Review of the Implementation of IOSCO's Principles for Financial Benchmarks by Administrators of Euribor, Libor and Tibor

THE BOARD
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1. Overview of findings

This report sets out the findings of the review (**Review**) by the International Organisation of Securities Commissions (**IOSCO**) of the degree of implementation of IOSCO's Principles for Financial Benchmarks (**Principles**)[1] by the administrators of the:

- Euro Inter-Bank Offer Rate (**Euribor**);
- London Inter-Bank Offer Rate (**Libor**); and
- Tokyo Inter-Bank Offer Rate (**Tibor**).

This report was prepared by a **Review Team** constituted of IOSCO members. The membership of the Review Team is set out below.

Key findings

Significant reform progress

The Report finds that all three administrators have made significant progress in implementing the majority of the Principles.

Both completed and on-going reforms have raised the overall oversight, governance, transparency and accountability of the three administrators and their respective benchmarks. This has undoubtedly improved the quality and integrity of the benchmarks. These reforms have occurred in the context of regulatory, operational and organisational changes concerning all three administrators. Specifically:

- Euribor-EBF, as administrator of Euribor, has significantly reformed its governance and technical framework since January 2013 in line with the recommendations of the European Securities and Markets Authority (**ESMA**) and the European Banking Authority.[2] This has occurred in advance of recently announced changes that, if implemented, will provide for regulatory oversight of benchmarks in the European Union. Euribor-EBF has also been involved in an exercise with the European Central Bank to ascertain the feasibility of a fully transaction-based reference rate anchored in a broad set of wholesale unsecured borrowing transactions of banks.

- The administration and submission to Libor became activities regulated by the FCA in April 2013. Panel banks and individuals responsible for submissions to LIBOR are now approved and accountable to the UK Financial Conduct Authority (**FCA**). The Libor administrator changed from the BBA LIBOR Limited to ICE Benchmark

[1] IOSCO, *Principles for Financial Benchmarks, Final Report* (July 2013). Available at: http://www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf.

[2] Available at: http://www.esma.europa.eu/system/files/eba_bs_2013_001_euribor_-_recommendations_to_ebf.pdf

Administration Limited (**IBA**) as of February 2014. Panel banks are required to provide IBA with the data and expert judgment used to compose each benchmark determination.

- The Tibor administrator changed from the Japanese Banking Association (**JBA**) to its newly formed subsidiary, *Ippan Shadan Hojin* (or General Incorporated Association) JBA Tibor Administration (**JBATA**), on 1 April 2014. This change of administrator has been accompanied by a major reworking of the applicable policies. This has occurred in advance of recently announced legal changes that, if implemented, will provide for regulatory oversight of benchmarks in Japan in 2015.

Governance, accountability and transparency

Administrators have made good progress in implementing the governance-related Principles, reflecting the primary focus of reform processes to date (subject to the comment below on conflicts of interest). This is evident in the policies and processes now in place covering administrators' responsibility for their benchmarks, oversight of third parties, the structure and remit of their oversight functions and control frameworks and the codes of conduct that each have developed for those institutions that submit rates to the administrator.

Administrators have also mostly implemented the transparency and accountability Principles (although note the discussion below on the non-implementation of the Principles' requirements concerning transparency of determinations).

Conflicts of Interests

The management of conflicts of interests by administrators needs further attention by IBA and JBATA. In particular, IBA needs to consider how it defines a conflict of interest while JBATA needs to ensure disclosure of all material conflicts of interest.

Further work needed on benchmark methodology

The reform process has some way to go in ensuring the Principles on benchmark design, data sufficiency and transparency of benchmark determinations are implemented. Administrators should also carefully consider ensuring arrangements for transitioning benchmarks meet the requirements of the Principles.

Data sufficiency

The assessment of Principle 7 on data sufficiency has posed particular challenges.

The Review Team considers that implementation of Principle 7 requires sufficient and robust data on the underlying market measured by the relevant benchmark, coupled with data on any other markets on which the benchmark determination process draws, to enable an assessment of the accuracy and reliability of the benchmark.[3] It requires an assessment, based on this

[3] The Review Team's position on the data and information required to *assess the implementation* of Principle 7 should not be taken as a specific *interpretation of the meaning* of the Principle. The Review Team referred solely to the text of Principle 7 in deciding what data and information is required to enable the assessment of its

data, of whether the benchmarks could be said to be 'anchored' in real transactions in an active market, preferably (but not limited to) transactions in the market for the interest that is sought to be represented by the benchmark.

This view is based not only on the text of Principle 7 but also the discussion set out in pages 39-42 of IOSCO's consultation report *Financial Benchmarks, Consultation Report* dated January 2013.[4] This discussion explores a variety of factors, such as size, liquidity, market concentration and market dynamics that will be relevant to the inquiry of whether a market is active.

Based on this view of the Review Team, the administrators were requested to supply a range of data and information to facilitate the Review Team's assessment work.

The request is detailed in the Key Questions set out on pages 22 and 23 of the Assessment Methodology (**Methodology**) used to conduct the Review (included as **Annex 1** to this report). Among other things, these questions sought information on the data and other information used to construct benchmark determinations, how this data is generated, whether there are observable transactions in the market for the interest measured by the benchmark and the conditions under which non-transactional data would be used for individual determinations.

The questions also sought information on the actions of administrators to ensure that the data and information relied upon in determining the benchmark accurately and reliably represents the interest it measures, submissions are in fact anchored by observable, bona-fide, arms-length transactions (as those terms are defined by the Principles) and that any adjunct data is tied to observable market data.

To date, and despite the Principles being published in July 2013, none of the administrators has provided the Review Team with all of the required data or analyses needed to demonstrate compliance with Principle 7, particularly the accuracy and reliability of the benchmark as a measure of interbank unsecured funding transactions within the current definitions of the reviewed benchmarks.[5]

Further, none of the administrators has defined what they see as an 'active' market in the interest that they seek to represent. None of the administrators has described the minimal acceptable level of activity necessary to demonstrate an active market. And none of the administrators has completed an analysis of methodologies to provide a basis for deciding

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implementation.

[4] IOSCO *Financial Benchmarks, Consultation Report* (January 2013). Available at: http://www.iosco.org/library/pubdocs/pdf/IOSCOPD399.pdf. This discussion is referenced in the Final Report setting out the Principles at footnote 21.

[5] The Review Team, however, acknowledges the material submitted by Euribor-EBF and IBA that is drawn from their efforts at understanding the relevant interbank and wholesale funding money markets, providing some insight into volumes and transactions in those relevant markets. Further elaboration on this data is needed to better understand the activity of those markets for purposes of Principle 7.

whether the submissions are anchored in that market.

The Review Team concluded that it should not draw conclusions with respect to the most widely used reference rates solely from the unavailability to the Review Team of sufficient data or analysis. It has, therefore, not rated any of the administrators against Principle 7.

The Review Team strongly encourages all three administrators to continue addressing Principle 7 as a matter of urgency.

This will involve performing a thorough analysis on the activity of the interbank and wholesale funding markets that their benchmarks seek to represent and sharing this information with IOSCO.

To complete this analysis, the Review Team expects administrators to collect comprehensive, robust and reliable data on the relevant markets the benchmark seeks to represent. This data should align with the data requested in the Methodology and should include sufficiently long time series that enable a robust analysis. The analysis should address the issues related to the sufficiency of a market outlined in Annex II of the Methodology. Principle 7 also requires administrators to demonstrate that the benchmark determinations are actually anchored in transactions that are drawn from an active market.[6]

Accordingly, the active participation and support of submitting banks and other firms will be essential in this process. These institutions should be encouraged by both regulators and administrators to facilitate this analysis on a confidential basis by collecting sufficient data to enable administrators to measure the activity in the market for the interests that the benchmarks seek to represent. Additionally, the on-going ability of an administrator to demonstrate that a benchmark is in fact anchored in transactions drawn from such a market would necessitate some facility for the continuous collection and verification of the data underlying benchmark determinations.[7]

It is likely that further design, methodological and/or definition changes will be required to implement Principles 6 (see below) and 7, particularly if data sufficiency requires a broadening of permissible transactions beyond interbank unsecured transactions. Compliance would also require consideration of transition issues.

The Review Team acknowledges that the interest that benchmarks seek to represent may evolve over time and, with that evolution, the data and analysis needed to demonstrate implementation of Principle 7 will also change. The assessment of Principle 7 can, however,

[6] Data collection for purposes of demonstrating the existence of an active market must be accompanied by an analysis demonstrating that submissions are in fact drawn from (i.e., anchored in) that market.

[7] The Review Team notes that LIBOR submitting banks are required to provide to the administrator on a daily basis all information used to enable it to make a submission (MAR 8.2.10) http://fshandbook.info/FS/html/FCA/MAR/8

only be performed against currently binding definitions of the market the benchmark seeks to represent. Ongoing monitoring of administrators' efforts to address Principle 7 by the Official Sector Steering Group (**OSSG**) and IOSCO is recommended.

The Review Team is aware that the OSSG is relying on it to provide guidance on whether the three administrators covered by this Review have implemented Principle 7. The assessment of each administrator therefore describes the actions taken by it to move the benchmarks towards being more closely and transparently anchored in transactions.

Benchmark design

Further work is also needed from all administrators on ensuring that they follow a design process that follows the requirements of Principle 6. Principle 6 requires that the benchmark design seeks to achieve and results in an accurate and reliable representation of the economic realities of the interest that the benchmark seeks to represent.

In so designing their benchmarks, administrators are required to take into account factors such as the adequacy of the sample used to represent the interest, the size and liquidity of the relevant market and the relative size of this market to the market that uses the benchmark, the distribution of trading and other market dynamics.

The three administrators covered by this Review have yet to adopt designs and design processes that adequately and fully address these requirements.

Transparency of benchmark determinations

On transparency of benchmark determinations, all three administrators have been rated 'Not Implemented' with respect to Principle 9. This is because none of the administrators publish the explanations required by this Principle with each benchmark determination.

In assigning this rating, the Review Team is aware that administrators are partially reliant on the entities that submit rate quotes to them to assist the administrators in meeting Principle 9.

To assist administrators in complying with Principle 9, however, the Review Team would draw the attention of administrators to Annex C of IOSCO's *Final Report Principles for Financial Benchmarks.*[8] This Annex details how administrators can comply with the requirements of Principle 9.

Recommended remediation

The Review Team has made recommendations for each administrator where remedial actions would strengthen the implementation by the administrators of the Principles.

IOSCO expects that each administrator will take action on these recommendations as expeditiously as possible.

[8] IOSCO, above n 1.

By end 2014 (or earlier if required by their relevant regulatory authority), each administrator should develop and provide to their regulatory authority, where available, its work plan to address the remediation recommendations for all Principles.

IOSCO appreciates that some remediation recommendations may pose greater challenges than others (in particular, those concerning implementation of Principles 6, 7 and 9). In such cases, the plan should set out the concrete steps that will be taken in 2014 that are intended to progress remediation.

IOSCO also encourages the administrators to continue their commitment to implementing the Principles this Review has identified as fully implemented. All administrators (not just those covered by this Review) are expected to work continuously to follow the Principles.

Further review

Because there is further reform work to be undertaken by the three administrators, particularly with respect to data sufficiency, the Review Team recommends that a further review be carried out of the three administrators in mid 2015 using the Methodology.

This further review would seek to identify whether administrators have made any progress in addressing the recommended remediation work set out in this report.

2. Details of Review

Background

At its 24 June 2013 meeting, the Financial Stability Board (**FSB**) Plenary established an OSSG of regulators and central banks on interest rate benchmark reform.[9] As part of this work, the OSSG is to recommend global standards for reference rate benchmarks and reviewing them against these standards. It is to also oversee work on exploring additional reference rates and transition strategies to these rates.

At its August 2013 meeting, the FSB Plenary endorsed the following OSSG proposals:

- That the Principles form the most appropriate set of regulatory standards on which to base a review of individual benchmarks;
- To focus initial work on Euribor, Libor and Tibor; and
- To commission IOSCO to conduct a review of these three benchmarks against the Principles and report its findings to the OSSG.[10]

On 3 September 2013, the chairs of the OSSG formally requested the IOSCO Board 'that IOSCO conducts a review of the most widely used interest rate Benchmarks (Libor, Euribor and Tibor), based on the developed Principles, to ensure timely delivery of the final recommendations and analysis by the OSSG to the FSB in June 2014.' This work was requested to be completed by 15 May 2014.

At its meeting in September 2013 in Luxembourg, the IOSCO Board agreed to this request. It approved terms of reference for the Review to be conducted by a Review Team comprised of members from the IOSCO Task Force on Financial Benchmarks and the IOSCO Assessment Committee.

A Review Team was constituted in early October 2013 with the purpose of completing the Review.

Purpose of the Review

Consistent with the OSSG's request, the Review's objective was to identify the degree of implementation of the Principles by administrators of Libor, Euribor and Tibor.

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[9] See Financial Stability Board, *Progress report on the oversight and governance framework for financial benchmark reform: Report to G20 Finance Ministers and Central Bank Governors* (29 August 2013) for more detail on the OSSG and its work program. Available at: http://www.financialstabilityboard.org/publications/r_130829f.pdf.

[10] Ibid.

The Principles

The Principles were published in July 2013. The IOSCO Board intended the Principles to create an overarching framework for benchmarks used in financial markets.

Specifically, they were intended to promote the reliability of benchmark determinations. They addressed benchmark governance, benchmark and methodology quality and accountability mechanisms.

- On **governance**, the Principles were intended to ensure that administrators have appropriate governance arrangements in place to protect the integrity of the benchmark determination process and to address conflicts of interest.

- On **benchmark quality**, the Principles were 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 that benchmark. The Principles also clarified that a variety of data may be appropriately used to construct a benchmark, as long as the Principle 7 on data sufficiency is met (i.e., the benchmark is based on an active market).

- On **methodology quality**, the Principles were intended to promote the quality and integrity of methodologies by setting out minimum information that should be addressed within a methodology. The Principles required that information be published or made available so that stakeholders may understand and make their own judgments concerning the overall credibility of a benchmark. They also required that the methodology should address 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 established that administrators should have credible policies in case a benchmark ceases to exist or stakeholders need to transition to another benchmark. These policies were intended to encourage administrators and stakeholders to plan prospectively for the possible cessation of a benchmark.

    - These Principles also addressed 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.

- On **accountability**, the Principles required that administrators establish complaints processes, documentation standards and audit reviews 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 addressed making the foregoing information available to relevant market authorities

The Principles are to be understood as a set of recommended practices that should be implemented by benchmark administrators and submitters.

Content of this report

This report sets out:

- The Methodology used to conduct the Review (**Annex 1**);
- The degree of implementation of each of the Principles by each of the administrators for Euribor, Libor and Tibor taking into account their respective policies and practices as implemented up to **11 April 2014**; and
- Where a Principle is yet to be implemented in full:
    - The key reasons why this is the case including what key indicia of the implementation of the Principles (**Key Indicia**) were not evident;
    - A description of the relevant administrator's plans (if any) to fully implement the Principle (including the timetable for those plans); and
    - Recommended remediation actions for the administrators to follow in order to fully implement the Principle.

Review Team

The Review Team was constituted by staff from the FCA (Co-Chair), the Australian Securities and Investments Commission (**ASIC**) (Co-Chair), the Commodity Futures Trading Commission (United States) (**CFTC**), the European Securities and Markets Authority **(ESMA)**, the Federal Financial Supervisory Authority (Germany) (**BaFin**), the Financial Services Authority (Japan) (**JFSA**), the Financial Services and Markets Authority (Belgium) (**FSMA**) and the Monetary Authority of Singapore (**MAS**).

The authorities of the Review Team are members of IOSCO's Assessment Committee or Task Force on Financial Market Benchmarks (**Task Force**). The Assessment Committee conducts assessments of IOSCO's members against IOSCO principles and standards. The Task Force developed the Principles.

Members of the IOSCO Secretariat provided administrative support to the Review Team.

Methodology

The Review was undertaken as a desk-based exercise, using responses provided by the administrators of Euribor, Libor and Tibor to the Methodology designed and developed by the Review Team.

The Methodology includes a detailed questionnaire, which sets out:

- The text of each Principle. This defines the obligations of the administrator;
- Key Indicia of implementation of each Principle. The Key Indicia for each Principle are the minimum policies, procedures and practices that the Review Team would expect to see if an administrator had implemented that Principle; and
- Key Questions to elicit evidence to assess the existence of the Key Indicia.

The Methodology was circulated to the administrators on 13 January 2014 with responses to the Key Questions returned by 7 February 2014.

The Review Team continued discussions with the respective administrators about their actions to implement the Principles up until mid-April 2014.

This Review covers the degree of implementation of the Principles by each of the administrators through to 11 April 2014.

Assessment process

The Review Team was divided into three sub-teams for the purposes of carrying out initial assessments.

- Staff from the FSMA, ESMA and CFTC conducted the initial assessment of the administrator of Euribor.
- Staff from the FCA, MAS and BaFin conducted the initial assessment of the administrator of Libor.
- Staff from the JFSA and ASIC conducted the initial assessment of the administrator of Tibor.

These sub-teams applied the following steps in assigning assessment grades to the administrators in respect of their implemented policies and practices.

1. They summarised the administrator's implemented policies and practices;
2. They identified whether any Key Indicia have not been implemented by the administrator through the policies and practices (planned policies and practices were taken into account — see below);
3. They assessed whether the failure by the administrator to implement any Key Indicia in the policies and practices affected the administrator achieving the intended outcome of the Principle.

   The intended outcome of the Principle was ascertained by considering both the specific Key Indicia and the text of the Principle as extracted in the Methodology; and

4. Based on this identification and assessment, the sub-teams assigned an assessment rating to the Principle (see below).

These initial assessments then underwent a process of standardisation by the Review Team. This process was intended to ensure a consistent standard of assessment was applied to all three administrators.

Respondent administrators were given the opportunity to check the accuracy of the descriptions prepared by the Review Team.

Assessment ratings

The Review Team assigned one of the following ratings to the implementation of each Principle by each administrator.

Fully Implemented	A Principle will be considered to be Fully Implemented when all Key Indicia have been implemented without any significant deficiencies.
Broadly Implemented	A Principle will be considered to be Broadly Implemented when the assessment demonstrates shortcomings in implementation of the Key Indicia by the administrator and those shortcomings do not, in the judgment of the assessor, substantially affect the administrator achieving the intended outcome of the Principle.
Partly Implemented	A Principle will be considered to be Partly Implemented when the assessment demonstrates shortcomings in implementation of the Key Indicia by the administrator and those shortcomings, in the judgment of the assessor, substantially affect the administrator achieving the intended outcome of the Principle.
Not Implemented	A Principle will be considered to be Not Implemented when the assessment demonstrates no implementation of any of the Key Indicia by the administrator or, where there is some implementation, the implementation is manifestly ineffective in achieving the intended outcome of the Principle.

This report does not include an overall assessment rating for an administrator's compliance with the Principles as an integrated whole. It does, however, include a qualitative assessment of an administrator's compliance with the Principles on the basis of the ratings for each

individual Principle.

Approach to planned policies and procedures

In conducting this Review, the Review Team was conscious that the Principles were only released in July 2013. At the time of responding to the questionnaire, therefore, administrators of Euribor, Libor and Tibor had only had approximately seven months to align their policies and practices with the Principles.

The Review Team was also conscious that, at the time of the review, initiatives were ongoing to reform the benchmark-setting processes at each administrator.

Accordingly, this report describes the status of any plans for administrators to fully implement (or achieve a greater degree of implementation of) the Principles. These plans were not taken into account when assigning ratings to individual Principles. However, whilst not rated, descriptions of these planned reforms form a key part of this report.

Approach to assessment or interpretation of Principles

Through the process of comparing the administrators' implemented policies and practices against the Principles, the Review Team identified several Principles (or elements thereof) that required further consideration or interpretation to allow transparent and fair assessment of their implementation. The interpretation of the Principles has been confirmed by the co-chairs of the Task Force.

The relevant Principles, and the Review Team's position on them, are set out below.

Principle 7 – Data Sufficiency

As noted above, the Review Team cannot adequately assess the implementation of Principle 7 due to the failing of the three administrators to provide the Review Team with sufficient data and information. This includes their failure to define what they see as an 'active' market in the interest that the benchmark seeks to represent. Accordingly, Principle 7 is currently not rated.

Principle 15 – Internal Controls over Data Collection

Principle 15 requires that when administrators collect data from an external source the administrator should ensure that there are appropriate internal controls over its data and collection processes.

The Review Team interpreted this Principle as not applying to the administrators of Libor, Euribor and Tibor. This is because none of them collect data from an external source *that is used for the determination of their respective benchmark.*

The Review Team does not consider that receiving submissions from reference or panel banks falls within the scope of Principle 15.

Instead, Principle 15 is directed at situations such as where there are no submitting entities interposed between the administrator and the primary data source. This would be the case where the administrator took a direct feed of data from a market, for example.

The Review Team took this view as the purpose of Principle 15 (to ensure there are internal controls over its data collection and transmission processes that cover selecting the source, collecting the data and protecting the integrity and confidentiality of the data) is covered by Principle 14 when the data used in the benchmark determination process are received via a submission process.

Principle 18 – Audit Trail

Principle 18 requires the retention of certain information used in the determination of benchmarks for five years by administrators.

The Review Team interpreted this Principle as only requiring the retention of information used in the determination of the benchmark to the extent that the administrator otherwise has the information in its possession. Accordingly, it does not require the administrator to actively seek out the listed information for the purposes of retaining it.

This interpretation was based on the text of the Principle itself. The Principle does not include any language directing the administrator to actively collect the listed information.

3. Euribor

3.1 Introduction

What is Euribor?

Euribor represents the rate at which Euro interbank term deposits are offered within the EU Economic and Monetary Union by one prime bank to another at 11.00 a.m. (CET). Euribor currently covers eight tenors (1, 2 weeks and 1, 2, 3, 6, 9, 12 months).

Administration of Euribor

Euribor-EBF is the administrator of Euribor. Euribor-EBF is an international non-profit making association under Belgian law. Its members are national banking associations in the Member States of the European Union, which are involved in the Eurozone and the Euro-system.

Euribor-EBF:

- Defines the methodology of Euribor;
- Is responsible for its integrity; and
- Establishes valid oversight processes.

The day-to-day collection of data and the calculation of the Euribor rate are, however, undertaken by an external calculation agent (**Calculation Agent**).[11] A panel of 26 banks (**Panel Banks**) currently provides the data upon which the Euribor benchmark is built.

Both the Calculation Agent and the Panel Banks are obliged to comply with the procedures and governance rules specified by the Euribor-EBF. The Euribor Code of Conduct (**Euribor CoC**) defines the Euribor benchmark, the calculation and oversight process as well as tasks and obligations of the Calculation Agent and Panel Banks. This includes a contingency plan controlling the benchmark fixing when the usual process is impaired. The Code of Obligations of Panel Banks (**COPB**) lays down the rules Panel Banks have to comply with for determining Euribor quotes.

Two distinct conflicts of interest policies further specify how conflicts of interests should be identified and handled at the administrator level (**Euribor-EBF CoIP**) and with regard to all parties involved in the day-to-day benchmark operation such as Panel Banks and the Calculation Agent (**Euribor CoIP**).

[11] As of 11 April 2014 Thomson Reuters is the mandated calculation agent of Euribor. Euribor-EBF announced the appointment of Global Rate Set Systems Ltd. (GRSS) as the new calculating agent. It is planned that GRSS will assume its responsibilities as of 1 July 2014.

Finally, a Service Level Agreement (**SLA**) breaks the general provisions of the Euribor CoC down into instructions to be followed by the Calculation Agent in the calculation and publication process.

How is Euribor determined?

By no later than 10.45 a.m. (CET), the Panel Banks are required to submit an indicative quote for a given tenor of the rate that they believe one prime bank is quoting to another prime bank for interbank term deposits within the EU Economic and Monetary Union zone at 11.00 a.m. (CET). Between 10.45 a.m. and 11.00 a.m. (CET) they may correct their submissions.

At 11.00 a.m. (CET), the Calculation Agent computes the Euribor rate for all tenors by first trimming out the 15% highest and lowest contributions, then averaging over all remaining quotes and eventually rounding the result to three decimal places. The rate is distributed immediately through the authorised financial data vendors (e.g. Thomson Reuters and Bloomberg).

Individual contributions of Panel Banks are published with a 24-hour delay on the Euribor-EBF official website.

There is no benchmark calculation on days when the Trans-European Automated Real-Time Gross-Settlement Express Transfer system (**TARGET**) is closed.

In case one or more Panel Banks, but less than 50% of them, fail to submit quotes, the Calculation Agent proceeds with the benchmark determination ignoring the missing data.

If more than 50% of the Panel Banks do not provide quotes, the determination is delayed until 11.15 a.m. (CET). By then, the Calculation Agent computes Euribor based on the available data, given that at least 12 or more submitters from three different countries have submitted quotes. Otherwise, the calculation for that day is further delayed until this criterion is met.

The administrator will republish the rates of the previous business day if fewer than 12 Panel Banks have provided data by 12:30 p.m. (CET). Contingency planning by the administrator furthermore provides for the Steering Committee "to devise a resolution strategy preserving the continuity of Euribor" within 3 fixing days following the event.

3.2 Assessment of implementation of Principles

Euribor-EBF is responsible for the administration of Euribor.

The General Assembly is the body primarily responsible for adopting polices that govern the operation of Euribor-EBF and the determination of Euribor.

Two committees ensure the effective operation and oversight of Euribor.

First, a Steering Committee is responsible for controlling the operation of Euribor, in

particular the adherence of the Calculation Agent and Panel Banks to the established policies through external audits and regular reporting on submissions. Euribor-EBF has provided extensive evidence on how the Steering Committee makes use of its competencies.

Second, an independent Conflicts of Interest Oversight Committee (**Oversight Committee**) monitors whether the parties involved in the operation of Euribor are subject to poor incentives and develop proposals to resolve potential issues. The Oversight Committee was established in 2014.

Euribor-EBF has substantially strengthened its governance framework over the past year to ensure the quality and integrity of Euribor and to meet the Principles. The current governance framework includes:

- The definitions and methodology determining Euribor;
- The obligations and tasks to be assumed by the Calculation Agent and Panel Banks in the benchmark determination process;
- Mitigation of potential conflicts of interests at the administrator level and with regard to all parties involved in the day-to-day benchmark operation, including Panel Banks and the Calculation Agent; and
- Planning for certain contingency cases.

Euribor-EBF has furthermore developed a framework to systematically address data integrity and quality issues. Specifically, Euribor-EBF has:

- Specified key Euribor definitions and anchored them in the Euribor CoC;
- Discontinued less used tenors, reducing the overall number of tenors from 15 to eight;
- Improved and reinforced the Euribor CoC at administrator level, effective as of 1 October 2013;
- Published the COPB on 1 October 2013 with a transitional period running until 30 April 2014;
- Defined minimum expectations regarding the Calculation Agent's internal procedures and controls through the SLA;
- Started to implement post-fixing checks and back-testing analysis and presented first results to the Steering Committee;
- Adopted two distinct new conflict of interests policies covering respectively the potential conflicts at the Euribor-setting level and at the Euribor-EBF administration level;

- Established a new independent oversight committee in the Euribor-EBF CoIP in order to monitor potential conflicts at the administrator level;
- Committed to perform both internal and external audits on a regular basis and disclose results of the external audit as soon as the reform is completed; and
- Established a new record-keeping policy in the Euribor CoC.

The progress made by Euribor-EBF on implementing the Principles reflects reform measures addressing all topics covered by the Principles.

The Review has found full implementation of six Principles, broad implementation of eight Principles, and partial implementation of two Principles. For the reasons given above that apply to all three administrators, Principle 9 was assessed not implemented and Principles 7 and 15 were not rated.

The Principles are met with respect to the overall responsibility of the administrator for the benchmark, the governance of the benchmark setting process, including the governance of Euribor key decision making bodies, oversight of third parties, and mitigation of conflict of interests. Further notable progress has been achieved with respect to the control framework at administrator level, internal oversight functions and procedures, audits and record keeping.

Measures to ensure data consistency and quality have been enhanced. In particular, Euribor-EBF has specified key definitions underlying benchmark determinations, defined a clear hierarchy of data inputs at the level of Panel Banks and established a back-testing program, the results of which are frequently reviewed by the Steering Committee.

Euribor-EBF has acknowledged the need to further consider data quality and sufficiency issues, i.e. beyond the policies and practices currently implemented. To this end, Euribor-EBF has participated in a joint data collection exercise with the ECB, with the aim to better understand activity in the Euro money markets, and is currently using the data and analysis to determine feasibility of a benchmark more closely anchored in actual wholesale money market transactions.

Some material drawn from Euribor-EBF's efforts at understanding the relevant interbank and wholesale funding money markets has been made available to the Review team. Further elaboration by the administrator is needed to better understand the activity of those markets for purposes of Principle 7, not least because the assessment of Principle 7 can only be performed against currently binding definitions of the market the benchmark seeks to represent.

Lastly, there is currently no requirement for Panel Banks to disclose on a regular basis to Euribor-EBF information on the data and expert judgment used to inform submissions. As a result, Euribor-EBF cannot verify that the benchmark is 'anchored' in bona fide, arms-length transactions. Nor can Euribor-EBF publish with each benchmark rate determination the concise explanations required by Principle 9

The Review Team recommends that a follow-up review of Euribor-EBF should be conducted in mid-2015 using the Methodology. This review should cover all Principles and focus, in particular, on those Principles that are rated below 'Fully Implemented'.

This review should seek to rate Principle 7 according to the scale set out in the Methodology. Euribor-EBF has already demonstrated strong cooperation by delivering some data and analysis requested by the Methodology in connection with Principle 7 and is in discussion with the Review Team on how to improve this data.

3.3 Commentary on implementation plans

Euribor-EBF recently established a number of new policies and procedures. These policies cover the following:

- Conducting external audits of the Calculation Agent's and Panel Banks' compliance with the COPB;
- Defining procedures with respect to remedial actions highlighted in the results of audits;
- Assessment of quality and integrity of data inputs used for informing submitted quotes on a regular basis;
- Assessment of and challenging the methodologies used by Panel Banks for informing submissions and working towards harmonisation; and
- Enhancing record-keeping arrangements.

Euribor-EBF announced a change of the Calculation Agent to Global Rate Set Systems Ltd which is planned to be effective by 1 July 2014. Euribor-EBF needs to make sure that the new Calculation Agent fully complies with the governance framework of Euribor without any delay.

Euribor-EBF has further made considerable progress, with the assistance of the ECB, in establishing the data and analytical foundation for creating a fully transaction-based benchmark.

The reform process followed by Euribor-EBF is being undertaken in a wider context of regulatory reform at EU level.

In particular, in September 2013 the European Commission put forward a legislative proposal for the regulation of indices used as benchmarks in financial instruments and financial contracts[12], which is currently being deliberated in the EU legislative procedure. The proposal

[12] (COM(2013) 641/2)

defines the notion of critical benchmarks and provides a new regulatory and supervisory framework for relevant benchmarks which would – subject to the final legal text – be applicable to Euribor.

3.4 Summary of assessment grades

	Principle	Assessment grade	Summary of rationale for assessment grade and recommended remediation
Governance			
1.	Overall responsibility of the administrator	Fully Implemented	All Key Indicia implemented.
2.	Oversight of third parties	Fully Implemented	All Key Indicia implemented.
3.	Conflicts of interest for administrators	Fully Implemented	All Key Indicia implemented.
4.	Control framework for administrators	Broadly Implemented	Most Key Indicia implemented. Enhance policy and practice of risk management at the administrator level. Amend policies and procedures to implement the recommendations applicable to Principles 6, 7, 9, 11 12, 13 and 14. Ensure that staff involved in the Benchmark determination at administrator level has the relevant expertise and receive appropriate training.
5.	Internal oversight	Broadly Implemented	Most Key Indicia implemented. Continue to define procedures with respect to remedial actions highlighted in the results of audits. Define the process for the cessation of tenors, including stakeholder consultations.
Quality of the benchmark			
6.	Benchmark design	Partly Implemented	A number of Key Indicia have not been implemented. Continue working with the FSB OSSG recommendations to ensure the design of Euribor is fit

	Principle	Assessment grade	Summary of rationale for assessment grade and recommended remediation
			for purpose.
7.	Data sufficiency	Not rated	Conduct the work as set out in the *Overview of findings* above.
8.	Hierarchy of data inputs	Fully Implemented	All Key Indicia implemented.
9.	Transparency of benchmark determinations	Not Implemented	Key Indicia have not been implemented. Further work necessary regarding publication by Euribor-EBF of explanations of the source of inputs for each Euribor determination (i.e. standardised disclosure including the use of any expert judgment).
10.	Periodic review	Fully Implemented	All Key Indicia implemented.
Quality of the methodology			
11.	Content of the methodology	Broadly Implemented	All but four Key Indicia have been implemented. Policies and procedures required to further define methodologies, especially: regarding consistent use of expert judgment; under market stress scenarios; for consultation procedures in amending Euribor determination; and regarding potential limitations of Euribor.
12.	Changes to the methodology	Broadly Implemented	All but four Key Indicia have been implemented. Ensure material changes to Euribor methodology are made in consultation with stakeholders and publicly disclosed.
13.	Transition	Partly Implemented	Not all Key Indicia have been implemented. Develop and adopt policies concerning suitable fall-back rates in situations where Euribor is not available or ceases being determined.
14.	Submitter code of conduct	Broadly	All but one Key Indicia implemented.

	Principle	Assessment grade	Summary of rationale for assessment grade and recommended remediation
		Implemented	Panel Banks need to comply with the COPB by 30 April 2014.
15.	Internal controls over data collection	Not Applicable	See discussion in *Details of Review – Approach to assessment or interpretation of Principles* above.
Accountability			
16.	Complaints procedures	Broadly Implemented	All but one Key Indicia have been implemented. Establish a user-friendly complaints process and resolve disputes over informal complaints.
17.	Audits	Broadly Implemented	All but one Key Indicia have been implemented. Engage a third party to audit the current Calculation Agent's and Panel Banks' compliance with the COPB.
18.	Audit trail	Broadly Implemented	All but one Key Indicium implemented. Record-keeping requirements need to cover "queries and responses relating to data inputs".
19.	Cooperation with regulatory authorities	Fully Implemented	All Key Indicia implemented.

3.5 Principle-by-principle analysis

A. Principles relating to governance

Principle 1 – Overall responsibility of the Administrator

Description of implemented policies and practices

Responsibility for Euribor is established through the policies and practices of Euribor-EBF.

The General Assembly of Euribor-EBF is the body primarily responsible for adopting the policies that govern the operation of Euribor-EBF and the determination of Euribor. It is composed of the members of Euribor-EBF. The General Assembly is responsible for adopting key policies including the:

- Euribor CoC —which contains the rules governing Euribor;
- Euribor COPB — which sets out the responsibilities of submitters with respect to the benchmark determination process, conflicts of interest, transparency and internal/external oversight procedures; and
- Conflicts of Interest Policy – which concerns potential conflicts of the various committees and parties involved in governing, overseeing or determining Euribor as well as Euribor-EBF.

The General Assembly also appoints the members of the Steering Committee (according to the Euribor CoC) and the Conflicts of Interest Oversight Committee.

The Steering Committee of Euribor-EBF is the central governance body that promotes the implementation, compliance and monitoring of the Euribor CoC. It meets on a bi-monthly basis and publishes its meeting minutes on the Euribor-EBF website.

