



# REFINITIV BENCHMARK SERVICES (UK) LIMITED

SAUDI ARABIAN INTERBANK OFFERED RATE (SAIBOR)

SAUDI ARABIAN INTERBANK BID RATE (SAIBID)

ENHANCED METHODOLOGY



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# Contents

<b>1.</b>	<b>INTRODUCTION .....</b>	<b>4</b>
1.1	Overview.....	4
1.2	Benchmark Administrator .....	4
1.3	Description of the Benchmarks.....	5
1.4	Benchmark Definitions.....	5
1.5	Intended Readership .....	6
1.6	Document Publication.....	6
<b>2.</b>	<b>INPUT DATA.....</b>	<b>7</b>
2.1	Contributor Banks.....	7
2.2	Methodology Waterfall.....	8
2.2.1	Waterfall Overview.....	8
2.2.2	Waterfall Level 1 .....	8
2.2.3	Waterfall Level 2 .....	9
2.2.4	Waterfall Level 3 .....	10
2.2.5	Lookback Period .....	11
2.2.6	Spread Percentage .....	11
2.2.7	Expert Judgment.....	12
2.2.8	Credit Spread Adjustment.....	12
2.2.9	SAMA Policy Rate Moves .....	13
2.2.10	Transaction Tenor Criteria .....	15
<b>3.</b>	<b>DETERMINATION OF SAIBOR AND SAIBID .....</b>	<b>16</b>
3.1	Contribution Procedures .....	16
3.2	Minimum Contribution Criteria .....	16
3.3	Fallback Arrangement.....	17
3.4	Exercise of Expert Judgment by the Administrator .....	17
<b>4.</b>	<b>PUBLICATION AND REFIX POLICY.....</b>	<b>18</b>
4.1	Publication .....	18
4.2	Delayed Publication .....	18
4.3	Refix Policy.....	18
<b>5.</b>	<b>Benchmark Methodology Reviews and Change Procedures .....</b>	<b>19</b>
5.1	Review of the Methodology and Input Data Providers .....	19
5.2	Changes to the Methodology .....	19
5.3	Objective of the Methodology .....	19
5.4	Identification of Potential Limitations of the Benchmark.....	19
<b>6.</b>	<b>GOVERNANCE AND FURTHER INFORMATION.....</b>	<b>20</b>
6.1	Benchmark Administrator .....	20
6.2	Oversight Committee.....	20
6.3	Benchmark Manager .....	20
6.4	User Feedback.....	20

6.5	Further Information .....	20
7.	<b>Definitions</b> .....	<b>21</b>

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# 1. INTRODUCTION

## 1.1 Overview

This document specifies the Methodology of the Saudi Arabian Interbank Offered Rate (SAIBOR) and the Saudi Arabian Interbank Bid Rate (SAIBID).

SAIBOR and SAIBID are calculated using input data (Contributions) from a panel of Contributor banks. Further to the SAIBOR Methodology Change Announcement<sup>1</sup> issued by RBSL on 3<sup>rd</sup> December 2021, each Contributor will transition from the original SAIBOR Methodology (“Legacy Methodology”) and original SAIBID Methodology to a new combined SAIBOR and SAIBID Methodology (“Enhanced Methodology”) during a transition period starting on 2<sup>nd</sup> January 2022. One Contributor will transition to the Enhanced Methodology each week and the transition period will last for approximately 12 weeks. In addition, the Methodology Change Announcement noted that from 2<sup>nd</sup> January 2022 the Contribution window will move to 11:00am – 11:50am KSA time, that the publication of SAIBOR and SAIBID will move to 12:00pm KSA time and that Refinitiv would begin to calculate and distribute SAIBID on behalf of its current administrator (Riyad Bank). At the conclusion of the transition period, RBSL will become the administrator of SAIBID.

**This document specifies the Enhanced Methodology for SAIBOR and SAIBID.** The SAIBOR Legacy Methodology is available on the Refinitiv website<sup>2</sup>.

This Methodology and the SAIBOR and SAIBID benchmarks are subject to the disclaimer above. All capitalised terms shall have the meaning given to them in section 7 (Definitions).

## 1.2 Benchmark Administrator

Refinitiv Benchmark Services (UK) Limited (“RBSL”) is the Administrator of SAIBOR. RBSL is incorporated in England and Wales and is a wholly owned subsidiary of Refinitiv Limited (“RL”), itself a wholly owned indirect subsidiary of London Stock Exchange Group plc (“LSEG”).

RBSL is authorised and regulated in the UK by the Financial Conduct Authority (“FCA”), FCA Reference Number 610678.

