BANK NEGARA MALAYSIA
CENTRAL BANK OF MALAYSIA

Alternative Reference Rate

and Strategic Direction on KLIBOR and KLIRR for the Malaysian Financial Markets

Discussion Paper

Applicable to:

1. Market participants referencing financial benchmark rates in Malaysia

Issued on: 19 May 2021

BNM/RH/DP 028-11

In line with global financial benchmark reforms and the upcoming London Interbank Offered Rate (LIBOR) cessation for most currencies by end-2021, Bank Negara Malaysia (the Bank) has appointed the Financial Markets Committee (FMC) to oversee the development of a transaction-based alternative reference rate (ARR) for Malaysia and deliberate on the strategic direction for the Kuala Lumpur Interbank Offered Rate (KLIBOR) and the Kuala Lumpur Islamic Reference Rate (KLIRR).

The objective of this discussion paper is to seek feedback from industry stakeholders on the framework, design and features pertaining to the development of ARR, potential enhancements to KLIBOR as well as a review of KLIRR. This paper outlines the features of the proposed transaction-based ARR, proposals to refine and fallback plans for KLIBOR and future direction for KLIRR.

The Bank, in consultation with the FMC, invites written feedback on this discussion paper, including suggestions to improve clarity on the proposals or alternatives for consideration. To facilitate a constructive consultation process, the feedback and views shall be supported with justifications especially on the practical and operational aspects, including accompanying evidence or illustrations, where appropriate.

Please provide your name and the organisation you represent in your written feedback. All queries and responses must be submitted via the attached feedback form electronically to the financial benchmark review team at fbr@bnm.gov.my by 18 June 2021.

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PART A OVERVIEW

1. Background

1.1 Financial benchmark reforms are underway in various jurisdictions to improve the integrity and reliability of interest rate benchmarks, in line with the Financial Stability Board's (FSB) recommendation[1]. Among the key recommendations of the FSB are the development of a nearly risk-free ARR and strengthening of the existing IBOR of respective jurisdictions.

1.2 While the LIBOR for most major currencies will cease to exist after end-2021, some other jurisdictions have maintained their existing IBORs while developing an ARR. It is envisioned that market participants will make wider use of ARR in order to reduce reliance on IBORs in the foreseeable future.

1.3 In line with global financial benchmark reforms, the Bank has appointed the FMC which comprises representatives from the Bank, Securities Commission Malaysia, financial institutions, insurers, fund managers and corporate treasurers, to oversee the development of a transaction-based ARR and deliberate on the strategic direction for KLIBOR and KLIRR in Malaysia.

1.4 Similar to other jurisdictions, it is proposed for the Malaysian ARR to be based on overnight transactions in the interbank market and will run in parallel to the existing KLIBOR. The availability of both rates provides the market with the flexibility to choose either ARR or KLIBOR as the reference rate for pricing of financial instruments.

1.5 This discussion paper is structured into four parts for industry feedback:

1. Development of ARR;
2. Refinements to KLIBOR;
3. IBOR fallback language; and
4. Review of KLIRR

[1] FSB - *Reforming Major Interest Rate Benchmarks* (www.fsb.org/wp-content/uploads/r_140722.pdf)

PART B DEVELOPMENT OF ARR

2. Characteristics of ARRs and Interbank Offered Rates (IBORs)

2.1 The major characteristics that differentiate ARRs and IBORs are as follows:

i. ARRs are nearly risk-free while IBORs generally reflect the perceived credit risk of large banks;

ii. ARRs are typically overnight rates while the tenors of IBORs can span from overnight to 12 months; and

iii. ARRs are derived solely from transaction data whereas IBORs are based on submissions by a number of selected contributing banks. While reform measures have been implemented to anchor IBOR submissions to transaction data, contributing banks are allowed to exercise expert judgement in providing rate submissions when there is a lack of transactions.

3. ARR for Malaysia

3.1 The Bank has appointed the FMC to engage relevant stakeholders in identifying an appropriate ARR for KLIBOR.

3.2 The Bank currently compiles and publishes the Average Overnight Interbank Rate (AOIR) which is a near risk-free weighted average overnight interbank funding rate taking into account the Bank's monetary operations and interbank transactions based solely on transaction data, consistent with the development of major currencies' ARR globally.

