibilities and prevent unnecessary or undisclosed conflicts of interest or the perception of such conflicts;

#### **Control Objective**

To provide reasonable assurance that the administrator protects the integrity and independence of their benchmark determination by documenting, implementing, and enforcing policies and procedures for the identification, disclosure, management, mitigation or avoidance of conflicts of interest. These policies should be reviewed and updated as appropriate.

The administrator should also disclose material conflicts of interest to their users and relevant Regulatory Authority and ensure that the framework is tailored to the degree of potential or existing conflicts of interest and the risk their benchmark poses and should ensure that potential or existing conflicts do not inappropriately influence their benchmark determinations.

#### **Business Process**

The LSEG Conflicts of Interest Policy defines the principles based on which LSEG business and entities are expected to identify, monitor and manage exposure to Conflicts of Interest risk in line with the Group risk appetite. The Policy sets out the minimum requirements, roles and responsibilities and governance in relation to conflicts of interest and is a part of the overall Conflict of Interest Framework

The FTSE Russell Conflicts of Interest Procedures are designed to document and explain the identification, disclosure, mitigation and management of possible conflicts of interest which may arise in the provision of the In-Scope Products. As part of the procedures, on an annual basis, all staff are required to attest to the LSEG Code of Conduct, which includes requirements to avoid / raise any potential or actual conflicts of interest via the Central Compliance System, with records being retained by Central Compliance. Similarly, the Oversight Committees have an annual attestation process in place for members to declare any personal conflicts.

The FTSE Russell Central Compliance System (CCS) is the record for logging, assessing and risk managing potential conflicts. Potential and actual conflicts of interest identified through the above activities are logged in the FTSE Russell Conflicts of Interest Register.

The FTSE Russell Benchmark Administration and Governance Team prepares and maintains the FTSE Russell Conflicts of Interest Register. This register contains a log of potential conflicts to identify the circumstances in which a Group or Benchmark conflict may arise or may be perceived to arise. It also details the mitigation and controls in place, the accountable forum / executive, the oversight and escalation forum, the impact and likeliness of the occurrence pre and post controls.

It also contains a register of actual conflicts which contains circumstances which have given rise to an actual Group or Benchmark Conflict. This documents any specific conflicts related to the segregation of Content Operations team and the influence of business interests outside of the Operations team, but within the wider Group. Mitigating actions for each conflict are documented.

Control: Review of the LSEG Conflicts of Interest Policy

#### **Test Procedures**

- 1. Obtained the LSEG Conflicts of Interest Policy and inspected for evidence that it documented the requirements, roles and responsibilities and governance in relation to Conflicts of Interest risk
- 2. Obtained email evidence from LSEG Market and Risk Intelligence General Counsel and inspected for evidence that they have reviewed and approved the *LSEG Conflicts of Interest Policy* on behalf of the LSEG Board at leastannually.
- 3. Obtained the FTSE Russell Conflicts of Interest Procedures and inspected for evidence of the description of processes to assist with the mitigation and management of potential conflicts of interest for the In-Scope Products.
- 4. Obtained the meeting minutes for the FTSE Russell Index Management Board and inspected for evidence that the FTSE Russell Conflict of Interest Procedures was review and approved at least annually.
- 5. Obtained the FTSE Russell Conflicts of Interest Registerand inspected for evidence that potential and actual conflicts at both the individual and Group level are documented, with actions to mitigate these conflicts also detailed, including those relating to segregation within FTSE Russell and the wider LSEG
- 6. Obtained the meeting minutes for the FTSE Russell Index Management Board and inspected for evidence that the FTSE Russell Conflicts of Interest Register was reviewed and approval at least annually
- 7. For a sample selected, obtained evidence of Conflicts of Interest Declarations made by FTSE Russell employees and inspected for evidence that these were submitted and recorded on an annual basis.
- 8. For a sample selected, obtained meeting minutes from the Oversight Committees and inspected for evidence to confirm that any Conflicts of Interest are disclosed by members at the start of the meeting.



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
	The LSEG Conflicts of Interest Policy is reviewed and approved by the LSEG Board on an annual basis	Test Result
	Control: Review of FTSE Russell Conflicts of Interest Procedures	No exceptions noted.
	The FTSE Russell Conflicts of Interest Procedures document is reviewed and approved by the FTSE Russell Index Management Board on an annual basis.	
	Control: Review of FTSE Russell Conflicts of Interest Register	
	The FTSE Russell Conflicts of Interest Register, which considers any conflicts of interest that may arise between FTSE Russell with other areas and businesses within LSEG, is reviewed by the FTSE Russell Index Management Board and approved on an annual basis.	
	Control: Review of Conflicts of Interest Declarations	
	The Conflicts of Interest Declarations are reviewed by the Central Compliance team to manage actual or potential conflicts of interest in line with the FTSE Russell Conflicts of Interest Procedures.	
	Control: Code of Conduct Attestations	
	The annual Code of Conduct attestations for FTSE Russell Staff are monitored by Compliance and where instances of incomplete attestations are identified, these are escalated and/or resolved through employee reporting lines	
	Control: Oversight Committee members declaration of Conflicts	
	Oversight Committee members declare their conflicts of interest on an annual basis. These are recorded within the meeting minutes	
d) Adequate supervision and sign-off by authorised or qualified employees prior to	Control Objective	Please refer to Principle 4 Control Framework for Administrators, 4(b)(i)
releasing Benchmark determinations;		, commentations, HeAlly
	Control: Control Framework for Administrators	
	Please refer to Principle 4 Control Framework for Administrators, 4(b)(i) for pre and post validation checks	
e) The confidentiality of data, information and other inputs submitted to, received by or	Control Objective	Please refer to IOSCO Principle 3(a)(b)(c) relating to the Conflicts of Interest Register.
produced by the Administrator, subject to the disclosure obligations of the Administrator;	To provide reasonable assurance that the administrator's conflicts of interest framework ensures confidentiality of data, information, and other inputs submitted to, received by, or produced by the administrator (subject to their disclosure obligations).	Ç



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
	To provide reasonable assurance that the administrator's conflicts of interest framework ensures confidentiality of data, information, and other inputs submitted to, received by, or produced by the administrator (subject to their disclosure obligations).	
	Control: Conflicts of Interest Register	
	Mitigating actions relating to confidential information, including data privacy, non-public information and confidentiality agreements are detailed within the <i>Conflicts of Interest Register</i> .	
	Please refer to IOSCO Principle 3(a)(b)(c) relating to the Conflicts of Interest Register.	
f) Effective procedures to control the exchange	Control Objective	Please refer to Principle 3(a)(b)(c) for review and approval of
of information between staff engaged in activities involving a risk of conflicts of interest or between staff and third parties, where that information may reasonably affect any	To provide reasonable assurance that the administrator's conflicts of interest framework ensures effective procedures to control information exchange between staff and third parties (where that information may affect benchmark determinations).	the LSEG Conflicts of Interest Policy and FTSE Russell Conflicts of Interest Procedures.
Benchmark determinations; and	Control: Review of the LSEG Conflicts of Interest Policy	
	The FTSE Russell Conflicts of Interest Procedures sets out how FTSE Russell complies with the LSEG Conflicts of Interest Policy. The Policy specifies that the business must maintain appropriate controls and procedures to handle confidential and material non-public information (or "inside information") to avoid its misuse. This includes ensuring that the business identifies and mitigates any conflicts it may have with another Group entity (such as by implementing procedures such as information barriers).	
	Please refer to IOSCO Principle 3(a)(b)(c) for review and approval of the LSEG Conflicts of Interest Policy	
	Control: Review and Approval of FTSE Russell Conflicts of Interest Procedures	
	Please refer to IOSCO Principle 3(a)(b)(c) relating to the Conflicts of Interest Procedures.	
g) Adequate remuneration policies that ensure	Control Objective	Test Procedures
all staff who participate in the Benchmark determination are not directly or indirectly rewarded or incentivised by the levels of the Benchmark	To provide reasonable assurance that the administrator's conflicts of interest framework ensures adequate remuneration policies for staff who participate in their benchmark determination such that they are not directly or indirectly rewarded/incentivised by benchmark levels.	1. Obtained the FTSE Russell Conflicts of Interest Procedures and inspected for evidence that it sets out the remuneration requirements for FTSE Russell employees, as outlined in the
	Business Process	Response.
	The FTSE Russell Conflicts of Interest Procedures states that "As part of LSEG, FTSE International Limited has adopted a remuneration structure consistent with that of LSEG. The Group's	Please refer to IOSCO Principle 3(a)(b)(c) relating to the review and approval of Conflicts of Interest Procedures.
	remuneration policy aims to encourage responsible business conduct and ensure that employees are	Test Result
	not remunerated in a way that conflicts with their duty to act in the best interests of clients, members, or participants. Remuneration is not linked to the value or performance of any of the indices that FTSE	No exceptions noted.



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
	International Limited administers; nor are employees incentivised to recommend certain products to clients or product users that may not be in their best interests".	
	Control: Review and Approval of FTSE Russell Conflicts of Interest Procedures	
	Please refer to IOSCO Principle 3(a)(b)(c) relating to the review and approval of the Conflicts of Interest Procedures.	
3.1) An Administrator's conflict of interest	Control Objective	Test Procedures
framework should seek to mitigate existing or potential conflicts created by its ownership structure or control, or due to other interests the Administrator's staff or wider group may havein relation to Benchmark determinations. To this	To provide reasonable assurance that the administrator's conflicts of interest framework aims to mitigate existing/potential conflicts due to their ownership structure, or due to other interest their staff or wider group may have with respect to the benchmark determinations. The administrator's framework should:	1. Obtained the FTSE Russell Conflicts of InterestProcedures and inspected for evidence that it outlines the conflicts of interest framework to mitigate and manage existing and potential Group conflicts.
end, the framework should:	<ul> <li>Include ways to avoid, mitigate, or disclose conflicts that may exist between their benchmark determination business and any other business they (or their affiliates) have; and</li> <li>Provide that they disclose conflicts arising from their ownership structure or control to stakeholders and relevant Regulatory Authorities in a timelyfashion</li> </ul>	2. Obtained the FTSE Russell Conflicts of Interest Register and inspected for evidence of conflicts of interest relating to the ownership structure being recorded, with mitigating actions also detailed.
	Business Process	Please refer to IOSCO Principle 3(a)(b)(c) for the review and
	The FTSE Russell Conflicts of Interest Procedures are designed to document and explain the identification, disclosure, mitigation and management of possible conflicts of interest which may arise in the provision of the In-Scope Products. It defines "Group Conflicts" as "where the Group's or FTSE	approval of the FTSE Russell Conflicts of Interest Register.



#### **IOSCO Principle FTSE Russell Response and Controls Work Performed by KPMG** a) Include measures to avoid, mitigate or Russell's interests or transactions influence, or give the appearance of influencing, the ability of the Please see Principle 3(a)(b)(c) for the review and approval of disclose conflicts of interest that may exist Group or FTSE Russell to properly discharge its duties to customers, members, third parties, or the the FTSE Russell Conflicts of Interest Procedures. between its Benchmark determination business Group as a whole," The Procedures provide requirements for avoiding, mitigating and disclosing Test Result (including all staff who perform or otherwise conflicts. Specifically: participate in Benchmark production No exceptions noted. responsibilities), and any other business of the a) Sections 4-6 outline the measures to identify, manage, approve and record personal, group Administrator or any of its affiliates; and and benchmark conflicts. b) Provide that an Administrator discloses b) Section 7 specifies that any 'High Risks' noted on the Potential Conflicts Register must be conflicts of interest arising from the ownership highlighted to the Index Management Board and disclosed to FTSE Russell users and any structure or the control of the Administrator to relevant Regulatory Authority. FTSE Russell publishes a statement on its Conflicts of Interest its Stakeholders and any relevant Regulatory Management on its website. Authority in a timely manner. Control: Review and Approval of FTSE Russell Conflicts of Interest Procedures Please refer to IOSCO Principle 3(a)(b)(c) relating to the Conflicts of Interest Procedures Control: Review and Approval of FTSE Russell Conflicts of Interest Register Please refer to IOSCO Principle 3(a)(b)(c) relating to the Conflicts of Interest Register.

## 4. Control Framework for Administrators

An Administrator should implement an appropriate control framework for the process of determining and distributing the Benchmark. The control framework should be appropriately tailored to the materiality of the potential or existing conflicts of interest identified the extent of the use of discretion in the Benchmark setting process and to the nature of Benchmark inputs and outputs. The control framework should be documented and available to relevant Regulatory Authorities, if any. A summary of its main features should be Published or Made Available to Stakeholders.

#### **Control Objective**

To provide reasonable assurance that the administrator implements a control framework for determining and distributing their benchmark. The framework should be tailored to the materiality of potential/existing conflicts of interest identified and the extent of usage of discretion in their benchmark setting process and nature of inputs and outputs.

#### **Business Process**

FTSE Russell has implemented a *Governance and Control Framework* spreadsheet which details the policies, procedures, and controls in place for the In-Scope Products covering non-operational and technology controls. These controls are mapped against the requirements of the IOSCO Principles. This Framework includes the controls in place to:

a) provide assurance that actual and potential conflicts of interest are effectively identified, disclosed and mitigated.

#### Test Procedures

- 1. Obtained the *Governance and Control Framework* spreadsheet and inspected for evidence that controls and procedures are documented in the spreadsheet for the In-Scope Products.
- 2. Obtained the meeting minutes for the RBSL Benchmark Governance Committee and inspected for evidence that the *Governance and Control Framework* spreadsheet was reviewed and approved at leastannually.
- 3. Obtained the *Control Framework Summary RBSL* and its public version and inspected for evidence that it summarises the *Governance and Control Framework* spreadsheet for use of sharing with stakeholders on request.
- 4. Obtained the RBSL Benchmark Governance Committee meeting minutes and inspected for evidence that the *Control*



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
	b) provide assurance that input data is processed and recorded with minimum standards for data quality, timeliness and representativeness, with discretion and expert judgement included as part of the pre- and post-publication checks.	Framework Summary – RBSL and its public version were reviewed and approved on at least an annual basis.
	These controls are summarised in the <i>Control Framework Summary – RBSL</i> document which is made available to stakeholders and regulatory authorities upon request.	Test Result
	Control: Review of the Governance and Control Framework spreadsheet	No exceptions noted.
	The Governance and Control Framework was reviewed and approved by the RBSL Benchmark Governance Committee at least annually.	
	Following the transfer of Benchmark Administration responsibilities from RBSL to FIL, the controls within the <i>Governance and Control Framework</i> spreadsheet are to be integrated within the <i>FTSE Russell Governance and Control Framework</i> . This document will be reviewed and approved on an annual basis by the FTSE Russell Index Management Board.	
	Control: Review of the Control Framework Summary - RBSL	
	The Control Framework Summary - RBSL document was reviewed at least annually by the RBSL Benchmark Governance Committee and will be reviewed and approved on an annual basis by the FTSE Russell Index Management Board.	
This control framework should be reviewed	Control Objective	Please refer to Principle 3 for Conflicts of Interest.
eriodically and updated as appropriate. The amework should address the following areas:	To provide reasonable assurance that the administrator implements a control framework that addresses conflicts of interest in line with Principle 3.	Please refer to Principle 4 for the Governance and Control
a) Conflicts of interest in line with Principle 3 on conflicts of interests:	Please refer to Principle 3 for controls relating to Conflict of Interest.	Framework spreadsheet and Control Framework Summary, and its public version, including review and approval.
	Controls relating to Conflicts of Interest are included within the Governance and Control Framework, please refer to Principle 4 above for control framework summary review.	
p) Integrity and quality of Benchmark	Control Objective:	Test Procedures
determination:	To provide reasonable assurance that the administrator implements a control framework that	1. Obtained the FTSE Term ESTR, FTSE Term SONIA, USD Cash Fallbacks, Tokyo Swap Rate daily check spreadsheets
i) Arrangements to ensure that the quality and integrity of Benchmarks is maintained, in line with principles 6 to 15 on the quality of the Benchmark and Methodology;	<ul> <li>Integrity and quality of benchmark determination (in line with Principles 6 to 15);</li> <li>Benchmark input integrity, including due diligence on input sources;</li> </ul>	and supporting documentation for the assurance date and inspected for evidence that:  a) the pre and/or post publication checks were
) Arrangements to promote the integrity of	Business Process	performed as per the relevant <i>Method of Work</i> documents.
Benchmark inputs, including adequate due diligence on input sources;	Each In-scope Product maintains one or multiple <i>Methods of Work</i> document detailing the pre and / or post publication checks specific to the benchmark. The relevant operations teams perform the checks as set out in the relevant <i>Method of Work</i> documents.	b) The checklist was completed and approved by a manager



#### **IOSCO Principle FTSE Russell Response and Controls** Work Performed by KPMG Control: FTSE Term ESTR, FTSE Term SONIA, USD Cash Fallbacks, Tokyo Swap Rate -2. Obtained the SAIBOR / SAIBID Monitoring Spreadsheet for Pre/Post Publication Check and Sign Off the assurance date and inspected forevidence that: the pre and/or post publication checks were Before the publication of benchmarks, two analysts within the Benchmark Content Operations Team performed as per the relevant Method of Work perform checks on the primary calculator's accuracy. These checks are conducted by importing the documents. source data files into the "Pricer Spreadsheet", which enables a comparison of their results against the resultant rates from the primary calculator. Excel-based parallel calculation spreadsheets are also b) The checklist was completed and approved by a run to manually check between their calculated values and the published benchmark values on the manager relevant publication systems. Once the benchmarks are published and all checks have been performed, the analysts complete the checklist stored on SharePoint which is then signed off by a manager. All "Pricer" and parallel calculation spreadsheets are saved in designated files for record 30btained the WMR London Closing Spot Fix Checklist for the keeping purposes. assurance date and inspected for evidence that: Control: SAIBOR / SAIBID - Pre/Post Publication Check and Sign Off a member of the Content Operations Teamhad completed the checklist. Throughout the monitoring window when Contributors submit their input rates, one of the two analysts within the Benchmark Content Operations team monitors the contributions using the Monitoring the checklist and attached reports had been quality Spreadsheet and the E-CIBORG user interface. Contributed data is assessed with queries raised to checked and signed off. the Contributor based on pre-set parameters. The analyst checks that the Monitoring Spreadsheet is fully populated and matches the data in the E-CIBORG system. Once the benchmarks are published 4. Obtained screenshots and supporting follow up emails / and all checks have been performed, the analysts complete the checklist stored on SharePoint which spreadsheets for the CoreCommodity CRB Indices on the is then signed off by a manager. The Monitoring Spreadsheet and other evidence of the analysts' assurance date and inspected for evidence that the input checks are saved in designated files for record keeping purposes. checks and delivery checks were performed as per the relevant Method of Work documents Control: WMR - Input Data and Benchmark Fix Validation Checks and Sign Offs 5. Obtained the FTSE Convertible Indices daily check The Content Operations Team conduct a validation process on an hourly basis that includes the spreadsheet for the assurance date and inspected for evidence review of the input data and the calculated benchmark values pursuant to certain pre-determined that: tolerance checks. The captured market data is subject to currency-specific systematic tolerance checks which aim to identify outliers in the input data received. Validation on the accuracy of the the pre and/or post publication checks were outlying data is performed by an Operations Specialists, who will seek corroboration, or rely upon their performed as per the relevant Method of Work documents and all evidence saved where required. Expert Judgement to determine the market level. Captured rates that do not satisfy the tolerance checks and cannot be explained using Expert Judgement by wider market conditions or events may The checklist was completed and signed off by a be rejected and replaced. Any changes to input data are checked by a manager (QA'd) and all validations are documented and recorded in the Fix Checklist Packs. On completion of QC, the

### Control: CoreCommodity CRB Indices - Pre/Post Publication Check

Checklist is signed off and saved as a PDF.