The members of the Steering Committee are Guido Ravoet (Chairman, Chief Executive of the Euribor-EBF), Andreas Biewald (Commerzbank), Olivier Brissaud (European Association of Corporate Treasurers), Bruno Colmant (Roland Berger), Alberto Covin (Unicredit), Philippe Jeanne (Natixis, Euribor-ACI), Karel Lannoo (Centre for European Policy Studies), Robert Peirce (Former chairman of the Belgian Accredited Financial Services Auditors), Patrick Siméon (Amundi) and José Maria Verdugo (Confederación Española Cajas de Ahorros).

The Oversight Committee (consisting of three members) monitors potential conflicts of interest at all levels and between all parties involved in the benchmark determination process. This process covers the Steering Committee. All Steering Committee members have published a signed conflicts of interest declaration (together with their CVs).

The calculation of Euribor is undertaken by a Calculation Agent, currently Thomson Reuters. Euribor-EBF oversees the actions of the Calculation Agent through:

- A **Code of Conduct** (developed by the Calculation Agent) defining the Calculation Agent's

obligations in operating Euribor in line with the Euribor CoC;

- An SLA between Thomson Reuters and Euribor-EBF that incorporates the Code of Conduct. According to Euribor-EBF, the SLA is contractually binding between it and the Calculation Agent through a side letter dated December 2013; and
- A **Contingency Plan** (developed by the Steering Committee) providing the Calculation Agent with a procedure for determining Euribor if the usual timely production of Euribor is impossible.

The Calculation Agent must confirm its adherence to the Code of Conduct to the Steering Committee annually.

As evidence of the responsibility that Euribor-EBF exercises over Euribor:

- The Steering Committee recently discontinued seven less-used maturities to simplify the rate setting process;
- The Oversight Committee has been formed;
- Euribor EBF published a revised Code of Conduct in October 2013, including clarifications to the definition and methodology of Euribor, as well as the daily calculation and publication processes and fall-back arrangements; and

  Euribor-EBF has participated in a joint data collection exercise with the ECB, with the aim to better understand activity in the Euro money markets, and is currently using the data and analysis to determine the feasibility of a benchmark more closely anchored in actual wholesale money market transactions.

Rating

Fully Implemented

Commentary on why rating was assigned

All Key Indicia have been implemented.

Description of planned policies and practices (including timelines)

None identified

Recommended remediation

None

Principle 2 – Oversight of third parties

Description of implemented policies and practices

There are two sets of third parties that contribute to the Euribor determination process; the Panel Banks and the Calculation Agent.

Panel Banks

Euribor-EBF exercises oversight of the Panel Banks through the Euribor CoC and the COPB. The two codes specify a comprehensive suite of independent review and monitoring requirements for Panel Banks with regard to general obligations, governance and organizational procedures. Most importantly, the COPB requires Panel Banks to implement a '**Submitter-Approver**' process. Under this process, Panel Banks should appoint at least two Submitters and two Approvers and establish appropriate back-up coverage arrangements from among the appointed individuals. The Calculation Agent must be notified of these individuals. Without this notification, the Calculation Agent will not consider the quote in the rate setting.

Panel Banks must confirm their adherence to the COPB annually by publishing a declaration of adherence.

Calculation Agent

Euribor-EBF exercises oversight of the Calculation Agent through the contractually binding Code of Conduct and the SLA.

These documents set out the Calculation Agent's responsibilities concerning the calculation of Euribor on a daily basis. These responsibilities include Calculation Agent controls to ensure the integrity of its calculation and reporting actions.

Further, the **Euribor Contingency Plan** and the **Euribor Business Continuity Plan** cover the Calculation Agent's actions in aggravated conditions, such as delayed submissions by Panel Banks or in the case of disaster. These plans are reinforced by corresponding plans at the Calculation Agent.

The Calculation Agent must confirm its adherence to the Code of Conduct annually by publishing a declaration of adherence.

Rating

Fully Implemented

Commentary on why rating was assigned

All Key Indicia have been implemented.

Euribor-EBF has adopted a framework that ensures it has oversight over the actions of the Calculation Agent and the Panel Banks.

Description of planned policies and practices (including timelines)

There are five planned policies or practices that are relevant to the arrangements described above:

- Euribor-EBF has announced the appointment of Global Rate Set Systems (GRSS) as the new Calculation Agent of Euribor with effect from 1 July 2014. This appointment will require a new SLA requiring GRSS to develop a new Code of Conduct and contingency plans and arrangements in line with the Principle.
- Euribor-EBF has plans to document procedures relating to clear communication and reporting channels between itself and third parties, including the Calculation Agent and Panel Banks, where not already covered under the above-mentioned codes and agreements. This documentation should be complete by Q2 2014.
- An external provider has been commissioned by Euribor-EBF to run the external review of the entity which will be appointed as new Calculation Agent (GRSS) as of 1 July 2014 and to deliver a report once the system is in place. In the meantime, the provider will review the transition plan to the new Calculation Agent. Euribor-EBF is also due to receive the results of the current Calculation Agent's internal review.
- Euribor-EBF committed to review the Panel Banks' compliance with the COPB. This review will use the Panel Banks' adherence certification process. The first certification is due on 30 April 2014.

Recommended remediation

None

Principle 3 – Conflict of interest for Administrators

Description of implemented policies and practices

Euribor-EBF has two distinct conflicts of interest policies:

- The Euribor CoIP; and
- The Euribor-EBF CoIP.

The Euribor CoIP concerns conflicts that arise in the process of determining Euribor. Accordingly, it covers conflicts of interest of the Steering Committee, the Panel Banks and the Calculation Agent (including interests of related parties). These parties are obliged to develop procedures regarding conflict of interest identification, monitoring, mitigation, management and disclosure.

The definition of conflicts of interest in the Euribor CoIP is customised to the Benchmark-setting process. Indeed, this policy specifically relates to potential conflicts of interest that may emerge in the process of determination, calculation and dissemination of Euribor and integrates the conflicts of interest policies adopted and implemented by each entity contributing to the determination, calculation and dissemination of Euribor. In particular, Euribor CoIP considers conflicts of interest in each entity between the contribution to the Euribor-setting process and the provision of investment services, investment activities and ancillary services (as defined by the EU Markets in Financial Instruments Directive) and in the provision of specific financial services.

The Euribor-EBF CoIP applies at the level of Euribor-EBF as an association. It covers members of the Euribor-EBF Association and their representatives, including the Board of Directors, the Secretary-General and members of the Secretariat. It requires Euribor-EBF to develop a framework to address conflicts of interest in the activity and functioning of Euribor-EBF at an association level.

This framework includes a Oversight Committee. This committee is an independent body that monitors potential conflicts of interest, gives advice to the Board of Directors and General Assembly on conflicts of interest (including action to be taken) and prepares an annual report assessing the management of conflicts of interest. The Oversight Committee is to be composed of three independent persons: one chair and two members. It will meet at least twice a year.

According to Section 5 of the Euribor CoIP, each member of the Steering Committee is requested to submit a conflict of interest declaration. The signed declarations are publicly available on the Euribor-EBF website. Moreover, detailed procedures to disclose identified conflicts of interest to the Oversight Committee or the Steering Committee are defined in the relevant conflict of interest policies.

The procedures implementing the above conflicts of interest policies have been approved by the Board of Directors and the General Assembly of Euribor-EBF on 20 and 21 March 2014.

The conflict of interest procedures envisage a process to mitigate conflicts of interest between those Secretariat members who work with third parties on revenue-related matters and those staff involved

with the monitoring and validating of third party compliance with the Euribor CoC and related agreements. An **Internal Workplace Policy** further establishes certain ethical standards. The Steering Committee has adopted another procedure specifically referring to benchmark participants.

Conflicts of interest are also covered in the COPB. The COPB requires Panel Banks to establish a Submitter-Approver process with clear sign-off procedures to ensure reliability of quote submissions. Panel Banks hold further obligations to regularly train their staff, enforce ethical standards, segregate potentially compromising duties, establish an appropriate remuneration policy and avoid unduly communications of submitters and approvers with third parties.

Rating

Fully Implemented

Commentary on why rating was assigned

All Key Indicia have been implemented.

In accordance with Principle 3, Euribor-EBF has a number of policies in place to establish a comprehensive and potent oversight process with respect to conflicts of interest:

- The Euribor CoIP addresses conflicts associated with the determination of Euribor;
- The Euribor-EBF CoIP addresses conflicts related to the organisation of the Administrator itself.

Sections 4.4 to 4.7 of the COPB further provide guidance for Panel Banks with respect to the minimal standards of their internal organisation and procedures related to the submission process.

Description of planned policies and practices (including timelines)

Euribor-EBF will publish an online form covering conflicts of interest complaints and representations on its website in 2014.

Recommended remediation

None

Principle 4 – Control framework for Administrators

Description of implemented policies and practices

General

Euribor-EBF's control framework for determining and distributing Euribor is set out in its governance structure and policies. These were generally summarised in connection with Principle 1.

The Steering Committee plays a key role in determining this framework and in ensuring its implementation. In particular, it is responsible for monitoring and controlling Panel Banks' compliance with the Euribor CoC and for ensuring that the Calculation Agent operates under an appropriate control framework.

Expectations of Panel Banks

Euribor-EBF further implemented a COPB and expects Panel Banks to implement necessary measures in order to comply with the COPB by 30 April 2014. The COPB sets uniform minimum requirements for the submission process and control mechanisms at individual Panel Banks. It requires Panel Banks to assess compliance with their obligations in relation to quote submissions by internal and external audits, at least on an annual basis.

The COPB requires that Panel Banks:

- Must use a range of relevant market inputs in determining submissions and ensure that submissions are provided in accordance with the Euribor CoC. Data inputs also need to be recorded and retained for internal and external review verification.
- Assess compliance with their obligations in relation to quote submissions by internal and external audits, at least on an annual basis.

These audits inform the annual acknowledgement Panel Banks are required to make to Euribor-EBF confirming their compliance with the Euribor CoC. The COPB further requires that material breaches in the submissions process uncovered in the reviews be communicated immediately to Euribor-EBF. Euribor-EBF also has the right to commission an external audit of one or more Panel Banks if there are reasonable grounds to believe that the integrity of the benchmark is being compromised.

Euribor-EBF has also adopted the conflict of interest framework described in connection with Principle 3.

Staff expertise

Euribor-EBF notes that with respect to daily routines and under normal circumstances, personnel contributing to the daily determinations are the submitters/approvers at the Panel Banks and staff at the Calculation Agent.

Policies are in place at Panel Bank level (COPB). Section 4.6 of the COPB requires that Panel Bank staff have the relevant expertise and receive appropriate training to discharge their duties. The Calculation Agent Code of Conduct similarly requires that staff at the Calculation Agent possess the necessary skills.

Euribor-EBF and Calculation Agent personnel are further responsible for setting-up technical systems to support the submission process and, in exceptional cases, when automated routines are not available.

Euribor-EBF has asserted that the expertise of their staff, backed by the experts on the Steering Committee and access to third party specialists, is appropriate. Euribor-EBF nonetheless acknowledges the need to continue to invest in staff resources. *Evidence of implementation*

As evidence of the implementation of a control framework:

- The Steering Committee meets bi-monthly and makes the minutes of its meetings available on Euribor-EBF's public website. The Euribor CoC and the COPB are on this website.
- The SLA defines the daily process of collecting data, running pre-fixing checks and publishing the rate, including a process for any re-fixing. The Calculation Agent is expected to carry out pre-fixing routines on that basis and provide pre- and post-fixing data to the administrator for further use in data quality controls and back-testing analysis.
- Ex-post monitoring is currently being executed as part of a monthly reporting process and Euribor-EBF's Back-Testing Program. Summary reports of the monitoring exercise are provided for review as a standing agenda item to the Steering Committee. Procedures for follow-up by the Secretariat with Panel Banks and for reporting to the Steering Committee were documented and approved by the Steering Committee in February 2014. Euribor-EBF furthermore adjusted the composition of its Steering Committee to mitigate conflicts of interest within it.
- Additional staff augments the relevant technical expertise in overseeing the daily determination processes and in pursuing inquiries on submissions activities with the Panel Banks and Calculation Agent.
- A number of documents further specifying whistleblowing and complaints policies and procedures have been drafted and have been submitted to the Steering Committee and Board of Directors for approval.

Rating

Broadly Implemented

Commentary on why rating was assigned

All but three Key Indicia have been implemented.

The non-implementation of the three Key Indicia does not substantially affect Euribor-EBF achieving the intended outcome of Principle 4.

Specifically:

- Key Indicium 4.1(c)(ii) is not fully implemented since arrangements in place are not sufficient to ensure the quality and integrity of Euribor is maintained in line with Principles 6 to 14 in view of the less than "fully implemented" ratings for certain of these Principles.

  The full implementation of all other aspects of the control framework, however, provides assurance that Euribor-EBF has a robust system to maintain the integrity of Euribor.

- The management of risk within Euribor-EBF has not been fully addressed by the Euribor-EBF control framework (as required by Key Indicium 4.1(c)(v)).

  While certain contingency cases are addressed by the COPB, including contingency plans of Panel Banks for technical or human failure, Euribor-EBF needs to further enhance the management of risk, in particular that of an operational nature at administrator level in policy and practice in line with the Key Indicium.

- There is insufficient evidence of policies ensuring that the staff at Euribor-EBF involved in determinations of Euribor possess the relevant levels of expertise (as required by Key Indicium 4.1(c)(vii)).

  There is, however, evidence of policies ensuring that Panel Bank and Calculation Agent staff has this expertise.

Description of planned policies and practices (including timelines)

Euribor-EBF has stated that it will develop more detailed operating procedures and communication protocols. Early attention will be given to procedures for handling complaints, whistleblowing, and reporting on benchmark quality and methodology. It has also stated that it will continue to invest in its own staff resources and supporting infrastructure, including training and succession planning for relevant personnel in 2014.

In particular, Euribor-EBF is expected to address the following issues:

- Further enhance the management of operational risk at the Administrator level in policy and practice, in line with the Key Indicia.

- Ensure that policies regarding quality and integrity of data inputs used for informing submitted quotes are implemented in practice. Euribor-EBF expects to assess input data used for informing submissions by Panel Banks on a regular basis.

- Further develop policies or procedures to ensure that staff involved in the benchmark determination at Administrator level has the relevant expertise and receive appropriate training

to discharge their duties.

Recommended remediation

Euribor-EBF should:

- Follow the recommendations given for Principles 6, 7, 9, 11, 12, 13 and 14.
- Address the management of risk at the level of Euribor-EBF in the Euribor-EBF control framework.
- Adopt policies and practices that ensure Euribor-EBF staff determining Euribor levels possess the relevant levels of expertise.

Principle 5 – Internal oversight

Description of implemented policies and practices

The Steering Committee performs the primary oversight function for Euribor and was described briefly above in connection with Principle 1.

More specifically, the Steering Committee is responsible for the oversight of the benchmark design as well as the oversight of the integrity of benchmark determination and the associated control framework. It receives regular updates on the control environment and technical benchmark quality, and can provide credible challenge where necessary to the parties involved in benchmark determination. The Steering Committee also adjudicates on the conflicts of interest policy and is responsible for developing policies concerning the Euribor CoC.

Further, the Euribor-EBF CoIP addresses potential conflicts of interest that may emerge at the administrator level, i.e. within the bodies of Euribor-EBF, between Euribor-EBF and the Steering Committee, between the Steering Committees of different financial benchmarks, as well as between the Administrator and Panel Banks or national banking associations.

Euribor-EBF's conflicts of interest framework is also part of its internal oversight framework. This framework was described in connection with Principle 3. Most notably, the newly established independent Oversight Committee:

- Makes decisions by simple majority with each person having one vote;
- Meets at least twice a year;

- Publishes an annual report on conflicts of interest management to the General Assembly; and
- Shall advise the Euribor-EBF Board and the General Assembly on actions to be taken to cope with potential conflicts of interests.

Furthermore, the General Assembly adopted the revised Articles of Association and Rules of Procedure for Euribor-EBF in order to establish asymmetric membership between the European Banking Federation (**EBF**) and Euribor-EBF. As a result, EBF members will not automatically be members of Euribor-EBF, and the two organizations may have different CEOs following a six-month transitional period.

Evidence of the Steering Committee's operational capabilities includes:

- New composition of Steering Committee expanding stakeholder representation;
- Approval of enhanced Euribor CoC and associated COPB;
- Definitional clarifications for Euribor including 'Prime Bank';
- Discontinuation of illiquid Euribor tenors (July 2013);
- Adoption of new Euribor CoIP;
- Pre-and post-fix calculation checks (September 2013);
- Euribor contingency arrangements;
- Adoption of formal Back-Testing Program (December 2013);
- Euribor conflicts of interest procedures;
- Back-testing review procedures; and
- Calculation Agent transition plan (February 2013).

Rating

Broadly Implemented

Commentary on why rating was assigned

All but two Key Indicia have been implemented. The non-implementation of these Key Indicia does not substantially affect Euribor-EBF achieving the intended outcome of Principle 5.

Specifically:

- Procedures have not formally been established with respect to the cessation of tenors (as required by Key Indicium 5.4((a)(iv)). In particular, procedures for termination of the Euribor, including

guidelines for setting stakeholders consultation are missing. This is so despite the Euribor CoC stipulating that the Steering Committee is to review the design of Euribor and make recommendations for changes when deemed necessary which includes a review of tenors.

- Euribor-EBF's existing policies and procedures do not explicitly define the Steering Committee's competences with respect to remedial actions highlighted in the results of audits (as required by Key Indicium 5.4(b)(ii)). This is despite the Steering Committee being the key oversight body tasked to ensure quality and integrity of the Euribor which includes, inter alia, the follow-up on audit results.

Description of planned policies and practices (including timelines)

None identified

Recommended remediation

Euribor-EBF should:

- Adopt policies and procedures to define the Steering Committee's competences with respect to remedial actions highlighted in the results of audits.
- Establish procedures for the cessation of tenors.

B. Principles relating to quality of the Benchmark

Principle 6 – Benchmark design

Description of implemented policies and practices

The interest that Euribor seeks to represent is the average interest rates at which prime banks lend funds to one another, over a range of different maturities.

Euribor is designed to achieve an accurate and reliable representation of this Interest by polling the Panel Banks on the rates that they believe one prime bank is quoting to another prime bank for interbank term deposit offer rates within the EU Economic and Monetary Union zone at 11.00 a.m. (CET).

The Euribor rate for all tenors is calculated by first trimming out the 15% highest and lowest contributions, averaging over all remaining quotes and eventually rounding to three decimal places.

The Code of Conduct specifies a minimum number of banks with a varied geographic spread that is representative of the broad European money markets. It further requires that Panel Banks be active participants in these respective markets.

Euribor-EBF has taken, and is taking, steps to assess the market upon which the interest is based and the design of Euribor. There are three aspects to this.

First, there is a back-testing program, the results of which are reviewed by the Steering Committee. This program involves:

- A series of monthly tests that are run against the submitted quotes with a view towards monitoring Panel Banks' adherence to definitional standards for Euribor;
- Analysis of the underlying markets, including the size, liquidity, and market dynamics; and
- High level surveillance tests to identify anomalous contributions for review. This supplements technical oversight performed by the Panel Banks as outlined in the COPB.

Second, the Steering Committee also regularly reviews design issues related to Euribor.

Key Euribor definitions were reviewed in 2013, with a focus on clarifying the specifications of 'Prime Bank', 'Panel Bank' and 'Interbank Transactions'.

Further design clarification was offered in November 2013 through Q&A guidance on Euribor CoC that noted Panel Banks should take into account all relevant market price data that can be accessed, provided that the market input "constitutes a reliable basis for the purpose of applying the Euribor definition".

The Steering Committee discussed these issues in December 2013. Members recommended continued investigation on defining "creditworthiness", while noting the importance of ensuring continuity of the benchmark in making any refinements to core definitions.

Lastly, Euribor-EBF has participated in a joint data collection exercise with the ECB, with the aim to better understand activity in the Euro money markets. The data and analysis will be used to determine the feasibility of a benchmark more closely anchored in actual wholesale money market transactions.

Some preliminary analysis derived from the Back-Testing Program and the joint Euribor-EBF/ECB data collection exercise has been provided to the Review Team. The material compares observable money market transactions against the current Euribor benchmark.

Rating

Partly Implemented

Commentary on why rating was assigned

A number of the Key Indicia have not been implemented. The non-implementation of the Key Indicia substantially affects Euribor-EBF achieving the intended effect of Principle 6.

Specifically, the Review Team has not been presented with required evidence that Euribor-EBF has documented or followed a design process that incorporates the factors in Key Indicium 6.1(b)(ii)–(v).

This conclusion holds even though Euribor-EBF has undertaken a reduction in tenors (which the Review Team note was in response to recommendations by EBA and ESMA).

Description of planned policies and practices (including timelines)

The Back-Testing Program will be developed over time to review how accurately Euribor represents the underlying market and to identify secular market trends affecting Euribor. These components of the Back-Testing Program are planned to be implemented over the course of 2014.

The Steering Committee will continue to monitor all aspects of the methodology and control framework, as required under the Euribor CoC and make further ongoing changes where appropriate to adapt to market conditions, evolving industry and regulatory control standards, and stakeholder requirements.

In terms of broader design considerations, specific note should be made of the Euribor-EBF/ECB data collection exercise and Euribor-EBF's ongoing efforts to determine the feasibility of a reformed benchmark more closely anchored in actual wholesale money market transactions. The design alternatives currently under discussion consider the Key Indicia of Principle 6.

Recommended remediation

Euribor-EBF should:

- Adopt and implement a process that incorporates the factors in Key Indicium 6.1(b)(ii)-(v).

Principle 7 – Data sufficiency

Description of implemented policies and practices

Euribor-EBF has provided information drawn from the recently concluded data collection exercise conducted in collaboration with the ECB.

This information is highly relevant to an understanding of both interbank and broader wholesale bank funding activity in the EU.

Euribor-EBF participated in the data collection exercise in acknowledgement of the need to further consider data quality and sufficiency issues. The aim of the exercise was to better understand activity in the Euro money markets. Euribor-EBF is currently using the data and analysis to determine the feasibility of a benchmark more closely anchored in actual wholesale money market transactions.

Euribor-EBF has furthermore provided conclusions derived from a survey among Panel Banks evaluation Panel Bank's submission methodology.

Further, certain aspects of Euribor-EBF's policies and practices are relevant to the implementation of Principle 7. These are set out below.

COPB

The COPB provides guidance on the price and rate inputs to be used for determining rate submissions. These inputs should reflect a combination of actual transactions, executable quotes and other indicators of market pricing.

Analysis of the market

Euribor-EBF has provided data from its back-testing program that incorporates comparative studies of Euribor against rates in adjacent markets, including the depth, volatility and secular trends in underlying money markets.

Panel Banks

Euribor-EBF seeks to retain Panel Banks to ensure a diversity of submissions.

The Euribor CoC requires a panel composition to support data sufficiency. Specifically, the Euribor CoC requires that the panel consist of Panel Banks that are active participants in the Euro money markets in the Eurozone or worldwide. Moreover, the number of Panel Banks should be high enough:

- To faithfully reflect the geographic diversity of the still-segmented money market in the Eurozone; and
- To provide representative surveys of Euribor that will be consistent over time.

The back-testing data has shown that the sample of surveyed banks cover a substantial amount of both

the borrowing and lending volume in the unsecured money markets.

Additionally, the calculation requirements for Euribor, as specified in section C.2 of the Euribor CoC, require a minimum number and geographic spread of contributions daily. These provisions entail that at least 12 Panel Banks from three or more different countries must provide data in order to determine a Euribor fix.

Submissions

Currently, Euribor-EBF permits Panel Banks to incorporate data other than transaction data into submissions and, hence, ultimately into the Benchmark determination. The use of such data is driven by a number of factors, including:

- Inconsistent levels of liquidity in the underlying market;
- A consideration that additional sources of information form related markets may enhance benchmark quality by providing a richer overall dataset; and
- Recognition that Panel Banks may not be necessarily "prime" banks as envisaged by the current Euribor definition and hence that their own transactions may not reflect the defined Interest.

Recent action

Euribor-EBF took the decision to reduce the number of quoted maturities given relatively low levels of transaction volume and needs of market participants.

Rating

Not Rated

Commentary on why rating was assigned

Despite providing some data and information that is relevant to Principle 7, this material is insufficient to allow the Review Team to assess the implementation of Principle 7.

In particular:

- The data provided, while informative of the Euro unsecured money markets, does not isolate out the market for 'prime banks' (which is the 'interest' that Euribor seeks to represent) – without this isolated data it is not possible to assess the implementation of Principle 7. The Review Team, however, notes that Euribor-EBF has used lowest rate borrowers as a proxy for prime banks in its supplied data.
- Euribor-EBF has not defined what it sees as an 'active' market in the interest that Euribor currently seeks to represent– this is also necessary to facilitate the assessment of Principle 7. The Review Team notes, however, that data sufficiency has been considered in the Euribor+ project, in relation to minimum threshold volumes and numbers of data contributors for possible

alternative methodologies to calculate Euribor.

- Related to this point, Euribor-EBF has not described the minimal acceptable level of activity necessary to demonstrate an active market.

- Lastly, Euribor-EBF has not provided sufficient information on whether the submissions it receives from Panel Banks are anchored in the relevant market. While Euribor-EBF has provided preliminary conclusions from the most recent survey indicating the degree to which transaction data drives the daily submissions, no detailed evidence has been provided - without which it is not possible to assess the implementation of Principle 7.

Nonetheless, the Review Team acknowledges that Euribor-EBF has made significant progress in identifying through its data collection exercise possible methodologies that could enhance Euribor through the inclusion of both interbank and wholesale funding transactions.

Description of planned policies and practices (including timelines)

Existence of observable, arms-length transactions and sufficiency of 'active market'

While data on observable transaction activity in the Euro unsecured money markets has been provided to the Review Team, it is still in discussion with Euribor-EBF to define how the data sufficiently describes an "active market", in the sense of providing accurate and reliable basis for the interest that Euribor seeks to represent..

While Euribor is a quote submission based process, Euribor-EBF has included in its Back-Testing Program comparative studies of Euribor against rates in adjacent markets, including the depth and secular trends in underlying unsecured money markets.

Changing the existing approach for composing Euribor

Euribor-EBF believes that there are a range of possible alternatives to the current determination of Euribor, including changes in calculation methodologies and the basis for determination.

The feasibility of these alternatives is being assessed as part of the Euribor+ Program. Once feasibility is established, the program will need to consider the actual desirability of proceeding with the introduction of an alternative benchmark; weighing transition costs and risks, including the risks of market disruption, against the benefits that alternative determination methods may engender. If a decision is reached, a detailed transition plan would be established for likely execution over a multi-year period.

Euribor-EBF has provided summaries of the Euribor+ Program to the FSB and will be informed by the outcome of the review in respect of potential transition planning.

- The Review Team is aware that the results of the second data collection exercise led by the ECB have been completed and presented to Euribor-EBF. The data and comprehensive statistical analysis made available by the ECB to Euribor-EBF will allow Euribor-EBF to draw conclusions regarding the sufficiency of an expanded benchmark using data inputs broader than the existing

Euribor.

- Euribor-EBF has indicated that they will use the ECB data analysis and continue the Euribor+ Program to the next phase of stakeholder outreach based on the preliminary conclusion that a transactions-based benchmark appears feasible.
- Euribor-EBF considers that volume in the interbank market would generally be insufficient, particularly at longer and certain intermediate tenors, to support a purely transaction-based approach under the current Euribor definition. However, this does not preclude the continuation of the current Euribor based on submissions, with the use of existing transactions data to provide periodic back-testing checks.
- If Euribor-EBF were to transition to a purely transactions-based benchmark, Euribor-EBF believes that it would be necessary to source data on broader wholesale market, rather than just interbank, transactions.

Recommended remediation

Euribor-EBF should continue addressing Principle 7 as a matter of urgency by:

- Continue work on collecting and sharing with IOSCO and other relevant authorities the data and analysis that was requested by the Methodology in connection with Principle 7.
- Continuing to work on exploring options to anchor Euribor in actual transactions drawn from active markets, including necessary further design, methodological and/or definition changes. This would include:
    - Defining what it considers an 'active' market in the interest Euribor seeks to represent, including describing the minimal acceptable level of activity necessary to demonstrate an active market;
    - Completing an analysis of methodologies to provide a basis for deciding whether the transactions are anchored in active markets; and
    - Making the necessary consequential changes from any broadening of permissible transactions beyond interbank unsecured transactions.
- Following the recommendations made in connection with Principle 9.

Principle 8 – Hierarchy of data inputs

Description of implemented policies and practices

The COPB requires Panel Banks to develop, document and adhere to a systematic approach in the use of data inputs in the Euribor determination and calculation process.

While Panel Banks are given latitude to develop approaches according to their individual circumstances, the COPB describes the broad hierarchy of data inputs that Panel Banks should employ. Relevant market data include, but are not limited to, the following:

- Panel Banks' observation of transactions in the unsecured Euro cash deposit markets, classified according to whether the parties are designated 'prime';
- Panel Banks' observation of transactions in other related markets, including but not limited to other unsecured Euro deposit markets, overnight index swaps, secured markets including repurchase agreements, foreign exchange forwards, central bank operations and interest rate futures;
- Panel Banks' observation of executable quotes in the aforementioned markets; and
- Panel Banks' observation of non-executable indications of interest in the aforementioned markets.

The COPB also provides overall guidance regarding the relative priority of observed arms-length transactions as compared to executable quotes and non-executable price indications. This guidance provides:

- Transactions or quotes in the markets and among parties that most closely accord with the definition of Euribor (i.e. Interbank Transactions between Prime Banks) should be accorded relatively higher priority;
- Transaction data should be accorded relatively higher priority than executable quote data, which in turn should be accorded higher priority than non-executable price indications;
- Data closer in time to the submission deadline should be accorded relatively higher priority; and
- Transactions for exceptionally large or small size relative to the respective tenor should be accorded lower priority within the overall categories of transactions.

The COPB further acknowledges that expert judgment may be used as a determining factor, but notes that the use of such judgment should be documented, based upon reasonable criteria, and applied in an objective and consistent fashion.

Euribor-EBF noted in a November 2013 Q&A document that while a systemization of approach within each Panel Bank is recommended (COPB 5.2), a single prescribed approach would not be feasible in

light of the variation in circumstances across the Panel Banks. This guidance stated that expert judgment should therefore be employed by Panel Banks in devising their overall approach to combining the data inputs available to them when determining their daily quote submissions. Moreover, the guidance noted that there may be occasions, for example during periods of market volatility or market illiquidity, where expert inference will have to be used to a arrive at the final submission.

Euribor-EBF has adopted requirements that encourage compliance with the COPB obligations. COPB 5.1 requires Panel Banks to develop structured and documented policies and procedures for determining quote submissions, as well as effective procedures for quote corroboration, with a clear audit trail to facilitate subsequent reviews.

COPB 7.1 requires Panel Banks to establish, implement and maintain policies for independent reviews of their compliance with Panel Bank obligations in relation to Euribor quote submissions, including ongoing continuous monitoring of quote submissions by independent risk management and/or compliance functions; periodic and unscheduled reviews by independent risk management and/or compliance functions; reviews by the Panel Bank's Internal Audit function at least annually; and review by an external auditor or other expert third party at least annually.

No evidence has been presented on whether Panel Banks are observing these policies.

Rating

Fully Implemented

Commentary on why rating was assigned

All Key Indicia have been fulfilled.

Euribor-EBF has adopted and published policies that fully implement the Key Indicia, provided guidance to Panel Banks with respect to the application of the data hierarchy provisions of the COPB and established independent review obligations on Panel Banks.

Description of planned policies and practices (including timelines)

Euribor-EBF is considering a survey of Panel Banks to gather data on the benchmark quote submission methodology employed by each participating Panel Bank. The findings will be used to inform the Steering Committee on the quality of the benchmark and the extent and balance of the various potential inputs used to arrive at final submissions.

Recommended remediation

None

Principle 9 – Transparency of benchmark determinations

Description of implemented policies and practices

The Euribor CoC mandates the regular disclosure of the Euribor daily rates, monthly and yearly averages and individual Panel Banks submissions on a delayed basis.

Euribor-EBF notes that those requirements are further reinforced by provisions in the SLA as well as by the COPB.

Euribor-EBF asserts that certain data, particularly detailed submissions methodologies as well as transaction data and pricing data that Panel Banks use to form submissions, is commercially sensitive and proprietary to individual banks. As such, Euribor-EBF is bound by the need to respect both rights of confidentiality and applicable law and regulations regarding the disclosure of such information.

Rating

Not Implemented

Commentary on why rating was assigned

The two Key Indicia have not been implemented. Specifically:

- The information disclosed by Euribor-EBF does not provide specific information on market size and liquidity (as required by Key Indicium 9.1(a)); and
- The information to be disclosed by Euribor-EBF does not specifically cover a concise explanation of the extent to which and the basis upon which expert judgment, if any, was used in establishing a determination of Euribor (as required by Key Indicium 9.1(b)).

Description of planned policies and practices (including timelines)

Euribor-EBF distributed a survey to Panel Banks in March 2014 to assess the quote submission determination methodologies employed by each Panel Bank.

Based on the results of the survey, Euribor-EBF may consider disclosing further information regarding the type of transactional data, hierarchy of data inputs, and level of expert judgment that is utilized by the Panel Banks during the development of their quote submission rate. Euribor-EBF states that the results of this exercise will inform whether further disclosures of the information used in the Euribor determination process are feasible.

Recommended remediation

Euribor-EBF should:

- Work decisively towards publishing with each benchmark determination the concise statements called for by Principle 9.
- Work in close cooperation with the Panel Banks on a facility that would permit Panel Banks to disclose to Euribor-EBF the data upon which their rate submissions are based, subject to appropriate confidentiality protection.

To assist Euribor-EBF with its implementation of these remedial actions, the Review Team notes that Principle 9 does not require the disclosure of any individual transaction information or other confidential or proprietary information.

Principle 10 – Periodic review

Description of implemented policies and practices

The Euribor CoC obliges the Steering Committee to "monitor market developments". The implementation of the Euribor Back-Testing Program over the course of 2014 completes this policy.

In fact, the Euribor Steering Committee has historically reviewed market conditions as a standing agenda matter.

Changes have already been made to benchmark methodology and design, including the withdrawal of tenors and related benchmarks, when liquidity has been insufficient in the underlying interest. An analysis and market consultation was completed in 2013 to assess the viability of the various Euribor tenors, leading ultimately to the withdrawal of certain tenors in November 2013.

A regular review of secular trends in the markets underlying Euribor is planned as part of the Euribor Back-Testing Program. This will supplement ad hoc analysis and reviews previously undertaken. This program will be progressively implemented over the course of 2014. It will leverage periodic surveys conducted by public authorities and trade groups. Subject to appropriate confidentiality agreements, certain aspects of the survey work conducted for the Euribor+ Program may also be employed.

The Euribor+ Program is considering the range and sources of Euro money market transaction data that may be used to support a transactions-oriented approach to deriving a suitable Euribor-like index. This program was undertaken partly in response to the gradual decrease in interbank Euro money market lending that has taken place over the past decade. The program represents one of the strategic responses that Euribor-EBF has undertaken in conformity with the policy underpinning Principle 10.

The Steering Committee's consideration of underlying market conditions is generally discussed under the topic "level and use of Euribor", but has also been addressed within the context of other topics such as "compliance by banks with their obligations".

