



Assessment of Compliance with the IOSCO Principles for Financial Benchmarks

Summary Report - RONIA

Prepared for

WMBA Limited

September 2017

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Limited Assurance Assessment

The Directors
WMBA Limited
Warnford Court
29 Throgmorton Street
London EC2N 2AT

Re: Limited Assurance Assessment of Compliance with the IOSCO¹ Principles for Financial Benchmarks (the “IOSCO Principles”)² for the Repurchase Overnight Index Average (“RONIA”) as of 31 July 2017.

12 September 2017

Dear Directors:

WMBA Limited engaged Promontory Financial Group, an IBM Company, (“Promontory” or “we”) to perform a limited assurance assessment of compliance with the IOSCO Principles with regard to the RONIA benchmark, for which WMBA Limited is the administrator.

BACKGROUND

WMBA Limited is responsible for complying with the IOSCO Principles, including designing, implementing and monitoring adherence to policies and procedures that achieve such compliance.

Promontory performed a limited assurance review of WMBA Limited’s compliance with the IOSCO Principles in respect of the administration of the RONIA benchmark.

PROMONTORY’S APPROACH

Promontory designed assessment procedures based on our professional judgement. These procedures included inquiry, inspection of documents supplied by WMBA Limited, and interviews with WMBA Limited’s staff. Promontory’s assessment took account of WMBA Limited’s work previously undertaken or currently planned as at 31 July 2017 with regard to WMBA Limited’s administration of RONIA.

¹ IOSCO, the International Organization of Securities Commissions

² <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf>

Promontory also reviewed WMBA Limited's Statement of Compliance with the IOSCO Principles dated July 2017 (the "Statement of Compliance") as it applies to the RONIA benchmark³.

Promontory's procedures were designed to give an understanding of the relevant facts sufficient to enable us to identify areas where a material misstatement in the Statement of Compliance would be likely to arise and to establish a basis for providing limited assurance concerning the substance of the Statement of Compliance.

Promontory's assessment did not entail testing the accuracy or completeness of any information, reports, or operational processes themselves; nor did any procedures enable us to reach conclusions regarding the effectiveness or operation of policies or controls. Accordingly, Promontory does not express any views on these matters.

In addition, Promontory should not be considered as expressing a view on conformance of the RONIA benchmark against applicable regulatory requirements.

INHERENT LIMITATIONS OF THE ASSESSMENT

Promontory's procedures were subject to certain inherent limitations and, accordingly, errors or irregularities may have occurred and not have been detected. By way of example, Promontory's procedures could not guarantee protection against fraudulent collusion, especially on the part of those holding positions of trust and authority.

Moreover, the validity and reliability of a benchmark is dependent on third parties that provide input data to the benchmark administrator, for which the data providers are solely responsible. Promontory performed no procedures regarding, and expresses no views concerning, source data provided by third parties.

Promontory's conclusion is based on information provided by WMBA Limited as at 31 July 2017. Promontory does not project any information or conclusions to future periods.

³ Promontory notes that the Statement of Compliance applies to a portfolio of indices and benchmarks.

CONCLUSION

Based on the results of these procedures, nothing has come to our attention that causes Promontory to believe that the Statement of Compliance, as it applies to the RONIA benchmark, is not fairly stated in all material respects.

PROMONOTRY FINANCIAL GROUP, AN IBM COMPANY

IOSCO Principles and Response

1. Overall Responsibility of the Administrator		
IOSCO Principle ⁴	WMBA Limited Comment	Work performed by Promontory
<p>The Administrator should retain primary responsibility for all aspects of the Benchmark determination process. For example, this includes:</p> <p>a) Development: The definition of the Benchmark and Benchmark Methodology;</p> <p>b) Determination and dissemination: Accurate and timely compilation and publication and distribution of the Benchmark;</p> <p>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</p> <p>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.</p>	<p>WMBA Limited retains full responsibility for all aspects of the RONIA benchmark determination process.</p> <p>The organisation and governance arrangements in place for RONIA are set forth in a policy statement, the WMBA Limited Benchmark Administration Control Framework.</p> <p>RONIA is a “specified benchmark” under the UK Financial Services and Markets Act 2000. WMBA Limited is regulated by the UK Financial Conduct Authority in respect of the administration of RONIA. In this context, WMBA Limited strives to comply with the relevant rules of the UK Financial Conduct Authority Handbook, with particular regard to MAR 8.3 “Requirements for Benchmark Administrators”.</p> <p>Specifically:</p> <p>a) WMBA Limited has published a RONIA Benchmark Methodology statement that summarises the definition and procedures to determine the benchmark.</p> <p>b) The determination and dissemination of RONIA is undertaken by dedicated staff in WMBA Limited, with responsibility for the accurate and timely publication and distribution of the benchmark.</p> <p>c) WMBA Limited has established and published</p>	<p>Promontory (“we”) reviewed WMBA Limited’s Benchmark Administration Control Framework. We examined the policies that support this framework. We also interviewed WMBA Limited management and staff responsible for the determination of RONIA to understand how WMBA Limited’s governance and oversight structure operates in practice:</p> <p>a) Promontory obtained copies of the RONIA Benchmark Methodology and reviewed the definition of the benchmark against IOSCO Principles.</p> <p>b) Promontory reviewed the determination process outlined in the RONIA Benchmark Methodology and the details of the publication process. We observed on site a daily cycle of the determination of RONIA.</p> <p>c) Promontory reviewed the RONIA Benchmark Methodology and supporting policies to understand the contingency measures in the event of insufficient data inputs or when other factors may disrupt the determination and publication process.</p> <p>d) Promontory inspected the Terms of Reference and the published minutes of the RONIA Oversight Committee for evidence that the committee is accountable for the determination</p>

⁴ Text from the IOSCO Principle with the term “Administrator” meaning a Benchmark Administrator. Capitalised terms are per the meaning as set out in the IOSCO Principles for Financial Benchmarks dated July 2013.

	<p>procedures in case of market stress or other disruptions that may impact the accurate or timely determination of RONIA. Significant decisions concerning the determination of the benchmark are published in a timely manner, while longer-term issues are consulted upon with stakeholders and resulting decisions are communicated to the market.</p> <p>d) WMBA Limited has established the RONIA Oversight Committee to provide oversight and guidance on the operation of the benchmark.</p>	<p>of the benchmark. We also conducted interviews with members of WMBA Limited’s internal teams to understand their responsibilities related to the benchmark.</p>
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2. Oversight of Third Parties

IOSCO Principle	WMBA Limited Comment	Work performed by Promontory
<p>Where activities relating to the Benchmark determination process are undertaken by third parties—for example collection of inputs, publication or where a third party acts as Calculation Agent—the Administrator should maintain appropriate oversight of such third parties. The Administrator (and its oversight function) should consider adopting policies and procedures that:</p> <ul style="list-style-type: none"> a) Clearly define and substantiate through appropriate written arrangements the roles and obligations of third parties who participate in the Benchmark determination process, as well as the standards the Administrator expects these third parties to comply with; b) Monitor third parties’ compliance with the standards set out by the Administrator; c) Make Available to Stakeholders and any relevant Regulatory Authority the 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. <p>This Principle does not apply in relation to a third party from whom an Administrator sources data if that third party is a Regulated Market or Exchange.</p>	<p>Except as specified below, WMBA Limited is responsible for all operational aspects of the determination and dissemination of RONIA.</p> <ul style="list-style-type: none"> (i) WMBA Limited sources input data for RONIA from a range of firms among the Wholesale Markets Brokers’ Association membership, under documented Data Supply Agreements. As detailed under Principle 14 below, WMBA Limited has put in place codes of practice, including the Submitter’s Code of Conduct and the Data Quality Code for Submissions setting forth the standards that WMBA Limited expects to be observed by these firms in providing the requisite data. (ii) WMBA Limited uses two externally-hosted data servers, and relies on external support for the office server and computer environments. <p>With respect to the above third parties:</p> <ul style="list-style-type: none"> a) Expectations for the providers of input data for RONIA are set forth in the above-mentioned codes of practice, as appropriate to their roles. Service Level Agreements are in place with the technology service providers, setting out the terms in place to minimise operational and technology risks for the services provided to WMBA Limited. b) The Terms of Reference of the RONIA Oversight Committee note that among the Committee’s duties are the oversight of the administration of the benchmark and of any non-compliance with the codes of practice. <p>WMBA Limited monitors the operational performance of data providers to RONIA in real-</p>	<p>Promontory reviewed the RONIA Benchmark Methodology and supporting policies to assess WMBA Limited’s reliance on third parties in the determination process.</p> <ul style="list-style-type: none"> a) Promontory reviewed the relevant WMBA Limited charters and policies in respect of third party oversight, including the Terms of Reference of the RONIA Oversight Committee, the Submitter’s Code of Conduct and the Data Quality Code for Submissions. b) Promontory reviewed a selection of minutes of the RONIA Oversight Committee to understand how it conducts its oversight responsibilities in respect of third parties. Promontory also reviewed summary reports on data provider performance provided to the Committee, as well as more detailed internal WMBA Limited reports and logs. c) Promontory confirmed that the foundational documents (as in “a”) above) were publicly available on WMBA Limited’s website. d) Promontory reviewed the RONIA Benchmark Methodology document to determine the existence and adequacy of procedures for market stress and noted the disaster recovery processes listed in WMBA Limited’s Business Continuity and Disaster Recovery Policy.