As Administrator, RBSL is responsible for collecting input data, determining and publishing the benchmarks, and for all aspects of governance, oversight, compliance and integrity of SAIBOR.

Refinitiv will calculate and distribute SAIBID on behalf of its current administrator (Riyad Bank) during the transition period. At the conclusion of the transition period, RBSL will become the administrator of SAIBID.

<sup>1</sup> [www.refinitiv.com/content/dam/marketing/en\\_us/documents/methodology/saibor-methodology-change-announcement.pdf](https://www.refinitiv.com/content/dam/marketing/en_us/documents/methodology/saibor-methodology-change-announcement.pdf)

<sup>2</sup> [www.refinitiv.com/en/financial-data/financial-benchmarks/interest-rate-benchmarks/saibor-rates](https://www.refinitiv.com/en/financial-data/financial-benchmarks/interest-rate-benchmarks/saibor-rates)

### 1.3 Description of the Benchmarks

SAIBOR and SAIBID are determined using Contributions from a panel of Contributor Banks. The Contributor Banks use a waterfall in order to determine their Contributions for SAIBOR and SAIBID.

For Level 1 of the waterfall, Contributions are volume weighted average prices (VWAPs) of all eligible unsecured Saudi Riyal transactions. The VWAP of a Contributor Bank's eligible transactions is its Contribution for SAIBID. The VWAP plus an amount determined using the Spread Percentage is its Contribution for SAIBOR.

For Level 2 of the waterfall, Contributions are volume weighted average prices (VWAPs) of all eligible Saudi Riyal repo transactions secured with any type of Saudi Riyal fixed income security. A Credit Spread Adjustment determined using expert judgment is added by the Contributor Bank to determine its SAIBID Contribution. An amount determined using the Spread Percentage is then added to determine its SAIBOR Contribution. Level 2 is used by a Contributor Bank only if it has insufficient eligible transactions to make a Contribution in accordance with Level 1.

For Level 3, a Contributor Bank will use expert judgment. If the Contributor Bank has transactions that would be eligible for Level 1 or Level 2 except that they occurred before a move in policy rates by the Saudi Central Bank (SAMA), the Contributor shall adjust such transaction rates using expert judgment to reflect the move in policy rates and to determine its Contribution. Otherwise, if a Contributor Bank has insufficient eligible transactions to determine a Contribution for Level 1 or Level 2 of the waterfall, expert judgment alone shall be used. The Contribution for SAIBOR based on expert judgment will include the Spread Percentage.

The waterfall is applied by Contributor Banks individually for each tenor of SAIBOR and SAIBID.

The benchmarks comprise the following tenors: overnight (O/N), 1 week, 1 month, 3 months, 6 months and 12 months. The benchmarks are published Sunday to Thursday at 12:00pm KSA<sup>3</sup> subject to local market holidays.

### 1.4 Benchmark Definitions

The objective of both SAIBOR and SAIBID is to reflect the true price of unsecured wholesale liquidity in the Kingdom of Saudi Arabia (KSA) Market. Wholesale liquidity is defined as unsecured Saudi Riyal funding from all sources for the Contributor Banks with maturities of less than one year (subject to the minimum size and other criteria) excluding equity.

#### SAIBOR Definition

*The Saudi Arabian Interbank Offered Rate ("SAIBOR") benchmark is an indicative offer rate at which contributor panel banks would be able to borrow unsecured interbank funds*

<sup>3</sup> The time in the Kingdom of Saudi Arabia (KSA)

*in Saudi Riyals, anchored in transactions where possible together with a historical spread adjustment. A waterfall methodology is applied to enable a rate to be published in a wide range of market circumstances.*

#### **SAIBID Definition**

*SAIBID is a benchmark representing the realised cost of contributor panel banks' wholesale unsecured funding in Saudi Riyals, anchored in transactions where possible. A waterfall methodology is applied to enable a rate to be published in a wide range of market circumstances.*

### **1.5 Intended Readership**

This document is intended for stakeholders of the SAIBOR and SAIBID.

### **1.6 Document Publication**

This document is available on the Refinitiv website and on request.

## 2. INPUT DATA

### 2.1 Contributor Banks

SAIBOR and SAIBID are determined using Contributions from a panel of Contributor Banks. The universe of banks eligible for consideration as Contributor Banks in respect of the Benchmark will be banks that are:

- Active in the Saudi Arabian Money Market,
- Willing to accept and implement the Contributor Code of Conduct for SAIBOR and SAIBID, a copy of which is available at [www.refinitiv.com/en/financial-data/financial-benchmarks/interest-rate-benchmarks/saibor-rates](http://www.refinitiv.com/en/financial-data/financial-benchmarks/interest-rate-benchmarks/saibor-rates),
- Willing to agree to regulation by relevant authorities in Saudi Arabia, should the benchmarks become regulated.