For example:

- The December 2009 minutes reveal that Steering Committee members discussed the Euribor definition to check that it was still consistent with the market. Questions were raised about the evolution of the definition in order to take into account the financial crisis and its consequences on the interbank money market.
- Under "level and use of Euribor" Steering Committee members commented that the trend was moving toward a more secured cash market and wondered whether it would be appropriate to move away from a purely cash-based definition.
- The October 2012 Steering Committee minutes reveal discussions that referred to the lesser degree of liquidity in the markets.
- The 2011 minutes reveal discussions of the current market conditions, including the unsecured market being partially replaced by the secured market;
- The 2012 minutes noted the impact of the ECB's Main Refinancing Operations and Long-Term Refinancing Operations on money market rates and that the Euribor fixing was volatile because of the ECB interventions.
- The January 2013 minutes reveal that the Steering Committee recommended (without explanation) to reduce the number of maturities to seven, being 1 week and 1, 2, 3, 6, 9 and 12 months. No report was referenced that explained the rationale for the recommendation.
- The July 2013 minutes referred to the ESMA/EBA recommendations, including recommendation 3 to discontinue less used tenors, reducing the overall number of tenors from 15 to eight. The minutes reveal that a consultation on the reduction of maturities was sent to Panel Banks and following the feedback received from the Panel Banks, it was recommended to keep the 2 week maturity as well.
- The Steering Committee agreed, as of 1 November 2013, to keep the 1, 2 week, 1, 2, 3, 6, 9 and 12 month maturities and to discontinue the 3 week, 4, 5, 7, 8, 10 and 11 month maturities. Euribor-EBF provided a two- page document D2706A-2013 (13.05.2013), which summarized Panel Banks' views during the consultation on the reduction in the number of Euribor maturities.

Rating

Fully Implemented

Commentary on why rating was assigned

All Key Indicia have been implemented.

The Euribor CoC obliges the Steering Committee to 'monitor market developments'. The implementation of the Euribor Back-Testing Program over the course of 2014 completes this policy. Moreover, a regular review of secular trends in the markets underlying Euribor is planned as part of the Euribor Back-Testing Program, and the Steering Committee has historically considered conditions in the underlying markets as a standing item at every regular meeting.

As a result, the Principle is Fully Implemented: the policies put in place by the Euribor-EBF should ensure that such reviews will occur periodically in the future.

Description of planned policies and practices (including timelines)

Euribor-EBF is undertaking a back-testing program to consider the calculation of Euribor. This program will, over 2014, formalize the review process and provide regular updates on market changes that may require adjustments to the benchmark.

At a strategic level, as part of the Euribor+ Program, extensive survey work has been undertaken on conditions in the Euro money markets. The survey data, while intended primarily to assist the feasibility study for Euribor+, will also provide significant insight into liquidity in the money market segments on which Euribor is based.

Recommended remediation

None

C. Principles relating to the quality of the methodology

Principle 11 – Content of the methodology

Description of implemented policies and practices

The methodology for Euribor determination has been developed and published. The publicly available Euribor CoC details the Euribor methodology and covers procedures for input selection, hierarchy of data inputs, contingency arrangements and internal reviews.

Additionally, the SLA describes the process related to submission processes, error handling and contingency arrangements.

Under the Euribor CoC, independent experts, including Euribor users outnumber Panel Banks in the Steering Committee. In addition, Euribor-EBF members who constitute the General Assembly capture

the entire European financial industry (and are not exclusively Panel Banks).

A summary history of the development of Euribor during 1997–1999 is also on the website. The original driver for adopting the submissions-based approach was that the Euro money markets are largely over-the-counter markets with limited public rate data available on a real-time basis. This is one of the reasons for the value of having a benchmark reference for these markets. A submissions-based approach using data from a representative sample of active banks in the money markets was held to be a pragmatic and efficient method to provide a timely benchmark rate.

The development of the Euribor CoC and the COPB included consultation with stakeholders.

Stakeholders are regularly consulted on the methodology, including proposed changes. For example:

- Consultations were undertaken in 2013 regarding the prime bank definition and the reduction in tenors.
- The Euribor+ Program includes both stakeholder input and outreach elements.
- The Euribor+ Task Force includes members from banking and end-user communities and has been supported technically by the ECB.
- Representatives from a number of regulatory agencies have attended Euribor+ Task Force meetings as observers.
- Preliminary results from the first data collection exercise under the Euribor+ Program were presented at a 2013 workshop with broad attendance from private and public sector stakeholders.
- A further series of outreach meetings are currently under way.

Rating

Broadly Implemented

Commentary on why rating was assigned

All but four Key Indicia have been implemented. Their non-implementation does not substantially affect Euribor-EBF achieving the intended outcome of Principle 11. Specifically:

- Euribor-EBF lacks procedures to encourage consistent use of expert judgment across all Panel Banks (as opposed to within each Panel Bank across their decisions) (as required by Key Indicium 11.2(c)).
- Euribor-EBF does not have procedures to govern the determination of Euribor in times of market stress or disruption or in periods when data sources may be absent (as required by Key Indicium

11.2(d)).

Instead, the Euribor Contingency Plan provides that in the event of a long term reduction below 12 Panel Banks (which could occur should Panel Banks drop out or if data becomes unavailable due to inactivity in the money markets) the Steering Committee will devise a resolution strategy, to be implemented within three days of the prior fixing.

This is insufficient to meet the requirements of the Key Indicium which require that the procedures exist on an ex-ante basis.

- Euribor-EBF lacks clear procedures under which it will consult with stakeholders (as required by Key Indicium 11.2(g)).

  At present, the Euribor CoC allows the Euribor-EBF General Assembly to amend the Euribor CoC upon recommendation of the Steering Committee subject, when necessary, to consultation with Panel Banks.

  The term 'stakeholder' as defined by the Principles, however, includes more than Panel Banks; it includes subscribers and persons who use a benchmark in financial instruments. Neither the Euribor CoC nor the COPB explicitly provides for such stakeholder consultation.

- There is no evidence the Euribor methodology covers the identification of its potential limitations, including its operation in illiquid or fragmented markets and the possible concentration of inputs (required by Key Indicium 11.2(h)).

  Euribor-EBF stated that the Back-Testing Program would allow the identification of the potential limitations that are contemplated by this Key Indicium.

  However, even if the Back-Testing Program is put into place, there is no commitment to identify limitations *in the methodology itself*. The purpose of this Key Indicium is to provide notice to stakeholders on the limitations in the methodology. There is no evidence that such a policy has been adopted.

The Euribor CoC requires that independent experts including Euribor users outnumber Panel Banks in the Steering Committee. In addition, the members of Euribor-EBF who eventually constitute the General Assembly represent the entire European financial industry and thus, to a large extent, Benchmark users.

In mitigation of these points, the representation of the Euribor users on the Steering Committee and the broad representation of the European financial industry on the General Assembly institutionalises consultation with external stakeholders.

Moreover, recent practices are aligned with the intended outcome of Principle 11.

For example, the Steering Committee initiated a consultation process before terminating certain tenors in

November 2013.

Accordingly, the implemented policies and practices largely achieve the intended outcome of Principle 11.

Description of planned policies and practices (including timelines)

Euribor-EBF stated that the requirements Key Indicium 11.2 (c) on promoting the consistent use of expert judgment is to be addressed by guidelines provided to Panel Banks following completion of the methodology survey described in its response to Principle 8.

Euribor-EBF stated that the requirements of Key Indicium 11.2 (h) on the methodology identifying the limitations of the benchmark will be addressed by the Back-Testing Program during H1 2014.

Recommended remediation

Euribor-EBF should:

- Adopt procedures to encourage consistent use of expert judgment across all Panel Banks;
- Adopt procedures to govern the determination of Euribor in times of market stress or disruption, or in periods when data sources may be absent;
- Adopt clear procedures that set out when and how it will consult with stakeholders on amendments to the Euribor methodology and associated documents; and
- Amend the Euribor methodology so that it covers the identification of its potential limitations, including its operation in illiquid or fragmented markets and the possible concentration of inputs.

Principle 12 – Changes to the methodology

Description of implemented policies and practices

Euribor-EBF has historically provided extensive public notice and disclosure of changes to Euribor.

According to the Euribor Statutes and the Euribor CoC, the Steering Committee and General Assembly initiate and decide on any changes related to the methodology or coverage of Euribor, not just material changes. The General Assembly can amend the Euribor CoC, including those aspects on methodology, on the Steering Committee's recommendation.

Changes in the Euribor definition or methodology should be disclosed in advance and should not occur

more frequently than necessary.

These changes are subject to consultation with Panel Banks. Changes are, however, not subject to the approval of (or veto by) Panel Banks.

Stakeholder participation is ensured through broad membership of the Steering Committee and General Assembly, which include Panel Banks and other stakeholders. There are, however, no written procedures for consultation with stakeholders.

Rating

Broadly Implemented

Commentary on why rating was assigned

All but four Key Indicia have been implemented. The non-implementation of these four Key Indicia does not substantially affect Euribor-EBF achieving the intended outcome of Principle 12.

Specifically:

- Euribor's documented policies (specifically, the Euribor CoC) does not clearly define what constitutes a material change (required by Key Indicium 12.2(a));
- Euribor-EBF has not developed stakeholder consultation procedures in relation to changes to the methodology that are deemed material by the Steering Committee that are appropriate and proportionate to the breadth and depth of Euribor's use and the nature of its stakeholders (required by Key Indicium 12.3(b));
- The failure to develop stakeholder consultation procedures necessarily means that Euribor-EBF has not implemented Key Indicium 12.4, which sets out the required features of those procedures; and
- The Euribor CoC does not address the provisions of Key Indicium 12.4 (a) and (b) as it only contemplates that amendments to it will be consulted on 'when necessary'. Given the scale of Euribor, all amendments should be subject to public consultation.

However, the Euribor CoC requires the Euribor-EBF to disclose all methodology changes. In addition, Euribor-EBF has been largely transparent about modifications to the Euribor definition and has consulted with relevant stakeholders. For instance, the Euribor-EBF has published all Steering Committee meeting minutes, consulted Panel Banks on the cessation of tenors and substantially involved non-bank stakeholders in the Steering Committee. Due to these actions, Euribor-EBF has achieved the intent of Principle 12.

Description of planned policies and practices (including timelines)

During 2014, Euribor-EBF will consider documenting formal procedures for changes to the Euribor methodology to enhance the Euribor CoC provisions.

Recommended remediation

Euribor-EBF should:

- Amend its policies (including the Euribor CoC) to define what constitutes a material change to the methodology.
- Develop and adopt formal stakeholder consultation procedures in relation to changes to the methodology that are deemed material by the Steering Committee. These need to be appropriate and proportionate to the breadth and depth of Euribor's use and the nature of its stakeholders. These procedures should also provide that public consultation should occur for all amendments.

Principle 13 – Transition

Description of implemented policies and practices

Euribor-EBF has established a number of preconditions necessary for further transition work.

- Euribor-EBF has engaged in exploring the feasibility of a transactions-based benchmark in the context of the Euribor+ Project. This could be used to develop a suitable alternative for the Euribor.
- In pursuing this project, Panel Banks and some other relevant stakeholders have been consulted.
- Euribor-EBF has engaged in dialogue with Panel Banks to ensure panel continuity until transition plans and policies have been established.
- Euribor-EBF has initiated the transition to a new Calculation Agent to support transition arrangements on a technical level.

Further, Euribor-EBF has established a basic contingency plan that provides that, under certain

conditions, the rate of the last day will be republished, until on the third day after discontinuation the Steering Committee devises a resolution strategy. This plan is on the Euribor-EBF website.[13]

Rating

Partly Implemented

Commentary on why rating was assigned

Not all of the Key Indicia have been fully implemented. Their non-implementation substantially affects Euribor-EBF achieving the intended outcome of Principle 13.

Specifically:

- While Euribor-EBF has followed practices that have ensured that stakeholders were aware of a possible cessation of Euribor, it still lacks policies which ensure this will occur in the future (as required by Key Indicia 13.1 to 13.3); and
- Euribor-EBF has a basic contingency plan for the non-determination of Euribor but this policy is not evolved enough to meet the requirements of Key Indicia 13.4 and 13.5.

Description of planned policies and practices (including timelines)

During 2014, Euribor-EBF will develop a strategic framework, including a documented transition policy that may need to be implemented under a variety of circumstances.

This should cover both a multi-year gradual controlled move away from Euribor, as well as a more immediate move if the number of Panel Banks decreases dramatically in a short period.

The framework will address the challenges posed by the systemic importance of Euribor, including interim measures for continuity of the Benchmark during the transition period. Euribor-EBF will be informed particularly by the work of the FSB in this regard, when published.

Euribor-EBF will explore whether any reformed benchmark might be considered an evolution of the current Euribor, so that contract continuity might be preserved or, alternatively, whether the new benchmark would be defined as distinct from Euribor. The latter option would require consideration of how to migrate contracts linked to the legacy Euribor. Euribor-EBF states that it recognizes that the development of a strategic transition policy is necessary.

[13] Available at: http://www.euribor-ebf.eu/assets/files/D2914C-2013-Euribor%20Contingency%20Plan.pdf.pdf

Recommended remediation

Euribor-EBF should:

- Conduct further work on, and adopt policies concerning, developing a suitable fall-back rate Euribor that would apply in situation where Euribor was not available or ceased being determined.
    - When working towards policies and procedures required by the Principle, Euribor-EBF will be expected to take into account due guidance by the FSB-OSSG and supervisory authorities.

Principle 14 – Submitter Code of Conduct

Description of implemented policies and practices

The COPB became effective on 1 October 2013. Panel Banks have a transition period to comply with it (ending 30 April 2014). The COPB is on Euribor-EBF's website.

Currently the COPB addresses all but one of the Key Indicia as set out in Principle 14, including:

- The selection of inputs;
- Who may submit data and information to Euribor-EBF;
- A four-eyes 'Submitter-Approver' framework;
- Quality control procedures to verify the identity of a Panel Bank and any employee(s) of a Panel Bank who report(s) data or information and the authorization of such person(s) to report market data on behalf of a Panel Bank;
- Criteria applied to employees of a Panel Bank who are permitted to submit data or information to Euribor-EBF on behalf of a Panel Bank;
- Staff training;
- Policies to encourage Panel Banks to submit all relevant data;
- A notice period for Panel Banks to voluntarily withdraw from the panel;
- The Panel Banks' internal systems and controls;
- Conflicts of interest policies;

- Whistleblowing policies;
- Complaint-handling procedures;
- Record-keeping procedures; and
- Independent audits.

Specifically, Panel Banks need to:

- '[I]dentify a range of objective, verifiable market data to be used as input to informing the daily quote submissions, when possible' (COPB 5.3). In addition, section 5.3 further defines 'relevant data' and requires Panel Banks set out a general priority for this data.

  Moreover, while there are no explicit provisions which clearly encourage Panel Banks to submit all relevant data, there are general provisions in the Euribor CoC that oblige Panel Banks to submit all the relevant data if requested by Euribor-EBF to do so.

- Designate a Submitter, who submit the information through the Calculation Agent's 'Calculated Interbank Offered Rate Generator' (**CIBORG**) system in accordance with the Code of Conduct. In CIBORG, every Panel Bank has a unique identifier code and only submission via this system will be accepted. The provisions relating to the procedures for submitting inputs are stated in section 5 of the COPB, while the methodologies to determine the type of eligible input are in section 5.3.

- Establish a four-eye '**Submitter-Approver**' process involving at a minimum two Submitters and two Approvers. Under this, Submitters are responsible for proposing the quote submissions, while Approvers are responsible for checking the quotes for reasonableness prior to submission and overseeing the daily submissions process.

  All Submitters and Approvers should have significant experience in the relevant Euro money markets. Approvers should further possess sufficient expertise and seniority so as to challenge the rates proposed by the Submitter.

  Submitters and Approvers must acknowledge their compliance to these roles and their responsibilities at least on an annual basis. The Panel Banks should assign two of each and communicate their names to the Calculation Agent. Changes in the appointments should be communicated immediately to Euribor-EBF and the Calculation Agent. The names of the specific Submitters and Approvers for each submission should be recorded as part of the daily record-keeping.

- Regularly train the staff involved in quote submissions. The training is to cover the COPB, associated internal controls, applicable regulations, the avoidance of conflicts of interest, the ethical standards, and the employment or other consequences of acting unlawfully or improperly in relation to the submissions activities.

- Give at least a three week notice to Euribor-EBF before voluntarily withdrawing from the panel.
- Identify, mitigate, document and disclose potential conflicts of interest associated with Euribor-related activities within the Panel Bank or between the Panel Bank and third parties. Such a conflicts of interest policy covers at least ethical standards, segregation of duties, a remuneration policy avoiding any incentive to manipulate Euribor, and communications with third parties.
- Inform Euribor-EBF and the competent supervisory authority without delay if they suspect that any person is manipulating, attempting to manipulate, or colluding in an actual or attempted manipulation of a EURIBOR quote submission or fixing.
- Maintain complaints handling procedures.
- Establish appropriate record-keeping policies that cover all relevant aspects of their Euribor submission activities. Records should be maintained for a minimum of five years, should be easily accessible and should be secured to prevent any possible alteration or even manipulation. In addition, this section describes a number of policies and procedures regarding record retention.
- Commission an independent review (internal and external audit) and inform Euribor-EBF on any issues raised in these reviews. Euribor-EBF can also commission an external audit based on reasonable grounds.
- Cooperate with supervisory authorities.

Panel Banks are obliged to certify their compliance with the COPB and the Euribor CoC annually. As part of this certification, Panel Banks are required to:

- Specify a reasonable timeframe under which full compliance will be achieved (if recent changes were to be introduced to the COPB); and
- Detail any reasons for non-compliance and provide relevant mitigating organizational controls or processes (if Panel Banks are experiencing difficulty in complying with the COPB, they should notify Euribor-EBF).

While Panel Banks only have to certify their compliance with the COPB by 30 April 2014, Euribor-EBF has stated that since October 2013 they have had regular interactions with the corresponding Panel Banks. Through these correspondences, Euribor-EBF has observed that Panel Banks have engaged in active efforts to ensure that their governance infrastructures, policies and procedures, and control environments are aligned with the COPB.
The Steering Committee is responsible for verifying the compliance of the Panel Banks with the COPB.

Rating

Broadly Implemented

Commentary on why rating was assigned

All but one Key Indicia have been fully implemented. The partial implementation of this Key Indicium does not substantially affect Euribor-EBF achieving the intended outcome of Principle 14.

Specifically, Euribor-EBF lacks sufficient policies to discourage the interim withdrawal of Panel Banks (as required by Key Indicium 14.4(e)).

Euribor-EBF has, however, been active in encouraging Panel Banks to maintain their commitments. Moreover, the COPB foresees that, in order to minimize potential disruption to the determination of Euribor, Panel Banks should give a notice period of at least three weeks to Euribor-EBF before voluntarily withdrawing from the Panel.

As a further (but temporary) deficiency, Panel Banks did not need to comply with the COPB as of 11 April 2014 (the cut-off date for the Review's consideration). It is, however, noted that Panel Banks needed to certify compliance with the COPB by 30 April 2014.

Description of planned policies and practices (including timelines)

None identified

Recommended remediation

Euribor-EBF should:

- Intensify its work on policies to discourage and mitigate the interim withdrawal of Panel Banks.

Principle 15 – Internal controls over data collection

Description of implemented policies and practices

Not applicable

Rating

Not applicable

Commentary on why rating was assigned

Not applicable

Description of planned policies and practices (including timelines)

Not applicable

Recommended remediation

Not applicable

D. Principles related to accountability

Principle 16 – Complaints procedures

Description of implemented policies and practices

Euribor-EBF's written complaints procedure was finalized in Q1 2014. This procedure:

- Permits complaints to be submitted through a user-friendly complaints process such as an electronic submission process to be available on the Euribor-EBF website;
- Contains procedures for receiving and investigating a complaint made about the Euribor-EBF 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;
- Contains a process for managing complaints, whereby the Secretariat receives and analyzes the complaints and escalates to the Steering Committee those that are not resolved. Depending on the nature of the complaints and the potential breaches, the Steering Committee may escalate the issue to the Board of Directors of Euribor-EBF or to competent legal or regulatory authorities, as appropriate; and
- Requires all documents relating to a complaint, including those submitted by the complainant as well as the Euribor-EBF's own record, to be retained for a minimum of five years.

Rating

Broadly Implemented

Commentary on why rating was assigned

All but one of the Key Indicia has been implemented. The non-implementation of this Key Indicium does not substantially affect Euribor-EBF achieving the intended outcome of Principle 16.

Specifically, Euribor-EBF has not yet adopted its **Complaints Policy and Procedures** which is needed to allow it to have a user-friendly complaints submission facility (as required by Key Indicia 16.2(a)).

Description of planned policies and practices (including timelines)

- Documentation of the associated procedures was finalized during Q1 2014. Furthermore, Euribor-EBF indicates that the approval of its Complaints Policy and Procedures will be forthcoming. This procedure will involve a user-friendly complaints submission facility on the Euribor-EBF website. It also includes a process for resolving informal disputes, or those disputes that can be addressed by the Euribor-EBF Secretariat and do not need to be escalated to more executive bodies.
- Panel Banks are to confirm their adherence with the COPB by 30 April 2014. Additionally, Euribor-EBF is conducting a survey to verify in detail the extent Panel Banks currently comply with the COPB.

Recommended remediation

Euribor-EBF should:

- Approve and implement its Complaints Policy and Procedure.

Principle 17 – Audits

Description of implemented policies and practices

There is on-going internal audit at Euribor-EBF. A report is expected by the end of April/early May.

In addition, an Audit Committee was established, following approval by the Board of Directors and the General Assembly on 20 and 21 March 2014 respectively. The Audit Committee consists of 3 Members appointed by the General Assembly for a two-year mandate. According to the Audit Committee Charter, the primary function of the Audit Committee will be to assist the Secretary General, the Board of Directors and the General Assembly in fulfilling their oversight responsibilities and advise them on financial/budgetary strategic decisions. The Audit Committee's first meeting is expected to in May 2014.

In addition, Euribor-EBF has commissioned external audits previously. In 2012, KPMG performed an audit of Euribor-EBF with a scope of evaluating its compliance with the Euribor CoC (as it was then in force) and with the Euribor-EBF Statutes with regard to the Euribor-EBF Board of Directors and the Euribor Steering Committee.

Finally, an external audit is being commissioned to take place in early Q2 2014. Requests for proposals have been made to a number of external auditing firms and Euribor-EBF is currently evaluating responses.

Rating

Broadly Implemented

Commentary on why rating was assigned

All but one Key Indicia have been implemented.

The non-implementation of Key Indicia 17.3 does not undermine Euribor-EBF from achieving the intended outcome of Principle 17.

Euribor-EBF has undertaken an internal audit during March - April 2014, has established an Audit Committee and is fully intended to appoint an external auditor in early 2014.

Description of planned policies and practices (including timelines)

An external audit is being commissioned to take place in early Q2 2014. Requests for proposals have been made to a number of external auditing firms and Euribor-EBF is currently evaluating responses. Euribor-EBF indicated that Euribor-EBF, the Calculation Agent and the Panel Banks should be at least annually audited.

To ensure the effectiveness of audits, Euribor-EBF is currently developing formal follow-up procedures to respond to process reviews, with strategies to address any identified gaps, noting resources required, likely budget, timetable for implementation, and monitoring of remediation steps. These will be conducted under the direction of the Euribor-EBF Secretariat, with regular progress reports to the Euribor Steering Committee.

Recommended remediation

Euribor-EBF should:

- Ensure and confirm the commission of an independent external auditor.
- Publicly disclosure of the results of the external audit.

Principle 18 – Audit trail

Description of implemented policies and practices

The Euribor CoC imposes the record-keeping requirements on Euribor-EBF.

Under this, Euribor-EBF is required to retain:

- Minutes of all governance meetings, including those of the Steering Committee and Conflicts of Interest Oversight Committee;
- Communications between Euribor-EBF and the Calculation Agent and/or Panel Banks;
- Data submitted by Panel Banks, including records of non-submittal;
- A register of the designated individuals authorized by Panel Banks to submit quote data or to approve such submissions;
- A register of the individuals authorized by the Calculation Agent to oversee and/or operate the daily submission and calculation processes at the Calculation Agent;
- Descriptions of determination methodology, including records of changes;
- Periodic and special review reports of Euribor quality; and
- Periodic and special audit reports, including those required under the Euribor CoC, of the conduct of Euribor activities at the Calculation Agent and Panel Banks.

As evidence of the practical implementation of the Principle:

- All Euribor Panel Banks have already provided contact forms with the names and contact details (including mobile numbers) of the two appointed Submitters and Approvers and a short description of the back-up coverage arrangements.
- As part of the internal audit of Thomson Reuters, the record retention requirements applicable to the Calculation Agent and detailed in the Euribor CoC will be evaluated. The findings of this audit will be reviewed by Euribor-EBF. The implementation of the record-retention requirements for Panel Banks will be confirmed through the Panel Banks' certification with the COPB as well as internal and external audits of the Panel Banks' operational and regulatory controls.

Rating

Broadly Implemented

Commentary on why rating was assigned

All but one of the Key Indicia has been implemented. The non-implementation of this Key Indicium does not substantially affect Euribor-EBF achieving the intended outcome of Principle 18.

Specifically, Euribor-EBF needs to ensure that record-keeping requirements cover not only "complaints", but also "any queries and responses relating to data inputs" (as required by Key Indicium 18.1(e)).

Description of planned policies and practices (including timelines)

No changes are planned to Euribor-EBF's existing record retention arrangements.

Record-retention requirements are further detailed in the Conflicts of Interest Procedures, Complaints Procedures, and Whistleblowing Procedures which are either under development, have been approved, or are due to be approved by the end of April 2014.

Record retention requirements with regards to the new Calculation Agent, GRSS, will be detailed in the new Calculation Agent Code of Conduct and the SLA between Euribor-EBF and GRSS, which are under development and will be finalized by the end of Q2 2014.

Recommended remediation

Euribor-EBF should:

- Ensure that its record-keeping requirements cover not only 'complaints', but also 'any queries and responses relating to data inputs'.

Principle 19 – Cooperation with regulatory authorities

Description of implemented policies and practices

The Euribor CoC requires Euribor-EBF to give information required under the Principles to the relevant regulatory authorities upon their request. Specifically, the Euribor CoC requires:

- The Steering Committee to share reviews of the overall control framework with regulatory authorities;
- Complaints and whistleblowing policies to be shared, to permit the escalation of relevant issues to regulatory authorities as appropriate; and

- Records be furnished to authorized independent reviewers and competent regulatory authorities in a timely manner upon request.

Euribor-EBF has always cooperated with the relevant regulatory authorities in accordance with Principle 19.

Similarly, the COPB requires Panel Banks to give the information subject to these Principles to the relevant regulatory authorities upon their request.

Rating

Fully Implemented

Commentary on why rating was assigned

All Key Indicia have been implemented.

Under the applicable policies, Euribor-EBF and Panel Banks are required to cooperate with regulatory authorities by providing information on request.

Euribor-EBF has cooperated with regulatory authorities on a voluntary basis. Euribor-EBF has responded to all queries during the IOSCO Revew on schedule and provided extensive documentation.

Description of planned policies and practices (including timelines)

None identified

Recommended remediation

None

4. Libor

4.1 Introduction

What is Libor?

Libor refers to a series of daily interest rate benchmarks administered by IBA.

Libor is defined as the rate at which an individual contributor panel bank could borrow funds, 'were [it] to do so by asking for and then accepting interbank offers in a reasonable market size[14] just prior to 11.00 a.m. London time'.

Libor interest rate benchmarks are currently calculated across five currencies (CHF, EUR, GPB, JPY and USD) and seven tenors (overnight/spot, 1 week, 1 months, 2 months, 3 months, 6 months and 12 months). They serve as a series of interest rate benchmarks of the average cost to banks of unsecured borrowing for a given currency and period.

Libor is an indication of the costs of unsecured borrowing in the London interbank markets. In essence it is a benchmark that gauges the interest rate, credit premium and liquidity premium that a leading bank would expect to be offered by another similar institution.

IBA maintains a reference panel of between 11 and 18 contributor banks for each currency calculated (**Contributor Banks**).

Libor is the most frequently utilised benchmark for interest rates globally, referenced in transactions with a notional outstanding value of at least $300tn.

History

Libor was established in the 1980s to provide a fair and standardised interest rate benchmark for loans, thereby facilitating the growth of the syndicated loans market.

Standardised interbank rates were attractive as a benchmark for investors and borrowers as they allowed the lending banks to pass on changes in the funding costs of an average bank over the course the loan.

The development of Libor was also driven, from an early stage, by the growth in new financial instruments such as forward rate agreements, which also required a standardised interest rate benchmark.

Since April 2013, administering and submitting to Libor are activities regulated by the FCA.

[14] "Reasonable market size" is intentionally unquantified: it would have to be constantly monitored and in the current conditions would have to be changed very frequently. It would also vary between currencies and maturities, leading to a considerable amount of confusion.

This makes Libor the only regulated interest rate benchmark as at the date of this Review.

Administration of Libor

Following the Wheatley Review,[15] the original administrator, the British Bankers Association LIBOR Ltd. (**BBALL**) agreed to hand over the administration of Libor to IBA, a wholly owned subsidiary of IntercontinentalExchange, Inc. (**ICE Group**). This became effective on 1 February 2014.

Accordingly, as of the date of this Review, IBA has only had a few weeks to implement policies and practices that comply with the Principles.

Any further reforms to the Libor definition, constitution and submission methodology will be taken forward by IBA and its Oversight Committee.

IBA outsources the collection of submissions, 'fat finger' checks and the calculation of Libor to Thomson Reuters Benchmarks Services Limited as calculation agent (**Calculation Agent**). This activity is governed by a contract and associated service level agreement (**SLA**) between IBA and the Calculation Agent (together, **TR Outsourcing Contract**).

IBA has a separate board (**Board**) which is responsible for compliance with regulatory duties and for developing a business strategy for IBA. It is a regulatory requirement for the Board to have at least two independent non-executive directors. IBA plans to add two independent non-executive directors.

IBA is in the process of setting up a separate audit and risk committee. Its first meeting was held on 25 April 2014.

All of the ICE Group's policies apply to IBA including its Code of Business Conduct and Ethics (**ICE Group Code**) and its remuneration policy.

IBA has an Oversight Committee, which has defined Terms of Reference (**ToR**). It has a majority of non-executive members including the independent non-executive directors and representatives of submitters and users of Libor. The Oversight Committee considers matters relating to the definition and scope of Libor, exercises collective scrutiny of Libor submissions, oversees the Code of Conduct and is required to notify the FCA of any material breaches of the Code of Conduct.

The ICE Group Code contains a general conflicts of interest policy. Conflicts specific to IBA are recorded in a conflicts register which is updated at least quarterly and is reviewed by the Oversight Committee.

[15] *The Wheatley Review of Libor: final report,* Box 3A and paragraphs 3.5–3.16, available at: http://cdn.hm-treasury.gov.uk/wheatley_review_Libor_finalreport_280912.pdf

IBA has a separate compliance manual which documents obligations in respect of all applicable regulation (FCA Handbook rule MAR 8), anti-money laundering rules and IBA's whistleblowing policies. It also sets out procedures and controls to meet those obligations.

IBA has a record-retention policy in line with FCA rules and a complaints policy.

IBA adopted the Code of Conduct for Contributor Banks published by BBALL in July 2013 (**Code of Conduct**). Changes to the Code of Conduct will be considered by the Oversight Committee and will be subject to public consultation. The Code of Conduct sets out industry guidance, in addition to the FCA rules. For submissions, in particular, it covers:

- The selection of possible inputs;
- Who may submit data and information to IBA;
- Quality control procedures; and
- Contributor Banks' internal systems and controls.

Regulation of submissions to Libor

Contributor Banks are regulated by the FCA. They are authorised by the FCA and each one of them has at least an approved person that is accountable for submissions to the Libor determination process. Such submissions must comply with FCA regulation.

This regulation encompasses transparency, scrutiny and accountability of the submitters. It also allows the IBA to collect not only the submitted rates but all relevant supporting information on a daily basis.

How is Libor determined?

On each London business day, the Calculation Agent calculates and IBA distributes the Libor rates.

Each day before 11.10 a.m. (London time), Contributor Banks send their rate submissions directly and confidentially to the Calculation Agent. Submissions are based upon the lowest perceived rate at which a bank could go into the London interbank money market and obtain funding in reasonable market size, for a given maturity and currency.

The Calculation Agent undertakes checks, discards the highest and lowest contributions (the top and bottom quartiles), and then uses the middle two quartiles to calculate an average. This methodology is sometimes called a 'shaved mean' or a 'trimmed mean'.

On each London business day this process is followed 35 times to create the Libor rates for all the five currencies and seven maturities in which the Libor rate is set. IBA distributes these figures at approximately 11.45 a.m. (London time).

4.2 Assessment of implementation of Principles

Upon IBA's assumption of responsibility on 1 February 2014, it adopted a comprehensive suite of policies that are intended to control how Libor is defined and determined.

IBA has continued many of the practices that were established by BBALL. The administration of and submission to Libor are now regulated activities in the UK and therefore the implementation of the Principles, initially by BBALL and subsequently by IBA, is largely (although not completely) a result of compliance with UK rules. As IBA only took control of Libor on 1 February 2014, it is still in the process of complying with certain Principles.

IBA's governance arrangements are closely aligned to the Principles.

Some work remains to be done on ensuring all conflicts of interest are managed and/or mitigated. This particularly applies to those conflicts of interest that are connected to ownership structure. The role of the Oversight Committee in practice will also need to be evidenced. This will, however, only be possible when the Oversight Committee has been operating for a more extended period of time.

The work conducted by the BBA to cease publishing rates in tenors and currencies with limited market usage and activity attests to the successful consideration of design factors mentioned in Principle 6. However, ongoing analysis on the underlying market to ensure that Libor has the correct design factors needs to be substantially improved. As a result, Principle 6 is rated as Partly Implemented.

At present, the Review Team cannot conclude that Principle 7 has been implemented by IBA with respect to all Libor tenors. As discussed above, this is because insufficient evidence has been given to the Review Team by IBA.

IBA is collecting data, following on from the practices of BBALL, with a view to complying with Principles 6 and 7 in the future.

It is noted that IBA does not publish specific information with each Libor determination as contemplated by Principle 9. As a result, Principle 9 is rated as Not Implemented. IBA, however, collects daily information with each submission which covers transactions and expert judgment. It notes that it would not be feasible to publish an explanation of the percentages of each type of market data used to determine the rates. IBA is assessing the need for a clearer iteration of the methodology used for calculating Libor.

For Principle 13, IBA has not created specific transition policies; however given the successful discontinuation of tenors and currencies (CAD, AUD) of Libor rates and transition of the administration to IBA, the Review Team assessed this Principle as Partly Implemented.

On Principle 17, IBA's internal audit committee, which is independent of IBA operations, is

expected to report the findings from its first internal audit by the end of July 2014. IBA is in the process of appointing an external auditor. For this reason, Principle 17 is deemed to be Broadly Implemented.

The remaining Principles have been assessed as either Fully or Broadly Implemented (with additional evidence required in relation to the latter in order for IBA to be assessed as fully implemented).

Lastly, it is noted that IBA (and in the past, BBALL) have cooperated fully with their regulator, the FCA, on all regulatory issues.

The Review Team recommends that a follow-up review of IBA should be conducted in mid 2015 using the Methodology. This review should cover all Principles and focus, in particular, on those Principles that are rated below 'Fully Implemented'.

