

Principles for Financial Benchmarks

Consultation Report



OICU-IOSCO

**THE BOARD
OF THE
INTERNATIONAL ORGANIZATION OF SECURITIES COMMISSIONS**

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This paper is for public consultation purposes only. It has not been approved for any other purpose by the Board of IOSCO or any of its members.

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Foreword

The Board of the International Organization of Securities Commissions (IOSCO) has published this Consultation Report.

This Consultation Report is prepared by the IOSCO Task Force on Financial Market Benchmarks (Task Force). IOSCO seeks the views of stakeholders on the draft principles questions posed in this report to inform its final principles on financial Benchmarks. This report also discusses feedback on a *Consultation Report on Financial Benchmarks*,¹ published by IOSCO on 11 January 2013.

Key terms are defined in the Glossary in Annex A.

How to Submit Comments

Comments may be submitted by one of the three following methods **on or before 16 May**. To help us process and review your comments more efficiently, please use only one method.

Important: All comments will be made available publicly. Anonymous comments will not be accepted. Comments will be converted to PDF format and posted on the IOSCO website. Personal identifying information will not be edited from submissions.

1. Email

- Send comments to BenchmarkPrinciplesconsultationresponses@IOSCO.org
- The subject line of your message must indicate ***Financial Benchmarks***.
- If you attach a document, indicate the software used (e.g., WordPerfect, Microsoft WORD, ASCII text, etc) to create the attachment.
- Do not submit attachments as HTML, PDF, GIFG, TIFF, PIF, ZIP or EXE files.

1. Facsimile Transmission

Send by facsimile transmission using the following fax number: + 34 (91) 555 93 68.

2. Paper

Send 3 copies of your paper comment letter to:

¹ CR01/13 Financial Benchmark's, Report of the Board of IOSCO, 10 January 2013. Available at: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD399.pdf>

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Your comment letter should indicate prominently that it is a *Public Comment on **Financial Benchmark Principles***.

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Chapter 1 Introduction

Background

On 11 January 2013 the International Organization of Securities Commissions (IOSCO) published a *Consultation Report on Financial Benchmarks*,² which requested comment from the public on policy issues arising from the work of its Board Level Task Force on Financial Market Benchmarks. The IOSCO Board created the Task Force in light of investigations and enforcement actions regarding attempted manipulation of major interest rate benchmarks.³

² CR01/13 Financial Benchmark's, Report of the Board of IOSCO, 10 January 2013. Available at: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD399.pdf> .

³ Japan FSA Press Releases (12 April 2013) regarding administrative action against RBS Securities Japan Limited available at: <http://www.fsa.go.jp/en/news/2013/20130412.html>

CFTC Press Release (19 December 2012) describing issuance of Order settling charges against UBS AG and UBS Securities Japan Co., Ltd. available at: <http://www.cftc.gov/PressRoom/PressReleases/pr6472-12>;

CFTC Order in the Matter of UBS AG and UBS Securities Japan Co., Ltd. available at: <http://www.cftc.gov/ucm/groups/public/@lrenforcementactions/documents/legalpleading/enfubsorder121912.pdf> ;

UK FSA Press Release (19 December 2012) relating to the UBS fine for significant failing in relation to LIBOR and EURIBOR, available at: <http://www.fsa.gov.uk/library/communication/pr/2012/116.shtml>;

the FSA Final Notice (19 December 2012) <http://www.fsa.gov.uk/static/pubs/final/ubs.pdf> ;

Swiss FINMA press release on UBS <http://www.finma.ch/e/aktuell/Pages/mm-ubs-libor-20121219.aspx> ;

CFTC Press Release (27 June 2012) describing issuance of Order settling charges against Barclays PLC available at: <http://www.cftc.gov/PressRoom/PressReleases/pr6289-12>; CFTC Order in the matter of Barclays PLC (27 June 2012) available at:

<http://www.cftc.gov/ucm/groups/public/@lrenforcementactions/documents/legalpleading/enfbarclaysorder062712.pdf> ;

UK FSA press release regarding fine for misconduct related to LIBOR (27 June 2012) available at: <http://www.fsa.gov.uk/library/communication/pr/2012/070.shtml>;

the FSA Final Notice (27 June 2012) available at: <http://www.fsa.gov.uk/static/pubs/final/barclays-jun12.pdf>

Japan FSA Press Releases (16 December 2011) regarding administrative action against UBS Securities Japan Ltd and UBS AG, Japan Branches available at: <http://www.fsa.go.jp/en/news/2011/20111216-3.html>;

administrative action on Citigroup Global Market Japan Inc. available at:

<http://www.fsa.go.jp/en/news/2011/20111216-2.html> ; and administrative action against Citibank Japan Ltd. available at: <http://www.fsa.go.jp/en/news/2011/20111216-1.html>

Those investigations and enforcement actions raised concerns over the fragility of certain Benchmarks – in terms of both their integrity and the continuity of provision – and have the potential to undermine market confidence, which may affect the real economy and investors.

The Consultation Report discussed concerns regarding the potential inaccuracy or manipulation of Benchmarks and identifies Benchmark-related policy issues across securities and derivatives and other financial sectors including:

- Standards that should apply to methodologies for Benchmark calculation;
- Credible governance structures to address conflict of interests in the Benchmark setting process at Submitters; and
- The appropriate level of transparency and openness in the Benchmarking process.

The Consultation Report also considered issues that Market Participants might confront when seeking to make the transition to a new or different Benchmark. For example, where there is insufficient data to support a Benchmark, Market Participants should consider the possibility of transitioning away from such a Benchmark.

On 11 March 2013 IOSCO published over 50 comment letters that had been submitted in response to the Consultation Report.⁴ These comments were considered by the Task Force in the development of the draft principles. A feedback statement summarizing these comments is included below as part of this Report. See Annex B.

The Task Force held a stakeholder meeting on 21 February 2013 at the Financial Services Authority (FSA) in London. A stakeholder meeting was also held on 26 February 2013 at the U.S. Commodity Futures Trading Commission (CFTC). These meetings, along with bilateral engagement with Stakeholders by Task Force members, provided valuable insights from a variety of Benchmark Administrators, exchanges and entities that use financial instruments and contracts that reference Benchmarks.

