



IOSCO Statement of Compliance



IHS Markit Benchmark Administration Limited

October 2020

Introduction

IHS Markit (NYSE: INFO) is a world leader in critical information, analytics and expertise to forge solutions for the major industries and markets that drive economies worldwide. The company delivers next-generation information, analytics and solutions to customers in business, finance and government, improving their operational efficiency and providing deep insights that lead to well-informed, confident decisions.

IHS Markit has more than 50,000 key business and government customers, including 85 percent of the Fortune Global 500 and the world's leading financial institutions. Headquartered in London, IHS Markit is committed to sustainable, profitable growth.

IHS Markit Benchmark Administration Ltd. ("IMBA") was authorised by the UK FCA as Benchmark Administrator under the European Benchmark Regulation ("BMR") in July 2018. IMBA currently administers more than 30,000 benchmarks, including both indices that are proprietary to IHS Markit and for third parties, and across financial, economic and commodity underlyings.

IMBA UK is listed as an authorised Benchmark Administrator under the BMR on the [ESMA register](#). View the [list of benchmarks that are administered by IMBA UK](#).

Statement of Compliance

IHS Markit Benchmark Administration Ltd. (IMBA UK or the Administrator) is a Benchmark Administrator authorised by the UK FCA under Regulation (EU) 2016/1011 (the EU BMR).

IMBA UK confirms that it continues to administer its benchmark products in accordance with the International Organisation of Securities Commissions Principles for Financial Benchmarks (the "IOSCO Principles"). In line with what is permitted under the IOSCO Principles, the Administrator has taken a proportionate approach to applying the necessary requirements to comply with the Principles.

In support of the IOSCO compliance, IMBA UK has implemented and maintained policies and procedures governing the creation and administration of indices. These existing policies and procedures include measures to ensure the accuracy and integrity of indices administered, as well as arrangements to identify and mitigate potential conflicts of interests.

In the next section of this report, IMBA has set out a general description of how the established frameworks and procedures address each of the IOSCO Principles for Financial Benchmarks, as administered as of October 2020. When reading this statement, it is important to understand that:

- a) This statement describes the compliance framework which was in place as of October 2020; and
- b) The compliance framework is designed to be suitable to meet the IOSCO principles that are being complied with.

IOSCO Principles and supporting compliance framework

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Governance

A Benchmark should have appropriate governance arrangements in place to protect the integrity of the Benchmark and to address conflicts of interests.

Principle	Description	IHS Markit
1. Overall Responsibility of the Administrator	The Administrator should retain primary responsibility for all aspects of the Benchmark determination process. For example, this includes:	For indices administered by IMBA, its internal research function will either have developed these indices' methodology, or in the case of taking over the

	<ul style="list-style-type: none"> a. Development: The definition of the Benchmark and Benchmark Methodology; b. Determination and Dissemination: Accurate and timely compilation and publication and distribution of the Benchmark; c. Operation: Ensuring appropriate transparency over significant decisions affecting the compilation of the Benchmark and any related determination process, including contingency measures in the event of absence of or insufficient inputs, market stress or disruption, failure of critical infrastructure, or other relevant factors; and b) Governance: Establishing credible and transparent governance, oversight and accountability procedures for the Benchmark determination process, including an identifiable oversight function accountable for the development, issuance and operation of the Benchmark. 	<p>administration of clients' indices, have reviewed their methodology in detail.</p> <p>In both cases, IMBA's Product Level Committees will have responsibility for the ongoing development of the indices' methodology. As administrator of IMBA indices, IMBA will have responsibility for the indices' development, calculation, publication, maintenance and licensing. IMBA indices will therefore ultimately be the responsibility of IMBA's Directors.</p> <p>Oversight of the management of indices will be carried out by the IMBA Benchmark Oversight Committee (the "BOC"). The BOC Terms of Reference are available on request.</p> <p>Index reviews will be carried out by IMBA or the relevant Product Level Committees. Any changes will be made in line with IMBA's Methodology Change and Cessation policy and communicated to stakeholders.</p> <p>Daily operational matters have been delegated to the relevant IHS Markit business areas. IMBA recognises its responsibility to ensure the IHS Markit businesses the index calculation is outsourced to maintain a comprehensive Due Diligence Framework and Disruption Policy to manage the risks to indices caused by the absence of or insufficient inputs, market stress or disruption, or failure of critical infrastructure.</p>
<p>2. Oversight of Third Parties</p>	<p>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:</p> <ul style="list-style-type: none"> 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 	<p>IMBA has outsourced the calculation of indices and the dissemination of index values to other parts of the IHS Markit group. Appropriate written agreements have been established to define the relationship, roles and responsibilities between these parties. IMBA recognises the importance of strictly monitoring the performance of these third parties and actively manages the operational risks created from outsourcing the index calculation to other parts of the IHS Markit group.</p>