The ICSDOT Content Operations team monitors the validation processes and quality checks for the benchmark's determination on a daily basis. These validation processes include input data checks on the validity of the captured prices and rates from the input data sources. Additionally, a series of 'Delivery Checks' are performed to validate the calculation by i-MINT and any discrepancies highlighted by the analyst are escalated to an SME for investigation. Each of these checks are evidenced via email and signed off where required.

Control: FTSE Convertible Indices - Pre/Post Publication Check and Sign Off

team member.

As part of our test of the design of these control activities over the integrity and quality of benchmark determination (including that the calculated benchmark or index values are in accordance with the Methodology), we obtained the FTSE Russell methodologies for the In-Scope Products ("the Methodology") and:

For each of the In-Scope Products other than WMR. we re-performed the benchmark or index calculation as at 21 January 2025 using the Methodology and



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
	The Convertibles Index Management team run quality checks on a daily basis that are detailed within the Methods of Work documentation. To support these checks, multiple reports are produced throughout the day which are manually checked by the team for factors such as missing prices and changes to the index etc. Specifically, the following reports are generated on a daily basis:  • Price Checks: price reports are generated and checked for stale or missing prices. Prices that fail or breach thresholds are investigated.  • Price Movement Checks: prices that have large movements generate into various reports which are compared to other sources. The price movements that are unexplained / out of the ordinary are checked against market holidays and corporate actions and investigated further if needed.  • Index Changes Checks: adds, drops and volume changes are monitored and reviewed where required. For new additions, assessment of pricing is performed on an ad hocbasis  There are specific pricing, non-pricing and routine checks which are performed at set times on a daily basis and checked off by the performing analyst and an additional analyst within the Daily Check Sheet. At the end of each day, the Daily Check Sheet is signed off and saved down onto the share drive.	January 2025 using the Methodology and relevant input data provided by FTSE Russell.  We compared our independently calculated benchmark or index values to the published FTSE Russell benchmark or index on 21 January 2025.
iii) Arrangements to ensure accountability and complaints mechanisms are effective, in line with principles 16 to 19; and	Please refer to Principle 16 for details of controls relating to the complaints procedures.  Please refer to Principle 1(c) for Business Processes and Controls relating to the FTSE Russell Benchmarks Administration Manual and the FTSE Russell RACI and Accountability Matrices.	
iv) Providing robust infrastructure, policies and	Control Objective	Test Procedures
procedures for the management of risk, including operational risk.	To provide reasonable assurance that the administrator implements a control framework that provides robust infrastructure, policies and procedures for managing risk (incl. operational risk).  Business Process	Obtained the Risk Management Framework and inspected for evidence that it documented the activities and processes relating to operational risk management for the In-Scope Products, as per the Response
	FTSE Russell has defined and documented a <i>Risk Management Framework, Conduct Risk Framework,</i> and <i>Risk Appetite Statement</i> which are applied to the In-Scope Products, this seeks to ensure there are effective policies and procedures in place that sets out the mechanisms to identify, assess, monitor and manage risks including operational risk in the determination of the in scope indices.	2. Obtained the meeting minutes from the RBSL Boardmeeting and inspected for evidence that the <i>Risk Management Framework</i> was reviewed and approved at least annually.  Test Result
	Control: Risk Management Framework Review and Approval	No exception noted.
	The <i>Risk Management Framework</i> was reviewed and approved by the RBSL Board on an annual basis and will be reviewed and approved by the FTSE Russell board going forward.	No exception noted.
	Technology Change Management – Index Determination System	Test Procedures



#### **IOSCO Principle FTSE Russell Response and Controls** Work Performed by KPMG **Business Process** 1. Obtained and inspected the below documents for evidence they outlined the information as per the response and that they FTSE Russell follows the LSEG policies and standards for the IT change management activities relating to the index infrastructure. These documents include: had been reviewed and approved periodically: LSEG Change Management Framework The 'LSEG Change Management Framework' document, which outlines the framework for change management Change Management Standard The 'Change Management Standard' document, which outlines the required approvals prior LSEG Application Testing Standard Document to a change being deployed LSEG Technology Governance and Process The 'LSEG Application Testing Standard Document' outline the required testing approach for Document IT changes prior to deployment 2. For a sample of changes, obtained and inspected evidence The 'LSEG Technology Governance and Process' document outlines the additional change that: management process 'architecturally significant' changes are required to adhere to. A change ticket was logged and tracked in JIRA The change underwent peer review, quality Control - Technology Change Management Standards Periodic Review assurance testing and business UAT (where The 'LSEG Change Management Framework', 'Change Management Standard' document, 'LSEG applicable). Application Testing Standard' documents, 'LSEG Technology Governance and Process' document The change was signed off by the Business and are reviewed and approved periodically by the technology document owner. Development team. The final change was signed off by the Technical Control - Technology Change Management - Business Approvals & Development Testing Operations Team prior to being deployed. The business can request a system change with the Development team outlining their business For architecturally significant changes, approval was requirements. A change ticket will be logged in JIRA by the Development team, who will propose the provided by the ARB Decision Authority and Cyber solution architecture to support the change. Changes undergo peer code reviews, User Acceptance Security. Testing ("UAT") where applicable, and Quality assurance ("QA") testing. Emergency changes are not required to undergo peer review and quality assurance checks. **Test Result** Control - Technology Change Management - Deployment Approvals No exception noted, except for: Prior to changes being moved into the deployment phase, approval is required from the Development Lead and the Business. When the change is ready to be deployed. Development team create a At the assurance date, the technology change management ServiceNow request ticket with details of the change. This is reviewed by the Technology Operations controls (business and technology approvals and testing) Team, who will assess and approve the deployment to move the change into production. relating to the index calculation systems were inconsistently documented and evidenced on the JIRA workflow system. Where a change is deemed to be 'architecturally significant', additional approvals are required from 'ARB Decision Authority' and Cyber Security. When initiating the change, the development team completes an architecturally significant assessment ('ASA') form to determine if this threshold is met. **Index Determination System - User Access Management: Test Procedures** 1. Obtained and inspected the User Configuration Method of **Business Process** Work and WMX User Roles Matrix document for evidence it The approach to user access management for the WMR calculation platform, WMX, is outlined in the outlines the process for granting new user access within the 'WMR User Configuration Method of Work' document. The different roles and user permissions within WMX platform and defines the different roles and permissions

the system are outlined in the WMX User's Role matrix'.

User access to the WMX application is managed through the Identity Resource Permission

Control: New User Request (WMX)

within the system

2. For a sample new joiner to the WMR Content Operations

Team, obtained and inspected evidence approval had been



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
	Management ('IRPM') platform. The system uses the Employee ID and lists their permissions roles within WMX, which are extractable into a user list. As per the 'WMR User Configuration Method of	provided by the Content Operation Management before being configured in WMX
	Work' and 'WMX User's Role matrix' users are assigned permissions based on job roles. To add, edit, or remove access, the user's manager are required to provide approval via email. This is then updated into the IRPM system by the WMX Content Operations Manager.	3. Obtained and inspected evidence of the monthly WMX user access review performed by Content Operations Team for evidence changes to users' access had been periodically
	Control: Periodic Review of Access (WMX) On a monthly basis the Content Operations team member extracts a report from IRPM listing the	reviewed confirmed to be appropriate based on job role
	WMX Users and any changes to users' permissions over the preceding 3 months, including new, changed, or revoked permissions. The Content Operations Management Team reviews the system access changes and verifies they are reasonable and aligned to the users' job role	Test Result
	access changes and verilles they are reasonable and aligned to the users job role	No exception noted
	Business Process (RFR)	Test Procedures
	The approach to user access management to the RFR application (Term ESTR, Term SONIA, and Tokyo Swap Rate) is outlined in the 'RFR UI User Roles Document' which outlines the different roles and permissions within the system and the details for gaining necessary approvals for user access changes.	1. Obtained and inspected the RFR UI User Roles document for evidence that the document outlined how access management to the RFR application is managed, including the process for raising / amending access and the system's roles and
	Control: New User Request (RFR)	permissions.
	The approach to user access management for the system is managed through the centralised user access management system: Identity Resource Permission Management ('IRPM'). Access is granted to the RFR Application has user permissions that are assigned to job role and can be segregated by benchmark. New users / access requests to the RFR application require email approval from the	2. For a sample new joiner to the RFR application, obtained and inspected evidence that the request for user access had been approved by the Content Operations Manager before being implemented into RFR.
	Content Operations Manager. Evidence of approval is sent to the Content Implementation Team, who have the permissions to implement the user changes into the IRPM system, which then become active in the RFR Application	3. Obtained and inspected an example of the quarterly RFR Application user access review for evidence that the report was created and reviewed by the Content Operations Manager.
	Control: Periodic Review of Access (RFR)	Test Result
	On a quarterly basis, the Benchmark Operations Manager extracts user reports from IRPM outlining all users who have had changes in their entitlement configuration on the RFR system over the preceding quarter. The report is reviewed by the Content Operations Manager to confirm any changes to users' access are reasonable.	No exception noted
	Business Process (E-CIBORG)	Test Procedures
	The process for user management is documented in the 'E-CIBORG Benchmark Access Control Document'. The document provides a matrix with suggested permissions based on job role and defines the required approval process for changing user access and raising access for new joiners.	1. Obtained and inspected the <i>E-CIBORG Benchmark Access Control Document</i> for evidence it defines access management process for the E-CIBORG system, including details on roles and pagingsions.
	Control: New User Request (E-CIBORG)	and permissions
	To administer the SAIBOR / SAIBID benchmark, the Benchmark Content Operation team use the E-CIBORG Application. E-CIBORG has user permission levels that are assigned to a job role. New	



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
	users / access changes to the E-CIBORG application require approval from the Content Operations Manager prior to access being granted via email. Evidence of approval is sent to the Content Implementation Team, who have the necessary permissions to implement the user changes directly	For a sample new joiner obtained and inspected evidence that the request for user access had been approved by the Content Operations Manager
	into the E-CIBORG platform.  Control: Periodic Review of Access (E-CIBORG)  On a quarterly basis, the Content Operations Manager extracts user access reports from the E-CIBORG platform which lists all changes to E-CIBORG users' configurations over the preceding 3 months. This is reviewed by the Content Operations Manager to confirm users' access are reasonable	3. Obtained and inspected an example of the quarterly E-CIBORG Application useraccess review to confirm that it had been approved by the Content OperationsManager.  Test Result
	and in line with the job role.	No exception noted
	Business Process (IMINT)	Test Procedures
	To administer the CRB benchmark, the Benchmark Content Operations team use the IMINT application.	Obtained and inspected the <i>IMINT System Architecture Document</i> for evidence it defined the roles and permissions within the IMINT system.
	The IMINT platform is also used to calculate the USD Cash Fallback index. To calculate the index, the IMINT platform outputs a generated file, which is enriched by the content operations offline, before the index is published. The USD CFB Content Operations team do not require user access to the platform to perform the administration of the index.	For a sample new joiner, obtained and inspected evidence
	Control: New User Request (IMINT)  Requests for new user access must be approved by the Content Operations Manager and IMINT	3. Obtained and inspected the annual review of user access performed by the Business Content Operations Manager to
	Development Manager via email. Once received a ServiceNow ticket is raised and the change is then implemented into the system by the Technology Team. The IMINT platform permits for differing permissions based on job role, details of are documented in the IMINT Solution Architecture Document ('SAD').	determine if it had been performed.  Test Result  No exception noted, except for:
	Control: Periodic Review of Access (IMINT)	New user access to index calculation applications is managed through formal controls requiring line manager approval. For
	On an annual basis, the Content Operations team extracts an IMINT user list and reviews to identify any users who no longer require access based on job role. This list of users is sent to the Development Manager for approval and update on the system.	the IMINT platform, the periodic assessment of suitability of the existing CRB Commodities user population was performed annually, rather than every six months (as per the LSEG policy).
	Business Process (CBI)	Test Procedures
	Access to the convertibles index calculation platform, CBI Platform, requires users to have access to the DCAG VPN server and the relevant applications within the MACE server.	For a sample new joiner, obtained and inspected evidence that they had received authorisation from their manager and the Development Lead for the access to the platform.
	Control – New User Request (CBI)	2. For a sample user, obtained and reviewed a screenshot of the SailPoint platform to verify if their access to the CBI platform had been periodically recertified by Content Operations Management.



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
	New CBI Platform accounts require access to be raised by Content Operations Management and approval to be sought from Development Lead. After the authorisations have been received, the user submits evidence of the approval to the Technology team who implement the change.  Control – Periodic Review of Access (CBI)	Test Result  No exception noted
	The CBI platform is onboarded to LSEG's user access management platform, SailPoint, which, on a quarterly basis, prompts the Content Operations Management to review the population of users on the CBI platform and recertify their access remains appropriate based on job role. If the individual no longer requires access to the CBI platform, their access is revoked.	
	Calculation System Authentication	Test Procedures
	Authentication to the index administration platforms requires users to have a usemame and strong password. Please see further details below for the respective controls for the systems in scope of the review.	1. Obtained and inspected the 'Cloud Logging in Method of Work' for evidence it outlined the process determine processes for accessing the WMX application, including the authentication process.
	Control: Authentication (WMX)	2. Obtained and inspected the 'Session and Password Policy'
	The 'WMR Cloud Logging In Methods of Work' document outlines the process for users authenticating and accessing the WMX application. As outlined in the document, users authenticate themselves when accessing the WMX platform using their LSEG username and a strong password. Authentication requires a strong password as outlined in the outlined in the 'Session and Password'	
	Policy' document, which specifies the length and complexity of the password.  Control: Authentication (RFR, E-CIBORG, IMINT)	Obtained and inspected the WMX log-on screen for evidence that authentication required a unique username and password
	Users log in to the RFR, E-CIBORG, and IMINT applications using their employee LSEG Worksite credentials and additional 2 Factor authentication using a mobile device. Worksite credentials require a strong password, as outlined in the 'Cyber Security Standard - Identity and Access Management' document.	4. Obtained the Cyber Security Standard – Identity and Access Management document and inspected for evidence that it contains details on system authentication and password requirements
	Control: Authentication (CBI Platform)	5. Obtained and inspected the RFR, E-CIBORG, and IMINT
	User access to the convertible indices calculation application, CBI Platform, requires a unique usemame and a one-time generated password. The passwords are generated per instance of access via the BeyondTrust application.	Log-on screens for evidence that it requires a worksite usemame, password credentials and 2-factor authentication to gain access to the platforms.
		<ol> <li>Obtained and inspected screenshots of the login process fo the CBI platform for evidence that users require a unique usemame and one-time generated password to access the CBI system.</li> </ol>
		TestResult
		No exception noted



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
	Index Administration Platform System Resilience	TestProcedures
	Business Process	Obtained and inspected the below documents for evidence they outlined the requirements as per the response and that
	FTSE Russell follows the LSEG policies and standards for the IT resilience, including:	they had been reviewed and approved periodically by the document owner:
	Technology Resilience Standard, which provides the overarching framework for IT resilience	Technology Resilience Standard,
	<ul> <li>IT Service Continuity Standard, which outlines the approach to ITcontinuity testing</li> </ul>	<ul> <li>IT Service Continuity Standard,</li> <li>Backup and Retention Standard.</li> </ul>
	Backup and Retention Standard, which outlines the approach to data backup and retentions	Busine and Notonius Polaridade.
	Details of how the above requirements on IT disaster recovery and backup and restoration have been implemented in the in-scope administration platforms are outlined in controls below.	Test Result
	Control: IT Resilience Key Documentation Review	No exception noted
	The IT Service Continuity Standard, Technology Resilience Standard, Backup and Retention Standard are reviewed and approved periodically by the document owner.	
	Control: IT Disaster Recovery (WMX)	Test Procedures
	The WMX platform is hosted on a cloud services infrastructure and is maintained across two separate sites (a primary and secondary). WMX utilises 'global cluster' functionality within the cloud service, which continuously replicates the databases between the primary and secondary sites. As required by	Obtained and inspected the WMX Disaster Recovery Plan for evidence it contained the IT disaster recovery testing plan
	the 'WMX Disaster Recovery Plan', on an annual basis, failover testing is performed between the primary and secondary sites by the Development team.	2. Obtained and inspected cloud service screenshots for evidence the WMX application is operating on both a primary and secondary site. Further, obtained and inspected the results of WMX annual failover testing to for evidence the disaster
	Control: Backup and Restoration (WMX)	recovery testing had been successfully completed.
	The WMX platform retains all WMR input and calculation data on the cloud service databases in both its primary and secondary locations. On a daily basis, in both locations, a full backup of the databases is automatically configured to be performed. Additionally, on an annual basis, a test restoration of a backup is performed by the Technology team. Evidence of the result are retained in a test report document	3. Obtained and inspected evidence of cloud service that the WMX database is backed up on a daily basis. Further obtained and inspected the results of periodic test restoration of a backup for evidence it had been successfullyperformed.
	document	Test Result
		No exception noted
	Control: IT Disaster Recovery (RFR)	Test Procedures
	The RFR Application and its database are housed on a cloud service on a single sited location with three availability zones (1 primary and 2 secondary). Data is replicated continuously between the three availability zones. As required by the 'RFR Disaster Recovery Plan', on an annual basis, failover testing is performed between three different availability zones to test for continuity of the system's	1. Obtained and inspected the RFR Disaster Recovery Plan for evidence it contained the IT disaster recovery testing plan for the RFR Application.



