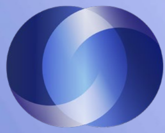


Surecomp

Surecomp Product Management August 2020

Planning for the LIBOR transition

What is LIBOR?

LIBOR - the London Interbank Offered Rate - came into widespread use in 1970, since 1986 became standard in the marketplace and today serves as a globally accepted key benchmark interest rate that indicates borrowing costs and accepted interest rates between banks. The LIBOR is calculated and published daily by the Intercontinental Exchange (ICE). LIBOR rates are calculated for five currencies and seven borrowing periods ranging from overnight to one year, are published each business day and play a critical role in global markets. It is assumed that $200-$300 trillion in loans, mortgages, corporate debt and other financial instruments are tied to LIBOR.

Why do we need to replace LIBOR?

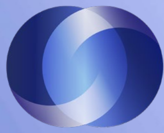
Since the 2008 financial crisis, there has been a significant decline in the LIBOR calculation sample size. Instead, LIBOR increasingly relies on what the IBA calls "market and transaction data-based expert judgment." As a result, in 2014, the U.S. Federal Reserve commissioned the Alternative Reference Rate Committee (ARRC) to recommend a benchmark interest rate to replace USD LIBOR, or the short-term reference rate for dollar-denominated debt. In 2018 the Fed began publishing the SOFR, the Secured Overnight Funding Rate.

What is the projected transition timeline?

The UK Financial Conduct Authority (FCA) has set various deadlines including interim milestones for the transition, the most important ones being:

- **30th September 2020** – It is recommended that market participants no longer offer or enter into new LIBOR-based products maturing after 31 December 2021. Market participants should have alternative arrangements in place before this date.

- **31st December 2021** – The FCA announced this as the date beyond which it will no longer require LIBOR panel banks to provide LIBOR submissions/publications. Effectively, this is the cessation date from which LIBOR will no longer be considered a reliable index.



What alternative reference rates can be used?

Several alternative rates can be used as a replacement for LIBOR. The key alternative rates are briefly described in the table below:

Currency	$ USD	£ GBP	¥ JPY	₣ CHF	€ EUR
Alternative RFR	Secured Overnight Financing Rate (SOFR)	Reformed Sterling Overnight Index Average (SONIA)	Tokyo Overnight Average Rate (TONA)	Swiss Average Rate Overnight (SARON)	Euro Short-Term Rate (€STR)
Administrator	Federal Reserve Bank of NY	Bank of England	Bank of Japan	SIX Swiss Exchange	European Central Bank
Working Group	Alternative Reference Rates Committee	Working Group on Sterling Risk-Free Reference Rates	Study Group on Risk-Free Reference Rate	The National Working Group on CHF Reference Rates	Working Group on Risk-Free Reference Rates for the Euro Area
Rate Type	Secured	Unsecured	Unsecured	Secured	Unsecured
Underlying Transactions	Repo Transactions	Money Markets	Money Markets	Repo Transactions	Money Markets
Rate Published	Since 3rd April 2018	Since 23rd April 2018	Since 4th January 2017	Since 25th August 2009	Since 2nd October 2019
Description of the RFR	SOFR is secured, overnight and transaction-based encompassing multiple repo market segments.	SONIA is unsecured and overnight and is calculated based on daily sterling money market activity.	TONA is unsecured, overnight and transaction-based. It reflects the uncollateralised overnight call rate market.encompassing multiple repo market segments.	SARON is a secured overnight rate that reflects interest paid on interbank overnight repo transactions.	€STR is an unsecured overnight rate that reflects overnight unsecured fixed rate deposits of euro area banks.

How does SOFR differ from LIBOR?

The Federal Reserve Bank of New York began publishing the SOFR , Secured Overnight Funding Rate, in April 2018 as part of an effort to replace LIBOR.

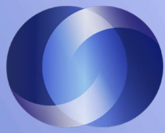
It is expected that after the transition, all dollar-denominated loans, derivatives and debts will reference this new rate, i.e. the SOFR, Secured Overnight Funding Rate. Using treasury as collateral, this rate is in effect a median of rates that market participants pay to borrow cash on an overnight basis.

There are however major differences between the way LIBOR was/is calculated and the way the SOFR is calculated. Thus, LIBOR cannot simply be 'swapped out' with SOFR in existing contracts that reference LIBOR without making the appropriate adjustments.

The major conceptual and actual differences between these two rates are summarized briefly below:

KEY DIFFERENCES

LIBOR	SOFR
Forward-looking rate	Backward-looking rate
Published for multiple terms	One term, overnight
Includes bank credit risk element for selected term	No term credit element embedded
Fixed at the start of interest period	Secured rate, collateralized using U.S. Treasuries
Based on very small number of transactions between banks	Based on several hundred billions of dollars of transactions daily
Mostly model-determined index	Based on known interest payments at the next interest payment date and transactions in treasury repurchase market



Impact on Surecomp

How does Surecomp currently use LIBOR?

