

Administrator Code of Conduct

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Contents

Introduction	4
1.1. BACKGROUND	4
1.2. Purpose	4
1.3. Scope	4
2. IOSCO Principles	5
2.1. GOVERNANCE	5
2.1.1. Principle 1: Overall Responsibility of the Administrator	5
2.1.1.1. Benchmark Definition and Methodology	5
2.1.1.2. Benchmark Determination and Dissemination	5
2.1.1.3. Transparency of Operation	6
2.1.1.4. Governance	6
2.1.2. Principle 2: Oversight of Third Parties	7
2.1.3. Principle 3: Conflicts of Interest	7
2.1.3.1. Product Reviews	8
2.1.3.2. Employee Obligations	8
2.1.3.3. External Committee Member Obligations	9
2.1.3.4. Attestations	9
2.1.4. Principle 4: Control Framework	9
2.1.5. Principle 5: Internal Oversight	11
2.1.5.1. Benchmark Oversight Committee	11
2.1.5.2. Annual Compliance Review/Audit	12
2.2. QUALITY OF THE BENCHMARK	12
2.2.1. Principle 6: Benchmark Design	12
2.2.2. Principle 7: Data Sufficiency	13
2.2.3. Principle 8: Hierarchy of Data Inputs	14
2.2.4. Principle 9: Transparency of Benchmark Determinations	14
2.2.5. Principle 10: Periodic Review	15
2.3. QUALITY OF THE METHODOLOGY	16
2.3.1. Principle 11: Content of the Methodology	16
2.3.1.1. Definition of key terms	17
2.3.1.2. Index development procedures	17
2.3.1.3. Consistency in the exercise of Expert Judgment	17
2.3.1.4. Procedures under certain circumstances	17
2.3.1.5. Index revision	18
2.3.1.6. Methodology review	18
2.3.1.7. Stakeholder consultations	18
2.3.1.8. Submitters inclusion and exclusion	18
2.3.2. Principle 12: Changes to the Methodology	19

2.3.3. Principle 13: Transition	20
2.3.4. Principle 14: Submitter Code of Conduct	20
2.3.5. Principle 15: Internal controls over data collection	21
2.4. ACCOUNTABILITY	22
2.4.1. Principle 16: Complaints procedures	22
2.4.2. Principle 17: Audits	22
2.4.3. Principle 18: Audit Trail	23
2.4.3.1. Administrator’s Records	23
2.4.3.2. Submitter’s Records	23
2.4.4. Principle 19: Cooperation with Regulatory Authorities	24
3. Appendices	25
Appendix A: Glossary of key IOSCO terms	25

Introduction

1.1. BACKGROUND

The International Organization of Securities Commissions (IOSCO) published its final report on Principles for Financial Benchmarks in July 2013 (FR07/13). The Principles represent a set of practices that should be implemented by Benchmark Administrators and Submitters.

The Principles are intended to promote the reliability of Benchmark determinations and address Benchmark governance, quality and accountability mechanisms.

1.2. Purpose

This Administrator Code of Conduct (the “Code”) documents the processes and policies that Markit maintains for the Benchmarks (as defined below) in response to the IOSCO Principles for Financial Benchmarks and related regulatory concerns.

References herein to Markit or the Administrator mean Markit in its role as Administrator unless the context specifies or requires otherwise. Any capitalised items are as defined in the IOSCO Principles.

1.3. Scope

Markit is responsible for the development, administration, calculation and dissemination of products and services classified as “Benchmarks” pursuant to the definition of a Benchmark in the IOSCO Principles (collectively the “Benchmarks” and each, a “Benchmark”).

In addition to administering Benchmarks that are owned by Markit, Markit provides Benchmark Administration services for third parties who own proprietary Benchmarks (the “Third Party Administration Service”). Markit’s Third Party Index Administration Service administers these third party Benchmarks in compliance with this Code. As Third Party Administrator, Markit does not own the intellectual property in the Benchmarks it administers.

Throughout this Code, and unless the context requires or specifies otherwise, “Benchmarks” refers to both Markit owned Benchmarks and those Benchmarks for which Markit is the Third Party Administrator.

The introduction to the IOSCO Principles states that “the application and implementation of the Principles should be proportional to the size and risks posed by each Benchmark and/or Administrator and the Benchmark-setting process.” Accordingly, the Administrator will make decisions and implement the IOSCO Principles and this Code in a manner proportionate to the size of, and risks posed by, each Benchmark. Any such decision made by the Administrator will be documented and presented to the relevant Index Management Board/Advisory Committee, as well as the Benchmark Oversight Committee.

Markit will review and update this Code on a periodic basis, but no less frequently than annually.

2. IOSCO Principles

2.1. GOVERNANCE

The Benchmarks have governance arrangements and a control framework in place to protect the integrity of the Benchmarks and to consider operational and risk management issues impacting the Benchmarks.

2.1.1. Principle 1: Overall Responsibility of the Administrator

IOSCO Principle 1 states that the Administrator shall have primary responsibility for all aspects of the Benchmark determination process, including development, calculation, determination and dissemination, operation and governance.

2.1.1.1. Benchmark Definition and Methodology

The Administrator has primary responsibility for all aspects of the Benchmark determination process, and shall make the index description and methodology for the Markit Benchmark readily available (the “Index Documentation”) on Markit’s public web site free of charge. For each Benchmark, the Index Documentation will include, if applicable, the following:

- Index rules
- Pricing rules
- Index calculus
- Rating methodology
- Classification methodology

Where Markit is taking on the administration of a pre-existing Benchmark, the documentation and methodology may already exist. Markit will review all existing documentation, rules and methods before agreeing to be Third Party Administrator and, if necessary, Markit will work with the Benchmark owner to amend the rules and methodology.