	<p>identity and roles of third parties who participate in the Benchmark determination process; and</p> <p>d) Take reasonable steps, including contingency plans, to avoid undue operational risk related to the participation of third parties in the Benchmark determination process.</p> <p>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.</p>	
<p>3. Conflicts of Interest for Administrators</p>	<p>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.</p> <p>Administrators should disclose any material conflicts of interest to their users and any relevant Regulatory Authority, if any.</p> <p>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:</p> <p>a) Existing or potential conflicts of interest do not inappropriately influence Benchmark determinations;</p> <p>b) Personal interests and connections or business connections do not compromise the Administrator’s performance of its functions;</p> <p>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;</p> <p>d) Adequate supervision and sign-off by authorised or qualified employees prior to releasing Benchmark determinations;</p> <p>e) The confidentiality of data, information and other inputs submitted to, received by or produced by the Administrator, subject to the disclosure obligations of the Administrator;</p> <p>f) Effective procedures to control the exchange of information between staff engaged in activities involving a risk of conflicts of interest or between staff and third parties, where that information</p>	<p>Policies</p> <p>IMBA maintains policies and procedures that address how perceived, potential and actual conflicts of interest are or will be identified, recorded, managed, mitigated, prevented and disclosed.</p> <p>These are documented as follows:</p> <ul style="list-style-type: none"> • The BOC Terms of Reference (regarding conflicts in that committee.) • The IMBA Conflicts of Interest Statement and the IHS Markit Code of Conduct Policy, and the IMBA personal account dealing policies. • The IMBA Conflicts of Interest Register. <p>Potential Conflicts of Interest at Director Level</p> <p>IMBA is an authorised Benchmark Administrator under the EU BMR. The company is not a user of any of the indices nor a participant in the markets that the indices measure, and the company currently has no plans to become an investment manager or to provide investment products.</p> <p>Potential Directors / Staff Conflicts of Interest</p> <p>There is expected to be no element of judgement or discretion in the day-to-day determination of IMBA’s indices nor those of its clients, and IMBA intends that this will continue to be the case wherever possible.</p> <p>However, to ensure good governance:</p>

