Bank Bill Benchmark Rate (BKBM) & the BKBM Trading Window

*Operating Rules & Principles*

1.0 INTRODUCTION

The operating rules and principles outlined in this document have been derived with the objective of ensuring:

- Where appropriate, the alignment with the IOSCO Principles for Financial Benchmarks.
- A transparent BKBM determination process is maintained.
- Conformance with global best practice.

This service provides a Benchmark that represent the mid-rates for NZFMA Prime Bank eligible securities that are traded in the local New Zealand market.

This document should be read in conjunction with the following NZFMA publications, all of which can be found on the NZFMA website:

- NZFMA Code of Conduct & Principles.
- NZFMA Benchmark Oversight Committee – Guidelines and Terms of Reference.

2.0 GOVERNANCE

NZFMA is the Administrator and Calculation Agent for the BKBM Benchmark (“Benchmark”). NZFMA provides transparent governance, oversight and accountability procedures for the Benchmark determination process. This includes an identifiable oversight function accountable for the development, issuance and operation of the Benchmark process to protect the integrity of the Benchmark and to address any conflicts of interest.

2.1 Overall Responsibility of the Administrator

As Administrator, the NZFMA maintains responsibility for all aspects of the capture and calculation process and overall governance surrounding the Benchmark. This includes the following:

a) Development: The definition of BKBM and BKBM determination methodology (as outlined in this document);

b) Determination and Dissemination: Accurate and timely compilation, publication and distribution of the Benchmark Rates;

c) Operation: Ensuring appropriate transparency in respect of significant decisions affecting the compilation of the Benchmark and any related determination process, including contingency measures in the event of absence of or insufficient inputs, market stress or disruption, failure of critical infrastructure, or other relevant factors; and

d) Governance: Establishing credible and transparent governance, oversight and accountability procedures for the Benchmark determination process, including an identifiable oversight function accountable for the development, issuance and operation of the Benchmark process.
2.2 Internal Oversight

NZFMA governance, which includes policies and processes for the calculation and control of the Benchmark, is coordinated through its Benchmark Oversight Committee ("BOC"), its Board of Directors ("NZFMA Board") and relevant sub-committees.

2.2.1 NZFMA Benchmark Oversight Committee

The NZFMA have established an oversight function via the BOC to review and provide challenge on all aspects of the Benchmark determination process, details of which are outlined in the BOC Guidelines and Terms of Reference document (refer 9.0 Appendix IV).

The committee includes representation from Price-making organisations, Benchmark users, independent industry experts and Regulatory Authorities (The Reserve Bank of New Zealand and Financial Markets Authority attend in an observer capacity). BOC members are appointed annually by the NZFMA Board.

2.2.2 NZFMA Board

The NZFMA Board is made up of the Heads of Markets of the Association’s Financial Markets member banks and the Head of Financial Markets of the Reserve Bank of New Zealand in an observer capacity. The NZFMA Board meets regularly to identify issues relating to the New Zealand markets, review market initiatives, develop strategic policy, monitor changes to the regulatory environment and manage the Association’s affairs.

The NZFMA Board will confirm the appointment of representatives forming the BOC to oversee the capture, calculation and publishing methodology of the Benchmark and other New Zealand official financial market Closing Rates.

The NZFMA Board also appoints member representatives with specialist knowledge to sit on Committees and Industry Working Groups that share and develop market ideas and strategies to enhance the New Zealand financial markets. These Committees and Working Groups provide Stakeholders with active input into the operations of the wholesale markets and provide recommendations and support to the NZFMA Board.

2.2.3 NZFMA Rates Committee

The Rates Committee is responsible for reviewing the operational management of the Benchmark capture and calculation process noting, however, that the governance of this and other NZFMA generated Benchmarks will be the responsibility of the BOC.

The Rates Committee will provide recommendations to the NZFMA Board concerning the overall operation of the Benchmark. The Rates Committee members are drawn from banks operating in the NZ domestic rates market including Participants and non-participants in the BKBM Trading Window. Each paid up Financial Markets member of the NZFMA may provide a member to the Committee. The Reserve Bank of New Zealand is invited to attend all committee meetings as an observer.

2.3 Code of Conduct

NZFMA requires that NZFMA member banks included in the Benchmark determination process agree to comply with the NZFMA Code of Conduct & Principles. This Code sets out ethical principles for acceptable standards of behaviour in the over-the-counter financial markets and promotes responsible decision-making by Participants.

For further information, please refer to the NZFMA Code of Conduct & Principles.
2.4 Conflicts of Interest

Identifying and disclosing existing and potential conflicts of interest is a standing item at BOC meetings and NZFMA Board meetings. Employees and contractors of the Administrator must disclose any existing or potential conflicts of interest to the Chair of the NZFMA Board as soon as they arise.

Once disclosed, it is the responsibility of the Chair (or where the Chair has the conflict, the Deputy Chair) to ensure that conflict does not inappropriately influence the calculation of the Benchmark.

2.5 Staff Training

NZFMA maintains and regularly updates an operational guide for its Help Desk staff.