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
	operation in the event of an outage on the primary availability zone. Evidence of the testing are retained in the RFR Disaster Recovery Test Report.	Obtained and inspected cloud service screenshots for evidence the RFR application is operating on multiple
	Control: Backup and Restoration (RFR)	availability systems. Further, obtained and inspected the results of RFR annual failover testing for evidence the disaster recovery testing had been successfully completed.
	On a daily basis, a backup of the RFR database is automatically configured to be performed within the cloud service platform. The backups are retained for period of 10 days.	3. Obtained and inspected evidence from the cloud service that the RFR database is backed upon a daily basis.
		Test Result
		No exception noted
	Control: IT Disaster Recovery (E-CIBORG)	Test Procedures
	The E-CIBORG platform is an on-premises system run on two separate sites, a primary and a secondary. There is continuous data replication between the databases on the primary and secondary sites. As required by the <i>E-CIBORG Disaster Recovery Testing Plan</i> , on an annual basis, switchover	Obtained and inspected the <i>E-CIBORG Disaster Recovery Plan</i> document to for evidence it contained details the IT disaster recovery testing plan for E-CIBORG
	disaster recovery testing is performed between the primary and secondary sites.  Control: Backup and Restoration (E-CIBORG)	2. Obtained and inspected screenshot evidence of the configuration of the E-CIBORG database for evidence it is housed on two separate locations. Further, obtained and inspected the results of the E-CIBORG annual failover
	The E-CIBORG platform is housed on a dual location with replication between the two sites. Transient market data and static data is retained within the E-CIBORG Database, which is backed up twice per	for evidence that disaster recovery testing had been successfully completed.
	day and on an annual basis a test restoration of the database is performed. Input data and calculated indices are retained in the E-CIBORG data log, which is backed up on a monthly basis.	3. Obtained and inspected evidence that the E-CIBORGdata base is backed up twice per day and a test restoration was performed. Further obtained and inspected evidence the E- CIBORG data log was backed up on at least monthly basis
		Test Result
		No exception noted, except for
		The data log for the E-CIBORG application containing a record of inputs and calculated index values is backed up on a monthly basis. This is not consistent with the 'LSEG Backup Data Retention' standard, which states that unless there is a valid exception, all production systems must undergo an incremental backup on a daily basis.
	Control: IT Disaster Recovery (IMINT)	Test Procedures



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
	The IMINT application is an on-premises application run across a primary and a secondary site. As outlined in the <i>IMINT Disaster Recovery Plan</i> , every six months, scheduled failover test is performed between the primary and secondary and the results are documented and retained.	Obtained the IMINT Disaster Recovery Plan and inspected for evidence that it contains the IT disaster recovery plan for the IMINT system
	Control: Backup and Restoration (IMINT)  The Index and its input data are stored for perpetuity in an SQL database. The IMINT application is deployed in two different data locations (primary and secondary) and the data is mirrored between the two different sites on a daily basis. Throughout each day, a backup of the database is performed, and each backup is retained for a period of 14 days. On a 6-monthly basis a test restoration of the backup is performed	2. Obtained and inspected the <i>IMINT SAD</i> for evidence that the IMINT database is configured on both a primary and secondary site. Further obtained and inspected evidence of the results of the IMINT annual failover testing for evidence that the disaster recover testing had been completed.  3. Obtained and inspected screenshot evidence of the system to test for evidence that the IMINT system is backed up on a daily basis. Further obtained and inspected the results of the periodic test restoration to confirm it had been completed successfully.  Test Result
		No exception noted
	Control: IT Disaster Recovery (CBI)	Test Procedures
	The MACE system (which houses the CBI Platform) has data sites at two geographical locations. The MACE solution is held on both on-premises and virtual servers. Throughout the day there is periodic replication between the primary and secondary sites. On an annual basis, failover testing is performed	inspected for evidence that it contains the IT disaster recovery
	between the primary and secondary site and the outcome is recorded in a Disaster recovery test report.  Control: Backup and Restoration (CBI)  All databases are backed up on a daily basis onto the MACE Fileserver. The backups made are	2. Obtained and inspected the CBI MACE platform for evidence that the application is configured on both a primary and a secondary site and is replicated periodically throughout each day. Further obtained and inspected evidence of the results of the CBI annual failover testing for evidence that the disaster recovery test had been completed.
	retained for a period of seven days. On at least an annual basis, a periodic test restoration of the backups is performed, and the results of the exercise are documented.	3. Obtained and inspected screenshot evidence of the CBI system for evidence that the CBI system is backed up on a daily basis. Further obtained and inspected the resultsof the periodic test restoration to confirm it had been completed successfully.
		Test Result
		No exceptions noted.
	Control: Business Continuity	Test Procedures
	The LSEG Group Business Continuity Minimum Standards and Business Continuity Risk Policy outline the Group's policies on Business Continuity Risk which aims to maintain the safety of Group	1. For each benchmark administered, obtained and inspected Business Impact Analysis and Business Continuity Plans for



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
	staff, the continuity of delivery of services, functions, processes and activities, the continued operation of regulated entities and to protect the interests of stakeholders. As required by the <i>Business Continuity Risk Policy</i> , for each index, the firm maintains a <i>Business Impact Assessment</i> ('BIA') and a corresponding <i>Business Continuity Plan</i> ('BCP'). The business continuity plans are tested periodically	evidence they had been periodically reviewed and approved. Further, obtained evidence of the business continuity testing scripts for evidence the continuity plans had been successfully performed.
	and evidence of the exercise are recorded in test script documents.	Test Result
		No exception noted, except for:
		FTSE Russell assesses and tests resilience of business continuity in line with the Group Operational Resilience Framework. As part of this process where it has been identified that alternative workarounds are not available for critical dependencies or that recovery strategies are not fully documented, there is currently not a formal governance process that requires the validation, risk assessment or planned remediation of such instances.
c) Whistleblowing mechanism: Administrators	Control Objective	Test Procedures
should establish an effective whistleblowing mechanism to facilitate early awareness of any potential misconduct or irregularities that may arise. This mechanism should allow for external	To provide reasonable assurance that the administrator's control framework addresses their whistleblowing mechanism, which facilitates early awareness of potential misconduct or irregularities, and allows for external reporting of such cases where appropriate.	1. Obtained the LSEG Speak Up Policy and inspected for evidence that it documents the processes in place for whistleblowing and the reporting of breaches in conducts.
reporting of such cases where appropriate.	Business Process	2. Obtained and inspected evidence that the <i>LSEG Speak Policy</i> was reviewed and approved by the Group Board or annual basis.  Test Result
	FTSE Russell provide a Whistleblowing confidential hotline and reporting portal through an independent third party. This allows staff to report concerns or breaches of policy, miscarriages of justice, criminal activity and behaviour that doesn't meet FTSE Russell's code of conduct policies. There is also an internal Speak Up email address that is available for use.	
	All 'concerns' reported via FTSE Russell's whistleblowing hotline and reporting portal are investigated in line with the 'Speak Up' policy. The 'Speak Up' team notify receipt of a concern within a week. Where instances of whistleblowing in relation to FTSE Russell are identified, FTSE Russell Compliance are contacted by Central Compliance of any Whistleblowing instances for any relevant benchmark related information to assist with investigations managed by Central Compliance.  Control: Group Speak Up Policy Review	No exceptions noted.
	The LSEG Speak Up Policy is reviewed and approved by the Group Board at least annually.	
d) Evretice.	Control Objective	Test Procedures
d) Expertise:  i) Ensuring Benchmark determinations are made by personnel who possess the relevant levels of expertise, with a process for periodic review of their competence; and	To provide reasonable assurance that the administrator's control framework addresses expertise, including:  • Ensuring personnel involved in their benchmark determinations possess relevant levels of	1. For a sample of the Benchmark Operations teams for the In-Scope Products, obtained screenshots from the Workday system and inspected for evidence that a performance review took place on at least an annual basis.



### **IOSCO Principle** Work Performed by KPMG **FTSE Russell Response and Controls** Staff training (incl. ethics and conflicts of interest training) and continuity and succession ii) Staff training, including ethics and conflicts of 2. Obtained and inspected evidence of the documenting of interest training, and continuity and succession planning completion records for staff involved in the mandatory annual planning for personnel. Control: Annual Performance Review Benchmark Regulation training. Employees who are involved in the benchmark and index activities, are subject to performance 3. Obtained and inspected evidence to confirm that the annual reviews at least annually, conducted by supervisors. Records are logged on Workday. BMR training was reviewed by Compliance at leastannually. **Control: Monitoring of Benchmark Regulation Training Completion** 4. Obtained the Compliance Manual and inspected for evidence that it identified the Training and Competence All staff involved in the benchmark and index determination process are required to complete the requirements for staff, as per the Response. mandatory Benchmarks Regulation training course annually. This is designed to ensure that all relevant employees have adequate resource to carry out their functions effectively. This includes 5. Obtained Benchmark Governance Committee meeting obligations regarding conflicts of interest and confidentiality. minutes and inspected for evidence that the Compliance Manual was reviewed and approved on an at least annual The records of completion of the Benchmark Regulation training are retained by Central Compliance and the training records spreadsheet is monitored on an annual basis. 6. Obtained the Control Framework Summary and inspected Control: Review of Benchmark Regulation Training Content for evidence that it documents the requirements to have in place adequate training and succession planning. The Benchmark Regulation training course scope and content is reviewed and approved by Compliance on an annual basis to ensure it addresses key requirements of benchmark administration. 7. Please refer to Principle 4 for the review and approval of the Control Framework Summary Control: Review of Compliance Manual - RBSL The Compliance Manual outlines the Training and Competence Requirements for staff, stating that all staff must be assessed for competency to perform their role, with FTSE Russell having procedures in Test Result place for individuals to be trained and assessed as competent so all parties can identify if the required No exceptions noted. skills are not being met. Please refer to Principle 3(q) for the Control review of the Compliance Manual Control: Review of the Control Framework Summary - RBSL The Control Framework Summary outlines that FTSE Russell allocates succession planning to the most senior person responsible within that activity/area, with the Senior Manager expected to train staff to an adequate level to fulfil their role during an absence; with reliance on key man risk identified to the Risk Manager. Please refer to Principle 4 for the review of the Control Framework Summary 4.1) Where a Benchmark is based on **Control Objective Test Procedures** Submissions: To provide reasonable assurance that when a Benchmark is based on Submissions, the administrator 1. Obtained the Benchmark Panel Bank Assessment Policy Administrators should promote the integrity of promotes the integrity of inputs by: and evidence of review and approval and inspected for inputs by: evidence that it contains the detail outlined in the Response Ensuring Submitters comprise an appropriately representative group of participants; a) Ensuring as far as possible that the and was approved on an annual basis. Employing a system of appropriate measures so that Submitters comply with the Submission Submitters comprise an appropriately guidelines as defined in the Submitter Code of Conduct;

representative group of participants taking into



### **FTSE Russell Response and Controls**

### Work Performed by KPMG

consideration the underlying Interest measured by the Benchmark:

- b) Employing a system of appropriate measures so that, to the extent possible, Submitters comply with the Submission guidelines, as defined in the Submitter Code of Conduct and the Administrators' applicable quality and integrity standards for Submission;
- c) Specifying how frequently Submissions should be made and specifying that inputs or Submissions should be made for every Benchmark determination: and
- d) Establishing and employing measures to effectively monitor and scrutinise inputs or Submissions This should include precompilation or pre-publication monitoring to identify and avoid errors in inputs or Submissions, as well as ex-post analysis of trends and outliers.

- Specifying how frequently Submissions should be made and specifying the inputs or 2.0btained evidence of completion of the Contributor Code of Submissions made for every Benchmarkdetermination:
- Establishing and employing measures to effectively monitor and scrutinise inputs or Submissions

### **Business Process**

Of the In-Scope Products, SAIBOR / SAIBID is the only In-Scope Product dependent on Submissions (Contributions).

- FTSE Russell has documented the Benchmark Panel Bank Assessment Policy which specifies that it is essential for FTSE Russell to obtain the input data from a reliable and representative panel or sample of contributors so as to ensure that the resulting benchmark is reliable and representative of the market or economic reality that the benchmark is intended to represent.
- FTSE Russell has implemented the SAIBOR/SAIBID Code of Conduct which defines the responsibility of each of the Contributor banks to make contributions that are representative 5. Obtained the SAIBOR / SAIBID Code of Conduct and of the underlying interest of the Benchmark, separately and independently of other inspected for evidence that it detailed the responsibility of each Contributor banks.
- FTSE Russell's Monitoring of Contributors Policy outlines the processes to ensure Process. compliance to the Code of Conduct and the measures to be taken in the event of any failures to do so. FTSE Russell may review with each Contributor their level of adherence with the Code of Conduct by conducting visits, calls, requesting evidence or any other means deemed necessary. All assessments are reported to the relevant Oversight Committee for review and recommendations. Additional scrutiny and oversight may be provided by the FTSE Russell Benchmarks Oversight Committee.
- The SAIBOR/SAIBID Benchmark Methodology defines the frequency for which the Benchmark is published, including the determination of input data for the Contributors, as well as the tenors that the Benchmark comprises.
- Please refer to Principle 14 for details on the requirement for pre /post publication monitoring

### Control: Benchmark Panel Bank Assessment Policy Review and Approval

The Benchmark Panel Bank Assessment Policy was approved by the RBSL Benchmark Governance Committee on an annual basis.

Going forward, the Benchmark Panel Bank Assessment Policy annual review and approval will be conducted by the FTSE Russell Index Governance Board.

### Control: Monitoring of Contributor Code of Conduct Compliance Certification Forms

On an annual basis, the Compliance function ensures that Contributors to the SAIBOR/SAIBID benchmark complete and return the Contributor Code of Conduct Compliance Certification Form to attest that they are adhering to the requirements defined within the Code of Conduct.

Control: Monitoring of Contributors Policy Review and Approval

- Conduct Compliance Certification Form by Contributor Banks and inspected for evidence that they have certified their adherence to the requirements set out in the SAIBOR / SAIBID Code of Conduct.
- 3. Obtained the Monitoring of Contributors Policy and inspected for evidence that it detailed the process for ensuring the compliance of Contributor banks, as outlined in the Business Process.
- 4. Obtained the meeting minutes for the *RBSL Benchmark* Governance Committee and inspected for evidence that the Monitoring of Contributors Policy was reviewed and approved at leastannually.
- of the Contributor banks, as outlined within the Business
- 6. Obtained the meeting minutes for the RBSL Benchmark Governance Committee and inspected for evidence that the SAIBOR / SAIBID Code of Conduct was reviewed and approved at least annually.
- 7. Obtained the SAIBOR / SAIBID Benchmark Methodology and inspected to determine whether it identified the frequency for which the benchmark is published and the determination of input data for Contributors, as per the Business Process
- 8. Obtained the meeting minutes for the FTSE Benchmarks Oversight Committee meeting minutes and inspected for evidence that it reviewed the assessment of each of the Contributor banks.

Please refer to Principle 11 for the annual review of Benchmark Methodologies

Please refer to Principle 1(d) for the review and approval of the Oversight Committee Terms of Reference.

### **Test Result**

No exceptions noted.



IOSCO Principle	FTSE Russell Response and Controls
	The <i>Monitoring of Contributors Policy</i> was approved by the RBSL Benchmark Governance Committee at least annually. Going forward the annual review and approval will be conducted by the FTSE Russell Index Governance Board, under the FTSE Russell Governance structure.
	Control: Contributor Code of Conduct Review and Approval
	The SAIBOR/SAIBID Contributor Code of Conduct is reviewed by Compliance and the relevant Oversight Committee and was approved by the RBSL Benchmark Governance Committee at least annually prior to being made public.
	Control: Methodology Review and Approval
	Please refer to Principle 11 for review and approval of the SAIBOR/SAIBID methodologies.
	Control: Review of the Oversight Committee Terms of Reference
	Please refer to Principle 1 for review and approval of the Oversight Committees Terms of Reference.

### 5. Internal Oversight

Administrators should establish an oversight function to review and provide challenge on all aspects of the Benchmark determination process. This should include consideration of the features and intended, expected or known usage of the Benchmark and the materiality of existing or potential conflicts of interest identified

The oversight function should be carried out either by a separate committee, or other appropriate governance arrangements. The oversight function and its composition should be appropriate to provide effective scrutiny of the Administrator. Such oversight function could consider groups of Benchmarks by type or asset class, provided that it otherwise complies with this Principle.

An Administrator should develop and maintain robust procedures regarding its oversight function, which should be documented and available to relevant Regulatory Authorities, if any. The main features of the procedures should be Made Available to Stakeholders. These procedures should include:

### **Control Objective**

To provide reasonable assurance that the administrator establishes an oversight function that reviews and challenges all aspects of their benchmark determination process, including the consideration of features and expected/known usage of their benchmark and the materiality of potential or existing conflicts of interest.

The oversight function shall be carried out by either a separate committee or other relevant governance arrangements.

The administrator should develop and maintains robust procedures with respect to their oversight function. These should be documented and made readily available to relevant Regulatory Authorities, with main features made available to stakeholders.

### Control: Review of the Oversight Committee Terms of Reference

The responsibilities for FTSE Russell's Oversight Committees' for the In-Scope Products are defined in their respective *Terms of Reference* (ToR). These include:

- the review and oversight of the benchmark methodology and any changes that may occur;
- · the oversight of the administrator's control framework; and
- the oversight of any third party involved in the provision of the benchmark.

The WMR Oversight Committee provides oversight on all aspects of the provision of the WMR Spot, Forward, NDF, and Spot Rate Metals and meet on at least a quarterly basis.

**Test Procedures** 

**Work Performed by KPMG** 

- Obtained and inspected the FTSE Benchmarks Oversight Committee Terms of Reference for evidence that it details the committees responsibilities.
- 2. Obtained and inspected the *WMR Oversight Committee Terms of Reference* for evidence that it details the committees responsibilities..
- 3. Obtained and inspected the FTSE CoreCommodity CRB Indices Oversight Committee Terms of Reference for evidence that it details the committees responsibilities.
- 4. Obtained the meeting minutes for the FTSE Benchmarks Oversight Committee and inspected for evidence that:
  - They meet at least quarterly or annually as per the Business Process
  - They conducted the responsibilities outlined as per the Business Process
- 5. Obtained the meeting minutes for the *WMR Oversight Committee* and inspected for evidence that:
  - They meet at least quarterly or annually as per the Business Process



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
a) The terms of reference of the oversight function;	The FTSE Benchmarks Oversight Committee provides oversight of SAIBOR/SAIBID, FTSE Convertible Indices, FTSE Term SONIA, Tokyo Swap Rate, FTSE USD IBOR Cash Fallbacks and FTSE Term €STR and meet on at least a quarterly basis.  The FTSE CoreCommodity CRB Indices Oversight Committee covers the FTSE CoreCommodity CRB Indices and meet on at least an annual basis.  Committee members for the Benchmark Oversight Committees are made publicly available on the FTSE Russell website.  Please refer to Principle 1 for review and approval of the Oversight Committees Terms of References.	They conducted the responsibilities outlined as per the Business Process  6. Obtained the meeting minutes for the FTSE CoreCommodity CRB Indices Oversight Committee and inspected for evidence that:  They meet at least quarterly or annually as per the Business Process They conducted the responsibilities outlined as per the Business Process  Please refer to Principle 1(d) for the review and approval of the Oversight Committee Terms of Reference  Test Result  No exceptions noted.
b) Criteria to select members of the oversight function; c) The summary details of membership of any committee or arrangement charged with the oversight function, along with any declarations of conflicts of interest and processes for election, nomination or removal and replacement of committee members.	To provide reasonable assurance that the administrator's oversight function procedures include criteria for selecting members of the function; and summary details of the membership of committees/arrangements charged with the function, in addition to any declarations of conflicts of interest and processes for electing, nominating, or replacing members.  Control: Review of Oversight Committee Procedures Manual - RBSL  The Oversight Committee Procedures Manual details the nomination criteria for the selection of members of the oversight function. Additionally, it details the election process in place for Oversight Committees.  Appointments, De-Selection and responsibilities of the Oversight Committee Chair are outlined in detail within these procedures. There are three main pillars of nomination criteria to evaluate a person or group of persons composing a Benchmark Oversight Committee:  1. Experience - ensuring that members have adequate experience to perform the roles effectively  2. Fit & Proper - centred around a person's level of competence, honesty and integrity  3. Conflict of Interest - members should be independent in both appearance andreality.  The Oversight Committee Procedure Manual - RBSL, was reviewed by the RBSL Benchmark Governance Committee and approved on an annual basis. Going forward the review and approval will be conducted by the FTSE Russell Index Governance Board.  Control: Review of the Oversight Committee Terms of Reference	1. Obtained the Oversight Committee Procedures Manual and inspected for evidence that it identified the criteria for the selection of members to the oversight function.  2. Obtained the meeting minutes for the RBSL Benchmark Governance Committee and inspected for evidence that the Oversight Committee Procedures Manual was reviewed and approved at least annually.  3. Obtained the Tems of Reference for the In-scope Oversight Committees and inspected for evidence that they contained a description of their membership terms.  Please refer to Principle 1(d) for the review and approval of the Oversight Committee Terms of Reference.  Test Result  No exceptions noted.



