Second Review of the Implementation of IOSCO's Principles for Financial Benchmarks in respect of the WM/Reuters 4 p.m. Closing Spot Rate

THE BOARD
OF THE
INTERNATIONAL ORGANIZATION OF SECURITIES COMMISSIONS

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INTRODUCTION

This report sets out the findings of the second review (Second Review) by the International Organisation of Securities Commissions (IOSCO) of the implementation of IOSCO’s Principles for Financial Benchmarks (Principles) by Thomson Reuters Benchmark Services Limited (TRBSL) as administrator of the WM/Reuters 4 p.m. London closing spot rate (Closing Spot Rate).¹

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

I Executive Summary

The Principles were first released in July 2013, and all benchmark administrators covered by the Principles were asked to publicly disclose the extent of their compliance with them within 12 months.

An IOSCO Review Team first assessed policies and practices in relation to the Closing Spot Rate as of 2 May 2014 and made a series of recommendations to assist with full implementation of the Principles across every category (governance, benchmark quality, methodology, and accountability).

Since 2014, there have been a number of changes to the administration of the Closing Spot Rate, including a change in ownership (for further detail see section VII below). There has also been significant progress towards implementation of the recommendations from the first review, and hence the Principles, over this time period.

The purpose of this report is to outline the findings of a second IOSCO Review Team tasked with assessing the extent to which the recommendations from the original review have been implemented as of 8 September 2016. Overall, the Review Team found that the vast majority of recommendations have now been put into practice, while noting that there is always room to improve and refine new policies and practices beyond initial implementation.

However, a certain amount of further work is required to fully address the recommendations, and implement the Principles, and the Review Team has made a small number of further recommendations to assist TRBSL in doing this. The Review Team also notes that, beyond the formal adoption of specific recommendations, it is important for TRBSL to ensure that new or improved policies and procedures are adhered to and put into practice.

The Review Team also makes certain further recommendations in circumstances where Principles and recommendations have been fully implemented, but where additional actions – sometimes actions on an ongoing or business-as-usual basis – would help maintain or improve the effectiveness of the frameworks TRBSL has put in place to address the recommendations and implement the Principles.

The Review Team would like to thank the staff members of TRBSL who participated in this process for their time and assistance.

II  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. As part of this work, the OSSG was to recommend global standards for reference rate benchmarks and review them against these standards.

At its February 2014 meeting, the FSB Plenary agreed to extend its work on financial benchmarks to cover global foreign exchange benchmarks.

The Foreign Exchange Benchmarks Group (FXBG) was created as a new OSSG subgroup to undertake a review of major foreign exchange benchmarks, including their definitions, construction and governance, as well as an analysis of market characteristics around benchmark fixings.

After an initial stocktaking exercise, the FXBG agreed to undertake a formal review of the Closing Spot Rate against the Principles. In April 2014, the co-chairs of the FXBG formally requested, and the IOSCO Board agreed, for IOSCO to conduct a formal review (First Review) of the Closing Spot Rate and provide the results to the FXBG by 1 July 2014.2

The First Review found that, as of the 2 May 2014 reporting date, The World Markets Company (WM) – the administrator of the Closing Spot Rate at that time – had demonstrated implementation of some Principles but still needed to do substantial work to fully implement many of them. This included Principles across governance, transparency and Benchmark quality. In this regard, the First Review found that only Principles 10 and 19 had been fully implemented.

For Principles 1 to 9, and 11 to 18, the First Review concluded that these Principles required more work by the Administrator to fully implement the Principles. Principle 14 was considered not applicable to the Administrator.

With respect to those Principles that had not been fully implemented, the First Review identified the Key Indicia in the assessment methodology that were not met, disclosed the representations made by the Administrator as to planned changes in policies and practices and set out recommendations to guide the Administrator in fully implementing all the Principles. It was recommended that a further review be undertaken in mid-2015, based on the original Assessment Methodology, to assess what progress the Administrator has made in addressing the recommended remediation work.