	<p>time during the daily contribution and determination activities. WMBA Limited provides a regular report on the quality of the data provision to the RONIA Oversight Committee.</p> <p>WMBA Limited conducts on-site visits to the data providers to RONIA on a periodic basis, to review conformance with the data provision standards.</p> <p>In respect of the IT infrastructure, WMBA Limited’s IT Systems and Controls manual describes how WMBA Limited has access to an automated system-monitoring tool provided by the server host.</p> <p>In addition to the automated tool, parallel independent operations are carried out daily on the two data servers, making discrepancies readily identifiable.</p> <p>c) The entities providing data for the determination of RONIA are listed on WMBA Limited’s website. The above-mentioned codes of practice are similarly published on the website.</p> <p>d) WMBA Limited regularly reviews and tests contingency arrangements for the determination and publication of RONIA under market and operational stress conditions. The WMBA Limited Operational Impact Assessment Policy describes how WMBA Limited determines the level of impact that an anomalous event would have on the RONIA benchmark, the mitigating controls in place to avoid the occurrence or repeat of an event, actions to be taken by WMBA Limited including when an incident report would be raised, and the identification of the parties to which the escalation of events would be required.</p>	
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3. Conflicts of Interest for Administrators

IOSCO Principle	WMBA Limited Comment	Work performed by Promontory
<p>To protect the integrity and independence of Benchmark determinations, Administrators should document, implement, and enforce policies and procedures for the identification, disclosure, management, mitigation or avoidance of conflicts of interest.</p> <p>Administrators should review and update their policies and procedures as appropriate.</p> <p>Administrators should disclose any material conflicts of interest to their users and any relevant Regulatory Authority, if any.</p> <p>The framework should be appropriately tailored to the level of existing or potential conflicts of interest identified and the risks that the Benchmark poses and should seek to ensure:</p> <ul style="list-style-type: none"> 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 	<p>WMBA Limited has a framework, policies and procedures in place to identify, manage, and avoid conflicts of interest. All staff are made fully aware of the WMBA Limited’s Conflicts of Interest Policy. On an annual basis all Directors and WMBA Limited staff must formally confirm their records of potential conflicts of interest.</p> <p>In addition, the Terms of Reference for the RONIA Oversight Committee require that the committee conduct its oversight role with due regard to the management of conflicts of interest.</p> <ul style="list-style-type: none"> a), b) WMBA Limited has established a Conflicts of Interest Policy and an associated Conflicts Risk Map. The policy provides for procedures and controls for identifying, managing, recording and, where relevant, disclosing actual or potential conflicts of interest. <p>The Conflicts of Interest Policy is applicable to all Directors, employees and consultants employed by WMBA Limited. Conflicts, where identified, are recorded within a Conflicts Register.</p> <ul style="list-style-type: none"> c) WMBA Limited maintains job descriptions for the various roles within the firm which provide for an appropriate segregation of responsibilities for the determination of RONIA. d) Since RONIA is a purely transactions-based benchmark with specific rules for the eligibility of transactions, WMBA Limited exercises no discretion in the daily determination process, beyond ensuring operational integrity. The data contributions are subject to system-based 	<p>Promontory reviewed WMBA Limited’s Conflict of Interest Policy and relevant sections of WMBA Limited’s Compliance Manual, Ethics Policy and Employee Manual.</p> <ul style="list-style-type: none"> a) Promontory noted that the obligations of all parties associated with the determination of RONIA to disclose conflicts of interest is contained in these policies. b) We also noted in these policies the expectation that employees will not compromise WMBA Limited’s business through personal interest or connections. c) Promontory obtained a copy of WMBA Limited’s organisation structure and job descriptions to confirm segregation of reporting lines. d) Promontory reviewed operational service documents that outline calculation controls in place for RONIA. e) Promontory noted the standards of confidentiality contained within the relevant policies and manuals above. f) Promontory also reviewed the confidentiality standards and procedures with regard to third parties. g) Promontory conducted interviews with WMBA Limited’s compliance officer and benchmark management to confirm that employees are not incentivised by the benchmark level. <p>Promontory inspected minutes from the WMBA Limited Board of Directors’ meetings and noted the</p>

<p>disclosure obligations of the Administrator;</p> <p>f) Effective procedures to control the exchange of information between staff engaged in activities involving a risk of conflicts of interest or between staff and third parties, where that information may reasonably affect any Benchmark determinations; and</p> <p>g) Adequate remuneration policies that ensure all staff who participate in the Benchmark determination are not directly or indirectly rewarded or incentivised by the levels of the Benchmark.</p> <p>An Administrator’s conflict of interest framework should seek to mitigate existing or potential conflicts created by its ownership structure or control, or due to other interests the Administrator’s staff or wider group may have in relation to Benchmark determinations. To this end, the framework should:</p> <p>a) Include measures to avoid, mitigate or disclose conflicts of interest that may exist between its Benchmark determination business (including all staff who perform or otherwise participate in Benchmark production responsibilities), and any other business of the Administrator or any of its affiliates; and</p> <p>b) Provide that an Administrator discloses conflicts of interest arising from the ownership structure or the control of the Administrator to its Stakeholders and any relevant Regulatory Authority in a timely manner.</p>	<p>controls and the benchmark determination is reviewed prior to release by the benchmark operations manager.</p> <p>e) The WMBA Limited Employee Manual and the WMBA Limited Ethics Policy set standards regarding confidentiality of information and safeguarding WMBA Limited non-public information. This includes input data and other information in relation to the determination of RONIA.</p> <p>f) Access to data for the determination of RONIA is limited to designated WMBA Limited staff. External communications are monitored by WMBA Limited Compliance.</p> <p>g) No WMBA Limited staff involved with the determination of RONIA are remunerated or incentivised directly or indirectly by the level of the benchmark.</p> <p>The Wholesale Markets Brokers’ Association has placed its regulated benchmarks within a separate entity, WMBA Limited, in part to mitigate any potential conflicts of interest.</p> <p>a) All Directors and staff of WMBA Limited must disclose any conflicts of interest and report them through the Conflicts Register.</p> <p>b) The Conflicts Register is established to meet the record-keeping requirements of the UK Financial Conduct Authority.</p>	<p>Board’s regard to conflicts of interest matters.</p> <p>a) Promontory reviewed the Conflicts of Interest register.</p> <p>b) Promontory noted the reporting requirements to the UK Financial Conduct Authority as outlined in the Compliance Manual.</p>
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4. Control Framework for Administrators

