

**Proposed Approach for Legacy Cleared INR MIFOR
IRS trades post Index Cessation**

Consultation Paper



July 12, 2022

A) Introduction

1. The UK Financial Conduct Authority (FCA), had announced on March 05, 2021 that LIBOR will either cease to be provided by any administrator or no longer be a representative rate:
 - (a) Immediately after December 31, 2021, in the case of all Pound sterling, Euro, Swiss franc and Japanese yen settings, and the 1-week and 2-month US dollar settings; and
 - (b) **Immediately after June 30, 2023, in the case of the remaining US dollar settings.**

2. RBI's notification issued on July 8, 2021 mentioned the following:

Banks are also encouraged to cease using the Mumbai Interbank Forward Outright Rate (MIFOR), published by the Financial Benchmarks India Pvt Ltd (FBIL), which references the LIBOR as soon as practicable and in any event by December 31, 2021. FBIL has started publishing daily adjusted MIFOR rates from June 15, 2021 and modified MIFOR rates from June 30, 2021 which can be used for legacy contracts and fresh contracts respectively. Banks may trade in MIFOR after December 31, 2021 only for certain specific purposes such as transactions executed to support risk management activities such as hedging, required participation in central counterparty procedures (including transactions for hedging the consequent MIFOR exposure), market-making in support of client activities or novation of MIFOR transactions in respect of transactions executed on or before December 31, 2021.

3. As on EOD of 8th July 2022, the number of trades referenced to 6M MIFOR benchmark accepted for CCP clearing by CCIL stands at 2055 trades with notional of Rs. 1,58,903 crores. The cash flows on these trades are settled using the FBIL published MIFOR rates. However, as mentioned in the RBI Notification, the FBIL published Adjusted MIFOR rates is the identified fallback rate which will apply to these legacy MIFOR trades post the Index Cessation Date of June 30, 2023.

4. At present, FBIL publishes both MIFOR and Adjusted MIFOR rates. MIFOR rates are derived using the USD/INR Rolling Forward Premia Curve and the USD LIBOR. Adjusted MIFOR rates are derived using the USD/INR Rolling Forward Premia Curve and the USD All-in-Fallback Rate (Calculated from the SOFR compounded in arrears & the 5 year historical median spreads between the respective tenors of SOFR and LIBOR calculated as per the ISDA Rule Book provided by Bloomberg).

5. As USD LIBOR published post Jun 30, 2023 will be considered as non-representative, the MIFOR rates computed using USD LIBOR will also be considered as non-representative. Thus, cash flows on existing MIFOR trades which will be reset post Jun 30, 2023 will be settled using the non-representative MIFOR rate.
6. Providing CCP Clearing for legacy MIFOR contracts using the fallback rate post June 2023 will be difficult for CCIL for the reasons outlined below:
 - i) Difficulty in specific risk management responsibilities of CCIL with respect to the accepted trades, which include default management.
 - ii) Reduced liquidity in Adjusted MIFOR linked swaps.
7. CCIL proposes that instead of allowing the fallback rate to reference the legacy contracts, the outstanding cleared MIFOR linked legacy contracts will be referenced to Modified MIFOR as outlined in this Consultation Paper. The approach in brief is as under:
 - i) All outstanding CCP cleared MIFOR trades having cash flows with reset date beyond June 30, 2023 will be referenced to Modified MIFOR. The trade attributes of the legacy MIFOR trades such as fixed rate, notional amount, termination date, cash flow dates, payment frequency, reset frequency, designated maturity of the float leg will be carried on to the new trades.
 - ii) The cash flow for all outstanding cleared MIFOR trades having reset date on or before Jun 30, 2023 will be settled based on corresponding FBIL published MIFOR rates for the relevant reset date and Designated Maturity.
 - iii) The cash flows for all the outstanding cleared MIFOR trades having reset date after Jun 30, 2023 will be settled based on the corresponding Modified MIFOR rate published by FBIL and **a spread** for the relevant reset date and Designated Maturity. This spread is computed using a median of the observed spread between MIFOR and Modified MIFOR rates (detailed methodology in Annexure III) for a period of 5 years (Sep 2015 to Sep 2020). The spread will be computed for Designated Maturity¹ of 6M and will be applicable to the float leg of each contract. The period used to calculate the INR spread is the same as the period used to calculate the USD fall back

¹ All outstanding cleared MIFOR trades at CCIL have a designated maturity of 6M.

rate spread². The value of the spread for 6M Designated Maturity stands at 44.25 basis points.