The FSB supported IOSCO’s findings in the First Review, including the recommendations for improvement contained in the First Review, and further stated that it expects the Administrator to comply with IOSCO’s recommendations. In its September 2014 Report, Final Report into Foreign Exchange Benchmarks, the FSB recommended IOSCO conduct a follow-up review and report back to the OSSG by Q4 2015. An explanation for the delay of the Second Review until

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2016 is provided below.

III Purpose of the Second Review

Following the Review Team’s recommendations in the First Review, IOSCO has now completed the Second Review to follow-up on the progress of TRBSL’s implementation of the Principles since the First Review.

Specifically, the objectives of the Second Review were to provide:

• A description of action taken and plans by the Administrator to change its policies and practices to fully implement the Principles, taking into account the Review Team's findings and recommendations from the First Review;

• A qualitative assessment of further implementation of the Principles by the Administrator, including a description of any remaining gaps and inconsistencies between current policies and practices and those expected by the Principles; and

• An outline of actions the Administrator should take to address any remaining gaps and inconsistencies in implementation, and a time frame for doing so.

This report responds to those objectives by outlining the steps taken by the Administrator, any remaining gaps in implementation and recommendations to address these.

Consistent with the First Review, the Second Review was limited to benchmarks associated with the USD/CAD, EUR/CHF and USD/IDR currency pair rates.

Where further recommendations have been made, the Review Team considers that implementation of these recommendations should be monitored by relevant national authorities, rather than via any further review by IOSCO.

IV 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 are intended to promote the reliability of benchmark determinations. They addressed benchmark governance, benchmark and methodology quality and accountability mechanisms.

• On governance, the Principles are 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 are intended to promote the quality and integrity of benchmark determinations through the application of design factors that result in a benchmark that reflects a credible market for an interest measured by that benchmark. The Principles also clarify that a variety of data may be appropriately used to construct a benchmark, as long as Principle 7 on data sufficiency is met (in particular that the benchmark is based on an active market).
• On methodology quality, the Principles are intended to promote the quality and integrity of methodologies by setting out minimum information that should be addressed within a methodology. The Principles require 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 require that the methodology should address the need for procedures that when material changes are planned, alert stakeholders of changes that might affect their positions, financial instruments or contracts.

  o The Principles also establish that administrators should have credible policies in case a benchmark ceases to exist or stakeholders need to transition to another benchmark. These policies are intended to encourage administrators and stakeholders to plan prospectively for the possible cessation of a benchmark.

  o These Principles also addressed vulnerabilities in the submission process (e.g., conflicts 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.

V Review Team

The Second Review has been conducted by a Review Team composed of members from the IOSCO Assessment Committee and the IOSCO Task Force on Financial Benchmarks.

The Review Team comprised staff from the Australian Securities and Investments Commission (ASIC) and the United Kingdom Financial Conduct Authority (FCA). Members of the IOSCO Secretariat also provided administrative support for the Review Team.

VI Assessment Methodology

The Review was undertaken as a desk-based exercise, using responses provided by TRBSL to the Assessment Methodology designed and developed by the Review Team. As noted above, a copy of the Assessment Methodology is at Annex 1.

The Assessment Methodology was developed to facilitate the self-assessment of the degree of implementation of recommendations from the First Review by TRBSL. The Methodology was also designed as a means for identifying any remaining work that needs to be done to fully implement the Principles and recommendations, inconsistencies, weaknesses and areas for action by TRBSL.

The Assessment Methodology included a Self-Assessment template that set out:
• The text of each relevant Principle, which set out the obligations of the Administrator;

• The Recommendation made in the First Review; and

• Key Questions for each Principle designed to elicit responses from the Administrator to allow the Review Team to determine the extent of implementation of the recommendations from the First Review;

• A field for TRBSL to respond to the questions and summarize relevant changes to its relevant policies and practices, including opportunity to attach supporting documentation where relevant; and

• Opportunity for TRBSL to describe any plans for further policies and practices that are relevant to the implementation of the recommendations from the First Review.