3.0 QUALITY OF BENCHMARK

3.1 Benchmark design

Factors such as the adequacy of the sample, the number of willing and available Price-makers, the size and liquidity of the relevant market, any market concentration issues surrounding the distribution of trading, and the relative size of the market in relation to the volume of trading in the market that references the Benchmark are subject to ongoing monitoring by the Administrator via the Rates Committee. Should there be any significant developments to these market dynamics, a review process will be conducted to determine if the Benchmark determination process remains appropriate and produces a robust representation of the interest that it seeks to measure.

The BOC shall also review the design of the Benchmark determination process (upon recommendation from the Rates Committee) and make recommendations to the Administrator in accordance with IOSCO Principle 5 (Refer 3.5 for more detail).

3.2 Data Sufficiency

The Benchmark determination process is anchored by observed transactions conducted in the Trading Window, entered into at arm’s length between buyers and sellers in the market and having been formed by the competitive forces of supply and demand. As an adjunct or supplement to these transactions, dealable bid and offer quotations extracted from broker pages may be relied upon. These different forms of data will be used depending on the conditions in the market on any given day to determine the Benchmark.

3.3 Hierarchy of Data Inputs

The NZFMA adheres to the following hierarchy of inputs in order to determine the Benchmark:

- A trade weighted average of all trades and volumes completed within the Trading Window.
- Where there are no trades completed during the Trading Window – the system uses any/all bids and offers for each tenor.
- Interpolation is used to calculate those tenors where bids and offers have not been quoted.
- The previous days Benchmark determinations are used in the event that the above cannot be obtained and / or calculated.

The process is not dependent on submissions although Price-maker quotations may be sourced directly from the brokers in the event that the data capture vendor is not available.
### 3.4 Transparency of Benchmark Determinations

On the basis that the Benchmark data is obtained in accordance with section 3.3 and, since there is public disclosure of the methodology, no explanation for how each Benchmark has been determined is required.

The Benchmark determination process will be conducted in a manner that complies with the details specified in this document and the NZFMA Code of Conduct & Principles. Any deviation will be investigated and, if necessary, escalated to the BOC for further consideration.

### 3.5 Periodic Review

The Rates Committee meets at least semi-annually at which time a review of the methodology and Operating Rules & Principles will be undertaken. This includes whether the two-way quotations:

- Have undergone any structural changes that may necessitate changes to the design of the methodology;
- Have diminished or are non-functioning such that they can no longer function as the basis for a credible Benchmark; and/or
- Have undergone any change which makes the Benchmark no longer representative of its intended interest and may result in the possible cessation of the Benchmark.

Any recommendations following each review will be forwarded to the BOC and the NZFMA Board for consideration and approval. The NZFMA Board and BOC will also review the methodology and Operating Rules & Principles as and when they deem appropriate.

The NZFMA will publish or make available a summary of such reviews where material revisions have been made to the methodology, including the rationale for the revisions.

## 4.0 QUALITY OF METHODOLOGY

### 4.1 Content of Methodology

The methodologies are outlined in the Appendices and include the following:

a) Definitions of key terms.
b) All criteria and procedures used to develop the Benchmark including the input selection and source, prioritisation of certain data types, quorums and calculation methods.
c) The procedures which govern a Benchmark determination in periods of market stress or disruption, including technology issues.
d) Information regarding the frequency of internal and external reviews of methodologies – as specified in section 3.5.
e) The circumstances in, and procedures under which, the Administrator will consult with Stakeholders.

### 4.2 Changes to the Methodology

The NZFMA and its relevant committees will publish or make available the rationale of any proposed material change in its Methodology.

These material Methodology changes will be communicated to Stakeholders and announced one month prior to implementation, except for situations where the timing of the announcement must be determined by the BOC ad hoc or in situations where there is no Stakeholder impact. This communication will give detailed information about the nature and rationale of the change as well as the implications and terms for the new Methodology to enter into the Benchmark determination process.

Such notification will allow sufficient opportunity for Stakeholders to analyse and comment on the impact of such proposed material change. Outcomes from the consultation process with relevant responses will also be published or made available to Stakeholders.

All material changes to the Methodology will be scrutinized and approved by the BOC.
4.3 Internal Controls over Data Collection

As the NZFMA collects data from an external source, appropriate internal controls have been put in place over its data collection and transmission processes. These controls address the process for selecting the source, collecting the data and protecting the integrity and confidentiality of the data.

A Master Services Agreement has been signed by the NZFMA with Bloomberg Finance LP which outlines the terms and conditions of the data license between the two entities. Permissioning has been obtained from the Brokers to access and use the quotation information that they publish on the relevant Bloomberg pages. Participating banks have agreed to disclose relevant trading information provided to the Brokers and subsequently used in the calculation of BKBM.

The Administrator does not actively monitor Bloomberg’s arrangements for the collection and dissemination of the data because the data consists of live deal-able two-way quotations and therefore is of a mechanical nature.