During the course of this work, the Task Force also has taken into consideration the related work undertaken within a variety of regulatory and industry fora. These include:

Regulatory Work streams:

- The IOSCO *Principles for Oil Price Reporting Agencies* (“PRA Principles”) which was undertaken with IOSCO Committee 7 on Commodity Futures markets;

⁴ Available at: <http://www.iosco.org/news/pdf/IOSCONEWS271.pdf>

- Significant reviews of domestic interbank Benchmarks, notably the CFTC *UBS Order*, the CFTC *Barclays Order*⁵ and FSA Order, and the *Wheatley Review* of LIBOR final report;⁶
- The European Commission's Consultation on the regulation of indices;⁷
- The European Securities and Markets Authority's/European Banking Association Consultation on principles for Benchmark-setting processes;⁸ and
- The BIS Board of Governors Economic Consultative Committee.⁹

Industry Work streams:

- Best practice standards for conducting Benchmark price assessments issued by the Global Financial Markets Association (GFMA).¹⁰
- The proposal by Argus Media, ICIS and Platts for a price reporting code for independent price reporting agencies (IPRO).¹¹

Objective of IOSCO's Benchmark Work

As stated in the January 2013 Consultation Report, IOSCO's objective is to create an overarching framework of principles for Benchmarks used in financial markets.¹² Specifically, the IOSCO Board seeks to articulate policy guidance and principles for Benchmark-related activities that will address conflicts of interest in the Benchmark setting process, transparency and openness to consider issues related to transition.

To inform this work, IOSCO's Task Force initially reviewed a selection of Benchmarks, representing a number of asset classes and jurisdictions. That review, as well as IOSCO's

⁵ See CR01/13 *Financial Benchmarks*, IOSCO, January 2013, supra fn 2.

⁶ Wheatley Review of LIBOR: Final Report (September 2012) http://cdn.hm-treasury.gov.uk/wheatley_review_libor_finalreport_280912.pdf

⁷ Consultation on a possible Framework for the Regulation of the Production of Indices serving as Benchmarks in Financial and Other Contracts (5 September 2012) http://ec.europa.eu/internal_market/consultations/docs/2012/benchmarks/consultation-document_en.pdf

⁸ European Securities and Markets Authority (ESMA) and European Banking Authority (EBA) Consultation Paper: *Principles for Benchmarks-Setting Processes in the EU* (January 2013) <http://www.esma.europa.eu/system/files/2013-12.pdf>.

⁹ Press Release available at: <http://www.bis.org/press/wnew.htm>. See *Towards better reference rate practices: a central bank perspective* (March 18, 2013) available at: <http://www.bis.org/publ/othp19.pdf>.

¹⁰ GFMA *Updated Principles for Financial Benchmarks* (November 2012)

¹¹ *Draft IPRO CODE* (April 30, 2012).

¹² CR01/13 *Financial Benchmarks*, Report of the Board of IOSCO, 10 January 2013 at p. 7, supra fn 2.

consideration of Benchmark issues in the context of oil price reporting agencies and in work being conducted in other fora, helped identify certain broad, generic risks to the credibility of Benchmarks arising from vulnerabilities in Benchmarks' Methodology, transparency and governance arrangements.¹³

As discussed in the Consultation report, these risks arise from incentives stemming from conflicts of interests, which may be amplified when discretion, and Expert Judgement is used in Benchmark determination. The following factors should be taken into account when assessing the risk of the Benchmark:

1. Submissions to Benchmarks: As described in the January Consultation, there are a variety of methods by which different forms of data are developed, collected and transmitted to Administrators. The process of submission may create additional vulnerabilities to the determination process if not addressed by appropriate controls and policies. Where the Submitters are Market Participants with stakes in the level of Benchmark, additional conflicts of interests and incentives to manipulate are present in the determination process. Other vulnerabilities such as voluntary and/or selective Submissions, the varied composition of Submitters, and discretion in the selection of data to be submitted also add further layers of conflicts of interest and opportunities for abusive conduct that might affect the reliability of the Benchmark.
2. Content and transparency of Methodologies: Inadequate detail of Methodology procedures and policies complicates the ability of Stakeholders to understand the credibility of a Benchmark. A lack of transparency creates the opportunity for abusive conduct to influence Benchmark determinations. The level of transparency also creates opportunities for gaming Submissions to influence a Benchmark (which necessitates strong internal controls).¹⁴
3. Governance processes: The enforcement cases reviewed by the Task Force illustrate that conflicts of interest at both the Submitter and Administrator can create incentives for abusive conduct. These conflicts can arise within the variety of structures that may exist in connection with Benchmark Submission and compilation processes. For example, persons operating within Submitters, Administrators, Calculation Agents and other third parties may attempt to manipulate a Benchmark by submitting false or misleading data or attempting to influence personnel at the Administrator who are responsible for the exercise of Expert Judgment.

The draft principles have been developed, and should be read collectively, to address these vulnerabilities.

¹³ See Appendix B in CR01/13 Financial Benchmark's, Report of the Board of IOSCO, 10 January 2013, supra fn 2. As stated in the January 2013 Consultation Report on p.8, IOSCO's Task Force did not make recommendations relating to any given Benchmark.

¹⁴ See discussion at pages 19-20 in CR01/13 *Financial Benchmarks*, IOSCO, January 2013, supra fn 2 .

Scope

As noted above, IOSCO's objective has been to create an overarching framework of principles for Benchmarks used in financial markets. Consistent with this objective, the definition of Benchmark adopted for these principles is very broad. However, Benchmark Administration by a National Authority used for public policy purposes (e.g., labour, economic activity, inflation or consumer price indices) is not within the scope of the principles. Benchmarks where a National Authority acts as Mechanical Calculation Agent are within the scope of the principles.

However, because the universe of Benchmarks is large and diverse - a point repeatedly stressed in the comment letters and Stakeholder meetings - the Task Force determined to develop a set of high level principles that would be applicable to Benchmarks generally, and a subset of more detailed principles that are intended to address Benchmarks having specific risks arising from their reliance on Submissions (principles 4, 10, 13 and 17) and/or ownership structures (Principles 2, 5 and 16), as described above.

Implementation

Benchmark Administrators Should Adopt the Recommended Practices

The principles should be understood as a set of recommended practices that should be implemented by Benchmark Administrators and Submitters. The application of these principles should be proportional to the size, and risks posed by each Benchmark Administrator and benchmark setting process.

IOSCO Members should encourage implementation of the principles including through regulatory action where appropriate.

The majority of IOSCO members do not regulate Benchmark Administrators or Submitters. Nor does this Report make specific recommendations with respect to any particular Benchmarks. Nonetheless, IOSCO members should consider whether regulatory action (or recommendations for action by other relevant National Authorities in their own jurisdiction) may be appropriate to encourage implementation of the principles. A policy decision in this regard will depend upon, among others, the:

- Facts and circumstances of Benchmark activity in a particular IOSCO member's jurisdiction;
- Impact of such activity on the IOSCO member's regulatory responsibilities;
- Investor and retail usage;
- Economic and financial stability impacts of such activity;

- Existing review and approval authority over securities and derivatives that reference Benchmarks,¹⁵
- Allocation of regulatory responsibility within the jurisdiction; and the
- IOSCO members' determination as to the need for and likely effectiveness of any policy changes.