2.1.1.2. Benchmark Determination and Dissemination

The Benchmarks administered by Markit will be calculated, determined and distributed according to the relevant Index Documentation. Markit, as Administrator disseminates or is responsible for dissemination of all relevant data and information regarding the determination, including index composition and relevant constituent’s information on an efficient and timely basis. Additionally, where possible, complete index composition is made available for access in advance of any index updates and in line with the index schedule and calendars.

To ensure accurate and timely delivery of its indices, the Administrator produces internal Key Performance Indicators (collectively, the “KPI’s”) that are reviewed by the Index Management Board (for Markit owned Benchmarks) or, in the case of Third Party Benchmarks, the Third Party Index Administration Committee and the Benchmark owner on a monthly basis. Please refer to section 2.1.5 on Governance for further details.

2.1.1.3. Transparency of Operation

Markit, as the Administrator, ensures that the relevant Index Documentation and any significant decisions affecting the administration or calculation of the Markit Benchmarks are made publically available on a timely basis. Markit will use its public web site at www.markit.com, to publish operational information concerning the Benchmarks. Markit maintains a login process for users to access certain data for information security and management purposes, including data integrity. Markit shall ensure that registration and login is available free of charge to all users.

In addition, the Administrator maintains documented Business Continuity Plans to ensure that an appropriate framework is in place to minimise disruption to Markit Benchmarks and to enable business continuity and service resumption in the event of a disaster. The Business Continuity Plan identifies potential risks to Markit Benchmarks, and details countermeasures to manage the threat posed by the loss of office locations, critical infrastructure, and personnel. The Administrator is responsible for documenting all contingency measures in place in the event of absence of or insufficient data inputs as well as in the event of market stress and disruption.

2.1.1.4. Governance

Markit maintains internal management committees that are accountable for the overall operation of the Markit Benchmarks. Index Management Boards (“IMBs”) are convened for Markit’s proprietary Benchmarks (each family of indices typically has its own IMB) and the Third Party Index Administration Committee (“TPIAC”) is convened for the Third Party Benchmarks (collectively the “Boards”).

The Boards are comprised of Markit senior managers involved in the Benchmark administration function and each Board’s composition is set in its Terms of Reference. The Boards shall meet to discuss matters which impact on their respective indices including: major index business items, prioritisation of index projects as well as key business issues and risks. In addition, KPIs are reviewed at these Board meetings.

Additionally, in order to ensure independence and objectivity of the Benchmarks, Markit can seek advice from distinct committees (collectively, the “Index Advisory Committees”) and market participants. The objective of these consultations is to solicit feedback which can assist the Administrator in the creation of the highest quality standards for its indices. Each Index Advisory Committee shall have its own policies and procedures, including terms of reference, maintained by the Administrator outlining the Committee’s role, structure, membership requirements and procedures. The Index Advisory Committees meet at an appropriate frequency for matters related to the rules and administration of the Markit Benchmarks. The Administrator makes all decisions taken in consultation with the Index Advisory Committees and market participants publically available on a timely basis. In the case of Third Party Administration, the Benchmark owner, and, if applicable, other stakeholders are invited to provide advise and consultation to the Administrator.

Procedures:

Markit shall:

1. Review each new product, and conduct a periodic review of change to existing product, to identify those products that are (1) Benchmarks, and (2) indices not officially classified as “Benchmarks” that Markit intends to administer in alignment with the IOSCO Principles and this Code
2. Review that the policy in place is still adequate for any new product and/or change to existing product
3. Provide periodic information and reports to the Benchmark Oversight Committee (see Section 2.1.5) as it may request in connection with its responsibility to review and provide challenge on all aspects of the Benchmark determination process

2.1.2. Principle 2: Oversight of Third Parties

IOSCO Principle 2 requires an Administrator to maintain appropriate oversight of third parties that perform activities related to the Benchmark determination process, such as the collection of inputs, publication or where a third party acts as Calculation Agent.

Policy:

Markit shall maintain a list of third parties that perform activities related to the Benchmark determination process, and for each third party, the Administrator shall:

- 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, the Benchmark owner (if applicable) 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.

Procedures:

The Administrator shall:

1. Review each new product and any change to existing products to identify third parties that perform activities related to the Benchmark determination process;
2. Review on a periodic basis written agreements with each third party that performs activities related to the Benchmark determination process. Each such agreement shall include a provision permitting the Administrator to monitor compliance with any standards set out by the Administrator;
3. Monitor third parties' compliance with the standards set out by the Administrator;
4. Review on a periodic basis publication of identity and roles of third parties in the Index Documentation and contingency plans
5. Provide the Benchmark Oversight Committee (see Section 2.1.5) with the list of such third parties including the obligations and expected compliance standards, compliance monitoring processes and contingency plans.

2.1.3. Principle 3: Conflicts of Interest

IOSCO Principle 3 states that the Administrator should document, implement and enforce policies and procedures for the identification, disclosure, management, mitigation or avoidance of conflicts of interest.

Policy:

Markit will administer the Benchmarks in a manner that is reasonably designed to protect the integrity and independence of the Benchmark administration process.

Procedures:

2.1.3.1. Product Reviews

Markit reviews each new Benchmark, and conducts a periodic review of existing Benchmarks, to identify potential and existing conflicts of interest. The conflict of interest review shall address the following:

A. Structural Conflicts Of Interest: conflicts that may exist between the Administrator (including all staff who perform or otherwise participate in Benchmark production responsibilities) and any other business of the Administrator or any of its affiliates;

B. Operational Conflicts Of Interest: 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;

C. Supervision: supervisory systems and sign-off by authorised or qualified employees prior to releasing Benchmark determinations;

D. Confidentiality: controls in place related to the confidentiality of data, information and other inputs submitted to, received by or produced by the Administrator, subject to its disclosure obligations;

E. Conflict Management: measures in place to mitigate identified conflicts of interest; and

F. Disclosure: required disclosures pursuant to IOSCO Principle 3 which provides that Administrators should disclose conflicts of interest arising from the ownership structure or the control of the Administrator to stakeholders and any relevant Regulatory Authority in a timely manner.