4.4 Transition

When a possible cessation event has been identified during the periodic review process specified in section 3.5, or at any other time by the NZFMA Board, a consultation process will be undertaken with market participants, Stakeholders and relevant Regulatory Authorities to ascertain the following:

• If a viable and a credible alternative that closely matches the existing Benchmark characteristics can be selected.
• In the event that a suitable alternative can be identified, the formulation of a transition process that endeavours to minimise market disruption.
• If a suitable alternative cannot be identified, establishing an appropriate time frame in which the Benchmark will continue to be determined including the specification of a suitable notice period for the cessation.

5.0 ACCOUNTABILITY

5.1 Complaints & Penalties Procedures

The NZFMA has a written complaints procedure by which Stakeholders may submit complaints including:

• 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.
• Administrator decisions in relation to a Benchmark determination.

These procedures can be enacted to query the following:

Price Action during the BKBM Trading Window

5.1.1 A Participant may request the NZFMA Rates Committee to review the trading and price action during the BKBM Trading Window should they believe that trading and price action has not operated in accordance with the Rules for Participants.

5.1.2 Such requests should be made by telephone to the NZdata Help Desk before 10.30am of the day in question. The request must include the reason(s) for review.

5.1.3 The NZdata Help Desk will contact the Benchmark Review Committee and immediately call a meeting to review the complaint. The NZdata Help Desk will pause the calculation and publication of the rates until the outcome of the review is determined.

5.1.4 The Minutes of the review and determination will be circulated to the NZFMA Rates Committee and NZFMA Board.
Post Publication Review of BKBM

5.1.5 A Participant may request the NZdata Help Desk to review the calculation of BKBM if they believe the calculation is incorrect. Such requests should be made within 10 minutes of publication. The NZdata Help Desk will arrange for the NZFMA, Refinitiv and Bloomberg to clear the published rates from vendor screens until the review has been completed.

5.1.6 The NZdata Help Desk will contact the BOC who will convene immediately to review the rate calculation.

5.1.7 At the completion of the review, the rate (either recalculated or remaining unchanged) will be republished to vendor screens with a notification advising that the rate has been republished and/or recalculated.

5.1.8 The Minutes of the review will be circulated to the NZFMA Rates Committee and NZFMA Board.

Potential penalties for non-compliance are as follows:

5.1.9 Rules for Participation is integral to the integrity of the calculation of the BKBM rates. Repeated Failure by an Approved Financial Institution to operate in accordance with these Rules may result in review of the institution’s Participant status.

5.1.10 Following a Repeated Failure, the NZFMA Rates Committee shall ask the Board to formally warn the offending Participant that it may be suspended if there is a further Repeated Failure during the following calendar month.

5.1.11 If that Participant has a Repeated Failure during that following calendar month, the NZFMA may, on the recommendation of the NZFMA Rates Committee, suspend that Participant for a period of four weeks. If that Participant has a repeated failure after completion of the suspension, it shall receive another formal warning.

5.1.12 In the event that Participant has two further Repeated Failures after completion of the suspension, the NZFMA, on the recommendation of the NZFMA Rates Committee, may (a) suspend that Participant for a period of 12 weeks, or (b) if those Repeated Failures were, in the majority opinion of the NZFMA Rates Committee members, a blatant breach of the Rules and Principles, permanently remove that Participant.

5.1.13 The offending Participant shall be given the opportunity to be heard fully before its suspension or removal as a Participant is ordered. The offending Participant shall be able to consent to suspension or removal before or after being heard.

5.1.14 The offending Participant shall have the right of appeal to the full Board of the NZFMA in the event of suspension or removal as a Participant.

5.2 Reporting and Audits

Daily data integrity checks will be conducted pre-publication and retrospective reviews undertaken to ensure the methodology remains robust. This integrity check will be performed by the NZFMA Help Desk as part of NZFMA’s obligations as Administrator. Breaches of tolerance will be identified on the NZdata Help Desk market monitor platform with Price-makers and NZFMA management notified accordingly.

From time to time, the BOC may appoint an independent external auditor with appropriate experience and skill to review and report the NZFMA’s adherence to its stated Operating Rules & Principles.

5.3 Audit Trail

Written records will be retained by the NZFMA for a minimum of seven years. These will include:

- All market data, contributed pricing and any other data and information sources relied upon for Benchmark determination.
- Details surrounding deviations from standard procedures and methodologies.
- Any queries and/or complaints with appropriate responses relating to the Benchmark determination process.
Record Keeping:

- Records will be retained in a medium and format that makes them readily accessible for future reference.
- To the extent permitted by law, records will be furnished to authorized independent reviewers in a timely manner upon request.
- Appropriate security measures will be applied so that records cannot be changed or manipulated.
- Records will be retained in such a manner to comply with relevant confidentiality requirements.
- Physical and electronic records shall be kept for at least seven years. Records of telephone conversations or electronic communications shall be kept for a period of three years.

5.4 Confidentiality

Subject to section 5.5, data provided by Price-makers and used in the Benchmark determination process will not be disclosed to any party other than the NZFMA and its employees, officers and the BOC for the purpose of carrying out its duties as Administrator.

5.5 Co-operation with Regulatory Authorities

Where required by law, data audit trails and other documents subject to these Operating Rules & Principles shall be made readily available by the NZFMA to any relevant Regulatory Authority.
6.0 Appendix I

Eligibility, Rules and Current Price-Makers

6.1 Price-Maker Eligibility Criteria

A Price-Maker means a financial institution approved by the NZFMA to quote prices and transact during the BKBM Trading Window.