3.3 Taking into consideration the characteristics of the current AOIR, the FMC has identified AOIR as the ARR. The FMC has also proposed some technical refinements to AOIR to enhance its robustness and representativeness.

3.4 The refined AOIR is proposed to be renamed as the Malaysia Overnight Rate (MYOR) with the proposed features set out in paragraph 4 and summarized in Appendix I.

4. Key features of ARR

4.1 The FMC has deliberated on various approaches for the framework and design of ARR for Malaysia including calculation methodology and data collection and has proposed the following technical refinements to MYOR as outlined below:

(a) **Calculation methodology**: MYOR will be calculated as the volume-weighted average rate of unsecured overnight MYR interbank transactions comprising the following eligible transactions:

(i) Wholesale unsecured deposits between interbank institutions[2] (either brokered or direct/bilateral); and

(ii) The Bank's overnight monetary operations, excluding Standing Facilities (SF).

[2] refers to institutions which are approved by the Bank to deal in the interbank market, whether acting as principals or agents in the wholesale financial markets

This aims to remove susceptibility to rate volatility driven by high numbers of small transactions and eliminate the need for a minimum threshold for transactions. MYOR will be rounded to 2 decimal places.

> Q1. Do you agree with the proposed type of transactions to be included in the calculation methodology? If not, please provide your suggestions, supported by appropriate rationale.

(b) **Data source**: MYOR will capture all eligible transactions sourced from the Real-time Electronic Transfer of Funds and Securities System (RENTAS). This ensures the robustness of MYOR and reduces the risk of misreporting.

(c) **Data collection window**: All eligible transactions settled via RENTAS throughout the entire business day will be included in the MYOR calculation.

(d) **Publication time**: To capture all eligible transactions settled on the same day, the FMC proposes for the publication time of MYOR to be at 10.00 am Kuala Lumpur time on the next business day. This proposed change is in line with international practices for publication of rates such as the Secured Overnight Financing Rate (SOFR) and Sterling Overnight Index Average (SONIA) which are published on the following business day.

(e) **Erroneous data**: A republication shall be made if the error is more than 2 basis points away from the correct rate and is identified or reported by 2.00pm on publication day. The republication will be made by 4.00pm on the same day. If findings or reports of erroneous calculations are made after the cut-off time, no republication will be made.

(f) **Contingency arrangements:** As a backstop in the event of disruption to the normal production of MYOR (e.g. disruption to trade settlement, interbank trading or data collection), the Bank shall at its discretion publish MYOR using a simple average of MYOR over the previous three publication days. For exceptional circumstances (e.g. a prolonged disruption), the Bank reserves the right to determine the appropriate contingency rate.

> Q2. Do you agree with the proposed methodology for contingency arrangements? If not, please provide your suggestions, supported by appropriate rationale.

PART C REFINEMENTS TO KLIBOR

5. Reference rate for derivatives

5.1 KLIBOR was introduced in June 1987 as an official indicator of the conditions in the interbank money market. KLIBOR is mainly used as the reference rate for derivatives products e.g. interest rate swaps and cross currency swaps and less frequently in cash products such as bank loans.

5.2 KLIBOR is administered by the Bank, with Refinitiv Malaysia Sdn Bhd as the designated KLIBOR distributor. Eleven licensed banks have been appointed as KLIBOR submitters and are currently required to provide submissions for 5 tenors i.e. 1, 2, 3, 6 and 12 months[3].

6. Removal of least referenced tenors

6.1 The 1 and 3-month KLIBOR tenors are the most frequently used benchmark tenors, with 97.7% of total KLIBOR exposure referenced to these two tenors. In comparison, the 2, 6 and 12-month tenors are less referenced by market participants.

6.2 The Bank, as administrator of KLIBOR, undertakes periodic reviews to ensure that KLIBOR continues to remain reliable as a financial benchmark. Notwithstanding these reviews, KLIBOR will remain available for reference until end-2022 at least.