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
	Each Oversight Committee Terms of Reference contains summary details of membership of the respective Committee.	
	Please refer to Principle 1 for review and approval of the Oversight Committees Terms of Reference.	
The responsibilities of the oversight function include:	Control Objective	Test Procedures
a) Oversight of the Benchmark design:	To provide reasonable assurance that the administrator's oversight function responsibilities include the oversight of benchmark design through:	1. Please refer to Principle 5(a) for the obtaining and inspection of the responsibilities contained within the relevant Oversight Committee Terms of Reference.
i) Periodic review of the definition of the Benchmark and its Methodology;	<ul> <li>Periodic review of benchmark definition and methodology;</li> <li>Taking measures to stay informed on issues and risks to the benchmark</li> <li>Reviewing and approving procedures to terminate the benchmark.</li> </ul>	Please refer to Principle 1(d) for the review and approval of the Oversight Committee's Terms of Reference.
ii) Taking measures to remain informed about issues and risks to the Benchmark, as well as commissioning external reviews of the Benchmark (as appropriate); iii) Overseeing any changes to the Benchmark Methodology, including assessing whether the Methodology continues to appropriately measure the underlying Interest, reviewing proposed and implemented changes to the Methodology, and authorising or requesting the Administrator to undertake a consultation with Stakeholders where known or its Subscribers on such changes as per Principle 12; and iv) Reviewing and approving procedures for termination of the Benchmark, including guidelines that set outhow the Administrator should consult with Stakeholders about such	That the responsibilities of the oversight function also include the integrity of benchmark determination and control framework through:  • Overseeing management and operations of the benchmark • Considering results of internal and external audits and monitoring the implementation of any remedial actions (if any); and • Overseeing exercise of expert judgement following the published methodologies.  Business Process  The WMR Oversight Committee, FTSE Russell Benchmarks Oversight Committee and FTSE CoreCommodity CRB Indices Terms of Reference set out the requirements of the committees to: a) review the benchmark's definition and methodology at leastannually; b) oversee any changes to the benchmark methodology and being able to request the administrator to consult on such changes; c) oversee the administrator's control framework, the management and operation of the benchmark;	•
cessation b) Oversight of the integrity of Benchmark determination and control framework: i) Overseeing the management and operation of the Benchmark, including activities related to Benchmark determination undertaken by a third party; ii) Considering the results of internal and external audits, and following up on the implementation of remedial actions highlighted in the results of these audits; and	d) review and approve procedures for cessation of the benchmark, including any consultation about cessation  e) oversee any third party involved in the provision of the benchmark, including calculation or dissemination agents;  f) assessing internal and external audits or reviews, and monitoring the implementation of identified remedial actions  g) oversee any exercise of Expert Judgement by the Administrator and ensuring the published Methodology has been followed.  Control: Review of the Oversight Committee Terms of Reference  Please refer to Principle 1 for review and approval of the Oversight Committees ToRs.	



**IOSCO Principle FTSE Russell Response and Controls** Work Performed by KPMG iii) Overseeing any exercise of Expert Judgement by the Administrator and ensuring Published Methodologies have been followed. Where conflicts of interests may arise in the **Control Objective Test Procedures** Administrator due to its ownership structures or To provide reasonable assurance that where the administrator may encounter conflicts of interest due 1. Please refer to Principle 5(b) for the obtaining and inspection controlling interests, or due to other activities to its ownership structures or controlling interests, or due to other activities conducted by any entity of the relevant Oversight Committee Terms of Reference to conducted by any entity owning or controlling owning or controlling the Administrator or by the Administrator or any of its affiliates. This includes confirm they documented the membership composition, as the Administrator or by the Administrator or any outlined within the Business Process. establishing an independent oversight function. of its affiliates: the Administrator should establish an independent oversight function Control: Review of FTSE Russell Conflicts of Interest Register Please refer to Principle 1(d) for the review and approval of the which includes a balanced representation of a Oversight Committee Terms of Reference. range of Stakeholders where known, The FTSE Russell Conflicts of Interest Register contains a log of potential conflicts to identify the Subscribers and Submitters, which is chosen to circumstances in which a Group or Benchmark conflict may arise or may be perceived to arise. It Test Result counterbalance the relevant conflictof interest. details the mitigation and controls in place, the accountable forum / executive, the oversight and No exceptions noted. escalation forum, and the impact and likeliness of the occurrence pre and post controls. The Oversight Committees are designed to risk assess and manage the defined conflicts. Please refer to IOSCO Principle 3(a)(b)(c) relating to the Conflicts of Interest Register. Control: Review of the Oversight Committee Terms of Reference Please refer to Principle 1 for review and approval of the Oversight Committees ToRs.

Where a Benchmark is based on Submissions: the oversight function should provide suitable oversight and challenge of the Submissions by:

- a) Overseeing and challenging the scrutiny and monitoring of inputs or Submissions by the Administrator. This could include regular discussions of inputs or Submission patterns, defining parameters against which inputs or Submissions can be analysed, or querying the role of the Administrator in challenging or sampling unusual inputs or Submissions;
- b) Overseeing the Code of Conduct for Submitters;
- c) Establishing effective arrangements to address breaches of the Code of Conduct for Submitters; and;

### **Control Objective**

To provide reasonable assurance that where a Benchmark is based on Submissions, the administrator has in place an oversight function to provide suitable oversight of challenge of Submissions by:

- Overseeing and challenging the scrutiny and monitoring of inputs or Submissions;
- b) Overseeing the Code of Conduct for Submitters;
- Establishing the effective arrangements to address breaches of the Code of Conduct for Submitters;
- d) Establishing measures to detect potential anomalous or suspicious Submissions.

### **Business Process**

The FTSE Benchmarks Oversight Committee is responsible for the oversight of the SAIBOR / SAIBID benchmarks with its documented responsibilities including:

1. Please refer to Principle 5(a) for the obtaining and inspection of the responsibilities contained within the FTSE Benchmark Oversight Committee Terms of Reference.

**Test Procedures** 

2. Obtained the *Monitoring of Contributors Policy* and inspected for evidence that it details that the assessments are reported to the Oversight Committee for review and recommendations.

Please refer to Principle 1(d) for the review and approval of the FTSE Benchmarks Oversight Committee ToR.

Please refer to Principle 4.1 for the review and approval of the Monitoring of Contributors Policy

Please refer to Principle 4.1 for the review and approval of the SAIBOR / SAIBID Code of Conduct.



# d) Establishing measures to detect potential anomalous or suspicious Submissions and in case of suspicious activities, to report them, as well as any misconduct by Submitters of which it becomes aware to the relevant Regulatory Authorities, if any.

### **FTSE Russell Response and Controls**

- The management and operation of the benchmark;
- The oversight of any third party involved in the provision of the benchmark, including calculation of dissemination agents;
- Reporting to the relevant competent authorities of any anomalous or suspicious input data

FTSE Russell has established the *SAIBOR/SAIBID Code of Conduct*, which outlines the obligations of the Contributor banks, with the *Monitoring of Contributors Policy* documenting the process for assessing SAIBOR/SAIBID Contributor's compliance with the *Code of Conduct*, and the measures to occur in the event of a contributor failing to comply with it. FTSE Russell may review with each Contributor their level of adherence with the *Code of Conduct*, with all assessments reported to the relevant Oversight Committee for review and recommendations.

Control: Review of the Oversight Committee Terms of Reference

Please refer to Principle 1(d) for review and approval of the Oversight Committees ToRs.

Control: Monitoring of Contributors Policy - Review and Approval

Please refer to Principle 4.1 for Monitoring of Contributors Policy Review and Approval

Control: Contributor Code of Conduct - Review and Approval

Please refer to Principle 4.1 for Contributor Code of Conduct Review and Approval

Control: Monitoring of Contributor Code of Conduct Compliance Certification Forms

Please refer to Principle 4.1 for Monitoring of Contributor Code of Conduct Compliance Certification Forms.

### **Work Performed by KPMG**

Please refer to Principle 4.1 for the obtaining and inspection of the completion of the Contributor Code of Conduct Compliance Certification Form by the Contributor Banks.

### Test Result

No exceptions noted.

### 6. Benchmark Design

The design of the Benchmark should seek to achieve, and result in an accurate and reliable representation of the economic realities of the Interest it seeks to measure and eliminate factors that might result in a distortion of the price, rate, index or value of the Benchmark.

Benchmark design should take into account the following generic non-exclusive features, and other factors should be considered, as appropriate to the particular Interest:

### **Control Objective**

To provide reasonable assurance that the administrator's design of their benchmarks seeks to achieve, and result in, the accurate representation of economic realities of the interest it measures, in addition to eliminating factors that could result in distortion of the price, rate, or value of the benchmark.

The design shall consider the following generic features, as appropriate to the particular interest:

- Adequacy of the sample used to represent the interest;
- Liquidity and size of the market
- Relative size of the underlying market with respect to trading volume
- Distribution of trading among market participants; and
- Market dynamics.

### **Test Procedures**

1. Obtained the review and approval of the *RBSL Benchmark Methodology Internal Review Policy* and inspected for evidence that it was reviewed and approved at least annually.

Please see Principle 11 for test procedures on Product Manager review of the Methodology documents

Please see Principle 11 for test procedures on review and approval of the Methodology documents

### **Test Result**

FTSE Russell WMR FX Benchmarks, Interest Rate Benchmarks, Convertible Bond Indices, and CoreCommodity CRB Indices

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IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
a) Adequacy of the sample used to represent	Business Process	No exception noted.
the Interest; b) Size and liquidity of the relevantmarket (for example whether there is sufficient trading to provide observable, transparentpricing); c) Relative size of the underlying market in relation to the volume of trading in the market that references the Benchmark;	The RBSL Benchmark Methodology Internal Review Policy specifies that, when conducting an internal review, Product Managers shall perform an analysis considering the following points:  • Conditions in the market that forms the underlying interest for the Benchmark including liquidity, market events and any changes to conventions that might affect the quality or viability of the Benchmark;  • The quality and representativeness of the input prices or rates used in the determination of the Benchmark;	
d) The distribution of trading among Market Participants (market concentration); e) Market dynamics (e.g. to ensure that the Benchmark reflects changes to the assets	As part of the review of the Methodology documents for the In-Scope Products performed by the relevant Product Manager, FTSE Russell undertakes a periodic review of the appropriateness of using specific data suppliers to provide the data used in the calculation and validation of the benchmark rates.	
underpinning a Benchmark).	Control: RBSL Benchmark Methodology Internal Review Policy - Review and Approval	
	The RBSL Benchmark Methodology Internal Review Policy is reviewed by FTSE Russell Benchmark Administration & Governance and approved by the Benchmark Governance Committee at least annually. Going forward this will be reviewed by the FTSE Russell Index Governance Board.	
	Control: Product Manager Analysis and Review of Methodology	
	Please refer to Principle 11 for Product Manager Analysis and Review of Methodology control.	
	Control: Methodology Review and Approval	
	Please refer to Principle 11 for Benchmark Methodologies review and approval.	
7. Data Sufficiency		
The data used to construct a Benchmark	Please refer to Principle 4(b)(i) above for detail on data accuracy checks.	N/A
determination should be sufficient to accurately and reliably represent the Interest measured by the Benchmark and should:  a) Be based on prices, rates, indices or values	Please refer to Principle 4b(i)(v) for detail on internal controls over data collection and transmission processes.	
	Please refer to Principle 11 for detail on Product Manager review of underlying data	
that have been formed by the competitive forces of supply and demand in order to provide confidence that the price discovery system is reliable; and,	Please refer to Principle 8 for detail on input data hierarchy and sources.	
b) Be anchored by observable transactions entered into at arm's length between buyers and sellers in the market for the Interest the Benchmark measures in order for it to function		



IOSCO Principle FTSE Russell Response and Controls Work Performed by KPMG

as a credible indicator of prices, rates, indices or values.

This Principle requires that a Benchmark be based upon (i.e., anchored in) an active market having observable Bona Fide. Arms-Length Transactions. This does not mean that every individual Benchmark determination must be constructed solely of transaction data. Provided that an active market exists, conditions in the market on any given day might require the Administrator to rely on different forms of data tied to observable market data as an adjunct or supplement to transactions. Depending upon the Administrator's Methodology, this could result in an individual Benchmark determination being based predominantly, or exclusively, on bids and offers or extrapolations from prior transactions. This is further clarified in Principle

Provided that subparagraphs (a) and (b) above are met, Principle 7 does not preclude Benchmark Administrators from using executable bids or offers as a means to construct Benchmarks where anchored in an observable market consisting of Bona Fide, Arms-Length transactions.

This Principle also recognizes that various indices may be designed to measure or reflect the performance of a rule-based investment strategy, the volatility or behaviour of an index or market or other aspects of an active market. Principle 7 does not preclude the use of non-transactional data for such indices that are not designed to represent transactions and where

N/A – no explicit requirements on benchmark administrator



# the nature of the index is such that non-transactional data is used to reflect what the index is designed to measure. For example, certain volatility indices, which are designed to measure the expected volatility of an index of securities transactional data, but the data is derived from and thus "anchored" in an actual functioning securities or options market. 8. Hierarchy of data inputs

An Administrator should establish and Publish or Make Available clear guidelines regarding the hierarchy of data inputs and exercise of Expert Judgement used for the determination of Benchmarks.

The hierarchy of data inputs should include:

- a) Where a Benchmark is dependent upon Submissions, the Submitters' own concluded arms-length transactions in the underlying interest or related markets:
- b) Reported or observed concluded Arm'slength Transactions in the underlying interest:
- c) Reported or observed concluded Arm'slength Transactions in related markets;
- d) Firm (executable) bids and offers; and
- e) Other market information or Expert Judgements.

### **Control Objective**

To provide reasonable assurance that the administrator establishes and publishes clear guidelines for the hierarchy of data inputs and exercise of expert judgement. The hierarchy should include:

- The Submitter's own concluded arms-length transactions in underlying interest/related markets (if dependent on Submissions);
- Reported/observed concluded arm's-length transactions in the underlying interest;
- Reported/observed concluded arm's-length transactions in related markets:
- Executable bids and offers; and
- Other market information (or expert judgement).

### **Business Process**

The benchmark *Methodology* documents for the In-Scope Products provide detail on their input data and, where multiple sources are utilised, a hierarchy is specified. All benchmark *Methodology* documents are made publicly available on FTSE Russell's website.

### Term ESTR, Term SONIA, Tokyo Swap Rate, USD Cash Fallback

Each of the benchmark *Methodology* documents detail the hierarchy of data inputs through their respective waterfall methodologies. These benchmarks rely on input data in the form of rates / quotes from inter-dealer brokers and / or dealer-to-client trading platforms and the methodologies specify the conditions in which the different data inputs are utilised. It is specified that FTSE Russell is not permitted to use expert judgement in the determination of these benchmarks.

### SAIBOR/SAIBID

The *Methodology* document provides detail on the Contributions from a panel of 11 Contributor Banks. The Contributor Banks follows a waterfall methodology to determine their Contributions for SAIBOR and SAIBID. Whilst Contributor Banks may use expert judgement for a Level 3 contribution according to the waterfall methodology, FTSE Russell is not permitted to use expert judgement in the determination of these benchmarks.

### **Test Procedures**

1. Obtained the FTSE In-Scope Benchmark *Methodology* documents and inspected for evidence that each document sets out the guidelines for the hierarchy of data inputs and exercise of expert judgement.

Please see Principle 11 for review and approval of the benchmark-specific methodology documents.

### **Test Result**

No exception noted.



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
	WMR FX Spot and WMR Metals	
	The <i>Methodology</i> document specifies that the input data to be used in the calculation of the rates are FX and Metals traded rates or order rates, with traded rates taking precedence where available. The input data for Non-Trade Currencies and Metals is indicative FX and Metals quote data.	
	Where data sufficiency is limited, FTSE Russell will use its own expert judgement to determine representative and meaningful market rates.	
	WMR Forwards / NDFs	
	The underlying rates used are those deemed to be the most appropriate for foreign investment transactions. These will normally be commercial interbank bid and offer premiums or discounts. A different type of rate may be selected by FTSE Russell if commercial interbank bid and offer rates are not available for a particular currency.	
	Where data sufficiency is limited, FTSE Russell will use its own expert judgement to determine representative and meaningful market rates.	
	FTSE CoreCommodity CRB Indices	
	The FTSE/CoreCommodity CRB indices offer composite indices comprising 19 commodities, along with ex-energy, ex-agri and single commodity index versions. All indices are available as excess return, total return based on US 3 month Treasury Bill rate, and total return based on SOFR overnight rate along with 3 month forward versions. The indices relies upon input data from commodity futures contract prices published by input data providers. The <i>Methodology</i> document specifies that the weight of individual commodities within each Commodity Segment index (main index and 3-month forward index weights are the same).	
	FTSE Convertible Indices	
	The <i>Methodology</i> document specifies that the indices are calculated using the input data and other necessary data available each weekday at the time of calculation. Input data includes, but is not limited to, convertible prices, price for equities, FX, and interest rates; Other necessary data include, but not limited to, corporate action information, convertible bond issuance, convertible bond terms and conditions. The circumstances permitted for expert judgement is specified under certain criteria.	
	Control: Methodology Review and Approval	
	Please refer to Principle 11 for Benchmark Methodologies review and approval.	
Provided that the Data Sufficiency Principle is met (i.e., an active market exists), this Principle is not intended to restrict an Administrator's flexibility to use inputs consistent with the Administrator's approach to ensuring the quality, integrity, continuity and reliability of its Benchmark determinations, as set out in the	N/A – no explicit requirements on benchmark administrator	



### **IOSCO Principle FTSE Russell Response and Controls** Work Performed by KPMG Administrator's Methodology. The Administrator should retain flexibility to use the inputs it believes are appropriate under its Methodology to ensure the quality and integrity of its Benchmark. For example, certain Administrators may decide to rely upon Expert Judgement in an active albeit low liquidity market, when transactions may not be consistently available each day, IOSCO also recognizes that there might be circumstances (e.g., a low liquidity market) when a confirmed bid or offer might carry more meaning than an outlier transaction. Under these circumstances. non-transactional data such as bids and offers and extrapolations from prior transactions might predominate in a given Benchmark determination.

### 9. Transparency of Benchmark determinations

The Administrator should describe and publish with each Benchmark determination, to the extent reasonable without delaying an Administrator publication deadline:

- a) A concise explanation, sufficient to facilitate a Stakeholder's or Market Authority's ability to understand how the determination was developed, including, at a minimum, the size and liquidity of the market being assessed (meaning the number and volume of transactions submitted), the range and average volume and range and average of price, and indicative percentages of each type of market data that have been considered in a Benchmark determination; terms referring to the pricing Methodology should be included (i.e., transaction-based, spread-based or interpolated/extrapolated):
- b) A concise explanation of the extent towhich and the basis upon which Expert Judgement if any, was used in establishing a Benchmark determination.

### **Control Objective**

To provide reasonable assurance that the administrator describes and publishes with each Benchmark determination, to the extent reasonable without delaying an Administrator publication deadline:

- A concise explanation, sufficient to facilitate a Stakeholder's or Market Authority's ability to understand how the determination was developed
- A concise explanation of the extent to which and the basis upon which Expert Judgement if any, was used in establishing a Benchmark determination

### **Business Process**

For Convertible Indices and SAIBOR / SAIBID, supplementary information is made available on a daily basis in addition to the publication of benchmark rates.

- For Convertible Indices, Explanation Reports are available for each published variant of CBI on a
  daily basis. They demonstrate the derivation of the index value at the end of the day based on the
  start of day index level and raw convertible bond pricingdata.
- For SAIBOR / SAIBID, the submitted rates from each Contributor is also made available.

In relation to WMR, the 'FTSE Russell Statement relating to the IOSCO Principles for the WMR

### **Test Procedures**

- 1. For a selected published variant of the Convertible Indices, obtained the *Convertible Indices Explanation Report* at the assurance date and inspected for evidence that it demonstrates the derivation of the index value.
- 2. For SAIBOR / SAIBID, for a selected Contributor to the benchmark, obtained its submitted rates for the assurancedate and inspected for evidence that it was made available in addition to the published benchmark values.
- 3. For WMR, obtained and inspected the FTSE Russell Statement relating to the IOSCO Principles for the WMR Benchmark' for evidence that it contains the scenarios in which notices would be published / shared with users to provide detail on how the benchmark was determined.
- 4. Obtained the *Methodologies* for Term ESTR, Term SONIA, Tokyo Swap Rate, USD IBOR Cash Fallbacks, and CC CRB and inspected for evidence that there is no provision for expert judgement within them.

Please see Principle 11 for review and approval of the benchmark-specific benchmark methodology documents.