The BKBM Trading Window is currently 10:20 to 10:22.

To be accepted as a Price-Maker to the Benchmark process, an entity must:

1. Be approved in writing by the NZFMA Board;
2. Be a paid up member of the New Zealand Financial Markets Association Incorporated;
3. Be an active participant in the bank bill market and a recognised Price-Maker in all maturities in the market amount and spread. At the time of writing, this requires Price-Makers to provide a three point price in $20 million parcels in the one to six month maturities during NZ market hours – currently 8.30am to 16:30 NZ time;
4. Provide the NZFMA with a certificate of exemption from Resident Withholding Tax issued by the NZ Inland Revenue Department in the name of the entity;
5. Provide the NZFMA with a Company Extract issued by the NZ Companies Office showing that the entity is registered in NZ and listing the company directors and the registered office;
6. Provide the NZFMA with a signed copy of the NZFMA standard “Fixed Establishment Warranty” (refer 8.0 Appendix III);
7. Provide the NZFMA with written acceptance of these Rules and Principles;
8. Display professionalism in market practice and adhere to the NZFMA Code of Conduct and Code of Ethics;
9. Provide written authority for Brokers to release details of volumes and rates relevant to BKBM settings to either the NZFMA and/or an independent reviewer (whichever is decided), upon request; and
10. Provide written authority to NZFMA, consenting to the publication of trade details relevant to the BKBM capture and calculation process.

6.2 Rules for Participants

1. To be eligible to participate in the BKBM Trading Window a participating entity must meet the Pre-requisites for Accepting Entitites as a Participant in BKBM above and must be confirmed by the NZFMA Board as a Participant in the BKBM Trading Window, thereby being bound by these Operating Rules and Principles.
2. Price action must display the intention to transact.
3. This means that a price entered by a Participant into the market must enable the market sufficient time to transact on that price.
4. Gapping of prices is not permitted. A Participant must enter the first price at the Broker MID and then may only move the bid or offer 1 basis point at a time. Each move must give sufficient time for the market to transact. Brokers will not accept a price in breach of this rule.
5. Sellers that issue Prime Bank Bill Paper must be willing to offer their own paper. Sellers that do not issue Prime Bank Bill Paper must be able to offer three lines of Prime Bank Bill Paper from the four major banks (ANZ, ASB, BNZ and Westpac) at all times throughout the BKBM Trading Window in order to take a market either choice or inverse (i.e. offer at the same level or at a higher level than the lowest bid).
6. To be a valid offer, the paper that is being offered must be able to be bought by a minimum of three Participants in the BKBM Trading Window at all times throughout the BKBM Trading Window. Sellers who hold non-valid paper under this rule may give bids during the BKBM Trading Window once they have ascertained the buyer has available a line of the paper being offered and, providing they do not take the market inverse in doing so.
7. Buyers must be able to buy and sell three lines of Prime Bank Bill Paper issued by the four major NZ banks (ANZ, ASB, BNZ, and Westpac) at all times throughout the BKBM Trading Window in order to bid on screen during the BKBM Trading Window. For the sake of clarity, a major bank listed above needs to be able to accept three major bank lines plus their own, whereas Kiwibank would need lines on four major banks plus their own. Buyers who have insufficient lines available may pay offers during the BKBM Trading Window once they have ascertained they have available line on the paper being offered, and providing they do not take the market inverse in doing so. For buyers that issue Prime Bank Bill Paper, their own paper shall count as one line of paper so that they need only be able to accept three other names.

8. The minimum parcel of bills during the set is $20 million in the 1- to 6-month maturities.

9. Participants shall not initiate a non-valid BKBM trade during the BKBM Trading Window.

10. Participants commit to providing two-way pricing in the 1- and 6-month tenors via the broker venue.

6.3 Eligible Prime Bank Paper

The NZFMA Board will consider applications for Prime Bank Paper that meet the following criteria.

6.3.1 The bank paper issuer is a Registered Bank in New Zealand.

6.3.2 The bank paper issuer is a participant in the New Zealand wholesale financial markets as demonstrated by a commitment to offering a range of wholesale financial products to a wide range of users and counterparties.

6.3.3 The issuer’s bank paper should be broadly fungible with the paper issued by other prime issuers from both a credit standing and liquidity perspective such that the market in general is willing to trade the prime issuer’s paper at rates equivalent to those generally pertaining to other prime bank paper in normal market conditions.

6.3.4 The bank paper issuer is a paid up Financial Markets member of the NZFMA.

6.3.5 The bank paper issuer is a Participant in the BKBM Trading Window.

6.3.6 The NZFMA Rates Committee will recommend a list of eligible prime bank paper to the NZFMA Board. This will be reviewed annually, or earlier if required. The list of eligible prime bank paper will be published on the NZFMA website. The current list of Eligible Prime Bank Paper is contained in 6.0 Appendix I.

The List of Eligible Prime Bank Paper is reviewed annually by the Rates Committee and approved by the NZFMA Board. Earlier reviews may take place as required due to a change in circumstances or a credit event of a Prime Bank Issuer.