The Assessment Methodology was sent to TRBSL on 5 August 2016, with the completed Self-Assessment returned to the Review Team on 8 September 2016.

VII Assessment Process

The Review Team considered the completed Self-Assessment and used this to assess whether TRBSL had implemented each of the recommendations from the First Review, and to consider what additional steps are required for the Administrator to fully implement the Principles. The Review Team and the Administrator also met via teleconference to clarify some of the information provided in the Self-Assessment. Following this meeting, TRBSL provided the Review Team with some additional information.

The veracity of TRBSL’s responses was not checked other than against the policy and working documents that TRBSL supplied voluntarily and at the Review Team’s request. Accordingly, the Review Team has not observed directly the practices which TRBSL asserts that it follows in the determination process.

This Report does not contain specific ratings of TRBSL's implementation against the Principles.

VIII Note on changes to ownership of WM between the First and Second Reviews

The Review Team is aware that there have been two significant changes in relation to the Closing Spot Rate since the First Review. First, starting from April 2015, the Closing Spot Rate is now regulated by the UK Financial Conduct Authority (FCA); and second, ownership of the business transferred from State Street to Thomson Reuters in April 2016. Consequently, due to


these significant changes and the ongoing reform in the Closing Spot Rate, the Second Review commenced in 2016, rather than 2015 as previously anticipated.

In respect of the change of ownership of the Administrator, the Review Team notes that, based on the information provided by TRBSL in the Self-Assessment, there appears to be a reasonably high level of continuity under the new management in relation to operational processes for determining the Closing Spot Rate (including continuity of staff). However, in other respects, the change of ownership has inevitably resulted in changes to some policies and procedures between the First and Second Reviews.

In this report, the Review Team has attempted to note where changes to policies or procedures have occurred as a result of the acquisition of WM by Thomson Reuters.
REVIEW

I Overview of assessment and recommended actions

1) Overall assessment

The First Review assessed the Administrator's policies and practices as of 2 May 2014. A report was published in September 2014. It found that the Administrator had demonstrated implementation of some Principles, but still needed to do substantial work to fully implement many of them. Only two out of the 19 principles had been fully implemented. The First Review made a number of recommendations to the Administrator.

In the Second Review, the Review Team has reviewed the Administrator's progress in implementing the recommendations from the First Review, as of 8 September 2016. It has found that most of the recommendations have been fully or mostly adopted and that, in consequence, the implementation of the Principles overall has been significantly advanced. In the Second Review, there are comparatively few areas where the Review Team has made additional recommendations for further work to implement the Principles.

The following is a general summary of the Administrator's progress across each category of Principles: benchmark governance, benchmark and methodology quality, and accountability. There is a range of documentation available on the Thomson Reuters website describing the various procedures and standards referenced below. The Review Team also had access to more detailed internal documents, which underpin the public documents and provide specifics about internal policies and procedures.

2) Governance – Principles 1-5

On governance, TRBSL now has a well-documented oversight and control structure with respect to the determination process for the Closing Spot Rate. The structure appears to be appropriate to the determination process.

The Administrator has set up a Benchmarks Oversight Committee (BOC) with appropriate powers to oversee the Benchmark methodology. A BOC Charter has been published that sets out the mission, responsibilities, structure, scope, meetings process, approach to conflicts of interest, authority and Composition of the BOC.

The Review Team was advised that the BOC first met in July 2014, and has continued to meet on a monthly basis since that time, barring some exceptional circumstances. During these meetings, the BOC is advised of key performance indicators including risk indicators for the previous month, along with business updates covering current and future initiatives. Data governance reports and monitoring and surveillance reports are also provided to the BOC.

TRBSL has also published a Methodology Guide (Methodology) on its public website, which includes a section outlining how judgement may be used in interpreting the data on which Closing Spot Rate fixes are based. Where changes to the Methodology or cessation of rates are proposed by the TRBSL Board, approval from the BOC must be sought prior to client consultation.
In addition to the above, TRBSL has also formalised its arrangements with third party platform operators, and introduced a range of policies and procedures in areas such as due diligence, conflicts of interest, and controls since the First Review.