IOSCO Principle	WMBA Limited Comment	Work performed by Promontory
<p>An Administrator should implement an appropriate control framework for the process of determining and distributing the Benchmark. The control framework should be appropriately tailored to the materiality of the potential or existing conflicts of interest identified, the extent of the use of discretion in the Benchmark setting process and to the nature of Benchmark inputs and outputs. The control framework should be documented and available to relevant Regulatory Authorities, if any. A summary of its main features should be Published or Made Available to Stakeholders.</p> <p>This control framework should be reviewed periodically and updated as appropriate. The framework should address the following areas:</p> <p>a) Conflicts of interest in line with Principle 3 on conflicts of interests;</p> <p>b) Integrity and quality of Benchmark determination:</p> <ol style="list-style-type: none"> i. Arrangements to ensure that the quality and integrity of Benchmarks is maintained, in line with principles 6 to 15 on the quality of the Benchmark and Methodology; ii. Arrangements to promote the integrity of Benchmark inputs, including adequate due diligence on input sources; iii. Arrangements to ensure accountability and complaints mechanisms are effective, in line with principles 16 to 19; and iv. Providing robust infrastructure, policies and procedures for the management of risk, including operational risk. 	<p>WMBA Limited has implemented a robust control framework for the RONIA benchmark, as outlined in the Benchmark Administration Control Framework policy. This covers:</p> <ul style="list-style-type: none"> • Governance • Oversight Functions • Staff • Business Continuity • Data Methodology • Record Keeping • Reporting and Cooperation with Competent Authorities <p>Specifically, WMBA Limited has:</p> <p>a) Established a Conflicts of Interest policy and control framework as discussed in Principle 3.</p> <p>b) Made arrangements to support the integrity of RONIA through:</p> <ol style="list-style-type: none"> i. management of the determination process by a dedicated operation team; ii. establishment of codes of practice, including the Submitter’s Code of Conduct and the Data Quality Code for Submissions setting forth the standards WMBA Limited expects to be observed by entities providing the requisite data for the determination of RONIA; iii. establishment of complaints management, record keeping and audit policies and processes; and iv. development of infrastructure, operating 	<p>Promontory performed the following work to review the control framework in respect of Principle 4:</p> <ol style="list-style-type: none"> a) Promontory examined WMBA Limited’s Conflict of Interest Policy as detailed in Principle 3. b) Promontory reviewed the RONIA Benchmark Methodology, Submitter’s Code of Conduct, and the Data Quality Code, and interviewed WMBA Limited staff to understand the processes to ensure integrity of the determination and publication of the RONIA benchmark. This included review of: <ol style="list-style-type: none"> i. the quality and methodology of the RONIA benchmark, as discussed under Principles 6 to 15; ii. the standards for data input set forth in the codes of practice; iii. the documented policies and procedures supporting the accountability measures, as set out under Principles 16 to 19; and iv. the documented policies and procedures referring to the design of the benchmark operational and technical infrastructure. We also interviewed key WMBA Limited staff to understand operating processes, controls, and business continuity plans. c) Promontory obtained copies of, and examined, WMBA Limited’s Whistleblowing Policy. d) Promontory further: <ol style="list-style-type: none"> i. Interviewed WMBA Limited staff included in the benchmark calculation and publication process; and ii. Reviewed materials for the WMBA Limited’s

<p>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.</p> <p>d) Expertise:</p> <ul style="list-style-type: none"> i. Ensuring Benchmark determinations are made by personnel who possess the relevant levels of expertise, with a process for periodic review of their competence; and ii. Staff training, including ethics and conflicts of interest training, and continuity and succession planning for personnel. <p>Where a Benchmark is based on Submissions: Administrators should promote the integrity of inputs by:</p> <ul style="list-style-type: none"> a) Ensuring as far as possible that the Submitters comprise an appropriately representative group of participants taking into consideration the underlying Interest measured by the Benchmark; b) Employing a system of appropriate measures so that, to the extent possible, Submitters comply with the Submission guidelines, as defined in the Submitter’s 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 	<p>policies and processes to manage and minimise operational and technical risks in the production of the benchmark.</p> <ul style="list-style-type: none"> c) Established a Whistleblowing Policy and Procedure. d) Established staff role descriptions, specifying competencies and experience levels required, and a staff training compliance and ethics training program. <p>As noted under Principle 14 below, standards for entities providing data for the determination of RONIA are set forth in a number of codes of practice, including the Submitter’s Code of Conduct and the Data Quality Code for Submissions. Operational and analytic processes are in place to review the quality of the data inputs, with a hierarchy of reporting of the results of these reviews, including a summary report to the RONIA Oversight Committee.</p>	<p>Compliance Training Program used by WMBA Limited’s Compliance Department.</p> <p>Specifically with regard to the input data provision, Promontory:</p> <ul style="list-style-type: none"> a) examined the RONIA Benchmark Methodology for a review of RONIA’s specification and eligible trades. b) inspected the codes of practice to confirm that contribution standards are detailed. c) reviewed the aforementioned documents to confirm the determination process, including benchmark frequency. d) reviewed the pre- and post- quality checks performed, and the associated reporting to the WMBA Limited management and the RONIA Oversight Committee as specified under the Market Abuse and Suspicious Transaction Reporting Procedures policy.
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ex-post analysis of trends and outliers.		
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5. Internal Oversight		
IOSCO Principle	WMBA Limited Comment	Work performed by Promontory
<p>Administrators should establish an oversight function to review and provide challenge on all aspects of the Benchmark determination process. This should include consideration of the features and intended, expected, or known usage of the Benchmark and the materiality of existing or potential conflicts of interest identified.</p> <p>The oversight function should be carried out either by a separate committee, or other appropriate governance arrangements. The oversight function and its composition should be appropriate to provide effective scrutiny of the Administrator. Such oversight function could consider groups of Benchmarks by type or asset class, if it otherwise complies with this Principle.</p> <p>An Administrator should develop and maintain robust procedures regarding its oversight function, which should be documented and available to relevant Regulatory Authorities, if any. The main features of the procedures should be Made Available to Stakeholders. These procedures should include:</p> <p>a) The terms of reference of the oversight function; b) Criteria to select members of the oversight function;</p> <p>The summary details of membership of any committee or arrangement charged with the oversight function, along with any declarations of conflicts of interest and processes for election, nomination or removal and replacement of committee members.</p> <p>The responsibilities of the oversight function include:</p>	<p>WMBA Limited has in place a structured approach to internal oversight of the RONIA benchmark.</p> <p>The Board of WMBA Limited is ultimately responsible for the benchmark-related activities, including the administration of RONIA, undertaken by WMBA Limited. In this regard, the Board is responsible for the strategic direction and the soundness of operations of the benchmark. The Board may take guidance and advice from the WMBA Limited-LEBA Data Committee and the WMBA Limited/LEBA Audit Committee in discharging its duties.</p> <p>In turn, WMBA Limited has established the RONIA Oversight Committee, as an independent committee, to assist WMBA Limited in fulfilling its role as the benchmark administrator for RONIA, with specific regard to the requirements of UK regulation of RONIA as a specified benchmark. The composition, roles and duties of the RONIA Oversight Committee are set forth in its Terms of Reference. The Terms of Reference and the minutes of the RONIA Oversight Committee are publicly available on the WMBA Limited website. The membership of this committee includes representatives of the Wholesale Markets Brokers' Association members responsible for provision of data for the RONIA determination, market infrastructure providers, users of the specified benchmarks, and independent members. Committee members are subject to the WMBA Limited Conflicts of Interest policies and procedures.</p>	<p>Promontory reviewed the internal oversight arrangements for RONIA, as established by the Board of WMBA Limited, and as conducted in conjunction with the RONIA Oversight Committee and the management of WMBA Limited.</p> <p>a) Promontory reviewed the Terms of Reference of the RONIA Oversight Committee for evidence that the committee is appropriately accountable for the benchmark in line with the requirements of Principle 5.</p> <p>b) Promontory reviewed the agenda and minutes of the meetings of the RONIA Oversight Committee to confirm the list of members and to confirm that those members represent a broad range of Stakeholders.</p> <p>c) We also noted from the minutes that Conflicts of Interest policy and review were regular topics of discussion by the RONIA committee.</p> <p>d) Promontory examined the Terms of Reference, committee minutes and specific supporting policies and conducted interviews with WMBA Limited management, in order to determine how the RONIA Oversight Committee:</p> <ul style="list-style-type: none"> provided oversight of the benchmark design, including a review of the risks pertaining to the benchmark, possible changes in and the cessation policy for the benchmark; provided oversight of the integrity of the control framework for the benchmark, including through review and approval of the principal operational and control policies and guidelines applying to the internal activities of