The factors discussed in the January 2013 Consultation Report on drawing regulatory distinctions are also pertinent to this inquiry.¹⁶ Moreover, different approaches may be appropriate for various Benchmarks.

Principles are Not Intended to Supersede Existing National Laws

The principles are not intended to supersede existing laws, regulations or relevant regulatory or supervisory frameworks in specific jurisdictions; including any IOSCO principles or undertakings agreed with Regulatory Authorities relating to a specific type of Benchmark, or a related activity. Rather these principles are intended to provide guidance to Administrators, Submitters and regulators and supplement existing IOSCO principles.

Evaluation

Following the publication of final principles, IOSCO intends to review within an 18 month period the extent to which the Principles have been implemented by obtaining the input of Stakeholders, Market Authorities and, as appropriate, Benchmark Administrators.

¹⁵ The January 2013 Consultation Report noted that the *IOSCO Objectives and Principles of Securities Regulation* provide that a regulator should be informed of the types of securities and products to be traded on an exchange or trading system and review or approve the rules governing the trading of the product. FRO8/11 *Methodology for Assessing Implementation of the IOSCO Objectives and Principles of Securities Regulation*, October 2011, Principle 33, key issue 4, products and participants at p. 207.

¹⁶ See discussion at pages 34-37 in CR01/ *Financial Benchmarks*, IOSCO, January 2013, supra fn 12 .

Chapter 2 –Principles for Financial Benchmarks

Summary of the Principles

These principles are intended to promote the reliability of Benchmark determinations, and address governance, Benchmark quality and accountability mechanisms. Although the principles set out uniform expectations, IOSCO does not expect a *one-size-fits-all* method of implementation to achieve these objectives. For example, differences in methodological approach or in the specific measures implemented by Administrators to obtain *bona-fide* data and other information are consistent with the principles. Moreover, nothing in these principles is intended to restrict an Administrator from adopting its own unique Methodologies or from adapting their Methodologies to changing market conditions.

Governance:

These principles are intended to ensure that Administrators will have appropriate governance arrangements in place in order to protect the integrity of the Benchmark determination process and to address conflicts of interest. Specifically, these principles require:

- The retention by the Administrator of primary responsibility for all aspects of the Benchmark determination process, such as the development and compilation of a Benchmark and establishing credible and transparent governance, oversight and accountability procedures. This principle makes clear that regardless of the particular structure for Benchmark compilation and administration, there must be an overall entity which is responsible for the integrity of the Benchmark. **[1. Overall Responsibility of the Administrator]**
- The adoption by the Administrator (and its oversight function) of clearly defined written arrangements setting out the roles and obligations of the parties involved in the Benchmark determination and the monitoring of any third party's compliance with those arrangements. The principle reflects the concern that any outsourcing of functions should be subject to oversight by the Administrator. Note: This principle applies only where activities relating to the Benchmark determination process are undertaken by third parties – for example with respect to collection of inputs, or where a third party acts as Calculation Agent or publisher of the Benchmark. **[2. Oversight of Third Parties]**
- The documentation, implementation and enforcement of policies and procedures for the identification, disclosure, management and avoidance of conflicts of interest, including the disclosure of any material conflicts of interest to Stakeholders and any relevant Regulatory Authority. The framework should be appropriately tailored to the level of existing or potential conflicts of interest identified by the Administrator and should seek to mitigate existing or potential conflicts of interest created by the ownership or control structure or due to other interests arising from the Administrators' staff or wider group in relation to Benchmark determinations. This principle is intended to address the

vulnerabilities that create incentives for Benchmark manipulation. **[3. Conflicts of Interest for Administrators]**

- An appropriate control framework at the Administrator for the process of determining and distributing the Benchmark, which should be appropriately tailored to the materiality of the potential or existing conflicts of interest identified, and to the nature of Benchmark inputs and outputs. The control framework should be documented and made available to Stakeholders and relevant Regulatory Authorities. Among other things, a control framework should include an effective whistleblowing mechanism in order to facilitate early awareness of potential misconduct. **[4. Control Framework for Administrators]**
- An oversight function to review and provide challenge on all aspects of the Benchmark determination process, which should be appropriate to the Benchmark in question (i.e., including its size, scale and complexity) and provide effective oversight of the Administrator. The oversight function and its composition 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. A separate committee or other appropriate governance arrangements should carry out the oversight function. **[5. Internal Oversight]**

Quality of the Benchmark:

These principles are intended to promote the quality and integrity of Benchmark determinations through the application of design factors that result in a Benchmark that reflects a credible market for an Interest measured by the Benchmark. The principles also clarify that a variety of data may be appropriately used to construct a Benchmark, as long as the Data Sufficiency principle is met (i.e., based on an active market). Specifically, these principles require:

- The design of Benchmarks should take into account generic design factors that are intended to result in a reliable representation of the economic realities of the Interest the Benchmarks seeks to measure and to eliminate factors that might result in a distortion of the price, rate, index or value of the benchmark. The factors presented are generic and non-exclusive illustrations. **[6. Benchmark Design]**
- The data used to construct a Benchmark should be based on prices, rates, indices or values that have been formed by the competitive forces of supply and demand and be anchored by observable transactions entered into at arm's length between buyers and sellers in the market for the Interest the Benchmark measures. This principle recognizes that *bona-fide* observable transactions in markets provide a level of confidence for the prices or values used as the basis of the Benchmark are credible.

The principle does not prohibit the use of non-transactional data such as bids and offers, or adjustments based on Expert Judgment, as an adjunct or supplement to transactional

data.¹⁷ The principle does not prohibit the use of non-transactional data for 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. **[7. Data Sufficiency]**

- The establishment of clear guidelines regarding the hierarchy of data inputs and the exercise of Expert Judgment used for the determination of Benchmarks. This principle is intended to make transparent to users the manner in which data and Expert Judgment may be used for the construction of a Benchmark. This principle is not intended to create a rigid checklist or otherwise 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, set out in the Benchmark Methodology, provided that the Data Sufficiency principle is met. **[8. Hierarchy of Data Inputs]**
- The periodic review by the Administrator of 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 (e.g., the Interest has diminished or such that it can no longer function as the basis for a credible Benchmark). In order to facilitate Stakeholders' understanding of the viability of a Benchmark, a summary of such reviews should be published where material revisions have been made to a Benchmark, including the rationale for the revisions. **[9. Periodic Review]**

Quality of the Methodology:

These principles are intended to promote the quality and integrity of Methodologies by setting out minimum information that should be addressed within a Methodology, which should be published so that Stakeholders may understand and make their own judgments concerning the overall credibility of a Benchmark. The Methodology also addresses the need for procedures that control when material changes are planned, as a means of alerting Stakeholders to these changes that might affect their positions, financial instruments or contracts.

