

### **Factsheet**

# Transitioning from LIBOR to alternative reference rates in Fusion Sophis

The investment industry must prepare for the shift from LIBOR to alternative reference rates such as SOFR. This factsheet updates you on the transition and explains how Fusion Sophis supports the new rates.

With LIBOR due to be phased out by 2021, alternative reference rates are being developed to replace this benchmark, which underpins many loans, mortgages, bonds and interest rate derivatives.

### Alternative reference rates (ARRs) for five key currencies

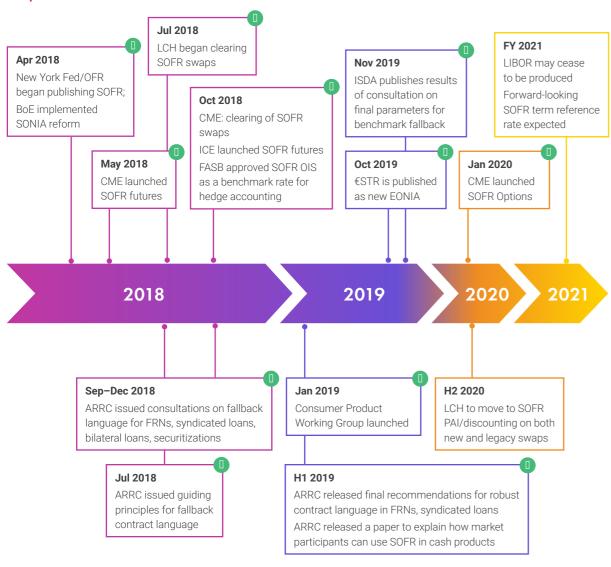
ARR	€STER	TONA	SARON	SONIA	SOFR
Name	Euro short term rate	Tokyo Overnight Average Rate	Swiss Average Rate Overnight	Sterling Overnight Index Average	Secured Overnight Financing Rate
Currency	EUR	JPY	CHF	GBP	USD
Old LIBOR	EONIA EURIBOR	JPY-LIBOR JPY-TIBOR	CHF-LIBOR	GBP-LIBOR	US-FEDF US-LIBOR
Publication	T+1	T+1	Real-time	T+1	T+1
Existing products	None	Futures	Future, swaps	Futures, swaps, FRN	Futures, FRN, swaps
Status	Publication from October 2019	Reform in development	Reform in development	Reform in development	Publication from April 2018

The transition from LIBOR to ARRs will take place in stages up to 2021. New financial products referencing ARRs have already been issued in the UK and US, including for futures, floating rate notes, and swaps. As the rates are new, the adoption and the liquidity of products that reference them remains under development.

However, to ensure a smooth transaction from LIBOR to ARRs, many issues remain to be clarified by authorities, for example:

- Adoption of ARRs and liquidity for each currency across many interest rate products
- Adjustment of ARRs to a term rate: LIBORs are term rates on seven tenors, while ARRs are daily rates. The impact on derivatives, especially options, needs to be scrutinized.
- Managing outstanding positions that reference LIBOR and are not closed by 2022
- Fallback provisions that specify contract terms where LIBOR is unavailable

### Adoption of the new risk-free rate timeline



Source: ARRC (Alternative Reference Rates Committee) "SOFR: A Year in review", enhanced with updates on SONIA, €STR

## Fusion Sophis – capabilities and milestones for LIBOR transition

### **Capabilities: how Fusion Sophis can help**

- Flexible operating model for supporting the new rate conventions in terms of position- keeping, trading workflow and product lifecycle management
- Support for ARR products to integrate new products in the system
- Flexible curve framework that supports pricing with both the LIBOR curve and new ARR curve during the transition, and allows for OIS discounting or new ARR discounting for different products
- Simulation tools for better understanding risk before and after the transition
- Full audit of history of the trading book and market data to backdate your book with confidence after the transition
- User-definable P&L attribution with granularity to explain the P&L change with new T+1 publication conventions and P&L and risk change before and after the transition

#### Support available from Finastra Services

Our service team will assist in all the stages of your transition from helping you assess and manage business impact, to adopting alternative reference rates to Alternative Reference Rates in Fusion Sophis.