Each conflict of interest review shall be documented and a report summarizing the review shall be submitted to the Benchmark Oversight Committee as part of its oversight function.

2.1.3.2. Employee Obligations

All employees working for the Administrator are required to avoid any activity, situation or relationship that creates or appears to create a conflict of interest. However, when potential or actual conflicts of interest do arise, it is the employee's responsibility to recognize it and to immediately notify the Compliance Department in accordance with this Code. Further guidance on managing conflicts of interest is contained in Markit's internal Code of Conduct and Business Ethics. Additionally, all employees are required to immediately disclose and obtain advance consent in writing from the Compliance Department before:

- Accepting any external directorships;
- Partaking in any business opportunity outside of the employee's employment at Markit;
- Hiring, supervising or affecting the terms and conditions of employment of any close relative;
- Accepting any kind of position, job, consultancy or affiliation with a competitor, client or supplier;
- Accepting any kind of position, job, consultancy or affiliation that could impact the employee's availability to do his/her work at Markit;
- Accepting or giving any type of gift or gratuity except as may be otherwise permitted by Markit policy;
- Accepting any monetary or non-monetary benefits from a third party in relation to the services Markit provides;

- Investing in a current or prospective competitor, client or supplier, unless the investment is a passive investment in a publicly traded security; or
- Using any information, property or corporate opportunities gained or developed through Markit for personal benefit.

2.1.3.3. External Committee Member Obligations

Markit's Benchmark Oversight Committee and Index Advisory Committees may include representatives who are not full time Markit employees. Although members of the Benchmark Oversight Committee are expected to act as individuals when serving on the Benchmark Oversight Committee, they may face conflicts of interest when doing so. Such conflicts may arise if they:

- Minimize the standards of regulation for Markit as developed through the committee's deliberations;
- Obtain confidential information which may be useful to their employers;
- Procure the reporting of certain Benchmark Submitters without due cause;
- Impose unduly burdensome requirements in respect of submissions methodologies this may be a means of applying pressure on one or more Benchmark Submitters in pursuit of commercial objectives unrelated to oversight; or
- Introduce changes to the definition, features or underlying interest of a benchmark that may be of commercial advantage to their employer organisation or to the particular class of users which they represent but may not necessarily be to the advantage of users as a whole.

In addition, any Committee member may be conflicted where, for example, they become party to confidential information which may be useful to their employers.

2.1.3.4. Attestations

In the Letter of Appointment to the Benchmark Oversight Committee or Index Advisory Committees, each committee member will confirm that they will:

- Promptly declare to the Compliance Department any other appointments or arrangements that conflict or may conflict with their position as a Benchmark Oversight Committee member. Examples of those are described in this Code above under 2.1.3.3 External Committee Member Obligations; and
- Comply, to the extent reasonable, with Markit's policy on conflicts of interest as may be amended from time to time.

2.1.4. Principle 4: Control Framework

IOSCO Principle 4 states that an Administrator should implement an appropriate control framework for the process of determining and distributing the Benchmark. The Principle requires that:

- The control framework is 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 the nature of Benchmark inputs and outputs;
- The control framework is documented and available to relevant Regulatory Authorities, if any;
- A summary of the main features of the control framework is published or made available to Stakeholders (which Markit does in its annual attestation statement); and

- The control framework is reviewed periodically and updated as appropriate.

The framework should address the following key areas:

- Conflicts of interest;
- Integrity and quality of Benchmark determination;
- Whistleblowing mechanism;
- Expertise.

Where a Benchmark is based on Submissions, the Administrator promotes the integrity of inputs by:

- a) Ensuring as far as possible that the Submitters comprise an appropriately representative group of participants taking into 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 pre-compilation or pre-publication monitoring to identify and avoid errors in inputs or Submissions, as well as ex-post analysis of trends and outliers.

Policies:

Markit's control framework is comprised of the following main features:

- Conflict of interest policies including escalation and reporting processes
- Transparent Index Documentation publicly available on the Administrator's website
- Robust operational processes and documentation ensuring quality and integrity of Benchmarks and Benchmarks inputs including where applicable:
 - Multiple operational checks covering processes ranging from data inputs collection, selection, benchmark rebalancing/roll, benchmark calculation and dissemination;
 - Exception flow being logged, monitored and reported upon request or escalated where appropriate;
 - Incident tracking: reporting from inception to resolution and fixes;
 - Clear governance function in place with documented processes;
 - Procedures to ensure integrity and quality of Benchmark Determination in line with principles 6 to 19;
 - Markit's Code of Conduct and Business Ethics, and related Whistleblowing Policy; and
 - Adequate staff expertise being monitored through supervision, tailored training, bi-annual competence review and adherence to Markit's Code of Conduct and Business Ethics

Procedures:

The control framework shall be reviewed at least annually by the Administrator and updated as appropriate

2.1.5. Principle 5: Internal Oversight

IOSCO Principle 5 states that an Administrator should establish an oversight function to review and provide challenge on all aspects of the Benchmark determination process. Markit's internal oversight is comprised of IMBs for Markit's proprietary Benchmarks the TPIAC for Third Party Indices, a Benchmark Oversight Committee with overall responsibility of the effective scrutiny of Benchmark Administration and an annual Compliance Review/Audit conducted by our internal audit department. Section 2.1.1.4 above provides further detail on the IMBs and TPIAC.