The principles also establish that Administrators should have credible policies in case a Benchmark may cease to exist or Stakeholders need to transition to another Benchmark. These policies are intended to encourage Administrators and Stakeholders to plan prospectively for the possible cessation of a Benchmark.

¹⁷ As noted in the January 2013 initial consultation report, a low liquidity market that reflects the commercial realities of a market and functions as a price discovery market could support a Benchmark consistent with this principle, even though non-transactional data such as verifiable (firm) bids and offers might be used as an adjunct in compiling a benchmark. See Discussion at pages 40-42 in CR01/13 *Financial Benchmarks*, IOSCO, January 2013, supra fn 12 .

This set of principles address vulnerabilities in the submission process (e.g., conflict of interest, improper communication between submitters and Administrators, selective submission of data) by outlining the responsibilities that should be undertaken by Submitters (i.e., a Submitter Code of Conduct). The principles also make clear the Administrator’s responsibilities to have internal controls over the Administrator’s collection of data from regulated sources. Specifically, these principles require:

The documentation and publication of the Methodology used to make Benchmark determinations, with 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. **[10. Content of the Methodology]**

- The publication of the rationale of any proposed material change in its Methodology, and procedures for making such changes. These procedures should clearly define what constitutes a material change, and the method and timing for consulting or notifying Subscribers (and other Stakeholders where appropriate, taking into account the breadth and depth of Benchmark use), of changes. **[11. Changes to the Methodology]**
- Clearly 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 function. 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 policies and procedures are appropriate for a particular Benchmark. Administrators should encourage Subscribers and Stakeholders to have robust fall-back provisions in contracts or financial instruments that reference a benchmark **[12. Transition]**
- The development of guidelines for Submitters (Submitter Code of Conduct), which should be Made Available to Stakeholders and any relevant Market Authorities. Note: This principle is only applicable where a Benchmark is based on Submissions. **[13. Submitter Code of Conduct]**
- Appropriate internal controls over the Administrator’s data collection and transmission processes – when an Administrator collects data directly from a Regulated Market, Exchange or other data aggregator – which address the process for selecting the source, collecting the data and protecting the integrity and confidentiality of the data. **[14. Internal Controls over Data Collection]**

Accountability:

These principles establish complaints processes, documentation requirements and audit reviews that are intended to provide evidence of compliance by the Administrator with its quality

standards, as defined by these principles and its own policies. The principles also include a requirement to make the foregoing information available to relevant Market Authorities. Specifically, these principles require:

- The establishment and publication of a written complaints policy, by which Stakeholders may submit complaints 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 and other Administrator decisions in relation to a Benchmark determination. The principle is intended to promote the reliability of benchmark determinations through Stakeholder input and alert Market Authorities to possible factors that might affect the reliability of determinations. **[15. Complaints procedures]**
- The appointment of 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 the requirements of the principles. The frequency of audits should be proportionate to the size and complexity of the Administrator's operations. Under certain circumstances (i.e., appropriate to the level of existing or potential conflicts of interest identified by the Administrator) an Administrator should appoint an independent external auditor to periodically review and report on the Administrator's adherence to its stated Methodology criteria. These provisions are intended to promote compliance with the principles and provide confirmation to relevant Market Authorities and Stakeholders of such compliance. **[16. Audits]**
- The retention of written records by the Administrator for five years, subject to applicable national legal or regulatory requirements. This principle is intended to safeguard necessary documents for Audits. Additional requirements apply for Benchmarks based on Submissions. **[17. Audit Trail]**
- Relevant documents, audit trails and other documents required by 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. This is intended to facilitate a Market Authority's ability to access information that might be needed to determine the reliability of a given Benchmark determination or to access information that might be needed to investigate misconduct. **[18. Cooperation with Regulatory Authorities]**

Principles for Benchmarks

Governance

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

1. Overall Responsibility of the Administrator

The Administrator should retain primary responsibility for all aspects of the Benchmark determination process. For example, this includes:

- 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 related determination process, including contingency measures in the event of absent or insufficient inputs, market stress or disruption, failure of critical infrastructure, or other relevant factors; and
- d) 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.

2. Oversight of Third Parties

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

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

3. Conflicts of Interest for Administrators

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

Administrators should disclose any material conflicts of interest to their users and any relevant Regulatory Authority, if any.

The framework should be appropriately tailored to the level of existing or potential conflicts of interest identified and the risks that the benchmark poses and should seek to ensure:

- a) Existing or potential conflicts of interest do not inappropriately influence Benchmark determinations;
- b) Personal interests and connections or business connections do not compromise the Administrator's performance of its functions;
- c) Segregation of reporting lines within the Administrator, where appropriate, to clearly define responsibilities and prevent unnecessary or undisclosed conflicts of interest or the perception of such conflicts;
- d) Adequate supervision and sign-off by authorised or qualified employees prior to releasing Benchmark determinations;
- 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;
- 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 may reasonably affect any Benchmark determinations; and
- 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.

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:

- 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

- b) Require an Administrator to disclose 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.

4. Control Framework for Administrators

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

This control framework should be reviewed periodically and updated as appropriate. The framework should address the following areas:

- a) Conflicts of interest in line with Principle 3 on Conflicts of Interests;
- b) Integrity and quality of Benchmark determination:
 - i. Arrangements to ensure that the quality and integrity of Benchmarks are maintained, in line with Principles 6 to 14 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 15 to 18; and
 - iv. Providing robust infrastructure and policies and procedures for the management of risk, including operational risk.
- c) Whistleblowing mechanism

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.

- d) Expertise
 - i. Ensuring Benchmark determinations are made by personnel who possess the relevant levels of expertise, with a process for periodic review of their competence; and
 - ii. Staff training, including ethics and conflicts of interest training, and continuity and succession planning for personnel.

Where a Benchmark is based on Submissions: Administrators should promote 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 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 inputs or Submissions should be made, and 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.

5. Internal Oversight

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

The oversight function should be carried out 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 requirements of this principle.

An Administrator should develop and maintain robust procedures regarding its oversight function and Make them Available to Stakeholders and any relevant Regulatory Authority. These should include:

- a) The terms of reference of the oversight function;
- b) Criteria to select members of the oversight function;
- c) The 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.

The responsibilities of the oversight function include:

- a) Oversight of the Benchmark design:
 - 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 11; 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.
- b) Oversight of the integrity of Benchmark determination and control framework:
 - i. Overseeing the management and operation of the Benchmark, including activities related to Benchmark determination undertaken by a third party;
 - ii. Considering the results of internal and external audits, and following up on the implementation of remedial actions highlighted in the results of these audits; and
 - iii. Overseeing any exercise of Expert Judgment by the Administrator and ensuring published Methodologies have been followed.