On conflicts of interest, TRBSL now maintains two conflicts of interest management policies. The first covers the WM business itself, and the second applies to TRBSL's benchmark administration business overall. The first of these policies is somewhat more detailed than the general TRBSL policy, and the Review Team understands that the two policies are intended to apply side-by-side and be followed by relevant WM staff in executing their responsibilities in respect of the Closing Spot Rate.

There are no apparent inconsistencies in the two policies, and the Review Team understands that the WM-specific policy was created in response to the IOSCO Principles and the First Review. However, we consider that it would be of assistance to TRBSL staff for the policies to include a statement that the policies are intended to coexist with and support each other, as well as a brief explanation of how this intended to happen. We therefore recommend that TRBSL amend the policies to this effect.

TRBSL should also continue its practice of reviewing all public and internal policies on an annual basis or as required, in consultation with the BOC, to ensure that policies are up to date and evolve as the need arises.

The BOC's Charter requires it to be comprised of at least two independent, non-executive directors, one market infrastructure provider and one user of the benchmark rates. The BOC is also to consider including a representative from its data providers.

At the time of the review at the end of August 2016, TRBSL was yet to appoint any non-executive directors, but it had identified suitable candidates and taken steps to progress their appointment. The Review Team recommends that it appoint these directors as a priority, and we understand that, subsequent to the review date, TRBSL has now done this.

3) Benchmark quality – Principles 6-10

On benchmark quality, the Administrator has taken steps to improve the quality of the benchmark since the First Review. The Review Team was advised that the 2014 Q4 data analysis led to proposals for enhancements to the methodology, which were considered by the BOC and on which clients were consulted. Changes were consequently made that increased the amount of data that was used in the rate setting process, to improve the quality of the benchmark. A similar review was started in 2016 and is yet to be concluded. In addition to these reviews, the Review team was advised that data sufficiency is reviewed every month by the Administrator, with BOC oversight.

Data sufficiency is assessed differently by the Administrator for the different currency rates. While it has access to sufficient raw market data from active markets for the generally traded currencies, in order to provide rates for some of the less frequently traded currencies, TRBSL sometimes has to use a single source, generally a central bank rate. The Review Team notes that TRBSL has advised there is good data sufficiency for the three currency pairs we examined, namely USD/CAD, EUR/CHF and USD/IDR.

TRBSL's definition of an "active market" is now explained to clients in the published Methodology document. The Review Team notes that a part of TRBSL's definition of an active
market states that "...In certain cases, Thomson Reuters defines an active market as having only a 'single source'..." may not reflect the concept of an "active market" as generally understood, which would typically include a number of active buyers and sellers. However, the Review Team accepts that this "single source" approach is only applied in specific and limited circumstances where it is necessary to do so, for example, where the trading of a specific currency is restricted in some way. TRBSL provides information to customers about the currencies affected by this definition upon request.

Principles 6 and 7 are highly significant in the assessment of the quality of any benchmark, as the benchmark design and data sources will determine its accuracy and reliability. The Review Team therefore consider that it is extremely important that TRBSL should continue its commitment to reviewing the benchmark methodology and approach on a regular basis to ensure that its benchmarks continue to reflect the underlying markets as conditions change in the future.

In relation to transparency of benchmark determinations (including information regarding the hierarchy of data inputs), TRBSL provides some information to relevant stakeholders through its Methodology. Information may also be provided to clients in the event of significant changes or "disruption" to benchmark rates. However, the Review Team notes that information is not provided "with each Benchmark determination", as anticipated by Principle 9. The Review Team recommends that TRBSL consider whether it may be appropriate to disclose any additional information to stakeholders, noting that full implementation of these principles may conflict with, for example, the need to protect the integrity of the benchmark calculation process against external interference. It may also be impractical to provide information with each benchmark determination, given the number of rates set by TRBSL.