	<p>may reasonably affect any Benchmark determinations; and</p> <p>g) Adequate remuneration policies that ensure all staff who participate in the Benchmark determination are not directly or indirectly rewarded or incentivised by the levels of the Benchmark.</p> <p>An Administrator’s conflict of interest 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 have in relation to Benchmark determinations. To this end, the framework should:</p> <p>a) Include measures to avoid, mitigate or disclose conflicts of interest that may exist between its Benchmark determination business (including all staff who perform or otherwise participate in Benchmark production responsibilities), and any other business of the Administrator or any of its affiliates; and</p> <p>b) Provide that an Administrator discloses conflicts of interest arising from the ownership structure or the control of the Administrator to its Stakeholders and any relevant Regulatory Authority in a timely manner.</p>	<ul style="list-style-type: none"> • Director and staff remuneration will not be dependent on published index values. • IHS Markit has strict anti-corruption and anti-bribery policies and provides all staff with regular training on them. <p>Although the intention is to have no day-to-day judgement or discretion in the determination of indices, there are three particular circumstances which IMBA notes, in relation to which conflicts of interest could arise:</p> <ul style="list-style-type: none"> • Constituent relationships: IMBA may be approached by companies that are, or may become, potential index constituents. As a result, IMBA will separate the staff responsible for reviewing index constituents from the BOC, so that no staff are placed in the position of overseeing their own work. • Constituent changes: Some directors and staff will have advance knowledge of prospective index constituent changes. <p>To mitigate conflicts deriving from advance knowledge of index constituents or levels, all relevant staff (not only those with potential advance knowledge of changes) are subject to IMBA’s Personal Account Dealing Policy, and are expressly prohibited from taking positions in financial products that reference indices that are administered by IMBA.</p> <ul style="list-style-type: none"> • Changes to index methodologies: IMBA will review each index methodology regularly. As detailed in IMBA’s Benchmark Methodology Change and Cessation Policy, where a Product Level Committee proposes changes that are considered material, IMBA will publicly consult on the proposed changes and provide stakeholders with the opportunity to comment on them, both well in advance of their implementation. The BOC additionally has a responsibility to ensure the company has appropriate policies in place to ensure the identification and management of conflicts of interest.
<p>4. Control Framework for Administrators</p>	<p>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</p>	<p>IMBA’s control framework for the administration of indices was developed to meet the requirements of both the Principles and of the EU Benchmarks</p>

	<p>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.</p> <p>This control framework should be reviewed periodically and updated as appropriate. The framework should address the following areas:</p> <p>a) Conflicts of interest in line with Principle 3 on conflicts of interests;</p> <p>b) Integrity and quality of Benchmark determination:</p> <ol style="list-style-type: none"> 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; ii. Arrangements to promote the integrity of Benchmark inputs, including adequate due diligence on input sources; iii. Arrangements to ensure accountability and complaints mechanisms are effective, in line with principles 16 to 19; and iv. Providing robust infrastructure, policies and procedures for the management of risk, including operational risk. <p>c) Whistleblowing mechanism:</p> <p>Administrators 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 reporting of such cases where appropriate.</p> <p>d) Expertise:</p> <ol style="list-style-type: none"> 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 ii. Staff training, including ethics and conflicts of interest training, and continuity and succession planning for personnel. 	<p>Regulation, while promoting the highest ethical business standards within IMBA.</p> <ul style="list-style-type: none"> • It seeks to ensure that staff involved in the provision of benchmarks are competent, appropriately trained and supervised, that conflicts of interest are managed, and that systems and procedures ensure compliance at both an individual and company level. • It details the bodies responsible for the management, quality and integrity of the indices and for the management of operational risk and conflicts of interest. • IHS Markit policies provide for an effective whistleblowing mechanism that allows both early internal reporting of possible, known or intended misconduct, and for external whistleblowing if necessary. All IHS Markit staff, including those involved in the provision or governance of indices, are responsible for reading, understanding and complying with all procedures applicable to them. • The IHS Markit Conduct Policy makes clear the serious consequences of failing to do so: anyone departing from the policies and procedures set out in the Code of Conduct without the prior clearance of the Compliance Oversight Officer may be in breach of their contract of employment and will have committed a disciplinary offence. Any such breach may be treated as a matter of serious misconduct which could result in dismissal. In addition, IMBA maintains plans for controlling and managing operational, business continuity, disaster recovery and other risks.
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	<p>Where a Benchmark is based on Submissions: Administrators should promote the integrity of inputs by:</p> <ol style="list-style-type: none"> 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. 	
<p>5. Internal Oversight</p>	<p>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.</p> <p>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.</p> <p>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:</p> <ol style="list-style-type: none"> a) The terms of reference of the oversight function; 	<p>Ultimate responsibility for indices administered by IMBA lies with the organisation's Directors, with day-to-day control delegated to other entities of the IHS Markit group, overseen by the BOC. The latter's responsibilities, set out fully in its Terms of Reference, are in summary:</p> <ul style="list-style-type: none"> • Reviewing indices' definitions and methodologies at least annually. • Overseeing any changes to index methodologies and where appropriate, requesting IMBA consult on such changes. • Overseeing external consultations, if appropriate, on matters relating to indices. • Considering, and where appropriate approving any actions recommended by IMBA or Product Level Committees in the event of a lack of clarity in an index methodology. • Overseeing IMBA's control framework and the management and operation of indices. • Reviewing and approving procedures for cessation of indices, including any consultation about a cessation. • Overseeing any third party involved in the provision of indices, including calculation or dissemination agents.