Surecomp uses LIBOR rates in different areas of its systems for different calculations as briefly summarized in the impact analysis on products, loan events and general system areas below:

Products	Loan events	General system areas
• Import financing • TR loans (all types) • Packing credit • Pre-to-post shipment • EBC/EBLC purchase • Banker's acceptance • Loan from bank • Loan with floating rate	• Loan creation • Settlement • Partial payment • Loan extension • Loan reset/repricing • Loan conversion • Rollover • Monthly collect	• Interest computation • Interest enquiries • Advices/statement • Accounting • Downstream systems • Finance reporting • DWH

What areas are currently in scope for the changes being considered?

1. Rate reference

Current available rate references in Surecomp:

a. Market rates LIBOR, PRIME, etc
b. Bank specific rates

Surecomp must support the new daily RFR rates e.g. SONIA (GBP), SOFR (USD), TONAR (JPY), SARON (CHF), all of which much also take into consideration and manage the multiple rate approach for some currencies e.g. EURIBOR, €STER or HONIA(HKD), SORA(SGD) and more.

2. Rate upload/feed

Currently Surecomp supports:

a. Manual update

b. Simple feeding (ISPL script)

Surecomp enhancements must include:

a. An automated source obtaining the rate directly from an authorized body/website as up-to date RFRs will be published every morning for the previous business day
b. Historical rates which are required to support the new RFR calculation methods

3. Interest calculation

Currently Surecomp supports:

a. Upfront: Interest due amount is calculated upfront for the interest period
b. In arrears: Interest is calculated but charged to the customer only at maturity

Surecomp must be able to support alternative interest calculation methods, e.g. alternative COF, simple average on previous loan period, new term rate (future). Thus, a new calculation approach must be applied for in arrears, e.g.:

a. Overnight RFR for lock-back, lockout etc
b. Lag periods
c. Spread adjustments

4. Interest accrual

Currently interest accrual, fund and margin in Surecomp are based on simple daily cumulative interest rates.

Surecomp must also be able to:

a. Calculate effective interest rates for each deal on a daily basis
b. Facilitate the compounded in arrears calculation methodology
c. Calculate the compounding factor i.e. compound interest calculations, including daily compound interest rates
d. Add the daily calculated interest accrual to the balance for interest calculation, where the customer margin is not part of the new compound interest calculation methodology

5. Customers

Currently corporate customers can easily:

a. Request interest pricing options
b. Enquire about interest calculations
c. In addition, customer advice includes simple interest calculation

Surecomp must be able to support new customer needs including being able to:

a. Propose different interest methods for the relevant loan currency
b. Support potential changes to customer advice and e-advice

c. Take into consideration the method used, particularly the compounding interest method

6. Accounting/Finance/Reporting

Surecomp will also require some modifications to:

a. Accounting feeds for the daily accrual and/or for any event in the finance module
b. DWH structure and the downstream systems
c. Reports that may also require adjustments and relevant changes

New enhancements

How will Surecomp handle the new reference rates?

Surecomp is already preparing for and aiming to enhance its solutions so it will be compliant with this benchmark reform in the following manner:

1) Automatic upload of the new reference rates from the market providers
2) Design and development of new reference rate calculation methods
3) Screen modifications and new functionality
4) Changes in the feed to the accounting system

What are the main reference rate enhancement areas?

1. Compounded in arrears

Surecomp must be able to facilitate interest calculation as per the compounded in arrears calculation methodology, as well as the simple in arrears calculation, and include

a. Overnight RFR
b. Spread/liquidity adjustment
c. Lockout, Look-back, backward shift
d. Calculation of the compounding factor

The new compounded calculation method must include interest in addition to the principal sum of a loan, with all relevant implications of daily compounded rates, previous loan periods, accrual of the daily calculated interest to the balance, ensuring margin is not part of the compound interest calculations.

2. Look-back period

A look-back period between 1 - 5 days must be possible. This means that a system will be able to apply the rate published 1-5 days prior to the date of the calculation. The look-back period must be flexible as it may vary between products and different customers.

3. Lockout period

Surecomp must be able to support a lockout period of between 0 - 5 days, i.e. be able to repeat one of the daily rates for the final 0-5 days of the calculation. The new lockout period must be flexible as it may vary between products.

4. Spread/liquidity adjustment

Surecomp must be able to add the spread adjustment to the margin, added wherever applicable to re-compensate for the difference between RFR and the previous LIBOR equivalent.

5. Historical data

Surecomp must enable storage of historical data for more than 1 year mainly for the look-back period and to support the required automated interface to upload the data from the authorized data sources. The new engine must be able to store previous RFRs and use these to calculate different types of interest. Jurisdiction and currency calendars must be fully updated to support the daily interest calculations.

Migration of existing loan contracts

Banks should ensure that their contracts with customers have fallback clauses spelling out how rates will be handled during and after the transition from LIBOR to SOFR.

In the event that this is not explicitly addressed, and the termination date of the loan or other financial instrument is after Dec 2021, the bank should negotiate new terms with the customer. In these specific cases, the contract will need to be migrated to Surecomp with reference to the new rate.

Writing new contracts for those terminating after 31st Dec 2021.

In addition to all the considerations herein, banks should become increasingly aware of this imminent change, should have alternative arrangements in place already from Oct 2020 and no longer offer or enter into new LIBOR-based products which mature after 31st December 2021.