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
	Benchmarks' FTSE Russell publicly state that, where it is necessary for FTSE Russell to use "quote"	Test Result
	data instead of trade rates for the trade currencies, FTSE Russell, as standard practice, communicates this to clients via email to inform them.	No exception noted.
	Where applicable, the <i>Methodologies</i> define how expert judgement may be used and how to inform stakeholders should it be used, if deemed necessary as per the <i>Methodologies</i> . The methodologies are designed to minimise use of expert judgement in their day-to-day operation. Where there are instances of insufficient market data, expert judgement may be required to overcome disruptions and / or issues which is detailed within the <i>Methodologies</i> .	
	Term ESTR, Term SONIA, Tokyo Swap Rate, USD IBOR Cash Fallbacks, and CC CRB Methodologies currently have no provision for expert judgement and as a result, do not define the scenarios for update notices to be published to users to provide information as to how the benchmark was determined.	
	Control: Supplementary Information	
	For Convertible Indices, an <i>Explanation Report</i> is available to Stakeholders on a daily basis for each published variant of the Index Family.	
	For SAIBOR / SAIBID, submitted rates from Contributors are made available to Stakeholders alongside the publication of the benchmark values.	
	Control: Methodology Review and Approval	
	Please refer to Principle 11 for Benchmark Methodologies review and approval.	

### 10. Periodic Review

The Administrator should periodically review the Control Objective conditions in the underlying Interest that the Benchmark measures to determine whether the Interest has undergone structural changes that might require changes to the design of the Methodology. The Administrator also should periodically review whether the Interest has diminished or is non-functioning such that it can no longer function as the basis for a credible Benchmark.

To provide reasonable assurance that the administrator periodically reviews:

- the conditions in the underlying interest that their benchmark measures
- whether the interest has diminished or is non-functioning

### Control: RBSL Benchmark Methodology Internal Review Policy - Review and Approval

The RBSL Benchmark Methodology Internal Review Policy sets out the process and requirements for the Methodology review. The document specifies that the following points must be analysed when conducting an internal review:

- Conditions in the market that forms the underlying interest;
- The quality and representativeness of the inputs;
- The effectiveness of the Methodology in producing a traceable and verifiable Benchmark;
- The *Methodology*'s compliance with all relevant regulation and guidance, and
- The checkpoints where back-testing is required.

### **Test Procedures**

1. Obtained the RBSL Benchmark Methodology Internal Review Policy and inspected for evidence that it contains the elements in the Business Process

Please see Principle 6 for review and approval of the Benchmark Methodology Internal Review Policy.

Please see Principle 11 for review and approval of the benchmark-specific benchmark methodology documents.

### Test Result

No exception noted.



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
	Please refer to Principle 6 for RBSL Benchmark Methodology Internal Review Policy review and approval.	
	Control: Product Manager Analysis and Review of Methodology	
	Please refer to Principle 11 for Product Manager Analysis and Review of Methodology control.	
	Control: Methodology Review and Approval	
	Please refer to Principle 11 for Benchmark Methodologies review and approval.	
The Administrator should Publish or Make	Control Objective	Please see IOSCO Principle 12 for testing of material change to FTSE Russell Benchmark Methodologies.
Available a summary of such reviews where material revisions have been made to a Benchmark, including the rationale for the revisions.	To provide reasonable assurance that the administrator publishes or makes available a summary of the Methodology periodic reviews where material revisions have been made to a Benchmark, including the rationale for the revisions.	
	Business Process	
	Please refer to IOSCO Principle 12 for detail regarding material revisions to FTSE Russell Benchmark Methodologies.	
	Control: FTSE Russell Policy for Benchmark Methodology Changes - Review and Approval	
	Please refer to IOSCO Principle 12 for detail regarding review and approval of the FTSE Russell Policy for Benchmark Methodology Changes document.	
	Control: FTSE Russell Critical Benchmark Methodology Change and Cessation Policy - Review and Approval	
	Please refer to IOSCO Principle 12 for detail regarding review and approval of the FTSE Russell Critical Benchmark Methodology Change and Cessation Policy.	

### 11. Content of the Methodology

The Administrator should document and Publish or Make Available the Methodology used to make Benchmark determinations. The Administrator should provide the rationale for adopting a particular Methodology. The Published Methodology should provide sufficient detail to allow Stakeholders to understand how the Benchmark is derived and to assess its representativeness, its relevance to particular Stakeholders, and its

### **Control Objective**

To provide reasonable assurance that the administrator documents and makes available the methodology used for each of their benchmark determinations.

### **Business Process**

The *Methodology* documents for the In-Scope Products are made available on FTSE Russell's website.

### Control: Product Manager Analysis and Review of Methodology

The benchmark *Methodologies* are reviewed by the relevant Product Managers on at least an annual basis. They include language to confirm FTSE Russell's responsibility for input data, determining, and

### **Test Procedures**

- 1. Accessed FTSE Russell's website and inspected for evidence that the benchmark *Methodology* documents are available on the website.
- 2. Obtained evidence of the completion and review of the annual review process of the benchmark *Methodologies* and inspected for evidence that the methodologies were reviewed by the relevant Product Managers and approved by the relevant Oversight Committee at leastannually.



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
appropriateness as a reference for financial instruments.	publishing the Benchmark, and for all aspects of governance, oversight, compliance and integrity of the Benchmark. The analysis and review carried out by the Product Managers are provided to the relevant Oversight Committees for review and approval.  Control: Methodology Review and Approval  The benchmark Methodologies were previously reviewed and approved at least annually by the RBSL Benchmark Governance Committee, and post 16 December 2024, they were reviewed and approved by the FTSE Russell Index Governance Board on an annual basis.	3. Obtained the meeting minutes for the Benchmark Governance Committee and inspected for evidence that the benchmark <i>Methodologies</i> were reviewed and approved by the RBSL Benchmark Governance Committee, and post 16 December 2024, by the FTSE Russell Index Governance Board.  Please see Principle 11 for review and approval of the benchmark-specific benchmark Methodology documents.
		Test Result
		No exception noted, except for:
		Benchmark <i>Methodologies</i> are required to be reviewed by the Product Manager and approved by the relevant governance forum at least annually. As at the Assurance date, the review of the USD Cash Fallback Methodology was last conducted and approved in November 2023.
At a minimum, the Methodology should contain:	Control Objective	Test Procedures
a) Definitions of key terms;	To provide reasonable assurance that the administrator's <i>Methodology</i> documents for the In-Scope Products contain definitions of key terms.	1. Obtained the <i>Methodology</i> documents for the In-Scope Products and inspected for evidence of definitions of key terms.
	Business Process	Please see Principle 11 for review and approval of the benchmark-specific benchmark Methodology documents
	The FTSE In-Scope Benchmark <i>Methodology</i> documents define the key terms in a specific section of the document.	Test Result
	Control: Methodology Review and Approval	No exception noted.
	Please refer to Principle 11 for Benchmark Methodologies review and approval.	
b) All criteria and procedures used to develop	Control Objective	Test Procedures
the Benchmark, including input selection, the mix of inputs used to derive the Benchmark, the guidelines that control the exercise of Expert Judgment by the Administrator, priority given to certain data types, minimum data needed to determine a Benchmark, and any models or	To provide reasonable assurance that the administrator's Methodology documents for the In-Scope Products contain all criteria and procedures used in developing their benchmark, including: input selection; mix of inputs used to derive the benchmark; guidelines controlling the exercise of expert judgement; priority to certain data types; minimum data to determine a benchmark; and models or extrapolation methods.	1. Obtained each of the <i>Methodology</i> documents for the In-Scope Products and inspected for evidence that they contain all the elements as described in the Business Process.
		Please see Principle 11 for review and approval of the benchmark-specific benchmark methodology documents.
extrapolation methods;	Business Process	Test Result
	The In-Scope Products <i>Methodology</i> documents contain descriptions of all criteria and procedures used to develop the In-Scope Products. Specifically, they contain details on:	No exception noted, except for:
	Data collection;	The Term ESTR and Tokyo Swap Rate public methodologies note that filtering parameters are applied to the source input



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
	<ul> <li>Minimum data (where applicable);</li> <li>Data filtering; (where applicable);</li> <li>Calculation;</li> <li>Publication;</li> <li>Exceptional market conditions;</li> <li>Errors and corrections;</li> <li>Expert Judgement;</li> <li>Methodology review;</li> <li>Stakeholder consultation; and</li> <li>Benchmark limitations.</li> </ul> Control: Methodology Review and Approval Please refer to Principle 11 for Benchmark Methodologies review and approval.	data prior to using them for benchmark determinations. These parameters are defined in the code of primary calculators but not documented in internal documentation. There is a risk that these parameters are not periodically reviewed alongside the annual methodology review.
c) Procedures and practices designed to	Control Objective	Test Procedures
promote consistency in the exercise of Expert Judgement between Benchmark determinations;	To provide reasonable assurance that the administrator's Methodology documents for the In-Scope Products contain procedures and practices to promote consistency in exercising expert judgement between their benchmark determinations.	1. Obtained each of the <i>Methodology</i> documents for the In-Scope Products and inspected for evidence that they define the use of expert judgement as per the Business Process.
	The benchmark-specific <i>Methodology</i> documents for FTSE Term ESTR, FTSE Term SONIA, USD IBOR Cash Fallback, FTSE CoreCommodity CRB Indices, SAIBOR / SAIBID and Tokyo Swap Rate explicitly state that expert judgement is not permitted by FTSE Russell. As defined in their	Please see Principle 11 for review and approval of the benchmark-specific benchmark Methodology documents.
		Test Result
		No exception noted.
	<u>WMR</u>	
	If the rates collected during a window do not satisfy the tolerance checks, or if no rates are available for a calculation based on a snapshot, benchmark rates will be determined using Expert Judgement. Section 1.3 of the WMR FX Benchmarks, Spot, Forward, NDF and Metal Rates Methodology states that the use of expert judgement may include i) reference to earlier benchmark rates; ii) the use of alternative rates derived using data from the respective data source(s) or iii) selecting alternative sources, (that may include central bank rates where applicable).	
	FTSE Convertible Indices	
	Section 11 of the FTSE Convertible Indices Methodology outlines specific criteria for when expert judgment may be utilised. Moreover, FTSE Russell may apply expert judgment during the reselection period. Appendix B specifies the terms in which expert judgement may be utilised.	
	Control: Methodology Review and Approval	
	Please refer to Principle 11 for Benchmark Methodologies review and approval.	



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
d) The procedures which govem Benchmark determination in periods of market stress or disruption, or periods where data sources may be absent (e.g., theoretical estimation models);	Control Objective	Test Procedures
	To provide reasonable assurance that the administrator's Methodology documents for the In-Scope Products contain procedures governing their benchmark determination in periods of market stress or disruption, or periods where data sources become absent.  Business Process	1. Obtained each of the <i>Methodology</i> documents for the In- Scope Products and inspected for evidence that it contains the procedures which govem Benchmark determination in periods of market stress or disruption in line with the Business Process
	Each benchmark specifies in their <i>Methodology</i> documents the conditions in which the publication may be delayed. For example, delayed publication may occur under the event that technical	Please see Principle 11 for review and approval of the benchmark-specific benchmark methodology documents.
	difficulties prevent receipt of input data, or if FTSE Russell has reason to believe that either the input	Test Result
	data or the determination of the benchmarks contains an error. Such events may be caused by market stress, disruption, or missing data.	No exception noted.
	For WMR, the <i>Methodology</i> document specifically details that economic realities could from time to time disrupt normal market conditions and could create unusually illiquid or fragmented markets. When this occurs, FTSE Russell will use reasonable effort to provide an email notification to clients advising the nature and impact of the disruption.	
	Control: Methodology Review and Approval	
	Please refer to Principle 11 for Benchmark Methodologies review and approval.	
e) The procedures for dealing with error reports,	Control Objective	Test Procedures
including when a revision of a Benchmark would be applicable;	To provide reasonable assurance that the administrator's Methodology documents for the In-Scope Products contain procedures for dealing with error reports (incl. when a revision of a benchmark would be applicable).	1. Obtained each of the <i>Methodology</i> documents for the In-Scope Products and inspected for evidence that they contain procedures for dealing with error and correction reports as per
	Business Process	the Business Process.
	The <i>Methodology</i> documents for the In-Scope Products include a Z outlining the conditions and procedures in which it would perform a refix to amend errors.	Please see Principle 11 for review and approval of the benchmark-specific benchmark Methodology documents.
	Control: Methodology Review and Approval	Test Result
	Please refer to Principle 11 for Benchmark Methodologies review and approval.	No exception noted.
f) Information regarding the frequency for	Control Objective	Test Procedures
internal reviews and approvals of the Methodology. Where applicable, the Published Methodologies should also include information regarding the procedures and frequency for external review of the Methodology;	To provide reasonable assurance that the Methodology documents for the In-Scope Products contain information on the frequency for internal reviews and approvals of the methodology. Where applicable, the published methodologies should include information on the procedures and frequency for external methodology review.	1. Obtained each of the <i>Methodology</i> documents for the In-Scope Products and inspected for evidence that they detail information regarding the frequency for internal reviews and approvals of the <i>Methodology</i> as per the Business Process.
<b>5</b> ,	Business Process	Please see Principle 11 for review and approval of the benchmark-specific benchmark Methodology documents.



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
	Each of the In-Scope Products Methodology documents refer to the frequency of internal reviews and	Test Result
	approvals of the <i>Methodology</i> . The <i>Methodologies</i> contain information regarding the frequency for internal reviews and relevant governance approvals.	No exception noted.
	Control: Methodology Review and Approval	
	Please refer to Principle 11 for Benchmark Methodologies review and approval.	
g) The circumstances and procedures under	Control Objective	Test Procedures
which the Administrator will consult with Stakeholders, as appropriate; and	To provide reasonable assurance that the administrator's Methodology documents for the In-Scope Products contain the circumstances and procedures where they will consult with stakeholders (as appropriate).	1. Obtained each of the <i>Methodology</i> documents for the In-Scope Products and inspected for evidence that circumstances and procedures under which the Administrator will consult with
	Business Process	Stakeholders are detailed as per the Business Process.
	The Methodology documents for the In-Scope Products detail the circumstances and procedures under which FTSE Russell will consult with its stakeholders. FTSE Russell will engage relevant	Please see Principle 11 for review and approval of the benchmark-specific benchmark Methodology documents.
	stakeholders and end users on material changes to the <i>Methodology</i> , if required in accordance with the IOSCO principles or where the Oversight Committee requests such consultation.	Please see Principle 12 for test procedures on the consultation of stakeholders.
	Changes to the <i>Methodologies</i> are deemed material on the basis of an assessment conducted by the	Test Result
	Administrator and submitted to the Oversight Committee for advice and feedback.	No exception noted.
	Control: Methodology Review and Approval	
	Please refer to Principle 11 for Benchmark Methodologies review and approval.	
	Control: Material Change Consultation and Approval	
	Please see Principle 12 for Test Procedures on the consultation of stakeholders.	
h) The identification of potential limitations of a	Control Objective	Test Procedures
Benchmark, including its operation in illiquid or fragmented markets and the possible concentration of inputs.	To provide reasonable assurance that administrator's Methodology documents for the In-Scope Products contain the identification of potential limitations of their benchmark.	Obtained each of the <i>Methodology</i> documents for the In-Scope Products and inspected for evidence that they contain all the elements in the business process.
	Business Process	•
	The Methodology documents for the In-Scope Products contain details on the potential limitations of	Please see Principle 11 for review and approval of the benchmark-specific benchmark methodology documents.
	the Benchmarks. Each benchmark identifies that their limitations relate to reliance on specific data sources, specifically:	Test Result
	FTSE Term ESTR, FTSE Term SONIA, SAIBOR / SAIBID, Tokyo Swap Rate	No exception noted.
	The ability of the data sources (i.e. dealer-to client trading platforms, inter-dealer brokers, Contributor banks) to provide accurate input data relies on there being a liquid market relevant to the benchmark.	



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
	For Term ESTR and Term SONIA, integrated fallback approaches are defined in the <i>Methodologies</i> . They depend on risk-free rate benchmarks from the European Central Bank and the Bank of England respectively.	
	USD IBOR Cash Fallback	
	The benchmark relies upon the availability of SOFR and SOFR Averages, both being benchmarks from the Federal Reserve Bank of New York, and Term SOFR Reference Rates, a UK Benchmarks Regulation (BMR)-compliant benchmark.	
	FTSE CoreCommodity CRB Indices	
	The <i>Methodology</i> recognises that market emergencies may have adverse effects on the published value.	
	WMR	
	The ability of FTSE Russell to determine and publish the benchmark depends on:	
	(i) the activity in each currency/metal on a case by case basis and for all tenors including spot and	
	(ii) the quality and representativeness of the rates available to FTSE Russell for the calculation of the Benchmarks.	
	FTSE Convertible Indices	
	The <i>Methodology</i> document identifies that the determination of FTSE Convertible Indices depends on the timely availability of the input and other necessary data from said Data Sources on a Weekday basis. As such, severe technical problems, extreme market events, or a widespread loss of liquidity may lead to a complete loss of one or more of the Data Sources which will affect the delivery of the data to FTSE Russell.	
	Control: Methodology Review and Approval	
	Please refer to Principle 11 for Benchmark Methodologies review and approval.	
Where a Benchmark is based on Submissions,	Control Objective	Test Procedures
the additional Principle also applies: The Administrator should clearly establish criteria for including and excluding Submitters. The criteria should consider any issues arising from the	To provide reasonable assurance that, where a Benchmark is based on Submissions, the administrator has established criteria for including and excluding submitters.  Business Process	1. Obtained the SAIBOR / SAIBID Methodology document and inspected for evidence for established criteria for including and excluding Submitters.
location of the Submitter, if in a different jurisdiction to the Administrator. These criteria	SAIBOR / SAIBID are the only In-Scope Product which are based on Submissions. The universe of	Please see Principle 11 for review and approval of the benchmark-specific benchmark Methodology documents.
should be available to any relevant Regulatory Authorities, if any, and Published or Made	banks eligible for consideration as contributor banks in respect of the Benchmark are defined within the SAIBOR / SAIBID Methodology as follows:	Test Result
Available to Stakeholders. Any provisions related to changes in composition, including	– Active in the Saudi Arabian Money Market,	No exception noted.
notice periods should be made clear.	- Willing to accept and implement the Contributor Code of Conduct for SAIBOR and SAIBID,	



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
	<ul> <li>Willing to agree to regulation by relevant authorities in Saudi Arabia, should the benchmarks become regulated</li> </ul>	
	Control: Methodology Review and Approval	
	Please refer to Principle 11 for Benchmark Methodologies review and approval.	

### 12. Changes to Methodology

An Administrator should Publish or Make Available the rationale of any proposed material change in its Methodology, and procedures for making such changes. These procedures should clearly define what constitutes a material change, and the method and timing for consulting or notifying Subscribers (and other Stakeholders where appropriate, taking into account the breadth and depth of the Benchmark's use) of changes.

Those procedures should be consistent with the overriding objective that an Administrator must ensure the continued integrity of its Benchmark determinations. When changes are proposed, the Administrator should specify exactly what these changes entail and when they are intended to apply.

The Administrator should specify how changes to the Methodology will be scrutinised, by the oversight function.

The Administrator should develop Stakeholder consultation procedures in relation to changes to the Methodology that are deemed material by the oversight function, and that are appropriate and proportionate to the breadth and depth of the Benchmark's use and the nature of the Stakeholders. Procedures should:

a) Provide advance notice and a clear timeframe that gives Stakeholders sufficient opportunity to analyse and comment on the

### **Control Objective**

To provide reasonable assurance that the administrator makes available proposed material changes in their methodology, in addition to the procedures for making such changes. These should clearly define what includes a material change, and the method and timing for notifying subscribers/stakeholders of changes. The administrator shall ensure the continued integrity of their benchmark determinations. When changes are proposed, they will specify exactly what these entail and when they will be applied. They shall also specify how changes will be scrutinised by the oversight function.