<p>a) Oversight of the Benchmark Design:</p> <ol style="list-style-type: none"> i. Periodic review of the definition of the Benchmark and its Methodology; ii. Taking measures to remain informed about issues and risks to the Benchmark, as well as commissioning external reviews of the Benchmark (as appropriate); iii. Overseeing any changes to the Benchmark Methodology, including assessing whether the Methodology continues to appropriately measure the underlying Interest, reviewing proposed and implemented changes to the Methodology, and authorising or requesting the Administrator to undertake a consultation with Stakeholders where known or its Subscribers on such changes as per Principle 12; and iv. Reviewing and approving procedures for termination of the Benchmark, including guidelines that set out how the Administrator should consult with Stakeholders about such cessation. <p>b) Oversight of the integrity of Benchmark determination and control framework:</p> <ol style="list-style-type: none"> i. Overseeing the management and operation of the Benchmark, including activities related to Benchmark determination undertaken by a third party; ii. Considering the results of internal and external audits, and following up on the implementation of remedial actions highlighted in the results of these audits; and iii. Overseeing any exercise of Expert Judgement by the Administrator and 	<p>The Board of WMBA Limited has delegated responsibility for the day-to-day oversight and monitoring of data from submitters or contributors, and the challenging or validation of the input data, to the management of WMBA Limited. The management of WMBA Limited provide regular reports on the benchmark operation to the Board and to the RONIA Oversight Committee.</p> <p>As outlined in its Terms of Reference, the duties of the RONIA Oversight Committee include, but are not limited to:</p> <ul style="list-style-type: none"> • Undertaking periodic reviews of the RONIA methodology and specification, including proposed changes; • Reviewing the policies governing the benchmark operation and integrity, including those applicable within WMBA Limited and those applying to entities providing data for the determination of the benchmark; • Receiving and reviewing internal and external reports on the operation and integrity of RONIA; • Scrutinising any suspicious activities with respect to the benchmark determination; • Providing effective challenge to WMBA Limited with respect to the establishment and operation of a robust control framework; • Reviewing cessation contingency policies and plans for RONIA; • Identifying and declaring any conflicts of interest. 	<p>WMBA Limited and the third party providers of input data for RONIA. We noted that, since RONIA is a purely transactions-based benchmark with prescribed transaction inputs, there is no discretion attached to the regular determination of the benchmark.</p> <p>Promontory reviewed the roles and responsibilities of the RONIA Oversight Committee, as detailed in the Terms of Reference.</p> <p>In respect of the provision of data for the determination of RONIA, Promontory noted:</p> <ol style="list-style-type: none"> a) the scrutiny of input data trends and patterns by the RONIA Oversight Committee, as reflected in the regular reporting package provided to the committee and associated discussions recorded in the minutes; b) the responsibility of the committee for oversight of the codes of practice for data providers, as specified in the Terms of Reference; c) the responsibility of the committee for oversight of failures to meet the codes of practice, as specified in the Terms of Reference; d) the responsibility of the committee to address and report to the competent authority any suspicious activities that may be indications of market abuse in respect of RONIA.
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<p>ensuring Published Methodologies have been followed.</p> <p>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.</p> <p>Where a Benchmark is based on Submissions: the oversight function should provide suitable oversight and challenge of the Submissions by:</p> <ul style="list-style-type: none"> 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. 		
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6. Benchmark Design

IOSCO Principle	WMBA Limited Comment	Work performed by Promontory
<p>The design of the Benchmark should seek to achieve and result in an accurate and reliable representation of the economic realities of the Interest it seeks to measure, and eliminate factors that might result in a distortion of the price, rate, index, or value of the Benchmark.</p> <p>Benchmark design should take into account the following generic non-exclusive features, and other factors should be considered, as appropriate to the particular Interest:</p> <ul style="list-style-type: none"> a) Adequacy of the sample used to represent the Interest; b) Size and liquidity of the relevant market (for example whether there is sufficient trading to provide observable, transparent pricing); c) Relative size of the underlying market in relation to the volume of trading in the market that references the Benchmark; d) The distribution of trading among Market Participants (market concentration); e) Market dynamics (e.g., to ensure that the Benchmark reflects changes to the assets underpinning a Benchmark). 	<p>RONIA generally seeks to measure the rate for secured overnight transactions in the Sterling money market. RONIA’s specification is framed using a particular determination method with respect to transactions brokered by a pre-defined list of Wholesale Market Brokers’ Association member firms, and is purely transactions-based. WMBA Limited does not use any discretion in the daily determination of the benchmark.</p> <p>WMBA Limited describes the design and methodology of the benchmark in the RONIA Benchmark Methodology, published on the WMBA Limited website. This document, and related policies and procedures, describe:</p> <ul style="list-style-type: none"> • The criteria and processes that are used to determine the benchmark; • The minimum amount of transaction data required for the benchmark calculation, and the determination when the submitted data fall below the methodology’s recommended transaction data threshold or the administrator’s quality standards; • The criteria for timeliness of the provision of input data and the means for providing such data whether electronically, by telephone or otherwise. 	<p>Promontory inspected the RONIA Benchmark Methodology, supporting documentation, and a sample of the monthly RONIA Dashboards submitted to the RONIA Oversight Committee. We noted that the determination methodology essentially reflects the specification of the benchmark.</p> <ul style="list-style-type: none"> a) We further noted that the list of data providers includes a number of the major brokers in the secured Sterling money market and that the sample size should therefore be adequate in relation to the activity in the brokered market, which is stated as the relevant market in the specification of the benchmark. b), c), d), e) We examined the reporting to the RONIA Oversight Committee and noted that the committee reviews the level of activity, the distribution of activity among the brokers providing data for the benchmark, and the pattern of contribution by each provider.

7. Data Sufficiency		
IOSCO Principle	WMBA Limited Comment	Work performed by Promontory
<p>The data used to construct a Benchmark determination should be sufficient to accurately and reliably represent the Interest measured by the Benchmark and should:</p> <p>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</p> <p>b) Be anchored by observable transactions entered into at arm’s length between buyers and sellers in the market for the Interest the Benchmark measures in order for it to function as a credible indicator of prices, rates, indices or values.</p> <p>This Principle requires that a Benchmark be based upon (i.e., anchored in) an active market having observable Bona Fide, Arms-Length Transactions. This does not mean that every individual Benchmark determination must be constructed solely of transaction data. Provided that an active market exists, conditions in the market on any given day might require the Administrator to rely on different forms of data tied to observable market data as an adjunct or supplement to transactions. Depending upon the Administrator’s Methodology, this could result in an individual Benchmark determination being based predominantly, or exclusively, on bids and offers or extrapolations from prior transactions. This is further clarified in Principle 8.</p> <p>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</p>	<p>As noted under Principle 6, RONIA’s specification is made with respect to the brokered market segment and, in turn, WMBA Limited seeks to ensure that a number of the major brokers in the secured Sterling market provide data for the determination of the benchmark. Given this approach, WMBA Limited considers that the data is sufficient to be an accurate and reliable representation of the interest as specified.</p> <p>a), b) RONIA is based solely on transactions, and these transactions are executed between mutually independent counterparties in the brokered market. As such, WMBA Limited considers that RONIA is based on a reliable system of price discovery in a competitive marketplace.</p>	<p>Promontory reviewed the RONIA Benchmark Methodology document and noted that the methodology and the selection of data providers seeks to ensure that there is sufficient data to make a reliable benchmark determination, consistent with the specification of the benchmark.</p> <p>We examined the reports provided to the RONIA Oversight Committee, and the associated minutes, to confirm that there is a regular review of activity levels.</p> <p>Promontory also reviewed the Submitter’s Code of Conduct and the Data Quality Code for RONIA for evidence that WMBA Limited’s expectations regarding the nature and scope of transactions used for determination of the benchmark were communicated to the data providers.</p>

<p>Benchmarks where anchored in an observable market consisting of Bona Fide, Arms-Length transactions.</p> <p>This Principle also recognises that various indices may be designed to measure or reflect the performance of a rule-based investment strategy, the volatility, or behaviour of an index or market or other aspects of an active market. Principle 7 does not preclude the use of non-transactional data for such indices that are not designed to represent transactions and where the nature of the index is such that non-transactional data is used to reflect what the index is designed to measure. For example, certain volatility indices, which are designed to measure the expected volatility of an index of securities transactions, rely on non-transactional data, but the data is derived from and thus “anchored” in an actual functioning securities or options market.</p>		
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8. Hierarchy of Data Inputs