4) Methodology – Principles 11-15

Steps have been taken to improve the quality of the methodology since the First Review. The Methodology document, which is available on the Thomson Reuters website, addresses the shortcomings identified by the First Review. The Review Team has been advised that TRBSL has contracts in place with the external providers of input data, and an internal agreement governing data supplied from inside the Thomson Reuters Group.

TRBSL also has policies in place for making changes to the methodology, for cessation of rates and for complaints handling. The BOC is heavily involved in these arrangements.

Consistent with the recommendations for Benchmark quality, TRBSL should consider whether it could generally include more detail in its published Methodology without compromising other competing aims.

5) Accountability – Principles 16-19

On accountability, the Administrator now has a published complaints procedure and cooperates with its new regulator, the FCA. As in the First Review, the Review Team again recommends that the Administrator conduct internal and external audits of compliance with the Principles in 2017. While steps have been taken to further this – and there have been matters, such as the change in ownership, which necessarily caused delay – the area of audit is one where adoption of the recommendations has distinctly lagged the overall level of progress.
Specifically, the Review Team notes that subsequent to the review date, TRBSL Internal Audit have employed an additional member of staff who will assist in conducting an internal review of the benchmark businesses (including the Closing Spot Rate).

6) Further recommendations

In summary, the recommendations of the Review Team are that TRBSL should:

- Complete the process to appoint non-executive directors to the BOC, as a priority\(^5\);

- Continue to progress its work to ensure that, where WM and Thomson Reuters both have policies covering certain topics – notably in the case of conflicts of interest management – that it be made clear in the wording of these policies that they are intended to coexist and support each other, and provide an explanation of how this is intended to work.

- Continue the practice of reviewing all public and internal policies on an annual basis or as required, in consultation with the BOC;

- Consider whether it may be appropriate to disclose any additional information to stakeholders in relation to benchmark determination and the data input hierarchy; and

- Conduct external and internal audit of compliance with the Principles in 2017; this should be repeated periodically as appropriate.

The table below provides a snapshot of progress in implementation of the recommendations from the First Review, set out by Principle. Where additional steps are required to complete implementation of the Principle, the Review Team has noted these further recommendations against the relevant Principle.

The Review Team also notes that, beyond the formal adoption of specific recommendations, it is important for TRBSL to ensure that new or improved policies and procedures are adhered to and put into practice.

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\(^5\) As noted at Section I(2), the Review Team understands that such directors have now been appointed.
**II Principle-by-principle summary table**

**Important:** In interpreting the further recommendations in this Table, it should be noted that – in many cases – the existence of a recommendation is not intended to suggest that the relevant Principle, or the associated recommendations from the First Review, have not been implemented. Certain further recommendations reflect circumstances where Principles and recommendations have been fully implemented, but where additional actions – sometimes actions on an ongoing or business-as-usual basis – would help maintain or improve the effectiveness of the frameworks TRBSL has put in place to address the recommendations and implement the Principles. For the avoidance of doubt, this applies to Principles 3, 7 and 11.