### Alternative reference rates setup

- Analysis of existing curves setup
- Configure the multi-curve and OIS discounting framework if required
- Configure alternative reference rate curves for all impacted currencies
- Configure processes snapping rate fixings Validate (calibrate) the new curves
- Update the curves assignment selector to default to the new curves
- Train your teams in the use of the new curves framework

### **Business impact management**

Finastra solution architects are available to help you assess and manage the impact of the LIBOR replacement in all business processes that are supported by your Fusion Sophis implementation:

- Referential (bond, collateral agreement, swap, rate derivatives)
- · Pricing, P&L and NAV
- Operations and fallback strategy
- Risk scenarios, VAR and stress tests
- Performance attribution
- · Cash and collateral management

## Fusion Sophis: full details of enhancements to support the LIBOR transition

### The existing Fusion Sophis solution can already manage several aspects of ARRs

- Daily rate products: it can define ARRs and use them in different contracts, including trading products (bonds, swaps), collateral, cash funding, etc.
- "Forecast" flexibility to manage the ARR fixing process on the next day
- Portfolio valuation and P&L explanation (from v7.2) with the last fixing due to the ARRs' publication lag
- Powerful P&L explanation tool enables the user to evaluate the P&L and risk impact with the transition
- OIS discounting and multi-curve framework (from v7.1.3) allows valuation under the new ARR and LIBOR curves simultaneously

### Enhancements to support the LIBOR transition include:

### · Daily compound rate derivatives

The new listed products referencing ARRs take into account that ARRs are overnight rates not term rates like IBORs. The term rates in old LIBOR futures contracts are replaced by the daily rates compounded during a period. Furthermore, instead of only one fixing rate in the old LIBOR contract, multiple fixings are used in the new contract. Fusion Sophis supports:

- New SOFR, SONIA, SARON futures
- Different daily compounded methods on 1M and 3M maturity
  New volatility derivatives are currently developing in the market, including IR futures, options and swaptions. We will continue to improve current system coverage to incorporate new products and market data conventions.

### · Interest rate curve management

New products are used in interest rate curve calibration – SOFR futures are used in the calibration of the SOFR curve as they are the most liquid products trading in the market for the short to medium term. For other ARR curves, the approach is different and will change as the market

evolves and after the transition. With the coexistence of "old" and "new" LIBOR rates in the market, multi-curve and OIS curve management is necessary. Fusion Sophis integrates the new market products and provides a flexible way to manage the curves:

- €STR curve construction based on the current EONIA curve
- New daily 1M / 3M (SOFR) future for short term-curve calibration

### Pricing and lifecycle management with new conventions

Unlike LIBOR, most of the new ARRs are published one day after their effective date. Valuation and workflow on the rate should be therefore changed. New market conventions have also been developed to incorporate the daily fixing. Fusion Sophis has made enhancements on:

- Non-business day convention for SOFRreferenced bonds
- Lookback and lockout period management for the new ARR bonds (SOFR/SONIA/SARON)
- Managing the one-day publication lag with T+1 with adjustment in pricing and improvement of performance on daily compound valuation

### · Prepare fallback language

Fallback language is under preparation to trigger the event "Switch LIBOR to a new rate". There is as yet no market consensus yet on how to replace the LIBOR rate in all existing contracts, whether traded contracts or credit agreements. We think that there are two possible scenarios:

- Renegotiate the contract, close the existing position and open a new position with an ARR
- Directly replace the rate in the existing contract with a premium on the trade (defined by the regulator or negotiated with counterparties)

We are planning to develop a portfolio simulation and migration tool which enables P&L analysis before the transition and eases the transition of portfolios.

### What's next?

Much has been already done in global markets to identify alternative reference rates and raise awareness among different market players. However, there is still more to do to construct transition plans across all asset classes and currencies

For Fusion Sophis, we will closely monitor regulatory developments and plan our support for the transition from the LIBOR to new ARRs accordingly.

We look forward to continuing to work with our clients to build an efficient solution for managing the LIBOR transition.

### **Fusion Sophis milestones**

7.1.3

Foundation for new ARR rate support with accurate pricing for the transition

- · OIS discounting and multicurve framework
- Support for negative rates
- Daily rate swaps, bonds

7.2

P&L explanation for the new LIBOR fixings and the ability to historize your book before and after transition

- Intraday data with full audit on instruments, trades, market data
- Full P&L explanation with granularity for each data element
- · Ability to run "forecasts" on instruments with a specific interest rate

7.2.2

Pricing simulation with different yield curves

Multi-flavor analytics

7.4 (NOW)

Support for new LIBOR

products (as at 2019)

rate futures

conventions

New alternative reference

ARR swaps and ARR swap

New ARR bond market

curves with futures



7.5

Full support for new LIBOR products and migration (pending market decisions)

To be confirmed

For more information contact us at capitalmarkets@finastra.com

#### **About Finastra**

Finastra is building an open platform that accelerates collaboration and innovation in financial services, creating better experiences for people, businesses and communities. Supported by the broadest and deepest portfolio of financial services software, Finastra delivers this vitally important technology to financial institutions of all sizes across the globe, including 90 of the world's top100 banks. Our open architecture approach brings together a number of partners and innovators. Together we are leading the way in which applications are written, deployed and consumed in financial services to evolve with the changing needs of customers. Learn more at finastra.com

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