2.1.5.1. Benchmark Oversight Committee

Policy:

To help discharge its responsibilities, Markit has established a Benchmark Oversight Committee (namely, the "BOC") which is responsible for effective scrutiny of the Administrator, including:

- Review and provide challenge on all aspects of the Benchmark determination process; and
- The recommendation and implementation of any necessary changes to new or existing products as may be required as a result of operational, legal, regulatory risks, as well as input or complaints from stakeholders.

The BOC is comprised of senior managers from the following departments:

- Executive Management
- Legal
- Compliance
- Risk
- Finance
- Operations
- Information Technology

Procedures:

The BOC meets at least quarterly and shall address each of the following matters:

1. Benchmark design for new and existing products including the review and approval procedures for termination of the Benchmark;
2. Benchmark determination and control framework including:
 - a. Management and operation of the Benchmarks;
 - b. Third party oversight;
 - c. Audit results and following up on implementation of remedial actions highlighted in the results of these audits; and

- d. Expert judgment oversight including recommendations and other guidance received from the Index Advisory Committees;
3. Any pending complaints;
4. Internal Compliance Reviews and Audits;
5. Regulatory examinations or Inquiries; and
6. Other reports and reviews as maybe requested from, or submitted by, the Administrator.

2.1.5.2. Annual Compliance Review/Audit

As set forth in Section 2.4.2, Markit's internal audit and compliance departments shall:

- A. Periodically test adherence to (1) the Principles, (2) its stated Methodology, and (3) adherence to this Code of Conduct; and
- B. Submit to the Benchmark Oversight Committee an annual report summarizing the test results, any significant identified exceptions, any remedial actions highlighted in the results of these audits and any additional or amended policies and procedures created in response to the test results.

2.2. QUALITY OF THE BENCHMARK

2.2.1. Principle 6: Benchmark Design

IOSCO Principle 6 states that the design of a 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.

Policy:

Each Benchmark is designed to reflect the performance of a specific asset class or section of the market. The objective and considerations in designing each Benchmark are detailed in the Index Documentation. While designing the Markit Benchmarks, the Administrator shall take into account the following features not limited to and where applicable:

- a. Index universe and constituent selection process
- b. Size and liquidity
- c. Relative size of the market
- d. Market concentration
- e. Market dynamics: up-to-date pricing, corporate actions and other events that impact the index constituents are reflected
- f. Risk/return profile between the index and the interest in terms of
 - Duration [interest rate risk] profile

- Credit ratings
 - Industry sector allocation
- g. Tier or seniority of debt, total debt outstanding, liquidity of the underlying components

Procedures:

1. Prior to offering or agreeing to administer a new Benchmark, the Administrator shall review and approve the Benchmark design in accordance with IOSCO Principle 6.
2. The Administrator shall also review the Benchmark design for all existing Benchmarks as part of its periodic review conducted in accordance with IOSCO Principle 10.
3. The BOC shall also review the Benchmark design and make recommendations to the Administrator in accordance with IOSCO Principle 5.

2.2.2. Principle 7: Data Sufficiency

Pursuant to IOSCO Principle 7, the data used to construct a Benchmark 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 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
- 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 as a credible indicator of prices, rates, indices or values.

Policy:

For the majority of Markit Benchmarks where an index level calculation is performed by the Administrator, it uses pricing data provided by Markit Pricing Data Services.

The Markit Pricing Data Service is an independently produced pricing service used by a broad cross-section of market participants (e.g. banks, insurers, asset managers, hedge funds). A variety of representative sources is used to fuel the Markit Pricing Data Service including but not limited to books of record contributions, parsed dealer runs, reported trade prices and executed levels. The Markit Pricing data is produced by experienced pricing analysts who are not part of the Administrator staff utilising established instrument evaluation models, independent of any index calculation process. The Markit Pricing Data Service as the main Submitter to Markit Benchmarks will comply with Principle 14 Submitter Code of Conduct referenced in section 2.3.4 of this Code.

In other cases (including the majority of Third Party Benchmarks) the Administrator uses pricing solely from Regulated Markets or Exchanges or Index Owners, or it may use submissions from multiple eligible market makers to create composite levels that are based on values that have been formed by the competitive forces of supply and demand.

The Index Documentation for each Benchmark shall document the source and sufficiency of pricing data used to make the Benchmark determination.

Procedures:

1. Prior to offering a new Benchmark or commencing Administration of a new Benchmark, making a pricing change to an existing Benchmark, the Administrator shall review and evaluate the sufficiency of data used to make the Benchmark determination in accordance with IOSCO Principle 7.
2. The Administrator shall also review the Data Sufficiency for all existing Benchmarks as part of its periodic review conducted in accordance with IOSCO Principle 10.
3. The BOC shall also review and make recommendations on Data Sufficiency in accordance with IOSCO Principle 5.

2.2.3. Principle 8: Hierarchy of Data Inputs

Under IOSCO Principle 8 the Administrator should establish and publish or make available clear guidelines regarding the hierarchy of data inputs and exercise of Expert Judgment used for the determination of Benchmarks which 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's-length Transactions in the underlying interest;
- c) Reported or observed concluded Arm's-length Transactions in related markets;
- d) Firm (executable) bids and offers; and
- e) Other market information or Expert Judgments.

Policy:

The Index Documentation for each Benchmark shall document the hierarchy of data inputs for each index and the exercise of Expert Judgment used in Benchmark determination where applicable.

Procedures:

1. Prior to offering a new Benchmark, or commencing Administration of a Benchmark, or making a pricing change to an existing Benchmark, the Administrator shall review and approve the proposed guidelines that will be published regarding the hierarchy of data inputs and exercise of Expert Judgment used for the determination of the Benchmark in accordance with IOSCO Principle 8.
2. The Administrator shall also review the hierarchy guidelines for all existing Benchmarks on a periodic basis.
3. The BOC shall also review and make recommendations on Hierarchy of Data Inputs for new and existing Benchmarks in accordance with IOSCO Principle 5.