If anything comes to the attention of RBSL that leads RBSL to believe that a Contributor Bank is not adhering to the Contributor Code of Conduct, the Administrator may not use input from that Contributor Bank until the situation is clarified or rectified to RBSL's satisfaction in accordance with the process specified in the Contributor Code of Conduct

At the effective date of this Methodology, the panel of Contributor Banks comprises:

- Arab National Bank
- Bank Aljazira
- Banque Saudi Fransi
- Saudi National Bank
- Riyadh Bank
- Saudi British Bank
- Saudi Investment Bank
- Alinma Bank
- Bank Albilad
- Al Rajhi Bank
- Gulf International Bank

The panel may be updated from time to time. Changes to the panel of Contributor Banks are available on request to RBSL. The panel size and membership are sufficient to ensure that the input data used in the determination of SAIBOR and SAIBID are representative of the unsecured market for wholesale funds in Saudi Riyals.

Contributor Banks are required by the Contributor Code of Conduct to develop and maintain their own submission procedures covering all aspects of the process for making Contributions including the use of expert judgment<sup>4</sup>.

## 2.2 Methodology Waterfall

### 2.2.1 Waterfall Overview

The following table summarises the methods for forming Contributions under the Methodology waterfall:

	SAIBID Contribution	SAIBOR Contribution
Level 1	VWAP only	VWAP plus Spread Percentage
Level 2	VWAP (including Credit Spread Adjustment) only	VWAP (including Credit Spread Adjustment) plus Spread Percentage
Level 3	Expert judgment of the rate of unsecured eligible transactions had any occurred in the last Business Day (subject to the process described below for SAMA Policy Rate Moves)	Expert judgment of the rate of unsecured eligible transactions had any occurred in the last Business Day and including the Spread Percentage (subject to the process described below for SAMA Policy Rate Moves)

### 2.2.2 Waterfall Level 1

Where a Contributor Bank has sufficient eligible transactions, a volume weighted average price (VWAP) of all such eligible transactions shall be calculated by the Contributor Bank. The VWAP shall be the Contribution for SAIBID and the VWAP added to an amount calculated with the Spread Percentage shall be the Contribution for SAIBOR.

In order to be eligible for inclusion in a Level 1 VWAP calculation for a specific tenor, transactions are subject to the following criteria: (i) transaction type, (ii) transaction counterparty type, (iii) transaction size, (iv) minimum number of transaction counterparties and (v) a suitable maturity for the tenor (see section 2.2.10, Transaction Tenor Criteria).

The eligible transaction types entered into by a Contributor Bank to be included in a Level 1 VWAP calculation are:

- Unsecured wholesale Saudi Riyal deposits received or raised by the Contributor Bank<sup>5</sup> from an eligible counterparty,
- Domestic primary and secondary market transactions by a Contributor Bank where it raises funds via unsecured certificates of deposit (CDs) and commercial paper (CPs) where such instruments are:
  - i. denominated in Saudi Riyals, and
  - ii. the transactions take place in the domestic KSA market; and

<sup>4</sup> For further information, please refer to the Contributor Code of Conduct at [www.refinitiv.com/en/financial-data/financial-benchmarks/interest-rate-benchmarks/saibor-rates](http://www.refinitiv.com/en/financial-data/financial-benchmarks/interest-rate-benchmarks/saibor-rates).

<sup>5</sup> Including deposits received or raised by branches of the Contributor Bank from an eligible counterparty.



- iii. issued by the relevant Contributor Bank itself.

The following transaction types are excluded and are therefore not eligible to be included in a Level 1 VWAP calculation:

- Structured deposits,
- Internal transactions such as transactions with a subsidiary (including a subsidiary that is a fund and including transactions between Contributor Bank branches and its head office),
- Unsecured deposits made by SAMA **except where** deposits are transacted at market prices **and** are specified for inclusion by SAMA,
- Transactions which have been entered into outside of the Lookback Period. (See section 2.2.5, Lookback Period),
- Transactions that occur before a move in the repo or reverse repo policy rates by SAMA. (See section 2.2.9, SAMA Policy Rate Moves).

The eligible counterparties types are:

- Banks,
- All central banks (including SAMA **but only** where deposits are transacted at market prices **and** are specified for inclusion by SAMA),
- Government Related Entities (GREs),
- Non-bank Financial Institutions,
- Corporates and all retail clients (that meet the required minimum threshold amount).