6.3 The FMC proposes to adopt a phased approach to potentially discontinue rate submissions for the least referenced tenors to ensure the integrity of KLIBOR rates and facilitate transition. In this regard, the 2 and 12-month tenor will be discontinued first, followed by the 6-month tenor.

6.4 The FMC proposes that market participants are given 12 months' advance notice in the event that certain KLIBOR tenors are discontinued upon review.

> Q3. Should least referenced KLIBOR tenors be discontinued? If yes, which tenors and why?
>
> Q4. Do you agree with the proposed notice period? If not, please provide suggestions, supported by appropriate rationale.

[3] In line with the requirements of the KLIBOR Rate Setting Policy Document issued on 27 December 2016.

PART D IBOR FALLBACK LANGUAGE

7. Background

7.1 IBOR fallback language refers to provisions in financial contracts that cater to scenarios where the IBOR becomes unavailable, e.g. upon an official announcement of cessation or non-representativeness (“pre-cessation trigger”) by the IBOR administrator or regulatory authority. The fallback language specifies the trigger events, the replacement rate and the spread adjustment needed to address structural differences between the replacement rate and the IBOR. For example, a secured, overnight lending rate would have to be adjusted for its lower credit risk and shorter tenor vis-à-vis the unsecured, term nature of the IBOR.

7.2 In light of the upcoming LIBOR cessation, authorities worldwide have recommended that market participants undertake the necessary preparations to minimize market disruption by inserting robust fallback language into their financial contracts. Due to the varied nature of products referencing IBORs, appropriate fallback language may differ between products to allow for different calculation methodologies or market conventions.

8. Scope of KLIBOR fallback language

8.1 The FMC proposes for the current scope of KLIBOR fallback language development to focus on derivatives as the largest product referencing KLIBOR. This will ensure that sufficient resources are available for the primary goal of ARR development, with the staggered development approach supported by the near-term continuity of KLIBOR.

9. ISDA IBOR Fallbacks Protocol

9.1 Over-the-counter interest rate derivatives are generally transacted and governed under the International Swaps and Derivatives Association (ISDA) Master Agreement, which contain basic terms and conditions, and accompanying definitional booklets including the 2006 ISDA Definitions, which provide a general framework for the documentation of such transactions.

9.2 Since 2018, ISDA has conducted a series of public consultations to develop IBOR fallback language for derivative transactions under its Master Agreement and Definitions, culminating in the launch of the ISDA IBOR Fallbacks Protocol (ISDA Protocol) and IBOR Fallbacks Supplement (ISDA Supplement)[4] in October 2020. By adhering to the ISDA Protocol, fallback language as contained in the ISDA Supplement is automatically incorporated into legacy transactions between adherents. This will avoid the need for arduous and potentially contentious bilateral negotiations to amend each legacy transaction.

9.3 In view of this standardized and efficient approach to incorporate fallback language into legacy IBOR-linked derivative transactions, FMC proposes to issue a recommendation for market participants to voluntarily adhere to the ISDA Protocol.

[4] The ISDA Supplement, which came into effect on 25 January 2021, amends the 2006 ISDA Definitions to incorporate robust fallbacks for new transactions in derivatives linked to certain IBORs

10. Fallback language for KLIBOR-linked derivatives

10.1 While the ISDA Supplement contains robust fallback language for the major IBORs (e.g. USD, GBP LIBOR), it has yet to include KLIBOR. FMC proposes to engage ISDA to incorporate KLIBOR fallback language, with the fallback rate based on the calculation methodologies[5] and parameters from the results of ISDA's public consultations, summarized as follows:

1. Compounded setting in arrears rate

Continuous compounding of the ARR over an accrual period corresponding to the tenor of the original IBOR. The "in arrears" structure compounds these rates over the current interest period (as opposed to the preceding period for the "in advance" structure), with the main benefit of reflecting the actual daily interest costs incurred by an entity borrowing at the ARR during the period.

2. Backward shift adjustment (i.e. lookback with observation shift)

A two-banking-day backward shift adjustment applied to the accrual period will provide sufficient time for operational and payment purposes.

3. Spread adjustment based on historical median over a five-year lookback period, without exclusion of outliers or negative spreads

A median-based spread is robust against the presence of outliers, especially when supported by a 5-year lookback period, which provides sufficient data for resilience against temporary market volatility while still remaining reflective of current market conditions. As a result, there is no need to exclude outliers or negative spreads, ensuring operationally simple and consistent calculations.