### **Business Process**

The FTSE Russell Policy for Benchmark Methodology Changes: Ground Rules document outlines the procedures in place for consulting on a material change to the methodologies, including:

- Defines the approach to assessing materiality.
- A requirement to issue a consultation, including the proposed change and associated rationale, and time period for the consultation.
- Specifies that comments received on the consultation, as well as FTSE Russell's response. will be published except where confidentiality has been requested.

Following receipt of feedback and considering advice from the relevant Oversight Committee. FTSE Russell will announce the change and set out the applicable dates for it taking effect

Section 2.3 specifically outlines the public consultation process, stating that if the FTSE Russell Index Governance Board determines to proceed with a public consultation, it will approve the contents of the consultation. Specifically:

- Section 2.2 outlines that consultations will typically be open for feedback for a period of no less than four weeks and users will be given at least one month's notice of any material Test Result change. Any feedback following the implementation of a methodology change is considered by the FTSE Russell Index Governance Board and external advisory committees as part of No exception noted. the on-going consideration of the management and development of benchmark and index methodologies
- Section 2.3.2 states that FTSE Russell will publish a summary of the consultation results, but no individual responses will be published.

### **Test Procedures**

- 1. Obtained and inspected the FTSE Russell Policy for Benchmark Methodology Changes: Ground Rules for evidence that it contains FTSE Russell's approach to proposed material changes to the benchmark Methodologies.
- 2. Obtained and inspected the review and approval of the FTSE Russell Policy for Benchmark Methodology Changes: Ground Rules for evidence that it was approved by the FTSE Russell Index Governance Board at leastannually.
- 3. Obtained and inspected the Critical Benchmark Methodology Change and Cessation Policy for evidence that it identified the procedures to be followed in instances in which there is a change made to the Benchmark Methodology or in instances of Benchmark cessation, as per the Business Process.
- 4. Obtained and inspected the review and approval of the FTSE Russell Critical Benchmark Methodology Change and Cessation Policy to confirm that it was approved by FTSE Russell Index Governance Board at leastannually.
- 5. Obtained the Consultation documents for the In-Scope Products that had a material change and inspected for evidence that they proposed to stakeholders an update to the Methodology.



### **FTSE Russell Response and Controls**

### **Work Performed by KPMG**

impact of such proposed material changes, having regard to the Administrator's assessment of the overall circumstances; and

b) Provide for Stakeholders' summary comments, and the Administrator's summary response to those comments, to be made accessible to all Stakeholders after any given consultation period, except where the commenter has requested confidentiality.

For WMR Closing Spot, the FTSE Russell Critical Benchmark Methodology Change and Cessation Policy sets out specific details for material changes in regard to the Critical Benchmark.

## Control: FTSE Russell Policy for Benchmark Methodology Changes: Ground Rules - Review and Approval

The FTSE Russell Policy for Benchmark Methodology is reviewed and approved by the FTSE Russell Oversight Committee and the FTSE Russell Index Governance Board on an annual basis and made publicly available.

## Control: FTSE Russell Critical Benchmark Methodology Change and Cessation Policy - Review and Approval

The FTSE Russell Critical Benchmark Methodology Change and Cessation Policy is reviewed by the FTSE Russell Index Governance Board and approved on an annual basis.

### Control: Material Change Consultation and Approval

Stakeholder consultation documents for an agreed material change to *Methodology* are reviewed and agreed by the relevant Oversight Committee and approved by the RBSL Benchmark Governance Committee.

All material changes approved are announced publicly and include the effective date of the change. If the determination to not proceed with the methodology change, the decision will be announced publicly.

Following the transfer of Benchmark Administration responsibilities from RBSL to FIL on the 16<sup>th</sup> December 2024, the review of stakeholder consultation documentation will be reviewed and agreed by the relevant Oversight Committee and approved by the FTSE Russell Index Governance Board.

### 13. Transition

Administrators should have clear written policies and procedures, to address the need for possible cessation of a Benchmark, due to market structure change, product definition change, or any other condition which makesthe Benchmark no longer representative of its intended Interest. These policies and procedures should be proportionate to the estimated breadth and depth of contracts and financial instruments that reference a Benchmark and the economic and financial stability impact that might result from the cessation of the Benchmark.

### **Control Objective**

To provide reasonable assurance that the administrator has clear written policies and procedures to address the possible cessation of a benchmark due to:

- (i) market structure change,
- (ii) product definition change, or
- (iii) other conditions making the benchmark no longer representative of its intended interest.

The administrator shall consider the stakeholders views and any relevant Regulatory and National Authorities in determining what policies and procedures are appropriate.

### **Business Process**

### **Test Procedures**

- 1. Obtained the FTSE Russell Index Series Decommissioning Statement and inspected to determine whether it outlined the processes to be followed when FTSE Russell considers the decommissioning of a benchmark or index for one of thefamily it administers, as per the Business Process
- 2. Obtained the meeting minutes for the FTSE Russell Index Governance Board and inspected for evidence that FTSE Russell Index Series Decommissioning Statement was reviewed and approved at leastannually.
- 3. Obtained the FTSE Russell Critical Benchmark Methodology Change and Cessation Policy and inspected to determine



### **IOSCO Principle** Work Performed by KPMG **FTSE Russell Response and Controls** The Administrator should take into account the FTSE Russell maintain the FTSE Russell Index Series Decommissioning Statement, which outlines whether it identified the procedures to be followed in instances views of Stakeholders and any relevant the processes which are to be followed when FTSE Russell considers decommissioning a benchmark in which there is a change made to the Benchmark Regulatory and National Authorities in or index for one of the families it administers. Specifically, the document outlines the factors methodology or in instances of Benchmark cessation, as per determining what policies and procedures are considered when evaluating a decommission proposal including, but not limited to: the Business Process. appropriate for a particular Benchmark. - inadequate supply of data Please refer to Principle 12 for the review and approval of the FTSE Russell Critical Benchmark Methodology Change and These written policies and procedures should - representativeness of input data be Published or Made Available to all Cessation Policy. Stakeholders. - structure and liquidity of the market underlying each benchmark and index **Test Result** The document also describes the Index, Interest and Reference Rate Benchmark decommission No exception noted. procedures, along with the procedures in place for emergency cessation These written policies and procedures are published on the FTSE Russell website. Where possible and appropriate, along with the Decommission Notice, guidance for users and other stakeholders on potential alternative or replacement Benchmarks will be published Additional Methodology change procedures that are required for Critical Benchmarks, which apply to the WMR Closing (4pm UK time) Spot Benchmark Rates, are documented in the Critical Benchmark Change and Cessation Policy. Control: FTSE Russell Policy for Benchmark Methodology Changes - Review and Approval Please refer to Principle 12 above for the FTSE Russell Policy for Benchmark Methodology Changes review and approval. Control: FTSE Russell Critical Benchmark Methodology Change and Cessation Policy - Review and Approval Please refer to Principle 12 above for the FTSE Russell Critical Benchmark Methodology Change and Cessation Policy review and approval. Control: FTSE Russell Index Series Decommissioning Statement - Review and Approval The FTSE Russell Index Series Decommissioning Statement is reviewed by the by the FTSE Russell Index Governance Board on an at least annual basis. Control: Material Change Consultation and Approval Please refer to Principle 12 above for details on material change consultation and approvals. **Test Procedures**

Administrators should encourage Subscribers and other Stakeholders who have financial instruments that reference a Benchmark to take steps to make sure that:

a) Contracts or other financial instruments that reference a Benchmark, have robustfall-back

### **Control Objective**

To provide reasonable assurance that the administrator encourages subscribers and stakeholders (who have instruments that reference the benchmark) to ensure that:

Contracts or other financial instruments referencing the benchmark have robust fall-back provisions if any material changes or cessation of the benchmark occurs; and

1. Obtained and inspected the following Benchmark Methodologies to determine whether they detailed the recommendation for subscribers and stakeholders to have adequate fall-back provisions in place in the event of changes



### **IOSCO Principle FTSE Russell Response and Controls Work Performed by KPMG** provisions in the event of material changes to. Stakeholders are aware of the possibility that various (incl. external) factors beyond FTSE to, or cessation of, a benchmark, with it noted that external or cessation of the referenced Benchmark and Russell's control might lead to material benchmarkchanges. factors may necessitate material changes: b) Stakeholders are aware of the possibility that **Business Process** - The WMR Benchmark Methodology various factors, including external factors The WMR FX Benchmarks, Spot, Forward, NDF and Metal Rates Methodology states that contracts - The FTSE CoreCommodity CRB Index Methodology beyond the control of the Administrator, might and other financial instruments that reference a benchmark need robust contingency provisions in the necessitate material changes to a Benchmark. - The FTSE CoreCommodity CRB Single CommodityIndex event of material changes or cessation. Methodology The FTSE CoreCommodity CRB Index Methodology states that circumstances may necessitate 2. Please refer to Principle 11 for the annual reviewand change to, or cessation, of the index series and as such index series, or investments funds which use approval of the Benchmark Methodologies. the index series to measure their performance, should be able to with stand such changes. 3. Obtained and inspected the following Benchmark FTSE Russell also has in place a set of *Benchmark Statements*, which for the remaining In-Scope Statements to determine whether they detailed the Products have documented in Section 2.3 the notification to users that it is possible that recommendation for subscribers and stakeholders to have circumstances and external events beyond the control of FTSE Russell, may necessitate changes to adequate fall-back provisions in place in the event of changes or cessation of, the index series family. Section 2.4 states that financial contracts and instruments that to, or cessation of, a benchmark, with it noted that external reference the index series family should be able to withstand, or otherwise address the possibility of factors may necessitate material changes: changes to, or cessation of, the index seriesfamily. - FTSE Convertible Indices Benchmark Statement Control: Methodology Review and Approval - FTSE Terms ESTR Benchmark Statement Please refer to Principle 11 for Benchmark Methodologies review and approval. - FTSE Term SONIA Benchmark Statement Control: Benchmark Statements Review and Approval - SAIBOR and SAIBID Benchmark Statement The Benchmark Statements are reviewed by the relevant Product Manager and approved by the FTSE Index Governance Board every two years or whenever there is a material change and made - TONA Tokyo Swap Rate and Fallback Benchmark Statement publicly available. - USD IBOR Cash Fallbacks Benchmark Statements 4. Obtained the meeting minutes for the FTSE Russell Index Governance Board and inspected for evidence that the Benchmark Statements were review and approved on an at least annual basis **Test Result** No exceptions noted. Administrators' written policies and procedures **Control Objective Test Procedures**

to address the possibility of Benchmark cessation could include the following factors, if determined to be reasonable and appropriate by the Administrator:

a) Criteria to guide the selection of a credible, alternative Benchmark such as, but not limited

To provide reasonable assurance that the administrator's written policies and procedures to address the possibility of Benchmark cessation include the following factors:

- Criteria to guide the selection of a credible, alternative Benchmark
- The practicality of maintaining parallel Benchmarks b)
- The procedures that the Administrator would follow in the event that a suitable alternative cannot be identified

1. Obtained the FTSE Russell Index Series Decommissioning Statement and inspected for evidence that it documents the procedures to address the possibility of benchmark cessation. as per the Business Process.



### to, criteria that seek to match to the extent practicable the existing Benchmark's characteristics (e.g., credit quality, maturities and liquidity of the alternative market). differentials between Benchmarks, the extent to which an alternative Benchmark meets the asset/liability needs of Stakeholders, whether the revised Benchmark is investable, the availability of transparent transaction data, the impact on Stakeholders and impact of existing legislation;

- b) The practicality of maintaining parallel Benchmarks (e.g., where feasible, maintain the existing Benchmark for a defined period of time to permit existing contracts and financial instruments to mature and publish a new Benchmark) in order to accommodate an orderly transition to a new Benchmark;
- c) The procedures that the Administrator would follow in the event that a suitable alternative cannot be identified;
- d) In the case of a Benchmark or a tenor of a Benchmark that will be discontinued completely, the policy defining the period of time in which the Benchmark will continue to be produced in order to permit existing contracts to migrate to an alternative Benchmark if necessary: and
- e) The process by which the Administrator will engage Stakeholders and relevant Market and National Authorities, as appropriate, in the process for selecting and moving towards an alternative Benchmark, including the timeframe for any such action commensurate with the tenors of the financial instruments referencing the Benchmarks and the adequacy of notice that will be provided to Stakeholders.

### **FTSE Russell Response and Controls**

- the policy defining the period of time in which the Benchmark will continue to be produced in Please refer Principle 13 for the review and approval of the order to permit existing contracts to migrate to an alternative Benchmark if necessary, and;
- The process by which the Administrator will engage Stakeholders and relevant Market and National Authorities, as appropriate, in the process for selecting and moving towards an alternative Benchmark

### **Business Process**

The FTSE Russell Index Series Decommissioning Statement includes policies and procedures to address the possibility of Benchmark cessation. Specifically:

- Section 4 states that the selection of a credible, alternative Benchmark such as, but not limited Please refer to Principle 12 for the review and approval of the to, criteria that seek to match to the extent practicable the existing Benchmark's FTSE Russell Critical Benchmark Methodology Change and characteristics (e.g. credit quality) will be considered.
- Section 4 outlines that, as part of the in-depth analysis of the potential cessation, the practicality of maintaining parallel Benchmarks (where feasible) in order to accommodate an orderly transition to a new Benchmark will be considered.
- Section 5 acknowledges that it may be possible in extremis that circumstances beyond FTSE Russell's control arise which mean that it is necessary to cease an index or benchmark at short 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.
- Section 4 states that typically users will be given a six-month notice period prior to the cessation of a benchmark. The exact length of the notice period would take into consideration relevant factors such as urgency, preparation time, technology issues and legal / regulatory provisions.

Section 3 outlines that the FTSE Russell Index Governance Board determines whether or not to issue a public consultation on the proposed decommissioning the results and any next steps will be notified to affected users. Vendor/client notice given at least three months prior to the proposed decommissioning date including an invitation for index users to provide feedback on the proposed decommission.

Additional cessation procedures are required for Critical Benchmarks, which apply to the WMR Closing (4pm UK time) Spot Benchmark Rates as outlined in Section 3 of the FTSE Russell Critical Benchmark Methodology Change and Cessation Policy.

### Control: FTSE Russell Index Series Decommissioning Statement - Review and Approval

Please refer to Principle 13 above for review and approval of the FTSE Russell Index Series Decommissioning Statement.

### Control: FTSE Russell Critical Benchmark Methodology Change and Cessation Policy - Review and Approval

Please refer to Principle 12 above for the FTSE Russell Critical Benchmark Methodology Change and Cessation Policy review and approval.

### Work Performed by KPMG

FTSE Russell Index Series Decommissioning Statement.

2. Obtained the FTSE Russell Critical Benchmark Methodology Change and Cessation Policy and inspected for evidence that it documented the cessation procedures for Critical Benchmarks, as outlined in the Business Process.

Please refer Principle 13 for the review and approval of the FTSE Russell Index Series Decommissioning Statement.

Cessation.

### **Test Result**

No exceptions noted



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
14. Submitter Code of Conduct		
Where a Benchmark is based on Submissions,	Control Objective	Test Procedures
the following additional Principle also applies: The Administrator should develop guidelines for Submitters ("Submitter Code of Conduct"),	To provide reasonable assurance that the administrator maintains a 'Submitter Code of Conduct' for benchmarks based on submissions, which is available to any relevant Regulatory Authorities and published or made available to stakeholders.	1. Accessed FTSE Russell's website and inspected for evidence that the <i>SAIBOR / SAIBID Code of Conduct</i> is available on the website.
which should be available to any relevant Regulatory Authorities, if any and Published or	Business Process	2. Please see Principle 4.1 for SAIBOR/SAIBID Contributor Code of Conduct review and approval.
Made Available to Stakeholders.	Of the In-Scope Products, SAIBOR / SAIBID is the only Benchmark dependent on Submissions (Contributions).	Test Result
	The SAIBOR / SAIBID Contributors Code of Conduct specifies the obligations that each Submitting Bank and its staff providing SAIBOR and SAIBID input data to FTSE must adhere to on a continuous basis. The document specifies that each Contributor Bank must implement all the requirements of the SAIBOR and SAIBID CCoC. The SAIBOR / SAIBID Contributors Code of Conduct is readily available on the FTSE Russell website.	No exceptions noted.
	Control: Contributor Code of Conduct – Review and Approval	
	Please refer to Principle 4.1 for review and approval of the Contributor Code of Conduct.	
The Administrator should only use inputs or	Control Objective	Test Procedures
Submissions from entities which adhere to the Submitter Code of Conduct and the Administrator should appropriately monitor and	To provide reasonable assurance that the administrator only use inputs or Submissions from entities which adhere to the Submitter Code of Conduct and the Administrator should appropriately monitor	1. Please refer to Principle 4.1 for <i>Monitoring of Contributor Code of Conduct Compliance Certification Forms</i> testresults.
record adherence from Submitters. The Administrator should require Submitters to confirm adherence to the Submitter Code of Conduct annually and whenever a change to	and record adherence from Submitters.  To provide reasonable assurance that the administrator requires Submitters to confirm adherence to the Submitter Code of Conduct annually and whenever a change to the Submitter Code of Conduct has occurred.	2. Please refer to Principle 4.1 for <i>Monitoring of Contributors Policy</i> review and approval test results.
the Submitter Code of Conduct has occurred.	Business Process	Test Result
	The Monitoring of Contributors Policy documents the process for assessing SAIBOR/SAIBID contributor's compliance with the Code of Conduct and measures in the event of a contributor failing to comply with it. Following the publication of a new version of the SAIBOR/SAIBID Contributor Code of Conduct that contains a material modification, each Contributor bank is required to provide a signed 'CCoC Attestation', as a "forward looking" confirmation that the contributor bank has read, understood, and will comply with the new Code. FTSE may review with each Contributor their level of adherence with the applicable Code of Conduct by conducting visits, calls, requesting evidence or any other means deemed necessary. All assessments are reported to the relevant Oversight Committee for review and recommendations. Any assessments requiring action are reported to the Benchmark Governance Committee for review and decision on potential invocation of the disciplinary process provisions, where this may be required.	No exceptions noted.