	<p>b) Criteria to select members of the oversight function;</p> <p>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.</p> <p>The responsibilities of the oversight function include:</p> <p>a) Oversight of the Benchmark design:</p> <ol style="list-style-type: none"> i. Periodic review of the definition of the Benchmark and its Methodology; 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 out how the Administrator should consult with Stakeholders about such cessation. <p>b) Oversight of the integrity of Benchmark determination and control framework:</p> <ol style="list-style-type: none"> 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 iii. Overseeing any exercise of Expert Judgment by the Administrator and ensuring Published Methodologies have been followed. 	<ul style="list-style-type: none"> • Ensuring index staff comprise of individuals with appropriate levels of expertise, that are suitably trained, and that appropriate training is carried out at regular intervals. • Investigating and acting upon (if appropriate) potential breaches of conflicts of interest policies. • Assessing internal and external audits or reviews and monitoring the implementation of identified remedial actions.
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Where conflicts of interests may arise in the Administrator due to its ownership structures or controlling interests, or due to other activities conducted by any entity owning or controlling the Administrator or by the Administrator or any of its affiliates: the Administrator should establish an independent oversight function which includes a balanced representation of a range of Stakeholders where known, Subscribers and Submitters, which is chosen to counterbalance the relevant conflict of interest.

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
- 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.

Quality of the Benchmark

Principle	Description	IHS Markit
<p>6. Benchmark Design</p>	<p>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.</p> <p>Benchmark design should take into account the following generic non-exclusive features, and other factors should be considered, as appropriate to the particular Interest:</p> <ul style="list-style-type: none"> a) Adequacy of the sample used to represent the Interest; b) Size and liquidity of the relevant market (for example whether there is sufficient trading to provide observable, transparent pricing); c) Relative size of the underlying market in relation to the volume of trading in the market that references 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 underpinning a Benchmark). 	<p>IMBA will ensure that indices that it administers provide an accurate and reliable representation of the relevant interest, and that index components are sufficiently liquid to provide transparent, accurate pricing.</p> <p>Key points regarding index designs:</p> <ul style="list-style-type: none"> • Many IMBA indices are using exchange data for the pricing of index components, and have entirely transparent and objective methodologies. As a result, the veracity of indices can be proven at any time through an independent historical reconstruction. • A significant number of indices administered by IMBA rely on evaluated pricing as input, which for these asset classes have proven to be the most reliable and comprehensive source of input data across market cycles. • IMBA methodologies are generally developed in close consultation with market participants and are continually further developed to reflect best practice. They will be reviewed by the Product Level Committees, overseen by the BOC, on an annual basis, or more often as circumstances require. • IMBA’s index methodologies will seek to ensure no adverse market impact due to the size of holdings