The current list of Prime Bank Paper eligible to be traded during the BKBM Trading Window is

- ANZ Bank New Zealand Ltd
- ASB Bank Ltd
- Citigroup
- Bank of New Zealand Ltd
- Kiwibank Ltd
- Westpac New Zealand Ltd

The current list of Eligible Prime Bank Paper is published on the NZFMA website (www.nzfma.org)

6.4 Current Price-makers

- ANZ Bank New Zealand Limited
- ASB Bank Limited
- Bank of New Zealand
- Kiwibank Ltd
- Westpac Banking Corporation – New Zealand Branch
7.0 APPENDIX II

Broker Obligations

7.1 Operational

7.1.1 Provide accurately communicated timely data for the rate calculation purposes by electronic connection through a specified vendor (Bloomberg) connection. The NZFMA is authorised to publish benchmark rates derived from the supplied data.

7.1.2 Ensure prices are updated promptly\(^1\) and are an accurate reflection of the market information available.

7.1.3 Have adequate measures in place to reduce the likelihood of erroneous pricing entering the market (noting that clearly erroneous pricing may result in exclusion from the BKBM Trading Window and Rate Calculation Process).

7.1.4 Clear down (remove pricing from) the Refinitiv or Bloomberg page at 9:00am each Business day.

7.1.5 Provide timely information in relation to any outages or delays to the NZFMA.

7.1.6 Operate at all times in accordance with the BKBM Operating Rules & Principles.

7.1.7 Ensure that gapping of prices does not occur (refer 3.4 above). The Broker will ensure that a Participant enters the first price at the Broker MID and then may only move the bid or offer one (1) basis point at a time, with each move providing sufficient time for the market to transact.

7.1.8 Achieve prompt cancellation and amendment of good orders where sought.

7.1.9 Time stamp all orders, amendments and transactions, log all activity and keep records for seven (7) years.

7.1.10 Only allow firm orders (no indicative orders) that do not have restrictions on their validity (for example it is not acceptable for orders to have restrictions as to their type of counterparty – the usual 'subject to credit' condition is acceptable).

7.1.11 Allow cancellation of trades for reasons of credit or genuine error only.

7.1.12 Have standard settlement instructions for all orders as per Market Conventions.

7.2 Governance

7.2.1 Certify that they have at least two active \textit{bona fide} market Participants connected to (or in the case of voice brokers contractually ready to participate) in the venue.

7.2.2 Report data specifically referencing Prime Bank Paper only and on a homogenous basis as defined by the NZFMA Conventions from time to time, noting that the NZFMA will give sufficient notice where possible as agreed before any relevant changes to these Conventions.

7.2.3 Give notice to the NZFMA of plans for the introduction of features that may impact the BKBM Trading Window and Rate Calculation Process.

7.2.4 Monitor the markets for compliance with the relevant regulatory requirements and adopt sound compliance standards.

7.2.5 Maintain the confidence of the NZFMA Board that the broker venue is suitable for inclusion in the BKBM Trading Window and Rate Calculation Process.

7.2.6 Operate and maintain a functioning Disaster Recovery Plan.

\(^{\text{1}}\) For voice brokers – to update prices on electronic representations of their market in well under 10 seconds.
7.3 Termination of Participation in the BKBM Trading Window and Rate Calculation Process

7.3.1 Broker participation in the BKBM Trading Window may be suspended or terminated at the sole discretion of the NZFMA where actions of the Broker would adversely impact on the NZFMA’s confidence in the integrity of the supplied data. In the event of a suspension or termination of the Broker’s participation due to a decision by the NZFMA Rates Committee, the NZFMA will provide a reason for such decision to the Broker. The Broker will have the right to appeal such decision to the NZFMA Board for their consideration.

7.3.2 Give one month’s notice before termination of participation in the BKBM Trading Window.

7.4 Trade Reporting

7.4.1 Contribute records for transactions executed on <BROKER VENUE>’s trading platform (representing trades of Prime Bank Paper between 10.20 to 10.22am) on a daily basis by 10.40am via the NZdata website. To authorise the provision of this trading information to regulatory authorities and the publication of this information on a delayed and cross-venue and counterparty aggregated basis as determined by the NZFMA Rates Committee from time to time.

7.4.2 Provide evidence of trading activity that meets the minimum defined threshold for relevance for inclusion in the BKBM Trading Window and Rate Calculation Process initially and from time to time as requested by the NZFMA and described in the Operating Rules & Principles of the Bank Bill Benchmark Rate (BKBM) and BKBM Trading Window.

7.5 Source of Data

7.5.1 Collection from Broker Feeds

The collection of real-time BIDS and OFFERS across all Bank Bill tenors from predefined broker pages are performed using dedicated data feed handlers (Bloomberg).

There are two data feed handlers; a Production Feed Handler and a Disaster Recovery Feed Handler. Both are active and available should one feed/connection become unavailable.

The BKBM market (NZdata system) will make a web service request for the Bank Bill broker data at a randomised time within the Trading Window of 10:20-10:22am each business day (See 11.0 Appendix VI for Good Business Day definition).