<table>
<thead>
<tr>
<th>No.</th>
<th>Principle</th>
<th>Summary of assessment and recommended actions from the First Review</th>
<th>Summary of assessment from the Second Review</th>
<th>Further recommendations</th>
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<td></td>
<td>Governance</td>
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</table>
| 1.  | Overall responsibility of the administrator | Further work needed to fully implement the Principle  
While WM has overall responsibility for the Closing Spot Rate, it lacks a formal oversight function that is accountable for the development, issuance and operation of the Closing Spot Rate.  
WM should put in place a formal oversight function with an identifiable structure and appropriate membership. | The Recommendations have **mostly been implemented** for this Principle, though there is one further recommendation.  
Since the First Review, a formal oversight function is now in place – with the Benchmark Oversight Committee (BOC) formed in July 2014. | TRBSL should appoint non-executive directors to the BOC, as called for in the BOC's Charter.  
*Note: The Review Team understands that these appointments were completed subsequent to the review date at the end of August 2016 and are now in place.* |
|   | Oversight of third parties | Further work needed to fully implement the Principle  
WM evidences some implementation of Principle 2 but it lacks all required policies with respect to the oversight and monitoring of third parties involved in the benchmark determination process.  
These policies should be adopted. | **Recommendations implemented**  
Agreements with parties outside the Thomson Reuters Group are documented in formal contracts.  
TRBSL deals with other members of the Thomson Reuters Group (e.g. RTSL which provides data) on an arms' length basis through a Regulatory and Computation Agreement. |   |
|---|---|---|---|---|
| 3. | Conflicts of interest for administrators | Further work needed to fully implement the Principle  
WM relies on State Street’s conflicts of interest policy. This is not tailored to WM’s benchmark determination process.  
WM should ensure that its conflicts of interest policy is specific to its business, has identified potential risks and conflicts, is appropriately detailed and contains the relevant information. The policy should be updated periodically.  
WM should also ensure that its conflicts of interest framework otherwise complies fully with the requirements of Principle 3. | **Recommendations implemented**  
A conflicts policy was introduced by WM following the First Review in July 2014. TRBSL also has its own conflicts policy; the Review Team understands that there is an intention to harmonise these policies.  
TRBSL also has a Description of Services and Conflicts of Interest Disclosure Statement, which includes conflicts disclosures. | **TRBSL should include text in the separate, complementary conflicts policies for WM and TRBSL that states that these policies are intended to coexist and support each other, and provide a brief explanation of how this is intended to work.** |
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<th>Principle 3 as a matter of priority.</th>
<th>Recommendations implemented</th>
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| 4. Control framework for administrators | Further work needed to fully implement the Principle  
WM lacks a formal oversight function which means it falls below the expectations of this Principle.  
WM should adopt and publish a control framework that is adapted to its processes. | **Recommendations implemented**  
A number of amendments have been made to adopt new or improved internal procedures in relation to control frameworks. Following the First Review, the World Markets Company published the Practice Standards document which served as a summary of the control framework. However, TRBSL is in the process of updating its Governance and Control Framework, including a Summary to be published for Stakeholders of the WM/Reuters FX Spot Benchmarks.  
All policies and procedures are reviewed annually, or as appropriate, in consultation with BOC. |   |
| 5 | Internal oversight | Further work needed to fully implement the Principle  
WM lacks a formal oversight function which means it falls below the expectations of this Principle.  
While WM’s informal Oversight Working | **Recommendations mostly implemented**  
As noted in Principle 1, a formal oversight function is now in place (the BOC).  
The BOC Charter outlines the responsibilities of the BOC. The BOC Charter is published on the | See **Further recommendation** section in Principle 1 (BOC to include non-executive directors). |
Group has started to look at the methodology and related issues such as research and governance, the appropriateness and composition of the group’s membership is not clear.

Further, its independence could be called into question as one member of staff has sole discretion over the appointment of members to the group. This could affect the robustness of the governance and challenge process.

WM should put in place a formal internal oversight function.

Administrator's website and the Review Team considers that this Charter covers the appropriate oversight issues.

The BOC has met monthly since July 2014 (except in exceptional circumstances). It has provided oversight and approval of the methodology enhancements made in February 2015 regarding the benchmark design (for further detail see Principle 6 below).

<table>
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<th>Quality of the benchmark</th>
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<td><strong>6. Benchmark design</strong></td>
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Further work needed to fully implement the Principle

WM has shown some evidence that it uses liquid platforms for its rate determination process and that it adapts and changes its data sources in reaction to market developments.

WM has also shown evidence that it is considering enhancements to its methodology to make the benchmark design more robust and more

**Recommendations implemented**

Since the First Review, the Administrator has conducted two reviews of the methodology for calculating the Benchmark, one in Q4 2014 and the other in Q1 2016. These reviews included data analysis, client consultation and approval of the BOC for any changes proposed.