		<p>that underlying investment products may have in index constituents.</p> <ul style="list-style-type: none"> • Either the number of constituents in indices will not be fixed, or the methodology built such that indices can continue to be an adequate sample of the relevant interest even if significant structural changes occur in markets. • Various constituent weighting methodologies may be used to provide indices fit for the purpose to which they will be put. However, IMBA will always aim to ensure indices provide an accurate and reliable representation of the relevant interest, while giving an appropriately diversified portfolio in the case of indices used as the underlyings for investment products. IMBA index methodologies are typically available on the relevant IHS Markit product website.
<p>7. Data Sufficiency</p>	<p>The data used to construct a Benchmark determination should be sufficient and reliably represent the Interest measured by the Benchmark and should:</p> <ol style="list-style-type: none"> 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. <p>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 8.</p>	<p>Wherever possible IMBA indices will be priced using regulated exchange data, with no estimations used.</p> <p>Therefore, the data used in the calculation of the indices will directly reflect the competitive forces of supply and demand in the relevant market, being formed from transactions in the components representing the underlying interest. IMBA's Index Management Committees (or Product Level Committees) nonetheless will be responsible for monitoring the adequacy of prices formed in all markets, including less liquid markets, and of bringing potential issues to the attention of users, where appropriate. IMBA does not intend to administer or calculate indices that require extensive use of expert judgement.</p> <p>For some index families evaluated prices are used that are calculated based on a variety of relevant inputs where such approach has proven to be the most reliable and comprehensive source of input data. Evaluated pricing will consider inputs including transactions and quotes, wherever those are available.</p>

	<p>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.</p> <p>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 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 transactions, rely on non-transactional data, but the data is derived from and thus “anchored” in an actual functioning securities or options market.</p>	
<p>8. Hierarchy of Data Inputs</p>	<p>An 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. In general, the hierarchy of data inputs should include:</p> <ul style="list-style-type: none"> 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. <p>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 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 Judgment 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</p>	<p>As stated within Principle 7 above, many IMBA indices are priced using regulated exchange data or evaluated prices that satisfy data sufficiency requirements.</p> <p>For some index families evaluated prices are used that are calculated based on a variety of relevant inputs where such approach has proven to be the most reliable and comprehensive source of input data. Evaluated pricing will consider inputs including transactions and quotes, wherever those are available.</p>

	<p>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.</p>	
9. Transparency of Benchmark Determinations	<p>The Administrator should describe and publish with each Benchmark determination, to the extent reasonable without delaying an Administrator publication deadline:</p> <p>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);</p> <p>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.</p>	<p>Indices administered by IMBA will have published methodologies and be derived from appropriate pricing data, IMBA’s indices will meet the requirements of Principle 9, as elaborated in Annex C of the Principles.</p> <p>However, for information:</p> <ul style="list-style-type: none"> Daily files detailing index constituents and prices and other information will be published, together with daily files showing index values and divisors used in the index calculations. Index methodologies are designed to ensure that eligible, suitably liquid index components are included in the relevant indices, and that the indices’ economic interest is defined in terms only of suitably liquid companies or components. As a result, each index will therefore represent the defined interest.
10. Periodic Review	<p>The Administrator should periodically review 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. 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.</p> <p>The Administrator should Publish or Make Available a summary of such reviews where material revisions have been made to a Benchmark, including the rationale for the revisions.</p>	<p>IMBA recognises its responsibility for reviewing the indices it administers, and for determining whether each index continues to provide a robust assessment of the underlying interest. To this end, Product Level Committees will review each index methodology at least annually, overseen by the BOC.</p> <p>If the Product Level Committee determines that a particular index may require modification or termination, it will consult with stakeholders as per the processes detailed within IMBA’s Benchmark Methodology Change and Cessation Policy. If a decision is taken to modify or terminate an index, IMBA will notify stakeholders accordingly, and in the case of the former, maintain a record of modifications within the methodology document.</p>

Quality of the Methodology

Principle	Description	IHS Markit
11. Content of the Methodology	The Administrator should document and Publish or Make Available the Methodology used to make Benchmark determinations. The	Rationale