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 report any misconduct by Submitters of which it becomes aware, and any anomalous or suspicious Submissions to the relevant Regulatory Authorities, if any.

Quality of the Benchmark

6. Benchmark Design

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

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

- 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).

7. Data Sufficiency

The data used to construct a Benchmark determination should be sufficient to represent accurately and reliably 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.

Administrators may rely on non-transactional data such as offers and bids and adjustments based on Expert Judgment for purposes of constructing an individual Benchmark determination, but such data should only be used as an adjunct or supplement to transactional data. The principle

does not prohibit the use of non-transactional data for 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.

8. Hierarchy of Data Inputs

An Administrator should establish and Publish 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:

- 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.

Provided that the Data Sufficiency principle is met, this provision 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, set out in the Benchmark Methodology. For example, certain Administrators may decide to rely upon Expert Judgment in an illiquid market, when transactions may not be consistently available. In that case, the Administrator should retain flexibility to use the inputs it believes are appropriate to ensure the quality and integrity of its Benchmark.

9. Periodic Review

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.

The Administrator should publish a summary of such reviews where material revisions have been made to a Benchmark, including the rationale for the revisions.

Quality of the Methodology

10. Content of the Methodology

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

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 (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.

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 Made Available to Stakeholders and

any relevant Regulatory Authorities. Any provisions related to changes in composition, including notice periods should be made clear.

11. Changes to the Methodology

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

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

The Administrator should specify how changes to the Methodology will be scrutinised, e.g., through consultation with Stakeholders and/or the oversight function.

The Administrator should develop consultation procedures that are appropriate and proportionate to the breadth and depth of Benchmark use and the nature of the Stakeholders. Procedures should:

- a) Provide advance notice and a clear timeframe that gives Stakeholders sufficient opportunity to analyse and comment on the impact of such proposed changes, having regard to the Administrator's assessment of the overall circumstances; and
- b) Provide for Stakeholders' comments, and the Administrator's response to those comments, to be made accessible to all Stakeholders after any given consultation period, except where the commenter has requested confidentiality.

12. Transition

Administrators should have clear written policies and procedures, to address the need for possible cessation of a Benchmark, due to market structure change, product definition change, or any other condition that 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 policies and procedures are appropriate for a particular Benchmark.

These written policies and procedures should be Made Available to all Stakeholders.

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

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

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:

- 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, liquidity of the alternative market), differentials between Benchmarks, the extent to which an alternative Benchmark meets the asset/liability needs of Stakeholders, whether the revised Benchmark is investable, the availability of transparent transaction data, the impact on Stakeholders and impact of existing legislation;
- b) The practicality of maintaining parallel Benchmarks (*e.g.*, where feasible, maintain the existing Benchmark for a defined period of time to permit existing contracts and financial instruments to mature and Publish a new Benchmark) in order to accommodate an orderly transition to a new Benchmark ;
- c) The procedures that the Administrator would follow in the event that a suitable alternative cannot be identified;
- d) In the case of a Benchmark or a tenor of a Benchmark that will be discontinued completely, the policy defining the period of time in which the benchmark will continue to be produced in order to permit existing contracts to migrate to an alternative Benchmark if necessary; and
- e) The process by which the Administrator will engage Stakeholders and relevant Market and National Authorities, as appropriate, in the process for selecting and moving towards an alternative Benchmark, including the timeframe for any such action commensurate with the tenors of the financial instruments referencing the Benchmarks and the adequacy of notice that will be provided to Stakeholders.

13. Submitter Code of Conduct

Where a Benchmark is based on Submissions, the following additional principle also applies:

The Administrator should develop guidelines for Submitters (“Submitter Code of Conduct”), which should be Made Available to Stakeholders and any relevant Market Authorities.

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 when a change to the Submitter Code of Conduct has occurred.

The Administrator’s oversight function should be responsible for the continuing review and oversight of the Submitter Code of Conduct.

The Submitter Code of Conduct should address:

- 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
- g) The Submitters’ internal systems and controls, which should include:
 - 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, 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 any of its affiliates or any of their respective clients or customers.

14. 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.

Accountability

15. Complaints Procedures

The Administrator should 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.

The complaints procedures policy should:

- a) Permit complaints to be submitted through a user-friendly complaints process such as an electronic Submission process;
- b) Contain procedures for receiving and investigating a complaint made about the Administrator's Benchmark determination process on a timely and fair basis by personnel who are independent of any personnel who 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;
- c) Contain a process for escalating complaints, as appropriate, to the Administrator's governance body; and
- d) Require all documents relating to a complaint, including those submitted by the complainant as well as the Administrator's own record, to be retained for a minimum of five (5) years, subject to applicable national legal or regulatory requirements.

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

16. Audits

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

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 criteria.

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. The outcome of the external audit should be promptly published.

17. Audit Trail

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

- a) All market data, Submissions and any other data and information sources relied upon for Benchmark determination;

- b) The exercise of Expert Judgment 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;
- e) The identity of any other person who submitted or otherwise generated any of the above information; and
- f) Any queries and responses relating to data inputs.

When a Benchmark is based on Submissions, the following additional principle also applies:

Submitters should retain records for five (5) years subject to applicable national legal or regulatory requirements on:

- a) The procedures and Methodologies governing the Submission of inputs;
- b) Names and roles of individuals responsible for Submission and Submission oversight;
- c) Relevant communications between submitting parties;
- d) Any interaction with the Administrator;
- e) Any queries received regarding data or information provided to the Administrator;
- f) Declaration of any conflicts of interests and aggregate exposures to Benchmark related instruments;
- g) Exposures of individual traders/desks to Benchmark related instruments in order to facilitate audits and investigations; and
- h) Findings of external/internal audits, when available, related to Benchmark Submission remedial actions and progress in implementing them.

18. Cooperation with Regulatory Authorities

Relevant documents, audit trails and other documents required by 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.