2.2.4. Principle 9: Transparency of Benchmark Determinations

IOSCO Principle 9 states that an 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 to which and the basis upon which Expert Judgment if any, was used in establishing a Benchmark determination.

Policy:

To the extent reasonable, Markit will publish pricing quality metrics ranging from the number of inputs used in benchmark determination to the pricing methodology deployed. In some specific cases, the Administrator may also make decisions based on Expert Judgment, and it will clearly identify, monitor and record processes associated with the use of Expert Judgment in order to provide transparency and avoid any conflicts of interests. To the extent reasonable and where possible, the Administrator will seek guidance from Advisory Committees and/or other market participants. The Administrator also documents in the Index Documentation the basis upon which Expert Judgment may be used for each applicable Benchmark.

In the event of market stress or disruption to Markit Benchmarks, the Administrator will apply the index rules as specified in the relevant Index Documentation. In the case of Third Party Benchmarks, Markit will apply the approach specified in the Index Documentation or, where appropriate, the TPIA Disruption and Force Majeure Events Policy, The Administrator also will promptly publish information about the disruption event and the actions taken. The Index Documentation will also include documentation of the Administrator's process regarding situations where data inputs are absent or insufficient for benchmark determination.

Additionally, Markit has established an external challenge process on Benchmark determination that provides a standardised, rules-based and transparent method of dealing with index enquiries, and ensures consistent, standardised and timely feedback to such enquiries.

Procedures:

1. Prior to offering a new Benchmark or commencing the Administration of a Benchmark, the Administrator shall review and determine the extent to which it is reasonable to publish timely Benchmark transparency explanations for each Benchmark determination in accordance with IOSCO Principle 9. To the extent it is determined to be reasonable, the Administrator will publish Benchmark transparency explanations in accordance with IOSCO Principle 9.

2. Markit will also review the Benchmark transparency explanations for each Benchmark, or a decision to not publish an explanation for a Benchmark, for all existing Benchmarks on a periodic basis.

3. The BOC shall also review and make recommendations in respect of Transparency of Benchmark Determinations for new and existing Benchmarks in accordance with IOSCO Principle 5

2.2.5. Principle 10: Periodic Review

IOSCO Principle 10 contemplates that the Administrator will conduct a periodic review of Benchmark Design.

Policy:

The Administrator will periodically review the Index Documentation and design to ensure that it is continuously representative of its stated objective and underlying interest. Where applicable, the Administrator may also seek feedback from specific Index Advisory Committees on the results of its periodic reviews.

Results of all material changes made to a Benchmark based on these reviews are published by the Administrator, and such publication shall contain a summary of the changes as well as the rationale for the revisions.

Procedures:

1. In accordance with IOSCO Principle 10, the Administrator shall conduct a periodic review of the Benchmark design for each Benchmark. This review shall include:

- The 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.
- Whether the underlying interest has diminished or is non-functioning such that it can no longer function as the basis for a credible Benchmark.
- The Index Documentation as well as any other supplementary documents to ensure that they continue to be appropriate.

2. The Administrator may also conduct an ad-hoc review as necessary, for instance as part of a complaint investigation.

3. The periodic reviews shall be documented as evidence and transmitted to the BOC for review in accordance with IOSCO Principle 5.

2.3. QUALITY OF THE METHODOLOGY

2.3.1. Principle 11: Content of the Methodology

IOSCO Principle 11 states that the Administrator should document and Publish or Make Available the Methodology used to make Benchmark determinations. At a minimum, the Methodology should contain:

- a) Definitions of key terms;
- b) All criteria and procedures used to develop 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 extrapolation methods;
- c) Procedures and practices designed to promote consistency in the exercise of Expert Judgment between Benchmark determinations;
- d) The procedures which govern Benchmark determination in periods of market stress or disruption, or periods where data sources may be absent (e.g., theoretical estimation models);
- e) The procedures for dealing with errors, including when a revision of a Benchmark would be appropriate;
- f) Information regarding the frequency of internal reviews and approvals of the Methodology. Where applicable, the Methodologies should also include information regarding the procedures and frequency for external review of the Methodology;
- g) The circumstances and procedures under which the Administrator will consult with Stakeholders, as appropriate;
- h) The identification of potential limitations of a Benchmark, including its operation in illiquid or fragmented markets and the possible concentration of inputs; and

i) Where a Benchmark is based on Submissions, the Administrator should clearly establish criteria for including and excluding Submitters. The criteria should consider any issues arising from the location of the Submitter, if in a different jurisdiction to the Administrator. These criteria should be available to relevant Regulatory Authorities, if any, and Published or Made Available to Stakeholders. Any provisions related to changes in composition, including notice periods should be made clear.

Policy:

Markit will document and publish the Administration methodology in its Index Documentation. The Index Documentation will be made publically available on the Markit website on www.markit.com.

The published methodology will provide sufficient detail to allow stakeholders to understand how the index is derived as well as show how to assess its representativeness, its relevance to particular stakeholders, and its appropriateness as a reference for financial instruments.

The Index Documentation will contain the items detailed below.

2.3.1.1. Definition of key terms

Markit will make the Index Documentation transparent to allow for non-ambiguous understanding. The Index Documentation will use standard finance terminology to describe the rules that govern the creation and maintenance of each index and will include a Glossary of Key Terms where necessary. More complex terms are explicitly defined, especially those terms which relate to mathematical formulae. Stakeholders' comments and/or questions will be taken into account in the review or improvement of the Index Documentation.

2.3.1.2. Index development procedures

The Index Documentation will detail the rules that govern the index. This will include selection rules, constituent classification, input data used, calculation methodology as well as specific details around the administration processes such as publication, reviews, rule changes and consultation process with the Index Advisory Committees.

