INTERNATIONAL DIVISION, INTEGRATED TREASURY BRANCH

INFORMATION TO OUR CUSTOMERS ON LIBOR TRANSITION

This notice is to reach out to our existing domestic/overseas customers who have entered into contracts with Central Bank of India using LIBOR as the benchmark reference rate and as a guidance note on LIBOR transitioning to all our valuable customers. The Note is to bring broad oversight on the recent developments on LIBOR Transition and various Regulatory Guidelines.

BACKGROUND:

London Interbank Offered Rate (LIBOR) is the most widely used benchmark for short-term interest rates, ranging from overnight to 1 year, across different countries. LIBOR is currently available for five currencies (USD, GBP, EURO, CHF & JPY) and for seven tenors in respect of each currency (O/N or S/N, 1 week, 1 month, 2 months, 3 months, 6 months and 12 months). It has been widely used as a reference rate for financial contracts and as a benchmark to gauge funding costs and investment returns for a broad range of financial products.

The methodology for calculating LIBOR has remained largely unchanged since it was introduced. Each day, a group of large banks, known as "panel banks", report their funding rates to the Intercontinental Exchange Benchmark Administration, which took over administering LIBOR in 2014. Those numbers are trimmed of the highest and lowest values, averaged, and released at about 11.55 a.m. London Time each business day.

There are two main concerns with this process:

(1) There has been a significant decline in the sample size for calculating LIBOR since the 2008 financial crisis.
(2) LIBOR's reliance on inputs from panel banks opened it to manipulation, and regulators have uncovered a range of irregularities that have led to large fines for those involved

As a result, global regulatory initiatives have sought to develop Alternative Reference Rates (ARRs).

Timeline for phasing out LIBOR

In July 2017, the United Kingdom's Financial Conduct Authority (FCA), which regulates the administrator of LIBOR, announced that it will no longer compel panel banks to participate in the LIBOR setting process after 2021.

On 05 March 2021, the UK's FCA announced that the publication of LIBOR on a representative basis will cease for LIBOR setting as follows:

(1) For overnight, 1,3,6 and 12 month USD LIBOR settings, immediately after 30th June 2023 and
(2) For all Euro, Sterling, Swiss Franc, and Yen LIBOR settings, immediately after 31st December 2021.

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Alternative Reference Rates

The following Alternative Reference Rates for currencies for which the London Interbank Offered Rate is determined:

Country	LIBOR-IBOR	New Risk-Free Rate	Public or Private Sector Working Groups	Description
United States	US Dollar LIBOR	SOFR	Alternative Reference Rates Committee (ARRC)	Secured rate that convers multiple overnight repurchase market segments
United Kingdom	GBP LIBOR	SONIA	Sterling Working Group on Risk-Free Rates	Unsecured rate that covers overnight wholesale deposit transactions
Japan	Yen LIBOR, TIBOR	TONA	Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks	Unsecured rate that covers overnight call rate market
Europe	EUR LIBOR and EURIBOR	ESTR	Euro RFR Working Group and European Money Markets Institute	Unsecured rate that covers the overnight wholesale deposit transactions
SWITZERLAND	CHF LIBOR	SARON	The National Working Group on Swiss Franc Reference Rates	Secured rate that covers the overnight repurchase market

Note: A secured rate is collateralized by funding transactions that serve as security. For Example, SOFR is collateralized by funding transactions secured by US Treasury securities. An unsecured rate is not collateralized.

Difference between LIBOR and ARRs

While ARRs are intended to replace the IBORs in their respective jurisdictions, there are some fundamental differences between ARRs and IBORs.

	LIBOR	ARRs
Term Structure	Yes, in various Maturities	No, Overnight
Methodology	Quoted on the same basis for each LIBOR currency	Currency Specific
Publication Time	11.00 (London Business Day) across each currency	Specific time for each currency
Credit Premium	Includes credit risk component to reflect the credit risk associated, with unsecured interbank borrowing	Close to risk free

LIBORs are forward looking term rates and ARRs are overnight interest rates. ARRs are overnight rates and must be converted into term rates before they can serve as substitutes for IBORs in any kind of contract, new or old. In an effort to ensure a smoother transition, the ISDA and regulators are looking at two main approaches: (1) a compounded, backward-looking, setting-in-arrears rate, which is known at the end of the corresponding application period, and (2) a market-implied prediction of this rate, which then forward looking and known at the beginning of the application period.