7.5.2 Collection from Broker TRADES

In additional to BID and OFFER collection for each BKBM tenor each broker is obligated to enter all TRADES with their respective VOLUMES that have been executed/transacted during the Trading Window, into the NZdata system.

This is performed using their specified broker logons via a secure webpage All broker TRADES and VOLUMES must be entered into the system by 10:40am each business day by each broker venue.

7.6 Calculation Methodology

The NZFMA Help Desk will monitor the rates during the entire BKBM Fixing Window to ensure all rates are, a) collected via the respective data feeds, and b) that all TRADES and VOLUMES have been entered by the respective broker venues.

Should there be any technical issues the NZFMA Help Desk will seek to contact the brokers direct to collect all the required rates and are able to enter such rates for any/all BKBM tenors (all of the escalation procedures and processes are made available within the NZFMA Help Desk operation and rules manual).

At any time the NZFMA Help Desk can “Pause” the BKBM market and escalate any such issues through to the broker venues, NZFMA senior management and/or the Benchmark Review Committee.
Where there is no data (no BIDS and/or OFFERS) in the snapshot then the NZFMA Help Desk will contact all brokers to obtain a rate. From a systems perspective the market will be set to “Paused” and the Help Desk will take the following actions:

- If any broker rate(s) are offered over the phone we will enter the rate(s) into the contribution monitor and “Resume” the market for calculation – any action taken by the NZFMA will be fully audited in the system logs.
- If no broker rate(s) are offered over the phone (e.g. unable to contact anyone) then we will “Resume” the market ready to be calculated data – any action taken by the NZFMA will be fully audited in the system logs.
- There is a commitment from Participants to provide BID/OFFER prices for the 1-, 3- and 6-month bank bills, in a 5-basis point maximum spread, to allow interpolation of other tenors. In the event that this commitment is not met, the Help Desk will pause the BKBM calculation and request brokers to seek these rates from participants. If in the event that these rates cannot be obtained, then the calculation process will be resumed based on the hierarchy detailed below.

The BKBM Fixing Window will close at 10:40am and the BKBM market will be calculated at 10:41am, unless the NZFMA has had reason to pause the market as noted above.

The calculation process runs through several processes in a hierarchical order:

- All TRADES and VOLUMES will be used across all/any tenors in the calculation. A Trade Weighted average will be applied.
- Where there are no TRADES then the system will use all/any BIDS and OFFERS for each tenor. There will be a maximum spread applied between the BIDS and OFFERS, for each tenor, of five (5) basis points. If that is exceeded then the BIDS and OFFERS for that tenor will be disregarded.
- A straight-line interpolation will be used to determine the 2-, 4- and 5-month tenors provided that a BID/OFFER has been captured / received in the 1- and 6-month tenors within a data “snap”.
- If there are TRADES or BIDS & OFFERS only for the 3 Month bank bills for today, then these rates will be used to calculate a 3 Month BKBM rate. Then all other BKBM tenors will be calculated based on the movement of today’s 3 Month BKBM rate from yesterday’s BKBM rate, e.g. BKBM 3 Month has gone up by two basis points then all other BKBM tenors (1, 2, 4, 5, & 6) will be adjusted by 2 basis points from the previous day’s BKBM rates.
- If there is a single BID or a single OFFER in any tenor (1, 2, 4, 5, & 6) it will be ignored as we will use the rule set above to determine the BKBM rate for today for those tenors affected.
- Where we have valid 3 Month data and only BIDS or OFFERS in either the 1 month or 6 month we will use the BIDS or OFFERS as a MID point to interpolate through the transacted 3 Month Period. (Please note that there are a number of combinations that can occur and these are documented in the NZFMA Help Desk operation and rules manual).
- We will derive a BKBM MID rate and then base the standard BKBM spread to derive the BKBM BID/OFFER for all/any tenor that has not receive any trades.
- Finally the system will use yesterday’s BKBM MID/BID/OFFER calculated rate/s if no TRADES, BIDS or OFFERS are available for today for any bank bill.

The NZFMA Help Desk will review the calculated BKBM rates and should there be any concerns they can delay the “publication” of the rates and escalated to NZFMA senior management and/or the Benchmark Review Committee.

7.7 Publication

The BKBM rates are distributed at approximately 10:41am each business day, via the following distribution channels:

- XML feed to the information vendors. Vendors are obligated to display the BKBM rates on their vendor screens upon immediate receipt of the XML data.
- Delayed extract data to the NZFMA website (using web services).
- Spread sheet distribution for subscribers to the BKBM service.

NZFMA continue to publish FRA and MID values in the XML records to ensure customers are not required to reconfigure their own systems (note FRA is no longer calculated and is the same value as the MID BKBM rate).

As set out in the Complaints and Penalties section, the NZFMA Help Desk has the ability to make changes to the calculation and re-calculate the BKBM market if requested by the Benchmark Oversight Committee.
8.0 APPENDIX III

Fixed Establishment Warranty / Acceptance of Rules

SAMPLE

[date]

The New Zealand Financial Markets Association
P. O. Box 641
Wellington
New Zealand

Dear Sirs,

FIXED ESTABLISHMENT IN NEW ZEALAND

[Company name] confirms and represents and warrants that, on each date on which it enters into a sale and purchase of New Zealand dollar denominated certificates of deposit, it is engaged in business through a fixed establishment in New Zealand.