B) Detailed Approach of conversion process

1. Contracts subject to conversion: Only those outstanding cleared MIFOR linked interest rates swaps having cash flows with reset date beyond June 30, 2023 as on the date of conversion (mentioned in section – C below) will be subject to this mandatory conversion process. Trades which have no cash flows with reset date beyond June 30, 2023 will not be subject to the conversion process and will remain outstanding till the last cash flow is settled (in absence of any bilateral amendment / reversals). Reversal trades will not be subject to any conversion process.
2. Settlement of Cash flows of legacy contracts having reset dates on or before the index cessation date:

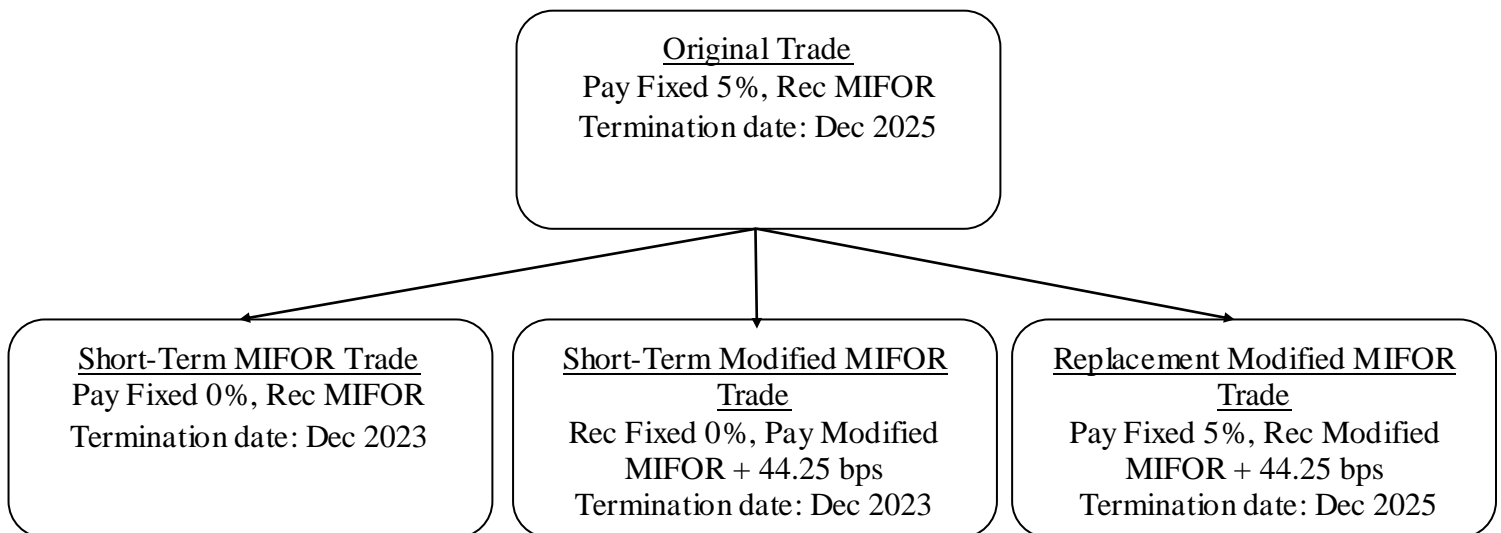
All cash flows of legacy trades having reset date on or before June 30, 2023 will be settled using the corresponding FBIL published MIFOR rate. This will be achieved by cancelling the existing legacy MIFOR trade and booking two new trades with the following attributes:

- i) New short-term MIFOR trade: This trade will have the same trade attributes as the legacy MIFOR trade with the exception of termination date. The termination date will be set to the last cash flow date of the legacy trade which will be reset on or before Jun 30, 2023.
- ii) New short-term Modified MIFOR trade: This trade will have the same trade attributes as the legacy MIFOR trade with the exception of the float leg benchmark rate, termination date and the spread on the float leg. The termination date will be set to the last cash flow date of the legacy trade which will be reset on or before Jun 30, 2023. **A spread of 44.25 bps will be added to the trade level spread on the float leg.** This short-term trade will help cancel the cash flows arising from the replacement Modified MIFOR trade for cash flows having reset date on or before Jun 30, 2023.