4. *No transitional period*

A transitional period refers to the period where the spread is linearly interpolated between the immediate spread at the time of fallback to the long-term historical median spread for a smoother transition. However, a transitional period is not recommended as the operational difficulty of implementing such a structure would likely outweigh the benefits.

5. *Inclusion of pre-cessation trigger*

The pre-cessation trigger is a supplement to the permanent cessation triggers, and will activate upon official declaration of "non-representativeness" of the IBOR by the regulatory authority. This will provide the flexibility to address "tough legacy" contracts by allowing the publication of a potentially synthetic rate until contract maturity.

Note: Timeline and outcome of this engagement depends on negotiations with ISDA

Q5. If KLIBOR fallback language is included in the development of a new ISDA Protocol and Supplement, would you be interested to adhere? If no, please provide appropriate rationale.

[5] *IBOR Fallback Rate Adjustments Rule Book* (http://assets.isda.org/media/34b2ba47/c5347611-pdf/)

PART E REVIEW OF KLIRR

11. Potential discontinuation of KLIRR

11.1 KLIRR was introduced in 2006 as a reference rate for the Islamic interbank market. However, its usage as a pricing reference has remained limited.

11.2 The Bank, in consultation with the FMC, is conducting a comprehensive review on the continuity of KLIRR and a potential alternative Islamic reference rate that adheres to global standards for financial benchmarks.

Please answer all of the following questions.

Given the limited usage of KLIRR, the Bank would like to propose and seek feedback on the discontinuation of KLIRR:

Q6. Do you agree with the proposed discontinuation? Please provide appropriate rationale.

Q7. What is your firm's exposure (if any) to KLIRR-based financial contracts?

On potential alternative Islamic reference rates, Islamic financial market participants recommended for:

i) transaction-based, Islamic overnight rate (similar to the conventional ARR); or

ii) composite overnight rate based on the weighted average of conventional and Islamic transacted rates.

Q8. Please state your preference between the two proposals or suggest an alternative option. Please provide appropriate rationale for your choice.

Q9. What are the key considerations to ensure the success and widespread use of the new alternative Islamic reference rate?

Q10. Would you use the new alternative Islamic reference rate, which is in line with the best practice framework for financial benchmarks introduced by the International Organization of Securities Commissions (IOSCO), in your financial contracts? If no, please provide appropriate rationale.

Q11. Given that there is no Shariah issue in referencing conventional financial benchmarks, if you are currently using KLIBOR for your Islamic financial contracts, would you continue doing so after the introduction of the new alternative Islamic reference rate?

APPENDICES

Appendix I: Malaysia Overnight Rate (MYOR) Features

Description	MYOR is the transaction-based alternative reference rate based on unsecured overnight MYR interbank transactions in the Malaysian interbank market.
Benchmark Owner and Administrator	BNM
Calculation Agent	BNM
Eligible Transactions	Overnight MYR interbank transactions comprising the following eligible transactions: i. Wholesale unsecured deposits between interbank institutions (either brokered or direct/bilateral) ii. BNM's overnight monetary operations, excluding Standing Facilities
Calculation Methodology	Volume-weighted average
Contributing Brokers	1. ICAP Malaysia Sdn Bhd 2. Harlow's & MGI Sdn Bhd 3. Affin Money Brokers Sdn Bhd
Publication	The computed MYOR shall be published on BNM's website at 10:00 a.m. Kuala Lumpur time on the next business day.
No. of Decimal Points	Rounded to two decimal places
Contingency Arrangements	In the event of disruption to the normal production of MYOR, the Bank shall at its discretion publish MYOR using a simple average of MYOR over the previous three publication days. For exceptional circumstances (e.g. prolonged disruption), the Bank reserves the right to determine the appropriate contingency rate.

Appendix II: Feedback Form

Name :
Organisation :
Telephone no. / E-mail address :

No.	Part / paragraph / question number	Comments/feedback	Suggestions
1.			
2.			
3.			

Any other matters/feedback/suggestions