This review should seek to rate Principle 7 according to the scale set out in the Methodology. Assigning this rating will require strong cooperation from IBA including by delivering the data and analysis that was requested by the Methodology in connection with Principle 7.

4.3 Commentary on implementation plans

At time of writing the report, IBA had just taken over the administration of Libor, and as such has not fully implemented its longer term reform agenda for Libor.

In the short term, IBA will strengthen its governance process by appointing to the Oversight Committee more independent non-executive directors, and other official sector observers. In addition, IBA's accountability will be bolstered by the establishment of an audit committee and the appointment of regular external auditors.

IBA has also signalled that it will bring in-house the activities currently outsourced to the Calculation Agent. This is expected to be implemented in Q3 2014.

Other than this, the next phase of implementation will be the development of oversight, challenge and scrutiny practices undertaken by IBA's oversight functions.

In the longer term, IBA has committed to assess the merits of a change of design of Libor, including:

- Changing the size and composition of the Contributor Bank currency panels;
- Changing the definition in respect of the source of eligible funding, by widening the offers which might be considered by Contributor Banks in responding to the Libor question so as to include offers stemming not only from the interbank market;
- Making the Libor publication time later in the day than the current publication time

being 11:45 a.m. (London time) or as close thereto as possible;

- Possibly making a second Libor publication later in the day; and
- Considering whether a transaction-based formula might be appropriate for use by Contributor Banks.

This will be informed by the statistics IBA will collect on the underlying markets, and by consultations with affected stakeholders.

Lastly, if adopted, the regulation being discussed at the EU level (see above) would also apply to Libor.

4.4 Summary of assessment grades

	Principle	Assessment grade	Summary of rationale for assessment grade and recommended remediation
	Governance		
1.	Overall responsibility of the administrator	Fully Implemented	All Key Indicia implemented.
2.	Oversight of third parties	Fully Implemented	All Key Indicia implemented.
3.	Conflicts of interest for administrators	Partly Implemented	All but five of the Key Indicia have been implemented. Document a conflicts of interest policy and procedures that are specific to IBA and its role as benchmark administrator. Ensure public disclosure of material conflicts of interests.
4.	Control framework for administrators	Broadly Implemented	All but four of the Key Indicia have been implemented. Amend policies and procedures to implement the recommendations applicable to Principles 3, 6, 7, 9, 11 12, 13 and 14.
5.	Internal oversight	Broadly Implemented	All but two of the Key Indicia have been implemented. Publish the ToR, the declarations of conflicts of interest and processes for election, nomination or

	Principle	Assessment grade	Summary of rationale for assessment grade and recommended remediation
			removal and replacement of Oversight Committee members (including the selection criteria).
Quality of the Benchmark			
6.	Benchmark design	Partly Implemented	All but four Key Indicia have been implemented. Further work is necessary to understand underlying interbank markets. Work with the FSB OSSG recommendations (when available) to ensure the design of Libor is fit for purpose.
7.	Data sufficiency	Not Rated	Conduct the work as set out in the *Overview of findings* above.
8.	Hierarchy of data inputs	Fully Implemented	All Key Indicia have been implemented.
9.	Transparency of Benchmark determinations	Not Implemented	Key Indicia not implemented. Further work necessary regarding publication of explanations of the source of inputs for each Libor determination (i.e. standardised disclosure).
10.	Periodic review	Fully Implemented	All Key Indicia have been implemented.
Quality of the methodology			
11.	Content of the methodology	Broadly Implemented	All but three Key Indicia have been implemented. Amend policies and procedures required to address the limitations of Libor and criteria for excluding Contributor Banks.
12.	Changes to the	Broadly	All but three of the Key Indicia have been

	Principle	Assessment grade	Summary of rationale for assessment grade and recommended remediation
	methodology	Implemented	implemented. Clarify policies regarding changes in Libor methodology. Publicly disclose the consultation procedure and individual responses.
13.	Transition	Partly Implemented	Most Key Indicia have not been implemented. Develop and adopt policies concerning suitable fall-back rates in situations where Libor currencies/tenors are not available or cease being determined.
14.	Submitter Code of Conduct	Broadly Implemented	All but two Key Indicia have been implemented. Develop procedures to monitor Contributor Banks' compliance with the Code of Conduct in conjunction with FCA regulation. Adopt policies to discourage and mitigate the consequences of the interim withdrawal of Contributor Banks.
15.	Internal controls over data collection	Not Applicable	See discussion in *Details of Review – Approach to assessment or interpretation of Principles* above.
Accountability			
16.	Complaints procedures	Broadly Implemented	All but two Key Indicia have been implemented. Develop policies and procedures for complainants to directly address the IBA Board. Publicly disclose ex-post changes in the Libor rate following a complaint.
17.	Audits	Broadly Implemented	All Key Indicia implemented in policy. However, there is no evidence of how effective the policies are in practice. Continued commitment necessary to ensure polices are implemented in practice.

	Principle	Assessment grade	Summary of rationale for assessment grade and recommended remediation
			Ensure IBA appoints an external auditor in FY2014.
18.	Audit trail	Broadly Implemented	All but two Key Indicia have been implemented. Amend record-keeping policy to require retention of information on exercise of expert judgment and identity of individuals involved in Libor determination.
19.	Cooperation with regulatory authorities	Fully Implemented	All Key Indicia have been implemented.

4.5 Principle-by-principle analysis

A. Principles relating to governance

Principle 1 – Overall responsibility of the Administrator

Description of implemented policies and practices

IBA's responsibility for Libor is established through its adopted policies, practices and the legal obligations under which it administers Libor.

As of 1 February 2014, IBA is the FCA authorised administrator for Libor and thus is wholly responsible for the administration of Libor

IBA 'administration of Libor is governed by the *Financial Services and Markets Act 2000* (**FSMA**) for the regulated activity of 'administering a specified benchmark'. Under the FSMA, this regulated activity means:

- Administering the arrangements for determining a specified benchmark;
- Collecting, analysing or processing information or expressions of opinion provided for the purpose of determining a specified benchmark; and
- Determining a specified benchmark through the application of a formula or other method of calculation to the information or expressions of opinion provided for that purpose.

As part of performing this regulated activity, IBA must comply with the relevant FCA Handbook rules (MAR 8). In particular, MAR 8.3 imposes responsibilities on IBA for all aspects of the determination process for Libor. These ensure that IBA maintains effective organisational and governance arrangements to enable it to carry out the activity of 'administering a specified benchmark'.

One of the key requirements is to establish an oversight committee. Other bodies responsible for the effective oversight and distribution of Libor include the Board and Calculation Agent.

- Oversight Committee

  The Oversight Committee, in line with the FCA requirements and pursuant to the ToR, is responsible for all aspects of the definition of Libor, including its compilation and surveillance.

- Board of IBA

  The Board must ensure that IBA complies with its statutory duties and has overall responsibility for ensuring that its regulatory obligations are fulfilled. IBA's longer-term strategy and development will be steered by the Board.

- Thomson Reuters (Calculation Agent)

  IBA states that it is primarily responsible for the dissemination of Libor. IBA is the distribution channel of Libor and Thomson Reuters is one of the redistribution channels for Libor data.

IBA has outsourced the collection of submissions, 'fat-finger' checks and calculation of Libor to the current Calculation Agent. This is a transitional arrangement. The TR Outsourcing Contract sets out the roles and obligations of IBA and the Calculation Agent and includes provisions relating to confidentiality obligations, regulatory compliance and remedies for non-performance.

Rating

Fully Implemented

Commentary on why rating was assigned

All Key Indicia have been implemented, through FCA requirements, the Oversight Committee and the IBA internal compliance manual. IBA has primary responsibility for Libor.

Description of planned policies and practices (including timelines)

IBA intends to bring the activities currently outsourced to the Calculation Agent in-house in Q3 2014.

IBA will publish significant decisions concerning the compilation and determination of Libor. This includes contingency measures in the event of absence of or insufficient inputs, market stress or disruption, failure of critical infrastructure, or other relevant factors.

IBA is reviewing the current contingency arrangements as implemented by BBALL and will be taking this forward in consultation with its Oversight Committee.

Recommended remediation

None

Principle 2 – Oversight of third parties

Description of implemented policies and practices

There are two sets of third parties that contribute to the Libor determination process; the Contributor Banks and the Calculation Agent.

Contributor Banks IBA maintains oversight of the Contributing Banks through the Code of Conduct. The Code of Conduct includes the submission methodology to be followed by the Contributor Banks, requirements on governance arrangements, management of conflict of interests, reporting of suspicious activities (to the FCA), record keeping, and compliance audits by internal and external auditors. The Code of Conduct has been endorsed by the FCA as 'industry guidance'.

The role and obligations of the Contributor Banks are defined in the Code of Conduct as well as the FCA Handbook (MAR 8.2).

The ToR includes overseeing the practice standards in the Code of Conduct and reviewing updates of suspected breaches of the practice standards in the Code. Other than this, no policies or practices regarding the regular monitoring of the adherence of Contributor Banks to the Code of Conduct have been implemented.

The FCA Handbook (MAR8.3.9) requires the Oversight Committee to notify the FCA of submitters that fail on a recurring basis to follow the Code.

However, IBA does not have legal powers to audit Contributor Banks.

The Code of Conduct requires Contributor Banks to establish and maintain the necessary arrangements to ensure that consistent and timely electronic delivery of Libor submissions is possible without material interruption due to human or technical failure.

Calculation Agent

IBA has outsourced the collection of submissions and calculation of Libor to the Calculation Agent. This outsourcing is governed by the TR Outsourcing Contract. This contract sets out the services that the Calculation Agent will provide including collecting quotes and rates from the Contributor Banks, calculating Libor and 'pre-publishing' Libor.

The contract sets out the roles and obligations of both parties and includes provisions relating to confidentiality obligations, regulatory compliance, monitoring of the services and remedies for disruptions and non-performance of the services.

IBA states that it monitors the Calculation Agent's performance through daily information provided by it and a weekly operational telephone conference. Ad hoc telephone calls supplement as necessary. IBA also elicits feedback from Contributor Banks in respect of the Calculation Agent's performance.

IBA's website states that 'Thomson Reuters continues to undertake the collection, some real-time surveillance and calculation services, under the oversight of ICE'.

Rating

Fully Implemented

Commentary on why rating was assigned

All Key Indicia have been implemented.

Description of planned policies and practices (including timelines)

IBA indicated to the Review Team that they intend to bring in-house the activities currently outsourced to the Calculation Agent. This is expected to occur in Q3 2014.

Recommended remediation

None

Principle 3 – Conflict of interest for administrators

Description of implemented policies and practices

Relevant conflicts of interest

IBA has disclosed the following potential conflicts of interest to the FCA:

Oversight Committee conflicts of interest

Oversight Committee members are required to notify IBA if they find themselves conflicted in a way which IBA may not otherwise have anticipated (e.g., a change in employment that gives rise to a conflict with the individual's duties as a member of the Committee). If a conflict cannot be managed otherwise by the Committee, disclosure may be the recourse. Such disclosure will be timely, clear, accurate and sufficiently detailed to enable the other party to understand the conflict and its potential implications. Certain types of conflicts of interest are anticipated in the contractual provisions to which Committee members are subject. These provisions require explicit advance consent for certain matters.

Staff conflicts of interest

IBA's employees are compensated on the basis of a combination of ICE Group's overall performance and

their individual performance. Employees are not typically paid on the basis of the performance of their individual subsidiary or business unit. There is no link between compensation and Libor.

IBA staff are dedicated to IBA's business and do not conduct work related to other businesses of the ICE Group. In addition, IBA's staff is physically segregated from other ICE Group staff and IBA's offices have cardkey access controls.

IBA's files are also segregated and access is tightly controlled.

Frameworks

The ICE Group Code sets out the conflicts of interest guidance that applies to IBA.

This guidance states that:

- Business decisions and actions must be based on the best interests of the ICE Group and its affiliates, and must not be motivated by personal considerations or relationships;
- Relationships with prospective or existing suppliers, contractors, customers, competitors or regulators must not affect staff's independent and sound judgment on behalf of the ICE Group and its affiliates; and
- IBA personnel are required to disclose to their Chief Compliance Officer any situation that may be, or appear to be, a conflict of interest.

IBA maintains a conflicts of interest register that records the following in respect of each conflict of interest:

- A description of the conflict;
- The assessment;
- The measures taken to mitigate or manage the conflict;
- The resolution; and
- The relevant dates (when the conflict arose; when it was discovered and reported; and when corrective action was taken).

Transparency

Under the ICE Group Code, disclosure of conflicts needs to be made to the relevant Chief Compliance Officer.

Rating

Partly Implemented

Commentary on why rating was assigned

All but five of the Key Indicia have been implemented. Their non-implementation substantially affects IBA achieving the intended outcome of Principle 3. Specifically:

- IBA has not documented conflicts of interest policies and procedures that are specific to IBA and its benchmark administration roles (as required by Key Indicium 3.1(a)).

  Instead it relies on the policies of ICE Group as set out in the ICE Group Code. The ICE Group Code lacks express policy on the management of conflicts of interest that may impinge on the independence and integrity of Libor determinations.

- IBA has disclosed certain potential conflicts of interest to the FCA but not to users (as required by Key Indicium 3.1(c)). This affects the ability of users to understand all the material conflicts of interest, as required by Principle 3.

- The ICE Group Code does not define what a conflict of interest is for IBA. Under the ICE Group Code, a conflict arises between the best interests of the ICE Group and other interests. This does not ensure that conflicts of interests do not inappropriately influence determinations of Libor (as required by Key Indicium 3.2(a)(i)) or that business connections do not compromise IBA's performance of its functions (as required by Key Indicium 3.2(a)(ii)).

  This deficiency occurs as the ICE Group could have an interest or interests in additional volatility of Libor. This could arise due to the potential influence of volatility on the activity in the derivatives markets operated by the ICE Group.

- The conflicts of interest policies do not ensure that there are adequate remuneration policies that ensure all staff who participate in the determination of Libor are not directly or indirectly rewarded by the levels of Libor (as required by Key Indicium 3.2(a)(vii)).

  It appears that the remuneration of IBA's staff is linked to the performance of the ICE Group which, in turn, could be indirectly linked to the level or performance of Libor.

Description of planned policies and practices (including timelines)

IBA states that they will disclose material conflicts of interest to users**.**

Recommended remediation

IBA should:

- Document a conflicts of interest policy and procedures that are specific to IBA and its benchmark administration roles.
  - This documented conflicts of interest policy should define what a conflict of interest is

appropriately given the imperative to ensure the credibility of Libor and the potential interests of the ICE Group; and

- The policy should also specifically ensure that there are adequate remuneration policies that ensure that all staff who participate in the determination of Libor are not directly or indirectly rewarded by the levels of Libor.

- Disclose potential conflicts of interest to Libor users.

Principle 4 – Control framework for administrators

Description of implemented policies and practices

Code of Conduct

IBA has implemented (and published) the Code of Conduct. This sets out, inter alia, the submission methodology, governance arrangements, requirements on management of conflicts of interest, compliance monitoring and audit, and reporting of suspicious activities.

Contributor Banks and IBA are also required to comply with other operational requirements under the FCA Handbook rules (MAR and SYSC).

IBA has established the Oversight Committee. Under its ToR, the responsibilities of the Oversight Committee include the following:

- Exercising collective scrutiny of individual submissions if and when required;
- Undertaking regular reviews of the composition of Libor currency panels and the process of making submissions;
- Reviewing updates on suspected breaches of the Code of Conduct and suspected manipulation;
- Considering existing and potential conflicts of interest where material; and
- Overseeing IBA's adherence to its published methodologies, including calculation, re-fix and business continuity policies.

Whistle-blowing

IBA has in place whistle-blowing procedures that allow any person to alert IBA on an anonymous basis of any conduct that may involve manipulation, or attempted manipulation, of Libor. These procedures are disclosed on IBA's website.

Operational Risk Framework

IBA has an Operational Risk Framework set out in a written Operational Risk Policy. The objective of the framework is to enable the executive management of IBA to monitor the overall risk profile of the company as well as specific material risks, so that developments which could jeopardise the interests of IBA be identified at an early stage and suitable countermeasures deployed. The policy adopts a "three lines of defence" framework for risk management:

a. The first line is the business lines and support functions managing day-to-day risks.

b. The second line provides oversight of the risk framework. Consolidated risk reporting is provided by IBA's internal risk services, supported by specialist risk and control functions and subject matter experts.

c. The third line is IBA's internal audit services and the company's external auditors providing independent assurance.

Staff training

All staff members joining ICE Group are required to complete e-training on compliance, applicable legislation and data protection. In addition, IBA staff has received three full training days on money markets, treasury, derivatives and applicable regulation.

Submissions surveillance

Contributor Banks submit information daily in accordance with an agreed template as well as corroborative information in free form. Information provided by Contributor Banks includes in some cases detailed transactional information with names of counterparties and pricing information.

IBA has commenced a programme of visits to review Contributor Banks' operational procedures and methodologies.

IBA has automated tools which generate alerts, as described below. In addition, the Calculation Agent continues to operate its existing ex-ante checks and will respond directly to the Contributor Banks when the Calculation Agent's alerts are raised during the submission-to-publication window.

IBA's post-publication surveillance system and tests are designed to assess the credibility of Libor submissions and rates.

IBA's monitoring centres provide statistical analysis and the identification of potential anomalies in an individual Contributor Bank's submission relative to:

- Its previous submissions;
- The submissions of other Contributor Banks; and
- Related market indicators.

The alerts typically seek to identify:

- Individual benchmark submissions which manifest an anomaly that is of lower magnitude than manifest error; or
- Anomalies when various peer-group statistical analyses are performed, including where the confidence interval of any identified anomaly is calculated to be above the expected threshold.

IBA analyses the alerts and other relevant data to understand the cause of the alerts. This includes review of the corroborative and transactional data which is provided daily by each Contributor Bank.

IBA assesses how the corroborative and transactional data is able to support a submission which appears anomalous. If the reason for the alert cannot be explained from the available data, IBA seeks further information and/or an explanation from the relevant Contributor Bank. If IBA finds an explanation unsatisfactory, the matter will be referred to the Oversight Committee.

Rating

Broadly Implemented

Commentary on why rating was assigned

All but four of the Key Indicia have been implemented. The non-implementation of the four Key Indicia does not substantially affect IBA achieving the intended outcome of Principle 4. Specifically:

- As noted above in connection with Principle 3, IBA does not have proper documentation of its conflict of interest policy (as required by Key Indicia 4.1(a) and 4.1(c)(i)).

  It uses the ICE Group's policy which requires staff to act in the best interest of the ICE Group. While a conflicts of interest policy is in place, this could sometimes be interpreted as conflicting with the interest of maintaining the independence and integrity of the benchmark determination process.

- Key Indicia 4.1(c)(ii) and (iv) are not fully implemented since arrangements in place are not sufficient to ensure the quality and integrity of Libor is maintained in line with Principles 6 to 14 in view of the less than "fully implemented" ratings for certain of these Principles..

The full implementation of all other aspects of the control framework, however, provides assurance that IBA has a robust system to maintain the integrity of Libor.

Description of planned policies and practices (including timelines)

IBA will appoint another two independent non-executive directors and more user representatives and central bank observers to the Oversight Committee.

Recommended remediation

IBA should:

- Follow the recommendations given for Principles 3, 6, 7, 9, 11, 12, 13 and 14.

Principle 5 – Internal oversight

Description of implemented policies and practices

IBA's internal oversight function is performed by the Oversight Committee (described above).

Composition of Oversight Committee

In compliance with FCA Handbook rule MAR 8.3.8, IBA has established an Oversight Committee of 17 members, comprising:

- Four representatives of Contributor Banks;
- Three representatives of market infrastructure providers;
- Five representatives of associations that represent the Libor user community;
- Two independent non-executive directors of IBA (who are approved to carry out this role);
- Two representatives of IBA;
- One representative of ICE; and
- One representative from the Calculation Agent.

The Bank of England, the Federal Reserve Board and the Swiss National Bank are observers on the Oversight Committee.

Responsibilities of the Oversight Committee

Under FCA Handbook rule MAR 8.3.9, the Oversight Committee is responsible for:

- Considering matters of definition and scope of Libor;
- Exercising collective scrutiny of Libor submissions if and when required; and
- Notifying the FCA of Contributor Banks that fail on a recurring basis to follow the Code of Conduct.

Under the ToR, the Oversight Committee is responsible, inter alia, for:

- Conducting regular reviews of all aspects of the determination of Libor, including the methodology, features, definition, scope, and the setting of Libor and overseeing any changes.
- Assessing aspects listed above against, inter alia, the underlying interest and the usage of Libor.
- Exercising collective scrutiny of individual submissions if and when required.
- Overseeing the practice standards in the Code of Conduct and reviewing these regularly.
- Ensuring notification to the FCA of Contributor Banks that fail on a recurring basis to follow the Code of Conduct.
- Undertaking regular reviews of:
    - The composition of Libor currency panels; and
    - The process of making relevant Libor submissions.
- Developing proposals for consultation on prospective changes to the benchmark methodology, the practice standards in the Code of Conduct, the setting and definition of Libor, the composition of the Libor currency panels and the process of making relevant Libor submissions.
- Having regard to any responses to consultation comments.
- Reviewing updates of:
    - Suspected breaches of the practice standards in the Code of Conduct; and
    - Suspected manipulation.
- Considering existing or potential conflicts of interest where material.
- Taking measures to remain informed about material issues and risks relating to Libor.
- Overseeing IBA's adherence to its published methodologies, including calculation, re-fix and business continuity policies.
- Recommending as appropriate, that external reviews of Libor be commissioned by IBA.

The Oversight Committee has met twice since IBA became operational on 1 February 2014. The meetings covered an overview of the transition for Libor from BBALL, a detailed review of the ToR, the information needed to discharge the committee's responsibilities and the Re-fix policy going forward.

IBA has surveillance processes to identify potential anomalies in Contributor Banks' submissions through the application of statistical analyses. Automated tools generate alerts which are used for follow-up work.

Corroborative transactional data is reviewed by IBA to analyse whether a submission which appears anomalous can be substantiated. If the reason for the alert cannot be explained from the available data, IBA seeks further information and/or an explanation from the Contributor Banks.

Behaviour which is suspected of being manipulative will be referred to the FCA. IBA will report to the Oversight Committee routinely in respect of any such referrals, describing the behaviours in question without identifying the relevant Contributor Banks. If IBA finds an explanation unsatisfactory, the matter will be referred to the Oversight Committee.

Every alert is reviewed by IBA's surveillance team. A daily meeting attended by three to five staff members reviews the alerts, decides on follow-up actions and assesses any outstanding actions. All alerts are signed-off at IBA management level.

Rating

Broadly Implemented

Commentary on why rating was assigned

All but two of the Key Indicia have been implemented. Their non-implementation does not substantially affect IBA achieving the intended outcome of Principle 5. Specifically:

- IBA has not published the ToR, the declarations of conflicts of interest and processes for election, nomination or removal and replacement of Oversight Committee members (as required by Key Indicium 5.2).

  However, the outcome of the Key Indicium is met as there are robust procedures for IBA's oversight function.

- IBA has not published the processes for the election, nomination or removal and replacement (including selection criteria) for its Oversight Committee (as required by key Indicium 5.3).

  However, the oversight function is independent and has a balanced membership, which is the intended outcome of the Principle.

Description of planned policies and practices (including timelines)

IBA state that the Oversight Committee receives a regular 'dashboard' setting out key surveillance metrics including: late submissions, errors in submissions, surveillance alerts generated and referrals to the FCA. IBA will, where relevant, include sample explanations given by banks in response to follow up enquiries and referrals to the FCA.

Recommended remediation

IBA should:

- Publish the ToR, the declarations of conflicts of interest and processes for election, nomination or removal and replacement (including selection criteria) of Oversight Committee members.

B. Principles relating to quality of the benchmark

Principle 6 – Benchmark design

Description of implemented policies and practices

The interest that Libor seeks to represent is the average rate at which Contributor Banks could go into the London interbank money market and obtain funding in reasonable market size, for a given maturity and currency.

The methodology used to calculate Libor seeks to achieve a representation of this Interest by obtaining rate submissions from Contributor Banks. The Code of Conduct requires Contributor Banks to base their submissions on a hierarchy of transactions and adjust their submission to be representative of the interest that Libor seeks to measure.

The submissions are averaged after excluding the highest and lowest 25% of submissions.

In order to inform the benchmark, IBA collects detailed data on the underlying interest: unsecured interbank transactions, other unsecured transaction, foreign exchange swaps for funding purposes and internal transactions at bona fide market prices in each Libor currency and tenor. Some of this data is obtained on a daily basis.

The data from all the banks has been collected and analysed by the BBALL, prior to IBA assuming responsibility for Libor. IBA has continued with this work

Data is not collected from other banks. Nor is there data on usage or market participation.

The surveillance and control functions of IBA (see Principle 7) are also used to ensure the data used is representative.

IBA notes that while Contributor Banks increasingly use transactions, the design of Libor as a polled rate allows for continuous publication of the benchmarks even when some tenors have low liquidity.

However, the limited number of Contributor Banks may affect the setting of Libor. They were inherited from BBALL. BBALL selected the Contributor Banks on the basis of scale of activity in the London market and perceived expertise in the currency concerned, with due consideration given to credit standing. 'London market' means any transaction carried out from London, with a London

counterparty, or via a London intermediary.

IBA believes the number of Contributor Banks is sufficient to represent the interest represented by Libor but could benefit from some expansion, as described below.

The design of Libor has seen one significant change since its inception. Up until 1998, banks submitted quotes to BBALL in line with the question: 'At what rate do you think interbank term deposits will be offered by one prime bank to another prime bank for a reasonable market size today at 11 a.m.?'

During 1998, this question changed and has up until today been: 'At what rate could you borrow funds, were you to do so by asking for and then accepting interbank offers in a reasonable market size just prior to 11 a.m.?'

This was decided after consultation with the markets and was implemented due to a view that a universal definition of a prime bank could no longer be given. It also links the figures submitted by Contributor Banks to their own market activity, rather than a hypothetical entity.

Previously, the BBALL has conducted a number of changes as a result of the Wheatley Review, such as the reduction in tenors and currencies. This review considered that certain currencies and tenors were so diminished that they could no longer function as a basis for a credible benchmark.

Rating

Partly Implemented

Commentary on why rating was assigned

All but four Key Indicia have been implemented. Their non-implementation substantially affects IBA achieving the intended outcome of Principle 6.

Specifically, the Review Team has not been presented with evidence that IBA has documented or followed a design process that incorporates the factors in Key Indicia 6.1(b)(ii)-(v).

However, because IBA (or BBALL) has discontinued the rates as prescribed by the Wheatley Review and collects daily and quarterly data, a 'Partly Implemented' rating rather than a 'Not Implemented' is warranted.

Description of planned policies and practices (including timelines)

There is no analysis of the usage of Libor which would allow IBA to assess the appropriateness of the Benchmark. The quarterly data and the daily submission information should allow IBA to ascertain whether there is a suitable and sufficient market.

IBA states it is committed to assessing the merits of:

IBA will also facilitate discussions to assist Contributor Banks to fine-tune their methodologies by developing and enhancing best practice standards over time.

Recommended remediation

IBA should:

- Continue collecting, classifying and refining data to understand the activity and liquidity for the interbank market and for each segment of the unsecured wholesale funding markets
- Work with the FSB OSSG recommendations (when available) to ensure the design of Libor is fit for purpose.

Principle 7 – Data sufficiency

Description of implemented policies and practices

Policies

The Code of Conduct describes the acceptable types of market data which can be used to construct Libor. This includes but is not limited to funding transactions. Funding transactions can be broadly divided into unsecured interbank deposits, non-London unsecured interbank deposits and other unsecured wholesale transactions (certificates of deposit (**CD**s), and commercial papers (**CP**s)), foreign exchange swaps for funding purposes, and internal bona fide transactions at an arm's length.

The interest which the Benchmark seeks to measure is based on the following question asked of submitters:

'At what rate could you borrow funds, were you to do so by asking for and then accepting interbank offers in a reasonable market size prior to 11 a.m.'

This definition appears to narrowly prescribe 11 a.m. interbank deposits as the basis for submissions.

The Submission Methodology Annex of the Code of Conduct acknowledges the difficulty of solely basing submissions in such narrowly defined terms, and hence allows a wider set of data to form the basis of the submission (funding transactions as listed above). To ensure that the submission is representative of the interest measured by Libor, the submission guidelines ask the Contributor Banks to perform adjustments taking into account, the proximity of transactions, techniques for interpolation, changes in credit conditions/borrowing requirements and non-representative transactions such as non-competitive transactions.

Practices

IBA follows a three-step approach to collecting information for each benchmark determination:

- Each Contributor Bank provides a submitted rate for each relevant currency and tenor for which they are a panel member;
- Together with the submitted rates, each submission comes with a standardised form for each currency, where Contributor Banks can insert their comments and any transactional/market information using the categories described below;
- Contributor Banks provide additional supporting documentation such as transaction details, screen rates and other relevant market information.

IBA asks each Contributor Bank to provide additional information explaining the submission. They encourage Contributor Banks to detail actual transactions used to base the submission, as well as additional market data which adjusts each submitted rate. Ina standard daily template, IBA asks the data to be categorised in one of the following categories:

- Unsecured interbank deposits;
- Other unsecured transactions:
    - Including but not limited to asset managers, CDs, central banks, corporates, CP, fiduciary trusts, government agencies, local authorities, money market funds, multi-lateral development banks, non-bank financial institutions, sovereign wealth funds; but
    - Excluding government guarantee schemes, internal transactions, repos/reverses; and
- Only market observations, where the bank has no transactions.

This data used to be collected for different purposes but was clarified and refined since the administration of, and submission to, Libor became regulated activities in April 2013.

Quarterly data

BBALL has collected data from all Contributor Banks for the relevant currencies (GBP, EUR, USD, CHF, JPY) and Libor tenors (1 week, 1 month, 3 months, 12 months). This data was collected quarterly and aggregated from April 2013 onwards. The data contains the number of trades and the associated volumes.

The quarterly template has the following data categories:

1. London unsecured interbank deposits. At least one counterparty or intermediary must be physically based in London. Transactions should not be size-limited.
2. Non-London unsecured interbank deposits and any other unsecured transactions. Counterparties located outside of London should be included if bank internal structures allow for aggregation of this data. Counterparties should include but not be limited to: asset managers, CDs, central

banks, corporates, CP, fiduciary trusts, government agencies, local authorities, money market funds, multi-lateral development banks, non-bank financial institutions, and sovereign wealth funds. All transactions viewed by the Libor submitting desk should be included. Transactions should not be size-limited.

3. Foreign exchange swaps. The total of all transactions undertaken for funding purposes should be recorded (e.g. when funding in a foreign currency is obtained through the combination of funding in the local currency and a foreign exchange swap). Data for both sides of a Libor-currency-to-Libor-currency swap is requested to be recorded, but only the Libor currency side of a Libor-currency-to-non-Libor-currency swap. Notional amount at near leg value date should be recorded. Transactions should not be size-limited.

4. Internal transactions. Internal deals which are competitively priced (e.g. when the funding is obtained overseas and on-lent at market price) and therefore reflective of market levels should be included. In determining whether internal deals fall under this category, firms should exercise their professional judgement and expertise. Transactions should not be size-limited.

This data used to be collected for different purposes but was clarified and refined since the administration of, and submission to, Libor became regulated activities in April 2013.

IBA will perform its first quarterly collection in May 2014.

Market data

IBA also consults relevant market data for its general surveillance purposes such as:

- Cash markets-related data (bonds, CP and CD secondary paper);
- Credit rating-related data (CDS, credit ratings etc.);
- Interest rates-related data (overnight index swaps, bonds, futures etc.);
- Foreign exchange swap-related data (basis swap rates, arbitrage levels etc.);
- Repo- and reverse repo-related market data;
- Brokers' quotes; and
- Macroeconomic and central banks' data (refinancing rates, market operations, deposit rate, inflation, capital requirements, etc.).

Other information

IBA uses various information as checks to the submission process:

- Information from meetings with Contributor Banks and others;
- Contributor Banks' operational procedures documents; and

- Data from alerts generated through IBA's surveillance processes.

Surveillance

In order to ensure the data is bona fide, IBA has developed a system of daily scrutiny and surveillance.

All submissions for all currencies and tenors are subject to IBA's statistical analyses which generate alerts to identify anomalies for further investigation. The process is multi-layered:

- Pre-submission checks, carried out by the Calculation Agent, check for excessive movement in submissions or excessive variance from Libor rates.
- Post-submission checks by IBA review all alerts generated by IBA and report on trends for each submission, checking whether unusual spikes or movements occur as well as seeking to identify possible manipulation or collusion.
- The flags raised in pre-submission checks by the Calculation Agent are reviewed by IBA each day and are discussed in a weekly conference call with the Calculation Agent.

Rating

Not Rated

Commentary on why rating was assigned

Since Libor administration became a regulated activity in April 2013 BBALL began widening, classifying and refining their data collection exercise. The volume of data collected at this point in time is neither sufficient nor robust enough to come to a conclusion on whether or not the Principle has been implemented. IBA receives supporting data on a daily basis and will continue to collect aggregated quarterly activity data. The OSSG will need to consider how to ensure compliance with this Principle.

Description of planned policies and practices (including timelines)

As yet, IBA has insufficient quantitative data on transactions. IBA will be collecting statistics on a quarterly basis which will be used, inter alia, to assess the changes and the adequacy of the Libor definition in the future. (They will be collecting transactional data more frequently for the purposes of corroborating submissions).

IBA is also assessing the merits of a number of changes to increasingly anchor Libor in transactions, including:

Recommended remediation

IBA should continue addressing Principle 7 as a matter of urgency by:

- Initiating work on collecting and sharing with IOSCO and other relevant authorities the data and analysis that was requested by the Methodology in connection with Principle 7.
- Continuing to work on exploring options to anchor Libor in actual transactions drawn from active markets, including necessary further design, methodological and/or definition changes. This would include:
    - Defining what it considers an 'active' market in the interest Libor seeks to represent, including describing the minimal acceptable level of activity necessary to demonstrate an active market;
    - Completing an analysis of methodologies to provide a basis for deciding whether the transactions are anchored in active markets; and
    - Making the necessary consequential changes from any broadening of permissible transactions beyond interbank unsecured transactions.
- Following the recommendations in connection with Principle 9.

Principle 8 – Hierarchy of data inputs

Description of implemented policies and practices

The hierarchy of data inputs for Libor is governed by the Code of Conduct and FCA Handbook rules.

Hierarchy of data

The Code of Conduct governs the range of permissible transactions.

It places a clear emphasis on own transactions, followed by observations of third party transactions, and then indicative quotes. All transactions should be adjusted to ensure that the submission is representative of the market for interbank deposits.

Transactions can be drawn from the following relevant markets:

- The unsecured interbank deposit market;
- Other unsecured deposit markets, including but not limited to, CDs and CP; and
- Other related markets, including but not limited to, overnight index swaps, repurchase

agreements, foreign exchange forwards, interest rate futures and options and central bank operations.

Submissions need to be adjusted to ensure that they are representative and consistent with the market for interbank deposits. The following consideration should be taken into account:

- Proximity of transactions to time of submission and the impact of market events between transaction and submission time;
- Techniques for interpolation or extrapolation from available data;
- Changes in relative credit standing, access to funds, and borrowing or lending requirements of the Contributor Banks or other market participants; and
- Non-representative transactions, such as non-competitive trades.

