ARRC Recommended Best Practices for Completing the Transition from LIBOR[1]

> The Alternative Reference Committee ("ARRC") has developed a set of recommended best practices to assist market participants in preparing for the cessation of U.S. dollar (USD) LIBOR by the end of 2021. This document sets forth recommended timelines and intermediate steps market participants can take to achieve a successful transition.

BACKGROUND

The Financial Stability Board and Financial Stability Oversight Council have both publicly recognized for some time that the secular decline in wholesale unsecured term money market funding by banks poses serious structural risks for unsecured benchmarks, including LIBOR. Although significant progress has been made in strengthening the governance and processes underlying LIBOR, the scarcity of underlying transactions poses a continuing risk of a permanent cessation of its production after the end of 2021. Andrew Bailey, then the Chief Executive of the United Kingdom's Financial Conduct Authority (FCA) highlighted this end-2021 timeline in a speech in 2017. In a March 25, 2020 statement addressing the potential impact of COVID-2019 on LIBOR transition plans, the FCA recently reemphasized that the central assumption that firms cannot rely on LIBOR being published after the end of 2021 has not changed and that this should remain the target date for all firms.

Because LIBOR is used in such a large volume and broad range of financial products and contracts, its vulnerabilities pose a potential threat to individual financial institutions and to financial stability. Without advanced preparation, a sudden cessation of such a heavily used reference rate would cause considerable disruptions to, and uncertainties around the large gross flows of LIBOR–related payments and receipts between many firms. It would also impair the normal functioning of a variety of markets, including markets for business and consumer lending. It is estimated that current outstanding contracts referencing USD LIBOR, including corporate loans, adjustable-rate mortgages, floating rate notes (FRNs), securitized products and a wide range of derivatives products, total nearly $200 trillion, roughly equivalent to 10 times U.S. Gross Domestic Product. These LIBOR exposures dwarf the volumes underlying the wholesale unsecured term bank funding markets that LIBOR is meant to represent.

The Board of Governors of the Federal Reserve System and the Federal Reserve Bank of New York convened the ARRC in 2014 to develop best practice recommendations in identifying potential alternative reference rates for USD LIBOR and for ensuring contract robustness in transactions relying on LIBOR, and to create an implementation plan to support the voluntary adoption of its recommended rate. In June 2017, after considering a comprehensive list of potential alternatives including other term unsecured rates, the ARRC announced a broad Treasury repo financing rate—the Secured Overnight Financing Rate (SOFR)—as its recommended alternative to USD LIBOR. The ARRC subsequently published a Paced Transition Plan to promote SOFR liquidity and has produced a number of models for use of SOFR in cash

[1] Version published 09/03/20. Please see the Revision History at the end of this document for a history of all updates since initial publication in May 2020.

markets, including loan markets.

The ARRC is comprised of a diverse set of private-sector entities as members, including buy-side, sell-side, end users, trade associations, and intermediary market participants. The ARRC also is comprised of a wide array of official-sector entities, including banking and financial sector regulators, as ex-officio members. Many more private and public sector participants also have contributed to the ARRC's transition planning efforts through the ARRC's various working groups, reflecting the broad range of stakeholders potentially affected by the LIBOR transition.

Reflecting input received from its working groups and other market participants, and pursuant to and consistent with its mandate under its Terms of Reference, the ARRC has developed the ARRC Recommended Best Practices set forth herein to help market participants prepare for the transition from LIBOR. The recommendations are intended to serve as guidelines for market participants seeking to organize their operations in a manner that fosters strong controls, reinforces overall market integrity, and promotes a successful transition away from LIBOR. They are also intended to help facilitate industry dialogue around these issues, particularly given the importance of client readiness for the transition. As recommendations from the ARRC, these guidelines do not constitute binding rules or regulatory guidance, and market participants must decide for themselves whether, or to what extent, they will adopt and apply them consistent with the size and complexity of their activities and institutions, and with the nature of their engagement in relevant transactions, taking into account relevant supervisory and regulatory policy.

ARRC RECOMMENDED BEST PRACTICES

Overview

With 19 months left until LIBOR could become unusable, it is important that market participants accelerate their transition efforts. Recognizing this need, the ARRC developed these recommendations for date-based guidance on the near-term transition steps it believes should be taken. The specific details and timing of this guidance recognize the differences in cash markets and are set out below. However, the ARRC's key recommended guidance is:

- To the extent not already utilized, new USD LIBOR cash products should include ARRC-recommended (or substantially similar) fallback language as soon as possible.[2]
- As the ARRC has previously noted, third-party technology and operations vendors relevant to the transition should complete all necessary enhancements to support SOFR by the end of this year.