² https://assets.bbhub.io/professional/sites/10/IBOR-Fallbacks-LIBOR-Cessation_Announcement_20210305.pdf

3. Settlement of Cash flows of legacy contracts having reset dates after the index cessation date:
All cash flows of legacy trades having reset date after June 30, 2023 will be settled using the corresponding FBIL published Modified MIFOR rate. This will be achieved by booking a new trade referenced to the Modified MIFOR benchmark. This new trade will have the same trade attributes as the legacy MIFOR trade which will include fixed rate, notional amount, termination date, cash flow dates, payment frequency, reset frequency, designated maturity of the float leg. The float leg of the trade will be changed from MIFOR benchmark to Modified MIFOR benchmark. **A spread of 44.25 basis points will be added on the float leg.**
4. No consideration will be exchanged for the cancelled MIFOR trades.

Pictorial illustration of the conversion of a legacy MIFOR trade is placed here with detailed example provided in Annexure I.



C) Timing of the Conversion process:

1. As the number of outstanding cleared MIFOR trades is not many, conversion of all eligible trades will be done in one go. The date of conversion will be at least one fortnight prior to the Index Cessation Date of June 30, 2023.

2. The conversion date chosen is before the Index cessation date as this will help both CCIL and members have additional time to handle any issues faced during the conversion process.

D) Other Aspects:

1. As CCIL will be booking new trades, new trade ids and member reference numbers will be generated by CCIL for members for the converted Modified MIFOR trades. CCIL **may** provide a report to members to enable them to link these trades with the old legacy contracts to facilitate further life cycle processing events.
2. All outstanding trades as on the conversion date having a cash flow which will be reset post Jun 30, 2023 will be mandatorily subject to this conversion. In case members do not wish to subject their trades to this conversion process, they should ensure that these trades are cancelled / reversed by both counterparties to the trade before the CCIL conversion date.
3. Members may note that CCIL will not be charging members for this conversion process. However, post conversion, the resultant three trades shall be subject to outstanding charges as applicable to cleared Rupee Derivatives trades.
4. CCIL will be making necessary changes to its Regulations to support the trades resulting from the aforementioned conversion approach.

Members are requested to send their comments and feedback on the proposal as detailed above. The feedback may be sent by email to us latest by August 12, 2022 at rmd@ccilindia.co.in for attention of Chief Risk Officer, CCIL with Subject line as: “*Consultation Paper: Proposed Approach for Legacy Cleared INR MIFOR IRS trades post Index Cessation*”. If any clarification is required on any aspect of this paper, please feel free to contact Mr. Kausick Saha, Chief Risk Officer, Risk Management Department on 6154 6441.

Annexure I

Example of the trade conversion for a single trade

Trade outstanding before conversion

i) Legacy Trade

Trade ID	202011263300059
Trade Date	26-Nov-20
Member	A
Counterparty	CCIL
Notional Amount	50 crs
Effective Date	01-Dec-20
Termination Date	01-Dec-25
Direction of Swap for Member	Pay fix
Fixed Rate	6.22
Float Leg Benchmark Index	MIFOR
Float Leg Benchmark Designated Maturity	6 M
Float Leg Spread	0
Trade Status	Cleared

Cash Flow dates	01-Jun-23	01-Dec-23	03-Jun-24	02-Dec-24	02-Jun-25	01-Dec-25
Reset Dates	29-Nov-22	30-May-23	29-Nov-23	30-May-24	28-Nov-24	29-May-25

Trades after conversion

ii) Assuming conversion done on 23 May 2023: The original legacy trade will be cancelled and replaced by three swaps given below:

a) New short-term MIFOR trade

Trade ID	202305233300001
Trade Date	26-Nov-20
Member	A
Counterparty	CCIL
Notional Amount (in Rs. Crores)	50 crs
Effective Date	01-Dec-20
Termination Date	01-Dec-23
Direction of Swap for Member	Pay fix
Fixed Rate	6.22
Float Leg Benchmark Index	MIFOR
Float Leg Benchmark Designated Maturity	6 M
Float Leg Spread	0
Trade Status	Cleared

Cash Flow dates	01-Jun-23	01-Dec-23
Reset Dates	29-Nov-22	30-May-23

b) New short-term Modified MIFOR trade

Trade ID	202305233400002
Trade Date	26-Nov-20
Member	A
Counterparty	CCIL
Notional Amount (in Rs. Crores)	50 crs
Effective Date	01-Dec-20
Termination Date	01-Dec-23
Direction of Swap for Member	Receive fix
Fixed Rate	6.22
Float Leg Benchmark Index	Modified MIFOR
Float Leg Benchmark Designated Maturity	6 M
Float Leg Spread	44.25 bps
Trade Status	Cleared