[Company name] will promptly advise the New Zealand Financial Markets Association ("NZFMA") of any change in circumstance that would or could potentially result in [Company name] to be not engaged in business through a fixed establishment in New Zealand for New Zealand income tax purposes.

[Company name] acknowledges that NZFMA and its members rely on the representations made in this letter in entering into the sale and purchase of certificates of deposit between [Company name] and members of NZFMA from time to time.

OPERATING RULES & PRINCIPLES OF THE BANK BILL BENCHMARK RATE (BKBM) AND THE BKBM TRADING WINDOW

[Company name] confirms that it has read, understands and agrees to comply with the Operating Rules & Principles of the Bank Bill Benchmark Rate (BKBM) and the BKBM Trading Window and further permits NZFMA to publish daily transactional data information relating to the BKBM Trading Window.

Yours faithfully

[sign off]

© NZFMA April 2017
BKBM Contributor Fixed Establishment Warranty
9.0  APPENDIX IV

Benchmark Oversight Committee – Guidelines & Terms of Reference

GUIDELINES

Purpose
The function of the Benchmark Oversight Committee (BOC) is to oversee the capture, calculation and publishing methodology of the New Zealand reference rates and indicative closing rates (Benchmark) calculated and published via the NZdata Service by the NZFMA (Benchmark Administrator). The BOC supports the integrity, efficiency and reputation of NZFMA Benchmarks.

The BOC will review and provide challenge on all aspects of the Benchmark determination process appropriate to the Benchmark in question (ie. including its size, scale and complexity) and provide effective oversight of the Administrator. This includes consideration of the features and intended, expected or known usage of the Benchmarks and the materiality of existing or potential conflicts of interest identified.

The Benchmark Oversight Committee’s responsibility is limited to the benchmarks calculated and published by the NZdata Service and does not extend to any third party data sources published by the NZdata Service.

Governance
The NZFMA as Benchmark Administrator has established a Benchmark Oversight Committee. This Committee is made up of Benchmark submitters, Benchmark users, independent industry experts and the regulators.

Formation
Members of the Benchmark Oversight Committee are appointed annually by the NZFMA Board at its Annual General Meeting and will include representation from NZFMA member representatives experienced in the New Zealand financial markets. The Committee’s chairperson will be appointed at the first Committee meeting following the Annual General Meeting.

Responsibilities
The Benchmark Oversight Committee will conduct reviews, exercise collective scrutiny, consider conflicts of interest and determine complaints relating to all Benchmarks captured, calculated and published by the Benchmark Administrator. (Refer the BOC Terms of Reference below).

Meetings
The Benchmark Oversight Committee will meet on a quarterly basis or ‘as required’. Telephone and videoconference linkages can be used to facilitate meetings. NZFMA members who are not represented on the BOC can raise issues to be included on the agenda.

Voting
A quorum for a Benchmark Oversight Committee meeting is two thirds of the committee members.

Where matters for determination cannot be agreed by consensus, an affirmative vote from at least 75% of committee members present is required for a motion to be carried.

Before finalising its view on a matter that may be significant in a wider market context, the BOC should refer the matter to the NZFMA Board for guidance.

Agenda & Minutes
NZFMA will provide administrative support at each meeting of the BOC.

The Agenda for each meeting will include confirmation of the minutes of the previous meeting, progress on action items from previous meetings, new business items for the meeting, and an ‘other business’ item.

The Minutes from each meeting will be circulated to the Committee members within 10 working days from the date of the meeting.
TERMS OF REFERENCE

The following are the responsibilities of the Benchmark Oversight Committee:

1. Conduct regular reviews of all aspects of the determination of the Benchmarks, including the methodology, features, definition, scope and setting.
2. Assess aspects listed in 1 above, including the underlying interest and the usage of the Benchmarks.
3. Exercise collective scrutiny of individual submissions of contributed markets if and when required.
4. Oversee the practice standards in the Operating Rules & Principles relevant to each Benchmark, and reviewing these documents as required.
5. Monitor the regularity of contributions made to contributed markets.
6. Develop proposals for consultation of prospective changes to Benchmark methodologies as required, and have regard to any representations made in response to consultations undertaken.
8. Review incidences of suspected manipulation of the Benchmark.
9. Consider existing or potential conflicts of interest where material.
10. Take measures to remain informed about material issues and risks relating to the setting of Benchmarks.
11. Oversee the Benchmark Administrator’s adherence to its published methodologies, including calculation, re-fix and business continuity policies.
12. Recommend as appropriate that external review of the Benchmarks be commissioned by the Benchmark Administrator.
13. Consider recommendations made pursuant to internal or external reviews of the Benchmark Administrator’s compliance with published methodologies, applicable laws and regulation.
14. Follow up on remedial actions required to implement any recommendations identified under 13 above, as appropriate.
15. Refer any conflict between the Committee’s decisions and the responsibilities of NZFMA’s Board to the Chair of the Committee and the Chair of NZFMA’s Board for resolution.
16. Keep these Terms of Reference of the Committee under regular review.
10.0 APPENDIX V