Chapter 3 - Consultation Questions

1. **Equity indices:** Indices may be used to measure a wide range of underlying Interests, using a variety of calculation methodologies and inputs. In the specific case of equity indices, inputs are typically based on transactions concluded on Regulated Markets. In light of this: are there any principles or parts of the principles that cannot, or should not, be applied to equity indices? If so, please identify these principles and explain why their application is inappropriate.
2. **Additional measures to address risks resulting from Submission-based Benchmarks or ownership or control structures:** Additional measures have been specified within certain principles to address specific risks arising from a reliance on Submissions (principles 4, 10, 13 and 17) and/or from ownership or control structures (Principles 2, 5 and 16).
 - a. Should these additional requirements apply to Submitters and Administrators of all submission-based Benchmarks or Benchmarks with the specified ownership/control structures?
 - b. If not, please explain why all or some submission-based Benchmarks or Benchmarks with the specified ownership/control structures should be exempt.
3. **Notice Concerning Use of Expert Judgment:** Should Administrators be required to briefly describe and publish with each benchmark assessment:
 - a. a concise explanation, sufficient to facilitate a User's or Market Authority's ability to understand how the assessment was developed, terms referring to the pricing methodology should be included (e.g., *spread-based*, *interpolated/extrapolated* or *estimate-based*); and
 - b. a concise explanation of the extent to which and the basis upon which judgment (i.e. exclusions of data which otherwise conformed to the requirements of the relevant methodology for that assessment, basing assessments on spreads, interpolation/extrapolation or estimates, or weighting bids or offers higher than concluded transactions etc.), if any, was used in establishing an assessment.
4. **Revisions to the principles:** Please provide any suggested changes to specific principles or definitions of key terms set out in Annex A, including drafting proposals and rationale.

Are any other principles needed: Should principles to address any additional issues, risks or conflicts of interest be developed? Please provide a summary of the issue and drafting for the proposed principle.

ANNEX A

GLOSSARY OF KEY TERMS

Administrator: 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:

- a) The calculation of the Benchmark;
- b) Determining and applying the Benchmark Methodology; and
- c) Disseminating the Benchmark.

Arm's-length Transaction: A transaction between two parties that is concluded on terms that are not influenced by a conflict of interest (e.g., conflicts of interest that arise from a relationship such as a transaction between affiliates).

Audit Trail: 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.

Benchmark: The Benchmarks in scope of this report are prices, estimates, rates, indices or values that are:

- a) Made available to users, whether free of charge or for payment;
- 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;
- c) Used for reference for purposes that include one or more of the following:
 - 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
 - measuring the performance of a financial instrument.

Benchmark Administration: Includes all stages and processes involved in the production and dissemination of a Benchmark, including:

- a) Collecting, analysing and/or processing information or expressions of opinion for the purposes of the determination of a Benchmark;

b) 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

c) Dissemination to users, including any review, adjustment and modification to this process.

Benchmark Publisher: A legal entity publishing the Benchmark values, which includes Making Available such values to Subscribers, on the internet or by any other means, whether free of charge or not.

Bona-Fide: Refers to data where the parties submitting the data have executed, or are prepared to execute, transactions generating such data and the concluded transactions were executed at Arms-length from each other.

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 the Administrator.

Expert Judgment: Refers to the exercise of discretion by an Administrator 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.

Interest: Refers to any physical commodity, currency or other tangible goods, intangibles (such as an equity security, bond, futures contract, swap or option, interest rates, another index, including indexes that track the performance of a rule-based trading strategy or the volatility of a financial instrument or another index), any financial instrument on an Interest, which is intended to be measured by a Benchmark. Depending on the context, it is assumed that the word "Interest" also includes the market for such Interest.

Market Authority: A Regulatory Authority, a Self-Regulatory Organisation, a Regulated Market or a clearing organisation (as the context requires).

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.

National Authority: Refers to a relevant governmental authority such as a central bank, which

might not be a Market or Regulatory Authority, but which has responsibility for or a governmental interest in Benchmark policies.

Panel: Subset of Market Participants who are Benchmark Submitters.

Publish, Make Public or Make Available: Refers to the expectation that a party such as an Administrator should provide a document or notice to Stakeholders. The means by which such notice is made should be proportionate to the breadth and depth of Benchmark use by Stakeholders, as determined by the Administrator on a “best efforts” basis. Ordinarily, posting a document or notice on the Administrator’s web-site will meet this expectation.

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.

Self-Regulatory Organisation or SRO: An organisation that has been given the power or responsibility to regulate itself, whose rules are subject to meaningful sanctions regarding any part of the securities market or industry. This authority may be derived from a statutory delegation of power to a non-governmental entity or through a contract between an SRO and its members as is authorized or recognized by the governmental regulator. See *IOSCO Methodology*, Principle 9, p.50. <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD359.pdf>

Stakeholder: Refers to Subscribers and other persons or entities who own contracts or financial instruments that reference a Benchmark.

Submissions: Prices, values, rates or other information that is provided by a Submitter to an Administrator for the purposes of determining a Benchmark.

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.

ANNEX B

FEEDBACK STATEMENT

Process: IOSCO's consultation report (CR) on Financial Benchmarks, published on 11 January 2013 provided for a four (4) week consultation period on the issues presented in the report. The consultation closed on 11 February 2013.

Respondents: 54 responses were received, of which 16 came from industry associations and trade bodies, 12 from Benchmark/index Administrators, eight from exchanges and clearing houses, five from buy side firms and four from banks.

Scope and Definitions

Many respondents were concerned about the scope of the principles being too wide; and many noted that designing principles to such different Benchmark types would be difficult.

Differentiation The feedback was very strongly in favour of differentiating between different types of Benchmarks. It was argued that qualitative, estimate-based or panel-based Benchmarks should be subject to more detailed principles than ones based on transparent traded products (*objective*). Other respondents argued that the differentiation should be made between Benchmarks based on measurable sets of instruments and Benchmarks based on formulas and estimates.

Respondents also mentioned the need to tailor the principles to the underlying market structure of the Benchmarks, taking into consideration idiosyncratic characteristics (for the commodity, shipping, weather and real estate markets) and liquidity conditions of the interest, asset class or market being measured.

Equity Indices A few respondents wanted to exclude some Benchmarks from the scope of this work. Many equity index providers believed that their transparency, and use of highly liquid data from Regulated Markets make any additional Principles unnecessary and thus that they should be exempt from the IOSCO work.

Oil Price Reporting Agencies (PRAs) wanted to be exempt from such principles, arguing that the work conducted by IOSCO's Committee 7 on Commodity Futures Markets was still being implemented and needed more time before additional requirements were set.

Bilateral Benchmarks Many other respondents wanted to exclude smaller, private, bilateral or customised Benchmarks since they thought they were private contracts between buyers and sellers with limited impact on financial markets.

Performance Evaluation Finally, many respondents considered that Benchmarks used for performance evaluation should be excluded. This would be for asset managers, banks (to mark-to market) and clearing house valuation references.

Overall, there was a consensus that a gradation of requirements is needed to account for the diversity of Benchmark types and usage.

Methodology and roles and responsibilities

Most respondents agreed with the Consultation report's findings that the Administrator and Submitters should have controls in place to deal with the integrity of data inputs.

Controls for Submitters For Submitters, respondents argue that the control framework should include pre- and post-verification of data by internal supervisors or by audit functions. Some banking associations argue that traditional Chinese walls could mitigate risks posed by conflicted Submitters; whilst others propose independent data providers or submitters (exchanges or brokers) as a potential mitigation.