2.3.1.3. Consistency in the exercise of Expert Judgment

As explained under Principle 9, in some specific cases, the Administrator will be required to make decisions based on Expert Judgment. Those decisions will be clearly identified and recorded. In addition and where the Index Advisory Committees are consulted to seek further advice, meeting minutes will record any decisions taken. This recording allows for transparency, disclosure and avoidance of any conflicts of interests. The ability to refer back to previous cases where Expert Judgment was exercised promotes consistency and predictability in the way that the index rules are being applied.

2.3.1.4. Procedures under certain circumstances

In the event of market stress and disruption impacting Markit Benchmarks, the Administrator will apply the rules as specified in the relevant Index Rules. In the event of market stress or disruption having an impact on a Third Party Benchmark, the Administrator will apply the rules specified in the relevant Index Rules, as supplemented where appropriate with the Third Party Disruptions and Force Majeure Events Policy. The Administrator also will promptly publish information about the disruption event and the input values used.

The Index Documentation will include documentation of the Administrator's process regarding situations where data inputs are absent or insufficient for benchmark determination.

Additionally, Markit maintains an internal Business Continuity Plan to ensure that an appropriate framework is in place to minimise disruption to the Benchmarks and to enable business continuity and timely service resumption in the event of a disaster. The Business Continuity Plan identifies potential risks to Benchmarks, and details countermeasures to manage the threat posed by the loss of office locations, critical infrastructure, and personnel.

2.3.1.5. Index revision

Markit has implemented a wide range of automated checks to capture and validate exceptions indicating an error or data problem. In the instance an error is caught, Markit will review the impact on affected index values. If the analysis leads to a potential revision of the Benchmark determination, the Administrator may consult with the specific Index Advisory Committee where applicable. If the Administrator decides to revise the index values, the reason for the revision together with revised material will be published.

The Administrator will also compile an incident report, which will summarize the incident, the root cause and set forth remedial actions to avoid such an error report in the future, where applicable. Further detail can be found in Markit's Index Restatement Policy, which is available at www.markit.com

2.3.1.6. Methodology review

The Administrator reviews the Index Documentation as part of the periodic review outlined in Principle 10 to ensure that they are continuously representative of the index objective. The Index Documentation is also updated whenever additional changes or clarifications are made. Where applicable, the Index Documentation contains information regarding the procedures and frequency for external reviews of the methodology.

To the extent possible, the Administrator will take into account feedback received from Index Advisory Committees and/or market participants when considering any material changes to the Index rules (see below 2.3.1.7. Stakeholder consultations). Any material change to the Benchmark Methodology is also overseen by the BOC. Please refer to section 2.1.5 of this Code referencing Principle 5 Internal Oversight.

2.3.1.7. Stakeholder consultations

The Index Advisory Committees and other Stakeholders may be consulted during periodic reviews, periods of stressed markets or disruption events or when a material change is made to a Benchmark, for instance a material index revision or a material change to the methodology.

2.3.1.8. Submitters inclusion and exclusion

In the majority of cases and where relevant, the Markit Pricing Data Service provides multi-source pricing to the Markit Benchmarks for the purpose of index level calculation. The Markit Pricing Data Service follows the Submitter Code of Conduct under IOSCO Principle 14, carefully selecting inputs and defining who may submit data and information to Markit Indices. Please refer to www.markit.com for an overview of the pricing methodology.

In addition, the Administrator may use submissions from multiple eligible market makers to create composite levels. In this case, Index Documentation details Submitters inclusion and exclusion criteria.

For the majority of Third Party Benchmarks for which Markit is Administrator, data is received from Regulated Markets and Exchanges, or the Index Owner.

Where the Administrator obtains data from Submitters, the Submitters are disclosed in the Index Documentation.

Procedures:

1. Prior to offering a new Benchmark, the Administrator shall review and approve the proposed Methodology in accordance with IOSCO Principle 11.
2. The Administrator shall review the Benchmark Methodology used for each Benchmark as part of its periodic review conducted in accordance with IOSCO Principle 10 to determine if any changes to the Methodology are required in accordance with IOSCO Principle 12.
3. The BOC shall also review the Index Documentation and the content of the Methodology as part of IOSCO Principle 5 Oversight function.

2.3.2. Principle 12: Changes to the Methodology

IOSCO Principle 12 states that an Administrator should Publish or Make Available the rationale of any proposed material change in its Methodology, and procedures for making such changes. The 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. In addition, 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.

Policy:

From time to time, the Administrator may determine that revisions to Index Documentation and rules are necessary to address market changes, including industry, regulatory, legal and other changes.

Markit views any change to methodology that results in a significant impact on the risk/return profile of the benchmark as material. Where practical, Markit will solicit feedback from the relevant Index Advisory Committee to confirm whether the rules change is indeed material and consult on the content of the proposed changes themselves. This consultation also covers the approach and timeline to be taken for consulting and notifying end users/Stakeholders/Index Owners where applicable.

If material Index rules changes are required, Markit will make available the rationale for any proposed material change, the timing and the content of the change. Markit will also publish the proposed material methodology changes along with a clear timeframe, to allow users to provide feedback. Summary comments and the Administrator's responses will be made available upon request during each consultation period, except where the commenter has requested confidentiality.

Procedures:

Prior to making any change to the Methodology used for a Benchmark:

1. The BOC shall review the proposed and implemented change for compliance with the IOSCO Principles and this Code of Conduct and authorize or request the Administrator to undertake a consultation with Stakeholders where known or its Subscribers on such changes as per Principle 12
2. The Index Documentation for the Benchmark will be revised and published in accordance with Section 2.3.1.

2.3.3. Principle 13: Transition

IOSCO Principle 13 states that an Administrator 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 makes the 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.