IOSCO Principle	WMBA Limited Comment	Work performed by Promontory
<p>An Administrator should establish and Publish or Make Available clear guidelines regarding the hierarchy of data inputs and exercise of Expert Judgement used for the determination of Benchmarks. In general, the hierarchy of data inputs should include:</p> <ul style="list-style-type: none"> a) Where a Benchmark is dependent upon Submissions, the Submitters' own concluded arms-length transactions in the underlying interest or related markets; b) Reported or observed concluded Arm's-length Transactions in the underlying interest; c) Reported or observed concluded Arm's-length Transactions in related markets; d) Firm (executable) bids and offers; and e) Other market information or Expert Judgements. <p>Provided that the Data Sufficiency Principle is met (i.e., an active market exists), this Principle is not intended to restrict an Administrator's flexibility to use inputs consistent with the Administrator's approach to ensuring the quality, integrity, continuity and reliability of its Benchmark determinations, as set out in the Administrator's Methodology. The Administrator should retain flexibility to use the inputs it believes are appropriate under its Methodology to ensure the quality and integrity of its Benchmark. For example, certain Administrators may decide to rely upon Expert Judgement in an active albeit low liquidity market, when transactions may not be consistently available each day. IOSCO also recognises that there might be circumstances (e.g., a low liquidity market) when a confirmed bid or offer</p>	<p>As described in the RONIA Benchmark Methodology, under normal operating conditions, the determination of RONIA is based solely on transactions. Furthermore, in the absence of transactions on a given day, the contingent determination methodology relies on past determinations of the benchmark, which in turn are transaction-based. Therefore, no reliance is placed on data other than transactions, nor on expert judgment.</p>	<p>Promontory reviewed the RONIA Benchmark Methodology, the Submitter's Code of Conduct and the Data Quality Code, and noted that both the regular and contingent determination methods rely solely on underlying transaction data.</p> <p>As part of our interviews with WMBA Limited management, we discussed the possible use of expert judgement by WMBA Limited as administrator. We noted that the administrator does not intervene in the daily determination process except to identify possible errors in the data provided, and has processes in place to manage such circumstances.</p>

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.

9. Transparency of Benchmark Determinations

IOSCO Principle	WMBA Limited Comment	Work performed by Promontory
<p>The Administrator should describe and publish with each Benchmark determination, to the extent reasonable without delaying an Administrator publication deadline:</p> <p>a) A concise explanation, sufficient to facilitate a Stakeholder’s or Market Authority’s ability to understand how the determination was developed, including, at a minimum, the size and liquidity of the market being assessed (meaning the number and volume of transactions submitted), the range and average volume and range and average of price, and indicative percentages of each type of market data that have been considered in a Benchmark determination; terms referring to the pricing Methodology should be included (i.e., transaction-based, spread-based or interpolated/extrapolated);</p> <p>b) A concise explanation of the extent to which and the basis upon which Expert Judgement if any, was used in establishing a Benchmark determination.</p>	<p>The RONIA Benchmark methodology is publically available.</p> <p>With each daily determination of the RONIA benchmark, WMBA Limited publishes the total volume of transactions used in calculating the benchmark, and a further breakdown of the distribution of volume by rate level. Since the benchmark is based solely on transactions, no reliance is placed on other data or techniques, nor on expert judgement.</p> <p>In addition, WMBA Limited publishes Quarterly Statistics for RONIA, showing the rate and volume history of RONIA in the prior quarter, as well as summary aggregate volume and rate statistics.</p>	<p>Promontory confirmed that the RONIA Benchmark Methodology is published on the WMBA Limited website.</p> <p>Promontory reviewed the information published with each daily determination (as, for example, displayed via the Bloomberg service), and the Quarterly Statistics summary published on the WMBA Limited website, to confirm that the degree of data made publically available would be sufficient to facilitate a stakeholder’s understanding of how the benchmark is determined.</p> <p>As described in the RONIA Benchmark Methodology, the benchmark is purely transactions-based, so that no reliance is placed on other data or techniques in the determination.</p>

10. Periodic Review		
IOSCO Principle	WMBA Limited Comment	Work performed by Promontory
<p>The Administrator should periodically review the conditions in the underlying Interest that the Benchmark measures to determine whether the Interest has undergone structural changes that might require changes to the design of the Methodology. The Administrator also should periodically review whether the Interest has diminished or is non-functioning such that it can no longer function as the basis for a credible Benchmark.</p> <p>The Administrator should Publish or Make Available a summary of such reviews where material revisions have been made to a Benchmark, including the rationale for the revisions.</p>	<p>Among the responsibilities of the RONIA Oversight Committee is the periodic review of the benchmark, including its definition, methodology and technical specification.</p> <p>Additionally, WMBA Limited undertakes periodic and ad-hoc reviews of the benchmark policies and procedures in order to ensure that the benchmark reflects the practices in the particular markets it seeks to represent, and to maintain the integrity of the benchmark calculations. These reviews consider any changes that would be necessary to enhance or modify RONIA, to reflect secular changes to market conditions or activity levels.</p>	<p>Promontory examined the Terms of Reference of the RONIA Oversight Committee to confirm that undertaking periodic reviews of the benchmark is listed among the duties of the committee.</p> <p>Additionally, Promontory inspected the WMBA Limited Benchmark Administration Control Framework, to confirm that it requires WMBA Limited to undertake periodic reviews of the policies, procedures and methodology of the benchmark.</p> <p>Promontory reviewed a sample of the information packages provided to the RONIA Oversight Committee that contain data to facilitate the ongoing review of the benchmark. We also noted that the minutes of the committee contain references to such review.</p> <p>Finally, Promontory noted a change to the benchmark specification in 2016, undertaken after a consultation, and resulting from the ongoing review of the benchmark by the RONIA Oversight Committee.</p>

11. Content of the Methodology

IOSCO Principle	WMBA Limited Comment	Work performed by Promontory
<p>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.</p> <p>At a minimum, the Methodology should contain:</p> <ul style="list-style-type: none"> a) Definitions of key terms; b) All criteria and procedures used to develop the Benchmark, including input selection, the mix of inputs used to derive the Benchmark, the guidelines that control the exercise of Expert Judgement 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 Judgement 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. 	<p>The RONIA methodology is described in the RONIA Benchmark Methodology document, published on WMBA Limited’s website. In addition, detailed standards for firms providing data for the determination of RONIA are set forth in the codes of practice, including the Submitter’s Code of Conduct and the Data Quality Code for Submissions.</p> <ul style="list-style-type: none"> a) The RONIA Benchmark Methodology sets out key definitions in relation to the benchmark. b) The RONIA Benchmark Methodology describes the inputs and determination methodology for the benchmark. As noted under Principle 8 above, under normal operating conditions, the determination of RONIA is based solely on transactions. Furthermore, in the absence of transactions on a given day, the contingent determination methodology relies on past determinations of the benchmark, which in turn are transaction-based. Therefore, no reliance is placed on data other than transactions, nor on expert judgement. c) No reliance is placed on expert judgment. d) The RONIA Benchmark Methodology specifies the contingency methodology that is triggered in periods where data inputs used to calculate RONIA fall below a minimum threshold. e) The RONIA Benchmark Methodology specifies the recalculation policy for RONIA in the event of an error. f) As noted under Principle 10, the RONIA Oversight Committee undertakes regular reviews of the benchmark, including the methodology. 	<p>Promontory examined the RONIA Benchmark Methodology, the WMBA Limited Benchmark Administrator Control Framework and the WMBA Limited Cessation Plan for RONIA to confirm that the key methodological elements are set forth in these documents. These elements include the core methodology, the determination methodology under stress conditions, the re-fixing policy in the event of errors, and the consultation and cessation policies.</p> <p>As described under Principle 2 above, we also inspected the Submitter’s Code of Conduct and the Data Quality Code for Submissions to review the instructions given to the providers of input data for the benchmark.</p>