	<p>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 appropriateness as a reference for financial instruments.</p> <p>At a minimum, the Methodology should contain:</p> <ul style="list-style-type: none"> 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 error reports, including when a revision of a Benchmark would be applicable; f) Information regarding the frequency for 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; g) The circumstances and procedures under which the Administrator will consult with Stakeholders, as appropriate; and h) The identification of potential limitations of a Benchmark, including its operation in illiquid or fragmented markets and the possible concentration of inputs. 	<p>IMBA index methodologies are initially designed and continuously developed over time, through extensive consultation with potential and actual users, by experts in financial index design and governance. They will be reviewed by the relevant Product Level Committee and the BOC on an annual basis, or more often as circumstances require, to ensure they are accurate representations of the underlying economic interest. Various constituent selection and index weighting options are considered in the design of IMBA indices and selected depending upon how they best represent the defined underlying economic interest.</p> <p>In many cases, additional controls are included in a methodology to account for other additional requirements, such as liquidity, capacity, diversification and reflect regulatory requirements such as the UCITS criteria. Full details of the creation, management, review, governance and calculation of each index are available for each index administered by IMBA.</p> <p>Transparency</p> <p>IMBA will fully document, and publish, a methodology covering each of the indices. These documents will be available on the IMBA or relevant product website. They are intended to contain all the necessary information for stakeholders to understand the methodology and objectives of the indices, in order to assess the suitability of any benchmark for their purposes.</p>
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Where a Benchmark is based on Submissions, 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 location of the Submitter, if in a different jurisdiction to the Administrator. These criteria should be available to any 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.

12. Changes to the Methodology	An Administrator should Publish or Make Available the rationale of any proposed material change in its Methodology, and	IMBA has established procedures to be followed in respect of changes to index methodologies, which are detailed in its
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	<p>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.</p> <p>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.</p> <p>The Administrator should specify how changes to the Methodology will be scrutinised, by the oversight function.</p> <p>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:</p> <ol style="list-style-type: none"> a) Provide advance notice and a clear timeframe that gives Stakeholders sufficient opportunity to analyse and comment on the 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. 	<p>Benchmark Methodology Change and Cessation Policy.</p> <p>The Policy defines materiality of a methodology change and the process to be followed when either a material change or cessation is proposed.</p> <ul style="list-style-type: none"> • All material amendments require consultation with stakeholders. IMBA Board and BOC are notified and have the opportunity to comment on or challenge the proposed plan. • Wherever possible, advance notice of changes will be provided to the marketplace. • Following consultation with stakeholders, a summary of comments and IMBA’s response will be provided.
<p>13. Transition</p>	<p>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 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. The Administrator should take into account the views of Stakeholders and any relevant Regulatory and National Authorities in determining what</p>	<ul style="list-style-type: none"> • Benchmark statements published by IMBA for all relevant Benchmark families specify situations where the benchmarks might no longer be representative, which might form the basis for their cessation. • Due to the characteristics of IMBA’s indices and the fast-moving nature of their underlying markets, IMBA has determined that it is not appropriate to set out criteria to guide the selection of alternative indices or to identify alternative indices. • However, if an index is discontinued, IMBA will consult with stakeholders in order to ensure a