For the O/N, 1 week, 1 month and 3 month SAIBOR and SAIBID tenors, the minimum size for a transaction to be eligible is SAR10 million. For the 6 and 12 month tenors, there is no individual transaction size but the aggregate size of all transactions used for a 6 or 12 month tenor Level 1 VWAP calculation must be equal to or greater than SAR50 million.

The minimum number of transaction counterparties across all eligible transactions used for a Level 1 VWAP calculation for a specific tenor is two different counterparties except that provided if only one eligible transaction has taken place following a move in policy rates by SAMA during the Lookback Period, that single transaction shall be used to make a Level 1 submission.

### 2.2.3 Waterfall Level 2

If a Contributor Bank has insufficient eligible transactions to make a Level 1 VWAP calculation for a specific SAIBOR and SAIBID tenor, the Contributor Bank shall use Level 2. Where a Contributor Bank has sufficient eligible transactions for Level 2, a volume weighted average price (VWAP) of all such eligible transactions for Level 2 shall be calculated by the Contributor Bank.

As SAIBOR and SAIBID represent the price of unsecured wholesale liquidity, a Contributor Bank will use expert judgment to determine the Credit Spread Adjustment (see section 2.2.8, Credit Spread Adjustment) to adjust for the secured nature of repo transactions. The Credit Spread Adjustment is added to the VWAP.

The VWAP plus the Credit Spread Adjustment shall be the Contribution for SAIBID. The VWAP plus the Credit Spread Adjustment is added to an amount calculated with the Spread Percentage (applied to the VWAP plus the Credit Spread Adjustment) to determine the Contribution for SAIBOR.

In order to be eligible for inclusion in a Level 2 VWAP calculation for a specific tenor, transactions are subject to the following criteria: (i) transaction type, (ii) transaction counterparty type, (iii) transaction size, (iv) minimum number of transactions and (v) a suitable maturity for the tenor (see section 2.2.10, Transaction Tenor Criteria).

The eligible transaction types entered into by a Contributor Bank to be included in a Level 2 VWAP calculation are:

- Saudi Riyal repo transactions (excluding those with SAMA) which have the economic effect of the Contributor Bank being the receiver (i.e. borrower) of Saudi Riyals. All types of Saudi Riyal fixed income securities are permitted collateral for an eligible repo transaction.

The following transaction types are excluded and are therefore not eligible to be included in a Level 2 VWAP calculation:

- Internal transactions such as transactions with a subsidiary (including a subsidiary that is a fund and including transactions between Contributor Bank branches and its head office),
- Repo transactions with SAMA,
- Transactions which have been entered into outside of the Lookback Period. (See section 2.2.5, Lookback Period),
- Transactions that occur before a move in the repo or reverse repo policy rates by SAMA. (See section 2.2.9, SAMA Policy Rate Moves).

The eligible counterparties types for Level 2 are the same as those for Level 1 except that SAMA is excluded for Level 2.

The minimum size requirements for a transaction or transactions for a Level 2 VWAP calculation are the same as those for a Level 1 VWAP calculation.

The minimum number of eligible transactions used for a Level 1 VWAP calculation for a specific tenor is one (i.e. a single eligible transaction).

#### **2.2.4 Waterfall Level 3**

The SAIBOR contributor banks may only provide a Level 3 submission if there are insufficient eligible transactions to make a submission at Level 1 or Level 2.

If there are transactions that would be eligible for Level 1 or Level 2, except that they took place prior to a move in policy rates, the process described below under SAMA Policy Rate Moves shall be followed for the purpose of Level 3.

Otherwise, if there are insufficient transactions to make a Level 1 or Level 2 submission, or to follow the process described under SAMA Policy Rate Moves, expert judgment alone shall be used to make a Level 3 submission. In such cases, expert judgment will estimate the VWAP that would have been calculated had any unsecured eligible transactions occurred in the last business day and will include the Spread Percentage adjustment to that estimated VWAP for a SAIBOR submission and will exclude the Spread Percentage adjustment to that estimated VWAP for a SAIBID submission.