There may be other factors and considerations that a Contributor Bank believes should be the subject of an adjustment, in particular the implications of the market in question being unusually stressed.

Expert judgment

The use of expert judgment is governed by FCA Handbook rule MAR 8.2.5 to ensure that "submitters and reviewers exercising expert judgement in a consistent manner" (Code of Conduct Section 3.8). The Submission Methodology Annex to the Code of Conduct also contains provisions governing the use of expert judgment (Articles. 18–20) including a range of factors to consider when using expert judgment.

Furthermore, the FCA Handbook rule MAR 8.2.5 provides that "A contributing bank must ensure that its Libor submissions are determined using an effective methodology to establish the benchmark submission on the basis of objective criteria and relevant information".

The Code of Conduct states that expert judgment should be subject to a range of factors such as:

- Reasonable market size;
- Known transactions of the contributing bank;
- Known transactions of third parties observed; and
- Known offer from third parties.

The Contributor Banks all have a submitting methodology in order to comply with the FCA Handbook rules and the Code of Conduct.

Furthermore, Contributor Banks have acknowledged their responsibilities under the Code of Conduct and its Submission Methodology Annex.

Finally, all Contributor Banks provide a range of information which supports each of their submissions, and contains information on how the submission was determined based on the above hierarchy.

Rating

Fully Implemented

Commentary on why rating was assigned

All Key Indicia have been implemented.

Description of planned policies and practices (including timelines)

The IBA has started analysing the data available to, and being used by, Contributor Banks and will regularly re-assess the hierarchy to see if an adjustment is appropriate or if other related markets should be considered.

Recommended remediation

None

Principle 9 – Transparency of benchmark determinations

Description of implemented policies and practices

IBA collects daily information with each submission which covers transactions and expert judgement. It also has a standardised template for the collection of quarterly data.

The Code of Conduct governs the submissions by Contributor Banks and the usage of adjustments and expert judgment.

IBA does not publish any information with each determination.

The collection of data has been done according to a template; however IBA has not deemed it reasonable to publish information with each determination.

IBA notes that it would not be feasible to publish an explanation of the percentages of each type of market data used to determine the rates. Not only would this delay publication unreasonably but there is the risk that a daily statement would offer scope for over-analysis of any change in the justification from day to day.

Rating

Not Implemented

Commentary on why rating was assigned

The two Key Indicia have not been implemented. Specifically:

- IBA does not provide specific information on market size and liquidity (as required by Key Indicium 9.1(a)); and
- IBA does not publish a concise explanation of the extent to which and the basis upon which expert judgment, if any, was used in establishing a determination of Libor (as required by Key Indicium 9.1(b)).

Description of planned policies and practices (including timelines)

IBA is currently assessing the need for a clearer iteration of the methodology used for calculating Libor. It will be assessing what additional information should be published on a routine basis. For a benchmark like Libor, which is based on an average of submissions that are themselves derived from a combination of transactions and expert judgement, then it is likely that this will not be a daily process but rather the methodology will be clearly iterated in advance and a more qualitative quantification of the inputs to the rate will be published on a routine but not daily basis.

Recommended remediation

IBA should:

- Work decisively towards publishing with each benchmark determination the concise statements called for by Principle 9.
- Continue working with the Contributor Banks to streamline the facility that would permit Contributor Banks to disclose to IBA the full data upon which their rate submissions are based, subject to appropriate confidentiality protection.

Principle 10 – Periodic review

Description of implemented policies and practices

Oversight Committee

The ToR make clear that that the Oversight Committee has duties to conduct regular reviews on all aspects of Libor, including Libor's:

- Methodology;
- Features;
- Definition;
- Scope; and
- Setting.

The Oversight Committee must also oversee any changes to these aspects of Libor.

This includes reviews of the above against the underlying interest and usage of Libor.

Furthermore, IBA is responsible for undertaking regular reviews of the composition of the Libor panels, and the process of making relevant Libor submissions.

Finally, the Oversight Committee can recommend the commissioning of external reviews of Libor.

Previously, BBALL produced guidelines for consulting on any changes resulting from such reviews.

Quarterly data

IBA (and previously BBALL) collects quarterly data from Contributor Banks on the activity in the underlying market. Under FCA rules, IBA must publish quarterly aggregate statistics on the activity of the market.

Practices

The first collection of quarterly data for IBA will be conducted in May 2014 for the months February to April 2014.

IBA has had discussions with Contributor Banks at senior level to gauge the conditions and sentiment in the interbank market.

Previously, BBALL has conducted a number of changes as a result of the Wheatley Review such as the reduction in tenors and currencies. This review and the changes were all publicly disclosed.

Subsequently, the BBALL Interim Libor Oversight Committee (**ILOC**) determined that definition

reviews and radical changes should not be conducted by BBALL due to its interim nature. This was evidenced in the minutes of the first ILOC meeting on 22 May 2013.

Further, in June 2013 ILOC commissioned a study of error/re-fix mechanisms. It consulted on changes to the re-fixing methodology on 7 October 2013 and its results were discussed at the 20 December 2013 ILOC meeting. The proposed changes were handed over to IBA and are under active consideration.

BBALL also ceased the publication of 'same day' Euro Libor rates for 1 week and 1 month as of 31 July 2013.

Rating

Fully Implemented

Commentary on why rating was assigned

All Key Indicia have been implemented.

The ToR ensure the Oversight Committee will conduct reviews of the underlying interest and all aspects of Libor regularly (periodically). BBALL did not conduct its own review of the underlying interest and the definition of Libor because it was deemed that an interim administrator would not have the authority to conduct such a review. BBALL, however, conducted changes in line with the Wheatley Review, such as reducing tenors and currencies. This evidences both a thorough review process conducted publicly and changes which have occurred as a result of the review.

IBA has not conducted a review but the Review Team acknowledges that it has only been the Libor administrator since February 2014.

Description of planned policies and practices (including timelines)

A review of the health of interbank markets is being considered.

Recommended remediation

None

C. Principles relating to the quality of the methodology

Principle 11 – Content of the methodology

Description of implemented policies and practices

IBA has published a methodology that is available on its website.

There are few key terms in the methodology as it is written in plain English. The methodology does provide definitions and explanations for the following key terms: "ICE Libor" and "trimmed arithmetic mean".

"Reasonable market size" is intentionally unquantified as the definition of an appropriate market size depends on the currency and tenor in question, as well as supply and demand. The Code of Conduct also contains a glossary of terms.

The IBA website sets out the definition of Libor and how the inputs are selected. The Code of Conduct details the submitter methodology including the hierarchy of data inputs and use of expert judgment. There are no minimum data requirements.

Guidelines for expert judgment for Contributor Banks are set out in Section 3 of the Code of Conduct. These guidelines do not apply to the Administrator as no expert judgement is used by IBA in the calculation of Libor although judgement is used post-publication in the assessment of corroborating evidence provided by Contributor Banks to IBA to support and justify their submissions.

Section 3 and the Annex of the Code of Conduct allow Contributor Banks to make adjustments/use expert judgment in periods of stress/dislocation. IBA has documented a number of procedures for dealing with scenarios that could negatively impact the Libor determination process.

The Code of Conduct details when error reports should be escalated to the Oversight Committee/FCA.

The Code of Conduct requires IBA to establish an operational group consisting of Contributor Bank representatives who will meet regularly with IBA.

However, the limited number of Contributor Banks may affect the setting of Libor. BBALL did not seek to address this as interim administrator. BBALL did not seek to limit or increase the number of Contributor Banks as there are a limited number of banks able to submit to Libor.

The Contributor Banks have not changed since IBA took over. BBALL's selection of Contributor Banks was based on the following criteria: scale of market activity; credit rating; and perceived expertise in the currency concerned.

The methodology prescribed by IBA and practiced by the Calculation Agent in their calculations of Libor is described in detail on the IBA webpage.

Current fall-back measures include a reduced submissions policy, a policy to republish the previous

day's Libor if a benchmark determination cannot be made on a particular day and full business continuity arrangements.

Additional elements of the methodology are detailed in the Code of Conduct.

BBALL has not added to or excluded Submitters from the panel due to its status as interim administrator. There are no available criteria for excluding Submitters.

Rating

Broadly Implemented

Commentary on why rating was assigned

All but four Key Indicia have been implemented. Their non-implementation does not substantially affect IBA achieving the intended outcome of Principle 11. Specifically:

- There are no provisions addressing the minimum data needed to determine a benchmark, or any models or extrapolation methods (as required by Key Indicium 11.2(b));
- There are no procedures to promote the consistent exercise of expert judgment within the IBA (as required by Key Indicia 11.2(c)).

  This is defensible, however, as IBA exercises no expert judgment in the determination of Libor. IBA's judgment is only used post-publication in the assessment of corroborating evidence provided by Contributor Banks to IBA to support and justify their submissions.

  There are, however, procedures or practices designed to promote consistency in the exercise of expert judgment by the Contributor Banks. These entities exercise the majority of expert judgment in the Libor determination process.
- The methodology does not yet include ways to identify and deal with the limitations of the benchmark (e.g. the limited panel size) (as required by Key Indicium 11.2(h)); and
- IBA has not yet established criteria for excluding Contributor Banks (as required by Key Indicium 11.3).

Description of planned policies and practices (including timelines)

IBA intends to work with the Oversight Committee, the FCA, Contributor Banks and other stakeholders in Libor to refine the methodologies used by Contributor Banks and codify them in the Code of Conduct. IBA will remain mindful that Libor is a polled rate and that material changes in the definition or scope of Libor could lead to legal frustration. IBA is also considering how to expand the number of Contributor Banks over time.

Recommended remediation

IBA should:

- Amend the Code of Conduct to ensure it refers to the fall-back arrangements and contains provisions addressing the minimum data needed to determine a benchmark, or any models or extrapolation methods.
- If necessary due to any change in the process by which Libor is calculated, adopt procedures to promote the consistent use of expert judgment within the IBA (as opposed to within the Contributor Banks).
- Document ways to identify and deal with the limitations of Libor and establish criteria for excluding Contributor Banks.

Principle 12 – Changes to the methodology

Description of implemented policies and practices

Actions by BBALL

'Material' changes were defined by BBALL as including, but not limited to, changes to the methodology for calculating Libor, changes to the definition of Libor and changes to currencies/tenors in which Libor is published.

Reasons to consult include understanding possible unintended consequences of a policy or to getting views on implementation. A decision to consult is based on the materiality of the change (e.g. the number of contracts/counterparties potentially impacted and the availability of alternative solutions).

These procedures were documented in BBALL's consultation guidance. However, it did not specify who is responsible for carrying out this scrutiny other than stating that BBALL Directors should be sighted on how a decision to consult came about.

IBA has made clear that, moving forward, the IBA Board and Oversight Committee would be the relevant decision makers in such situations.

BBALL's consultation guidance specified that consultation with stakeholders should begin early in policy development, with efforts to make evidence available at that stage. The length of consultation would depend on the nature/impact of the proposal and would be typically between two and 12 weeks. The capacity of groups responding should be taken into account. In consulting with stakeholders, the consultation should ensure the full range of impacted parties are captured, that the information be disseminated in an accessible way and should be easy to understand. The objectives of the process

should be clear and should not create unrealistic expectations.

BBALL consulted on streamlining currencies and tenors for Libor and on 7 October 2013, published a joint consultation with ILOC regarding re-fixing of Libor. A summary of consultation feedback was provided to ILOC, the FCA and published on the BBALL website. The consultation period lasted eight weeks. These consultations followed the framework set out in the consultation guidance.

BBALL did not consult on discontinuing publication of "Euro Same Day" Libor.

Actions by IBA

IBA has documented a general process for consultation but this is not specific to changes in methodology and it has not been made publicly available.

The process outlines the various steps to be taken in consulting stakeholders, including, the initiation of proposals for consultation, drafting of a consultation paper and the details to be included, such as securing Oversight Committee, Board and FCA approval, and inviting public comments.

Rating

Broadly Implemented

Commentary on why rating was assigned

All but three of the Key Indicia have been implemented. Their non-implementation does not substantially affect IBA achieving the intended outcome of Principle 12. Specifically:

- There is no publication of the consultation procedure as required by Key Indicium 12.1, however this does not affect the outcome of the principle, namely, the existence of such procedures;
- Individual consultation responses are not published in line with Key Indicium 12.4(b), but this does not affect the overall outcome of the Principle which deals with consultation processes; and
- Further, it is not clear from BBALL's response how changes in the methodology will be scrutinised and by whom (Key Indicium 12.3(a)). While it can be assumed that this would have been carried out by the ILOC, this should have been made clear in the consultation guidance. The consultation guidance should also have been made public.

Description of planned policies and practices (including timelines)

IBA has not yet published procedures for changing the methodology. However, IBA is developing plans to address these issues when it has more data on which to base any change.

IBA intends to gradually expand the submission panel and recognises that changing the panel could impact the economics of the Benchmark rate — any action will consequently be cautious. Any change to the question upon which Contributor Banks base their submissions ("At what rate could you borrow

funds, were you to do so by asking for and then accepting interbank offers in a reasonable market size just prior to 11 a.m.?") would be subject to extensive consultation due to the associated legal uncertainty. Such changes could include broadening the types of transactions considered by Submitters, reconsidering the timing and details of the Libor publication, addressing errors in submissions and other changes proposed by the Board, the Oversight Committee and others.

Consultation papers will be produced under the auspices of IBA's Oversight Committee. The length of the consultation period is likely to be the element most influenced by the extent of materiality of the change. The public consultation timings are expected to range from three to 10 weeks depending on the materiality of change.

Factors IBA intend to take into account when making changes to the methodology include at least the following (depending on the materiality of the change):

- Feedback from IBA's Oversight Committee;
- Feedback from the public consultation that would be conducted;
- Detailed analysis of the effect of the change on outstanding contracts referencing Libor;
- The impact for existing and potential Libor users;
- The state of the unsecured interbank market and possible impacts thereto;
- The impact for Contributor Banks;
- Legal implications;
- Any regulatory implications;
- Any delivery or other risks which may arise as a consequence of the change;
- The implementation timing of the change and its proximity to expected happenings (such as the introduction of new regulatory initiatives affecting the market); and
- Any other factors of relevance to the particular change or desired outcome.

Recommended remediation

IBA should:

- Publish its consultation procedure and individual consultation response; and
- Clarify in its written policies how changes in the methodology will be scrutinised and by whom.

Principle 13 – Transition

Description of implemented policies and practices

BBALL and IBA have implemented the following policies and practices for transition:

- A contingency plan in the event of unavailability of submissions;
- BBALL discontinued Libor for two currencies and a number of tenors in line with the Wheatley Review.. The cessations occurred in full consultation with stakeholders and BBALL also provided an indication of alternative rates for the whole breadth and depth of contracts. As a result, contracts successfully transitioned to alternative rates with limited impact on market participants.; and
- In February 2014, BBALL successfully handed over the administration of Libor to IBA.

Rating

Partly Implemented

Commentary on why rating was assigned

The Key Indicia of Principle 13 have not been fully implemented. Their non-implementation substantially affects IBA achieving the intended outcome of Principle 13.

However, the rating is not 'Not Implemented' as policies exist in the form of a basic contingency plan and consultation was undertaken when BBALL discontinued certain Libor rates.

Description of planned policies and practices (including timelines)

IBA expects that the development of new and predominantly transaction-based rates will complement Libor and provide, in some instances, more appropriate tools for market usage. This will ensure that Libor becomes used only where it is the most appropriate rate rather than because it is the only available rate. However, no concrete plans have been announced so far.

IBA plans a consultation guidance to be used for changes in the Benchmark methodology.

IBA plans to publish consultation guidance. This is also a requirement of FCA Handbook rules (MAR8.3.10(3)), which requires benchmark administrators to notify the FCA of proposed changes, publish drafts of proposed changes, and invite and have regard to responses.

Recommended remediation

IBA should:

- Conduct further work on, and adopt policies concerning, developing a suitable fall-back rate Libor that would apply in situation where certain currencies or tenors of Libor were not available or ceased being determined.
    - When working towards policies and procedures required by the Principle, IBA will be expected to take into account due guidance by the FSB-OSSG and the FCA.

Principle 14 – Submitter Code of Conduct

Description of implemented policies and practices

IBA has a Code of Conduct for Contributor Banks. This is publicly available. The Code of Conduct was originally established by BBALL. IBA adopted this without any substantive changes.

According to its ToR, the Oversight Committee is required to periodically review the practice standards (which include the Code of Conduct).

The Code of Conduct covers the following:

- A Contributing Bank is required to be authorised as Benchmark Submitters by the FCA. The FCA rules define a Benchmark Submitter as a "bank carrying out the regulated activity of providing information in relation to a specified benchmark".
- A '**Submitter**' is defined as a natural person within a contributing bank who prepares a benchmark submission on behalf of a Contributor Bank. Each Contributor Bank is required to appoint a person responsible for overseeing the submission process (Benchmark Manager). The Code of Conduct specifically provides for relevant employees to be formally designated and prescribes that the designation and documentation should include the person's name, role and reporting line, as well as a detailed job description covering their involvement in the submission process.
- Section 2 (Staff Training and Awareness) requires that all Submitters and reviewers should have relevant experience in the market for the Libor for which they are making submissions, or in a comparable market. The level of experience required to be demonstrated should be appropriate to the responsibilities of the function performed, in the context of the depth of the market concerned. It also requires that all submitters and reviewers should receive training on

responsibilities, processes, systems and controls associated with setting Libor. The training requirements also cover the FSMA, which makes false or misleading statements in relation to benchmark-setting a criminal offence.

- Section 6 (Record Keeping) requires Contributor Banks to provide to the IBA all information used to enable it to make a submission on a daily basis. This section also contains record-keeping requirements for Contributor Banks.
- Section 1 requires Contributor Banks to create, implement and enforce written policies and procedures designed to ensure the Code of Conduct is implemented and systematically applied within the bank.
- Section 3 and the Submission Methodology Annex set out requirements for Contributor Banks' methodologies including the hierarchy of data inputs and the use of expert judgment for Submitters.
- Section 7 (Compliance and internal audit) prescribes procedures for review of submissions by a contributing bank. It requires banks to conduct periodic internal audits of reasonable, random samples of its submissions, as well as the factors, and all other evidence documenting the basis, for such submissions.
- Section 5 requires Contributor Banks to notify the FCA without delay if they suspect that any person is involved in manipulative activities.
- Section 1 requires that governance arrangements should be within the context of a structure that reflects appropriate senior management involvement in, and awareness of, the Libor submission process. Section 1 also specifies roles and responsibilities of the *Benchmark Manager*, which is a Controlled Function introduced by the FCA.
- Section 4 (Managing conflicts of interests) requires that Contributor Banks maintain a whistle-blowing policy so that members of staff have a means by which to raise concerns regarding unlawful or inappropriate practices related to Libor. Section 4 includes the possibility for whistleblowers to maintain confidentially.

  This section also requires that effective controls are established to manage conflicts of interest between the parts of the business responsible for submissions and those parts of the business that may use or have an interest in LIBOR.

All Submitters have supplied confirmation of their responsibilities under the Code of Conduct. Via the Oversight Committee, IBA is required to notify the FCA of Contributor Banks that fail on a recurring basis to follow the practice standards. The Oversight Committee must review the Code of Conduct periodically.

Rating

Broadly Implemented

Commentary on why rating was assigned

All but two Key Indicia have been implemented. Their non-implementation does not substantially affect IBA achieving the intended outcome of Principle 14.

Specifically,

- IBA does not monitor Contributor Banks (as required by Key Indicium 14.2(b)).

  Instead, IBA relies on FCA regulation of Contributor Banks to give it comfort that the Contributor Banks are complying with the submission guidelines and controls in the Code of Conduct.

- IBA lacks policies to discourage the interim withdrawal of Contributor Banks (as required by Key Indicium 14.4(e)).

  Again, however, IBA relies on the FCA's legal compulsion powers to ensure that Contributor Banks do not withdraw from the submission panels.

Description of planned policies and practices (including timelines)

IBA states that the Code of Conduct will evolve over time through the Oversight Committee with initial changes to the Code being made in 2014. IBA did not explain any further.

Recommended remediation

IBA should:

- Commence a program under which it monitors the compliance by Contributor Banks with the Code of Conduct.

- Adopt policies to discourage and mitigate the interim withdrawal of Contributor Banks.

  The Review Team recognises that in complying with these recommendations, IBA may work with the FCA to align its policies with the applicable regulation.

Principle 15 – Internal controls over data collection

Description of implemented policies and practices Not applicable
Rating Not applicable
Commentary on why rating was assigned Not applicable
Description of planned policies and practices (including timelines) Not applicable
Recommended remediation Not applicable

D. Principles related to accountability

Principle 16 – Complaints procedures
Description of implemented policies and practices IBA has a complaints policy that sets out a procedure according to which a complaint will be dealt with by senior staff not involved in the matter and an answer will be given within eight weeks. It explicitly covers complaints regarding the underlying interest, methodology and IBA decisions. Complaints may be made in writing (including e-mail) and orally ("not in writing"), there is no specified submission process. All complaints records will be retained for a minimum of five years. IBA makes the policy available to complainants and to users on request. There are informal dispute resolution processes, which optionally involves IBA senior management.

There were no complaints filed during BBALL's tenure as interim administrator. Neither have there been any complaints since IBA took over responsibility from BBALL on 1 February 2014.

Rating

Broadly Implemented

Commentary on why rating was assigned

All but two Key Indicia have been implemented. The non-implementation of Key Indicium 16.2(c) and 16.3 does not substantially affect IBA achieving the intended outcome of Principle 16.

IBA's complaints policy covers most of the Key Indicia. However:

- There is no explicit procedure that allows complainants to address the IBA Board of Directors (as required by Key Indicium 16.2(c)), but complainants are not precluded from doing so; and
- There is no procedure for publishing or making available post-publication changes in the Libor-rate following a complaint (as required by Key Indicium 16.3).

Description of planned policies and practices (including timelines)

BBALL has consulted on the possibility of "re-fixing" and the answers of (mostly) banks were diverse. The Oversight Committee is currently considering a **Re-fix Policy** based on the consultation paper by the ILOC and BBALL.

Recommended remediation

IBA should adopt procedures that:

- Allow complainants to address the Board of Directors; and
- Provide for publishing or making available post-publication changes in the Libor-rate following a complaint.

Principle 17 – Audits

Description of implemented policies and practices

BBALL appointed an external auditor (KPMG) during their time as interim Libor administrator. The

external auditor has conducted one audit since April 2013. The report covered the following specific aspects of the Libor administration process and raised a number of observations, ranked in order of priority (from low to high) for the Libor administrator to address:

- Libor calculation and distribution;
- Scrutiny and surveillance;
- Business continuity; and
- Governance and compliance.

BBALL management responded to the recommendation of the audit report and all actions were closed by 14 January 2014.

No external audit has been conducted since IBA took over Libor administration on 1 February 2014. IBA is in the process of appointing an external auditor.

Under FCA guidance, IBA has a three month grace period following authorisation during which they must appoint an audit committee. For IBA, this deadline is 1 May 2014. According to the internal audit charter, the internal audit department is responsible for special tasks or projects requested by management and the audit committee. It is independent from IBA operations and has unrestricted access to information. Its chief audit executive reports to the IBA CEO and the Board of Directors and its audit committee.

IBA expects that the internal audit department will report the findings from its first internal audit by the end of July 2014 and thereupon will appoint an external auditor.

The intended outcome of the Principle is to have an independent audit review of the Administrator's adherence to the methodology, set criteria and the Principles.

Rating

Broadly Implemented

Commentary on why rating was assigned

IBA's adopted policies implement the Key Indicia for Principle 17.

There is, however, no evidence of how effective these policies are in meeting the intended outcome of Principle 17 in practice.

Specifically, there is no evidence of that an auditor has been appointed as of the date of the Review, nor is there evidence of the actual frequency of the audits.

For that reason, a Broadly Implemented rating is warranted at this stage.

In assigning this rating, however, the Review Team recognises that the audit framework was established immediately prior to the finalisation of this Review and that IBA has not yet had an opportunity to implement it functionally.

Description of planned policies and practices (including timelines)

IBA intends to have an internal review conducted

Timing, scope and frequency of external audits have yet to be determined, but IBA anticipates that internal and external audits will be conducted within the first two years of operation.

For the following years, IBA anticipates an alternation of internal and external audits.

Recommended remediation

IBA should:

- Ensure that the internal and external audits plans are developed and approved.
- Ensure that its audit and risk function is established.

Principle 18 – Audit trail

Description of implemented policies and practices

IBA has a record keeping policy. Under this policy:

- IBA will retain written records on Libor submissions, supporting data for determinations, compliance with the Code of Conduct and whistle-blowing policies from 3 February 2014 for at least seven years; and
- IBA will retain written records on other aspects for a minimum of five years.

Records containing personal information are subject to the Data Protection Act 1998.

Any disposal or destruction of records is subject to consent from IBA Compliance.

IBA does not yet have substantial records as they took over Libor administration from BBALL on 1 February 2014.

Rating

Broadly Implemented

Commentary on why rating was assigned

All but two Key Indicia have been implemented. Their non-implementation does not substantially affect IBA achieving the intended outcome of Principle 18. Specifically, IBA's record keeping policy does not require the retention of:

- Information on the exercise of expert judgment (as required by Key Indicium 18.1(b)); and
- The identity of each internal person involved in the determination of Libor (as required by Key Indicium 18.1(d)).

The second deficiency may obstruct investigations into misconduct as it may render the identification of responsible individuals impossible. However IBA and the FCA keep records of each individual responsible for submissions at Contributor Banks. This provides comfort that the adequate records are kept since IBA's internal staff has a limited ability to modify the submissions and the ultimate rate. Other records would be able to evidence any such misconduct.

Description of planned policies and practices (including timelines)

None identified

Recommended remediation

By July 2014, IBA should amend its record keeping policy to require the retention of:

- Information on the exercise of expert judgment; and
- The identity of each internal person involved in the determination of Libor.

Principle 19 – Cooperation with regulatory authorities

Description of implemented policies and practices

IBA is subject to the FCA Handbook rules (MAR 8) setting out the requirements for the Libor administrator under UK law and the FCA's Supervisory Engagement Agenda. The latter details the manner and frequency of supervisory engagement that the regulator expects.

IBA holds fortnightly meetings with the FCA, moving to monthly meetings in H2 2014. Meetings between the FCA and the Chairs of the Board and the Oversight Committee are also scheduled.
Rating Fully Implemented
Commentary on why rating was assigned All Key Indicia have been implemented.
Description of planned policies and practices (including timelines) None identified
Recommended remediation None

5. Tibor

5.1 Introduction

What is Tibor?

Tibor is a series of daily interest rate benchmarks. It is calculated as the prevailing market rate based on rates quoted by reference banks, assuming transactions between prime banks on the Japan unsecured call market and on the Japan offshore market, as of 11:00 a.m. each business day. Tibor is currently quoted for 13 different tenors ranging from 1 week, and 1 to 12 months.[16]

Tibor includes the following rates:

- Japanese Yen Tibor, which reflects prevailing conditions in the Japan unsecured call market; and
- Euroyen Tibor, which reflects prevailing conditions in the Japan offshore market.

From 1 April 2014, the term 'prime bank' was clarified in determining Tibor and is defined as 'a bank which is financially resilient (e.g. banks having adequate capital and sufficient liquid assets) and which is a major player in the Japan unsecured call market (or in the Japan offshore market in the case of Euroyen Tibor).'

Administration of Tibor

The JBATA assumed responsibility for the calculation and publication of Tibor on 1 April 2014.

Previously, the JBA had been responsible for its calculation and publication. The JBA is an industry organisation whose members consist of banks, bank holding companies and bankers associations in Japan.

JBATA is wholly owned by the JBA.

There are currently 17 reference banks (15 of which quote rates for Japanese Yen Tibor and 14 of which quote rates for Euroyen Tibor) (**Reference Banks**). The Reference Banks are required to comply with the procedures and governance rules specified by JBATA.

JBATA's administration of Tibor is governed primarily by the JBA Tibor Operational Rules

[16] The JBA has decided to reduce the number of tenors, for which the Japanese Yen Tibor and Euroyen Tibor rates are published, from the current 13 tenors (i.e. 1 week and 1–12 months) to six tenors (i.e. 1 week, 1 month, 2 months, 3 months, 6 months and 12 months), discontinuing the publication of Tibor for the other tenors (i.e. 4 months, 5 months, 7 months, 8 months, 9 months, 10 months and 11 months). The revised tenors will be effective from 1 April 2015.

(**Operational Rules**) and the JBA Tibor Code of Conduct (**Code of Conduct**).

The Operational Rules set out how Tibor is determined and disseminated, JBATA's governance structure is intended to work and JBATA will deal with matters such as conflicts of interest and contingency planning.

The Code of Conduct sets out how Reference Banks are meant to behave in relation to their submission of reference rates to JBATA. JBATA is run by a board of directors. It is assisted in its governance of JBATA by three committees:

- An **Administration Committee**;
- An **Oversight Committee**; and
- A **Planning Committee**.

The determination and dissemination process for Tibor has been outsourced to Quick Corp., as **Calculation Agent**. An outsourcing agreement between JBATA and Quick Corp., coupled with provisions of the Operational Rules, governs how Quick Corp. performs this process.

The Osaka Bankers Association (**OBA**) also performs functions related to the determination of Tibor. It serves as a back-up administrator of Tibor and reviews the correctness of the Calculation Agent's calculations of Tibor on each business day of the second and third weeks of each month.

How is Tibor determined?

By 11:20 a.m. on each business day, Reference Banks quote what they deem to be prevailing market rates, assuming transactions between prime banks on the Japan unsecured call market (Japanese Yen Tibor) and on the Japan offshore market (Euroyen Tibor) as of 11:00 a.m. Reference Banks quote these rates unaffected by their own positions and submit such rates for 13 tenors (1 week and 1–12 months) to the JBATA.

The two highest and two lowest reference rates submitted by these Reference Banks for each tenor are excluded, and an average of the remaining rates is derived to calculate Tibor rates, which are then published through price vendors.[17]

[17] There are five price vendors: Thomson Reuters Markets KK, QUICK Corp., Jiji Press, Ltd., Bloomberg Finance L.P. and Nomura Research Institute, Ltd.

5.2 Assessment of implementation of Principles

JBATA assumed responsibility for the administration of Tibor on 1 April 2014.

Upon assuming responsibility, JBATA adopted a comprehensive suite of policies that are intended to control how JBATA is governed and how Tibor is defined and determined.

JBATA has indicated that these policies have been drafted cognisant of the Principles.

The policies include the intended establishment of a committee framework that aids in the governance and oversight of JBATA's administration of Tibor. This committee framework incorporates functions to review the functioning of Tibor as a Benchmark and to ensure compliance with the various policies that JBATA will follow.

Based on these policies, JBATA has demonstrated an encouraging degree of implementation of the Principles. Its policies establish strong governance and control frameworks that are closely aligned with the Principles.

As JBATA only took control of Tibor on 1 April 2014, the Review Team has been unable to determine the degree to which JBATA's policy framework is implemented effectively in practice. This has affected the rating assigned to JBATA for Principles 2, 4, 5, 12, 14, 16 and 17.

Although JBATA's policies manifest full implementation of the requirements of each of these the Principles, the inability to assess the way in which these policies have been applied in practice has led to a Broadly Implemented rating for each. In assigning these ratings, however, the Review Team recognises that JBATA's framework was established immediately prior to the finalisation of this Review and that JBATA has not yet had an opportunity to implement it functionally.

Any future review of JBATA will present the opportunity to assess whether the rating for these Principles should be upgraded to Fully Implemented in light of the then-current implementation of these recently adopted policies.

While JBATA's governance and control frameworks are closely aligned to the Principles, the determination of Tibor from a methodological and data integrity perspective requires further consideration.

As noted above, Tibor is calculated as the average of rates that Reference Banks 'deem' to be prevailing market rates, assuming transactions between prime banks in the relevant market.

This definition, coupled with the policies governing the submission of rates by Reference Banks, appears to give the Reference Banks a high degree of discretion in how they decide on their submitted rates. This discretion appears driven largely by the recognised low liquidity of the Japanese unsecured call market and the Japanese offshore market.

This degree of discretion, while understandable given the realities of the underlying markets, makes it difficult to confirm that JBATA has fully implemented Principles 6, 7 and 8 (which all concern the ability of the benchmark to accurately measure the underlying market). Principle 7 has not been rated for the reasons given in *Overview of findings*.

This is an area that will need further consideration going forward, particularly in light of the ongoing accommodative monetary policy of Japan and the impact this has on the liquidity of the interbank market in Japan.

The Review Team recommends that a follow-up review of JBATA should be conducted in mid 2015 using the Methodology. This review should cover all Principles and focus, in particular, on those Principles that are rated below 'Fully Implemented'.

This review should seek to rate Principle 7 according to the scale set out in the Methodology. Assigning this rating will require strong cooperation from JBATA including by delivering the data and analysis that was requested by the Methodology in connection with Principle 7.

5.3 Commentary on implementation plans

JBATA has few plans for further development of policies concerning its governance and control frameworks. This is largely due to it having just completed the development of the majority of its policies.

The major immediate plans of JBATA will concern the implementation of the comprehensive suite of policies that it has just adopted.

Looking ahead, however, a bill to amend the Financial Instruments and Exchange Act was submitted to the National Diet of Japan on 14 March 2014. This bill proposes regulation for financial benchmarks and, if enacted, will apply to JBATA.

The proposed regulation aims to ensure the credibility of specified financial benchmarks that are widely used as the basis of financial transactions by designating an administrator of such benchmarks (assumed to be an administrator of Tibor for the time being) and requiring the designated administrator to formulate and comply with the Operational Rules, containing items in line with requirements of the Principles. Furthermore, the proposed regulation would impose a discipline on Reference Banks by requiring the designated administrator to establish and conclude the 'Submitter Code of Conduct' with Reference Banks.

5.4 Summary of assessment grades

	Principle	Assessment grade	Summary of rationale for assessment grade and recommended remediation
Governance			
1.	Overall responsibility of the administrator	Fully Implemented	All Key Indicia implemented.
2.	Oversight of third parties	Broadly Implemented	All Key Indicia implemented in policy. However, there is no evidence of how effective they policies are in practice. As JBATA only took control of Tibor on 1 April 2014, the Review Team has been unable to determine the degree to which JBATA's policy framework is implemented effectively in practice. Continued commitment necessary to ensure policies are implemented in practice.
3.	Conflicts of interest for administrators	Partly Implemented	All but two Key Indicia have been implemented. Ensure public disclosure of material conflicts of interests. (Such disclosure may include, for example, making signed conflict of interest declarations publicly available.) Implement procedures to control the exchange of information between staff engaged in the determination of Tibor.
4.	Control framework for administrators	Broadly Implemented	All but two Key Indicia have been implemented. Amend policies and procedures to implement the recommendations applicable to Principles 6 through 19. As JBATA only took control of Tibor on 1 April 2014, the Review Team has been unable to determine the degree to which JBATA's policy framework is implemented effectively in practice.