<p>Where applicable, the Published Methodologies should also include information regarding the procedures and frequency for external review of the Methodology;</p> <p>g) The circumstances and procedures under which the Administrator will consult with Stakeholders, as appropriate; and</p> <p>h) The identification of potential limitations of a Benchmark, including its operation in illiquid or fragmented markets and the possible concentration of inputs.</p> <p>Where a Benchmark is based on Submissions, the additional Principle also applies:</p> <p>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.</p>	<p>g) The WMBA Limited Benchmark Control Framework sets out the consultation approach and process for changes to benchmark. The WMBA Limited Benchmark Cessation Plan for RONIA further describes the consultation process in the event of termination of the benchmark.</p> <p>h) RONIA is specified as the weighted average rate of a defined set of transactions, with a contingent mechanism when there are no such transactions on a given trading day. As such, WMBA Limited considers that clarity is provided to stakeholders regarding the precise interest being measured, irrespective of market liquidity or fragmentation.</p> <p>As noted under Principle 2 above, WMBA Limited sources input data for RONIA from a range of entities among the Wholesale Markets Brokers' Association membership. The Submitter's Code of Conduct and the Data Quality Code for Submissions set forth the standards that WMBA Limited expects to be observed by these firms in providing the requisite data.</p>	
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12. Changes to the Methodology

IOSCO Principle	WMBA Limited Comment	Work performed by Promontory
<p>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.</p> <p>Those procedures should be consistent with the overriding objective that an Administrator must ensure the continued integrity of its Benchmark determinations. When changes are proposed, the Administrator should specify exactly what these changes entail and when they are intended to apply.</p> <p>The Administrator should specify how changes to the Methodology would be scrutinised, by the oversight function.</p> <p>The Administrator should develop Stakeholder consultation procedures in relation to changes to the Methodology that are deemed material by the oversight function, and that are appropriate and proportionate to the breadth and depth of the Benchmark’s use and the nature of the Stakeholders.</p> <p>Procedures should:</p> <p>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</p>	<p>As noted under Principle 11 above, the WMBA Limited Benchmark Control Framework sets out the consultation approach and process for proposed changes to the benchmark. The WMBA Limited Benchmark Cessation Plan for RONIA further describes the consultation process in the event of termination of the benchmark.</p> <p>WMBA Limited undertakes market consultations in respect of proposed material changes to RONIA. The RONIA Oversight Committee oversees such consultations. WMBA Limited publishes a market notice in response to each consultation and any subsequent change to the benchmark.</p>	<p>Promontory reviewed the section of the WMBA Limited Benchmark Control Framework covering changes to the benchmark methodology and the associated consultation process.</p> <p>We inspected the consultation paper and subsequent market notice published by WMBA Limited in 2016 (with respect to broadening the universe of Central Securities Depositories through which settlement can be effected) for evidence that the documented consultation process was followed. We also reviewed the relevant RONIA Oversight Committee minutes related to this consultation.</p>

<p>circumstances; and</p> <p>b) Provide for Stakeholders' summary comments and the Administrator's summary response to those comments, to be made accessible to all Stakeholders after any given consultation period, except where the commenter has requested confidentiality.</p>		
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13. Transition		
IOSCO Principle	WMBA Limited Comment	Work performed by Promontory
<p>Administrators should have clear written policies and procedures, to address the need for possible cessation of a Benchmark, due to market structure change, product definition change, or any other condition, which makes the Benchmark no longer representative of its intended Interest. These policies and procedures should be proportionate to the estimated breadth and depth of contracts and financial instruments that reference a Benchmark and the economic and financial stability impact that might result from the cessation of the Benchmark. The Administrator should take into account the views of Stakeholders and any relevant Regulatory and National Authorities in determining what policies and procedures are appropriate for a particular Benchmark.</p> <p>These written policies and procedures should be Published or Made Available to all Stakeholders.</p> <p>Administrators should encourage Subscribers and other Stakeholders who have financial instruments that reference a Benchmark to take steps to make sure that:</p> <ol style="list-style-type: none"> a) Contracts or other financial instruments that reference a Benchmark, have robust fall-back provisions in the event of material changes to, or cessation of, the referenced Benchmark; and b) Stakeholders are aware of the possibility that various factors, including external factors beyond the control of the Administrator, might necessitate material changes to a Benchmark. <p>Administrators' written policies and procedures to</p>	<p>WMBA Limited has established a Benchmark Cessation Plan for RONIA to facilitate a smooth cessation of RONIA should circumstances require.</p> <p>The Cessation Plan sets forth the factors that WMBA Limited would consider in proposing a cessation of RONIA, so that stakeholders may be aware. WMBA Limited also allows for consideration of whether changes to governance or methodology could reasonably be made in order to avoid the need to terminate the benchmark.</p> <p>The Cessation Plan further lays out the cessation process, which includes a stakeholder consultation process and liaison with the competent regulatory authority. The cessation process includes the allowance of adequate time to wind down the benchmark, in order to avoid market disruption, and the nomination of possible alternative benchmarks.</p>	<p>Promontory reviewed the WMBA Limited "Benchmark Cessation Plan for RONIA" for evidence that it sets out a structured process for the wind down of the benchmark, if necessary, including provisions for a public consultation process to limit market disruption.</p>

<p>address the possibility of Benchmark cessation could include the following factors, if determined to be reasonable and appropriate by the Administrator:</p> <ul style="list-style-type: none"> a) Criteria to guide the selection of a credible, alternative Benchmark such as, but not limited to, criteria that seek to match to the extent practicable the existing Benchmark’s characteristics (e.g., credit quality, maturities and liquidity of the alternative market), differentials between Benchmarks, the extent to which an alternative Benchmark meets the asset/liability needs of Stakeholders, whether the revised Benchmark is investable, the availability of transparent transaction data, the impact on Stakeholders and impact of existing legislation; b) The practicality of maintaining parallel Benchmarks (e.g., where feasible, maintain the existing Benchmark for a defined period of time to permit existing contracts and financial instruments to mature and publish a new Benchmark) in order to accommodate an orderly transition to a new Benchmark; c) The procedures that the Administrator would follow in the event that a suitable alternative cannot be identified; d) In the case of a Benchmark or a tenor of a Benchmark that will be discontinued completely, the policy defining the period of time in which the Benchmark will continue to be produced in order to permit existing 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 		
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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.		
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14. Submitter Code of Conduct		
IOSCO Principle	WMBA Limited Comment	Work performed by Promontory
<p>Where a Benchmark is based on Submissions, the following additional Principle also applies:</p> <p>The Administrator should develop guidelines for Submitters (“Submitter Code of Conduct”), which should be available to any relevant Regulatory Authorities, if any and Published or Made Available to Stakeholders.</p> <p>The Administrator should only use inputs or Submissions from entities, which adhere to the Submitter Code of Conduct, and the Administrator should appropriately monitor and record adherence from Submitters. The Administrator should require Submitters to confirm adherence to the Submitter Code of Conduct annually and whenever a change to the Submitter Code of Conduct has occurred.</p> <p>The Administrator’s oversight function should be responsible for the continuing review and oversight of the Submitter Code of Conduct.</p> <p>The Submitter Code of Conduct should address:</p> <ol style="list-style-type: none"> The selection of inputs; Who may submit data and information to the Administrator; 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; Criteria applied to employees of a Submitter who are permitted to submit data or information to 	<p>Data for determining RONIA are provided to WMBA Limited by a range of Wholesale Markets Brokers’ Association member firms, under documented Data Supply Agreements. The firms currently providing these data are not regulated as benchmark submitters under UK benchmark regulation. However, WMBA Limited nonetheless requires that they adhere to the broad standards anticipated under Principle 14, in order to ensure the integrity of the benchmark.</p> <p>To this end, WMBA Limited has developed a Contributor Pack consisting of a series of guidance documents related to the provision of data for the benchmark. The Contributor Pack is distributed to the Wholesale Markets Brokers’ Association member firms providing inputs for RONIA. The Contributor Pack contains the following:</p> <ul style="list-style-type: none"> Data Submissions Manual Data Submission Process Template Contact Template Data Quality Code for Submissions WMBA Limited Contact Details <p>Additionally, should a firm providing data for RONIA become regulated as a benchmark submitter in the future, they would be subject to an alternative policy, the Submitter’s Code of Conduct, which has been developed by WMBA Limited. This Submitter’s Code of Conduct would substitute for the Data Quality Code for Submissions in the Contributor Pack under these circumstances. The substance of the two documents is, however, largely identical.</p> <p>WMBA Limited considers that the Contributor Pack constitutes the guidelines for data providers to RONIA required under Principle 14.</p>	<p>Promontory reviewed the Contributor Pack, including the Data Submissions Manual, the Data Submission Process Template, Contact Template, Data Quality Code for Submissions and the WMBA Limited Contact Details. We examined a sample of completed Data Submission Process and Contact Templates, as well as a Data Supply Agreement. We also reviewed the Submitter’s Code of Conduct. The documentation was inspected for evidence that each of the detailed provisions of Principle 14 is appropriately addressed in the Contributor Pack, having regard for the facts that RONIA is a purely transaction-based benchmark and that the firms currently providing input data for RONIA are not regulated as benchmark submitters under UK regulation.</p> <p>We interviewed WMBA Limited management with respect to the means of ensuring adherence to the Contributor Pack by the firms providing data to RONIA, including the controls operated on a daily basis with respect to the completeness and accuracy of input data and the on-site visits conducted by WMBA Limited to the firms. Finally, we observed a full daily determination cycle for RONIA and reviewed a selection of the control logs and reports generated by WMBA Limited to monitor the input data.</p>