[2] In regards to the incorporation of hardwired language, the ARRC is supportive of consistency and standardization throughout documents, where practicable, but has also noted that counterparties may reasonably make certain adjustments to its recommended fallback language, for example, eliminating reference to a term rate so that the contract will fall back to compounded SOFR in order to match derivatives or using simple rather than compound averages of SOFR in business loans. Other examples of "substantially similar" fallbacks might include reasonable modifications to lower levels of the ARRC's recommended rate or spread adjustment waterfalls, while maintaining the higher levels of these waterfalls in line with the ARRC's recommendations.

- New use of USD LIBOR should stop, with timing depending on specific circumstances in each cash product market.
- For contracts specifying that a party will select a replacement rate at their discretion following a LIBOR transition event, the determining party should disclose their planned selection to relevant parties at least 6 months prior to the date that a replacement rate would become effective.

In setting out these recommendations, the ARRC recognizes that there are contingencies that need to be satisfied in order for particular timelines to be met. For example, the ARRC is working to revise its recommendations for hardwired fallback language in business loans and is working to develop recommended conventions that could be used by third-party vendors for business loans. The ARRC also issued a set of Objectives to advance its work and mission, to help ensure that these contingencies are satisfied. The ARRC also recognizes that the timing of any official-sector statements about the end of LIBOR is uncertain. In light of this uncertainty, the ARRC recommends that, in the absence of any statement before June 30, 2021 from the FCA that LIBOR will continue past 2021, market participants act on the assumption that LIBOR will end as of December 31, 2021.

Product	**Hardwired Fallbacks Incorporated By**	**Tech/Ops Vendor Readiness By**	**Target For Cessation Of New Use Of USD LIBOR By**	**Anticipated Fallback Rates To Be Identified By**
Floating Rate Notes	6/30/2020	6/30/2020	12/31/2020	6 months prior to reset after LIBOR's end
Business Loans	Syndicated Loans: 9/30/2020 Bilateral Loans: 10/31/2020	9/30/2020	6/30/2021	6 months prior to reset after LIBOR's end
Consumer Loans	Mortgages: 6/30/2020 Student Loans: 9/30/2020	Mortgages 9/30/2020	Mortgages 9/30/2020[3]	In accordance with relevant consumer regulations
Securitizations	6/30/2020	12/31/2020	CLOs: 9/30/2021 Other: 6/30/2021	6 months prior to reset after LIBOR's end
Derivatives	Not later than 3-4 months after the Amendments to ISDA 2006 Definitions are published	Dealers to take steps to provide liquid SOFR derivatives markets to clients	6/30/2021	

[3] The September 30, 2020 date for consumer loans refers to new applications for closed-end residential mortgages using USD LIBOR and maturing after 2021.

1. **Institutions should take active steps to meet the timelines set out in the recommendations below.**

   A. **Floating Rate Notes**
   Unless otherwise specified, all best practices below refer to new issuances with maturities after December 31, 2021 including the remarketing of existing FRNs, perpetual FRNs, back-end floaters and similar instruments, but excluding securitizations.[4]

- **Recommendation 1:** To the extent not already utilized, newly issued FRNs should include ARRC-recommended (or substantially similar) USD LIBOR fallback language as soon as possible, but in no event later than June 30, 2020.
- **Recommendation 2:** Third-party technology and operations vendors relevant to floating rate notes (including those with booking, valuation and accounting systems used for FRNs) should complete all necessary enhancements to support SOFR (including, but not limited to, compounding in arrears and trading) by June 30, 2020.
- **Recommendation 3:** No FRNs using USD LIBOR and maturing after 2021 should be issued after December 31, 2020.
- **Recommendation 4:** For FRNs specifying that one or more parties will select a replacement rate for USD LIBOR at their discretion, the determining parties should disclose the replacement rate and any related spread adjustment methodology they anticipate selecting to relevant parties at least 6 months prior to the date that a replacement rate would become effective.[5]

   B. **Business Loans**
   The term "business loans" refers to new loans, including renewals and refinancings, of all non-consumer loans with maturities after December 31, 2021.

- **Recommendation 1:** To the extent not already utilized, all new syndicated business loans should include ARRC-recommended (or substantially similar) *hardwired* USD LIBOR fallback language as soon as possible, but in no event later than September 30, 2020. All new bilateral business loans should include ARRC-recommended (or substantially similar) *hardwired or hedged* USD LIBOR fallback language as soon as possible, but in no event later than October 31, 2020.[6]

---

[4] These recommendations are directed at FRNs that directly refer to LIBOR rather than instruments that may reference an index or rate that is indirectly linked to LIBOR.