	Principle	Assessment grade	Summary of rationale for assessment grade and recommended remediation
5.	Internal oversight	Broadly Implemented	All Key Indicia implemented in policy. However, there is no evidence of how effective the policies are in practice. As JBATA only took control of Tibor on 1 April 2014, the Review Team has been unable to determine the degree to which JBATA's policy framework is implemented effectively in practice. Continued commitment necessary to ensure polices are implemented in practice. Ensure Oversight Committee is able to provide oversight and challenge on submissions.
Quality of the benchmark			
6.	Benchmark design	Not Implemented	Key Indicia not implemented. Further work necessary to understand underlying interbank markets. JBATA only took control of Tibor on 1 April 2014 and the data collection has not yet been implemented, different from the other two benchmarks. Continue working with the FSB OSSG recommendations to ensure the design of Tibor is fit for purpose.
7.	Data sufficiency	Not Rated	Conduct the work set out in the *Overview of findings* above.
8.	Hierarchy of data inputs	Broadly Implemented	All but one Key Indicia have been implemented. Amend Code of Conduct to provide a hierarchy of data inputs i.e. a preference ordering of specific data inputs or a relative priority of data inputs.
9.	Transparency of benchmark determinations	Not Implemented	All but two Key Indicia have been implemented. Disclose specific information on market size and liquidity and, where applicable, an explanation of the use of expert judgment.

	Principle	Assessment grade	Summary of rationale for assessment grade and recommended remediation
10.	Periodic review	Broadly Implemented	All but one Key Indicia have been implemented. Ensure JBATA conducts periodic reviews of Tibor going forward. As JBATA only took control of Tibor on 1 April 2014, the Review Team has been unable to determine the degree to which JBATA's policy framework is implemented effectively in practice.
Quality of the methodology			
11.	Content of the methodology	Broadly Implemented	All but three Key Indicia have been implemented. Amend policies and procedures required to address: minimum data; consistency in use of expert judgment; and jurisdictional issues involving Reference Banks.
12.	Changes to the methodology	Broadly Implemented	All Key Indicia implemented in policy. However, there is no evidence of how effective the policies are in practice. As JBATA only took control of Tibor on 1 April 2014, the Review Team has been unable to determine the degree to which JBATA's policy framework is implemented effectively in practice. Continued commitment necessary to ensure polices are implemented in practice. Ensure material changes to Tibor methodology are made in consultation with stakeholders and publicly disclosed.
13.	Transition	Broadly Implemented	All but one Key Indicia have been implemented. Develop and adopt policies concerning suitable fall-back rates in situations where Tibor is not available or ceases being determined.
14.	Submitter Code of Conduct	Broadly Implemented	All Key Indicia implemented in policy. However, there is no evidence of how effective the policies are in practice. As JBATA only took control of Tibor on 1 April 2014, the Review Team has been unable to determine the degree to which JBATA's policy

	Principle	Assessment grade	Summary of rationale for assessment grade and recommended remediation
			framework is implemented effectively in practice. Continued commitment necessary to ensure polices are implemented in practice. Ensure Reference Banks implement the Code of Conduct.
15.	Internal controls over data collection	Not Applicable	See discussion in *Details of Review – Approach to assessment or interpretation of Principles* above.
Accountability			
16.	Complaints procedures	Broadly Implemented	All Key Indicia implemented in policy. However, there is no evidence of how effective the policies are in practice. As JBATA only took control of Tibor on 1 April 2014, the Review Team has been unable to determine the degree to which JBATA's policy framework is implemented effectively in practice. Continued commitment necessary to ensure polices are implemented in practice.
17.	Audits	Broadly Implemented	All Key Indicia implemented in policy. However, there is no evidence of how effective the policies are in practice. As JBATA only took control of Tibor on 1 April 2014, the Review Team has been unable to determine the degree to which JBATA's policy framework is implemented effectively in practice. Continued commitment necessary to ensure polices are implemented in practice. Ensure JBATA implements audits.
18.	Audit trail	Fully Implemented	All Key Indicia implemented. .
19.	Cooperation with regulatory authorities	Fully Implemented	All Key Indicia implemented.

5.5 Principle-by-principle analysis

A. Principles relating to governance

Principle 1 – Overall responsibility of the administrator

Description of implemented policies and practices

As of 1 April 2014, JBATA is responsible for Tibor. JBATA is wholly owned by the JBA.

JBATA's administration of Tibor is governed primarily by the Operational Rules and the Code of Conduct.

The Operational Rules set out how Tibor is determined and disseminated, JBATA's governance structure is intended to work and JBATA will deal with matters such as conflicts of interest and contingency planning.

The Code of Conduct sets out how Reference Banks are meant to behave in relation to their submission of reference rates to JBATA.

Other policies, as described below, supplement these main policies.

JBATA is run by a board of five directors (**Board**). Under the Operational Rules, the Board has responsibility for the execution of the operations of JBATA. As of 1 April 2014, these directors are Akihiro WANI (Representative Director and Chairman, Attorney at Law), Shin TAKAGI (Representative Director, Vice-Chairman, Senior Executive Director, Japanese Bankers Association), Saburo ARAKI (Director, Managing Director, Bank of Tokyo-Mitsubishi UFJ), Yuri SASAKI (Director, Professor, Meiji Gakuin University) and Masanori SATO (Director, Certified Public Accountant). Three of the directors are notionally independent from the Reference Banks.

The decision making process concerning Tibor is transparent to the extent that the Operational Rules and Code of Conduct have been made public and revisions to published rates and decisions to select or revoke the selection of Reference Banks are made public. Other documents, including the JBATA's contingency plans and complaints handling rules (discussed below), are also made public.

Assisting the Board in governing JBATA are three committees:

- <u>The Administration Committee</u>

  The Administration Committee's responsibilities, functions and membership are set out in the Operational Rules and the JBA Tibor Administration Committee Rules (**Administration Committee Rules**).

  Under these documents, the Administration Committee is intended to be responsible for reviewing and discussing the definition and methodology of Tibor, the selection of Reference Banks (including the selection criteria), the submission procedures and other rules relating to Tibor.

The Administration Committee will be constituted by representatives from banks (not necessarily the Reference Banks). The identity of these representatives is not known at the time of the Review.

The Administration Committee will not make decisions on these matters but will refer them for resolution by the Board. It must also inform the Oversight Committee (discussed below) of these matters.

The Board may delegate decision-making authority to the Administration Committee. At the time of this Review, it is not clear what authority, if any, has been delegated to the Administration Committee.

- The Oversight Committee

  The Oversight Committee's responsibilities, functions and membership are set out in the Operational Rules and the JBA Tibor Oversight Committee Rules (**Oversight Committee Rules**).

  Under these documents, the Oversight Committee is intended to be responsible for assessing the appropriateness of, and recommending remedial measures to the Board on, certain matters. This includes the management of conflicts of interest arising from the administration of Tibor, the periodic assessment of the Code of Conduct (discussed below) and the implementation of monitoring Reference Banks' compliance with the Code of Conduct. The Oversight Committee also has a general mandate to investigate the operations of JBATA.

  The Oversight Committee will not make decisions on these matters, but will refer them for resolution by the Board.

  The Oversight Committee will be constituted by 'lawyers, accountants, academic experts and other experts'. Members cannot be individuals from Reference Banks. The Board selects these members.

- The Planning Committee

  The Planning Committee's responsibilities, functions and membership are set out in the Operational Rules and the JBA Tibor Planning Committee Rules.

  Under these documents, the Planning Committee is intended to be responsible for the organization and budgeting of JBATA.

  The Planning Committee will not make decisions on these matters, but will refer them for resolution by the Board.

  The Planning Committee will be constituted by representatives from banks (not necessarily the Reference Banks) . The identity of these representatives is not known at the time of the Review.

Supporting this governance structure are four departments or offices:

- The JBA Tibor Operation Department (**Operation Department**)

  The Operation Department checks and reviews the Tibor rates for publication and provides secretariat support to the Board, the Administration Committee and the Planning Committee.

- The JBA Tibor Compliance Office (**Compliance Office**)

  The Compliance Office has responsibility for JBATA's compliance-related issues and reports to the Board.

- The JBA Tibor Internal Audit Office (**Internal Audit Office**)

  The Internal Audit Office must carry out internal audits in accordance with an audit plan for each fiscal year. It must report the results of its audits to the Board and the Oversight Committee.

- The JBA Tibor Oversight Committee Office (**Oversight Committee Office**)

  The Oversight Committee Office provides secretariat support to the Oversight Committee, including receiving complaints and conducting investigations.

The determination and dissemination process for Tibor has been outsourced to Quick Corp., as Calculation Agent. An outsourcing agreement between JBATA and Quick Corp. (**Calculation Outsourcing Agreement**), coupled with provisions of the Operational Rules, governs how Quick Corp. performs this process.

The OBA also performs functions related to the determination of Tibor. It serves as a back-up administrator of Tibor (as contemplated by Article 47 of the Operational Rules) and, to this end, reviews the correctness of the Calculation Agent's calculations of Tibor on each business day of the second and third weeks of each month. An outsourcing agreement between JBATA and OBA (**Review Outsourcing Agreement**), coupled with provisions of the Operational Rules, governs how OBA performs this process.

The performance of the Calculation Agent and the OBA is also intended to be subject to the oversight arrangements described in the JBATA's Guidelines on Outsourcing JBA Tibor Calculation/Publication Operations (**Outsourcing Guidelines**). As of the date of this Review, it is not possible to verify how this oversight policy works in practice. Under the Operational Rules, the Operation Department is tasked with periodically monitoring compliance with the Outsourcing Guidelines.

Rating

Fully Implemented

Commentary on why rating was assigned

All Key Indicia have been implemented.

Under its governance and oversight framework, JBATA has primary responsibility for Tibor.

Description of planned policies and practices (including timelines)

In Japan, a bill to amend the Financial Instruments and Exchange Act, which proposes a regulatory framework for financial benchmarks, was submitted to the National Diet of Japan on 14 March 2014.

The proposed regulation aims to ensure credibility of specified financial benchmarks that are widely used as the basis of financial transactions by designating an administrator of such benchmarks (assumed to be an administrator of TIBOR for the time being) and requiring the designated administrator to formulate and comply with the Operational Rules, containing items in line with requirements of the Principles.

Further, the proposed regulation would impose a discipline on submitters by requiring the designated administrator to implement a 'Submitter Code of Conduct' with submitters.

Recommended remediation

None

Principle 2 – Oversight of third parties

Description of implemented policies and practices

There are three sets of third parties that contribute to the Tibor determination process; the Reference Banks, the Calculation Agent and OBA.

Reference Banks

As described above, JBATA exercises oversight of the Reference Banks through the Code of Conduct. Under the Code of Conduct, JBATA intends to assess Reference Banks' compliance with the Code of Conduct annually and whenever the Code of Conduct is amended.

Under the Code of Conduct, the Reference Banks are also required to undertake annual internal and external audits of their compliance with the Code of Conduct. External audits are not required for one year after the implementation of the Code of Conduct (i.e. not until 2015). The results of these audits need to be reported to JBATA. The Oversight Committee verifies these reports and sends them to the Board.

The Operational Rules also provide that the Oversight Committee Office will carry out ex-post monitoring of rate submissions by the Reference Banks.

Any suspected breaches by the Reference Banks of the Code of Conduct or doubts as to the appropriateness of the rate submissions are to be reported to the Oversight Committee.

Calculation Agent

As described above, the performance by the Calculation Agent of the functions outsourced to it are governed by the Calculation Outsourcing Agreement, the Operational Rules and the Outsourcing Guidelines.

As noted, the Operation Department is responsible for periodically monitoring compliance with the Outsourcing Guidelines.

OBA

As described above, the performance by the OBA of the functions outsourced to it are governed by the Review Outsourcing Agreement, the Operational Rules and the Outsourcing Guidelines.

As noted, the Operation Department is responsible for periodically monitoring compliance with the Outsourcing Guidelines.

Disclosure of identities of parties performing outsourced functions

The Operational Rules intend that any outsourced operations are disclosed to the public where they have an impact on users of Tibor. The identities of these parties have been made public.

Contingency planning

With respect to the functions of all three parties, the Contingency Plan for JBA Tibor Publication (**Contingency Plan**) sets out fall-back plans in case the normal arrangements for determination and dissemination of Tibor are disrupted by an event. These arrangements include the physical delivery of rates to the offices of JBATA, where necessary, and the transfer of determination functions to Osaka from Tokyo.

Rating

Broadly Implemented

Commentary on why rating was assigned

All Key Indicia have been implemented through JBATA's policies. However, there is no evidence of how effective JBATA's oversight of third parties is in meeting the intent of the Principle in practice. As JBATA only took control of Tibor on 1 April 2014, the Review Team has been unable to determine the degree to which JBATA's policy framework is implemented effectively in practice. For example, there is no evidence that the oversight of the third parties is effective in practice (as required by Key Indicium 2.1).

This does not substantially affect JBATA achieving the intended outcome of Principle 2.

For these reasons, a Broadly Implemented rating is warranted at this stage.

In assigning this rating, however, the Review Team recognises that the oversight framework was established immediately prior to the finalisation of this review and that JBATA has not yet had an opportunity to implement it functionally.

Description of planned policies and practices (including timelines)

None identified

Recommended remediation

JBATA should:

- Ensure its carries out effective oversight of third parties involved in the process of determining and publishing Tibor.

Principle 3 – Conflict of interest for Administrators

Description of implemented policies and practices

Relevant conflicts of interest

The Operational Rules apply to the following potential conflicts of interest:

(a) A person who is involved in the process of defining and determining Tibor might have a conflict due to working for or belonging to a financial institution; or

(b) A financial institution with responsibilities to submit reference rates appropriately in accordance with the definition of Tibor on one hand but may be conducting lending and trading derivatives that reference Tibor on the other hand.

The Code of Conduct applies to conflicts of interest between the Code of Conduct which requires appropriate rate submissions subject to the definition of Tibor and the benefits (including non-financial benefits) of individual Reference Banks.

JBATA does not conduct any business other than the administration of Tibor. It is owned completely by the JBA.

JBATA states that, as of 1 April 2014, it has not identified any conflicts of interest that need to be disclosed.

Frameworks

The Operational Rules set out a framework for the management of conflicts of interest by JBATA. Conflicts of interest are also covered by the Code of Conduct and Outsourcing Guidelines.

The Operational Rules framework includes:

- The Board having a majority of independent directors;
- Revisions to the definition of Tibor and other significant matters being reviewed by the independent Oversight Committee;
- The members of the Oversight Committee declaring whether they have a conflict of interest; and
- The maintenance of an appropriate administrative framework.

To the extent that the OBA performs determination functions, it needs to comply with the conflict of interest requirements that the Operational Rules impose on JBATA.

Additionally, JBATA has implemented clear reporting lines for its departments, offices and committees through to the Board. All departments and offices report through to a director and then to their relevant committee (see discussion above for Principle 1).

Transparency

Under the Operational Rules, the Oversight Committee and the Board are to discuss and determine whether to disclose any individual cases of conflicts of interest.

Confidentiality of data

The Operational Rules have provisions concerning the management of confidential information.

Rating

Partly Implemented

Commentary on why rating was assigned

All but two Key Indicia have been implemented. Their non-implementation substantially affects JBATA achieving the intended outcome of Principle 3. Specifically:

- JBATA has policies that require it to disclose conflicts of interest it decides are material. Further, JBATA has resolved that it has no such conflicts of interest to date that need to be disclosed as required by Key Indicium 3.1(c). The Review Team notes this resolution but is unable to verify its correctness at this stage; and

- While Article 21(3)(vi) of the Operational Rules requires that information is to be treated with utmost care and managed on a case-by-case basis, and requires the establishment of effective procedures to control the exchange of information between relevant persons (who take part in activities that give rise to a risk of a conflict of interests), these procedures are not yet in place. JBATA needs to have *procedures* to control the exchange of information between staff engaged in activities involving a risk of conflicts of interest where that information may reasonably affect any determination of Tibor (as required by Key Indicium 3.2(a)(vi)).

Description of planned policies and practices (including timelines)

None identified

Recommended remediation

JBATA should:

- Publicly disclose all material conflicts of interest. Such disclosure may include, for example, making signed conflict of interest declarations publicly available.
- Adopt procedures to control the exchange of information between staff engaged in activities involving a risk of conflicts of interest where that information may reasonably affect any determination of Tibor.

Principle 4 – Control framework for administrators

Description of implemented policies and practices

JBATA's control framework for determining and distributing Tibor is set out in its governance structure and policies. These were summarized in connection with Principle 1.

Rating

Broadly Implemented

Commentary on why rating was assigned

All but two Key Indicia have been implemented. Their non-implementation does not substantially affect JBATA achieving the intended outcome of Principle 4. Specifically:

- There are deficiencies with the arrangements under the Operational Rules such that they do not ensure that the quality and integrity of Tibor is maintained in line with Principles 6 to 15 (contrary

to the requirements of Key Indicium 4.1(c)(ii)); and

- The arrangements under the Operational Rules to ensure accountability and complaints mechanisms are effective, are not in line with principles 16 to 19 (contrary to the requirements of Key Indicium 4.1(c)(iv)).

Further, there is no evidence of how effective JBATA's control framework is in meeting the intent of the Principle in practice. As JBATA only took control of Tibor on 1 April 2014, the Review Team has been unable to determine the degree to which JBATA's policy framework is implemented effectively in practice. For example, while JBATA has undertaken to review the framework regularly, there is no evidence yet that this is occurring in practice (as required by Key Indicium 4.1(c)). In the same vein, while the framework sets up a whistle-blowing mechanism that appears effective as designed, there is no evidence that it is effective in practice (as required by Key Indicium 4.1(c)(vi).

For these reasons, a Broadly Implemented rating is warranted at this stage.

In assigning this rating, however, the Review Team recognises that the control framework was established immediately prior to the finalisation of this review and that JBATA has not yet had an opportunity to implement it functionally.

Description of planned policies and practices (including timelines)

None identified

Recommended remediation

JBATA should:

- Implement the recommendations applicable to Principles 6 through 18.

Principle 5 – Internal oversight

Description of implemented policies and practices

The Board and the Oversight Committee perform the oversight function for Tibor. Both bodies were described briefly above in connection with Principle 1.

More specifically, the Oversight Committee is responsible for the oversight of the design of Tibor as well as the integrity of the determination process and the associated control framework. It adjudicates on the conflicts of interest policy and is also responsible for developing policies concerning the Code of Conduct. The Oversight Committee is also charged with overseeing and challenging the scrutiny and monitoring of inputs or submissions by JBATA.

The Oversight Committee has (up to) five members: one chairperson, one vice-chairperson and three other members. All members of the Oversight Committee must be 'lawyers, accountants, academic experts, and other experts who have the knowledge about the related laws, regulations, accounting, audit and/or corporate governance'. They must also be independent by not being an "interested party" (for example, having some connection with a Reference Bank).

JBATA has publicly released the names of the initial five members of the Oversight Committee, together with their occupations. These initial members appear to match the requirements for Oversight Committee members. It is not clear, however, whether any of the members are an 'interested party'.

JBATA's conflicts of interest framework is also part of its internal oversight framework. This was described in connection with Principle 3.

Rating

Broadly Implemented

Commentary on why rating was assigned

JBATA's adopted and published policies implement the Key Indicia for Principle 5.

There is, however, no evidence of how effective these policies are in meeting the intent of the Principle in practice. As JBATA only took control of Tibor on 1 April 2014, the Review Team has been unable to determine the degree to which JBATA's policy framework is implemented effectively in practice. Specifically, while the Oversight Committee has been given the responsibility of providing oversight and challenge on submissions under the Operational Rules, the Review Team has no evidence that the Oversight Committee is able to provide this oversight and challenge effectively in practice (as required by Key Indicium 5.6).

For that reason, a Broadly Implemented rating is warranted at this stage.

In assigning this rating, however, the Review Team recognises that the Oversight Committee was established immediately prior to the finalisation of this Review and that it has not yet had an opportunity to execute its assigned functions.

Description of planned policies and practices (including timelines)

None identified

Recommended remediation

JBATA should:

- Ensure it effectively implements its adopted policies in this area, including so that the Oversight Committee provides effective oversight and challenge on submissions.

B. Principles relating to quality of the Benchmark

Principle 6 – Benchmark design
Description of implemented policies and practices According to JBATA, the interests that Tibor seeks to represent are: • For Japanese Yen Tibor, the rates which Reference Banks deem as prevailing market rates, assuming transactions between prime banks on the Japan unsecured call market as of 11:00 a.m.; and • For Euroyen Tibor, the rates which Reference Banks deem as prevailing market rates, assuming transactions between prime banks on the Japan Offshore Market as of 11:00 a.m. The design of Tibor seeks to represent these interests by asking for the deemed rates from the Reference Banks, removing the top two and bottom two outliers and averaging the remaining rates. JBATA has not provided enough evidence that they have taken steps to assess the underlying market and incorporate this assessment into the design of Tibor.
Rating Not Implemented
Commentary on why rating was assigned To the extent that Tibor is taken to represent the level of the market rates in the Japan unsecured call market, it fails to demonstrate implementation of any Key Indicia. This is because there is no evidence that the design of Tibor seeks to represent actual rates. JBATA only took control of Tibor on 1 April 2014 and the data collection has not yet been implemented, different from the other two benchmarks. Based on the question posed to Reference Banks to solicit their submissions, they appear free to submit their subjective opinions of rates. There are no features of the methodology that would seek to ensure

Tibor represents actual rates.

Description of planned policies and practices (including timelines)

None identified

Recommended remediation

JBATA should:

- Adopt and follow a design process that incorporates the factors in Key Indicia and provide any evidence that it has taken steps to assess the underlying market and incorporate this assessment into the design of Tibor.

Principle 7 – Data sufficiency

Description of implemented policies and practices

JBATA has shared limited information with the Review Team that is relevant to this Principle. No information has been provided on the underlying market.

The only information provided indicated that an unnamed Reference Bank took actual transactions into account when developing the rate that it submitted to JBATA.

The information, however, was a high-level description of the process used by the Reference Bank in developing the rate. It was not backed by quantitative data or other information that the Review Team could use to understand or verify how rates are derived by Reference Banks.

Further, JBATA has not provided any evidence of what they consider to be an 'active market' for the interests that Tibor seeks to represent.

Rating

Not rated

Commentary on why rating was assigned

JBATA has not yet provided sufficient information or evidence that would allow the Review Team to conclude that the Key Indicia of this Principle has been implemented so that Tibor is underpinned by data anchored in an active market for the interest it seeks to represent.

Description of planned policies and practices (including timelines)

None indicated.

Recommended remediation

JBATA should continue addressing Principle 7 as a matter of urgency by:

- Initiating work on collecting and sharing with IOSCO and other relevant authorities the data and analysis that was requested by the Methodology in connection with Principle 7.
- Continuing to work on exploring options to anchor Tibor in actual transactions drawn from active markets, including necessary further design, methodological and/or definition changes. This would include:
    - Defining what it considers an 'active' market in the interest Tibor seeks to represent, including describing the minimal acceptable level of activity necessary to demonstrate an active market;
    - Completing an analysis of methodologies to provide a basis for deciding whether the transactions are anchored in active markets; and
    - Making the necessary consequential changes from any broadening of permissible transactions beyond interbank unsecured transactions.
- Following the recommendations in connection with Principle 9.

Principle 8 – Hierarchy of data inputs

Description of implemented policies and practices

The Code of Conduct (and an accompanying set of Frequently Asked Questions (**FAQ**)) requires Reference Banks to set standards for the types of data inputs used in the Tibor determination and calculation process.

The Code of Conduct and the FAQ set out a suggested set of data inputs. The Code of Conduct makes clear that Reference Banks have discretion as to which of the inputs they use and in what order of preference. The suggested set of inputs under the Code of Conduct and FAQ is:

- The Reference Banks' own concluded arm's length interbank unsecured funding transactions;
- The firm (executable) bids and offers in interbank unsecured market;
- Interbank unsecured funding transactions, which are observable by Reference Banks;
- The related transactions in money markets, other than those deemed to be within the above category, which are observable by Reference Banks; and
- The qualitative information, including indicative price.

The Code of Conduct further acknowledges that expert judgment may be used if a Reference Bank "considers that transactions and the other information set out above are not enough to calculate reference rates".

No evidence was provided on whether Reference Banks are actually observing these policies.

Rating

Broadly Implemented

Commentary on why rating was assigned

All but one of the Key Indicia have been implemented. The non-implementation of Key Indicium 8.1 does not substantially affect JBATA achieving the intended outcome of Principle 8.

Specifically, while the Code of Conduct and its accompanying FAQ sets out a suggested set of inputs and states that expert judgment should be used if this set of transaction-type information is not enough to calculate rates, the Code of Conduct makes it clear that Reference Banks have discretion as to which of the inputs they use and in what order of preference.

It would be preferable if the Code of Conduct provided a hierarchy of data inputs (i.e. a preference ordering of specific data inputs or a relative priority of data inputs) rather than simply indicating a preference between data inputs and expert judgment.

Further, the failure of JBATA to provide evidence that the Reference Banks are following the limited hierarchy established by the Code of Conduct in practice means that it is difficult to conclude that Key Indicium 8.1 has been implemented in practice.

Description of planned policies and practices (including timelines)

None identified

Recommended remediation

JBATA should:

- Amend the Code of Conduct so that it provides a hierarchy of data inputs (i.e. a preference ordering of specific data inputs or a relative priority of data inputs) rather than simply indicating a preference between data inputs and expert judgment.

Principle 9 – Transparency of benchmark determinations

Description of implemented policies and practices

The submission rates of each Reference Bank are disseminated through information providers.

No other information is published by JBATA in conjunction with the Tibor rate.

Rating

Not Implemented

Commentary on why rating was assigned

The two Key Indicia have not been implemented. While there is some implementation, the implementation is manifestly ineffective in achieving the intended outcome of Principle 9. Specifically:

- The information disclosed by JBATA does not provide specific information on market size and liquidity (as required by Key Indicium 9.1(a)); and
- The information to be disclosed by JBATA does not specifically cover a concise explanation of the extent to which and the basis upon which expert judgment, if any, was used in establishing a determination of Tibor (as required by Key Indicium 9.1(b)).

Description of planned policies and practices (including timelines)

None identified

Recommended remediation

JBATA should:

- Work decisively towards publishing with each benchmark determination the concise statements called for by Principle 9.
- Work in close cooperation with the Reference Banks on a facility that would permit Reference Banks to disclose to JBATA the data upon which their rate submissions are based, subject to appropriate confidentiality protection.

Principle 10 – Periodic review

Description of implemented policies and practices

Under the Operational Rules, JBATA undertakes to assess and review the definition of Tibor, its methodology in consideration of relevant market conditions and feedback provided by external parties. The Operational Rules also provides that JBATA will publish on its website the details and reasons of material revisions to the definition of Tibor or its methodology.

In December 2013, the JBA publicly released a report that reviewed Tibor, including its governance and definition. Based on this review, the JBA declined to change the Tibor methodology.

This review, however, was a one-off and no further evidence of historical "periodic" reviews was provided to the Review Team.

Rating

Broadly Implemented

Commentary on why rating was assigned

All but one of the Key Indicia has been implemented. The non-implementation of Key Indicium 10.1 does not substantially affect JBATA achieving the intended outcome of Principle 10.

Specifically, there is insufficient evidence to conclude that JBATA (or the JBA previously) has undertaken 'periodic' reviews in the past. As JBATA only took control of Tibor on 1 April 2014, the Review Team has been unable to determine the degree to which JBATA's policy framework is implemented effectively in practice. That said, one review has been undertaken and JBATA has committed to periodic reviews in the future. For this reason, while there is not a strict implementation of

Key Indicium 10.1, the Review Team has comfort that there are policies in place to ensure this occurs in the future. Accordingly, a Broadly Implemented rating is warranted.

Description of planned policies and practices (including timelines)

From 1 April 2015, the number of benchmark tenors will be decreased from 13 to six, being: 1 week, 1 month, 2 month, 3 month, 6 month and 12 month tenors.

Recommended remediation

JBATA should:

- Ensure it effectively implements its adopted policies in this area, including by conducting periodic reviews.

C. Principles relating to the quality of the methodology

Principle 11 – Content of the methodology

Description of implemented policies and practices

The methodology for Tibor determination has been developed and published. The Operational Rules and the Code of Conduct, which are available on JBATA's website, detail the Tibor methodology. Additionally, the Calculation Outsourcing Agreement and the Review Outsourcing Agreement describes the process related to the submission of rates, error handling and contingency arrangements.

The Operational Rules provide that Reference Banks shall consist of banks or financial institutions that are local or global active participants in the market and comply with the Code of Conduct regardless of their jurisdiction.

Rating

Broadly Implemented

Commentary on why rating was assigned

All but three Key Indicia have been implemented. Their non-implementation does not substantially affect JBATA achieving the intended outcome of Principle 11. Specifically:

- The Operational Rules do not contain provisions addressing the minimum data needed to determine a benchmark, or any models or extrapolation methods (as required by Key Indicium

11.2(b));

- The Operational Rules, the Code of Conduct and its accompanying FAQ do not contain procedures or practices designed to promote consistency in the exercise of expert judgment between benchmark determinations (as required by Key Indicium 11.2(c)); and
- The criteria in the Operational Rules for including and excluding Reference Banks do not expressly address any issues arising from the location of a Reference Bank being in a jurisdiction different to that of the JBATA (as required by Key Indicium 11.3(a)). The reference in the Operational Rules to Reference Banks possibly being local or global participants is insufficient to *address* the issues that may arise from the jurisdiction of a reference bank.

Description of planned policies and practices (including timelines)

None identified

Recommended remediation

JBATA should:

- Amend the Operational Rules to ensure they contain provisions addressing the minimum data needed to determine a benchmark, or any models or extrapolation methods;
- Amend the Operational Rules, the Code of Conduct and its accompanying FAQ so that they contain procedures or practices designed to promote consistency in the exercise of expert judgment between determinations of Tibor; and
- Amend the criteria in the Operational Rules for including and excluding Reference Banks so that they address any issues arising from the location of a Reference Bank being in a jurisdiction different to that of the JBATA

Principle 12 – Changes to the methodology

Description of implemented policies and practices

The Operational Rules set out the procedures for changing the definition of Tibor and its methodology:

- When JBATA proposes to change the definition of Tibor or its methodology, this shall be decided by the Board after discussions at the Administration Committee, and the Oversight Committee will scrutinize and challenge the discussion as necessary.

- If the change is deemed material, JBATA must carry out public consultation and hold discussions with stakeholders, as appropriate. In carrying out the public consultation, a sufficient period must be set to canvas stakeholders' views and JBATA shall consider carrying out an impact analysis of the proposed change.
- Where the definition of Tibor or its methodology is changed, the details of the change, the reason(s) for the change and its effective date shall be disclosed on JBATA's website three months or more prior to the effective date.

As noted above in connection with Principle 10, the JBA published its review of the definition of Tibor in December 2013.

Rating

Broadly Implemented

Commentary on why rating was assigned

JBATA's published and adopted policies implement the Key Indicia for Principle 12.

There is, however, no evidence of how effective these policies are in meeting the intent of the Principle in practice. As JBATA only took control of Tibor on 1 April 2014, the Review Team has been unable to determine the degree to which JBATA's policy framework is implemented effectively in practice.

Specifically, there is no evidence of how the framework for JBATA to manage changes to the methodology works in practice.

For that reason, a Broadly Implemented rating is warranted at this stage.

In assigning this rating, however, the Review Team recognises that the framework for managing changes to the methodology was established immediately prior to the finalisation of this Review and that JBATA has not yet had an opportunity to implement it functionally.

Description of planned policies and practices (including timelines)

None identified

Recommended remediation

JBATA should:

- Ensure it effectively implements its adopted policies in this area, including the framework for JBATA to manage change works in practice.

Principle 13 – Transition

Description of implemented policies and practices

The Operational Rules contain documented policies and procedures to address the need for possible cessation of Tibor. They:

- Contain clear documented policies and procedures to address the need for possible cessation of Tibor due to the circumstances contemplated by Key Indicium 13.1;
- Require JBATA to consider the effect of the cessation of Tibor on the stability of the financial economy and the degree of impact on the "scope" of contracts referencing Tibor;
- Require JBATA to carry out public consultation and conduct discussions with stakeholders regarding the continuous suspension of Tibor; and
- Require JBATA to make recommendations to parties to contracts referencing Tibor to take steps to ensure such contracts have robust fall-back provisions in the event of material changes to, or cessation of, Tibor and such parties are aware that various factors (including factors beyond the control of JBATA) may necessitate material changes to Tibor.

Rating

Broadly Implemented

Commentary on why rating was assigned

All but one of the Key Indicia has been implemented. The non-implementation of Key Indicium 13.5 does not substantially affect JBATA achieving the intended outcome of Principle 13.

The Operational Rules do not currently include procedures for directly covering the specified matters relating to the transition of an alternative benchmark (required by Key Indicium 13.5).

This is because implementation of Key Indicia 13.5 is only needed if "determined reasonable and appropriate" by JBATA. JBATA has indicated that incorporation of criteria (a)–(e) of Key Indicium 13.5 in the Operational Rules would be considered when an alternative benchmark is determined in future.

Description of planned policies and practices (including timelines)

None identified

Recommended remediation

JBATA should:

- Amend the Operation Rules to include procedures directly covering the specified matters relating to the transition to an alternative benchmark when one is identified.

Principle 14 – Submitter Code of Conduct

The Code of Conduct sets out rules and guidelines for Reference Banks in relation to submission of reference rates.

The Code of Conduct became effective on 1 April 2014.

Reference Banks are required to establish internal rules relating to the matters set out in the Code of Conduct, and provide them to JBATA at the time of selection as Reference Banks. It provides that JBATA will assess Reference Banks' compliance with the Code of Conduct annually and when the Code is amended.

JBATA will perform any amendment or abolition of the Code of Conduct.

Definitions

The Code of Conduct sets out the definitions of Japanese Yen Tibor, Euroyen Tibor, Prime Bank and Reference Bank.

Submission of rates and procedure

The Code of Conduct requires Reference Banks to submit reference rates on a daily basis for all maturities to be published. The Reference Banks are required to set standards for the types and scope of transactions, qualitative information and other reference information used in determining reference rates.

In setting standards, the information used may include:

- Interbank unsecured funding transactions observable by Reference Banks;
- Related transactions in money markets other than those deemed to be within the above category; and
- Qualitative information including indicative price.

Reference Banks have discretion in determining which is most appropriate and takes precedence (subject to the definition of Tibor).

If a Reference Bank doesn't consider transactions and other information to be sufficient, it can use expert judgment to determine the reference rates.

Procedure for reference bank selection

The Code of Conduct sets out the procedure for selection of Reference Banks.

JBATA takes into account a number of factors in selecting the Reference Banks including:

- Market trading volume;
- Yen asset balance;
- Reputation;
- Track record in providing rate submissions; and
- Degree of establishment of the processes required to comply with the Code of Conduct.

Persons involved in rate submission

The Code of Conduct requires Reference Banks to notify the JBATA about the:

- Department within the Reference Bank responsible for rate submission;
- Person Responsible for Rate Submission — this person is defined as a member of management deemed by the Reference Bank as having sufficient experience and capability on transactions in the money markets or other related markets; and
- Staff Performing Rate Submission Tasks — this is defined as staff deemed by the Reference Banks as being capable of appropriately performing tasks related to rate submissions under the supervision of a Person Responsible for Rate Submission.

In case such nominated personnel are temporarily unavailable, the Reference Bank may appoint substitutes. The substitute must comply with the Code of Conduct and the Reference Bank must notify JBATA.

Checking processes and controls for reference rates

The Code of Conduct requires that Reference Banks ensure rates are checked by multiple persons through examination, validation and other means (e.g. by persons other than the Staff Performing Rate Submission Tasks).

The Code of Conduct also requires Reference Banks to report to JBATA immediately if they recognise violations of the Code of Conduct or similar incidents in connection with rate submissions. Reference Banks are also required to have processes to enable reporting to their compliance and management functions in such circumstances including whistle-blowing processes.