Policy:

In case of a possible cessation of a Benchmark and to the extent it is practicable, Markit will attempt to select or create a credible, alternative benchmark that seeks to match the existing benchmark characteristics. The possible criteria to determine the practicability and quality of a matching alternative to the existing benchmark will be based as closely as possible on the existing methodology, selection criteria (e.g. currency, region, credit quality, maturities, liquidity, investability), constituent turnover, historical performance characteristics and correlation of the alternative to the existing index.

Markit will invite market participants, Stakeholders, Index Owners and relevant Regulatory Authorities, to participate in a consultation process to assess the seriousness of the issues, to collect feedback and concerns on the selection process of an alternative benchmark and on the end users' mitigating plans.

In the event a suitable alternative cannot be identified and the continuation of the Markit Benchmark is not possible or meaningful, the Administrator will discontinue the administration and maintenance of the Benchmark completely.

The Administrator will aim to announce cessation of a Benchmark to all market participants at least six months prior to the effective date or as soon as practically possible. In case of an event that requires an immediate cessation of Markit Benchmark, the Administrator will announce a timetable detailing the schedule of dates and events regarding the cessation of the Benchmark as soon as possible. Such a scenario could result in a shorter implementation period for a change or the cessation of a Benchmark.

Markit encourages all Stakeholders who rely on any index as a determinant or a performance measurement in a financial contract/instrument to ensure robust contingency measures are contained within such contracts/instruments.

Procedures:

1. Prior to termination of an existing Benchmark, the Administrator shall conduct the consultation contemplated by Principle 13 and submit a report on the proposed Transition to the BOC.
2. The BOC shall review and approve the procedures for termination of the Benchmark as detailed in the above policy and shall oversee the proposed Transition.

2.3.4. Principle 14: Submitter Code of Conduct

IOSCO Principle 14 states that where a Benchmark is based on Submissions, the Administrator should develop guidelines for Submitters (a "Submitter Code of Conduct"), which should be Published or Made Available.

Policy:

Markit has developed a Submitter Code of Conduct that is available online at www.markit.com. Where appropriate, Submitters will be required to confirm adherence to the Submitter Code of Conduct annually and whenever a change to the Submitter Code of Conduct has occurred.

Procedures:

1. Markit shall review and update the Submitter Code of Conduct on a periodic basis but no less frequently than annually.
2. Markit shall monitor and periodically audit Submitters' adherence to the Submitter Code of Conduct where appropriate.
3. Prior to offering a new Benchmark or Administering a Third Party Benchmark, the Administrator shall, where appropriate, request from the Submitter adherence to the Submitter Code of Conduct in accordance with IOSCO Principle 14.
4. The BOC shall receive reports on the adherence to the Submitters to the Code of Conduct.
5. The BOC shall also review the Submitter Code of Conduct used for each Benchmark as part of its periodic review conducted in accordance with IOSCO Principle 10 to determine if any changes are required.

2.3.5. Principle 15: Internal controls over data collection

IOSCO Principle 15 states that when an Administrator collects data from any external source it should ensure that there are appropriate internal controls over its data collection and transmission processes. These controls should address the process for selecting the source, collecting the data and protecting the integrity and confidentiality of the data. Where Administrators receive data from employees of the Front Office Function, the Administrator should seek corroborating data from other sources.

Policy:

Markit has appropriate internal controls over its data collection and transmission processes. These controls address the process for selecting the source where applicable, collecting the data and protecting the integrity and confidentiality of the data. Wherever operationally possible, the data is imported automatically and information including import timestamp, location and identity of the person(s) involved in the process is recorded. For more manual processes, operational steps are documented in Markit's operational documentation detailing additional procedures and oversight in place.

Procedures:

1. Prior to offering a new Benchmark, administering a Third Party Benchmark or for any changes to existing Benchmarks, the Administrator shall review any new data input/collection and ensure alignment with the above policy
2. Internal audit shall conduct an annual audit of the internal controls for each Benchmark for compliance with IOSCO Principle 15.
3. The BOC shall review the results of the annual audit of the internal controls for each Benchmark as part of its periodic review conducted in accordance with IOSCO Principle 10.

2.4. ACCOUNTABILITY

2.4.1. Principle 16: Complaints procedures

IOSCO Principle 16 requires each Administrator to establish and publish 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 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.

Policy:

Markit has a written complaints policy for all Benchmarks which can be found at <http://www.markit.com/Documentation/Product/Indices/regulation>

Procedures:

The Complaints policy includes procedures related to:

- Submission of a complaint;
- Receipt, investigation and escalation of a complaint; and
- Documentation and record retention.

2.4.2. Principle 17: Audits

IOSCO Principle 17 states that 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 (1) the Principles, and (2) its stated Methodology.

The frequency of the audits should be proportionate to the size and complexity of the Administrator's operations and the depth of Benchmark use by Stakeholders, provided that each Administrator is audited no less than annually.

Policy:

Markit's Internal Audit Department shall:

- Periodically test each the Administrator's adherence to (1) the Principles, and (2) its stated Methodology; and
- Submit to the Benchmark Oversight Committee a report summarizing the test results, any significant identified exceptions, and any additional or amended policies and procedures created in response to the test results.

Procedures:

Markit's Internal Audit Department shall conduct a periodic audit of the Administrator in accordance with IOSCO Principle 17 and submit a report on the Administrator's adherence to (1) the Principles, and (2) its stated Methodology to the BOC for its review.

2.4.3. Principle 18: Audit Trail

2.4.3.1. Administrator's Records

IOSCO Principle 18 states that Administrators should retain written records 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 Judgment made by made 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;
- d) The identity of each person involved in producing a Benchmark determination; and
- e) Any queries and response related to data inputs.