Cash Flow dates	01-Jun-23	01-Dec-23
Reset Dates	29-Nov-22	30-May-23

c) Replacement Modified MIFOR trade

Trade ID	202305233300003
Trade Date	26-Nov-20
Member	A
Counterparty	CCIL
Notional Amount (in Rs. Crores)	50 crs
Effective Date	01-Dec-20
Termination Date	01-Dec-25
Direction of Swap for Member	Pay fix
Fixed Rate	6.22
Float Leg Benchmark Index	Modified MIFOR
Float Leg Benchmark Designated Maturity	6 M
Float Leg Spread	44.25 bps
Trade Status	Cleared

Cash Flow dates	01-Jun-23	01-Dec-23	03-Jun-24	02-Dec-24	02-Jun-25	01-Dec-25
Reset Dates	29-Nov-22	30-May-23	29-Nov-23	30-May-24	28-Nov-24	29-May-25

Annexure II

Approach followed by other global CCPs

1. Based on the consultation papers issued by Global CCPs, we see that they have proposed to convert their outstanding USD LIBOR swaps to market standard RFR swaps post June 2023. Thus these CCPs have refrained from letting the legacy swaps be converted to the identified ISDA fallbacks for similar reasons. In fact these CCPs have followed this approach despite the differences in the fallback Risk free rate and the market standard Risk free rate as tabulated below:

Trade Attribute	Contracts subject to ISDA Fallback	Market standard RFR
Payment Lag	Zero	2 USNY business days
Offset Lag	2	Zero

2. While the broader approach remains the same for these CCPs, a few differences have emerged in the way these trades are proposed to be booked by them. The approach followed by some of these global CCPs for fixed vs float USD LIBOR swaps has been summarized below:

- i) LCH Approach³

- LCH proposes to convert USD LIBOR contracts outstanding at (or shortly before) 30th Jun 2023 to market-standard SOFR contracts;
- LCH proposes to book 2 contracts⁴ for each outstanding LIBOR contract:
 - a) Output Contract: The Output Contract will be linked to Market standard RFR in which the SOFR leg adopts the Spread Adjustment corresponding to the Interest Period Frequency of the Input Contract and has a Payment Frequency equal to the Payment Frequency of the Input Contract.
 - b) Overlay swaps: A subset of these trades involves a coupon period which would otherwise rely on combining representative and non-representative LIBOR settings towards a single payment. In these cases, LCH proposes to preserve – via overlay bookings – a truncated LIBOR-based payment running

³ https://www.lch.com/system/files/media_root/LCH_USD%20LIBOR%20Conversion_Consultation.pdf

⁴ 3 swaps in case of clients trades

to the end of the compounding period that relies on the last representative LIBOR period. These Overlay Bookings are booked into Member accounts as direct USD LIBOR / SOFR basis bookings for their short lifespan, where product eligibility allows. These Overlay Bookings are booked into Client accounts as pairs of outright USD LIBOR and outright SOFR bookings. These swaps will serve to preserve the LIBOR based payment and to offset the first SOFR payment of the output contract.

ii) CME Approach⁵

- CME proposes to book 2 replacements swaps for each seasoned LIBOR swap:
 - a) A “Short LIBOR Replacement Swap”: To preserve the last LIBOR representative setting.
 - b) A forward starting SOFR OIS to capture all future cash flows

⁵ <https://www.cmegroup.com/trading/interest-rates/files/cme-conversion-for-usd-libor-cleared-swaps.pdf>

Annexure III

Computation of Spread used for Legacy trades

- 1) A daily spread between 6M MIFOR and 6M Modified MIFOR was calculated for a period of 5 years (Sep 2015 to Sep 2020). The period used to calculate the INR spread is the same as the period used to calculate the USD fall back rate spread.
- 2) The following data sources are used for 6M MIFOR and 6M Modified MIFOR rates:
 - a) 6M MIFOR:
 - i) April 2018 – Sep 2020: FBIL published 6M MIFOR rates
 - ii) Sep 2015 – Mar 2018: Computed using FBIL methodology for MIFOR using ICE published 6M LIBOR and EOD forward premia sourced from Reuters page INR=1F for 6M tenor
 - b) 6M Modified MIFOR:
 - i) April 2018 – Sep 2020: Computed using FBIL methodology for Modified MIFOR using Adjusted SOFR and FBIL published 6M forward premia
 - ii) Sep 2015 – Mar 2018: Computed using FBIL methodology for Modified MIFOR using Adjusted SOFR and EOD forward premia sourced from Reuters page INR=1F for 6M tenor
- 3) The median value of the daily spread between 6M MIFOR and 6M Modified MIFOR was then calculated. The median value was found to be 44.25 bps.