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
	Control: Monitoring of Contributors Policy – Review and Approval	
	Please refer to Principle 4.1 for the review and approval of the Monitoring of Contributors Policy.	
	Control: Compliance Monitoring of Contributor Code of Conduct Compliance Certification Forms	
	Please refer to Principle 4.1 for Compliance Monitoring of Contributor Code of Conduct Compliance Certification Forms.	
The Submitter Code of Conduct should	Control Objective	Test Procedures
<ul><li>address:</li><li>a) The selection of inputs;</li><li>b) b) Who may submit data and</li></ul>	To provide reasonable assurance that the administrator maintains a Submitter Code of Conduct which addresses:	Obtained the SAIBOR / SAIBID Code of Conduct and inspected for evidence that it includes the details specified in the Business Process.
information to the Administrator; c) c) Quality control procedures to verify the identity of a Submitter and any employee(s) of a Submitter who report(s) data or information and the authorization of such person(s) to report market data on behalf of a Submitter; d) d) Criteria applied to employees of a Submitter who are permitted to submit data or information to an Administrator on behalf of a Submitter; e) Policies to discourage the interim withdrawal of Submitters from surveys or Panels; f) Policies to encourage Submitters to submit all relevant data; and g) The Submitters' internal systems and controls, which should include: i) Procedures for submitting inputs,	a) the selection of inputs. b) Who may submit data and information to the Administrator; c) Quality control procedures to verify the identity of a Submitter and any employee(s) of a Submitter d) Criteria applied to employees of a Submitter e) Policies to discourage the interim withdrawal of Submitters fromsurveys or Panels; f) Policies to encourage Submitters to submit all relevantdata g) The Submitters' internal systems and controls, which shouldinclude i. Procedures for submitting inputs, including Methodologies to determine the type of eligible inputs ii. Procedures to detect and evaluate suspicious inputs or transactions iii. Policies guiding and detailing the use of Expert Judgement iv. Record keeping policies v. Pre-Submission validation of inputs, and procedures for multiple reviews by senior staff to check inputs vi. Training vi. Suspicious Submission reporting viii. Roles and responsibilities of key personnel and accountabilitylines ix. Internal sign off procedures x. Whistle blowing policies xi. Conflicts of Interest procedures and policies	Please see Principle 4.1 for test procedures on the review and approval of the SAIBOR / SAIBID Contributors Code of Conduct.  Test Result  No exceptions noted.
including Methodologies to determine the type of eligible inputs, in line with the Administrator's Methodologies; ii) Procedures to detect and evaluate suspicious inputs or transactions, including inter-group transactions, and to ensure the Bona Fide nature of such inputs, where appropriate; iii) Policies guiding and detailing the use of Expert Judgement, including documentation requirements;	Business Process  Of the In-Scope Products, SAIBOR / SAIBID is the only Benchmark dependent on Submissions (Contributions). FTSE Russell maintains the SAIBOR / SAIBID Contributors Code of Conduct which	



### **FTSE Russell Response and Controls**

### **Work Performed by KPMG**

- iv) Record keeping policies;
- v) Pre-Submission validation of inputs, and procedures for multiple reviews by senior staff to check inputs;
- vi) Training, including training with respect to any relevant regulation (covering Benchmark regulation or any market abuse regime):
- vii) Suspicious Submission reporting;
- viii) Roles and responsibilities of key personnel and accountability lines;
- ix) Internal sign off procedures by management for submitting inputs;
- x) Whistle blowing policies (in line with Principle 4); and
- xi) Conflicts of interest procedures and policies, including prohibitions on the Submission of data from Front Office Functions unless the Administrator is satisfied that there are adequate internal oversight and verification procedures for Front Office Function Submissions of data to an Administrator (including safeguards and supervision to address possible conflicts of interests as per paragraphs (v) and (ix) above), the physical separation of employees and reporting lines where appropriate, the consideration of how to identify, disclose, manage, mitigate and avoid existing or potential incentives to manipulate or otherwise influence data inputs (whether or not in order to influence the Benchmark levels). including, without limitation, through appropriate remuneration policies and interest which may exist between the Submitter's Submission activities (including all staff who perform or otherwise participate in Benchmark

Submission responsibilities), and any other business of the Submitter or of

- Section 3.5 outlines the 'Submitters and Supervisors Eligibility' which outlines the due diligence checks to verify the identity of a Submitter and Supervisor
- d) Section 3.5 specifies the criteria which must be considered when selecting persons involved in submissions and supervision of SAIBOR / SAIBID.
- e) Section 3.6 addresses the Termination terms and specifies that 6 months' notice must be provided by the Contributor Banks should they wish to terminate participation
- f) Section 5 addresses the policies in place to encourage Contributors to submit all relevant data as defined by the Methodology
- g)
- Section 5.1.1 specifies that each Contributor Bank must document Submission Procedures which includes eligible transaction and other data inputs.
- Section 5.3.2 addresses the post-submission monitoring and controls which should be in place to detect and evaluate suspicious inputs ortransactions
- ii) Section 5.2 addresses expert judgement and provides guidance on its use by Contributor Banks
- Section 4.8 addresses the Record Keeping requirements that Contributor Banks must follow and specifies the documents which must be retained for at least five years.
- Section 5.1.3 addresses the requirement for including and implementing procedures for pre-submission validation of eligible inputs.
- vi) Section 4.4 addresses the training requirements for Submitters and Supervisors, specifying that adequate training on SAIBOR / SAIBID processes, documentation and regulation must be provided and keptupdated.
- vii) Section 5.4 addresses suspicious submission reporting by specifying that each Contributor Bank must have written procedures in place that oblige its staff to identify and report any actual, attempted, or a suspicion of manipulated Input Data to its Compliance and/or Fraud Investigation function for investigation, and record how the reports were managed
- vii) Section 4 specifies the roles and responsibilities of the senior management, Board and Oversight Functions in relation to SAIBOR / SAIBID.
- ix) Section 5.1.3 addresses the requirement for procedures for review by senior staff to check inputs before submission
- x) Section 5.6 specifies that Contributors must have in place internal whistleblowing policies to supplement the LSEG Group whistleblowing process and Speak Up Policy.
- x) Section 4.6 addresses the conflicts of interest management with the requirement for a conflicts of interest framework, procedures, systems and controls.

### Control: SAIBOR / SAIBID Code of Conduct - Review and Approval

by effectively addressing conflicts of Please refer to Principle 4.1 for the review and approval of the SAIBOR / SAIBID Code of Conduct.

### Control: Group Speak Up Policy Review

Please refer to Principle 4(c) for the review and approval of the Group Speak Up Policy.



### **IOSCO Principle FTSE Russell Response and Controls** Work Performed by KPMG any of its affiliates or any of their respective clients or customers. 15. Internal Controls over Data Collection When an Administrator collects data from any **Control Objective Test Procedures** external source the Administrator should ensure To provide reasonable assurance that when the administrator collects data from external sources, it 1a. Obtained the Managing Market Abuse Risks Documents for that there are appropriate internal controls over will ensure there are internal controls over their data collection and transmission processes. The the In-Scope Products that are subject to monitoring and its data collection and transmission processes. controls should address how the source selection, collection of the data, and the protection of the surveillance and inspected for evidence that they were These controls should address the process for integrity and confidentiality of the data. reviewed on an annual basis. selecting the source, collecting the data and protecting the integrity and confidentiality of the **Business Process - Market Abuse and Conduct** 1b. Obtained the relevant forum / committee minutes and data. inspected for evidence that the Managing Market Abuse Risks As part of the risk framework for monitoring FTSE Russell have implemented post-publication Documents for the In-Scope Products that are subject to Monitoring & Surveillance controls which seek to identify potential market abuse risks within input monitoring and surveillance were reviewed on an annual basis. data. The Managing Market Abuse Risks documents defines the procedures, models and alert calibration. The market abuse controls are applied to FTSE Term ESTR, Tokyo Swap Rate, FTSE 2. Obtained the relevant Oversight Committee minutes and Term SONIA, WMR, and SAIBOR / SAIBID. inspected for evidence that a monitoring and surveillance update and status report was provided for the In-Scope FTSE CoreCommodity CRB Indices, USD IBOR Cash Fallback and FTSE Convertible Indices which Products, where applicable. use input data sourced from regulated markets regulated exchanges are excluded from the monitoring and surveillance controls 3. Obtained a sample of all in-scope benchmark alerts triggered by the monitoring & surveillance systems on the Term ESTR has 5 alert scenarios which cover abnormal movements, abnormal price differences. assurance date and inspected for evidencethat: outliers, dynamic deviations with data source and abnormal trade volatility and are run on an internal a. they had been investigated and documented within Python tool. templates as per the Managing Market Abuse Risks Tokyo Swap Rate has 4 alert scenarios which cover marking the close, abnormal price volatility. documentation. benchmark rate comparisons and are run on an internal Python tool. b. the templates had been tested by a different member of the Term SONIA has 5 alert scenarios which cover marking the close, abnormal price volatility, benchmark and broker rates comparisons and are run on a third-party surveillance tool. c. any alerts that could not be resolved had been escalated as Contribution based benchmarks (covering SAIBOR / SAIBID) have 7 alert scenarios which cover per the escalation process. dynamic deviations, static deviations, rankings, clustering and are run on a third-party surveillance **Test Result** tool. WMR has 11 alert scenarios for the 4pm FX Close Benchmarks, 6 alert scenarios for the intraday FX No exceptions noted. Spot Benchmarks, and 5 alert scenarios for the Intraday FX Forwards & NDF Benchmarks. The alert

scenarios identify abnormal trading activity and pricing movements around all benchmarks and are

Any alerts raised within the surveillance process are assessed by the Monitoring & Surveillance team. If the analyst is unable to resolve the alert, it will be escalated in order to obtain further information or

to raise potential manipulative behaviour. The stages of escalation are:

run on a third-party surveillance tool.



### **IOSCO Principle** Work Performed by KPMG **FTSE Russell Response and Controls** Level 2 - Queried to Ops Senior Management Level 3 - Escalated to Benchmark Source Level 4 - Escalated to Oversight Committee Level 5 - Escalated to FCA Control: Managing Market Abuse Risks Document Reviews and Approvals The Managing Market Abuse Risks documents are reviewed by the Monitoring & Surveillance team and approved by the relevant Oversight Committee at least annually. Control: Monitoring and Surveillance Daily Alert Checks and Escalation The investigation of alerts is carried out by the Monitoring & Surveillance team following defined and documented procedures and templates. Cases are investigated using either the third party or inhouse surveillance tool made available via the surveillance platform, supplemented by news on market events and reference data from LSEG Workspace. Alerts are either escalated or closed, with the associated rationale checked and approved by a separate reviewer. Control: Oversight Reporting of Monitoring and Surveillance Updates and reports on the outcome of surveillance control are provided to the relevant Oversight Committee for review and comments. Business Process: WMX - Input data checks **Test Procedures** 1. Obtained the WMX Solutions Architecture Document and The WMX Solutions Architecture Document defines the key data sources and feeds to the WMX WMX Interdependencies Diagram and inspected for evidence system. To support this the WMX Interdependencies diagram outlines how the WMX platform fits into that it documented the key input data flows for the WMX platform the wider system architecture at FTSE. The WMR calculation platform, WMX, ingests market input data via the Elektron Edge ('EED') system. The data is ingested into WMX platform on a Realtime 2 Obtained the WMR Methods of Work documents to inspect basis via a dual data feed and undergoes automated tolerance checks within in the platform. for evidence they contained they specified the logic used in the automated accuracy controls for inputdata indested into WMX Control: Data quality (WMX) WMX has automated data validation checks implemented into the platform. If triggered, an alert is 3. Obtained a report extract from WMX for evidence of the raised to the Content Operations team via the WMX UI for manual review. The Content Operations parameters for the alert logic to confirm they had been team perform a manual investigation of the tolerance breach and determine if the data input should be implemented for each fixing type. included in the calculation. Details of the automated alert logic are maintained in WMR Methods of 4. Obtained a screenshot of WMX UI and inspected for evidence Work documents, and the parameters for the alert logic are configurable in the WMX platform and of an example alerts where input data had breached tolerance reviewed annually as part of the 'Currency Review Process'. Additionally, within the platform, the thresholds content operations team receive the real time status of the dual data feeds, and are alerted through the UI to instances where interruptions in the feeds result in incomplete data 5. Obtained a screenshot of WMX UI and inspected for evidence that it reported the status of the dual data feeds to the user. Test Result No exceptions noted.



**IOSCO Principle Work Performed by KPMG FTSE Russell Response and Controls Test Procedures** Business Process: RFR Application - Input data checks 1. Obtained and inspected the RFR Application Dependencies The Term SONIA, Term ESTR, and Tokyo Swap Rate indexes are calculated via the Risk-Free Rate document for evidence for evidence that it documented the key ('RFR') Application. Daily, for each benchmark, the platform ingests a flat data input files from the input data flows for the RFR platform Data File Distribution (DfD) application, which sources the input data from external providers. The 2. For each Index, obtained and inspected the RFR User system performs data validation sanity checks on the input data file received and maintains a process Interface Log for evidence it whether it reported the status of key log within the platform which provides the status on key stages of the index calculation. FTSE processes in benchmark calculation processes are reported, maintain an 'RFR Application Interdependencies' diagram which outlines how the RFR Application fits including on successful data validation checks on the input data into the wider system architecture at FTSE. file. Control: Input File Data Handling Alerting (RFR) 3. Obtained and inspected screenshot of the RFR UI for The RFR Application performs automated validation sanity checks on the input data files ingested for evidence of an example alert generated in the instance where each benchmark's calculation. The content operations team are alerted to issues through the system's there has been an error ingesting the input file. UI. Input data file validation errors are maintained in an event log with the RFRApplication Test Result No exceptions noted. **Business Process: E-CIBORG Input Data Checks Test Procedures** The SAIBOR / SAIBID index is calculated on the Elektron Calculated Interbank Offered Rates 1. Obtained and inspected the ECIBORG Interdependencies Generator (E-CIBORG') application. The platform ingests the panel input data via a real-time data Flow Diagram for evidence that it documented the key input feed from the Elektron data storage platform. The 'E-CIBORG Data Validation' document details the data flows for the RFR platform scope of data validation check scenarios performed by the E-CIBORG tool. Additionally, FTSE 2. Obtained and inspected the ECIBORG Data Validation maintain an 'E-CIBORG Interdependencies' flow diagram which documents the key data feeds for the Document for evidence that it documented the scope of platform. validation checks performed on input data indested to the tool. Control: Input Data Checks (E-CIBORG) 3. Obtained and inspected the E-CIBORG UI for evidence of an The E-CIBORG platform runs automated validation checks over the input data ingested into the tool. example automated completeness alert being generated in the Alerts are triggered via the system's UI in instances where the input data has breached pre-defined instance of incomplete submission data being received from tolerance thresholds or incomplete contribution data has been received from a panel bank. If panel banks. triggered, an alert is raised to the Content Operations team for manual review. 4. Obtained and reviewed the E-CIBORG UI for evidence of a sample automated accuracy alert being generated in the instance where panel bank data has exceeded pre-defined tolerances Test Result No exceptions noted



1. Obtained and inspected the MACE Solution Architecture

Document and Refinitiv Convertible Bond Index System for

evidence it outlined the data flows for the CBI platform

**IOSCO Principle FTSE Russell Response and Controls Work Performed by KPMG** Business Process: IMINT - Input data checks **Test Procedures** 1. Obtained and inspected the IMINT Solutions Architecture The IMINT Solutions Architecture Document defines the key data sources and feed for the system Document and IMINT Interdependencies Flow Diagram for and additionally maintains an 'IMINT Interdependencies Flow Diagram' which outlines the how IMINT evidence they outlined the key data inputs to the platform. fits into the wider system architecture at FTSE and the key system inputs. 2. Obtained and inspected the 'Core Commodities CRB Indices' The CRB index is calculated on the I-MINT platform. The platform indests input data from the Elektron document to for evidence it outlined the automated data quality Edge platform, which in turn sources market data from various exchanges. The IMINT platform has controls implemented for the IMINT platform automated data validation checks on the input data ingested to the tool and alerts to the user via the 3. Obtained and inspected sample emails generated by the automated email. The details of the scope of the data quality checks performed on the platform are outlined in the Core Commodity CRB Indices document. IMINT platform for evidence they had been generated in instances where automated validation checks hadfailed. The USD Cash Fallback index utilises an output file produced by the IMINT application to calculate **Test Result** the rate. The completeness and accuracy of the data in the output file is verified by the parallel calculation process. No exceptions noted. Control: Data Quality (IMINT - CRB) The IMINT application performs automated validation checks on the data ingested from Elektron Edge. The tool has automated controls to detect incomplete data transfer, unsuccessful index calculation, and incomplete index publication. Alerts are raised by IMINT platform via automated emailing and are reviewed and responded to by the Content Operations Team. Business Process: CBI Platform - Input data checks **Test Procedures** 

Convertible Indices are calculated and published via the CBI Platform. The CBI Platform is a

collection of applications housed within the MACE environment. The Convertible indices are

calculated in a single application within the CBI Platform which sources input data from within MACE

and convertible bond pricing data from the LSEG Evaluation Pricing Service. Detail of the data inputs

FTSE Russell WMR FX Benchmarks, Interest Rate Benchmarks, Convertible Bond Indices, and

CoreCommodity CRB Indices



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
	are documented in the 'Refinitiv Convertible Bond Index System' diagram and the 'MACE Solutions Architecture Document'.	2. Obtained and inspected the <i>CBI Feed Monitoring</i> document for evidence it outlined the different data inputs into the CBI Platform and the data validation alerting on the data feeds.
	The CBI platform completes a series of automated processes to calculate each day's index. The platform has in-built automated tiggers to alert the user via the user interface if processes are incomplete, or incomplete input data has been received. The 'CBI Feed Monitoring Document' outlines the different data inputs to the platform, their source, and the different data validation checks each input undergoes when ingested by the tool.	3. Obtained and inspected screenshots of the CBI Platform interface for evidence of the system's monitoring dashboards and alarm log to determine whether key IT processes in the index calculation were monitored
	The CBI platform generates several reports throughout the day to validate the reasonability of the pricing data ingested to the platform. These reports include the <i>Parser report, Index Price Movement report, Index Pricing Report</i> and <i>TRPS Report</i> .	4. Obtained and inspected the following reports to determine whether they had been generated to sense check the data ingested:
	Control: Feed Health and Input Data Dashboard (CBI Platform)	1. Index Pricing Report
	The CBI Platform has a monitoring dashboard which reports the status of the key processes part of	2. Parser Report
	each day's index calculation. Instances where tasks have not been completed will be flagged in an 'Alarms' monitoring dashboard for the user to review. If any process in the monitoring dashboard is	3. Index Price Movement report
	not completed an alert will be generated to the Level 2 Monitoring Team and an SMS message is sent to the CBI Development team.	4. TRPS Report
	Control: Pricing Data Integrity checks (CBI Platform)	Test Result
	A number of reports are generated from CBI platform through the day to validate the reasonability of the pricing data ingested into the platform. These reports include:	No exceptions noted.
	<ul> <li>Parser report: used to identify pricing data used in the calculation that has breached pre- defined thresholds on day-on-day movements</li> </ul>	
	<ul> <li>Index Price Movement report: released multiple times per day and takes the prices used in calculation and compares them to other OTC available prices on MACE. Those prices which are above pre-defined thresholds are highlighted for further review.</li> </ul>	
	<ul> <li>Index Pricing Report: is generated multiple times per day and highlights where there no pricing data available for bonds included in the index.</li> </ul>	
	<ul> <li>TRPS report: calculates the theoretical price calculated in MACE using the Greeks and compares to the TRPS price. Where there is a breach of the pre-defined thresholds, the prices are highlighted for further review.</li> </ul>	
	Business Process – System & Data Health checks	Test Procedures
	The Technology Operations Centre ('TOC') team perform system and data feed health monitoring on each of the different systems. An incident management application raises alerts to the team and tracks open issues. For each index calculation system platform, the TOC team maintain a host of 'Logging, Alarms and Monitoring' Runbooks which lists the scenarios the team monitor and provides guidance on how to respond to each alert scenario.	Obtained and inspected the 'Logging, Alams and Monitoring' Runbook for each benchmark system for evidence it outlined the scope of scenarios monitored by the Technology Operations Centre
	Control - Level 1 System Health Monitoring	



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
	The Technology Operations Centre ('TOC') team perform system and data feed health monitoring on each of the platforms used for benchmark calculations. Alerts arising from the platforms are generated to the TOC team via an incident management and logging application. In the first instance, the alert is responded to by the Level 1 Monitoring Team (TOC). If the issue is unable to be resolved, the alert is	2. For a sample alert generated for each system, obtained and inspected evidence of the issues log to confirm it had been investigated by the TOC team and resolved.
	escalated to the Level 2 Monitoring Team, and if still unresolved, to the Development Team (Level 3).	Test Result
		No exceptions noted.
Where Administrators receive data from employees of the Front Office Function, the Administrator should seek corroborating data from other sources.	N/A – FTSE does not use data received from employees of the Front Office Function to determine In-Scope Products.	
16. Complaints Process		
The Administrator should establish and Publish	Control Objective	Test Procedures
or Make Available a written complaints procedures policy, by which Stakeholders may submit complaints including concerning whether a specific Benchmark determination is representative of the underlying Interest it	To provide reasonable assurance that the administrator establishes and makes available a complaints procedures policy, for stakeholders to be able to submit complaints. The administrator should ensure that the complaints procedures policy:  The administrator should ensure that the complaints procedures policy:	1. Obtained the FTSE Russell <i>Benchmark Determination Complaints-Handling Policy</i> and inspected for processes relating to the submission, investigation and escalation of complaints, as per the Business Process.
seeks to measure, applications of the Methodology in relation to a specific Benchmark determination(s) and other Administrator decisions in relation to a Benchmark determination.	<ul> <li>permits complaints to be submitted through a user-friendly process (e.g., electronic submission);</li> <li>contains steps to receive and investigate a complaint</li> <li>contains a process for escalating complaints to their governance body.</li> </ul>	2. Obtained the meeting minutes for the FTSE Russell Index Governance Board and inspected for evidence that the FTSE Russell <i>Benchmark Determination Complaints-Handling Policy</i> was reviewed and approved at leastannually.
The complaints procedures policy should:	requires all documents relating to a complaint to be retained for a minimum of five years	3. Obtained screenshots from the online ticketing system and inspected for evidence of complaints being recorded by Client
a) Permit complaints to be submitted through a	To provide reasonable assurance that the administrator resolves any disputes about a benchmark determination (not formal complaints) by referencing their standard procedures.	Services as per the BusinessProcess.
user-friendly complaints process such as an electronic Submission process;	Business Process	Please refer to Principle 17 for Controls related to record keeping of complaints.
b) Contain procedures for receiving and investigating a complaint made about the Administrator's Benchmark determination process on a timely and fair basis by personnel who are independent of any personnel who	The FTSE Russell Benchmark Determination Complaints-Handling Policy describes FTSE Russell's approach to complaints resolution and is publicly available on their website (https://www.lseg.com/en/ftse-russell/governance/index-policy-and-methodology).  The Complaints Handling Policy details the following:	Please refer to Principle 13 for the FTSE Russell Policy for Benchmark Methodology Changes: Ground Rules. This outlines the processes in place to notify clients in instances of any changes to the Benchmark.
may be or may have been involved in the subject of the complaint, advising the complaint and other relevant parties of the outcome of its investigation within a reasonable period and retaining all records concerning complaints;	<ul> <li>a) The methods for submitting a complaint oFTSE Russell.</li> <li>b) The procedures in place for receiving and investigating acomplaint;</li> <li>c) Review of complaints will be managed independently of any personnel who may have been involved in the subject matter of the complaints. In the event that the complainant disagrees with a response or considers that there are grounds to appeal, the issue will be escalated to</li> </ul>	Please refer to Principle 13 for the review and approval of the FTSE Russell Policy for Benchmark Methodology Changes: Ground Rules.