Policy:

Markit shall maintain a list of the written records used in connection with the Benchmark Administration, the location and means used to preserve each record and the length of time each record is preserved, which in each case shall be at least five years.

Procedures:

An audit of the Markit's compliance with IOSCO Principle 18 shall be performed as part of the periodic audit to be conducted in accordance with IOSCO Principle 17.

2.4.3.2. Submitter's Records

For each Benchmark that is based on Submissions, IOSCO Principle 18 states that Submitters should retain records for five years subject to applicable national legal or regulatory requirements on:

- 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 data or information provided to the Administrator;
- c) Names and roles of individuals responsible for Submission and Submission oversight;
- d) Relevant communications between submitting parties;
- e) Any interaction with the Administrator;
- f) Any queries received regarding data or information provided to the Administrator;
- g) Declaration of any conflicts of interests and aggregate exposures to Benchmark related instruments;
- h) Exposures of individual traders/desks to Benchmark related instruments in order to facilitate audits and investigations; and

i) Findings of external/internal audits, when available, related to Benchmark Submission remedial actions and progress in implementing them.

Policy:

Markit shall, where applicable, require the Submitter to retain its records in accordance with IOSCO Principle 18 and for a periodic audit of their compliance with the framework.

Procedures:

An audit of each Submitter's compliance with IOSCO Principle 18 may form part of the periodic audit to be conducted in accordance with IOSCO Principle 17, where appropriate.

2.4.4. Principle 19: Cooperation with Regulatory Authorities

IOSCO Principle 19 requires that the Administrator will make available relevant documents, audit trails and other documents subject to these Principles readily available to the relevant Regulatory Authorities carrying out their regulatory or supervisory duties and handed over promptly upon request subject to applicable national legal or regulatory requirements.

3. Appendices

Appendix A: Glossary of key IOSCO terms

Terms	IOSCO definition
Administration	<p>Includes all stages and processes involved in the production and dissemination of Benchmark, including:</p> <p>Collecting, analysing and/or processing information or expressions of opinion for the purposes of the determination of a Benchmark;</p> <p>Determining a Benchmark through the application of a formula or another method of calculating the information or expressions of opinions provided for that purpose; and</p> <p>Dissemination to users, including any review, adjustment and modification to his process</p>
Administrator	<p>An organisation or legal person that controls the creation and operation of the Benchmark Administration process, whether or not it owns the intellectual property relating to the Benchmark. In particular, it has responsibility for all stages of the Benchmark Administration process, including:</p> <p>a) The calculation of the Benchmark;</p> <p>b) Determining and applying the Benchmark Methodology; and</p> <p>c) Disseminating the Benchmark.</p>
Audit Trail	<p>For the purposes of the Benchmark-setting process, the documentation and retention of all relevant data, Submissions, other information, judgments (including the rationale for any exclusions of data), analyses and identities of Submitters used in the Benchmark-setting process for an appropriate period.</p>
Benchmark	<p>The Benchmarks in scope of this report are prices, estimates, rates, indices or values that are:</p> <p>a) Made available to users, whether free of charge or for payment;</p> <p>b) Calculated periodically, entirely or partially by the application of a formula or another method of calculation to, or an assessment of, the value of one or more underlying Interests;</p> <p>c) Used for reference for purposes that include one or more of the following:</p> <ul style="list-style-type: none">• determining the interest payable, or other sums due, under loan agreements or under other financial contracts or instruments;• determining the price at which a financial instrument may be bought or sold or traded or redeemed, or the value of a financial instrument; and/or

	<ul style="list-style-type: none"> • measuring the performance of a financial instrument.
Calculation Agent	A legal entity with delegated responsibility for determining a Benchmark through the application of a formula or other method of calculating the information or expressions of opinions provided for that purpose, in accordance with the Methodology set out by Market Indices.
Expert Judgment	Refers to the exercise of discretion by an Administrator or Submitter with respect to the use of data in determining a Benchmark. Expert Judgment includes extrapolating values from prior or related transactions, adjusting values for factors that might influence the quality of data such as market events or impairment of a buyer or seller's credit quality, or weighting firm bids or offers greater than a particular concluded transaction.
Market Participants	Legal entities involved in the production, structuring, use or trading of financial contracts or financial instruments used to inform the Benchmark, or which reference the Benchmark.
Methodology	The written rules and procedures according to which information is collected and the Benchmark is determined.
Regulated Market or Exchange	A market or exchange that is regulated and/or supervised by a Regulatory Authority.
Regulatory Authority	A governmental or statutory body (not being a Self-Regulatory Organisation) with responsibility for securities and/or commodities and futures regulation
Stakeholder	Refers to Subscribers and other persons or entities who own contracts or financial instruments that reference a Benchmark.
Submission(s)	Prices, estimates, values, rates or other information that is provided by a Submitter to an Administrator for the purposes of determining a Benchmark. This excludes data sourced from Regulated Markets or Exchanges with mandatory post-trade transparency requirements.
Submitter	A legal person providing information to an Administrator or Calculation Agent required in connection with the determination of a Benchmark
Subscriber	A person or entity that purchases Benchmark determination services from an Administrator

Disclaimer

Pursuant to the IOSCO Final Report on Principles for Financial Benchmarks published on July 17th 2013, Markit has reviewed its services and products (the "Review"). Markit has classified its index business as the Benchmark Administrator for certain index products in response to the IOSCO Principles.

The Review is intended only for professionals in the financial markets and is not, and should not be construed as, financial, legal or other advice of any kind, nor should it be regarded as an offer or as a solicitation of an offer to buy, sell or otherwise deal in any investment. The Review should not be interpreted as the approval of any regulator. You may not use the Review to generate any advice, recommendations, guidance, publications or alerts and the Review is not a substitute for your own analysis.

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