[5] In regards to legacy contracts that allow discretion to name a replacement rate, the ARRC recognizes that determining parties may choose to disclose a contingent waterfall, for example, specifying that they will select a SOFR forward-looking term rate if the ARRC has recommended one and an average of SOFR if no forward-looking term rate has been recommended.

- **Recommendation 2:** Third-party technology and operations vendors relevant to business loans (including those with booking, trading, valuation, settlement, and accounting systems used for loans) should complete all necessary enhancements to support SOFR (including but not limited to simple, compounding in arrears, and term SOFR) by September 30, 2020.
- **Recommendation 3:** No business loans using USD LIBOR and maturing after 2021 should be originated after June 30, 2021.
- **Recommendation 4:** For business loans specifying that one or more parties will select a replacement rate for USD LIBOR at their discretion, the determining parties should disclose to relevant parties the replacement rate and any related spread adjustment methodology they anticipate selecting to relevant parties at least 6 months prior to the date that a replacement rate would become effective.[7]

C. Consumer Loans

- **Recommendation 1:** New closed-end residential mortgages referencing LIBOR should include the ARRC's fallback recommendations by June 30, 2020. New student loans referencing LIBOR should include ARRC fallback recommendations by September 30, 2020.
- **Recommendation 2:** Third-party technology and operations vendors relevant to consumer mortgages should complete all necessary enhancements including the capability to support SOFR and USD LIBOR concurrently by September 30, 2020.
- **Recommendation 3:** No new closed-end residential mortgages applications using USD LIBOR and maturing after 2021 should be accepted after September 30, 2020.
- **Recommendation 4:** By December 31, 2020, servicers of any consumer loans using LIBOR and maturing after 2021, should have developed robust programs for notifications and consumer education and outreach to the borrowers. They should ensure that their planned notifications are compliant with all relevant consumer regulations.

D. Securitizations

- **Recommendation 1:** To the extent not already utilized, newly issued securitizations should include ARRC-recommended (or substantially similar) USD LIBOR fallback language as soon as possible, but in no event later than June 30, 2020.
- **Recommendation 2**. Third-party technology and operations vendors relevant to the securitization market (including those with booking, valuation, and accounting systems used for securitizations) should complete all necessary enhancements to support SOFR (including, but not limited to, compounding and trading) by December 31, 2020.
- **Recommendation 3:** Other than CLOs, no floating-rate securitizations using USD LIBOR in its tranches and maturing after 2021 should be issued after June 30, 2021. No CLOs (both corporate and CRE) referencing USD LIBOR should be issued after September 30, 2021.

[7] In regards to legacy contracts that allow discretion to name a replacement rate, the ARRC recognizes that determining parties may choose to disclose a contingent waterfall, for example, specifying that they will select a SOFR forward-looking term rate if the ARRC has recommended one and an average of SOFR if no forward-looking term rate has been recommended.

- **Recommendation 4:** For securitizations specifying that one or more parties will select a replacement rate for USD LIBOR at their discretion, the determining parties should disclose the replacement rate and any related spread adjustment methodology they anticipate selecting to relevant parties at least 6 months prior to the date that a replacement rate would become effective paying due consideration to the replacement rates of the securitization's underlying assets.[8]

E. Derivatives

The following recommendations refer to any cleared or uncleared derivative instrument referring to USD LIBOR.

- **Recommendation 1**: Market participants should adhere to the International Swaps and Derivatives Associations' Fallback Protocol for Interbank Offered Rates within the 3- to 4-month period after it is published and before the amendments to embed the fallbacks in legacy transactions take effect. Dealers and other firms with significant derivatives exposures are encouraged to adhere to the protocol during the escrow period in order to promote adoption on as timely a basis as possible[9].
- **Recommendation 2**: Dealers should seek to promote liquidity and client access to SOFR derivatives products by:
    - Offering electronic market-making and execution in SOFR swaps by September 30, 2020.
    - Amending interdealer CSAs to use SOFR 'Interest Amount' for USD collateral by December 31, 2020.
    - Making markets in SOFR-linked interest rate volatility products (including swaptions, caps, and floors) by December 31, 2020
    - Changing the market convention for quoting USD derivative contracts from LIBOR to SOFR by March 31, 2021

- **Recommendation 3**: Market participants should not initiate new LIBOR derivative trades maturing after 2021 that will increase LIBOR risk unless such trades are for risk or default management of legacy LIBOR positions after June 30, 2021.[10]

2. Institutions should have clear internal programs in place to prepare for a transition away from USD LIBOR across all of their relevant activities, including a rigorous assessment of exposures.