	<p>policies and procedures are appropriate for a particular Benchmark.</p> <p>These written policies and procedures should be Published or Made Available to all Stakeholders.</p> <p>Administrators should encourage Subscribers and other Stakeholders who have financial instruments that reference a Benchmark to take steps to make sure that:</p> <ul style="list-style-type: none"> a) Contracts or other financial instruments that reference a Benchmark, have robust fall-back provisions in the event of material changes to, or cessation of, the referenced Benchmark; and b) Stakeholders are aware of the possibility that various factors, including external factors beyond the control of the Administrator, might necessitate material changes to a Benchmark. <p>Administrators' written policies and procedures to address the possibility of Benchmark cessation could include the following factors, if determined to be reasonable and appropriate by the Administrator:</p> <ul style="list-style-type: none"> a) Criteria to guide the selection of a credible, alternative Benchmark such as, but not limited to, criteria that seek to match to the extent practicable the existing Benchmark's characteristics (e.g., credit quality, 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 	<p>smooth transition, and will point out if any alternative indices are available.</p>
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	<p>contracts to migrate to an alternative Benchmark if necessary; and</p> <p>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.</p>	
<p>14. Submitter Code of Conduct</p>	<p>Where a Benchmark is based on Submissions, the following additional Principle also applies:</p> <p>The Administrator should develop guidelines for Submitters ("Submitter Code of Conduct"), which should be available to any relevant Regulatory Authorities, if any and Published or Made Available to Stakeholders.</p> <p>The Administrator should only use inputs or Submissions from entities which adhere to the Submitter Code of Conduct and the Administrator should appropriately monitor and record adherence from Submitters. The Administrator should require Submitters to confirm adherence to the Submitter Code of Conduct annually and whenever a change to the Submitter Code of Conduct has occurred.</p> <p>The Administrator's oversight function should be responsible for the continuing review and oversight of the Submitter Code of Conduct.</p> <p>The Submitter Code of Conduct should address:</p> <ul style="list-style-type: none"> 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 who report(s) data or information and the authorization of such person(s) to report market data on behalf of a Submitter; 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 	<p>Several IMBA indices or index families rely on submissions of input data from Contributors.</p> <p>In such cases IMBA has established a Contributor Code of Conduct that specifies the data to be submitted, formatting and timing of the submission, identities of individuals involved in the submission, etc. as required under BMR.</p> <p>Contributors are required to attest to their compliance with the Code of Conduct annually, regular reviews of compliance take place with Contributors, and in case of breaches IMBA has the right to reject the submission.</p>

	<p>g) The Submitters' internal systems and controls, which should include:</p> <ul style="list-style-type: none"> i. Procedures for submitting inputs, 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 Judgment, including documentation requirements; 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 by effectively addressing conflicts of 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 	
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	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 external source the Administrator 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.	<p>Most IMBA indices will use input data provided by regulated venues or internal evaluated pricing.</p> <p>The IHS Markit business performing the data collection and index calculation maintains a due diligence policy and business continuity plan. IMBA regularly reviews these to satisfy itself that the management of data risk is appropriate. If IMBA creates or administers indices for which non-regulated pricing data is required, suitable monitoring procedures will be put into place to ensure the reliability of that input data. In case of contributions such procedures and requirements will be documented and attested to in Contributor Code of Conduct.</p>

Accountability

Principle	Description	IHS Markit
16. Complaints Procedures	<p>The Administrator should establish and Publish 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 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.</p> <p>The complaints procedures policy should:</p> <ol style="list-style-type: none"> Permit complaints to be submitted through a user-friendly complaints process such as an electronic Submission process; 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 may be or may have been involved in the subject of the complaint, advising the complainant and other relevant parties of the outcome of its investigation within a reasonable period and retaining all records concerning complaints; 	<p>IMBA has an established complaints procedure and published a Complaints Policy that is available on the IMBA website.</p> <p>The Policy sets out:</p> <ul style="list-style-type: none"> What constitutes a complaint. How a complaint can be made. How a complaint will be investigated. What actions may follow its investigation. How a complainant can request that the results of the investigation are reviewed, if considered unsatisfactory. <p>Any changes to an index methodology that are considered as a result of a complaint will be subject to the engagement processes and approvals processes detailed as per principles 12 and 13.</p>

	<p>c) Contain a process for escalating complaints, as appropriate, to the Administrator's governance body; and</p> <p>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 years, subject to applicable national legal or regulatory requirements.</p> <p>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.</p>	
17. Audits	<p>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.</p> <p>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.</p>	<p>Annual IOSCO Audits</p> <p>On an annual basis, relevant IMBA Benchmark families engage an external auditor with appropriate experience and capability to carry out a reasonable assurance engagement in respect of the fairness of the Description that IMBA have put in place to address the IOSCO Principles.</p> <p>The external auditor performs a reasonable assurance engagement in accordance with International Standard on Assurance Engagements 3000 (revised) 'Assurance engagements other than audits or reviews of historical financial information' (ISAE 3000), issued by the International Auditing and Assurance Standards Board and having regards to TECH 02/14 FSF: 'Assurance Reports on Benchmarks and Indices' issued by ICAEW.</p> <p>The objective of a reasonable assurance engagement is to obtain such appropriate evidence as considered sufficient to enable the auditor to express an assurance opinion as to whether, in all material respects, the Description is fairly stated and whether for the in-scope year, the processes and controls identified in the Description operated as described.</p> <p>The reasonable assurance procedures comprise primarily of:</p>