LIBORs include a Credit Spread and Term Premium, while ARR include no credit risk, as they are overnight rates. One important aspect that market participants need to consider is the credit spread adjustment (CAS) that will be required. Market participants use a CAS to mitigate the risk of value transfer when transitioning to risk-free rates due to the difference between LIBOR rates and the risk-free rates, caused by the lack of a credit risk premium in risk-free rates.

To address the Credit Spread, certain spread adjustments have been advised by working groups to preserve the economic value of the contracts. The ARRC's recommended fallbacks for USD LIBOR-based cash products and ISDA's fallbacks for USD-LIBOR based derivatives, would both fall back to forms of SOFR plus a fixed spread adjustment at the point of transition for legacy contracts.

TERM RATES:

Many working groups have recommended/proposed forward looking Term rates or considering for term versions of the ARRs. Some working group recommendations are:

- The Alternative Reference Rates Committee (ARRC) working group for SOFR has recommended TERM SOFR. SOFR is calculated and published by the Federal Reserve Bank of New York (NY Fed) and was selected as the preferred overnight reference rate for U.S.Dollar financial contracts by the ARRC.
    - Each Business Day, the NY Fed publishes three daily compounded averages of SOFR and a SOFR Index:
        - SOFR Index
        - 30-day Average SOFR
        - 90-day Average SOFR
        - 180-day Average SOFR
- The Working Group on Sterling Risk-Free Reference Rates has recommended for Term SONIA Reference Rate (TSRR). It refers to Forward-looking term SONIA reference rates (TSRR). Available beta versions of TSRRs for 1, 3, 6 and 12 month tenors.

LIBOR Transition and its impact on Customers

Due to the broad use of USD LIBOR as a reference rate, all financial market participants including retail customers, corporations, issuers, investors, service providers of financial products, and large financial institutions are impacted by the risks associated with USD LIBOR. LIBOR transition may impact existing products as well as any future contracts using LIBOR as reference rate.

In India, LIBOR is mainly used for

(1) For determining
    a. Rate of Interest (ROI) on FCNR(B) deposits and other Foreign Currency Deposit Schemes
    b. Rae of Interest (ROI) on Foreign Currency Loans such as PCFC, EBRD, Foreign Currency Demand Loan (FCDL), Foreign Currency Term Loan (FCTL) etc.,
    c. Rate of Interest (ROI) on External Commercial Borrowing by Corporates.
    d. Rate of Interest (ROI) on different Treasury products.
(2) For pricing the derivative contracts.
(3) To hedge interest rate risk emanating from Derivative contracts.

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(4) To calculate SWAP cost in FCY-FCY SWAPs.
(5) Revaluation of different treasury products.
(6) Mumbai Interbank Forward Offer Rate (MIFOR) which is combination of LIBOR and a forward premium derived from Indian Forex Market and used in India to hedge local interest rate risk exposure.

The above list is illustrative and not exhaustive.

Transition from LIBOR to ARRs will depend on the terms of the contract. For smooth transitioning, all the LIBOR linked exposures must have robust fallback language. "Fallback Language" refers to the legal provisions in a contract that apply if the underlying reference rate in the products (e.g. LIBOR) is discontinued, non-representative or unavailable.

For existing loans, fallbacks will result in the application of a new benchmark (ARRs) in place of LIBOR as mutually decided by Bank and Customer. Depending on new benchmark, new rate will be reset for the contract which may be more or may be less or the previous contractual rate.

ARRs may vary depending on the transaction, products or the jurisdiction. Since the transition from LIBOR to ARRs might lead to risks in terms of infrastructure, taxation, accounting, legal and operational aspects, the effect of the potential discrepancies must carefully be examined. We advise our valued customers to make an assessment of LIBOR transition on taxation, legislations, accounting or any other aspects.

For further information related to your existing exposures and on specific products and service, please contact your respective branches.

ABBREVATIONS

TERM	DESCRIPTION
ARRC	Alternative Reference Rates Committee
CHF	Swiss Franc
ESTR	Euro Short Term Rate
FCA UK	Financial Conduct Authority (UK)
FED	Federal Reserve System
LIBOR	London Interbank Offered Rate
JPY	Japanese Yen
SARON	Swiss Average Rate Overnight
SOFR	Secured Overnight Financing Rate
SONIA	Sterling Overnight Index Average
TIBOR	Tokyo Interbank Offered Rate
TONA	Tokyo Overnight average Rate