Many commenters did note that excessive requirements placed on submitters could deter participation in the Benchmark setting leading to deterioration of Benchmarks.

Submitter Participation To avoid this problem, the CR noted that mandatory Submission could be a solution in certain cases. Many commenters from banks, trade associations and industry bodies were against this proposal as it would place too much burden on submitters. However, they did note that incomplete Submissions could be mitigated by placing contractual arrangements between Submitters and Administrators to ensure that Submitters provide all the available data to the Administrator once they agree to participate.

Submission Criteria-Panels- In terms of Submission criteria and panels, many respondents note that a clear definition of the Submission criteria should be provided to Submitters for consistency. This could take the form of standardised contract sizes for Submissions, or templates for Submitters (real estate). For the panel sizes, respondents believe a balance should be struck between a large panel to be representative, and a smaller size to ensure sufficient market expertise is being considered.

Controls for Administrators For Administrators, measures to verify and check the data were considered useful; although many respondents noted that the Administrators did not always have access to all data nor the capacity and resources to analyse large data sets. As such, it was considered they should be able to access data on request.

The use of discretion by Administrators elicited different responses. Some commenters believed that allowing discretion ensured the Benchmark remained flexible; and, subject to adequate governance and transparency processes, discretion could be beneficial. Other respondents were against any Administrator discretion and demanded strong internal oversight and methodologies to prevent this.

Equity Indices Finally, equity index Administrators were keen to point out that many of the aspects presented in the control framework for Submitters was not applicable to cases (like theirs) where Submission takes the form of data feeds from Regulated Markets. In these cases, they felt controls on Submissions and excessive verification were not needed; and furthermore it could increase costs for their indices and users. Some other respondents did note the need for

Administrators to check the systems and controls of data feeds/exchange data they used as inputs.

Overall it was felt that while control frameworks as described was adequate for Submission based Benchmarks, other Benchmarks would not need such detailed controls in place.

Transparency

Transparency of Methodology Most commenters agreed that Methodologies should be publicly available on a website and allow users to assess credibility, representativeness, relevance and suitability of a Benchmark on an on-going basis. Commenters also generally agreed that published Methodologies should include detailed descriptions of how the Administrator intends to measure the given market, how it will choose index constituents, how those constituents will be weighted, and other relevant information about how the index will be calculated.

However, several commenters expressed reservations about commercial Administrators being required to provide too many details about their Methodology, citing concerns such as *free riding* and *front running* which could damage Administrators' intellectual property and index licenses. Other commenters disagreed and supported full transparency so as to allow for independent replication of the index by users.

Feedback and Notice of changes Commenters generally agreed that Administrators should provide advance notice and seek feedback from users and other interested parties on important methodological changes. Commenters also generally agreed that the Administrator should make final decisions on Methodology with feedback in mind. Some commenters proposed that Administrators provide notice publically and broadly to all potentially interested parties, while others suggested focusing consultations with users/Subscribers and independent oversight committees. However, a number of commenters also noted that circumstances could require prompt implementation of a change, in which case consultation with users and other Stakeholders could be impractical and inadvisable.

Contingency Measures Most commenters also agreed that contingency measures should be clearly defined and made publicly available in advance via website or other public documents. However, one commenter believed contingency measures should be made available to regulatory authorities, whose approval of such measures should be made public, but the actual measures should be kept from the public to mitigate potential manipulation. Most commenters agreed that contingency measures should address the absence of data from normal market data sources, market disruptions, and the failure of critical infrastructure.

Many commenters noted that it is impossible to foresee all eventualities, so where ad hoc reaction is necessary, administrators should discuss any contingency measures with relevant Stakeholders and governance committees and make such measures transparent to interested parties. Certain commenters also recommended that users establish contingency plans in their own contracts.

Benchmark Review. In terms of reviewing the Benchmark design, many commenters thought it would benefit from an annual or quarterly review; but others believed that that habitual or repeated significant changes to Benchmarks may not be advisable, due to the risk of disruption to outstanding contracts, and that a more gradual process would allow for the development of competing/or additional Benchmarks for new contracts. Some commenters felt that a uniform review period for all Benchmarks should not be established, but that the review period for each Benchmark should depend on the nature of the Benchmark and what is relevant and efficient for each market.

Governance and Conflicts of Interest

Most respondents believed that the consultation report captured the primary examples of generic conflicts of interest. However, many cautioned against a ‘one-size-fits approach’ highlighting that additional governance measures should be proportionate to the inherent risks of the Benchmarks. Most suggested that delineation should be drawn between Benchmarks based on subjective inputs (panel Submissions/surveys) and Benchmarks based on observable transactions or actionable quotes. The latter involves little discretion and are supplemented by clear and transparent prices. In particular, index providers and investment management associations highlighted that manipulation of the latter would be exceedingly difficult and costly, and additional governance measures would likely increased costs for end-users and investors.

Independent Oversight Committee: Many respondents agreed that the oversight committee should include independent parties and not be dominated by Benchmark administrators or Submitters. A few respondents however noted that given the diversity of types of Benchmarks, Administrators should be allowed discretion on the appropriateness of such a committee. Equity index providers and PRAs were of the view that Market Participants should not be included in an oversight committee as doing so would likely introduce significant conflicts of interest into existing mechanisms which have served the industry well so far. Several respondents highlighted that such oversight committees would not applicable to bespoke Benchmarks used for performance management between bilateral contracting parties. No responses were received regarding what should be the minimum level of independent representation on any oversight committee.

Internal/external Audits: Some respondents suggested that Administrators should be allowed discretion to assess the appropriateness of internal and/or external audits depending on the characteristics of the respective Benchmark. A few respondents suggested that the oversight committee should be responsible for determining the appropriate frequency of internal/external audits, taking into consideration the usage of the Benchmark and any concerns highlighted to the governance function.

Others suggested that internal and/or external audits should occur at least annually, with one respondent suggesting for internal audits twice a year supplemented by an annual external audit.

Self-certification: Some respondents believed that self-certification could be effective, subject to third party verification or regulation. Others believed that self-certification supplemented by internal audits could be a proportionate response as an alternative to external audits and/or direct

regulation. Several respondents suggested that self-certification should only be required for Benchmarks which are widely used, while a few suggested that self-certification would not be effective in the absence of formal regulatory oversight.

Regulation

Formal regulation Many respondents expressed concerns that the costs of regulating Benchmark Submission and Benchmark Administration would outweigh the benefits of such regulation, mainly restoring credibility and integrity to Benchmarks. Respondents felt that regulating these activities would discourage voluntary Submissions, lead to a reduction in the number of Benchmarks, and stifle innovation in the creation of new Benchmarks. Such outcomes could lead to Benchmarks that are not reflective of the underlying Interest, reduced competition, and fewer choices and increased costs for users of Benchmarks.