### **IOSCO Principle** c) Contain a process for escalating complaints, as appropriate, to the Administrator's governance body; and d) Require all documents relating to a

complaint, including those submitted by the complainant as well as the Administrator's own record, to be retained for a minimum of five vears, subject to applicable national legal or regulatory requirements.

Disputes about a Benchmarking determination, which are not formal complaints, should be resolved by the Administrator by reference to its standard appropriate procedures. If a complaint results in a change in a Benchmark determination, that should be Published or Made Available to Subscribers and Published or Made Available to Stakeholders as soon as possible as set out in the Methodology.

### **FTSE Russell Response and Controls**

- the Chair of the Index Governance Board and the matter will be debated by the FTSE Russell Index Governance Board
- That FTSE Russell will maintain relevant records for a minimum of five years, on documents and correspondence relating to a complaint

For any changes that may occur to the methodology of a benchmark as a result of a complaint, FTSE Russell maintain the FTSE Russell Policy for Benchmark Methodology Changes: Ground Rules. The FTSE Russell Index Decommissioning Statement: Ground Rules and Critical Benchmark Methodology Change & Cessation Policy that outlines the process in place to notify clients, and any resulting stakeholder consultation that may occur.

### Control: Review of the FTSE Russell Benchmark Determination Complaints - Handling Policy

The FTSE Russell Benchmark Determination Complaints-Handling Policy, which is publicly available, is reviewed and approved annually by the FTSE Russell Index Governance Board.

### Control: Monitoring and review of Complaints

Complaints are recorded, tracked and managed centrally via the online ticketing system by the Client Services Team.

### Control: Record Keeping

Please refer to Principle 17 for Business Process and Controls related to record keeping of complaints.

### Control: FTSE Russell Policy for Benchmark Methodology Changes: Ground Rules - Review and Approval

Please refer to Principle for 12 for FTSE Russell Policy for Benchmark Methodology Changes: Ground Rules review and approval

### Control: Critical Benchmark Methodology Change and Cessation Policy - Review and Approval

Please refer to Principle 12 for the Critical Benchmark Methodology Change and Cessation Policy review and approval.

### Work Performed by KPMG

Please refer to Principle 12 for the FTSE Russell Critical Benchmark Methodology Change and Cessation Policy. This outlines processes in place to notify clients in instances of any changes to Critical Benchmarks.

Please refer to Principle 12 for the review and approval of the FTSE Russell Critical Benchmark Methodology Change and Cessation Policy.

### **Test Result**

No exceptions noted

### 17. Audits

The Administrator should appoint an independent internal or external auditor with appropriate experience and capability to periodically review and report on the Administrator's adherence to its stated criteria and with the Principles. The frequency of audits should be proportionate to the size and complexity of the Administrator's operations.

### **Control Objective**

To provide reasonable assurance that the administrator appoints an independent internal or external auditor with appropriate experience and capability to periodically review and report on the adherence to their stated criteria and with the Principles.

Additionally, the Oversight Committee ToR's require the Committees to assess internal and external audits or reviews and monitor the implementation of identified remedial actions.

### **Test Procedures**

1. Obtained the Compliance Manual and inspected for evidence of the documentation of the Audit Policy, with it specifically detailing the processes for appointing an external auditor, as well as the responsibilities of the internal audit team, as outlined in the Business Process



# Where appropriate to the level of existing or potential conflicts of interest identified by the Administrator (except for Benchmarks that are otherwise regulated or supervised by a National Authority other than a relevant Regulatory Authority), an Administrator should appoint an independent external auditor with appropriate experience and capability to periodically review and report on the Administrator's adherence to its stated Methodology. The frequency of audits should be proportionate to the size and complexity of the Administrator's Benchmark operations and the breadth and depth of Benchmark use by Stakeholders.

### **FTSE Russell Response and Controls**

### Control: Review of Compliance Manual - RBSL

The Audit Policy is contained within section 8 of the *Compliance Manual – Refinitiv Benchmark Services (UK) Limited*. Specifically, Section 8.3 describes the requirement to appoint an internal or external auditor to report on adherence to the methodology criteria and IOSCO Principles.

Please refer to Principle 3(g) for review and approval of the Compliance Manual

### **Control: Oversight Committee Terms of Reference**

The Oversight Committee *ToR's* require the Committees to assess internal and external audits or reviews and monitor the implementation of identified remedial actions.

Please refer to Article 1(d) for the Oversight Committee Terms of Reference review and approval

### Control: External Audit Review

FTSE Russell have engaged KPMG to carry out a Reasonable Assurance engagement in respect of its controls over its benchmark administration activities for the In-Scope Products in relation to the IOSCO Principles for Financial Benchmarks.

Please refer to Principle 4(b) for the assessment of the Administrator's adherence to the relevant inscope methodologies.

### **Work Performed by KPMG**

Please refer to Principle 3g for the review and approval of the Compliance Manual

2. Obtained the Oversight Committee *Terms ofReference* and inspected to determine that the assessment of internal and external audits was included as part of the documented responsibilities.

Please refer to Principle 1(d) for the review and approval of the Oversight Committee Terms of Reference

We point to this report as evidence that FTSE Russell have engaged an independent external audit firm to perform a reasonable assurance engagement in respect of its controls over its benchmark administration activities for the In-Scope Products in relation to the IOSCO Principles for Financial Benchmarks.

Please refer to Principle 4(b) for the assessment of the Administrator's adherence to the relevant in-scope methodologies.

### Test Result

No exceptions noted.

### 18. Audit Trail

Written records should be retained by the Administrator for five years, subject to applicable national legal or regulatory requirements on:

- a) All market data, Submissions and any other data and information sources relied upon for Benchmark determination:
- b) The exercise of Expert Judgementmade by the Administrator in reaching a Benchmark determination:
- c) Other changes in or deviations from standard procedures and Methodologies, including those made during periods of market stress or disruption;

### **Control Objective**

To provide reasonable assurance that the administrator retains written records for five years (subject to applicable national legal/regulatory requirements) on:

- Market data, submission, and other data relied upon for benchmark determination;
- The administrator's exercise of expert judgement when reaching their benchmark determination:
- Changes/deviations from standard methodologies and procedures (including those made during market stress);
- Identities of those involved in producing a benchmark determination; and
- Queries and responses related to data inputs.

### Control: Record Keeping Policy

The FTSE Russell Record Retention Policy (effective from July 2024) requires key evidences related to benchmark determination to be retained for a minimum of five years. The FTSE Russell Record

### **Test Procedures**

- 1. Obtained the FTSE Russell Record Retention Policy and inspected for evidence that it documented requirements for evidence retention of benchmark data
- 2. Obtained the meeting minutes for the RBSL Benchmark Governance Committee and inspected for evidence that the FTSE Russell Record Retention Policy was reviewed and approved at least annually.
- Obtained and inspected evidence that items outlined in the control objective were retained for a period of at least five years.

### Test Result

No exceptions noted.



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IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
d) The identity of each person involved in producing a Benchmark determination; and	Retention Policy is reviewed and approved on an annual basis by the FTSE Russell Index Management Board.	
e) Any queries and responses relating to data inputs. If these records are held by a Regulated Market or Exchange the Administrator may rely on these records for compliance with this Principle, subject to appropriate written record sharing agreements.		
If these records are held by a Regulated Market or Exchange the Administrator may rely on these records for compliance with this Principle, subject to appropriate written record sharing agreements.	N/A – FTSE Russell's records are not held by a Regulated Market or Exchange and therefore does not rely on this provision of IOSCO Principles.	
When a Benchmark is based on Submissions,	Control Objective	Test Procedures
the following additional Principle also applies: Submitters should retain records for five years subject to applicable national legal or regulatory requirements on:	To provide reasonable assurance that when a Benchmark is based on submissions, the Submitter should retain records for up to five years on in line with Principle 18.	1. Obtained the SAIBOR / SAIBID Code of Conduct and inspected for evidence that it detailed the record retention requirements for Contributor banks for the processes outlined
a) The procedures and Methodologies	Business Process	as per a-i in the Business Process.
a) The procedures and Methodologies governing the Submission of inputs; b) The identity of any other person who submitted or otherwise generated any of the	this SAIBOR and SAIBID CoC in a medium that allows for the storage of the information to be readily accessible for future reference with a documented audit trail. The defined records are to be stored for	Please refer to Principle 4.1 for the review and approval of the SAIBOR/SAIBID Contributor Code of Conduct
		Test Result
data or information provided to the Administrator;	five years, including:	No exceptions noted, except for:
c) Names and roles of individuals responsible for Submission and Submission oversight;	<ul> <li>a. The procedures and Methodologies governing the Submission ofinputs;</li> <li>b. The identity of any other person who submitted or otherwise generated any of the data or information provided to the Administrator;</li> </ul>	The requirement for SAIBOR panel bank Contributors to retain records of their "exposures of individual traders/desks to Benchmark-related instrument in order to facilitate audits and
d) Relevant communications between submitting parties;	<ul> <li>c. Names and roles of individuals responsible for submission and Submission oversight;</li> <li>d. Relevant communications between submitting parties;</li> <li>e. Any interaction with the Administrator;</li> </ul>	investigations" was not defined and documented within the SAIBOR Code of Conduct in place at 21 January 2025.
e) Any interaction with the Administrator;	<ul> <li>f. Any queries received regarding data or information provided to the Administrator;</li> <li>g. Declaration of any conflicts of interests and aggregate exposures to Benchmark related</li> </ul>	
f) Any queries received regarding data or information provided to the Administrator;	instruments;  h. Exposures of individual traders/desks to Benchmark related instruments in order to facilitate audits and investigations; and (not currently met)	
g) Declaration of any conflicts of interests and aggregate exposures to Benchmark related	<ul> <li>Findings of external/internal audits, when available, related to Benchmark Submission remedial actions and progress in implementing them.</li> </ul>	
instruments;	Control: Contributor Code of Conduct Review and Approval	



IOSCO Principle	FTSE Russell Response and Controls	Work Performed by KPMG
h) Exposures of individual traders/desks to Benchmark related instruments in order to facilitate audits and investigations;and	Please refer to Principle 4.1 for review and approval of the SAIBOR/SAIBID Contributor Code of Conduct.	
i) Findings of external/internal audits, when available, related to Benchmark Submission remedial actions and progress in implementing them		
19. Co-operation with Regulatory Authorities		
Relevant documents, Audit Trails and other	Control Objective	Test Procedures
documents subject to these Principles shall be made readily available by the relevant parties to the relevant Regulatory Authorities in carrying out their regulatory or supervisory duties and	To provide reasonable assurance that the administrator makes any relevant documents, audit trails and other documents subject to the Principles readily available (and handed promptly) to the relevant regulatory authorities for performing their regulatory/supervisory roles.	1. Obtained the FTSE Russell <i>Benchmark Administration Manual</i> and inspected for evidence that it outlines the processes for communicating with the regulator and the record
handed over promptly upon request.	Control: Review and Approval of FTSE Russell Benchmark Administration Manual	keeping requirements for documentation to be made available, as per the business process.
	The FTSE Russell Benchmark Administration Manual sets out the regulatory rules, obligations and procedures that are relevant to Administrator employees' role. The manual applies to all FTSE Russell business functions and employees involved in the benchmark administration activities. The Administration Manual sets out procedures for communicating with the regulator within Section 6.6. Section 7: Record Keeping Policy requires records and documents to be available for at least five years. Please refer to Principle 1(d) for the FTSE Russell Benchmark Administration Manual	Please refer to Principle 1(d) for the review and approval of the FTSE Russell Benchmark Administration Manual.
		Test Result
		No exception noted.



# **Appendix 1 – Control Exceptions and Management Responses**

Ref.	IOSCO Principle	Benchmark(s)	Control Exception	FTSE Russell Management Response
1	Principle 4. Control Framework for Administrators	All	Change Management – Benchmark Calculation Systems  At the assurance date, the technology change management controls (business and technology approvals and testing) relating to the index calculation systems were inconsistently documented and evidenced on the JIRA workflow system.	Subsequent to the assurance date an enhanced change management process has been introduced, specifically it ensures greater transparency, accountability, and control over changes made to FTSE Russell's critical systems. FTSE Russell Engineering is currently finalising the implementation of this new process, and once complete no further action is required.
2	Principle 4. Control Framework for Administrators	CoreCommodity CRB Indices	Periodic Monitoring of User Access (i-MINT only)  New user access to index calculation applications is managed through formal controls requiring line manager approval. For the IMINT platform, the periodic assessment of suitability of the existing CRB Commodities user population was performed annually, rather than every six months (as per the LSEG policy).	The iMint system has been manually onboarded to Sailpoint, the user access recertification platform and quarterly recertifications will now be undertaken.  An automated integration of Sailpoint is due to be implemented during 2025.
3	Principle 4. Control Framework for Administrators	All	Benchmark Business Continuity Plans (BCPs)  FTSE Russell assesses and tests resilience of business continuity in line with the Group Operational Resilience Framework. As part of this process where it has been identified that alternative workarounds are not available for critical dependencies or that recovery strategies are not fully documented, there is currently not a formal governance process that requires the validation, risk assessment or planned remediation of such instances.	The Group Business Continuity Risk Policy will be reviewed during 2025 with consideration of remediation processes for recovery strategies assessed as unavailable in business continuity plans. FTSE Russell will enhance Business Continuity Management procedures to implement these new policy requirements. In the interim, FTSE Russell will review such instances where they have been identified across all Important Business Services to ensure that BCP documentation is complete and accurate. Where such instances are validated and confirmed, Self-Identified Issues will be recorded with a remediation plan documented, and a formal issue acceptance will be logged and tracked to closure via FTSE Russell Governance Framework.
4	Principle 4. Control Framework for Administrators	SAIBOR / SAIBID	E-CIBORG Backup Process  The data log for the E-CIBORG application containing a record of inputs and calculated index values is backed up on a monthly basis. This is not consistent with the 'LSEG Backup Data Retention' standard, which states that unless there is a valid exception, all production systems must undergo an incremental backup on a daily basis.	A daily backup schedule for the E-CIBORG platform will be implemented to ensure that the data is protected in accordance with the 'LSEG Backup Data Retention' standard. Regular test recovery cycles for backups will also be implemented to ensure its integrity and recoverability. These enhancements are planned to be completed in Q2 2025.
5	Principle 11. Content of the Methodology	USD IBOR Cash Fallbacks	Methodology Review – USD IBOR Cash Fallbacks  Benchmark Methodologies are required to be reviewed by the Product Manager and approved by the relevant governance forum at least annually. As at the Assurance date, the review of the USD Cash Fallback Methodology was last conducted and approved in November 2023.	The annual review of the USD IBOR Cash Fallbacks Benchmark Methodology document was completed prior to this report being published. No further action is required
6	Principle 11. Content of the Methodology	Term €STR Tokyo Swap Rate	Calculation Parameters  The Term ESTR and Tokyo Swap Rate public methodologies note that filtering parameters are applied to the source input data prior to using them for benchmark determinations. These parameters are defined in the code of primary calculators but not documented in internal documentation. There is a risk that these parameters are not periodically reviewed alongside the annual methodology review.	These calculation parameters will be documented in the <i>Method of Work</i> for each benchmark together with a statement that any changes to them must first be approved by the Head of Benchmark Operations (or delegated authority) and the Benchmark Manager.
7	Principle 18. Audit Trail	SAIBOR / SAIBID	SAIBOR Code of Conduct – Record Retention Requirements  The requirement for SAIBOR panel bank Contributors to retain records of their "exposures of individual traders/desks to Benchmark-related instrument in order to facilitate audits and investigations" was not defined and documented within the SAIBOR Code of Conduct in place at 21 January 2025.	The SAIBOR & SAIBID Contributor Code of Conduct will be amended to include this specific record keeping requirement for panel banks. This proposal will be implemented subject to FTSE Russell Governance Framework, including review of feedback received during the standard 90 day panel bank consultation process for material changes.



# **Appendix 2 – Post Assurance date**

### Post Assurance date - Delay in the WMR publication - 3rd April 2025

On Thursday, 3rd April 2025, at 15:20 (BST) FTSE Russell Operations identified there were some delays in processing data being ingested into the WMX calculation platform. Following investigations by Technology and Operations, the business invoked WMR disaster recovery protocols and switched to the parallel calculation instance in the cloud environment, including data integrity check controls, to ensure ongoing publication of the day's rates. The products impacted by the delay included the WMR Intraday Spots and Forwards/NDFs and metals from 15:30 onwards (including the 4pm Closing Spot Rate).

FTSE Russell informed clients during this period of the delay. Publication of the delayed WMR benchmark intraday rates was restored and sequentially published starting at 19:57 and all rates were published by 20:13 on the day. Thereafter, WMR production processes continued to operate successfully with no further issues. The switch to the parallel calculation instance, and therefore the publication of the benchmarks, was completed within FTSE Russell's defined recovery time objective. The underlying systems have been subsequently enhanced to remediate the dependency on the technology issue identified.