Processes for management of conflicts of interest

The Code of Conduct requires Reference Banks to put in place processes to manage conflicts of interest arising in relation to rate submissions. These processes should include involvement of the compliance function and other relevant functions and regular assessment by the internal audit function to check appropriate management of conflicts.

Conflict of interest is defined to mean conflicts between the Code of Conduct requiring appropriate rate submissions and the benefit (including non-financial benefits) of the Reference Banks. Particularly high risk business activities include trading activities[18] involving products referencing Tibor.

The Code of Conduct suggests that Reference Banks could put in place the following processes:

- Prohibition of concurrent appointment of Person Responsible for Rate Submission/Staff Performing Rate Submission Tasks and staff performing trading activities. However, if for an unavoidable reason this occurs, the Reference Bank should put place internal validation processes and inform JBATA;

- Prohibition of information sharing or coordination between Person Responsible for Rate Submission/Staff Performing Rate Submission Tasks and staff performing trading activities, unless there is a reasonable justification to do so;

- Measures to enforce segregation between Person Responsible for Rate Submission/Staff Performing Rate Submission Tasks and staff performing trading activities to ensure appropriate submissions (including through office seating, reporting line and system access control);

- Ensuring remuneration for Person Responsible for Rate Submission/Staff Performing Rate Submission Tasks does not incentivise rate manipulation;

- Identification of other processes to identify and manage conflicts of interest; and

[18] This refers to proprietary trading, excluding transactions based on asset liability management policies or other pre-determined policies.

- Reference Banks should retain, for five years, documents with conflict of interest records and exposures in relation to instruments referring Tibor (on an aggregate and trader-by-trader or desk-by-desk basis).

Other requirements to ensure appropriate rate submission

The Code of Conduct also:

- Prohibits sharing of information about the content of submissions and coordination of submissions between staff involved in rate submission and other persons internally and externally;
- Requires Reference Banks to have processes to enable post-submission explanations about the grounds for rate submissions.
- Requires Reference Banks to retain records for five years about notifications to JBATA for department, Person and Staff Performing Rate Submission Tasks; managing conflicts of interest; documents supporting rate submission; communication records on rate submission; audit trails; in-house training records; correspondence about inquiries/investigation requests from JBATA for rate submissions; and internal rules;
- Requires Reference Banks to implement internal and external audits annually and report the results to JBATA;
- Requires Reference Banks to conduct in-house training, in line with the Code of Conduct, for staff at least annually (targeting Person Responsible for Rate Submission and Staff Performing Rate Submission Tasks) and report the implementation of this training to JBATA. In addition, Reference Banks are required to provide in-house training to staff involved in dealing Tibor financial instruments; and
- Requires Reference Banks to cooperate with JBATA (or relevant authorities) about responding to rate submission inquiries and submit documents, data and other related materials (including information about who was involved in the submission process, identification of the grounds for reference rates and data and other information used to determine the rate).

Rating

Broadly Implemented

Commentary on why rating was assigned

JBATA's adopted and published policies implement the Key Indicia for Principle 14.

There is, however, no evidence of how effective these policies are in meeting the intended outcome of the Principle in practice. As JBATA only took control of Tibor on 1 April 2014, the Review Team has

been unable to determine the degree to which JBATA's policy framework is implemented effectively in practice.

Specifically, there is no evidence of the degree to which the Reference Banks have implemented the Code of Conduct.

For that reason, a Broadly Implemented rating is warranted at this stage.

In assigning this rating, however, the Review Team recognises that the Code of Conduct was established immediately prior to the finalisation of this review and that JBATA has not yet had an opportunity to review or verify its implementation by the Reference Banks.

Description of planned policies and practices (including timelines)

None identified

Recommended remediation

JBATA should:

- Ensure it effectively implements its adopted policies in this area, including ensuring that the Reference Banks have implemented the Code of Conduct.

Principle 15 – Internal controls over data collection

Description of implemented policies and practices

Not applicable

Rating

Not applicable

Commentary on why rating was assigned

Not applicable

Description of planned policies and practices (including timelines) Not applicable
Recommended remediation Not applicable

D. Principles related to accountability

Principle 16 – Complaints procedures
Description of implemented policies and practices The Operational Rules contemplate that a complaints process will be established by JBATA. This intended process would: • Permit complaints to be submitted through a user-friendly complaints process such as an electronic submission process, available on JBATA's website; • Contain a procedure for receiving and investigating a complaint made about the Tibor 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; • Contain a process for managing complaints, whereby the Oversight Committee Office would receive and analyse the complaints and the status of the complaints/consultations and the actions taken by the Administration Committee will be periodically reported to, and affirmed by, the Oversight Committee; and

- Require all documents relating to a complaint, including those submitted by the complainant as well as JBATA's own records, to be retained for a minimum of five years.

As of the date of the Review, however, there is no evidence of the existence of this procedure or how effectively it operates.

Rating

Broadly Implemented

Commentary on why rating was assigned

JBATA's intended policies implement the Key Indicia for Principle 16.

There is, however, no evidence of the established procedures in practice. As JBATA only took control of Tibor on 1 April 2014, the Review Team has been unable to determine the degree to which JBATA's policy framework is implemented effectively in practice.

For that reason, a Broadly Implemented rating is warranted at this stage.

In assigning this rating, however, the Review Team recognises that the framework for managing changes to the methodology was established immediately prior to the finalisation of this Review and that JBATA has not yet had an opportunity to implement it functionally.

Description of planned policies and practices (including timelines)

None indicated.

Recommended remediation

JBATA should:

- Ensure it effectively implements its adopted policies in this area.

Principle 17 – Audits

Description of implemented policies and practices

JBATA appointed an internal auditor to its Board. There is, however, no evidence that any internal audits have been commenced.

An external auditor, Ernst & Young ShinNihon LLC, has been appointed by JBATA to conduct audits.

Rating

Broadly Implemented

Commentary on why rating was assigned

JBATA's adopted policies implement the Key Indicia for Principle 17. Further, JBATA has appointed an internal auditor (as required by Key Indicium 17.1).

There is, however, no evidence of how effective these policies are in meeting the intent of the Principle in practice. As JBATA only took control of Tibor on 1 April 2014, the Review Team has been unable to determine the degree to which JBATA's policy framework is implemented effectively in practice. Specifically, there is no evidence of the actual frequency of the audits.

For that reason, a Broadly Implemented rating is warranted at this stage.

In assigning this rating, however, the Review Team recognises that the audit framework was established immediately prior to the finalisation of this Review and that JBATA has not yet had an opportunity to implement it functionally.

Description of planned policies and practices (including timelines)

None identified.

Recommended remediation

JBATA should:

- Ensure it effectively implements its adopted policies in this area.

Principle 18 – Audit trail

Description of implemented policies and practices

Under the Operational Rules, JBATA undertakes to retain a range of information including:

- The Reference Banks' reference rates and the official Tibor rates;
- If applicable, records concerning expert judgment used in determining Tibor;
- Identity of the personnel of JBATA and service providers involved in determining Tibor; and
- Communications between JBATA and Reference Banks concerning Tibor.

This information is to be retained for a period of five years since its creation.

Rating

Fully Implemented

Commentary on why rating was assigned

All of the Key Indicia have been implemented.

Description of planned policies and practices (including timelines)

None identified

Recommended remediation

None

Principle 19 – Cooperation with regulatory authorities

Description of implemented policies and practices

The Operational Rules require JBATA to give the information to the relevant regulatory authorities upon their request.

Rating

Fully Implemented

Commentary on why rating was assigned

All Key Indicia have been implemented. JBATA is required to cooperate with regulatory authorities by providing information on request under the Operational Rules.
Description of planned policies and practices (including timelines) None identified
Recommended remediation None

Annex 1 – Assessment Methodology

Assessment Methodology

IOSCO Principles for Financial Benchmarks

International Organization of Securities Commissions

January 2014

Instructions

This assessment methodology supports the review by International Organisation of Securities Commissions' (**IOSCO**) of the implementation of the IOSCO Principles for Financial Benchmarks (**Principles**) by the administrators of LIBOR, EURIBOR and TIBOR.

This review will cover all the fixings published by the administrators of LIBOR, EURIBOR and TIBOR

As one of these administrators, we ask you to read this methodology and respond to the questionnaire in section III in accordance with the instructions by **7 February 2014**.

Your response should be sent to [email address] in MSWord format. You should also send any documentation and data which supports your response to this email address. Data should be submitted in either MSWord or MSExcel format.

INTRODUCTION

A. Background

At its 24 June 2013 meeting, the Financial Stability Board (**FSB**) Plenary established an Official Sector Steering Group (**OSSG**) of regulators and central banks on interest rate Benchmark reform.[1] As part of this work, the OSSG is to recommend global standards for reference rate Benchmarks and reviewing them against these standards. It is to also oversee work on exploring additional reference rates and transition strategies to these rates.

At its August 2013 meeting, the FSB Plenary endorsed the following OSSG proposals:

- That the Principles form the most appropriate set of regulatory standards on which to base a review of individual Benchmarks;[2]
- To focus initial work on the London Inter-Bank Offer Rate (**LIBOR**), the Euro Inter-Bank Offer Rate (**EURIBOR**) and the Tokyo Inter-Bank Offer Rate (**TIBOR**); and
- To commission IOSCO to conduct a review of these three Benchmarks against the Principles (**Review**) and report its findings to the OSSG.[3]

On 3 September 2013, the chairs of the OSSG formally requested the IOSCO Board '...that IOSCO conducts a review of the most widely used interest rate Benchmarks (LIBOR, EURIBOR and TIBOR), based on the developed Principles, to ensure timely delivery of the final recommendations and analysis by the OSSG to the FSB in June 2014.' This work was requested to be completed by 15 May 2014.

At its meeting in September 2013 in Luxembourg, the IOSCO Board agreed to this request. It approved terms of reference for the Review to be conducted by a Review Team comprised of members from the IOSCO Task Force on Financial Benchmarks and the IOSCO Assessment Committee.

This Review Team was constituted in early October 2013 with the purpose of completing the Review.[4]

B. Objectives of the Review

Consistent with the OSSG's request, the objective of this Review is to identify the degree of implementation of the Principles by the respective Administrators of LIBOR, EURIBOR and TIBOR.

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[1] See Financial Stability Board, *Progress report on the oversight and governance framework for financial benchmark reform: Report to G20 Finance Ministers and Central Bank Governors* (29 August 2013) for more detail on the OSSG and its work program. Available at: http://www.financialstabilityboard.org/publications/r_130829f.pdf.

[2] IOSCO, *Principles for Financial Benchmarks, Final Report* (July 2013). Available at: http://www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf.

[3] Ibid, 2.

[4] The Review Team is constituted by staff from the Financial Conduct Authority (United Kingdom) (**FCA**) (Co-Chair), the Australian Securities and Investments Commission (Co-Chair), the Commodity Futures Trading Commission (United States), the European Securities and Markets Authority (**ESMA**), the Federal Financial Supervisory Authority (Germany), the Financial Services Agency of Japan (**JFSA**), the Financial Services and Markets Authority (**FSMA**) (Belgium) and the Monetary Authority of Singapore (MAS). Members of the IOSCO Secretariat are providing administrative support to the Review Team.

C. Deliverable of the Review

The Review will deliver a report to be approved by the IOSCO Board and submitted to OSSG (**Review Report**) setting out:

- This assessment methodology (**Assessment Methodology**);
- The degree of implementation of the Principles by the Administrators for LIBOR, EURIBOR and TIBOR taking into account their policies and practices as implemented up to early April 2014; and
- Where a Principle is yet to be implemented in full:
    - The key reasons why this is the case; and
    - A description of the relevant Administrator's plans (if any) to fully implement the Principle (including the time table for those plans).

I. THE ASSESSMENT METHODOLOGY

A. Introduction

This Assessment Methodology has been developed to facilitate the assessment of the degree of implementation by the Administrators of LIBOR, EURIBOR and TIBOR of the Principles.

The Methodology also has been designed as a means for identifying any potential gaps, inconsistencies, weaknesses and areas where further policy development may be necessary.

The Assessment Methodology sets out the instructions for responding to the questionnaire and assessment grades that the Review Team will use to indicate the degree of implementation by the Administrators of each Principle. It also includes a detailed questionnaire in section III. This questionnaire sets out:

- The text of each Principle, which set out the obligations of the Administrator;
- Key Indicia of implementation of each Principle; and
- Key Questions to elicit evidence to assess the existence of the Key Indicia.

B. Key Indicia

The Key Indicia for each Principle are the minimum policies, procedures and practices that the Review Team would expect to see if an Administrator had implemented that Principle.

They express discrete, identifiable elements of a Principle that can be used to assess the degree of implementation of a Principle by an Administrator. In this sense, they form an integral part in the rating mechanic of this assessment methodology.

For clarity, they do not add to, or alter, the Principles: They are effectively segmented summaries of the Principles.

C. Key Questions – How to Respond

The Key Questions have been developed to elicit responses from the Administrators that will allow the Review Team to assess the extent of implementation of each Principle.

Rates and fixings covered by the review

Administrators should provide responses and information on all the rates and fixings in different tenors and currencies (where applicable) they provide.

Policy and practice

This Assessment Methodology envisions that assessors will evaluate whether the objectives of a Principle are implemented from two perspectives:

- From a policy or design perspective (i.e., by identifying the Administrator's relevant policies and any laws, rules and regulations that form the overall framework applicable to benchmark activities in the jurisdiction.[5]); and

- From an operational perspective (i.e., are the policies implemented in practice and do the policies operate as designed).

It is important that the Administrator's responses to the Key Questions cover both their formal policies and procedures as well as how those policies and procedures are implemented in practice. Where full implementation in practice has not been accomplished, the reasons for this should be given.

Failure to address the issue of implementation in practice will impair the ability of the Review Team to assess whether a particular Principle is being followed by an Administrator.

Evidence

In addition to their narrative responses, the Administrators should provide sufficient evidence to allow the Review Team to verify those responses. Accordingly:

- With respect to policies and procedures, supporting documentation, as well as internet linkages to such documents, should be provided wherever possible.

    - Where documentation is provided, the Administrators are requested to indicate in their response the relevant part of the documentation that they are relying on to evidence implementation of the Principle.

- The Administrators should provide data, examples or other evidence to substantiate the implementation practice that they follow.

The Review Team notes that it will seek access to other relevant information and stakeholders when conducting an assessment.

- Relevant information may include public information (such as relevant laws, regulations and policies) and non-public information (such as internal self-assessments, policies, procedures, data, metrics and supervisory reports).

- Relevant stakeholders may include individuals (such as management and auditors), organizations (such as market participants and industry associations) and authorities (i.e., relevant regulators and central banks). Interviews with the Administrators and other relevant stakeholders may also be conducted to confirm whether procedures are, in fact, followed.

Administrators are requested to be prepared to facilitate access to this relevant information and these relevant stakeholders where that access is within their control.

[5] The focus of the assessment and rating is solely on the Administrator's policies and practices, not the relevant jurisdiction's laws that may be in effect**.** Where such laws and regulations exist, they might be referenced as a means to show implementation and to inform the assessors' understanding of the regulatory environment.

Further, any official reviews of a Benchmark or reports developed by relevant authorities, central banks or OSSG work groups may be referred to by the Review Team in order to provide context to the response and to identify matters that might require follow-up questions to an Administrator.

Alignment of responses to Principles

In order to assist the Review Team, responses to the Key Questions should explicitly highlight how the relevant policies and practices align with the specific requirements of each Principle.

A simple mapping of policy and practices to Principle, however, should not be the only response provided to the question. Responses should explain as robustly and succinctly as possible how the Administrator's written polices conform to a Principle and how its activities implement those policies.

D. Approach to Assessing Implemented Policies and Practices

Overview

The Review assessment will be based on an Administrator's implemented policies and practices up until **11April 2014**.

The Review Team will assign assessment ratings for each individual Principle using the rating scale set out below and will substantiate all assigned ratings with reasoning in the Review Report.

The Review Report will not assign a single, overall assessment rating for the Administrator's implemented policies and procedures as an integrated whole. The Review Team will, however, form a qualitative assessment of an Administrator's overall compliance with the Principles on the basis of the ratings. This qualitative assessment will be the Review Report's key message, as the purpose of the Review is to encourage and assist compliance.

Instructions to assessors

Conclusions about which rating are assigned to each Principle should be reached using the following method:

1. Summarise the Administrator's implemented policies and practices;

2. Identify whether any Key Indicia have not been implemented by the Administrator through those summarised policies and practices (planned policies and practices should not be taken into account at this stage);

3. Assess whether the failure by the Administrator to implement any Key Indicia in the summarised policies and practices affects the Administrator achieving the intended outcome of the Principle.

   The intended outcome of the Principle is to be ascertained by considering both the specific Key Indicia and the text of the Principle as extracted in this Assessment Methodology; and

4. Based on this identification and assessment, assign one of the following ratings to the Principle.

	Rating Scale
Fully Implemented	A Principle will be considered to be Fully Implemented when all Key Indicia have been implemented without any significant deficiencies.

Broadly Implemented	A Principle will be considered to be Broadly Implemented when the assessment demonstrates shortcomings in implementation of the Key Indicia by the Administrator and those shortcomings do not, in the judgment of the assessor, substantially affect the Administrator achieving the intended outcome of the Principle.
Partly Implemented	A Principle will be considered to be Partly Implemented when the assessment demonstrates shortcomings in implementation of the Key Indicia by the Administrator and those shortcomings, in the judgment of the assessor, substantially affect the Administrator achieving the intended outcome of the Principle.
Not Implemented	A Principle will be considered to be Not Implemented when the assessment demonstrates no implementation of any of the Key Indicia by the Administrator or where there is some implementation, the implementation is manifestly ineffective in achieving the intended outcome of the Principle.

The assessment should note instances where implementation of a particular Principle could not be adequately assessed and explain why. For example, certain information may not have been provided or the data that is used to assess the degree of implementation may be inconclusive. Unsatisfied requests for information should be documented in writing.

E. Approach to Planned Policies and Practices

The Review Team is conscious that the Principles were only released in July 2013. At the time of responding to the Key Questions, therefore, Administrators of LIBOR, EURIBOR and TIBOR will have had approximately seven months to align their policies and practices with the Principles.

Accordingly, a key part of the Review Report will include describing the status of any plans for Administrators to fully implement (or to ensure a greater degree of implementation of) the Principles. The Review Report will not formally assess these plans; it will simply describe them.

To assist the Review Team to describe reform plans, there is a Key Question associated with each Principle that asks whether an Administrator anticipates the arrangements that they have described in their responses connected to that Principle changing in the future.

In responding to these questions, the Administrators should ensure that they:

1. *Describe in detail the nature of any anticipated changes, including the extent to which they have engaged in planning or designing new policies or practices and providing any available drafts or outlines of these new policies;*

2. *Provide a timeline over which the arrangements will change;*

3. *Identify whether regulatory or legislative change is driving the anticipated changes; and*

4. *Explain how they believe the new arrangements will help the Administrator implement the relevant Principle. To the extent concrete proposals have been published, responses should explicitly highlight how the relevant policies and practices would align with the specific requirements of each Principle.*

The Review Team will contact each Administrator prior to **11 April 2014** to follow up on the adoption and/or implementation of any anticipated changes. We would also encourage each Administrator to keep the Review Team updated on the progress of the implementation of their reforms through to this date. This will allow the Review Team to take into account all relevant information when performing their assessments.

F. Confidentiality

The Review Team appreciates that responses to the Key Questions may elicit market or commercially sensitive information.

To address this issue:

- Each Administrator is requested to indicate what information is market or commercially sensitive in its response.
- Each Administrator will send their response to their relevant Regulatory Authority[6], where relevant, for vetting and scrubbing before the response is shared with the broader Review Team.
    - That relevant Regulatory Authority will be responsible for ensuring the response does not contain any market or commercially sensitive information that should not be shared with the broader Review Team.
- Each Administrator will be afforded the opportunity to review the Review Report prior to its submission to the OSSG by the Review Team.
- The Review Team will not share any non-public information concerning one Administrator with any other Administrator.

G. Key Dates

The key dates for this Review are:

- **13 January 2014** – Assessment Methodology sent to Administrators for completion
- **7 February 2014** – **Responses from Administrators due back to Review Team**
- **Mid-February – Mid-March 2014** – Review Team analyses responses, assigns preliminary assessments grades and drafts Review Report
- **Through to early April 2014** – Review Team to conduct any follow-up with Administrators on planned changes or on further information requests
- **By 11 April 2014** – Review Team to share relevant parts of draft of Review Report with individual Administrator for their comment
- **May 2014** – Review Report submitted to IOSCO Board for approval
- **15 May 2014** – Review Report submitted to OSSG

H. Definitions

[6] This will be the FCA for LIBOR and the JFSA for TIBOR.

Capitalised terms that are used but not defined in the text of this Assessment Methodology are defined in Annex I (or take a cognate meaning to those definitions e.g. past tense or plural versions).

QUESTIONNAIRE

A. 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 any related determination process, including contingency measures in the event of absence of or insufficient inputs, market stress or disruption, failure of critical infrastructure, or other relevant factors; and

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.

Key Indicia of implementation of Principle

1.1 Administrator has primary responsibility for all aspects of Benchmark determination process include (at a minimum):

a) Development: definition of Benchmark and methodology;

b) Determination and dissemination: accurate and timely compilation, publication and distribution;

c) Operation: appropriate transparency over significant decisions affecting the compilation and determination; and

d) Governance: credible and transparent governance, oversight and accountability for the Benchmark determination process, including an identifiable oversight function accountable for the development and issuance and operation of the Benchmark.

Key Questions

1. Please explain if you have primary responsibility for the Benchmark determination process. In responding to this request, please consider that the Benchmark determination process covers at least:

a) The development of the Benchmark;

b) The determination and dissemination of the Benchmark;

c) The operation of the Benchmark process (including contingency measures for breakdowns in the process); and

d) The governance surrounding the Benchmark determination process.

2. If you do not have primary responsibility for the Benchmark determination process, please explain why this is the case.

    a) As part of your response, please identify all other parties who have responsibility for some element of the Benchmark determination process and explain what that responsibility is.

3. Are the responsibilities for the Benchmark determination process documented? If so, please supply a copy of the documentation.

4. Do you anticipate the existing arrangements to change in the future? If so, please describe how and when. If applicable, please also describe how the changes will assist in your implementation of the Key Indicia of the Principle.

2. Oversight of third parties

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

a) Clearly define and substantiate through appropriate written arrangements the roles and obligations of third parties who participate in the Benchmark determination process, as well as the standards the Administrator expects these third parties to comply with;

b) Monitor third parties' compliance with the standards set out by the Administrator;

c) Make Available to Stakeholders and any relevant Regulatory Authority the identity and roles of third parties who participate in the Benchmark determination process; and

d) Take reasonable steps, including contingency plans, to avoid undue operational risk related to the participation of third parties in the Benchmark determination process.

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

Key Indicia of implementation of Principle

2.1 Where activities relating to the Benchmark determination process are undertaken by third parties, the Administrator maintains appropriate oversight of such third parties.

2.2 The Administrator's policies:

a) Clearly define and substantiate through appropriate written arrangements the roles and obligations of third parties and the standards the Administrator expects them to meet;

b) Monitor third parties' compliance with the standards;

c) Make Available to Stakeholders and any relevant Regulatory Authority the identity and roles of such third parties; and

d) Take reasonable steps, including contingency plans, to avoid undue operation risk related to the participation of such third parties in the Benchmark determination process.

2.3 This Principle is not applicable if the third party is a Regulated Market or Exchange.

Key Questions

1. Please describe any aspect of the Benchmark determination process that is outsourced to a third party.
2. Are these outsourcing arrangements documented? Please describe the provisions in the documentation which respond to (a)-(d) of the Principle above.
3. Please describe any policies, procedures and practices that you have which govern or otherwise provide oversight over these arrangements. If these policies, procedures and practices are documented, please provide a copy of the documentation.
4. If you lack any applicable policies, procedures and practices for oversight, or if these policies, procedures and practices do not cover all topics listed in the Key Indicia, please explain why.
5. Do you anticipate the existing arrangements to change in the future? If so, please describe how and when. If applicable, please also describe how the changes will assist in your implementation of the Key Indicia of the Principle.

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, 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) Provide that an Administrator discloses conflicts of interest arising from the ownership structure or the control of the Administrator to its Stakeholders and any relevant Regulatory Authority in a timely manner.

Key Indicia of implementation of Principle

3.1 Administrators:

a) Document, implement and enforce policies and procedures for the identification, disclosure, management, mitigation or avoidance of conflicts of interest.

b) Review and update their policies and procedures as appropriate.

c) Disclose any material conflicts of interest to their users and any relevant Regulatory Authority.

3.2 The framework is tailored to the level of existing or potential conflicts of interest and risks posed by the Benchmark and seeks to

a) Ensure that:

i. Existing or potential conflicts of interest do not inappropriately influence Benchmark determinations;

ii. Personal interests and connections or business connections do not compromise the Administrator's performance of its functions;

iii. 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;

iv. Adequate supervision and sign-off by authorised or qualified employees prior to releasing Benchmark determinations;

v. 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;

vi. 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

vii. 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.

b) Mitigate existing or potential conflicts created by the Administrator's ownership structure or control, or due to other interests of its staff or wider group and to this end:

i. Includes measures to avoid, mitigate or disclose conflicts of interest that may exist between its Benchmark determination business, including staff who perform or otherwise participate in Benchmark production responsibilities, and other business of the Administrator or an affiliate;

ii. Provides that an Administrator discloses conflicts of interest arising from the ownership structure or the control of the Administrator to its Stakeholders and any relevant Regulatory Authority in a timely manner.

Key Questions

1. Please describe all identified existing and potential conflicts of interest within the Administrator's business, including all affiliates.
2. Have any of these conflicts been disclosed to your users or regulatory authority?
3. Please describe in detail any framework you have for the identification, disclosure, management, mitigation or avoidance of conflicts of interest and how that framework is tailored to relevant conflicts and has been implemented. Please include in your description detail of the identification and mitigation processes you use, giving an example if possible of actual employment of the processes.
4. If this framework is documented, please provide a copy of the documentation.
5. Please describe any process you have for the review and updating of these policies and procedures.
6. If you lack any such framework, or your framework does not cover one of the topics identified in the Key Indicia, please explain why.
7. Do you anticipate the existing arrangements to change in the future? If so, please describe how and when. If applicable, please also describe how the changes will assist in your implementation of the Key Indicia of the Principle.

4. Control framework for Administrators

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

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 is maintained, in line with principles 6 to 15 on the quality of the Benchmark and Methodology;

ii. Arrangements to promote the integrity of Benchmark inputs, including adequate due diligence on input sources;

iii. Arrangements to ensure accountability and complaints mechanisms are effective, in line with principles 16 to 19; and

iv. Providing robust infrastructure, policies and procedures for the management of risk, including operational risk.

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 the Benchmark;

b) Employing a system of appropriate measures so that, to the extent possible, Submitters comply with the Submission guidelines, as defined in the Submitter Code of Conduct and the Administrators' applicable quality and integrity standards for Submission;

c) Specifying how frequently Submissions should be made and specifying that inputs or Submissions should be made for every Benchmark determination; and

d) Establishing and employing measures to effectively monitor and scrutinise inputs or Submissions. This should include pre-compilation or pre-publication monitoring to identify and avoid errors in inputs or Submissions, as well as ex-post analysis of trends and outliers.

Key Indicia of implementation of Principle

4.1 Administrators have an appropriate control framework in place for the process of determining and distributing the Benchmark. At a minimum it is:

a) Appropriately tailored to the materiality of the identified conflicts of interest, the extent of the use of discretion in the Benchmark setting process and to the nature of Benchmark inputs and outputs.

b) Documented and available to relevant Regulatory Authorities. A summary of its main features should be Published or Made Available to Stakeholders.

c) Reviewed periodically and updated as appropriate and address the following areas:

i. Conflicts of interest in line with Principle 3

ii. Arrangements to ensure that the quality and integrity of Benchmarks is maintained, in line with principles 6 to 15

iii. Arrangements to promote the integrity of Benchmark inputs, including adequate due diligence on input sources

iv. Arrangements to ensure accountability and complaints mechanisms are effective, in line with principles 16 to 19

v. Provides robust infrastructure, policies and procedures for the management of risk, including operational risk

vi. Establishes an effective whistle blowing mechanism, to facilitate early awareness of any potential misconduct or irregularities, which should allow for external reporting where appropriate

vii. Ensures Benchmark determinations are made by personnel who possess the relevant levels of expertise, with a process for periodic review of their competence

viii. Staff training, including ethics and conflicts of interest training, and continuity and succession planning for personnel

Benchmarks based on Submissions:

4.2 Administrators:

a) Have measures in place to ensure as far as possible whereby Submitters comprise an appropriately representative group of participants taking into consideration the underlying Interest measured by the Benchmark;

b) Employ 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; and

c) Specify the frequency of Submissions and specifying that inputs or Submissions should be made for every Benchmark determination.

Key Questions

1. Please describe in detail any control framework that you have implemented that concerns the process of determining and distributing the Benchmark.

2. Please provide copies of all documentation detailing such control framework (or frameworks).

3. Please explain how this control framework (or frameworks) is 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.

4. Please describe any process you have for the review and updating of these policies and procedures.

5. If you lack any control framework, or if the control framework does not address the areas identified in the Key Indicia, please explain why.

6. Please indicate whether and how a summary of this control framework (or frameworks) is Published or Made Available to Stakeholders. If it has, please provide evidence (e.g. a hyperlink). If it not Published or Made Available, please explain why.

7. If not already covered in your response to question 1, please describe in detail the composition of, selection criteria for and all arrangements with submitters to the Benchmark. Please include in this any submitter code of conduct that you employ.

8. Please supply a copy of all documentation setting your arrangements with submitters.

9. Please describe the processes in place for monitoring submitters' compliance with the arrangements.

10. Please describe any ex-ante and ex-post monitoring of submissions conducted, including any procedures covering such monitoring.

11. Please explain how, if applicable, your submitters comprise an appropriately representative group of participants taking into consideration the underlying interest measured by the Benchmark.

12. Do you anticipate the existing arrangements to change in the future? If so, please describe how and when. If applicable, please also describe how the changes will assist in your implementation of the Key Indicia of the Principle.

5. Internal Oversight

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

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

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

a) The terms of reference of the oversight function;

b) Criteria to select members of the oversight function;

c) The summary details of membership of any committee or arrangement charged with the oversight function, along with any declarations of conflicts of interest and processes for election, nomination or removal and replacement of committee members.

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 12; and

   iv. Reviewing and approving procedures for termination of the Benchmark, including guidelines that set out how the Administrator should consult with Stakeholders about such cessation.

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

Key Indicia of implementation of Principle

5.1 Administrators have an oversight function to review and provide challenge on all aspects of the Benchmark determination process, which should:

a) 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.

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

5.2 An Administrator develops and maintains robust procedures regarding its oversight function, which should be documented and available to relevant Regulatory Authorities and its main features Made Available to Stakeholders.

5.3 These procedures include terms of reference for the oversight function, selection criteria for membership and summary details of membership of any committee or arrangement of the oversight function (together with declarations of conflicts of interest and processes for election, nomination or removal and replacement of members).

5.4 Responsibilities of the oversight function include:

a) Oversight of the Benchmark design, including:

i. Periodic review of the definition of the Benchmark and its Methodology;

ii. Taking measures to remain informed about issues and risks to the Benchmark, as well as commissioning external reviews of the Benchmark (as appropriate);

iii. Overseeing any changes to the Benchmark Methodology, including assessing whether the Methodology continues to appropriately measure the underlying Interest, reviewing proposed and implemented changes to the Methodology, and authorising or requesting the Administrator to undertake a consultation with Stakeholders where known or its Subscribers on such changes as per Principle 12; and

iv. Reviewing and approving procedures for termination of the Benchmark, including guidelines setting out how the Administrator should consult with Stakeholders about such cessation.

b) Oversight of the integrity of Benchmark determination and control framework, including:

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 interest may arise due to Administrator's ownership structures or controlling interests:

5.5 Administrator has 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 Benchmark is based on Submissions

5.6 The oversight function provides suitable oversight and challenge of the Submissions by:

a) Overseeing and challenging the scrutiny and monitoring of inputs or Submissions by the Administrator, including regular discussions of inputs or Submission patterns, defining parameters against which inputs or Submissions can be analysed, or querying the role of the Administrator in challenging or sampling unusual inputs or Submissions;

b) Overseeing the Code of Conduct for Submitters;

c) Establishing effective arrangements to address breaches of the Code of Conduct for Submitters; and

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

Key Questions

1. Please describe in detail the form, arrangements, responsibilities, operation and other details of any oversight function that you have in place to review and provide challenge to the Benchmark determination process and, if relevant, submissions.

2. Please explain how this oversight function is appropriate to provide effective scrutiny of your activities.

3. Please detail how this oversight function has operated in practice since its establishment, giving examples of its activities.

4. Please describe any procedures that relate to your oversight function.

5. If you lack any such oversight function, or it does not cover the areas listed in the Key Indicia please explain why.

6. Are these procedures documented and are they made available to regulators? If so, please supply a copy of the documentation.

7. Please indicate whether and how details of this oversight function are Made Available to Stakeholders. If they have, please provide evidence (e.g. a hyperlink).

8. Do you anticipate the existing arrangements to change in the future? If so, please describe how and when. If applicable, please also describe how the changes will assist in your implementation of the Key Indicia of the Principle.

B. 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).

Key Indicia of implementation of Principle

6.1 The design of the Benchmark:

a) Seeks 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

b) Takes into account the following generic non-exclusive features, and other factors should be considered, as appropriate to the particular Interest:

i. Adequacy of the sample used to represent the Interest;

ii. Size and liquidity of the relevant market (for example whether there is sufficient trading to provide observable, transparent pricing);

iii. Relative size of the underlying market in relation to the volume of trading in the market that references the Benchmark;

iv. The distribution of trading among Market Participants (market concentration);

v. Market dynamics (e.g., to ensure that the Benchmark reflects changes to the assets underpinning a Benchmark).

Key Questions

1. Please describe the details of the Interest that the Benchmark seeks to represent. Please include all related sources which inform the state of the Interest that the Benchmark seeks to represent.

2. Please include all market metrics that you have available concerning the features listed in the Key Indicia.

3. Please describe in detail the design of the Benchmark including a detailed description of the factors taken into account in designing the Benchmark. In particular, please cover if and how the design of the Benchmark takes into the details of the Interest it seeks represent and explain how it results in an accurate and reliance representation of the economic realities of the Interest it represents. If it does not, please explain why.

4. Are the details of the Benchmark's design documented? If so, please provide a copy of the documentation.

5. Do you anticipate the existing arrangements to change in the future? If so, please describe how and when. If applicable, please also describe how the changes will assist in your implementation of the Key Indicia of the Principle.

7. Data Sufficiency

The data used to construct a Benchmark determination should be sufficient to accurately and reliably represent the Interest measured by the Benchmark and should:

a) Be based on prices, rates, indices or values that have been formed by the competitive forces of supply and demand in order to provide confidence that the price discovery system is reliable; and

b) Be anchored by observable transactions entered into at arm's length between buyers and sellers in the market for the Interest the Benchmark measures in order for it to function as a credible indicator of prices, rates, indices or values.