---

[8] In regards to legacy contracts that allow discretion to name a replacement rate, the ARRC recognizes that determining parties may choose to disclose a contingent waterfall, for example, specifying that they will select a SOFR forward-looking term rate if the ARRC has recommended one and an average of SOFR if no forward-looking term rate has been recommended.

[9]

[10] The ARRC recognizes that LIBOR risk is better captured by metrics such as net DV01 than by gross notional and that dealers and other market makers executing such trades for their clients may accumulate LIBOR risk as a result and that they cannot necessarily assess or reasonably be expected to seek to discover the intent of their clients when a client seeks to initiate a LIBOR derivative trade.

They should refer to the ARRC's Practical Implementation Checklist for SOFR Adoption (Checklist) for more detailed guidance and background.

A. To facilitate the above, institutions should establish a plan with specific internal deadlines for completing the actions described below to ensure preparedness for end-2021:

- Implement a robust governance framework with accountable senior executives to oversee the delivery and coordination of the firm's enterprise-wide LIBOR transition program.

- Establish an enterprise-wide program across functions and businesses to evaluate and mitigate the risks associated with transition with specific considerations for unique product and client exposures.

- Develop and implement an enterprise-wide strategy with clear objectives to proactively engage, consistently communicate, and increase levels of education with impacted internal and external stakeholders.

- Quantify and develop a flexible approach to monitor LIBOR-linked exposures through the transition period. Obtain or develop capabilities to value SOFR-based products as part of transition to using those products.

- Develop a strategy for redesigning or transitioning the existing portfolio of LIBOR products, including creating or using new products based on SOFR.

- Identify, measure, monitor, and control financial and non-financial risks of transition, establishing processes and oversight routines for ongoing management.

- Understand the financial, customer, and legal impacts resulting from transitioning from LIBOR to SOFR via fallbacks, and plan mechanisms for implementing.

- Develop a plan to address the large-scale operating model, data, and technology implications required for LIBOR transition.

- Determine accounting considerations along with related reporting considerations.

- Determine the tax and regulatory reporting considerations.

B. In establishing the above, institutions should refer to the ARRC's Practical Implementation Checklist for SOFR Adoption (Checklist) for more detailed guidance and background.

3. **Institutions should be aware of additional ARRC recommendations, such as the ARRC's selection of SOFR as a replacement rate for USD LIBOR, and should incorporate additional ARRC recommended conventions into new contracts to support robust contract language in the event that USD LIBOR is**

no longer usable. Further, institutions should have ongoing dialogue with their key stakeholders to promote awareness of the transition and their preparedness for it.

A. The ARRC has produced a number of tools that can help to facilitate greater dialogue around these issues, including:

- ARRC Interim Report and Consultation
- ARRC Second Report
- Buy Side Focused Checklist and Internal Systems and Processes: Transition Aid for SOFR Adoption
- Fallback Contract Language Webpage
- Frequently Asked Questions
- Practical Implementation Checklist
- User's Guide to SOFR
- White Paper on Using SOFR Averages in Adjustable Rate Mortgages
- Options for Using SOFR in Student Loan Products

B. In addition, the ARRC has released potential conventions for the following products:

- Interdealer Cross-Currency Swaps
- Floating Rate Notes
- Syndicated Business Loans

C. The ARRC has also published Guiding Principles and Scope of Work for the ARRC Consumer Products Working Group.

D. ARRC Newsletters are published monthly to highlight key developments for the ARRC as well as note relevant developments in other regions. These are available via the ARRC Announcements webpage.

Revision History

Revision Date	Section Revised	Revision Summary
August 19, 2020	Derivatives Recommendation #1	Revised following ISDA's July 29 statement and its July 22 letter to the ARRC and other National Working Groups on the escrow period to add a recommendation that dealers and other firms with significant derivatives exposures adhere to the protocol during the escrow period. See also the letter from the ARRC Chair to ARRC Members dated August 10, 2020 concerning the ISDA protocol.
September 3, 2020	Business loans Recommendation #1	Revised following the ARRC's publication of revised bilateral fallback language on August 27, 2020 to specify a separate date for the inclusion of hardwired or hedged fallback language in bilateral business loans (the recommendation had previously fixed a September 30, 2020 date for all new business loans).