Changes were made to the methodology in February 2015 as a result of the first review with the objective of gaining a
representative.

WM should consider the benchmark design process, including the choice of trading platform, sampling period and calculation method, to satisfy itself that the Closing Spot Rate results in an accurate and reliable representation of the interest it seeks to represent. WM should also consider using data from a wider range of sources.

<table>
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<th>better balance of timeliness and data density, and to capture a wider view of the market across platforms. These changes included:</th>
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<tr>
<td>• Extension of the calculation window from 1 minute to 5 minutes for trade currencies, and 2 minutes to 5 minutes for non-trade currencies;</td>
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<tr>
<td>• Thomson Reuters Matching data was included in calculations for additional currencies; and</td>
</tr>
<tr>
<td>• The Methodology was updated to blend data sources together for currencies as considered appropriate.</td>
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The second review is still in progress. This review will determine whether it would be appropriate to expand the use of EBS transaction/trade data for an additional 6 currencies.

TRBSL has indicated that they are committed to reviewing the methodology and approach on a regular basis to ensure that the most appropriate data sources are used now and in the future, to reflect changes in liquidity and availability of
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<th>Further work needed to fully implement the Principle</th>
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<tr>
<td>7.</td>
<td>Data sufficiency</td>
<td>WM relies on data drawn from observable transactions sourced from platforms which show a high level of liquidity. However WM should satisfy itself that its definition of an ‘active market’ takes into account the factors set out in Principle 7. In order to control for the bona-fide nature of the input data WM relies on the controls, surveillance and governance framework of the platforms it used. In order to do so, it performs regular due diligence on these controls. However WM needs to formalise its draft due diligence policies. The Review Team notes that WM has been reviewing further enhancements. WM should consider further steps it could take to better ensure that the transactions on which it relies for the determination of the Closing Spot Rate are ‘bona fide’. This could be, for example, by seeking undertakings from the providers of the platforms.</td>
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**Recommendations implemented**

As a result of the reviews conducted on methodology (see Principle 6), outcomes have included proposals to extend use of some data sets, as well as the potential to "pool" data from different platforms for a single currency.

Since the First Review, the Administrator's definition of what constitutes an “active market” has been made available to all users and the public through the Methodology on the Administrator's website.

The Administrator has also sought to improve engagement with each of the benchmark data providers since the First Review through discussing and establishing guidelines/practice standards. TRBSL has started a practice of holding quarterly meetings with the data providers to discuss topics including: data quality, trading activity, monitoring and surveillance, service review and updates. A due diligence review is undertaken
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<tr>
<td><strong>8. Hierarchy of data inputs</strong></td>
<td>Principle broadly implemented, but some actions recommended</td>
<td>This Principle was considered <strong>broadly implemented</strong> at time of First Review.</td>
</tr>
<tr>
<td></td>
<td>WM has a policy on the hierarchy of data used in the determination process.</td>
<td>A high-level hierarchy of data sources is now listed on the WM Reuters website.</td>
</tr>
<tr>
<td></td>
<td>WM, however, should clearly provide for a hierarchy of alternative data for the Quote Pair.</td>
<td>TRBSL should consider whether there are any opportunities to disclose additional information on benchmark determination and the data input hierarchy to stakeholders, without compromising other competing aims.</td>
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<tr>
<td><strong>9. Transparency of benchmark determinations</strong></td>
<td>Further work needed to fully implement the Principle</td>
<td><strong>Recommendations partially implemented</strong></td>
</tr>
<tr>
<td></td>
<td>WM discloses inputs to the benchmark through its methodology or an email alert if inputs change.</td>
<td>WM's Methodology provides general information on the data inputs for the different currencies and the data hierarchy, to enable users/stakeholders to understand the determination process.</td>
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<td></td>
<td>The disclosure of change inputs, however, appears to be conducted on an ad hoc basis and there is no policy giving comfort that WM will always be this transparent. Further, it does not disclose a summary of the data inputs used in each determination of the Closing Spot Rate.</td>
<td>TRBSL does not disclose a summary of the data inputs used in each determination of the Closing Spot Rate.</td>
</tr>
<tr>
<td></td>
<td>Consistent with the First Review, TRBSL discloses inputs to the benchmark through its methodology or an email alert if inputs change.</td>
<td>See <strong>Further recommendation</strong> section in Principle 8 (TRBSL to consider whether there are opportunities to disclose additional information).</td>
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Because of this, WM should adopt procedures to ensure the disclosures required by Principle 9 concerning inputs are made on a consistent basis.