<p>an Administrator on behalf of a Submitter;</p> <p>e) Policies to discourage the interim withdrawal of Submitters from surveys or Panels;</p> <p>f) Policies to encourage Submitters to submit all relevant data; and</p> <p>g) The Submitters' internal systems and controls, which should include:</p> <ul style="list-style-type: none"> i. Procedures for submitting inputs, including Methodologies to determine the type of eligible inputs, in line with the Administrator's Methodologies; ii. Procedures to detect and evaluate suspicious inputs or transactions, including inter-group transactions, and to ensure the Bona Fide nature of such inputs, where appropriate; iii. Policies guiding and detailing the use of Expert Judgement, 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 	<p>WMBA Limited requires that the data providers adhere to the provisions of the Contributor Pack on an ongoing basis. WMBA Limited has processes in place to monitor such adherence, and conducts periodic on-site visits to the data providers in this regard.</p> <ul style="list-style-type: none"> a) The Data Submissions Manual specifies the transaction types and data fields for input to the benchmark. b) The Contact Template and the Data Quality Code for Submissions detail the staff authorized to provide inputs for RONIA. c) The Data Quality Code for Submissions requires data providers to operate robust internal control environments to ensure the accuracy and completeness of the input data provided. Since RONIA is wholly based on transactions, the data selection and transmission controls are largely systematized. d) The Data Quality Code for Submissions specify the general criteria for the selection of staff authorized to submit input data. e) WMBA Limited works closely with each firm providing data to ensure that the operating processes are as efficient as practical, and do not present undue cost or risk burdens for the firms. The Data Supply Agreements include a 3-month notice period for termination. f) The Data Quality Code for Submissions specifies the data sets to be provided and the expected organisational and technical control environments to ensure the accuracy and completeness of the data. g) The Data Submissions Manual and the Data Quality Code for Submissions set forth WMBA Limited's expectations for the firms providing data. These include provisions related to the following: <ul style="list-style-type: none"> i. the selection and transmission of eligible transaction data; 	
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<p>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</p>	<ul style="list-style-type: none"> ii. procedures to monitor for suspicious transaction activity; iii. procedures to report on departures from the operating guidelines, though noting that no expert judgement is involved in the determination of RONIA; iv. record keeping and audit trail requirements; v. internal controls on the data inputs; vi. staff training; vii. procedures to report on suspicious activity related to the data provided; viii. the organisation structure and roles and responsibilities of staff overseeing or associated with the data provision; ix. the Data Submission Process Template, internal review and monitoring of data inputs, and error reporting; x. whistle-blowing mechanisms; and xi. conflicts of interest policy and procedures related to the provision of the benchmark data. 	
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15. Internal Controls over Data Collection

IOSCO Principle	WMBA Limited Comment	Work performed by Promontory
<p>When an Administrator collects data from any external source, the Administrator should ensure that there are appropriate internal controls over its data collection and transmission processes. These controls should address the process for selecting the source, collecting the data, and protecting the integrity and confidentiality of the data. Where Administrators receive data from employees of the Front Office Function, the Administrator should seek corroborating data from other sources.</p>	<p>WMBA Limited’s Data Collection and Monitoring policy manual details the internal controls in place at WMBA Limited for the collection and monitoring of input data from the data providers to RONIA. The controls in this policy manual are further augmented by those specified in the Contributor Pack, and in supporting policies including the WMBA Limited Design and Security and the WMBA Limited Operational Impact Assessment policies.</p> <p>Input data are transmitted under a Secure File Transfer Protocol, with robust operational and security controls. Back-up transmission mechanisms are also available where necessary. WMBA Limited additionally employs a systematic monitoring tool for processing of the incoming data, which includes a set of data warning triggers. When a data anomaly is so detected, a series of escalation and communications processes are used to attempt to resolve the anomaly prior to the benchmark publication. These are summarized in the WMBA Limited Operational Impact Assessment policy. WMBA Limited also conducts a number of post-publication checks on the data, together with the data providers. An event log is maintained and summary reports are provided to WMBA Limited management and to the RONIA Oversight Committee. Notification may also be made to the WMBA Limited Board and regulatory authorities in defined severe instances of operational or other failures.</p>	<p>Promontory reviewed the WMBA Limited Data Collection and Monitoring policy manual, and the supporting WMBA Limited Design and Security and the WMBA Limited Operational Impact Assessment policies, for evidence that WMBA Limited maintains appropriate internal controls over data collection, processing and security, as well as associated escalation, communication and reporting procedures. We also reviewed the relevant sections of WMBA Limited’s Risk Management policy to the same end.</p> <p>We observed a full daily determination cycle for RONIA and reviewed a selection of the control logs and reports generated by WMBA Limited to monitor the input data. In particular, we examined the event log to review the nature and frequency of anomalous events, and how these events were resolved. We also examined a sample of the information package provided to the RONIA Oversight Committee, with a specific view to the reporting of operational performance and controls.</p>

16. Complaints Procedures

IOSCO Principle	WMBA Limited Comment	Work performed by Promontory
<p>The Administrator should establish and Publish or Make Available a written complaints procedure, by which Stakeholders may submit complaints including concerning whether a specific Benchmark determination is representative of the underlying Interest it seeks to measure, applications of the Methodology in relation to a specific Benchmark determination(s) and other Administrator decisions in relation to a Benchmark determination.</p> <p>The complaints procedures policy should:</p> <ul style="list-style-type: none"> 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. 	<p>WMBA Limited has established a Complaints Policy, published on its website, detailing how stakeholders may make complaints in relation to RONIA. The policy sets out the means by which a complaint may be brought to the attention of the administrator and the process that will be followed for reviewing, resolving and reporting on the complaint. The WMBA Limited Whistleblowing Procedure allows WMBA Limited’s staff to raise concerns about the benchmark on a confidential basis if necessary.</p> <ul style="list-style-type: none"> a) Complaints may be received in writing (including email) or verbally (either by telephone or in person). Where any doubt exists as to whether the matter constitutes a complaint, appropriate points of contact are provided. b) Any complaints received must be reported immediately to the WMBA Limited Compliance Officer. The Compliance Officer ensures that appropriate investigation and internal reporting of the complaints is undertaken. c) The WMBA Limited Compliance Officer is responsible to ensure that appropriate escalation of complaints is made to the governing bodies and regulatory authorities, as necessary. d) WMBA Limited has established a Complaints Register to log incoming complaints and their resolution. The WMBA Limited Compliance Officer is responsible for maintaining a file of all documentation related to each complaint, and such files are held in line with WMBA Limited record keeping requirements. 	<p>Promontory confirmed that the WMBA Limited Complaints Policy is available to stakeholders, including through WMBA Limited’s website, and that complaints can be made to a dedicated WMBA Limited email address. We reviewed the contents of the policy for evidence that appropriate reporting, investigation and escalation procedures were in place. We also reviewed the WMBA Limited Whistleblowing procedure to the same end.</p> <p>Finally, we examined the WMBA Limited Complaints Register, noting that no complaints had actually been received in respect of RONIA since 2016.</p>