This Principle requires that a Benchmark be based upon (i.e., *anchored in*) an active market having observable *Bona Fide*, Arms-Length Transactions. This does not mean that every individual Benchmark determination must be constructed solely of transaction data. Provided that an active market exists, conditions in the market on any given day might require the Administrator to rely on different forms of data tied to observable market data as an adjunct or supplement to transactions. Depending upon the Administrator's Methodology, this could result in an individual Benchmark determination being based predominantly, or exclusively, on bids and offers or extrapolations from prior transactions. This is further clarified in Principle 8.

Provided that subparagraphs (a) and (b) above are met, Principle 7 does not preclude Benchmark Administrators from using executable bids or offers as a means to construct Benchmarks where anchored in an observable market consisting of *Bona Fide*, Arms-Length transactions. [fn. 23 For example this approach might be appropriate in a market where overall transaction volume is high over sustained periods, though on any given day there might be more firm bids and offers than posted transactions taking place."]

This Principle also recognizes that various indices may be designed to measure or reflect the performance of a rule-based investment strategy, the volatility or behaviour of an index or market or other aspects of an active market. Principle 7 does not preclude the use of non-transactional data for such indices that are not designed to represent transactions and where the nature of the index is such that non-transactional data is used to reflect what the index is designed to measure. For example, certain volatility indices, which are designed to measure the expected volatility of an index of securities transactions, rely on non-transactional data, but the data is derived from and thus "*anchored*" in an actual functioning securities or options market. [**LIBOR, EURIBOR and TIBOR are intended to represent unsecured, inter-bank funding operations as described by the Benchmark's terms. Accordingly, this paragraph does not apply to these three benchmarks**].

Key Indicia of implementation of Principle

7.1 Data used to construct a Benchmark determination is sufficient to accurately and reliably represent the Interest measured by the Benchmark and is:

a) Based on prices, rates, indices or values that have been formed by the competitive forces of supply and demand;

b) Anchored by observable arm's length transactions entered into between buyers and sellers in the market for the Interest the Benchmark measures.

7.2 Benchmark should be based upon (i.e. anchored in) an active market with observable, *Bona Fide*, Arms-Length Transactions in the market for the Interest the benchmark measures. *Notes: The term "active market" was deliberately left undefined in the Principle as this is a determination that is made by the Administrator during the design of the Benchmark and in its periodic review of the selected reference market. The consultation report published in January 2013 sets out a number of factors such as market size, liquidity, market concentration and dynamics that will be relevant to the determination of an active market. The relevant pages from the consultation report are set out in full in* ***Annex II*** *and should be considered part of this Key Indicium. An Administrator's belief or assertion that an active market exists will not be conclusive in assessing whether Principle 7 has been implemented.*

7.3 This does not mean that every individual Benchmark determination must be constructed solely of transaction data. Provided that an active market exists, conditions in the market on any given day might require the Administrator to rely on different forms of data tied to observable market data as an adjunct or supplement to transactions. Depending upon the Administrator's Methodology, this could result in an individual Benchmark determination being based predominantly, or exclusively, on bids and offers or extrapolations from prior transactions. (See Principle 8).

7.4 Further, provided paragraph 7.1 is met, Administrators may use executable bids or offers as a means to construct Benchmarks where anchored in an observable market consisting of *Bona Fide*, Arms-Length transactions.

Key Questions

1. Please provide data and other information used to construct Benchmark determinations under the technical terms of the Benchmark (*e.g.,* relevant tenors and currencies, specific times for fixing, minimum quantities) that is available to you over as long a period as possible.

   For any data and information that underlie submissions or data and information received by you, if available and where applicable, please clearly indicate:

   1. *The specific type of transaction data:*

      a) *Submitter's own or observed concluded unsecured interbank transactions that are described by the technical terms of the relevant Benchmark (i.e., LIBOR, EURIBOR, LIBOR or TIBOR)*

      b) *Unsecured interbank deposits and any other unsecured transactions*

      c) *FX swaps and FX forwards undertaken in combination with (a) or (b) for funding purposes.*

   2. *Committed and indicative prices or quotes in the types of transactions in 1 (a)-(c)*

   3. *Transaction:*

      a) *Maturity;*

      b) *Currency;*

      c) *Time and date;*

d) Counterparty type; and

e) Size and volume.

2. Please explain how this data is generated, and your data sources. Please include an evaluation of the quality and robustness of this data.

3. Are the details of the data and information that needs to be used to construct the Benchmark documented? If so, please provide a copy of the documentation.

4. Please demonstrate and support with any available evidence, whether observable transactions entered into at arm's length between buyers and sellers in the market for the Interest specified by the Benchmark's terms exist, and that the market is active such that it serves as an accurate and reliable indicator of the Interest measured by the Benchmark.

   You may reference any relevant data and other information be provided in your response to Key Question 1 – any additional data and information provided should be labeled consistently with the labeling convention used in the response to Key Question 1.

   - In your response, please include a description of how you have defined an 'active' market for your Benchmark's purposes;

   - Your response should take into account the considerations set out in Annex II.

5. To the extent that individual Benchmark determinations are not constructed solely of transaction data in the Interest specified by the Benchmark, please explain what conditions require you to rely on these different forms of data. Please explain how this data is tied to observable market transactions in the Interest specified by the benchmark.

   - If other forms of data are used, does the market for the Interest described by the Benchmark continue to reflect prices or rates that have been formed by the competitive forces of supply and demand?

6. Please describe all of your actions that seek to ensure that:

   - Any data and information relied upon in determining the Benchmark accurately and reliably represents the Interest measured by the Benchmark;

   - Submissions that communicate a submitting bank's beliefs or perceptions of rates or values are in fact anchored by observable, Bona-Fide, Arms-Length transactions in the market for the Interest specified by the Benchmark's terms; and

   - Any other forms of data used as an adjunct or supplement to transactions in the Interest described by the Benchmark's terms are themselves tied to observable market data.

7. Please describe which data would be needed to comply with this principle. Are the details of the data and information that needs to be used to construct the Benchmark documented? If so, please provide a copy of the documentation.

8. Do you anticipate the existing approach for composing the benchmark will change in the future? If so, please describe how and when. If applicable, please also describe how the changes will assist in your implementation of the Key Indicia of the Principle.

8 Hierarchy of data inputs

An Administrator should establish and Publish or Make Available clear guidelines regarding the hierarchy of data inputs and exercise of Expert 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 (i.e., an active market exists), this Principle is not intended to restrict an Administrator's flexibility to use inputs consistent with the Administrator's approach to ensuring the quality, integrity, continuity and reliability of its Benchmark determinations, as set out in the Administrator's Methodology. The Administrator should retain flexibility to use the inputs it believes are appropriate under its Methodology to ensure the quality and integrity of its Benchmark. For example, certain Administrators may decide to rely upon Expert Judgment in an active albeit low liquidity market, when transactions may not be consistently available each day. IOSCO also recognizes that there might be circumstances (e.g., a low liquidity market) when a confirmed bid or offer might carry more meaning than an outlier transaction. Under these circumstances, non-transactional data such as bids and offers and extrapolations from prior transactions might predominate in a given Benchmark determination.

Key Indicia of implementation of Principle

8.1 Administrators Publish or Make Available clear guidelines regarding the hierarchy of data inputs and exercise of Expert Judgment used for the determination of Benchmarks.

8.2 Generally, hierarchy of data inputs includes:

a) For Submission-based Benchmarks, 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 and in related markets;

c) Firm (executable) bids and offers; and

d) Other market information or Expert Judgments.

8.3 Provided that the Data Sufficiency Principle is met (i.e., an active market exists), this Principle is not intended to restrict an Administrator's flexibility to use inputs consistent with the Administrator's approach to ensuring the quality, integrity, continuity and reliability of its Benchmark determinations, as set out in the Administrator's Methodology.

Key Questions

1. Please describe any guidelines that establish hierarchy of data inputs and exercise of expert judgment used for determination of the Benchmark and explain how that hierarchy operates.

2. If you lack any such guidelines, or the guidelines do not cover the points listed in the Key Indicia, please explain why.

3. Are the guidelines documented? If so, please provide a copy.

4. Do you anticipate the existing arrangements to change in the future? If so, please describe how and when. If applicable, please also describe how the changes will assist in your implementation of the Key Indicia of the Principle.

9 Transparency of Benchmark Determinations

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

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

b) A concise explanation of the extent to which and the basis upon which Expert Judgment if any, was used in establishing a Benchmark determination.

Key Indicia of implementation of Principle

9.1 Administrators describe and publish with each Benchmark determination, to the extent reasonable without delaying the publication deadline, concise explanations:

a) Sufficient to facilitate a Stakeholder's or Market Authority's ability to understand how the determination was developed, including, at a minimum, the size and liquidity of the market being assessed (meaning the number and volume of transactions submitted), the range and average volume and range and average of price, and indicative percentages of each type of market data that have been considered in a Benchmark determination; terms referring to the pricing Methodology should be included (e.g., transaction-based, spread-based or interpolated/extrapolated).

b) Of the extent to which and the basis upon which Expert Judgment if any, was used in establishing a Benchmark determination.

Key Questions

1. Please describe in detail all the information described and published with each Benchmark determination that you believe meets the criteria in principle 9(a) and (b) above.

2. Are requirements for information to be included with each Benchmark determination documented? If so, please provide a copy of this documentation.

3. Do you anticipate the existing arrangements to change in the future? If so, please describe how and when. If applicable, please also describe how the changes will assist in your implementation of the Key Indicia of the Principle.

10 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 or Make Available a summary of such reviews where material revisions have been made to a Benchmark, including the rationale for the revisions.

Key Indicia of implementation of Principle

10.1 Administrators periodically review conditions in the underlying Interest that the Benchmark measures to determine whether the Interest has:

a) Undergone structural changes that might require changes to the design of the Methodology.

b) Diminished or is non-functioning such that it can no longer function as the basis for a credible Benchmark.

10.2 The Administrator should Publish or Make Available a summary of such reviews where material revisions have been made to a Benchmark, including the rationale for the revisions.

Key Questions

1. Please describe in detail any policies, procedures and practices in place to periodically review the conditions in the underlying Interest that the Benchmark measures.

2. If you do not have any such policies, procedures and practices, or they do not cover the points listed in the Key Indicia, please explain why.

3. Please describe the focus (e.g., structural changes, diminished or nonfunctioning market) and outcomes sought from any such reviews that have been held.

4. Please describe any change in methodology or benchmark tenors or currencies resulting from such reviews.

5. If the process or detail of the reviews is documented, please provide a copy of the documentation.

6. Have or will the reviews or their outcomes be Published or Made Available to anyone under any circumstances? If they have, please provide evidence (e.g. a hyperlink).

7. Do you anticipate the existing arrangements to change in the future? If so, please describe how and when. If applicable, please also describe how the changes will assist in your implementation of the Key Indicia of the Principle.

C. Quality of the Methodology

11 Content of the Methodology

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

e) The procedures for dealing with error reports, including when a revision of a Benchmark would be applicable;

f) Information regarding the frequency for internal reviews and approvals of the Methodology. Where applicable, the Published Methodologies should also include information regarding the procedures and frequency for external review of the Methodology;

g) The circumstances and procedures under which the Administrator will consult with Stakeholders, as appropriate; and

h) The identification of potential limitations of a Benchmark, including its operation in illiquid or fragmented markets and the possible concentration of inputs.

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

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

Key Indicia of implementation of Principle

11.1 Administrators have:

a) Documented and Published or Made Available the Methodology.

b) Provided the rationale for adopting a particular Methodology.

11.2 The Published Methodology provides 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. The Methodology contains – as a minimum:

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) Procedures which govern Benchmark determination in periods of market stress or disruption, or periods where data sources may be absent (e.g., theoretical estimation models);

e) Procedures for dealing with error reports, including when a revision of a Benchmark would be applicable;

f) Information regarding the frequency of 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 Benchmark is based on Submissions

11.3 The Administrator should clearly establish criteria for including and excluding Submitters, which:

a) Considers any issues arising from the location of the Submitter, if in a different jurisdiction to the Administrator

b) Is available to any relevant Regulatory Authorities, and Published or Made Available to Stakeholders. Any provisions related to changes in composition, including notice periods should be made clear.

Key Questions

1. Please describe in detail the methodology used to determine the Benchmark, including all the information contained in the Methodology.

2. Please identify where the methodology addresses each of the required items in the principle. If the Methodology fails to cover all the items listed in the Key Indicia, please explain why.

3. Please provide a copy of the Methodology.

4. Has the documented methodology, together with a rationale for its adoption, been Published or Made Available? If so, please provide evidence (e.g. a hyperlink).

5. Where a Benchmark is based on submissions: does the Methodology establish criteria for including and excluding submitters?

6. Do you anticipate the existing arrangements to change in the future? If so, please describe how and when. If applicable, please also describe how the changes will assist in your implementation of the Key Indicia of the Principle.

12 Changes to the Methodology

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

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

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

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

a) Provide advance notice and a clear timeframe that gives Stakeholders sufficient opportunity to analyse and comment on the impact of such proposed material changes, having regard to the Administrator's assessment of the overall circumstances; and

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

Key Indicia of implementation of Principle

12.1 Administrators Publish or Make Available the rationale of any proposed material change in its Methodology, and procedures for making such changes.

12.2 The [documented] procedures:

a) Clearly define what constitutes a material change, and the method and timing for consulting or notifying Subscribers (and other Stakeholders where appropriate, taking into account the breadth and depth of the benchmark's use) of changes

b) Are consistent with the overriding objective that an Administrator must ensure the continued integrity of its Benchmark determinations.

12.3 The Administrator:

a) Specifies how changes to the Methodology will be scrutinised, by the oversight function.

b) Develops Stakeholder consultation procedures in relation to changes to the Methodology that are deemed material by the oversight function and that are appropriate and proportionate to the breadth and depth of the benchmark's use an the nature of the Stakeholders.

12.4 Stakeholder consultation procedures involve:

a) Providing advance notice and a clear timeframe that would give Stakeholders sufficient opportunity to analyse and comment on the impact of such proposed material changes, having regard to the Administrator's assessment of the overall circumstances

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

Key Questions

1. Are the procedures and the rationale for any proposed material change to the Methodology Published or Made Available? Do those procedures define what constitutes a material change? If not, why not?

2. Please describe in detail the procedures followed to make changes to the methodology, including all the factors taken into account in making any changes to the methodology and the definition of what constitutes a material change (if any). Are there different processes depending on the materiality of the change?

3. If the procedures fail to cover all the topics listed in the Key Indicia, please explain why.

4. Are the procedures documented? If so, please provide a copy.

5. Please describe in detail the processes in place to scrutinize proposed changes to the methodology. Please describe the parties responsible for carrying out this scrutiny. If these processes are documented, please provide a copy.

6. Please describe any procedures in place to consult with stakeholders in relation to any changes to the methodology. If these are documented, please provide a copy. If there are no such procedures, please explain why.

7. Do you anticipate the existing arrangements to change in the future? If so, please describe how and when. If applicable, please also describe how the changes will assist in your implementation of the Key Indicia of the Principle.

13 Transition

Administrators should have clear written policies and procedures, to address the need for possible cessation of a Benchmark, due to market structure change, product definition change, or any other condition which 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 Published or 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 and liquidity of the alternative market), differentials between Benchmarks, the extent to which an alternative Benchmark meets the asset/liability needs of Stakeholders, whether the revised Benchmark is investable, the availability of transparent transaction data, the impact on Stakeholders and impact of existing legislation;

b) The practicality of maintaining parallel Benchmarks (e.g., where feasible, maintain the existing Benchmark for a defined period of time to permit existing contracts and financial instruments to mature and publish a new Benchmark) in order to accommodate an orderly transition to a new Benchmark;

c) The procedures that the Administrator would follow in the event that a suitable alternative cannot be identified;

d) In the case of a Benchmark or a tenor of a Benchmark that will be discontinued completely, the policy defining the period of time in which the Benchmark will continue to be produced in order to permit existing contracts to migrate to an alternative Benchmark if necessary; and

e) The process by which the Administrator will engage Stakeholders and relevant Market and National Authorities, as appropriate, in the process for selecting and moving towards an alternative Benchmark, including the timeframe for any such action commensurate with the tenors of the financial instruments referencing the Benchmarks and the adequacy of notice that will be provided to Stakeholders.

Key Indicia of implementation of Principle

13.1 Administrators have clear documented policies and procedures, to address the need for possible cessation of a Benchmark, due to market structure change, product definition change, or any other condition which makes the Benchmark no longer representative of its intended Interest.

13.2 Policies and procedures are 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.

13.3 Administrators are required to take into account the views of Stakeholders and any relevant Regulatory and National Authorities in determining appropriate policies and procedures for a particular Benchmark and there is evidence they have done so. These procedures are Published or Made Available to all Stakeholders.

13.4 Administrators 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.

13.5 If determined reasonable and appropriate by the Administrator, its written policies and procedures to address the cessation of a Benchmark include the following factors:

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, 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 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

13.6 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.

Key Questions

1. Please describe in detail the policies and procedures in place to address the possible cessation of the Benchmark and indicate where these policies and procedures specifically address the criteria in principle (a) –e) above.

2. If there are no such policies or procedures, please explain why.

3. Please describe in detail all the factors taken into account in determining the policies and procedures.

4. Are the policies and procedures documented? If so, please provide a copy.

5. Have the policies and procedures been Published or Made Available to Stakeholders? If so, please provide evidence (e.g. a hyperlink).

6. Have you encouraged users of the Benchmark to have fall-back provisions in contracts or financial instruments that reference the Benchmark? If so, please the details of this encouragement.

7. Do you anticipate the existing arrangements to change in the future? If so, please describe how and when. If applicable, please also describe how the changes will assist in your implementation of the Key Indicia of the Principle.

14 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 available to any relevant Regulatory Authorities, if any and Published or Made Available to Stakeholders.

The Administrator should only use inputs or Submissions from entities which adhere to the Submitter Code of Conduct and the Administrator should appropriately monitor and record adherence from Submitters. The Administrator should require Submitters to confirm adherence to the Submitter Code of Conduct annually and whenever a change to the Submitter Code of Conduct has occurred.

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 unless the Administrator is satisfied that there are adequate internal oversight and verification procedures for Front Office Function Submissions of data to an Administrator (including safeguards and supervision to address possible conflicts of interests as per paragraphs (v) and (ix) above), the physical separation of employees and reporting lines where appropriate, the consideration of how to identify, disclose, manage, mitigate and avoid existing or potential incentives to manipulate or otherwise influence data inputs (whether or not in order to influence the Benchmark levels), including, without limitation, through appropriate remuneration policies and by effectively addressing conflicts of interest which may exist between the Submitter's Submission activities (including all staff who perform or otherwise participate in Benchmark Submission responsibilities), and any other business of the Submitter or of any of its affiliates or any of their respective clients or customers.

Key Indicia of implementation of Principle

14.1 Administrators have a Submitter Code of conduct in place which is available to any relevant Regulatory Authorities, and Published or Made Available to Stakeholders.

14.2 Administrators:

a) Only use inputs or Submissions from entities which adhere to the Submitter Code of Conduct

b) Appropriately monitor and record adherence from Submitters

c) Require Submitters to confirm adherence to the Submitter Code of Conduct annually and whenever a change to the Submitter Code of Conduct has occurred.

14.3 Administrator's oversight function is responsible for the continuing review and oversight of the Submitter Code of Conduct.

14.4 The Submitter Code of Conduct covers the following:

a) 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 includes:

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 (as defined in Principle 14 g xi).

Key Questions

1. Please describe in detail any guidelines in place addressing submitters and indicate where those policies address the criteria set out in principle 14 (a) –(g) above.

2. Do these guidelines cover all points in the Key Indicia? If not,, please explain why. We are particularly interested in reasons why, if applicable, you may not have a prohibition on receiving data from a Front Office Function(e.g. because you are satisfied that there adequate internal and verification procedures).

3. Does the Administrator require Submitters to confirm adherence to the Submitter Code of Conduct annually and whenever a change to the Submitter Code of Conduct has occurred?

4. Are these guidelines documented? If so, please provide a copy. If not, why not?

5. Have these guidelines been Published or Made Available to Stakeholders? If so, please provide evidence (e.g. a hyperlink). If not, why not?

6. Please describe in detail processes in place and the parties responsible for the review, update and oversight of the guidelines and Submitters' adherence to the guidelines.

7. Please describe in detail the consequences of non-compliance with the guidelines by Submitters.

8. Do you anticipate the existing arrangements to change in the future? If so, please describe how and when. If applicable, please also describe how the changes will assist in your implementation of the Key Indicia of the Principle.

15 Internal Controls over Data Collection

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

Key Indicia of implementation of Principle

15.1 When an Administrator collects data from any external source the Administrator ensures there are appropriate internal controls over its data collection and transmission processes, which address processes for :

a) Selecting the source

b) Collecting the data

c) Protecting the integrity and confidentiality of the data.

15.2 If data is received from the Front Office Function, the Administrator seeks corroborating data from other sources

Key Questions

1. Please describe in detail the circumstances where data is sought from external sources, including a detailed description of the sources and the data sought.

2. Please describe in detail any internal controls in place over the data collection and transmission processes, including how sources are selected, data is collected and integrity and confidentiality of the data is maintained.

3. If there are no such internal controls, or the internal controls do not cover the topics in the Key Indicia, please explain why.

4. In what circumstances are data collected from a Front Office Function and how is such data treated? Please explain whether and if so, how, the Administrator seeks corroborating data from other sources.

5. Are these internal controls documented? If so, please provide a copy.

6. Do you anticipate existing arrangements to change in the future? If so, please describe how and when. If applicable, please also describe how the changes will assist in your implementation of the Key Indicia of the Principle.

D. Accountability

16 Complaints Procedures

The Administrator should establish and Publish or Make Available a written complaints procedures policy, by which Stakeholders may submit complaints including concerning whether a specific Benchmark determination is representative of the underlying Interest it seeks to measure, applications of the Methodology in relation to a specific Benchmark determination(s) and other Administrator decisions in relation to a Benchmark determination.

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 years, subject to applicable national legal or regulatory requirements.

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

Key Indicia of implementation of Principle

16.1 Administrators establish and Publish or Make Available a written complaints procedures policy, by which Stakeholders may submit complaints including concerning whether a specific Benchmark determination is representative of the underlying Interest it seeks to measure, applications of the Methodology in relation to a specific Benchmark determination(s) and other Administrator's decisions in relation to a benchmark determination.

16.2 The complaints procedures policy:

a) Permits complaints to be submitted through a user-friendly complaints process such as an electronic Submission process;

b) Contains 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) Contains a process for escalating complaints, as appropriate, to the Administrator's governance body; and

d) Requires all documents relating to a complaint, including those submitted by the complainant as well as the Administrator's own record, to be retained for a minimum of five years, subject to applicable national legal or regulatory requirements.

16.3 Disputes that are not formal complaints are resolved by the Administrator by reference to its standard appropriate procedures. If a complaint results in a change in a Benchmark determination, that change is published or made available to Subscribers and published or made available to Stakeholders as soon as possible as set out in the Methodology.

Key Questions

1. Please describe in detail your complaints procedures policy for Stakeholders seeking to make a complaint in relation to a Benchmark determination.

2. Is this policy documented? If so, please provide a copy.

3. If there is no such policy, or it does not cover all of the topics listed in the Key Indicia, please explain why.

4. Has the policy been published or made available to users of the Benchmark? If so, please provide evidence (e.g. a hyperlink).

5. What is the process for resolution of informal disputes?

6. Please describe in detail the process followed if a complaint results in a Benchmark determination being changed. Is this Published or Made Available to anyone?

7. Do you anticipate the existing arrangements to change in the future? If so, please describe how and when. If applicable, please also describe how the changes will assist in your implementation of the Key Indicia of the Principle.

17 Audits

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

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

Key Indicia of implementation of Principle

17.1 Administrators appoint an independent internal or external auditor with appropriate experience and capability to periodically review and report on the Administrator's adherence to its stated criteria and with the Principles.

17.2 Frequency of audits is proportional to the size and complexity of the Administrator's operations.

17.3 Where appropriate to the level of existing or potential conflicts of interest identified by the Administrator an Administrator appoints an independent external auditor with appropriate experience and capability to periodically review and report on the Administrator's adherence to its stated Methodology.

17.4 The frequency of audits is proportionate to the size and complexity of the Administrator's Benchmark operations and the breadth and depth of Benchmark used by Stakeholders.

Key Questions

1. Have you appointed an auditor to conduct an audit of your adherence with your stated policies and methodologies the Principles? If not, why not?

2. If so, please describe the details of this appointment and the anticipated audit process in detail.

3. If the process is documented, please provide a copy.

4. Have you appointed an auditor to conduct a period audit of your compliance with the Benchmark's methodology? If not, why not?

5. If so, please describe the details of this appointment and the anticipated audit process in detail. Please include in your response a justification of why the anticipated frequency of audits is proportionate to the size and complexity of your Benchmark operations and the breadth and depth of Benchmark use by Stakeholders.

6. If the process is documented, please provide a copy.

7. Do you anticipate the existing arrangements to change in the future? If so, please describe how and when. If applicable, please also describe how the changes will assist in your implementation of the Key Indicia of the Principle.

18 Audit Trail

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

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

b) The exercise of Expert 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; and

e) Any queries and responses relating to data inputs.

If these records are held by a Regulated Market or Exchange the Administrator may rely on these records for compliance with this Principle, subject to appropriate written record sharing agreements.

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

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

a) The procedures and Methodologies governing the Submission of inputs;

b) The identity of any other person who submitted or otherwise generated any of the data or information provided to the Administrator;

c) Names and roles of individuals responsible for Submission and Submission oversight;

d) Relevant communications between submitting parties;

e) Any interaction with the Administrator;

f) Any queries received regarding data or information provided to the Administrator;

g) Declaration of any conflicts of interests and aggregate exposures to Benchmark related instruments;

h) Exposures of individual traders/desks to Benchmark related instruments in order to facilitate audits and investigations; and

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

Key Indicia of implementation of Principle

18.1 Administrators, subject to national legal or regulatory requirements, retain for five years written records 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; and

e) Any queries and responses relating to data inputs.

18.2 Administrators may rely on these records held by a Regulated Market or Exchange for compliance with this Principle, subject to appropriate written record sharing agreements.

QUESTION: Should we ask the Administrator make some effort to determine whether the Submitting bank carries out this Principle's requirement on record retention?

Key Questions

1. Please describe in detail your record keeping policies including detailed descriptions of kinds of data and information retained, manner of retention and time for which data and information is retained.
2. If you do not have such policies, or your policies do not cover the topics listed in the Key Indicia, please explain why.
3. Are these policies documented? If so, please provide a copy.
4. Do you have record sharing arrangements with a relevant regulated market or exchange? If so, please provide details of these arrangements.
5. Do you anticipate the existing arrangements to change in the future? If so, please describe how and when. If applicable, please also describe how the changes will assist in your implementation of the Key Indicia of the Principle.

19 Cooperation with Regulatory Authorities

Relevant documents, Audit Trails and other documents subject to these Principles shall be made readily available by the relevant parties to the relevant Regulatory Authorities in carrying out their regulatory or supervisory duties and handed over promptly upon request.

Key Indicia of implementation of Principle

19.1 Relevant parties make readily available and hand over promptly on request, relevant documents, Audit Trails and other documents subject to the Principles to the relevant Regulatory Authorities in in carrying out their regulatory or supervisory duties.

Key Questions

1. Please describe in detail your policies and procedures relating to sharing of information with Regulatory Authorities, including the kinds of information and data covered under these arrangements.

2. If you do not make relevant documents, Audit Trails and other documents available to the Regulatory Authorities, please explain why.

3. Are these policies and procedures documented? If so, please provide a copy.

4. Do you anticipate existing arrangements to change in the future? If so, please describe how and when. If applicable, please also describe how the changes will assist in your implementation of the Key Indicia of the Principle.

ANNEX I – DEFINED TERMS

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.

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 Assessment Methodology 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 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 arm's-length from each other.

Expert Judgment: Refers to the exercise of discretion by an Administrator or Submitter with respect to the use of data in determining a Benchmark. Expert Judgment includes extrapolating values from prior or related transactions, adjusting values for factors that might influence the quality of data such as market events or impairment of a buyer or seller's credit quality, or weighting firm bids or offers greater than a particular concluded transaction.

Front Office Function: This term means any department, division, group, or personnel of Submitter or any of its affiliates, whether or not identified as such, that performs, or personnel exercising direct supervisory authority over the performance of, any pricing (excluding price verification for risk management purposes), trading, sales, marketing, advertising, solicitation, structuring, or brokerage activities on behalf of a third party or for proprietary purposes.

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 Exchange, 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.

Panel: Subset of Market Participants who are Benchmark Submitters.

Publish 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 website 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.

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

Submission(s): Prices, estimates, values, rates or other information that is provided by a Submitter to an Administrator for the purposes of determining a Benchmark. This excludes data sourced from Regulated Markets or Exchanges with mandatory post-trade transparency requirements.

Submitter: A legal person providing information to an Administrator or calculation agent required in connection with the determination of a Benchmark

Subscriber: A person or entity that purchases Benchmark determination services from an Administrator.

ANNEX II – EXTRACT FROM CONSULTATION REPORT

"Accordingly, the Task Force is of the view that a Benchmark should as a matter of priority be anchored by observable transactions entered into at arm's length between buyers and sellers in order for it to function as a credible indicator of prices, rates or index values. The discipline of observable transactions, providing they are of a bona-fide nature, should give a level of confidence that the price discovery system is accurate.[32] Moreover, a predominant reliance by an Administrator on non-transactional data such as expert judgements (e.g., extrapolating values from related transactions) may increase the potential for manipulation or for an "outlier" trade to corrupt the Benchmark values.[33]

This does not mean that non-transactional information is inappropriate. The hierarchies established by the *IOSCO Principles for Oil Price Reporting Agencies*, the *Wheatley Review of LIBOR: final report,* and the CFTC's *Barclays* and *UBS Orders* allow consideration of other types of information such as bids and offers and adjustments based on expert judgement (*e.g.,* extrapolation from prior or related transactions, adjustments for factors that might influence the quality of data such as, but not limited to, market events or credit quality). [34]

However, at some point, an insufficient level of actual transaction data raises concerns as to whether the Benchmark continues to reflect prices or rates that have been formed by the competitive forces of supply and demand.

Where the underlying market has diminished, it may be necessary to re-evaluate the Benchmark. For example, its definition may need to be reviewed, the range of trades in which it is anchored may need to be reassessed or consideration given to whether a better alternative exists. These issues are examined in more detail in the next section.

The ability to use non-transactional data such as bids and offers may be an accommodation that allows a Benchmark to be produced during periods when daily transactions may not be available.

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[32] The existence of observable market transactions provides visible evidence of market metrics and commercial practices in the referenced market, which not only fosters confidence by Market Participants but also facilitates surveillance by relevant authorities.

[33] See discussion above on conflicts of interest. For example, although attempts at manipulating LIBOR predated the decline in unsecured inter bank borrowing, the decline in this market created other conflicts of interest for banks, and submissions to LIBOR became increasingly reliant on expert judgement rather than transactions, which created an incentive for banks to manipulate the submissions that compile the rate. *The Wheatley Review of LIBOR Initial Discussion paper* at p.9.

[34] FR06/12 *Principles for Oil Price Reporting Agencies*, Report of the Board of IOSCO (05 Oct 2012), principle 2.2(b) at p. 13 available at http://iosco.org/library/pubdocs/pdf/IOSCOPD391.pdf , *The Wheatley Review of LIBOR: final report,* Box 4B: LIBOR SUBMISSION guidelines, p.28 available at: http://cdn.hm-treasury.gov.uk/wheatley_review_libor_finalreport_280912.pdf, *CFTC Order in the matter of* Barclays PLC (June 27, 2012), "Determination of Submissions Factors 1-3 paragraph, pp. 32-33 available at: http://www.cftc.gov/ucm/groups/public/@lrenforcementactions/documents/legalpleading/enfbarclaysorder062712.pd

The aforementioned reports and orders anticipate the use of non-transactional data as an adjunct (i.e., as a supplement) to transactions. [35]

Whether the extent of a Benchmark's reliance on non-transactional information is appropriate requires an analysis of the *structure* of the underlying market in question and the identification of factors that might be influencing liquidity. The factors discussed in Chapter 2, such as size, liquidity, market concentration and market dynamics, will be relevant to this inquiry.[36]

For example, a low liquidity market might indicate the commercial realities of that market or seasonal fluctuations in a market which otherwise has sufficient commercial activity. Low liquidity markets may also be due to certain markets (e.g., developing markets) being at an earlier stage of development. Alternatively, a market may in fact be diminishing due to slowly occurring structural evolution or, such as LIBOR, because of sudden shocks affecting the ability of the underlying market to function normally. Given this, the size and volume of current transactions in relation to historic metrics should also be considered.

If one concludes that a low liquidity market reflects normal commercial usage and functions as an accurate price discovery market, then verifiable firm (i.e., executable) bids and offers might be credible *estimates* of supply and demand and used as adjunct data in compiling a Benchmark.[37] It will be critical, however, for adequate governance requirements to be in place to ensure the *bona-fide* status of any such adjunct data (*e.g.,* any bids or offers considered should in fact be required to be executed). It also is important in such cases that the transparency framework allows users to understand the potential limitations of a Benchmark operating in an illiquid and imperfect market.

All of these determinations have a temporal element; they cannot be a one-off analysis based on static data. As markets evolve, the underlying market for a particular Benchmark could be diminished (*e.g.,* the submissions could become heavily reliant on non-transactional data, or indeed the use of a particular Benchmark may be marginal). In those circumstances the reliance on such a "market" to underpin a Benchmark should be questioned. Accordingly, the duration (and expected duration) of reliance upon non-transaction data also needs to be considered.

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[35] See FR06/12 *Principles for Oil Price Reporting Agencies*, Report of the Board of IOSCO (October 5, 2012) A PRA should use its market data, giving priority in the following order, where consistent with the PRA's approach to ensuring the quality and integrity of a price assessment: (1) concluded and reported transactions; (2) bids and offers; (3) other market information. If concluded transactions are not given priority, the reasons should be disclosed);

The Wheatley Review of LIBOR: final report, Box 4B: LIBOR SUBMISSION guidelines, p.28 -- "The greatest emphasis should be placed on transactions undertaken by the contributing bank."; and

CFTC Order in the matter of Barclays PLC "Determination of Submissions" p. 32 (June 27, 2012) --"Barclays' transactions shall be given the greatest weight in determining submissions, subject to applying appropriate Adjustments and Considerations in order to reflect the market measured by the Benchmark Interest Rate)

[36] Considerations addressing physical commodity markets are discussed in FR07/11 *Principles for the Regulation and Supervision of Commodity Derivatives Market*s, Final Report, Technical Committee of the International Organization of Securities Commissions (September 2011) ("characteristics of underlying physical markets") available at: http://iosco.org/library/pubdocs/pdf/IOSCOPD358.pdf

[37] However, a Benchmark based on a low level of transactions and informed by judgements might not necessarily be an appropriate reference for the settlement of a commodity derivatives contract. See FR06/12 *Principles for Oil Price Reporting Agencies*, Report of the Board of IOSCO (05 Oct 2012), p. 5 available at http://iosco.org/library/pubdocs/pdf/IOSCOPD391.pdf

Finally, conclusions regarding the robustness of a market should also take into account the impact that the Benchmark has on the economy. For example, one might conclude that a relatively small and illiquid market, where transactions are widely used as a basis for determining rates in financial instruments having a nominal value that is several multiples of the value of the underlying market transactions, is *insufficiently* robust to serve as the basis for a Benchmark."