Subject to the procedure described for SAMA Policy Rate Moves (see section 2.2.9, SAMA Policy Rate Moves), the acceptable inputs and references that may be used to determine a Level 3 Contribution for a specific tenor in accordance with expert judgment are:

- Transactions that are outside the specified tenor buckets,
- Interpolation/extrapolation (from transactions in the markets underlying Level 1 and Level 2),
- Other market instruments: interest rate swaps, money market operation rates, forward rate agreement/single period swaps, overnight-indexed swaps, SAMA bills,
- Macro-economic factors (monetary policy change, policy rate change in major economies & significant economic data),
- Credit standing i.e. a published and verifiable change in the credit standing of the bank, and
- Other factors: those that can be evidenced and verified subject to the Contributor Bank's submission procedures.

### **2.2.5 Lookback Period**

When identifying eligible transactions for Level 1 or Level 2, a Contributor Bank must first use transactions executed during the last Business Day. If there are insufficient eligible transactions in the last business day, the Contributor Bank may extend the period to the last two Business Days. This process may be repeated, extending the period by one Business Day at a time, until either sufficient eligible transactions have been obtained or until a maximum of five Business Days has been reached (the "Lookback Period") subject to any SAMA Policy Rate Moves.

For the avoidance of doubt, the process of looking back by one extra Business Day at a time (up to a maximum of 5 Business Days and subject to any SAMA Policy Rate Moves) must be completed for Level 1 before the Contributor Bank moves to Level 2. If sufficient eligible transactions are found in the Lookback Period for Level 1, these will be used to create a submission even if more recent transactions exist that would be eligible for Level 2.

Contributor Banks are allowed to use Level 3 inputs and references without any restriction on maximum number of Business Days.

### **2.2.6 Spread Percentage**

VWAPs calculated in accordance with Level 1 or Level 2 of the Methodology waterfall are typically representative of the bid side of the market and are used as Contributions for SAIBID.

For Level 1 Contributions, an amount calculated by applying the Spread Percentage to the VWAP is added to the VWAP by a Contributor Bank to determine a suitable Contribution for SAIBOR, which represents the offered side of the market. For Level 2 Contributions, the Spread Percentage is applied to the sum of the VWAP and the Credit Spread Adjustment.

The Spread Percentage is 16%<sup>6</sup>. The Spread Percentage will be reviewed from time to time by RBSL with the Contributor Banks on at least an annual basis and more frequently if required by market conditions. Any proposed change to the Spread Percentage will be submitted to SAMA for its approval. Should market conditions require it, a cap to the amount calculated using the Spread Percentage may be introduced. Any proposed cap will be reviewed by RBSL with the Contributor Banks and shall be submitted to SAMA for its approval. The cap will then be reviewed on at least an annual basis and more frequently if required by market conditions. Amendments to the Spread Percentage or the introduction of a cap via the mechanisms described above are part of this Methodology and shall not constitute changes to it.

### 2.2.7 Expert Judgment

Expert judgment must be in accordance with internal submission procedures developed by each Contributor Bank. Internal submission procedures must be available at all times to be shared with SAMA and/or RBSL upon request. Where expert judgment is used, a Contributor Bank must record all the factors used in determining the Contribution it makes and such records must be available at all times to be shared with SAMA and/or RBSL upon request<sup>7</sup>.

### 2.2.8 Credit Spread Adjustment

Saudi Riyal repo transactions used in Level 2 may be collateralised with any type of Saudi Riyal fixed income security. Such a secured transaction will typically be priced at a lower rate than an equivalent unsecured transaction. In order to maintain consistency with Level 1 submissions and the objective of SAIBOR and SAIBID, a Contributor Bank will use expert judgment to include a suitable credit premium (Credit Spread Adjustment) in the VWAP created from the secured repo transaction(s) before making the Level 2 submission. Expert judgment may not be used for any other purpose for a Level 2 submission and is subject to the submission procedures and recording keeping requirements described under section 2.2.7 (Expert Judgment). The credit premium should reflect the nature and credit quality of the collateral used in the repo transaction(s) and result in a submission rate that is equivalent to an unsecured transaction rate<sup>8</sup>.

<sup>6</sup> To illustrate how the Spread Percentage amount is to be calculated and used, if a Contributor Bank calculates a volume weighted average price (VWAP) for Level 1 (or, for Level 2 the sum of the VWAP and Credit Spread Adjustment) of 75 basis points using eligible transactions, the Spread Percentage amount will be 16% of this, or 12 basis points, and the final SAIBOR submission will be  $75 + 12 = 87$  basis points.

<sup>7</sup> For further information, please refer to the Contributor Code of Conduct at [www.refinitiv.com/en/financial-data/financial-benchmarks/interest-rate-benchmarks/saibor-rates](http://www.refinitiv.com/en/financial-data/financial-benchmarks/interest-rate-benchmarks/saibor-rates).