		<ul style="list-style-type: none"> • Making enquiries of management that support the benchmark price assessment process; • Observing specific policies, processes and controls and inspecting relevant documentation prepared and published by you; and • Tests of relevant processes and controls to assess the operation throughout the in-scope year.
<p>18. Audit Trail</p>	<p>Written records should be retained by the Administrator for five years, subject to applicable national legal or regulatory requirements on:</p> <ol style="list-style-type: none"> All market data, Submissions and any other data and information sources relied upon for Benchmark determination; The exercise of Expert Judgment made by the Administrator in reaching a Benchmark determination; Other changes in or deviations from standard procedures and Methodologies, including those made during periods of market stress or disruption; The identity of each person involved in producing a Benchmark determination; and Any queries and responses relating to data inputs. <p>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.</p>	<p>The IHS group businesses that are responsible for the calculation of the indices retain a record of relevant input data, supporting documentation, index review and index calculation decisions made.</p> <p>IMBA will retain a record of all decisions taken by Product Level Committees, the Board and the BOC, including any exercise of expert judgement or deviations from the published index methodology.</p> <p>Changes to methodologies will be recorded within the relevant index manuals. Relevant records are retained for a period of not less than five years.</p>
<p>When a Benchmark is based on Submissions, the following additional Principle also applies:</p>		
<p>Submitters should retain records for five years subject to applicable national legal or regulatory requirements on:</p> <ol style="list-style-type: none"> The procedures and Methodologies governing the Submission of inputs; The identity of any other person who submitted or otherwise generated any of the data or information provided to the Administrator; Names and roles of individuals responsible for Submission and Submission oversight; Relevant communications between submitting parties; Any interaction with the Administrator; Any queries received regarding data or information provided to the Administrator; Declaration of any conflicts of interests and aggregate exposures to Benchmark related instruments; Exposures of individual traders/desks to Benchmark related instruments in order to facilitate audits and investigations; and Findings of external/internal audits, when available, related to Benchmark Submission remedial actions and progress in implementing them. 		
<p>19. Cooperation with Regulatory Authorities</p>	<p>Relevant documents, Audit Trails and other 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 handed over promptly upon request.</p>	<p>IMBA responds promptly and appropriately to enquiries and requests for information or documentation from regulatory authorities.</p>

Document Management

Document Name	IOSCO Statement of Compliance
Document Owner	IHS Markit Regulatory Compliance Group
Document Classification	Public
Original Published Date	06 October 2020
Approved By	Head of Regulatory Compliance and Risk

ABOUT IHS MARKIT

IHS Markit (NYSE: INFO) is a world leader in critical information, analytics and expertise to forge solutions for the major industries and markets that drive economies worldwide. The company delivers next-generation information, analytics and solutions to customers in business, finance and government, improving their operational efficiency and providing deep insights that lead to well-informed, confident decisions. IHS Markit has more than 50,000 key business and government customers, including 85 percent of the Fortune Global 500 and the world's leading financial institutions. Headquartered in London, IHS Markit is committed to sustainable, profitable growth.

CUSTOMER CARE AMERICAS

T +1 800 447 2273
+1 303 858 6187 (Outside
US/Canada)

CUSTOMER CARE EUROPE, MIDDLE EAST, AFRICA

T +44 1344 328 300

CUSTOMER CARE ASIA PACIFIC

T +604 291 3600

E CustomerCare@ihsmarkit.com

CONTACT US

For more information, including methodology documents please visit <https://ihsmarkit.com/products/indices.html> or contact us at indices@ihsmarkit.com

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