BKBM Benchmark Calculation Process – Decision Tree

90 DAY TENOR EXAMPLE – TRADES, THEN BIDS/OFFERS, THEN YESTERDAY’S RATES

- NZFMA Web Service
- Get Broker Data for BKBM Market
  - Request all broker data (BIDS/OFFERS) over the 2 minute window
  - Recorded in Event Log
- Any TRADES?
  - YES
  - Brokers will enter all TRADES into NZData systems ready for daily calculations
  - Calculate Using TRADES/BIDS/OFFERS or yesterday’s rates
  - NO
  - Interrogate collected data
  - Recorded in Event Log
- Any BIDS/OFFERS in database?
  - YES
  - Most external
    (basis point tolerance)
  - NO
  - NZFMA Helpdesk to contact brokers via phone
  - Recorded in Event Log
- Any BIDS/OFFERS provided by brokers?
  - YES – Helpdesk enter into system
  - NO
  - Use yesterday’s rates
11.0 APPENDIX VI

Key Definitions

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

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

b) Determining a Benchmark through the application of a formula or another method of calculating the information or expressions of opinions provided for that purpose; and

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

Audit trail: For the purposes of the Benchmark determination process, the documentation and retention of all relevant data, submissions, other information, judgments (including the rationale for any exclusions of data), analyses and identities of Submitters used in the Benchmark setting process for an appropriate period.

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

a) Made available to users, whether free of charge or for payment;

b) Calculated periodically, entirely or partially by the application of a formula or another method of calculation to, or an assessment of, the value of one or more underlying Interests;

c) Used for reference for purposes that include one or more of the following:
   • determining the interest payable, or other sums due, under loan agreements or under other financial contracts or instruments;
   • determining the price at which a financial instrument may be bought or sold or traded or redeemed, or the value of a financial instrument; and/or
   • measuring the performance of a financial instrument.

Benchmark Administrator ("Administrator"): An entity or legal person that controls the creation and operation of the Benchmark Administration process, whether or not it owns the intellectual property relating to the Benchmark. In particular, it has responsibility for all stages of the Benchmark Administration process, including:

1. The calculation of the Benchmark;
2. Determining and applying the Benchmark methodology; and
3. Disseminating the Benchmark.

BKBM Fixing Window: Period between 10:20am and 10:40am including the BKBM Trading Window and the period immediately following and prior to calculation.

BKBM Trading Window: Two minute period between 10:20am and 10:22am being the trading period used for the capture and calculation of the BKBM Benchmark.

Bloomberg: A third party platform that provides a real time source of market data, pricing information and news.

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

‘Good’ Business Day:
A ‘good’ business day is defined as a day on which banks in New Zealand are generally open for business, or a day other than one on which banks in New Zealand are obliged or permitted to close - specifically excluding Saturday and Sunday.

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2 Source: IOSCO Principles for Financial Benchmarks July 2013 and NZFMA internal documents.
Essentially, good business days are weekdays (Monday to Friday) other than public holidays.

In general, NZFMA recommends that transactions should not be negotiated for settlement or price fixing (rollover) on a non-business day (see below for non-business days in New Zealand). Other conventions can be utilised, if agreed upon at the time of dealing.

**Calculation Agent:** An entity with delegated responsibility for determining a Benchmark through the application of a formula or other method of calculating the information or expressions of opinions provided for that purpose, in accordance with the methodology set out by the Administrator.

**Contingency procedure:** An alternative to the normal procedure – triggered if an unusual but anticipated situation arises.

**Deal-able:** Price or quotation that a client can contact a dealer about, and which the dealer has discretion to alter.

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

**Market parcel:** The minimal notional size of a trade (or bid or offer) for a financial instrument that is accepted by Price-makers as a fair reflection for a standard market transaction.

**Methodology:** The written rules and procedures according to which information is collected and the Benchmark is determined.

**Over-the-Counter:** Financial instruments that are bought and sold and privately negotiated directly between two counterparties, without the use of an exchange or other intermediary.

**Participants:** Legal entities involved in the production, structuring, use or trading of financial contracts or financial instruments used to form the Benchmark, or which reference the Benchmark.

**Price-maker:** A financial institution approved by the NZFMA to supply two-way quotations via a third party platform for the calculation of the NZSW Benchmark.

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

**Regulatory Authority:** A governmental or statutory body (not being a Self-Regulatory Organisation) with responsibility for securities and/or commodities and futures regulation.

**Repeated Failure:** More than one breach of the Rules in a calendar month

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

**Submission(s):** Prices, estimates, values, rates or other information that is provided by a Price-maker to an Administrator for the purposes of determining a Benchmark. This excludes data sourced from Regulated Markets or Exchanges with mandatory post-trade transparency requirements.

**Subscriber:** A person or entity that purchases Benchmark determination services from an Administrator.

**Two-way:** A price that has a bid price (yield) and an offer price (yield). The bid offer spread is the difference between the bid price and offer price.