<sup>8</sup> To illustrate the use of the credit spread adjustment, a Contributor Bank might develop a submission methodology that reflects recent spreads between repo transactions and unsecured transactions. For instance, if repo transactions involving government bonds occurred at 50 basis points in recent days and the Contributor Bank's equivalent unsecured transactions at the same time were at 70 basis points, a spread of 20 basis points could be used as the Credit Spread Adjustment when required for a Level 2 submission. Similarly, if the repo transaction occurred at 60 basis points because non-government collateral was used,

## 2.2.9 SAMA Policy Rate Moves

No transaction that occurs before any move in the repo or reverse repo policy rates by SAMA during the Lookback Period (SAMA Policy Rate Move) will be an eligible transaction for Level 1 or Level 2. This also applies intraday: any transaction that occurs before a policy rate move during a business day will not be an eligible transaction. The following procedure shall apply following a SAMA Policy Rate Move:

1. Eligible transactions that take place after the policy rate move will be used to make a Level 1 contribution. If there are insufficient eligible transactions (see Level 1 eligibility criteria above) following such a move during the maximum five day Lookback Period, Level 2 will be used.
2. Eligible transactions that take place after the policy rate move will be used to make a Level 2 submission. If there are insufficient eligible transactions (see Level 2 eligibility criteria above) following such a move during the maximum five day Lookback Period, Level 3 will be used.
3. Where Level 3 is used following a policy rate move by SAMA, both Level 1 eligible transactions and also Level 1 transactions that would have been eligible except for the fact that they took place before the SAMA Policy Rate Move during the Lookback Period will be used, when exercising expert judgment, to create a VWAP, subject to the process described under section 2.2.5 (Lookback Period). The VWAP will then be adjusted by the Contributor Bank to adjust for the effect of the move in policy rates. Such adjustment will be in accordance with the Contributor Bank's documented internal contribution procedure. Contributions for SAIBOR will include the Spread Percentage adjustment to the final VWAP and contributions for SAIBID will exclude the Spread Percentage adjustment to the final VWAP.
4. Where Level 3 is used following a SAMA Policy Rate Move and there are insufficient Level 1 eligible transactions (see Level 1 eligibility criteria above) to create a submission even when including Level 1 transactions that took place before the SAMA Policy Rate Move during the Lookback Period, then both Level 2 eligible transactions and also Level 2 transactions that would have been eligible except for the fact that they took place before the SAMA Policy Rate Move will be used to create a VWAP, subject to the process described under section 2.2.5 (Lookback Period) and including the Credit Spread Adjustment. For the purposes of exercising expert judgment, the VWAP will then be adjusted by the Contributor Bank to adjust for the effect of the SAMA Policy Rate Move. Such adjustment will be in accordance with the Contributor Bank's documented internal submission procedure. Contributions for SAIBOR will include the Spread Percentage adjustment to the final VWAP and contributions for SAIBID will exclude the Spread Percentage adjustment to the final VWAP.

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the Credit Spread Adjustment could then be 10 basis points. This Credit Spread Adjustment could then be updated every time there are repo and unsecured transactions with comparable tenors on the same day.

5. If there are insufficient transactions for both Level 1 and Level 2 including transactions that took place prior to a SAMA Policy Rate Move, expert judgment alone will be used by a SAIBOR Contributor Bank to make a submission.
6. Where a VWAP is adjusted at Level 3 as described above, the size of the adjustment should not exceed the size of the SAMA Policy Rate Move except where the Contributor Bank has strong reasons to believe that a larger adjustment is required to ensure that the contribution is representative of current market conditions. In all cases where expert judgment is used including such VWAP adjustments, a Contributor Bank must record all the factors used in determining the contribution it makes as detailed under section 2.2.7 (Expert Judgment) above.

### 2.2.10 Transaction Tenor Criteria

The maturity ranges for transactions to be eligible for each tenor of SAIBOR and SAIBID are as follows:

<b>Tenor</b>	<b>Permitted maturity range</b>
O/N (Overnight)	1 business day, and must be an overnight transaction
1 week	5 business days
1 month	From 25 to 35 calendar days inclusive
3 months	From 80 to 100 calendar days inclusive
6 months	From 150 to 210 calendar days inclusive
12 months	From 330 to 390 calendar days inclusive

## 3. DETERMINATION OF SAIBOR AND SAIBID

### 3.1 Contribution Procedures

Contributor Banks will provide two distinct Contributions for each tenor, as follows:

- The unadjusted Contribution<sup>9</sup> in accordance with section 2.2, which will then be used by Refinitiv as calculator and distributor to calculate SAIBID; and
- The Contribution as adjusted by applying an amount calculated with the Spread Percentage in accordance with section 2.2, which will then be used by RBSL as Administrator to calculate SAIBOR.