<p>Disputes about a Benchmarking determination, which are not formal complaints, should be resolved by the Administrator by reference to its standard appropriate procedures. If a complaint results in a change in a Benchmark determination, that should be Published or Made Available to Subscribers and Published or Made Available to Stakeholders as soon as possible as set out in the Methodology.</p>	<p>WMBA Limited employs a series of operating procedures and practices to resolve disputes, other than formal complaints, about the benchmark.</p>	
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17. Audits		
IOSCO Principle	WMBA Limited Comment	Work performed by Promontory
<p>The Administrator should appoint an independent internal or external auditor with appropriate experience and capability to periodically review and report on the Administrator’s adherence to its stated criteria and with the Principles. The frequency of audits should be proportionate to the size and complexity of the Administrator’s operations.</p> <p>Where appropriate to the level of existing or potential conflicts of interest identified by the Administrator (except for Benchmarks that are otherwise regulated or supervised by a National Authority other than a relevant Regulatory Authority), an Administrator should appoint an independent external auditor with appropriate experience and capability to periodically review and report on the Administrator’s adherence to its stated Methodology.</p> <p>The frequency of audits should be proportionate to the size and complexity of the Administrator’s Benchmark operations and the breadth and depth of Benchmark use by Stakeholders.</p>	<p>WMBA Limited has established an Audit Committee as part of its governance and oversight organisational framework. Under its Terms of Reference, the Audit Committee should appoint an external expert party to review and report upon WMBA Limited’s adherence to the IOSCO Principles and applicable regulatory standards in respect of benchmark activities. Such reviews should be conducted at least annually.</p> <p>For 2017, WMBA Limited appointed Promontory to carry out the corresponding external review for the RONIA benchmark, as herein reported.</p>	<p>Promontory reviewed the Terms of Reference of the WMBA Limited Audit Committee to confirm the requirement that an annual external review be conducted of WMBA Limited’s administration of RONIA.</p> <p>Promontory reviewed WMBA Limited’s 2017 Compliance Statement for WMBA Limited’s administration of RONIA with reference to the IOSCO Principles, as reported herein.</p>

18. Audit Trail		
IOSCO Principle	WMBA Limited Comment	Work performed by Promontory
<p>Written records should be retained by the Administrator for five years, subject to applicable national legal or regulatory requirements on:</p> <ol style="list-style-type: none"> All market data, Submissions and any other data and information sources relied upon for Benchmark determination; The exercise of Expert Judgement made by the Administrator in reaching a Benchmark determination; Other changes in or deviations from standard procedures and Methodologies, including those made during periods of market stress or disruption; The identity of each person involved in producing a Benchmark determination; and Any queries and responses relating to data inputs. <p>If these records are held by a Regulated Market or Exchange the Administrator may rely on these records for compliance with this Principle, subject to appropriate written record sharing agreements.</p> <p>When a Benchmark is based on Submissions, the following additional Principle also applies:</p> <p>Submitters should retain records for five years subject to applicable national legal or regulatory requirements on:</p> <ol style="list-style-type: none"> The procedures and Methodologies governing the Submission of inputs; The identity of any other person who submitted or otherwise generated any of the data or 	<p>WMBA Limited’s general record keeping requirements are set forth in WMBA Limited’s Senior Management Manual, and are designed to conform with UK regulatory requirements. In particular, records should be retained in a format and medium to allow ready access to authorized parties, such retention should be a minimum period of seven years, and an audit trail of amendments should be maintained. The WMBA Limited Benchmark Administration Control Framework further details record keeping requirements specific to WMBA Limited’s benchmark activities. The Contribution Pack documents specify the record keeping requirements for the firms providing data for the determination of RONIA.</p> <p>Under these policies, the records retained by WMBA Limited include, but are not limited to:</p> <ul style="list-style-type: none"> All input data for the determination of RONIA; The use of this input data to determine the benchmark and the methodology utilized, noting that no expert judgement is generally involved in the determination of RONIA; Any exercise of discretion by WMBA Limited in the benchmark determination, including the full reasoning for the use of such discretion. This includes records of the disregard of any input data, in particular where it conformed to the requirements of the benchmark methodology, and the rationale for its disregard; The identity of WMBA Limited’s staff involved in the daily determination of RONIA; and All documents relating to any complaint, including 	<p>Promontory reviewed the sections of WMBA Limited’s Senior Management manual and the Benchmark Administration Control Framework pertaining to record keeping. We also examined the Contribution Pack documents in respect of WMBA Limited’s expectations on record keeping by firms providing input data for RONIA. In each instance, we considered how the provisions in the policies measured against the requirements of Principle 18 for the form and content of records to be retained in respect of RONIA.</p> <p>We interviewed WMBA Limited operations and compliance staff, and reviewed operational documents for WMBA Limited’s calculation engine, to understand how data archiving is implemented in practice. Finally, we examined a Compliance Review on Record Keeping Requirements undertaken by the Compliance Officer in respect of 2016 with reference to applicable UK regulatory requirements.</p>

<p>information provided to the Administrator;</p> <p>c) Names and roles of individuals responsible for Submission and Submission oversight;</p> <p>d) Relevant communications between submitting parties;</p> <p>e) Any interaction with the Administrator;</p> <p>f) Any queries received regarding data or information provided to the Administrator;</p> <p>g) Declaration of any conflicts of interests and aggregate exposures to Benchmark related instruments;</p> <p>h) Exposures of individual traders/desks to Benchmark related instruments in order to facilitate audits and investigations; and</p> <p>i) Findings of external/internal audits, when available, related to Benchmark Submission remedial actions and progress in implementing them.</p>	<p>those submitted by the complainant as well as WMBA Limited’s records.</p> <p>The records to be retained by firms providing input data for RONIA are summarized in the Data Quality Code for Submissions (and alternatively in the Submitter’s Code of Conduct – See Principle 14 above) in the WMBA Limited Contributor Pack. Such records are to be retained for a minimum period of five years. They include, but are not limited to:</p> <ul style="list-style-type: none"> • Procedures and methodologies governing provision of the transaction and any related data; • Names and roles of individuals responsible for oversight and provision of the data; • Relevant communications with WMBA Limited in relation to RONIA; • Any amendments, cancellations or reversals of transactions subsequent to providing input data; • Findings of External or Internal Audits related to provisions of input data for RONIA, remedial action and progress on their implementation; and • Training records of staff involved in the provision of the input data for RONIA. 	
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19. Cooperation with Regulatory Authorities

IOSCO Principle	WMBA Limited Comment	Work performed by Promontory
<p>Relevant documents, Audit Trails and other documents subject to these Principles shall be made readily available by the relevant parties to the relevant Regulatory Authorities in carrying out their regulatory or supervisory duties and handed over promptly upon request.</p>	<p>WMBA Limited is overseen by the UK Financial Conduct Authority for the regulated activity of “administering a specified benchmark” under UK MAR 8.3 in respect of RONIA. WMBA Limited holds regular meetings with the FCA in relation to these regulated activities.</p> <p>WMBA Limited is committed to cooperate fully and to engage actively with regulators and other public authorities. WMBA Limited seeks to provide documents and other information related to its benchmark activities to the regulators on a timely and complete basis, as required.</p> <p>The WMBA Limited Senior Management Manual provides for the establishment of appropriate procedures and controls to ensure that regulatory reporting is made within the required time-frames and is accurate and complete. Management information in respect of regulatory reporting is reviewed by WMBA Limited’s senior management periodically to confirm that these reporting requirements are being met.</p> <p>Additionally, the WMBA Limited Benchmark Administrator Control Framework requires WMBA Limited to monitor input data for RONIA, to report suspicious or anomalous activities to the regulators, and to cooperate with any subsequent investigations.</p>	<p>Promontory reviewed the sections of the WMBA Limited Senior Management Manual and the WMBA Limited Benchmark Control Framework pertaining to cooperation with, and reporting to, competent regulatory authorities. In addition, we reviewed WMBA Limited’s Compliance Function Manual, which documents WMBA Limited’s protocols for interactions with regulators. Finally, we examined the WMBA Limited FCA Regulatory Reporting Schedule, which defines the FCA-specific reporting processes.</p>