Regulatory Distinction Most respondents felt that all Benchmark Administrators should be subject to the same regulation. If distinction is to occur, then such distinction could be made on a case-by-case basis. The systemic importance of the Benchmark and the underlying asset class of the Benchmark are two additional factors that could be considered in determining the circumstances where an administrator should be regulated.

Unregulated Submitters A continuum of views was expressed on the oversight of Benchmarks in instances where submitters operate in an unregulated market and participation in Benchmark Submission is voluntary. Some respondents suggested the regulation of these markets, since activity in the unregulated markets could impact the Regulated Markets. Others suggested the creation of a code of conduct and scrutinizing the integrity and quality of Submissions, as possible oversight approaches for unregulated markets.

Self-Certification Respondents' views on the issue of self-certification were mixed. Some did not support self-certification while others did, either outright or with conditions. For the latter group of supporters they felt that self-certification could be effective if it was combined with stronger enforcement powers and/or monitoring and if the codes were tailored to the entities that they applied to (i.e., Submitters, Administrators). Some respondents felt self-certification against industry standards was not appropriate for survey-based or systemically important Benchmarks.

Code of Conduct Commenters disagreed on the need for a code of conduct for Submitters. While many commenters supported the idea, they cautioned that it would be difficult to articulate a single code applicable to all forms of submitters.

Many commenters expressed reservations that a code of conduct would create disincentives for data Submitters to enter into agreements with index providers. These commenters noted an unintended consequence of establishing a code of conduct for Submitters could be reducing the amount of information available. Some commenters believed the burden of supervision and examination of inputs should fall to the Administrator. However, one commenter believed that any voluntary code of conduct would be insufficiently weak, instead proposing further regulatory oversight over Submitters.

Most commenters noted that different codes of conduct would be necessary for different types of Benchmarks. Numerous commenters noted that a code of conduct would be unnecessary for equity indices where the inputs were based on actual reported prices that are publically available.

Some commenters believed that Benchmarks relying on committed quotes/expert judgment based Submissions should have more prescriptive codes of conducts for Submitters than transactional data based Benchmarks.

SRO Responses were mixed on the effectiveness of SRO oversight. Respondents thought SRO oversight was appropriate for Benchmarks based on transaction data and exchange listed Benchmarks and in situations where the regulatory framework cannot be easily applied to Benchmarking activities. This oversight approach, however, is inappropriate for global Benchmarks.

Users There was widespread agreement that users of Benchmarks should have a role in enhancing the quality of Benchmarks; however, respondents stressed that participation should be voluntary.

Data Sufficiency

Use of Transaction data The responses to questions surrounding the use of transactions in Benchmark construction were quite strong. A large group of respondents, representing index Administrators, banks and industry associations noted that the exclusive use of transactions could be inadequate for certain markets and even potentially misleading. In particular, they note that in markets with low liquidity, low transparency or markets which are not standardised or possess idiosyncratic factors, other inputs should be considered for Benchmark determination. They believe that a prescriptive hierarchy of data inputs may not be appropriate.

Some respondents mention that using only transactions in such markets may facilitate manipulation; and may cause the Benchmark to be more volatile.

Value of non-transaction based benchmarks Therefore many respondents see the value of using other inputs in markets with limited transaction data. The markets they mention are OTC markets, fixed income, real estate and shipping. By constructing such Benchmarks, they believe more transparency is added to these markets, which helps them to be more trade-able. Subject to adequate governance and transparency, respondents believe that such Benchmarks can provide a useful representation of underlying Interests.

Some respondents agreed that transactions should form the basis of Benchmarks, but they often agreed with the use of other types of inputs in case transactions were not available.

Transition

Transition Measures There was broad agreement among the commenters that Benchmarks should take prophylactic measures to mitigate the need for potential transition. Recommendations include:

- Ensuring there is flexibility within the Benchmark to remain resilient during periods of market stress;
- Applying good design principles so that Benchmarks reference a liquid market;
- Develop contingency plans for data collection during stressed periods, including a wide set of submitters/Market Participants;
- Develop alternate methodologies as a mean to reduce the possibility for disruption.

Commenters acknowledged that even with these measures, transitions are still not always avoidable. Accordingly, commenters were generally in accord that Administrators should develop prospectively transition policies. Regardless of the policies developed, commenters were in agreement that transitions raise significant administrative and legal issues and would require the participation (to varying degrees) of regulatory authorities.

Although there was broad support for the development of prospective policies and procedures to address possible transition, there was some disagreement on how these policies and procedures should be organized. Moreover, commenters noted that Benchmarks span a wide gamut of use, methodology and importance, and argued for flexibility in the design of transition policies and the avoidance of a *one-size-fits-all* approach. Some commenters suggested that *Living Wills* were most appropriate for systemically important Benchmarks.

Alternative Benchmarks In cases where there was a need to transition to an alternative Benchmark, commenters generally supported the factors mentioned in the Consultation Report to help identify a replacement Benchmark. However, there was significant support for having any alternative choice be market-led.

Benchmark users emphasized that those leading the transition effort should make sure alternatives satisfy the investment and risk exposure needs of those with living contracts and financial instruments; and accordingly, that the decision making process to select an alternative should be dominated by those with risk exposure to the Benchmark, not intermediaries.

Factors for smooth transition Commenters emphasized that clarity, credibility of process and adequacy of time were factors that could ensure a smooth transition. Other commenters stressed that transitions should be made over appropriate time periods to avoid market disruption, possibly with the Benchmark and alternatives both published, and that the volume of current activity will likely inform transition time, as well as maturity of legacy contracts. The conversion to the Euro was cited as an example that could be studied for lessons on smooth transitions.

Factors mentioned to be considered with respect to the timeframe for possible transition included: the size of legacy book, infrastructure requirements, size and diversity of current activity on existing Benchmark, balance sheet considerations, instrument liquidity, and hedging needs.

Legacy Contracts and transition. There was wide recognition that the existence of legacy trades constitutes a major issue with regard to any transitions, primarily because the scope of the

legacy book could be very wide with systemically important Benchmarks that have been written into many financial instruments. Several commenters stressed that that the potential litigation/instability flowing from a transition should be considered. In this connection, some commenters emphasized the need to have clarity in updated Master Agreements/Protocols for contract holders.

It was noted that the process for transition is often organic, gradual and slow, with some commenters suggesting that transitions may only need to be partial, with rates that continue to be liquid remaining. In this regard, one commenter suggested that if changes are too disruptive, it may be necessary to publish both old and new Benchmark simultaneously. Alternatively, it was suggested that a spread between old and new Benchmarks may have to be established. Other commenters similarly observed that it may be necessary to allow the legacy book to exist until it is extinguished, but to have a new Benchmark as an alternative for new transactions.