Contributor banks will also submit the level of the waterfall used when making a submission. RBSL shall not publish such waterfall level information but shall make it available to SAMA on request and, in aggregated form, to the Technical Working Group or its successor on request. For the avoidance of doubt, waterfall levels do not constitute any part of the benchmarks.

Contributor Banks must contribute rates to all data points between 11:00am to 11:50 KSA. The last Contribution received from each Contributor Bank before the contribution window is closed will be taken for use in the calculation.

Contributor Banks can make changes to their Contributions as many times as required up until 11:50am KSA. Any new Contribution will overwrite the previous Contribution.

Where 5 or more Contributions are received by 11:50am KSA, the two highest and two lowest Contributions are discarded in accordance with the Minimum Contribution Criteria detailed in 3.2, and the remaining rates averaged.

### 3.2 Minimum Contribution Criteria

If fewer than 5 Contributions are received, the Benchmark will not be calculated and the previous setting will be republished with a notification of republication.

Where 5 or more Contributions are received, the Contributions will be applied with a trimming methodology where the two highest and two lowest Contributions, per tenor, are excluded from the calculation, once 5 or more Contributions are received.

Contributions Received	Number of High Contributions Trimmed	Number of Low Contributions Trimmed
0 – 4	N/A – Republication with Notification	N/A – Republication with Notification
= 5 or > 5	2	2

<sup>9</sup> Except that where waterfall level 2 is used, the Contribution will include the Credit Spread Adjustment.



Once the trimming methodology has been applied, the SAIBOR and SAIBID benchmarks will be calculated as an average of the remaining rates and published to 5 decimal places.

### **3.3 Fallback Arrangement**

If the minimum 5 Contributions are not received by 11:50am KSA, a fallback arrangement is triggered.

Triggering the fallback arrangement extends the contribution window to 12:30pm KSA to accept additional Contributions from Contributor Banks who have not contributed.

If the minimum Contributions are reached by 12:30pm KSA, the benchmarks will be released. If not, the previous setting will be republished with a notification of republication at 12:30pm KSA.

### **3.4 Exercise of Expert Judgment by the Administrator**

RBSL will not exercise expert judgment in the determination of SAIBOR. Refinitiv as calculator and distributor of SAIBID will not exercise expert judgment in the determination of SAIBID

## 4. PUBLICATION AND REFIX POLICY

### 4.1 Publication

SAIBOR and SAIBID are published at 12:00pm KSA Sunday to Thursday, subject to local market holidays. (Prior to 2<sup>nd</sup> January 2022, SAIBOR and SAIBID were published at 11:00am KSA.)

### 4.2 Delayed Publication

RBSL may at its discretion delay publication of SAIBOR and Refinitiv may at its discretion delay publication of SAIBID in the event that technical difficulties prevent receipt of input data or if RBSL or Refinitiv (as appropriate) have reason to believe that either the input data or the determination of the benchmarks contains an error. In such cases, all reasonable efforts will be made to publish the benchmarks at the earliest opportunity. If the potential error cannot be resolved or rectified, the previous setting will be republished with a notification of republication for the affected tenor(s) and setting.

### 4.3 Refix Policy

The benchmarks will not be re-fixed if a Contributor Bank identifies an error to its Contribution(s) after the publication time.

If an error is identified in the calculation or published benchmarks before 1:00pm KSA, an alert will be published on the Refinitiv FIXALERT page to alert market participants and will use reasonable efforts to re-fix and republish the benchmarks by 1:00pm KSA.

If a benchmark setting is re-fixed and republished, an alert will be published on the FIXALERT page to alert market participants.

## 5. Benchmark Methodology Reviews and Change Procedures

### 5.1 Review of the Methodology and Input Data Providers

RBSL will carry out a review of the Methodology on at least an annual basis. Additional reviews may be conducted at RBSL's discretion. Reviews will include an analysis of the underlying market that the benchmarks seek to represent, the performance and appropriateness of the current Contributor Banks, and analysis of other potential Contributor Banks as applicable.

The aim of the review will be to ensure that the benchmarks are still representative of the underlying market, that the input data sufficiently represent the underlying market, that the Contributor Banks are the optimum grouping to provide Contributions to represent the underlying interest, and that the current Contributor Banks have been contributing in an accurate and timely manner. The Oversight Committee will provide input into the review.