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| 10. Periodic review | Principle implemented | **Principle implemented at time of First Review**; no changes to warrant a different conclusion |

## Quality of the methodology

| 11. Content of the methodology | Further work needed to fully implement the Principle | **Recommendations implemented**
> The Methodology is available on the Thomson Reuters website.
> The Methodology addresses the shortcomings identified by the First Review. |
> As in the Further recommendation section in Principle 8, TRBSL should consider whether it could generally include more detail in its published Methodology without compromising other competing aims. |
> The methodology used by WM for the Closing Spot Rate does not cover a number of topics outlined in Principle 11. In particular, it fails to address what would happen in times of market stress, including if the platforms relied upon do not evidence any trading at all. 
> WM should revise its methodology to address these deficiencies. |

| 12. Changes to the methodology | Further work needed to fully implement the Principle | **Recommendations implemented**
> The Changes to the Methodology document states that BOC has sole |
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| **13. Transition** | Further work needed to fully implement the Principle  
WM has not taken steps to encourage users of the Closing Spot Rate to have fallback provisions nor has it sufficiently provided for the engagement with those users in its cessation procedures.  
WM should adopt more specific cessation procedures and encourage its users to have fallback contingencies if the Closing Spot Rate is not published. | **Recommendations implemented**  
The Cessation of WM/Reuters FX Rates Policy provides a recommendation that users have contingency provisions in place in the event of material changes or cessation of the benchmark rate.  
The Cessation policy also allows for consultation "where practicable", and also for TRBSL to assist users to identify an alternative rate. |
| **14. Submitter code of conduct** | Not applicable | **Not applicable** |
| **15. Internal controls over data collection** | Further work needed to fully implement the Principle  
WM has a detailed process to select data | **Recommendations implemented**  
Agreements are in place with Currenex |
sources, including a due diligence check on their controls and procedures. It lacks, however, contractual arrangements with Currenex and should adopt these. and EBS. A Regulatory and Computation Agreement is in place with other Thomson Reuters Group entities.

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| **16. Complaints procedures** | Further work needed to fully implement the Principle  
WM’s complaints policy is not publicly available.  
WM should make the policy publicly available. | **Recommendations implemented**  
TRBSL has a complaints policy that it has published on its website. It includes the ability of an aggrieved party to appeal any initial decision, ultimately to the BOC. |
| **17. Audits** | Principle implemented, but some actions recommended  
WM has undertaken appropriate internal audit.  
WM should assess the need for an external audit. | **Principle considered implemented at First Review; however recommendations have not been implemented**  
TRBSL is still in the process of evaluating firms to conduct an external audit after purchasing the WM/Reuters business.  
TRBSL has indicated that it intends to appoint an internal auditor during the "next audit planning phase".  
TRBSL should undertake an external and internal audit of compliance with the Principles in 2017, and this should be repeated periodically as appropriate. |

*Note: The Review Team understands that subsequent to the review date, TRBSL Internal Audit employed an additional member of staff who will assist in conducting an internal review of the benchmark businesses.*
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| 18. | Audit trail | Principle implemented, but some actions recommended  
WM has a practice of generally retaining records for five years.  
WM should consider adopting a policy concerning record retention. |
| 19. | Co-operation with regulatory authorities | Principle implemented  
WM cooperates with regulatory authorities. |

Note that as of April 2015, the Closing Spot Rate is regulated by the FCA.