### 5.2 Changes to the Methodology

Changes to the Methodology shall be made in accordance with the RBSL Benchmark Methodology Change and Cessation Policy. The combined RBSL Benchmark Methodology Change and Cessation Policy is available at <https://www.refinitiv.com/en/financial-data/financial-benchmarks>.

### 5.3 Objective of the Methodology

The objective of this Methodology is to reflect best practice across the industry for the calculation and Administration of Benchmarks that seek to represent the behaviour of markets showing similar characteristics as the Saudi Arabian Money Market. The Methodology shall also comply with all applicable regulations and policies.. The Methodology shall also comply with all applicable regulations and policies.

### 5.4 Identification of Potential Limitations of the Benchmark

The benchmarks are based upon rates collected from Contributor Banks, the content of which is reliant upon there being a liquid Saudi Arabian money market, plus the ability of Contributor Banks to provide their data to RBSL. If any ongoing constraint or fragmentation to liquidity in the Saudi Arabian money market is identified or foreseen, RBSL will consult with stakeholders as well as the Oversight Committee to consider an appropriate course of action.

## 6. GOVERNANCE AND FURTHER INFORMATION

### 6.1 Benchmark Administrator

Refinitiv Benchmark Services (UK) Limited (“RBSL”) is the Administrator of the SAIBOR and Refinitiv is the calculator and distributor of SAIBID on behalf of its administrator (Riyad Bank) during the transition period. At the conclusion of the transition period, RBSL will become administrator of SAIBID. As Administrator of SAIBOR, RBSL is responsible for collecting input data, determining and publishing the benchmarks, and for all aspects of governance, oversight, compliance and integrity of the benchmarks.

### 6.2 Oversight Committee

The Oversight Committee is responsible for oversight of all aspects of the provision of SAIBOR including the reviews of the benchmark definitions and Methodology at least annually, overseeing any changes to the benchmarks Methodology or cessation of the benchmark, and overseeing RBSL’s control framework, management and operation of the benchmark.

### 6.3 Benchmark Manager

A benchmark manager is appointed from time to time by the Administrator who will be a subject matter expert responsible for interpreting the Methodology in respect of the benchmarks.

### 6.4 User Feedback

RBSL shall communicate periodically with stakeholders in order to assess conditions in the market for unsecured wholesale funds in Saudi Riyals and to assess the ongoing fitness and suitability of the Methodology in respect of the benchmarks. Such feedback may be used as part of the periodic review of the Methodology in respect of the benchmarks.

### 6.5 Further Information

Further information is available at <https://www.refinitiv.com/en/financial-data/financial-benchmarks/interest-rate-benchmarks/saibor-rates>.

Refinitiv welcomes feedback. Any comments or questions regarding this Methodology or the SAIBOR and SAIBID benchmarks should be sent to [index\\_queries@refinitiv.com](mailto:index_queries@refinitiv.com) and include ‘SAIBOR SAIBID’ in the email subject line.

## 7. Definitions

Capitalised terms in this Methodology have the following definitions except where indicated otherwise.

Administrator	Refinitiv Benchmark Services (UK) Limited (“RBSL”). See section 6.1.
Business Day	A Business Day for the purposes of a SAIBOR contribution is defined as the 24 hour period from the start of the contribution window on a standard business day (11:00am KSA) and the start of the contribution window on the next standard business day.
Contribution	A submission made by a Contributor Bank to RBSL for the purpose of determining the SAIBOR and SAIBID benchmarks.
Contributor Bank	A contributor bank that makes Contributions.
Credit Spread Adjustment	Shall have the meaning given to it in section 2.2.8.
SAMA Policy Rate Moves	Shall have the meaning given to it in section 2.2.9.
Spread Percentage	Shall have the meaning given to it in section 2.2.6.
Lookback Period	Shall have the meaning given to it in section 2.2.5.
Methodology	The methodology used for the determination of the SAIBOR and SAIBID benchmarks.
Oversight Committee	Shall have the meaning given to it in section 6.2.
Submission Procedures	As defined in the Contributor Code of Conduct <a href="http://www.refinitiv.com/en/financial-data/financial-benchmarks/interest-rate-benchmarks/saibor-rates">www.refinitiv.com/en/financial-data/financial-benchmarks/interest-rate-benchmarks/saibor-rates</a> .

Refinitiv is one of the world's largest providers of financial markets data and infrastructure, serving over 40,000 institutions in approximately 190 countries. It provides leading data and insights, trading platforms, and open data and technology platforms that connect a thriving global financial markets community – driving performance in trading, investment, wealth management, regulatory compliance, market data management, enterprise risk and fighting financial crime.